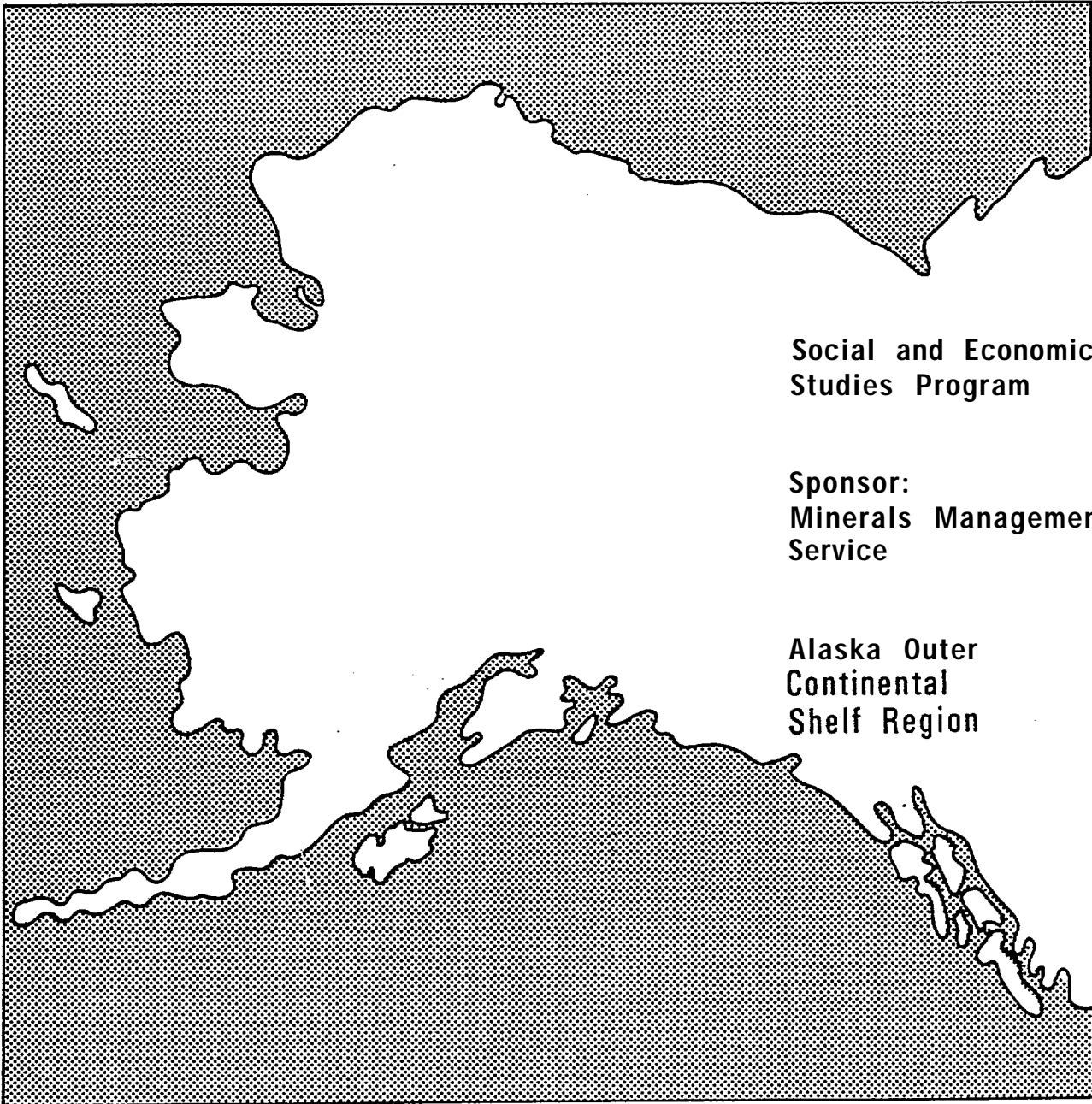


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ETHNOGRAPHIC STUDY AND MONITORING METHODOLOGY  
OF CONTEMPORARY ECONOMIC GROWTH, SOCIO-CULTURAL  
CHANGE AND COMMUNITY DEVELOPMENT IN NUIQSUT, ALASKA

Prepared For:

MINERALS MANAGEMENT SERVICE  
ALASKA OUTER CONTINENTAL SHELF REGION  
LEASING AND ENVIRONMENT OFFICE  
SOCIAL AND ECONOMIC STUDIES UNIT

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ETHNOGRAPHIC STUDY AND MONITORING METHODOLOGY  
OF CONTEMPORARY ECONOMIC GROWTH, SOCIO-CULTURAL  
CHANGE AND COMMUNITY DEVELOPMENT IN NUIQSUT, ALASKA

Prepared by: Research Foundation of State University of  
New York  
University Center at Binghamton  
State University of New York  
Binghamton, New York 13901

This report was prepared under the helpful guidance of Kevin Banks and Marsha Bennett, Minerals Management Service. Principal contributors to this report include Michael Galginaitis, Claudia Chang\*, Kathleen M. MacQueen, Albert A. Dekin Jr., and David Zipkin.

Anthropology Department  
State University of New York  
at Binghamton  
Binghamton, New York 13901

\* Department of Anthropology/  
Sociology  
Sweet Briar College  
Sweet Briar, Virginia 24595

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## ABSTRACT

**Nuiqsut** is a traditional **Inupiat** village on the North Slope of Alaska. It was resettled in April 1973. The Alaska Native Claims Settlement Act and the formation of the North Slope Borough (NSB) created a fiscal, social, and political environment to make it a viable undertaking. Many of the founding families were closely related. Approximately 2/3 of the (approximately) 170 settlers remain among the 270 residents of the present village. The founding population has aged demographically and because of the uneven age distributions the numbers of births and young children are expected to increase.

Most of the 1973 settlers had kinship links to traditional users of the **Nuiqsut** area. This pattern continues as families intermarry and relatives move into the village. Harvested resources comprise somewhat over 50% of the food consumed in an average **Nuiqsut Inupiat** household. All households have some access to wage income. Most households include at least one full-time wage earner. Nearly all include at least one seasonal wage earner.

Oil development, as such, has had little direct effect on **Nuiqsut**. Few **Inupiat** work for oil companies. However, the money which supports (and is building) **Nuiqsut** is derived from oil through taxes imposed by the NSB. These funds (along with bond issues) are used to fund construction projects within the villages. **Inupiat** perceive oil development as decreasing the availability of subsistence resources, both in absolute terms and in terms of access. However, cash is now absolutely essential for the harvest of subsistence resources. Such harvesting activity is also essential as a diet consisting of all "store" food is at present neither economically possible nor socially acceptable.

About 25% of all adult **Inupiat** have permanent, full-time wage positions. In addition, another 40% of adult **Inupiat** males are seasonally employed. Few adult **Inupiat** females work seasonally. Females are specializing in **professional-type** full-time positions while men continue a construction/laborer pattern. This sexual differentiation within the cash economy is also evident within the traditional economy. Women's roles are being replaced while those of men are still ideologically the center of **Inupiaq** values. Population composition and wage/subsistence labor force characteristics are two of the most fundamental sources of present-day social dynamics.

Although unfamiliar institutional structures have been introduced, traditional leadership and decision-making patterns are being maintained. There is a shortage of **Inupiat** individuals to fill the available leadership roles, however, as the boundaries of the social system have expanded. Thus, **non-Inupiat** have become increasingly visible. Permanent **non-Inupiat** populations in the villages outside of Barrow can be expected to increase the pace of social change.

Traditional **Inupiaq** values remain strongly held. Successful development will require change consistent with these values. New organizational and structural forms must continue to reflect such values if **Nuqsut** is to remain a viable **Inupiat** community.

It is recommended that a program to systematically collect information monitoring these changes be implemented. This methodology **should** and must include the study populations as active participants. Significant variables and potential relationships are proposed, and the question of measurement (**operationalization**) discussed.

## FOREWORD

**Nuiqsut** has been described in a variety of ways by a variety of people, as each person sees the community in a different perspective. Some have said that **Nuiqsut** is but a suburb of Barrow--a microcosm **little** different from **Browerville** save for being a bit more distant. Others have described **Nuiqsut** as a model of back-to-the-land native movements, where classic **Inupiat** values are expressed and native subsistence dominates. Several viewed **Nuiqsut** as a frontier outpost of the North Slope Borough established to support and maintain a boundary between **Inupiat** settlements and the oil industry. Less charitably, **Nuiqsut** has been **called** a rural ghetto--a bunch of drunks and **social** outcasts, **living** on unemployment and make-work projects. Many have seen **Nuiqsut** as a village of very nice people. Each of these perceptions has a reality because **it** is **held** by a number of viewers. However, none provides an accurate and sufficient portrayal by itself and **all** seem to exaggerate certain aspects and ignore others. Clearly, **Nuiqsut** is different things **to** different people.

Even the founding of **Nuiqsut** is somewhat cloudy, when we go beyond the relatively well-known when and how and by whom to ask why. To the question of why **Nuiqsut** was founded, we have heard answers ranging from the strongly **valued** "to reaffirm traditional **Inupiat** values by returning to the land" to "staking a claim on the mineral and other natural resources before they are **all** taken or destroyed by the oil companies". Other responses included "to get out of a deteriorating social situation in Barrow" and "to provide a point of contact and economic growth, with a new connection to 'outside'".

To the extent that these differing opinions are held by **Nuiqsut** residents, Borough politicians and other observers,

there is clearly a basis for a conflicting understanding of **Nuiqsut's** past and differing expectations for its future. Where is **Nuiqsut** going? How is it changing? **Why** is it changing? Of these questions the answer **to** why it is changing is perhaps the most clear, although the details may not always command agreement.

Our study was designed to provide some insight **into** the present circumstances and the nature of future changes. At the onset, there appear to be two alternate general trajectories for **Nuiqsut's** future. The first is to stay relatively isolated from the oil field development projected for its immediate surroundings, maintaining an economic system composed of cash and wage-based labor mixed with traditional subsistence and kin-based reciprocity. The second is to become a major point of access to the oil fields and the rest of Alaska--a point of land access and focus of development, perhaps rivaling Barrow as the regional services center and moving more closely to economic and **social** ties with the rest of Alaska. Between these two alternates, there is considerable room for many trajectories at different directions, as political and economic circumstances dictate.

To the extent that these differing trajectories are the subject of much discussion and valuation, who cares which way **Nuiqsut** goes? To a great extent, nearly everyone we asked cared. **Nuiqsut** is seen by many observers as a kind of "test case" in a number of different areas, from determining if we are able to plan development at identifiable social cost to seeing if "self determination" and "**local** rule" are viable concepts when the name of the game is "\$OIL". With further development planned, is it the case that as **Nuiqsut** goes, so goes **Wainwright**?

Numerous planning and governmental bodies (North Slope Borough, Arctic Slope Regional Corporation, **Kuukpiik** Corporation, the State of Alaska, the Federal Government, etc.) and agencies responsible for planned change (the Minerals Management Service, the NSB Environmental Protection Office, etc.) as **well** as **Nuiqsut** residents, landowners and investors and oil companies and oil field service companies will **all** be affected by change in **Nuiqsut**. Social scientists interested in general problems of change and development are also concerned as are other groups interested in the peoples and lands of the far **North**. **In** brief, as **Nuiqsut** goes, others may follow. **All** those who have a stake in the result should be interested in this study, as much as for what it foretells as for what it says about the present community.

**Nuiqsut** has been changing ever since its founding--why should we be concerned about what the present situation is? Here, we need to reflect on the responsibility of the Minerals Management Service of the United States Department of the Interior, concerned as they are with the potential impact of off-shore oil development. Our purpose in conducting this **Nuiqsut** research for them is to provide all interested parties with a base-line from which relevant changes in **Nuiqsut** can be measured. **In** the future, others may wish to determine if change has occurred, measure its direction and rate of change and evaluate future conditions against those which prevailed this past winter. This **would** allow those interested in effecting those changes to evaluate the change and to intervene if the changes were not desirable. **In** short, in order to make future determinations of whether or not change had occurred, one must have a base-line study of this sort from which to make measurements. Only then can one **alter** policies and practices and have a reasonable expectation that the changes would be effective.

Our present study has been hampered because it has been of short duration, we have not been **able** to consult with everyone we would have liked to, and we have not been able to address all issues of concern to those who live in **Nuiqsut**. In addition, **our** results are subject to different interpretations and could be used in a number of political and economic arguments which go beyond those under consideration in this report. However, it is not our present purpose to judge the future uses to which these data will be put, but to make them available so that everyone, in particular the people of **Nuiqsut**, can use them to develop responsible strategies for planning the future course of **Nuiqsut's** growth. **We** do not expect that everyone will **like** the present situation in **Nuiqsut**, but not everyone will dislike it either. If there are different perceptions of the community, perhaps our information can be used to determine what is important and how to maintain the desirable aspects of **Nuiqsut life**. It is our hope that by presenting this information as it was obtained that the people of **Nuiqsut** can take a dominant role in determining their future and that the planning powers and political representatives will be responsive to **Nuiqsut's** needs. If that comes to pass, then our task will be rewarded and the **Nuiqsut** people well prepared to face a future to which we have made a positive contribution.





## I. NUIQSUT--THE ENVIRONMENTAL AND SOCIAL SETTING

Over the past few years, volumes have been written on the geography and natural environment of the North Slope. Useful summaries for the **Nuiqsut** area can be found in Johnson and **Hartmen** 1969, Arctic Institute of North America 1974, Alaska Consultants 1976, Brewer et al 1977, Underwood **et al.** 1978, and **Wickersham** and **Flavin** 1982. Our need is not to reiterate this information here but to place some emphasis on salient environmental points which affect life in **Nuiqsut**. Probably the most important are the structure and dynamics of the ecosystem, whose periodic rhythms range from seasonal (by the month) to daily. The wide fluctuations in environmental parameters (whether those of weather or sunshine or frozen water) affect human capabilities and subsistence opportunities. The ranges of these parameters themselves are not necessarily disruptive or threatening to basic human adaptive capabilities but it is the unpredictability of environmental factors that creates fluctuations in other aspects of human behaviors. For example, without effective management, if resources are **widely** fluctuating in an unpredictable fashion, we expect to observe periods of over-consumption and waste followed later by periods of privation. Traditional **Inupiat** storage techniques and traditional sharing and reciprocity were adaptive to such fluctuations in resources, providing an overall stability to their way of life. **While** the resources exploited may have changed from traditional practices, the overall utility of such adaptive strategies persists through the present day. So while the year is not without its rhythms and changes, in resources availability and human behavior, there is an overall stability whose maintenance is based on traditional **Inupiat** culture.

The social setting is perhaps best measured by linkages with other **social** groups. Here the communications network is

possibly the best representation of the structure of the social system in which **Nuiqsut** functions. **Nuiqsut** is still largely dependent upon air transportation for tangible things, exchanges, and travel. The telephone system has recently provided an important new dimension to communications between **Nuiqsut** and elsewhere. As we might expect, there **is** a structural concordance between the linkages **of Nuiqsut** and elsewhere in the telephone system and **in** the air transportation system. This structural concordance is mirrored in the frequency of linkages, with most links of transportation and telephone to Barrow. Our study demonstrates tangibly the importance of social linkages as well, with an analysis of kinship and demographic changes in **Nuiqsut**.

Hence, we **will** be examining both the geographic and social setting of **Nuiqsut** from a broad ecological approach during the period of observation and during other periods as the data are available. **While** the actual content of many of the behaviors observed during our study varies from that which has prevailed in the past and may be expected to change **in** the future, there remains a remarkable structural continuity to these **socio-**cultural patterns. It is our belief that this seeming paradox has led to considerable disagreement on what is "going on" in **Nuiqsut** and to different expectations regarding the present situation and **likely** future changes. By utilizing an explicitly ecological systems approach to these data and by keeping careful note of differences in perspectives and scales of abstraction and observations, we **will** attempt to reconcile what have in the past appeared to be conflicting **views** and to provide a coherent base-line study of **Nuiqsut** as it was revealed to **us**.

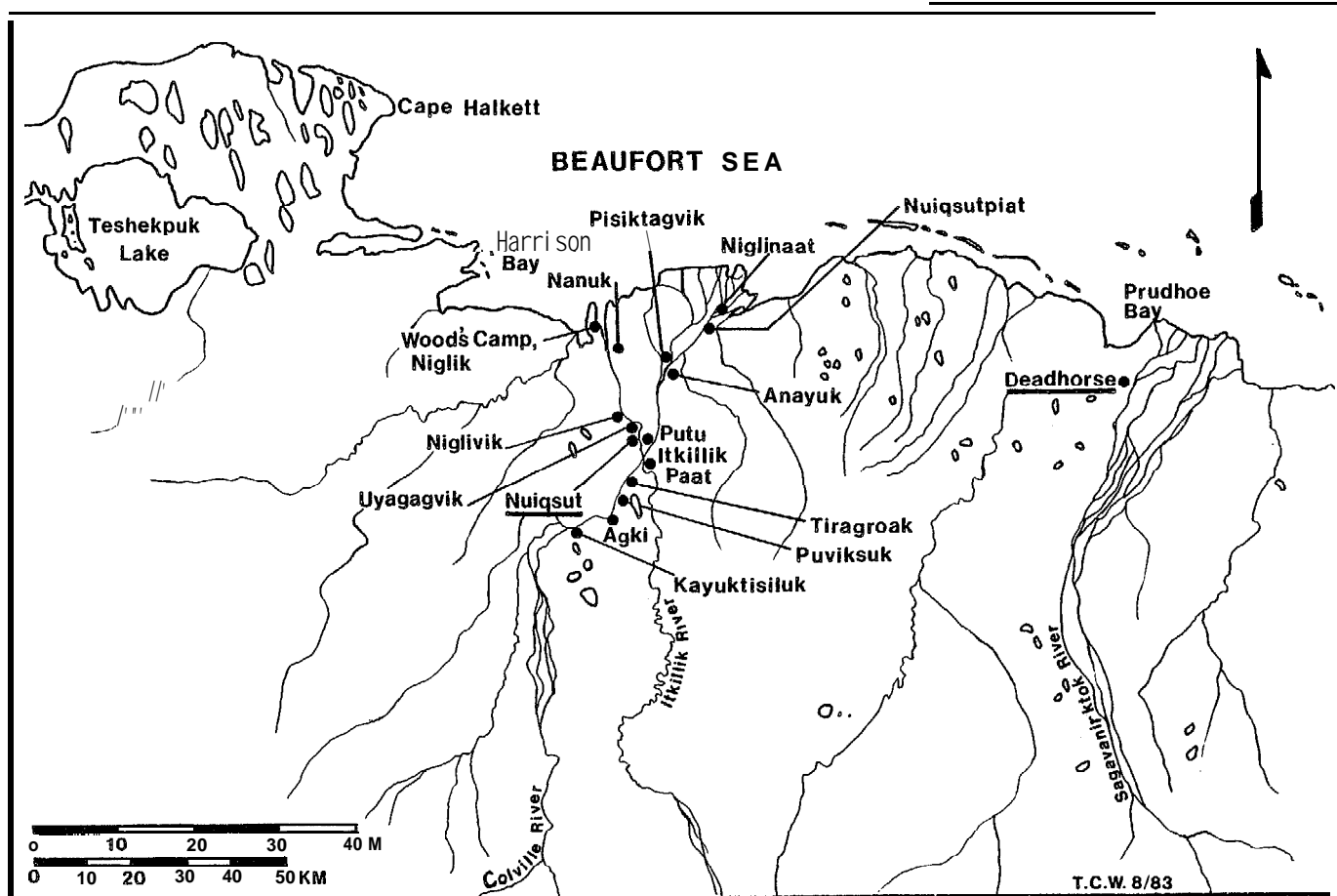
## II. SOCIAL HISTORY

### Introduction

Present-day **Nuiqsut** is about 150 miles southeast of Barrow, inland from the Arctic Ocean on the west channel of the **Colville** River (Figures 1, 2). It shares the physical characteristics of its environment with the other communities on the North Slope of Alaska--24 hours of daylight from **May** through the middle of August, 24 hour nights (with twilight) from mid-November **to** February, a reliance on air travel since open water exists for three and one half months at most, overland travel from October through May by snow machine or dog **sled** or other tracked vehicle, and an average yearly temperature range of about -45°F to **+50°F** (North Slope Borough Health and Social Services Agency, **rid**). It shares with **Atqasuk** the problems, challenges, and opportunities of being a **newly** resettled community. It is unique in its location on the disputed boundary of the National Petroleum Reserve in Alaska (**NPR-A**). **Atqasuk** is within **NPR-A**, while Barrow and **Wainwright** have defined borders with it and rights within it. **Nuiqsut's** unclear status in regard to **NPR-A** is part of the issue of social and political identity which faces the community.

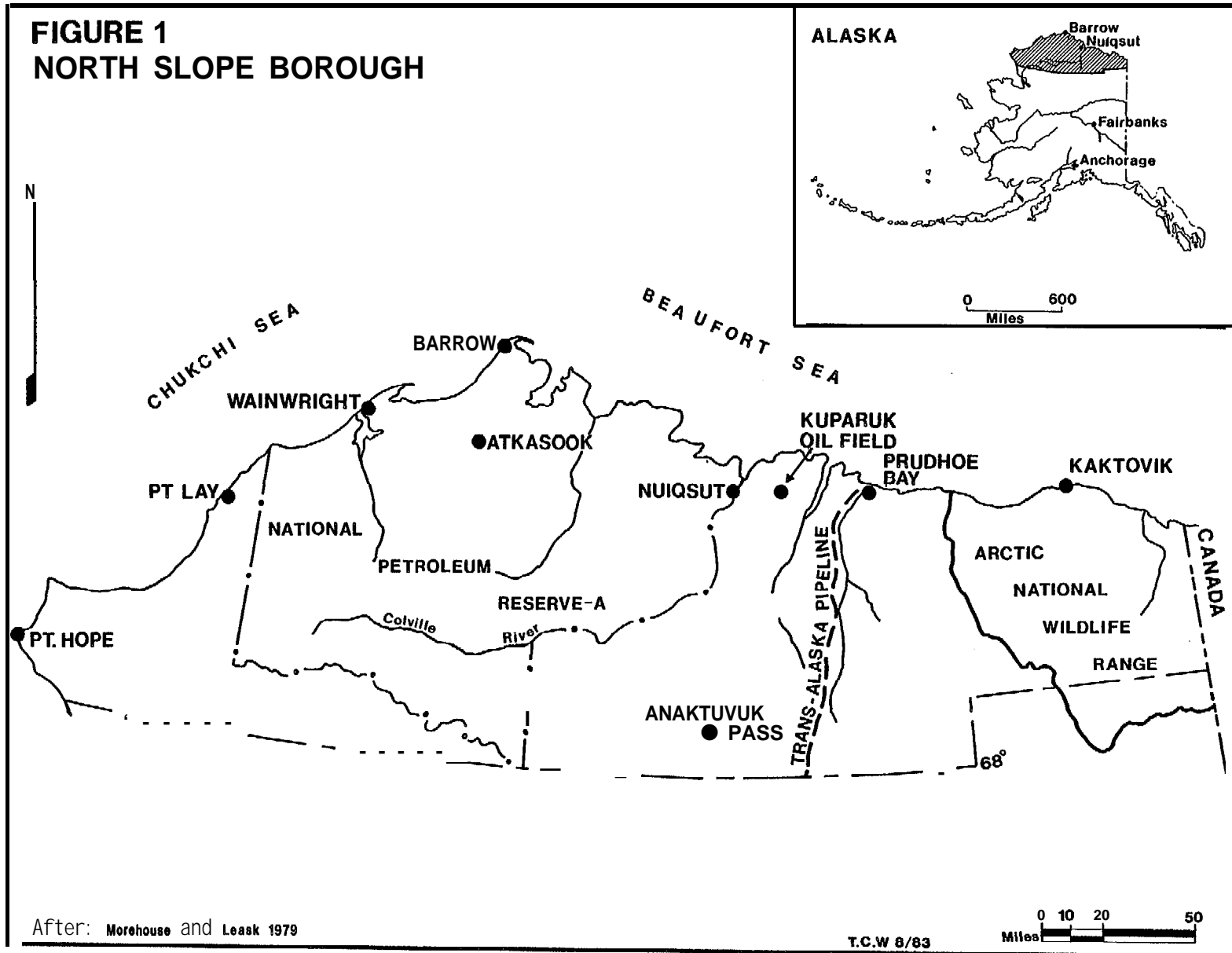
A definitive social history of **Nuiqsut** remains to be written, and what follows can only add a small bit towards that end. It is our best attempt to synthesize and reconcile the existing evidence on the ground with what people have told us and the existing written accounts. **We** will sketch four chronological historical periods, emphasizing the last (from 1973 on). This will be our main contribution in this section.

**FIGURE 2**  
**NUIQSUT AREA**



After: Libbey, Spearman, and Hoffman 1979

**FIGURE 1  
NORTH SLOPE BOROUGH**



After: Morehouse and Leask 1979

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## Late-Prehistoric Period (Traditional Inupiat)

The prehistoric origins of those people who first lived on the North Slope are not known, nor is the date of their earliest migration. Archaeological studies have not been extensive in this region and most emphasis has been placed on the more recent past, whose cultural remains are more **easily** discovered on the surface of the ground. The specific area of **Nuiqsut** has never been subjected to archaeological investigation and we must turn to the studies of adjacent areas for guidance as to **Nuiqsut's** prehistoric background.

Investigations in adjacent areas include studies in conjunction with **oil** development at **Prudhoe** Bay (beginning in 1970) and studies within the Petroleum Reserve and the National Wildlife Refuge, many of which are continuing. Much information on the historic or recent period has come from interviews with Elders, in conjunction with studies of past land use or as a result of studies conducted in Barrow associated with the **Utqiagvik** Archaeological Project.

These data are supplemental to ethnographic studies conducted in the late nineteenth century which focused on Barrow (Murdoch 1892). This work was further synthesized by Spencer (1959) whose reconstructive ethnography has been seen as the classic and definitive work in the area. Recent research by Nelson (1969) and the continuing studies by Burch (1980, 1981) have produced an updated picture of the inhabitants of the North Slope during the historic period, providing important insight into the otherwise sparse picture available for the **Colville** River area itself.

The detailed picture of historic land use and subsistence **activities** in the **Nuiqsut** area can be obtained from previous studies and land use inventories of the North Slope Borough

(Hoffman, Libbey, and Spearman 1978). As background to the social history, however, it is essential to review briefly what is known of the nineteenth century **Inupiat** cultural heritage on whose base the development of **Nuiqsut** rests.

As reconstructed from various sources, many of which are more reliably indicative of the way of life at Barrow, **Inupiat** culture derived its subsistence from hunting and gathering the variety of seasonally available resources in the natural environment. An historical view distinguished between two distinct types of culture, one characteristic of the coast (the **Taremiut**) and the other of the interior (the **Nunamiut**) (see Spencer 1959). While these categories are still useful for comparative purposes, it is clear that intermediate types existed and that such a simple dichotomy is too gross for a discussion of particular intermediate areas such as the lower **Colville** River. People who occupied this area year-round subsisted on a wide range of plants and animals while participating in extensive kin-based trading and traveling networks which helped them obtain additional resources. Their travels brought them into contact with other groups who may have had access to resources not easily obtained directly from a **Colville** River residence, such as large sea mammals (from the **Chukchi** Sea coast) or caribou and musk-ox (from the Brooks Range). In exchange, the people of the lower **Colville** could provide fish or could act as traders of more distantly available goods. Thus, while not all resources were directly available, social connections and cultural capabilities operated to provide access to the full range of resources available on the North Slope.

**Inupiat** society was organized along kinship lines extended bilaterally, with the largest concentration of people being in winter settlements. However, no large winter settlement



is known to have been located on the lower Colville River and people may have passed the winter at other locations or in small household clusters. With a predominantly household level of social organization and an environment with low productivity and scattered resources, these people maintained seasonal rounds and movements characterized by great flexibility and resiliency relying on cultural emphases of cooperation and sharing to maintain their society.

While their cultural and social patterns were similar to those of other villages (such as Barrow), the people of the Colville maintained a distinctive cultural adaptation because of their different environmental and social circumstances. In the main, however, the general picture of Inupiat cultural heritage which emerges from studies of these adjacent areas can be held to describe the culture of those who lived on the lower Colville River prior to the population withdrawal to Barrow and the resettlement in 1973 which became Nuiqsut.

Burch estimates the population of the Lower and Middle Colville River Kukpigmiut ca. 500 people at about 1840 A.D., but many people moved to Barrow in the late nineteenth century and few remained year-round after 1900 (Burch 1980:287).

#### Contact to the Late 1940s

Present informants tell us that during the early twentieth century they ranged from Barrow to Kaktovik, as well as inland, in their normal movements. Certainly the birthplaces listed for the current residents of Nuiqsut bear this out. While Barrow predominates, as one might expect, it is quite clear that people lived on the land well into the 1940s (the Tukles, for instance). While this is so, it is also equally clear that this period saw the increased centralization of Inupiat

population. The earlier voyages of exploration had little direct effect. However, the advent of commercial whaling in about 1850 began a period of rapid change. A stable system of subtle adaptations to a harsh and **everchanging**, but at the same time, sustaining and bounded environment was upset by the introduction of new resources, technologies, and dependencies (Helmricks 1983). Most of these effects were unintended and unforeseen. They were often nonetheless devastating.

The greatest of these changes must be in the rapid depopulation which resulted from Western contact and the introduction of disease and liquor. The population's demographic structure was radically altered and the kinship system fundamentally disrupted (Burch 1975). Conceptually, the system still could operate as before but the removal of many of the actual people left gaping holes in the social network. Evidence of this disruption is the extreme difficulty, if not impossibility, of collecting genealogical information from before ca. 1860. Thus **Nuiqsut** is an aggregation of **Inupiat** from different areas with different life experiences, similar in this respect to all other North Slope communities.

Many technological innovations were easily adopted into **Inupiat** life, but **still** altered it. New whaling technologies, rifles, and snow machines **all** enabled the **Inupiat** to continue harvesting traditional subsistence foods. However, in the contact context, they radically changed the tempo of life. The introduction of firearms and the growth of commercial whaling weakened the traditions of the hunt. Animals could be killed easily, in large numbers and from a distance. The cooperative **corral** was no longer needed to harvest large numbers of caribou. The skills of close approach were also rendered superfluous. Depopulation and the **lure** of employment on whaling crews or hunting for them depopulated the

interior areas (Ni el son 1977:57-58).

/

Once firearms were accepted, there was no turning back from at least partial integration into the cash economy. **Burch** may state this rather too strongly (**Burch 1980:282**): "... by 1910, although Northwest Alaskan Eskimos still survived as human beings, Northwest Alaskan Eskimo societies had passed forever out of existence." Certainly dramatic changes have taken place. By 1910, commercial whaling had essentially ended due to too few whales and **low** market prices. Steel traps and rifles enabled **Inupiat** to earn cash by trapping for twenty to thirty more years, however. Trading posts, most run by **non-Inupiat**s, sprung up along the coast. There was some tendency to return to the land in this period, at **least** to the extent necessary to run a **trapline**. It was necessary to deliver one's furs to a central fur trader (Ni el son 1977: 59-60).

At least one **Nuiqsut** informant herded reindeer in this period as **well**, and he spoke of another family herd as **well**. Reindeer herding never became commonplace, however, even though those who worked with them now remember them fondly. Trapping sustained the **Inupiat** need for cash for most of this period. Population dispersement was fostered by the establishment of a string of trading posts along the coast. Many people born 1910-1940 were born in or around the locations **of** these posts. The distribution of present native allotments is **also** indicative of how people were spread on the landscape at that time. Sonnenfeld (**1959**), at least, thinks **trapping** fostered a return to more of a subsistence lifestyle than that of the commercial whaling period.

However, fur prices declined in the 1930s and the last trading posts outside of major villages were closed in the early 1940s (North Slope Borough Commission on History and

Culture, 1980]. People again congregated into the larger coastal communities. Additionally, the government required that all children attend school, and the only school was in Barrow. All but a few families from in and around the **Colville** River area moved into Barrow. It appears that one native family, the Allens, remained in the **Nuiqsut** vicinity. Four or five others maintained seasonal camps in the area, and one non-native family established a commercial fishing operation at the mouth of **the Colville** River. For the last, the wife provided tutoring for her children.

#### Late 1940s to 1973

Our information indicates that only one native household lived in the **Nuiqsut** area year-round during this period. One non-native couple lived at the mouth of the **Colville**. Several native families seasonally occupied structures in the area, mostly for subsistence activities. In addition, hunters used the area for hunts ranging from days to a month or more. These hunters came from Barrow for the most part (Personal Communications; North Slope Borough Commission on History and Culture 1980; Okakok 1981).

The events of this period have vast implications. The true extent of North Slope **oil** reserves and the development necessary to extract them became clear. The impacts from industrial infrastructure development and population increases and the simple need to organize, in response to these issues, ensure that the **Inupiat** will never be an isolated people again. In many ways, it is ironic that the assertion of **Inupiat** independence resulted from not only **Inupiat** determination, but also the desire of outsiders to integrate the North Slope into America's mainstream energy economy. The Alaska Native Claims Settlement Act (**ANCSA**) was the result

of an inspired group of people creating the opportunity to help decide their own future. The formation of the North Slope Borough (NSB) in February, 1972 built on this by firmly establishing a social, political, and financial base for local development. It is difficult to conceive of the ANCSA or the NSB coming into existence without the desire for oil. It is within this turmoil, the dynamic struggle of subsistence and self-determination with external economic forces and imposed change, that the refounding of Nuiqsut is set (McBeath 1981, 1982; McBeath and Morehouse 1980).

#### Oil and Government Related Activities

The period of 1942 through the early 1950s saw the construction of the DEW Line Network. We collected no specific information on the effect of this on Nuiqsut people, so the reader is referred to other sources (see Nielson 1977:43). This period saw the employment of many Inupiat men in jobs which gave them construction and heavy equipment operators skills. It thus prestaged the NSB Capital Improvement Projects (CIP) program, among other things. For the first time, Inupiat were working directly for wages instead of engaging in the harvest of subsistence resources to convert into cash. This again intensified the Inupiat dependence upon cash and the things that money could be used to buy.

Oil and government are almost inseparable to many Inupiat. This is understandable since the North Slope Borough is essentially a creation of the oil strike at Prudhoe Bay. Almost all non-Inupiat on the North Slope are somehow connected to oil. Oil money funds everything on the North Slope, either directly or through taxation. The people of Nuiqsut see oil exploration and development as one of their major concerns because of its financial benefits and potential

environmental /social detriments.

The Naval Petroleum Reserve Number 4 was created by Executive Order 1923. Its eastern boundary is the right bank of the Colville River, but the exact meaning of this is currently under dispute. Nuiqsut thus may be in the reserve or not. Geological mapping of the Reserve was conducted by the USGS from 1923 through 1926. Thirty six exploration wells were drilled during the extensive geological and geophysical surveys of 1944-53. Oil was found at Umiat, and gas was in evidence at several locations.

Jurisdiction over the Reserve was transferred to the Department of the Interior in 1976 and the name changed to the National Petroleum Reserve in Alaska (NPR-A). Exploratory drilling operations and seismic exploration are ongoing. Development and production are not permitted (USDI, BLM 1981:2). The most recent proposal potentially affecting Nuiqsut was a Sohio request to drill an exploratory well near Fish Creek. This is within NPR-A, approximately 32 miles northwest of Nuiqsut. It is also one of their most important subsistence resource areas, both for fish and caribou.

NPR-A, of course, includes all the land west of Nuiqsut. The Prudhoe Bay and Kuparuk oil fields are actually in production to the east of Nuiqsut. Nearly all land east and south of Nuiqsut is proposed for oil leasings by the State of Alaska. The continental shelf is on the schedule of proposed state lease sales (some has been leased already). The outer continental shelf, under Federal jurisdiction, has also or is in the process of being leased. Most land offered for lease is not bid upon, but it is clear that Nuiqsut is surrounded by oil activity. One can see the lights of Kuparuk from Nuiqsut (but not vice versa).

## Since 1973

### RESETTLEMENT

The actual resettlement of **Nuiqsut** took place in April of 1973 when a group of 14 people made the **first** trip from Barrow. Eventually, 27 families would arrive over a period of approximately two months (Brown 1979:3). Informants in **Nuiqsut** listed 31 family heads as those who were **in Nuiqsut** the first year. As some last names appear twice, **it** may be that some kin-groups came formally as one household and others as two. Our very rough surmise as to the original resettlement group is listed in Table 1.

The reason for establishing the new **Nuiqsut** at a particular spot does not seem to be a matter of public agreement. Several non-natives, familiar with the area and capable of making such judgments, remarked that the site was rather poor for a village due to wind and poor drainage. This was not disputed, but neither was it confirmed, by native informants. The first temporary landing facilities for airplanes were five miles from the village. Transportation to the village was by boat or **skidoo**. The first airstrip **built** near the village was subject to flooding, so that at times the village was cut off from regular supply lines for weeks. These problems were not solved until the construction of a new airstrip in 1981. Meanwhile, the channel of the **Colville** upon which the village sits has silted in so much that access to the main river by boat is blocked.

The first draft of the Alaska Native Claims Settlement Act did not include **Nuiqsut**. The Bureau of Indian Affairs (BIA) did certify the village in the first amendments to the act the next year, but located **Nuiqsut** on the **Negli**k Channel by the Woods' fishing camp. **Nuiqsut** residents have something

Table 1: ORIGINAL SETTLERS OF NUIQSUT, APRIL 1973

<u>Name</u>	<u>Date of Birth</u>	<u>Name</u>	<u>Date of Birth</u>
Thomas NAPAGEAK	08/03/35	David KASAK	08/10/39
Francis <b>Evikana</b>	06/05/39	Susi e Nukapi gak	02/12/45
Walter	01/17/58	David Jr.	10/08/67
Archie	10/12/64	Larry	<b>09/24/56</b>
Thomas Jr.	03/14/68	<b>Harland</b>	12/13/66
Susi e	09/10/56	Alice	10/05/67
Lucy	08/23/59	Agnes	07/07/71
Vera	04/25/61		
Elizabeth	11/20/62	Clay KAI GELAK Sr.	09/25/15
Ellen	07/26/64	Kitty <b>Sakalok</b>	06/15/16
		Jimmy e	08/25/42
David EVI KANA	11/11/37	Isaac	01/27/60
Florence Solomon	07/22/47	Edith	03/02/47
Delbert	03/14/64	Susi e	03/14/55
Alice	02/25/65		
Veronica	12/13/68	Mark PAUSANNA	12/28/18
		<b>Nannie Nayulok</b>	05/19/23
Steve HOPSON, Sr.	08/26/06	David	09/14/46
<b>Terza Ungarnok</b>	07/07/17	Margaret	01/09/52
		<b>Bernice</b>	10/26/65
Raymond IPALOOK	07/23/24	Percy	<b>?/ ?/70</b>
Flora <b>Tukle</b>	07/13/30		
Herbert	<b>?/ ?/59</b>	Jimmy KASAK	12/31/41
		Helen Ahnupkana	03/06/41
Willie SIELAK	04/07/07	Jimmy Jr.	01/11/67
Ruth Egasak	12/11/10	Rhoda	12/03/61
<b>Willie Jr.</b>	04/11/5?		
George	<b>?/ ?/60</b>	Jobe WOODS	<b>?/ ?/32</b>
		Alice <b>Masuleak</b>	<b>?/ ?/38</b>
Frank OYAGAK	03/11/36	George	10/12/62
Irene <b>Napageak</b>	09/22/39	Jobe Jr.	09/26/39
Freddie	08/17/62	Marlene	10/21/66
Frank Jr.	12/12/64	Jimmy	06/29/70
Walter	12/24/65		
Joseph	07/10/68	Frank LONG Jr.	05/16/43
Herman	12/18/70	Hattie <b>Matumeak</b>	10/25/44
		<b>Vernan</b>	16/15/64
Jerry SOVALIK	11/16/39	Jeffrey	11/20/65
Lydia Woods	04/24/41	Florence	01/01/68
Floyd	04/04/67	Christopher	04/04/72
Valerie	07/10/64	Leroy	03/02/73
<b>Cornelia</b>	12/22/65		
Conrad	10/01/70	David MASULEAK	<b>?/ ?/42</b>
		Mae	<b>?/ ?/43</b>
		John	06/10/72



Table 1: ORIGINAL SETTLERS OF NUIQSUT, APRIL 1973, Continued

<u>Name</u>	<u>Date of Birth</u>	<u>Name</u>	<u>Date of Birth</u>
Archie AHKIVIANA	07/07/40	Mammie MATUMEAK	?/ ?/?
Dorcas Tukle	?/ ?/43	Lucy	?/ ?/58
Billy	09/01/64	Gordon	?/ ?/53
Dora Ann	08/12/63		
Emma Lourie	04/10/65	Robert KILAPSUK	?/ ?/?
Lucy Mae	08/28/68		
Loila	07/03/70	Paul ORAGROOK	08/1 7/22
David BROWER Sr.	05/16/07	Samuel KUNAKNANA	04/ ?/1 3
Jane N. Kilapsuk	12/10/29	Sarah Pausauna	06/09/21
David Jr.	02/1 5/51	Ira	11/23/50
Karl	09/20/63	Myrtha Martha	04/28/52
Freddie	09/26/65	Laura Mae	08/08/53
Lucy	09/11/61	Emma Susie	12/07/54
Maria	10/24/62	Hester Ann	01/25/58
		Vera Julia	10/08/64
Neil ALLEN	?/ ?/ ?	Molly	?/ ?/70
Annie	?/ ?/24	Sammy	?/ ?/67
Maggie	?/ ?/45	Susie	?/ ?/57
Ray AHNUPKANA	12/06/27	John AHTUANGARUAK	?/ ?/39
Marjorie Kasuk	04/17/36	Mae E. Evikava	?/ ?/29
Clarence	02/25/61	Cyrus	11/14/54
Roger	04/16/64	Joseph	01/11/56
Harry	02/10/68	Wesley	06/23/57
Lottie	09/08/65	Johnny Jr.	07/07/58
Johnny AHNUPKANA	04/06/37	Lottie Mae Evikava	10/23/52
Irene Brown Tukle	?/ ?/40	Delbert Evikava	12/23/49
Gordon Brown	?/ ?/65		
Gloria Brown	?/ ?/66	George WOODS	?/ ?/03
Ben Tukle Jr.	?/ ?/73	Nannie Woods	?/ ?/05
		Abraham	?/ ?/24
Wilbur AHTUANGARUAK	11/15/34	Norman LAMPE	07/23/31
Bernice Kanayuvak	01/23/38	Annie Nayukok	09/24/38
Cyrus	04/06/64	Robert	02/27/58
Rodney	03/19/64	Sandra	01/16/66
Jeus	01/19/68	Leonard	04/29/67
Ellen Rose	07/09/58		
Dora	03/08/62		

Table 1: ORIGINAL SETTLERS OF NUIQSUT, APRIL 1973, Continued

<u>Name</u>	<u>Date of Birth</u>	<u>Name</u>	<u>Date of Birth</u>
. Edward NUKAPIGAK	02/15/25	Patsy TUKLE	06/09/33
Ruth Ahtaungaruak	01/17/25	Helen Itta	12/22/40
Joseph	12/04/48	Samuel	02/16/55
Eli	06/06/51	Donald	07/05/55
Edward Jr.	04/03/54	George	09/15/60
Isaac	04/12/57	Wallace	11/15/62
Robert	06/29/58	Leonard	10/12/62
Jimmi e	07/20/60	Euni ce Mae	07/21/58
Jonah	09/11/61		
Thomas Mi ckey	10/21/63	Joash TUKLE	06/23/26
Emily	03/04/50	Ni ta Tazvik	09/01/38
Martha	11/16/52	Charl ey	12/12/58
Dora Al ice	04/19/65	Al fred	12/12/61
Doreen Al ice	09/27/66	Clarence	07/05/59
<b>Dorcas</b>	05/15/67	Juani ta	01/05/63
		Valerie Ruth	04/25/64
<b>Bessie</b> ERI CLOOK	05/13/17	Dorothy	11/19/65
Harry	05/03/60		

of a dispute over land in this area with the only long-term non-Native residents of the Nuiqsut locale, the Helmericks, who had lived there since ca. 1952. The Natives claim that the Helmericks only located there after they became aware that it was land historically used by the Inupiat. The Helmericks deny this, of course, and maintain that the Woods built their camp after the Helmericks arrived. The Helmericks do not deny that the area may have been used previously by others for Native subsistence activities on a seasonal basis. Thus, there are conflicting claims for the onset of recent continuing land use.

The present community of Nuiqsut was built next to a more-or-less permanent household structure erected by Neil and Annie Allen some years previously. Patsy Tukle also had (and has) a structure several miles from Nuiqsut. Indeed, at least several people moving to Nuiqsut stopped at Tukle's before

arriving at **Nuiqsut** to pick up some frozen fish to take with them (Isaac **Kaigelak**, personal communication); No one has ventured an opinion as to why **Nuiqsut** was erected next to Allen's house rather than Woods' or **Tukles'**.

The resettlement was possible because among the responsibilities assumed by the North Slope Borough was that of educating the young. This made it practical for families with school age children to live in **Nuiqsut**. The **Arctic Slope Regional Corporation (ASRC)** assisted in their move financially and logistically, as well as by fighting for official recognition under the **ANCSA** (Tundra Times 01/02/73). There are rumors, repeated by many, that **Nuiqsut's** location serves political/economic reasons. One scenario has **Nuiqsut** on top of a **coal** field to which the ASRC wanted to establish a **claim**. Another has **Nuiqsut** serving as a test case, to see how **firmly locked** up National Petroleum Reserve in Alaska (**NPR-A**) **lands really** are.

Another version, told us in Anchorage, was that when people moved back to this area they lived in tents **at Putu**, the Naval Arctic Research Laboratory (**NARL**) field facility (which was located near where **Nuiqsut** is today). **When** the time came to build, they moved to a spot some distance away. An informant says trouble between the **non-Inupiat** commercial fishing natives began at this time although previous relations had been good. **When** **NARL** was shut down **at Putu**, some **Inupiat** were upset because they thought a resident **non-Inupiat** then stole the buildings away. Natives thought those buildings would have been useful in the village and had, in fact, already been using **them**. This only added to the ongoing disputes over **land** ownership and fishing rights. That was only one among many problems caused by poor communication between **Inupiat**, government, and **non-Inupiat**.

## DEVELOPMENT OF SERVICES

Housing is the most expensive Capital Improvement Project (CIP) in Nuiqsut. All other infrastructure development can be tied to increases in housing supply (which is of course a measure of actual or projected population increase). The new high school and the new airstrip were more costly single investments during the period of their construction, but housing is the category of largest accumulative expenditure. Utilities development is ongoing, but mainly as a result of increased demand for electricity and water from the new school and housing units. Additional infrastructure development (public roads, sewage, city dump) can also be attributed to such demand (Figures 3, 4, 5).

Services were minimal when Nuiqsut was refounded in 1973. There was no electricity, public water service, or sewage disposal. Air traffic was irregular and the airstrip was five miles away, so mail and supplies were unreliable. In such circumstances, reliance upon local resources was absolutely necessary. Ice for water was chopped from a shallow pond just north of the village (now the area between the post office and the high school). People ate mostly fish, caribou, and other local game resources. Individual "honey bucket" systems were used for sewage.

Large changes have taken place in nearly all these areas. "Honey buckets", out of necessity, remain in use in all structures except for the school, which has flush toilets. A "honey bucket" is essentially a five-gallon pail lined with a plastic bag and topped with a toilet seat. When the bag is full, it is closed and tied and dumped into the household 55-gallon drum outside (or sometimes cardboard boxes in winter, when sewage freezes rather quickly). When each household has several of these full, the city council declares a

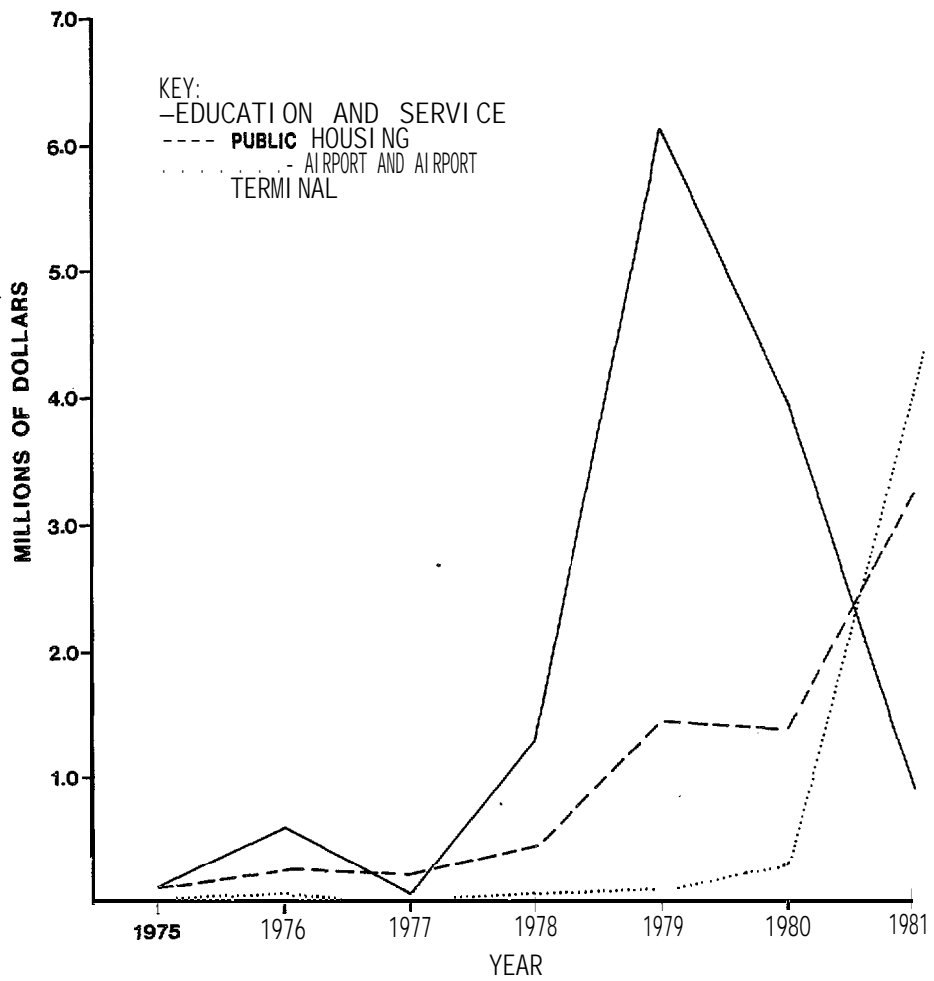
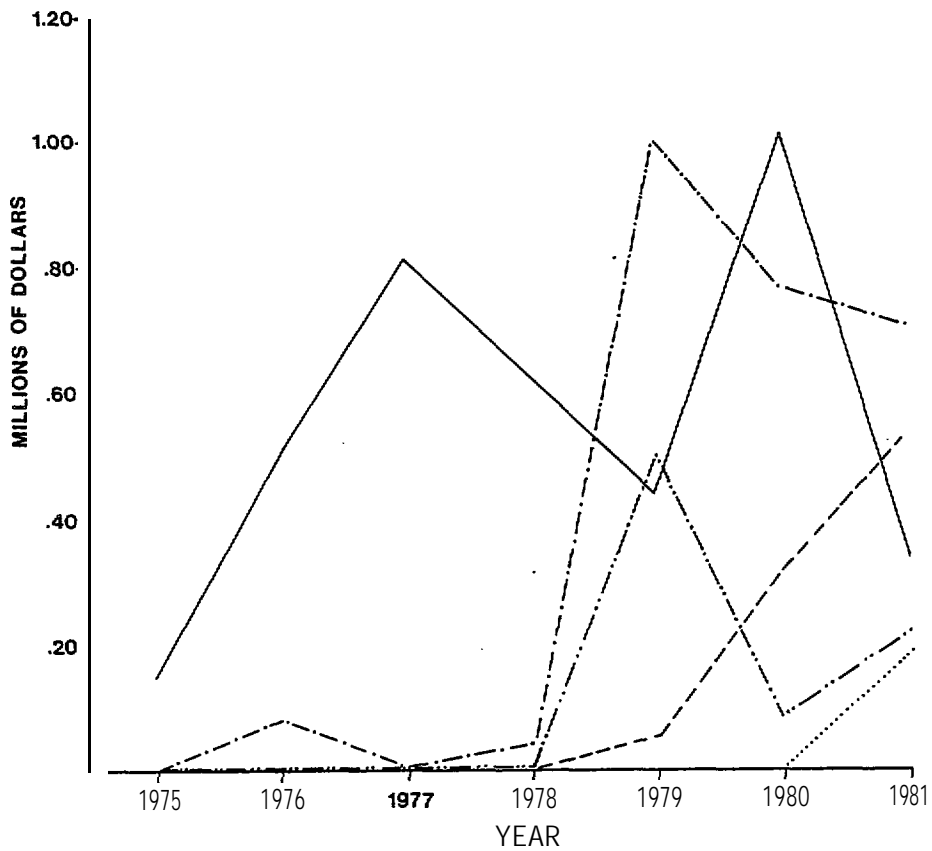


FIGURE 3  
 CIP FUND EXPENDITURES, NUIQSUT



**KEY:**  
 ----- LIGHT, POWER AND HEAT  
 — PUBLIC ROADS, STREETS, etc.  
 ---- SEWAGE TREATMENT AND DISPOSAL  
 -.-.- WATER FACILITIES  
 ..... SANITARY FACILITIES

FIGURE 4  
 CIP FUND EXPENDITURES, NUIQSUT

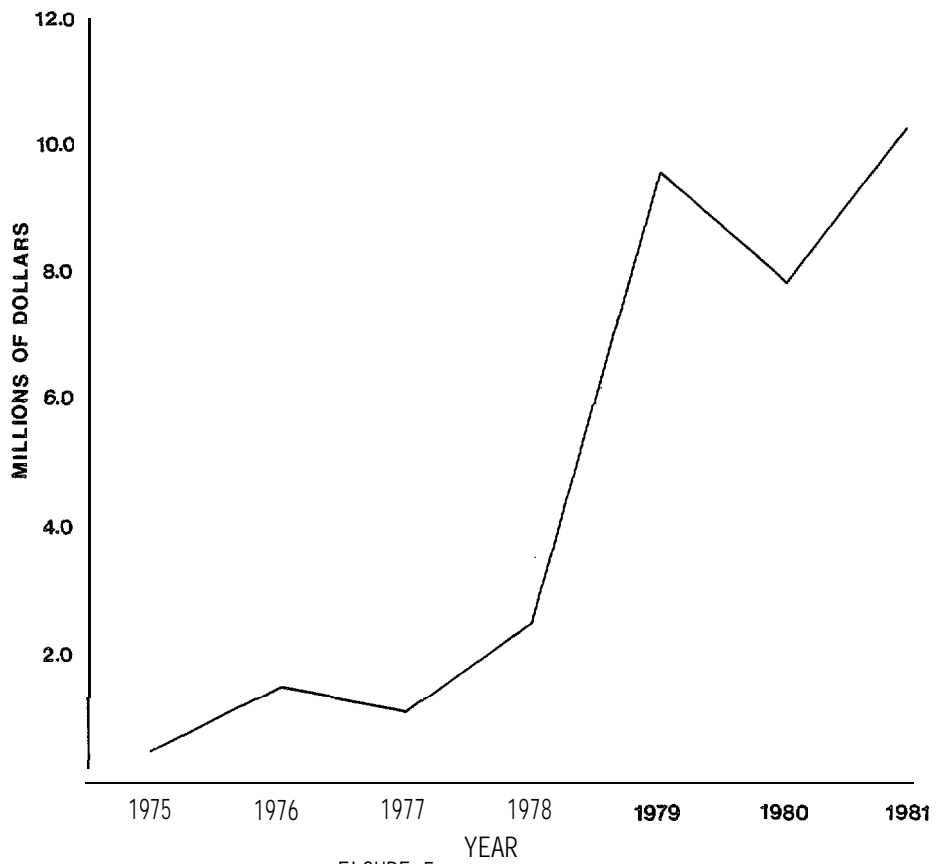


FIGURE 5  
TOTAL CIP FUND EXPENDITURES, NUIQSUT

"hauling day" and pays Individuals \$10 for each such drum they take to the city dump for disposal. The funds come from the NSB, as that is where responsibility for sewage disposal lies. Alternatively, a crew from the NSB Public **Works** Department collects the drums with a tracked vehicle and takes them to the dump. Prior to the construction of the city dump, with its access roads, disposal was made at a designated spot on the tundra outside the village. The flush toilets empty into a sewage holding tank in the utilities building, which **is** then pumped out into the recently constructed sewage lagoon north of the school. Plans are that all village sewage will be collected and placed in the sewage lagoon, but problems with the sewage collection truck require the continued use of the dump for this purpose.

Water is now pumped from a fresh water lake south of the village to the utilities building, but this is relatively recent (1979). Here it is treated, mainly by chlorination. Delivery of water is made by pumper truck and costs nine cents per gallon. There is no charge for water if people come and get it from the utilities building themselves. People do still chop ice for water, some for their entire household supply and others only for drinking water. Two reasons are given. Utilities water is said not to taste as good as ice water, and utilities will no longer deliver water to people who do not pay their water delivery **bill**. **Ice** is chopped from the same fresh water lake from which utilities pumps its water, as the source originally used nearer the village has become rather turbid.

The original 30 houses have no running water and store their household supply indoors in 55-gallon drums or large plastic garbage cans. Newer houses sometimes have such supplies, but may also have a larger holding tank to provide water to sinks, and in some cases, to showers. Showers, like the



washing machine in the **four-plex**, are luxuries which are sometimes too much trouble. Due to the limited household water supplies and the cost of heating water, many people who have household showers still go to the utilities building or the school to **wash**. The utilities building **also** has three washing machines and two dryers which, along with those of the school, are adequate at present for the village.

All structures are heated with diesel fuel oil. The buildings constructed in the first building phase **all** have freestanding space heaters. These are connected to a fuel tank outside of the structure by copper tubing. The fuel tank is an empty 55-gallon oil drum elevated so that **fuel** is gravity fed to the heater. The tank is refilled by pumping **oil, usually** with a hand pump, from a **full** 55 or **30-gallon** drum which is delivered so as to be just below the fuel tank. This delivered drum is itself **filled** from the large **oil** storage tanks near the airport. Newer buildings have **central** heating systems, either forced air or baseboard, but must **also** rely on pumping fuel oil from delivered drums into the heating **oil tank**. Their fuel tanks do tend to be larger than **55-gallon** drums, as they are made to be fuel tanks. Thus, they would not have to be refilled as often. In reality, most **Inupiat** households buy and pump **fuel** oil in 55-gallon amounts. This evens the expense out over time and is easier to manage physically as most households transport their own **oil** using a snowmobile and a **sled**.

The electrical generating capacity of the village has grown steadily since 1974. However, demand has always pushed the **limits** of capacity due to **Nuiqsut's** rapid rate of growth. Present capacity has been built essentially since 1979. New housing and the school **will** require expansion of the utilities complex or the construction of a second generator facility

in the very near future (NSB Utilities Department, Personal Communication).

There was no telephone service or television reception in Nuiqsut when it was resettled in 1973. People did listen to the Barrow radio Station, KBRW, which served as the major communications link. A single phone, serving the entire village, was eventually installed. This required users to wait in line, sometimes for quite a time. Only recently has telephone service been extended to individual households (1982). Nearly all houses now have phones. The television set is nearly ubiquitous, even though reception has been possible for only two years. Cable facilities will be installed shortly, if the City Council will donate the lot upon which to build the antenna and is able to find someone to maintain the system. Video recorders and players are not uncommon in Nuiqsut, being owned by at least ten Inupiat and several non-Inupiat households.

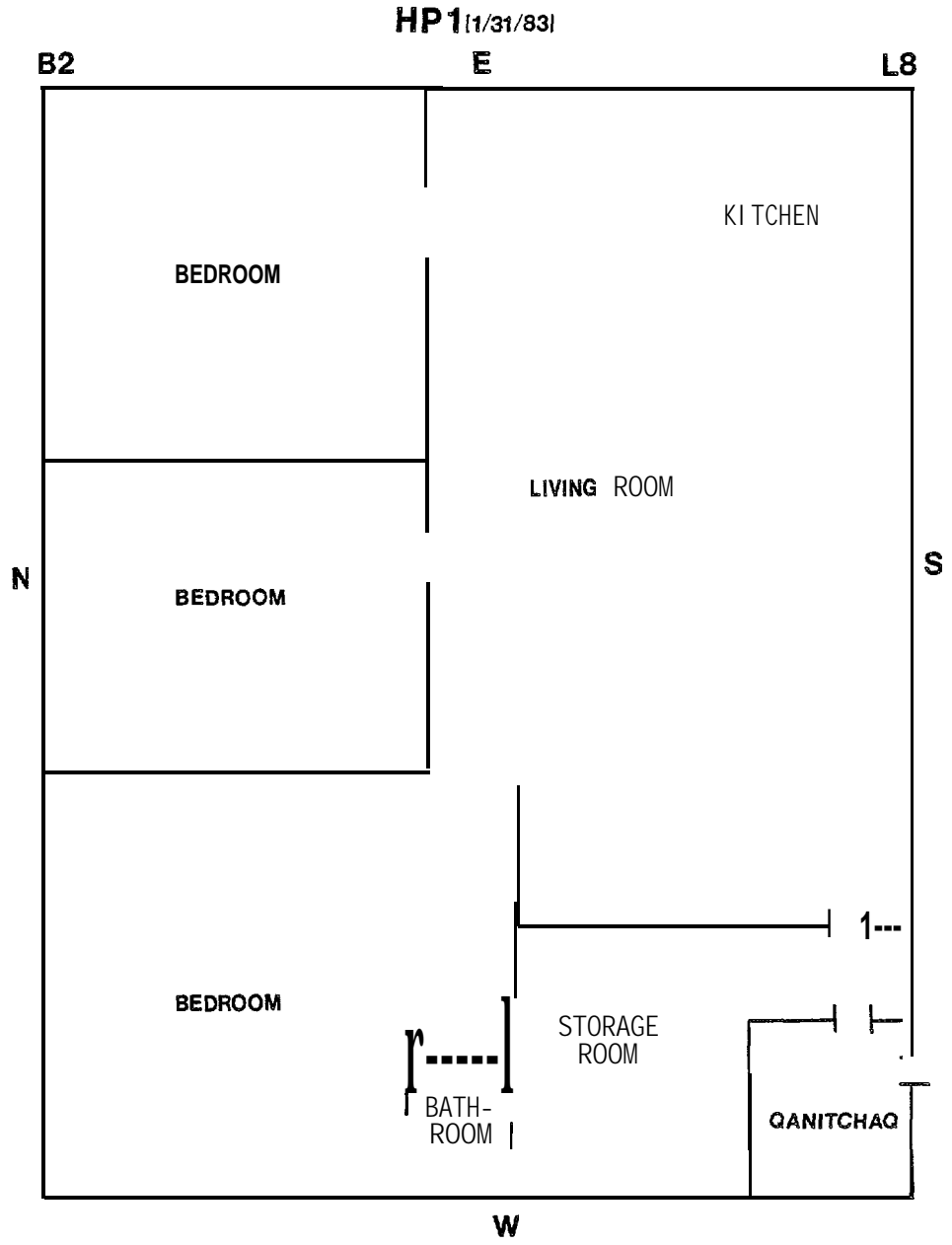
## PHYSICAL PLANT DEVELOPMENT

### Housing

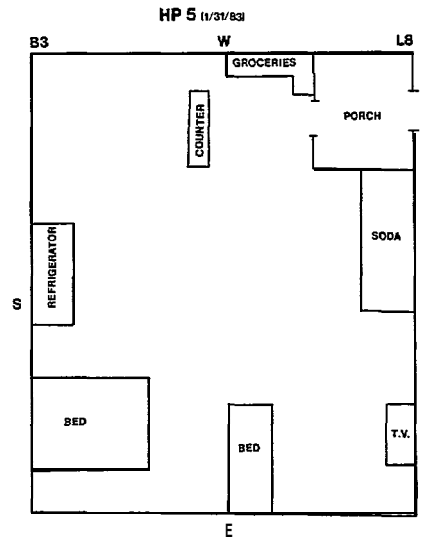
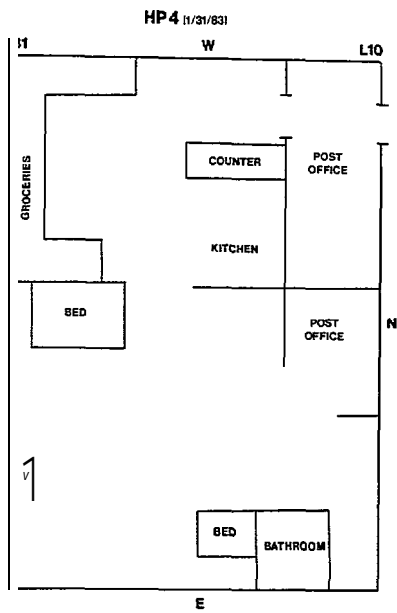
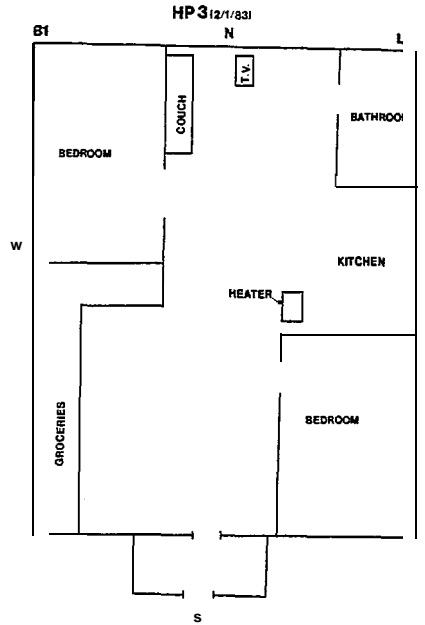
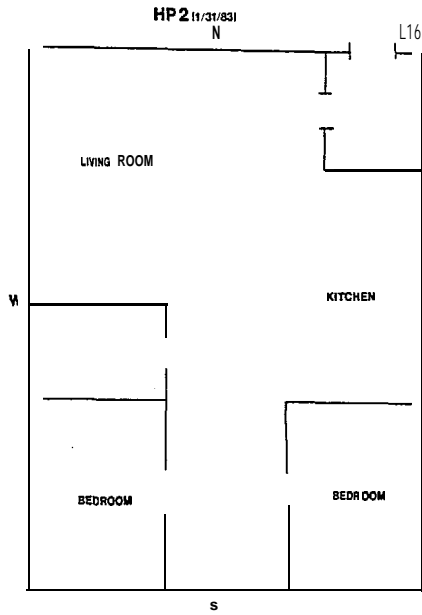
Housing projects have been the prime mover in Nuiqsut's growth. New houses provide places to live as well as local construction jobs. This section will discuss the different building phases and how housing has become more complicated and costly over time. A conceptualization of the physical expansion of Nuiqsut will result from this, as well as a better understanding of the spatial dimensions of day-to-day life. Figures 6-12 and Photographs 1-18 will facilitate this understanding.

When the first families moved to Nuiqsut, only one frame

FIGURE 6



**FIGURE 6**



**FIGURE 6**

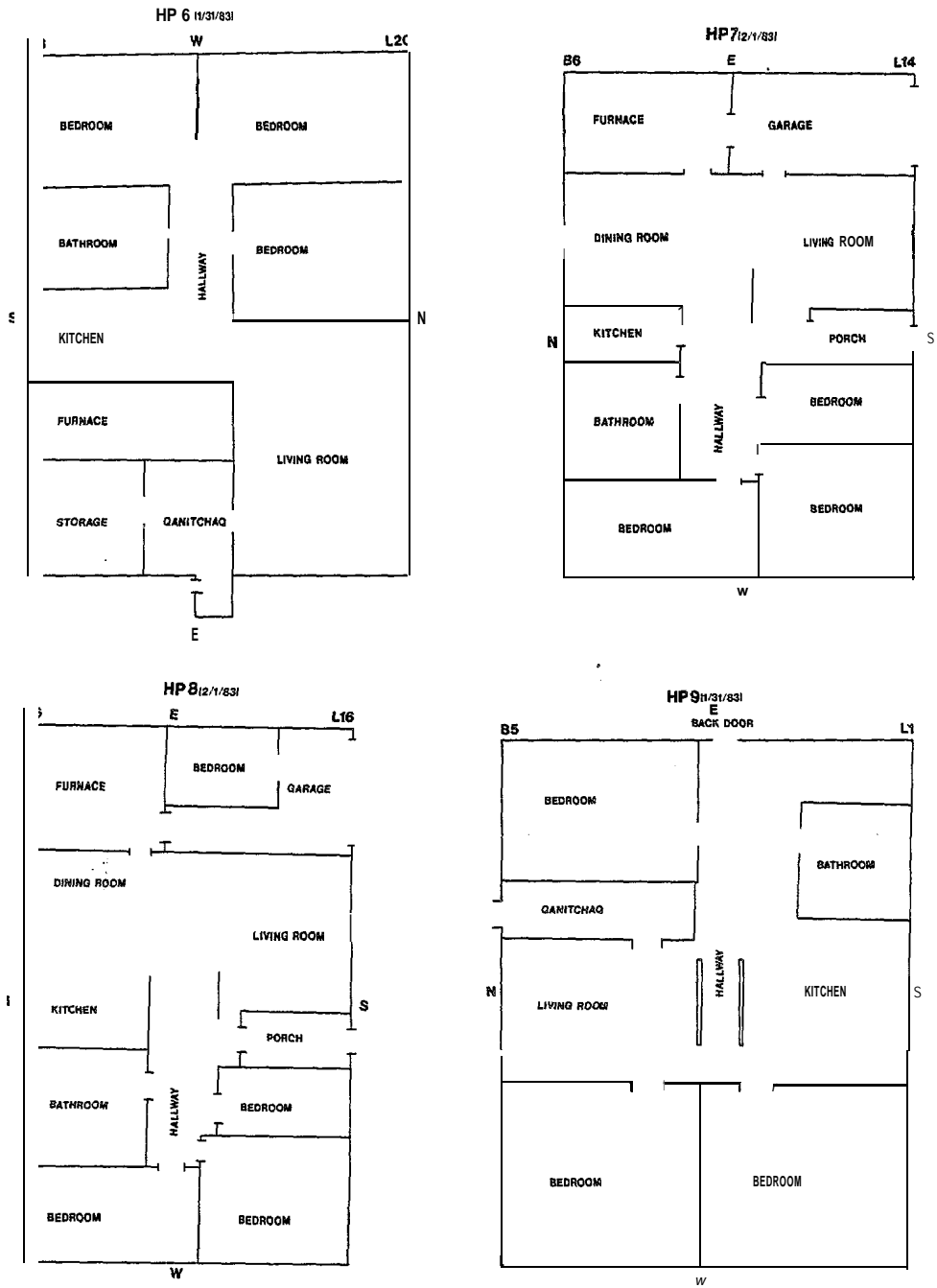
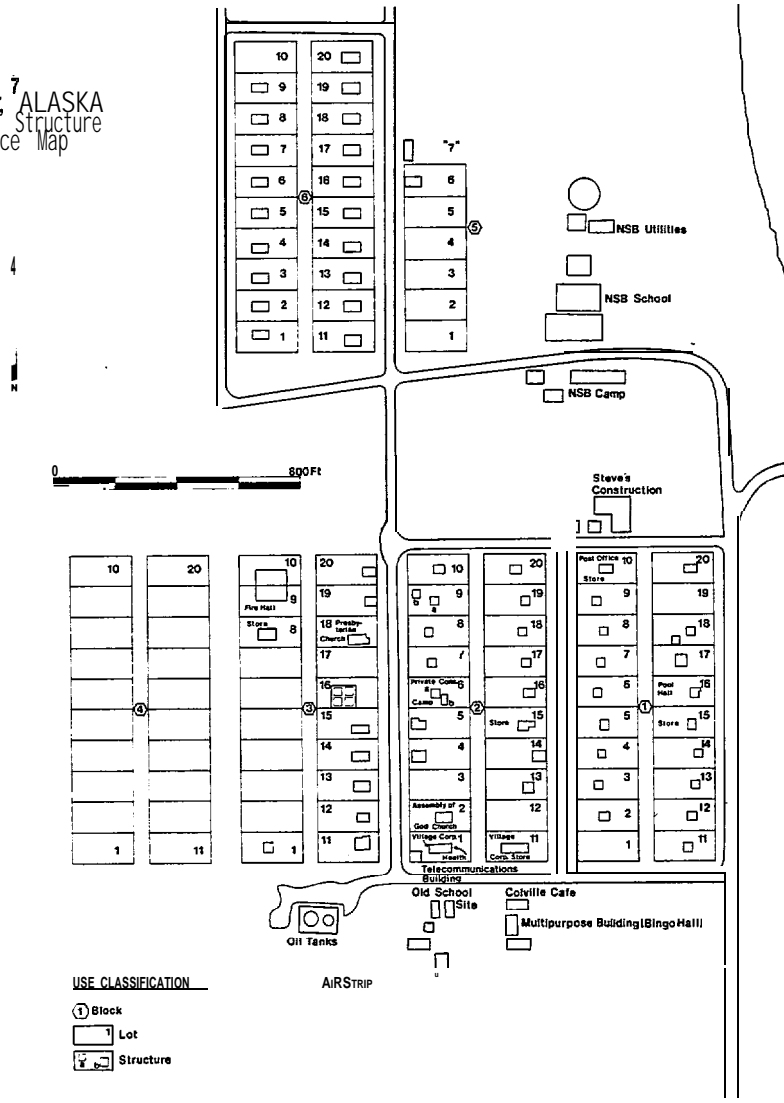
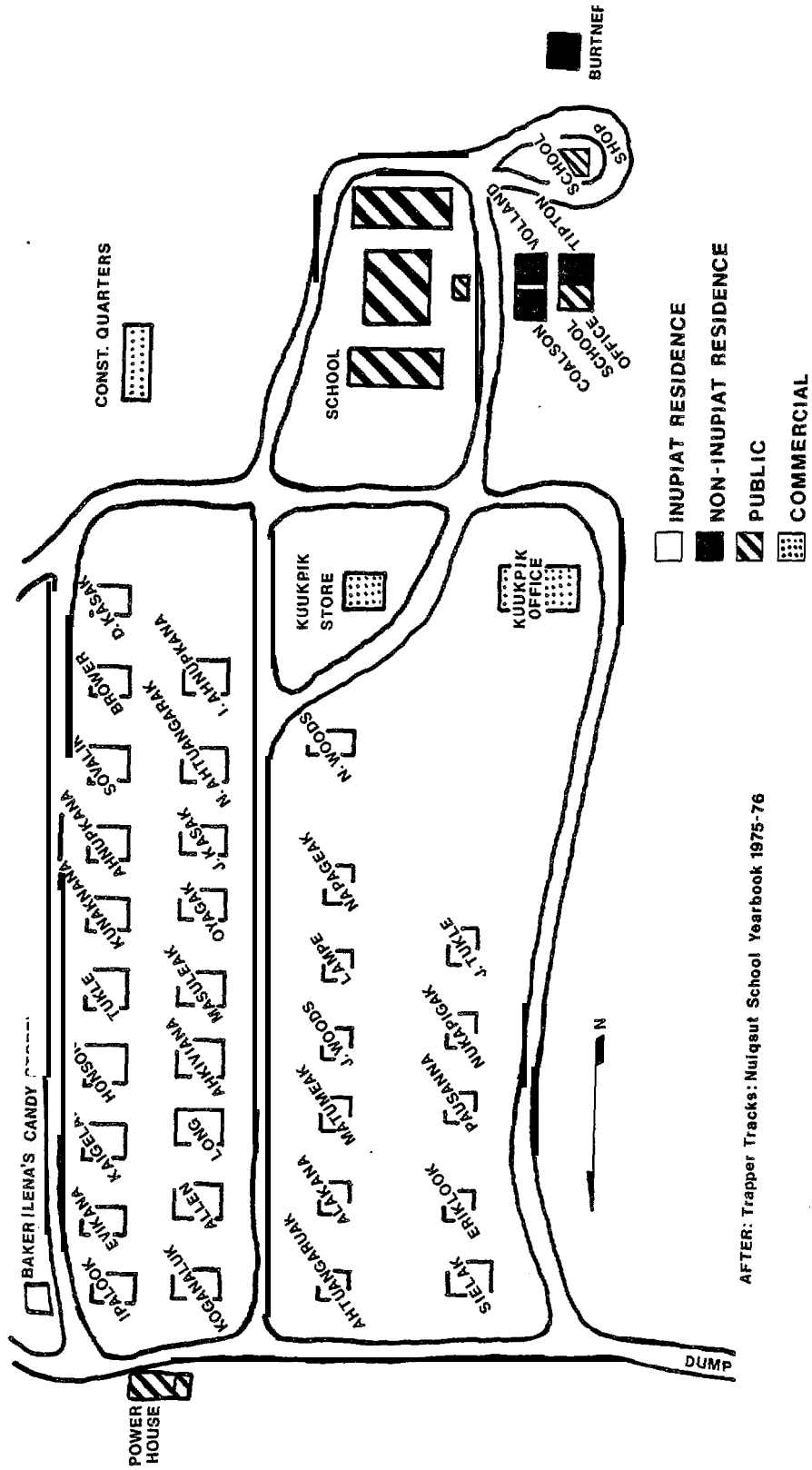


FIGURE 7  
 NUQSUT, ALASKA  
 Lot and Structure  
 Reference Map  
 03/83

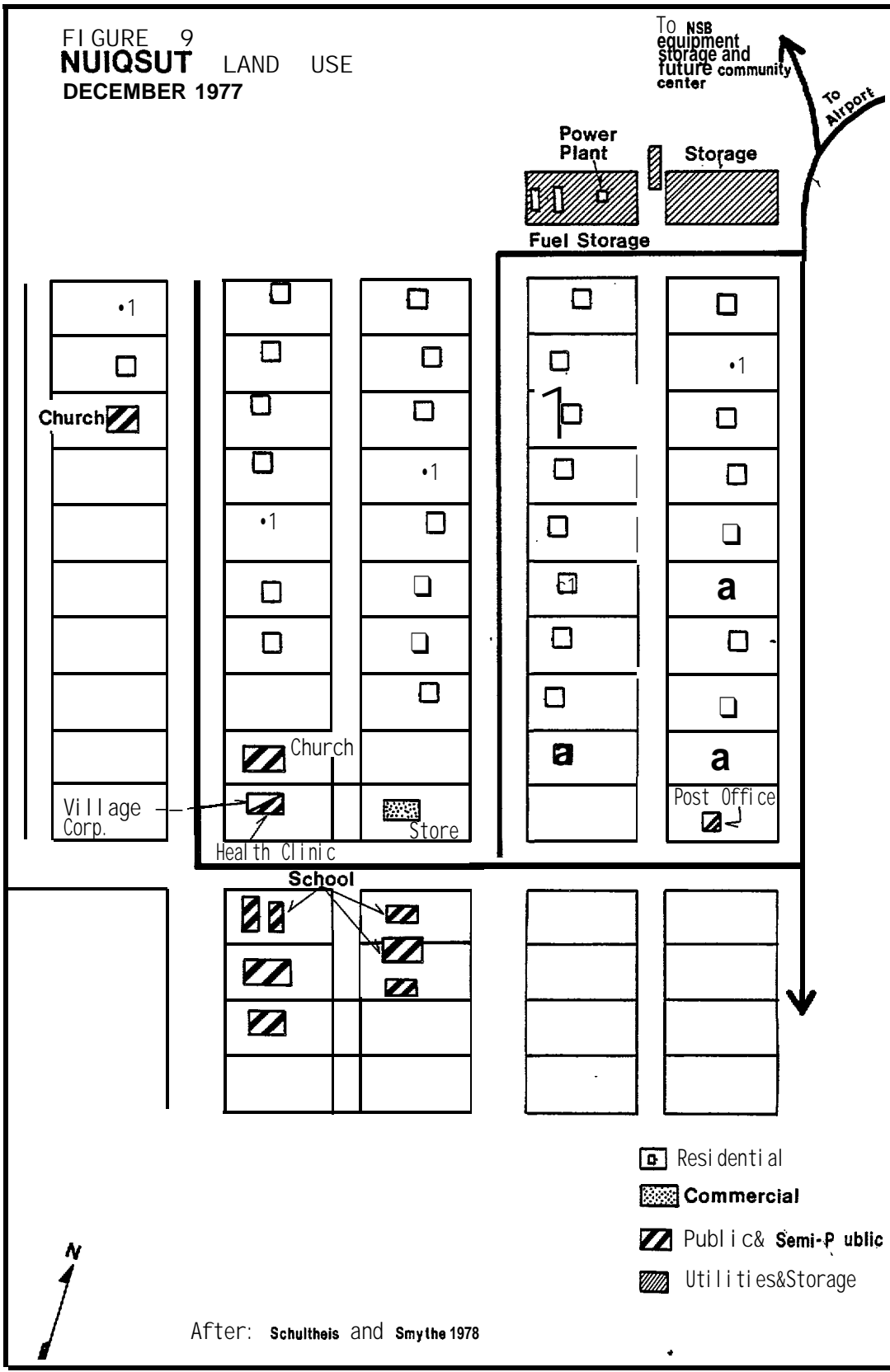


**FIGURE 8**  
**NUIQSUT LAND USE, 03/26/76**



AFTER: Trapper Tracks: Nuiqsut School Yearbook 1975-76

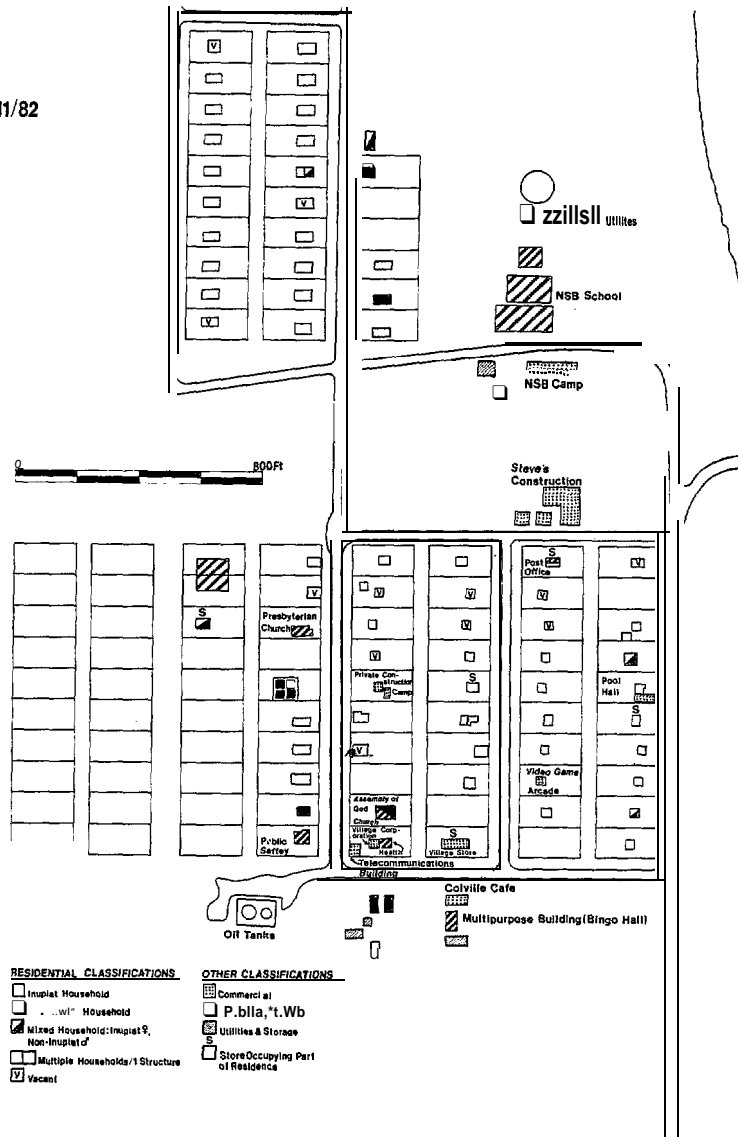
FIGURE 9  
**NUIQSUT** LAND USE  
 DECEMBER 1977



After: Schultheis and Smythe 1978



FIGURE 10  
 NUIQSUT  
 LAND USE 11/82



**FIGURE 11**  
**NUIQSUT**  
**LAND USE 03/83**

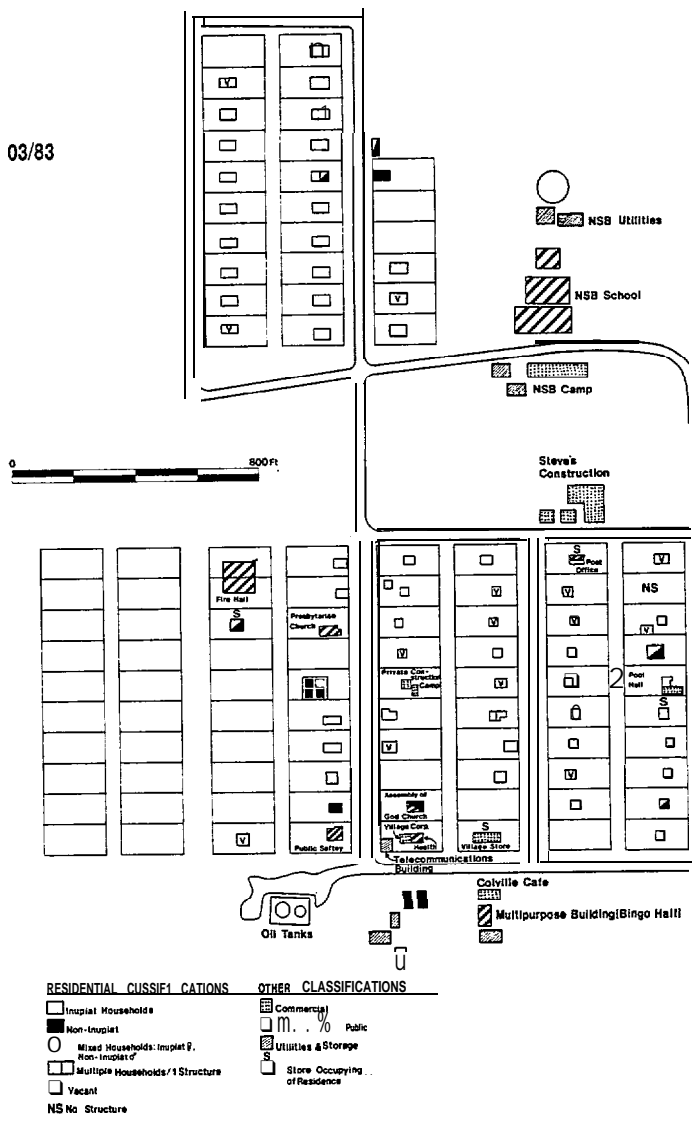
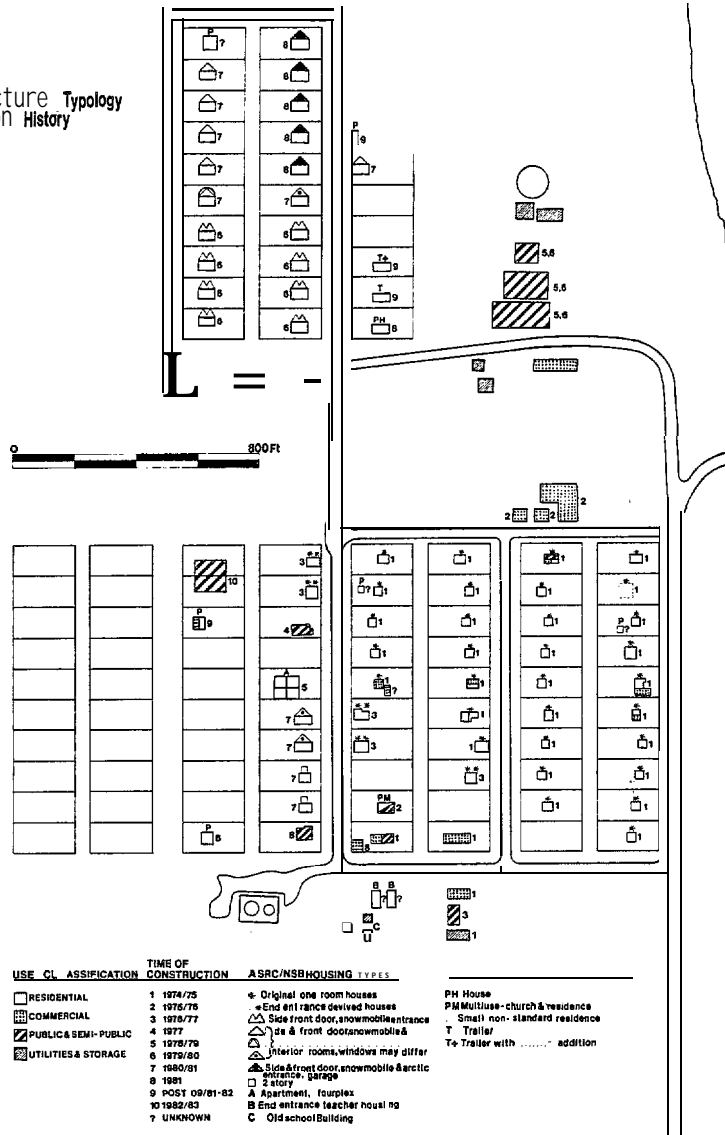
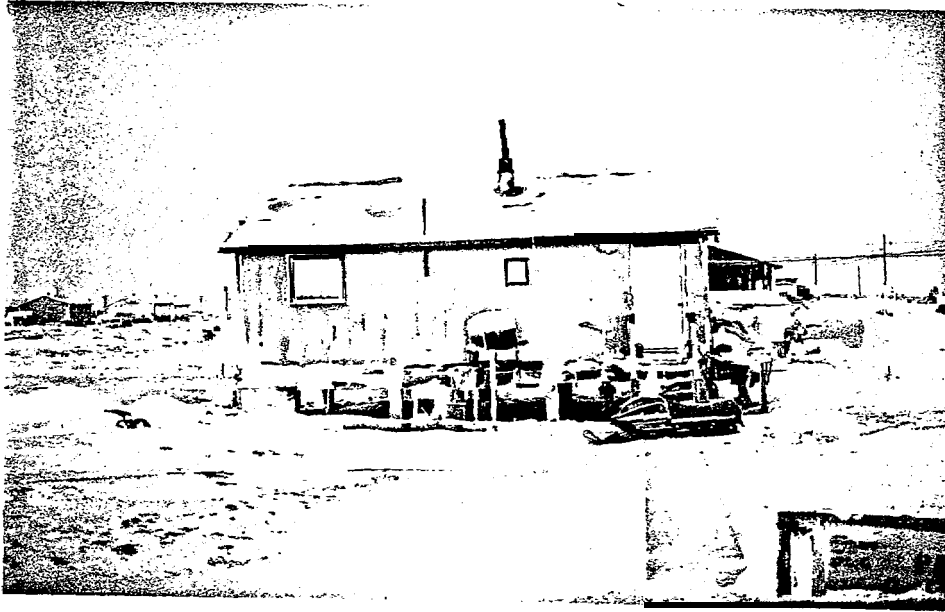
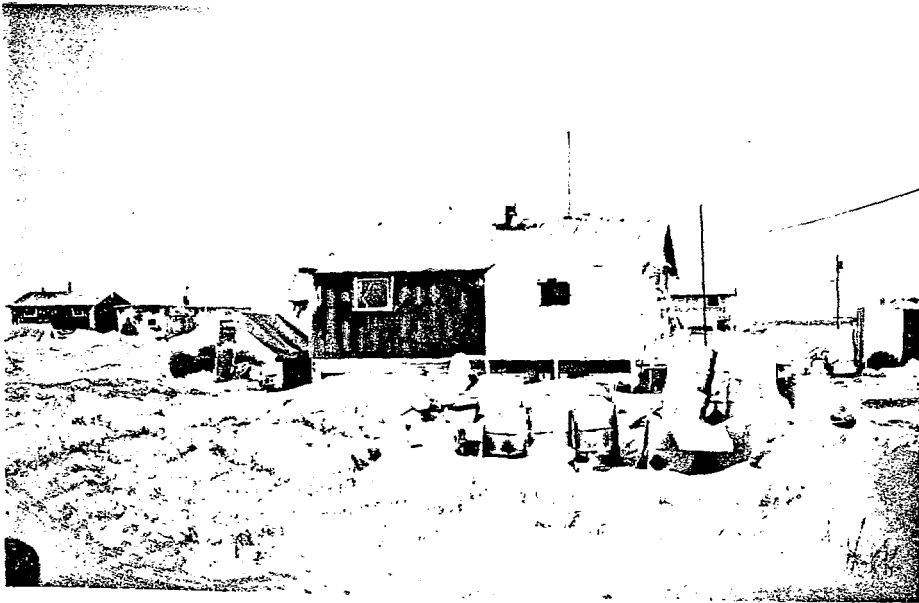


FIGURE 12  
**NUQSUT**  
 Residence Structure Typology  
 and Construction History  
 12/82





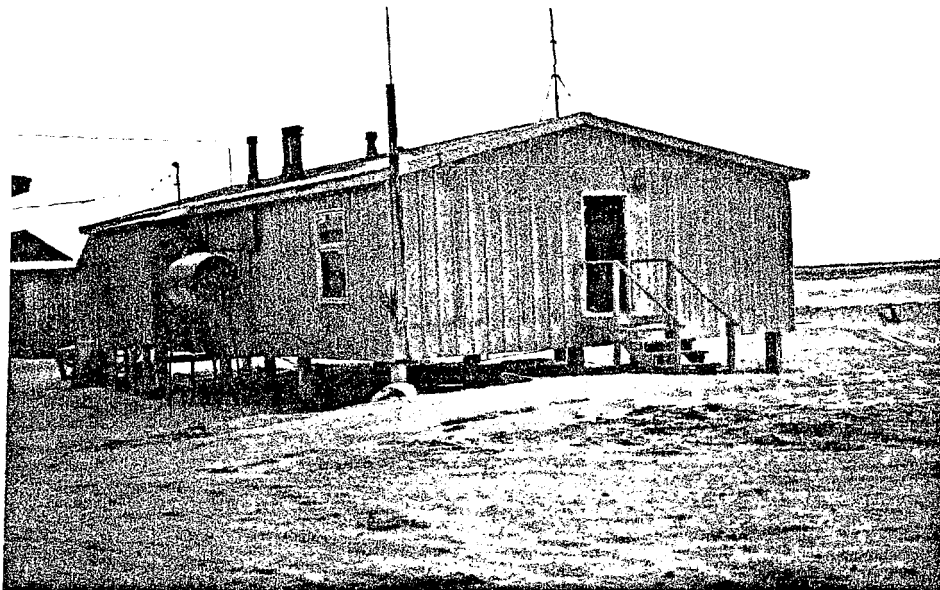
PHOTOGRAPH 1: Ori gi nal Housi ng (1974/75)



PHOTOGRAPH 2: Ori gi nal Housi ng (1974/75)



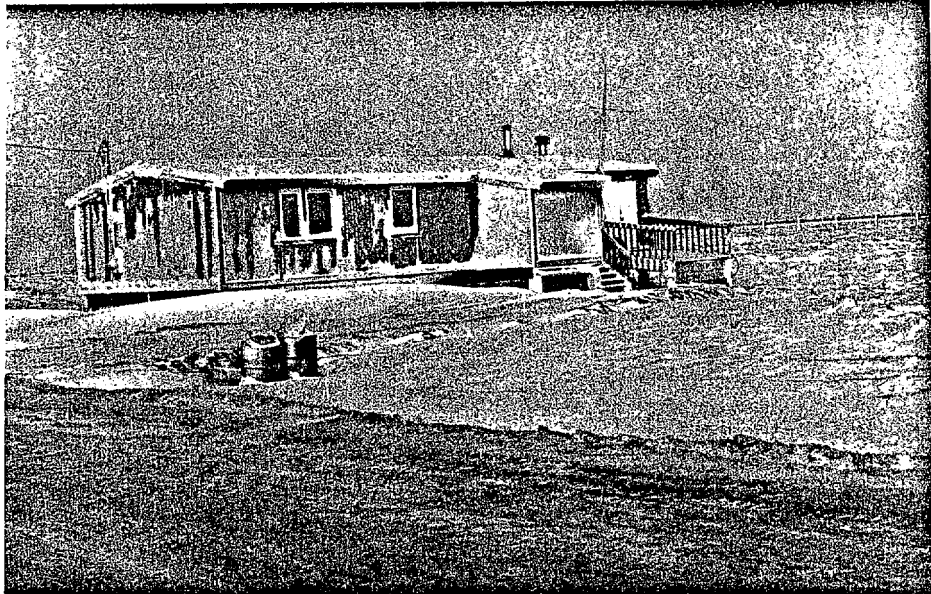
PHOTOGRAPH 3: Original Housing (1974/75) and Poo? Hall (1982)



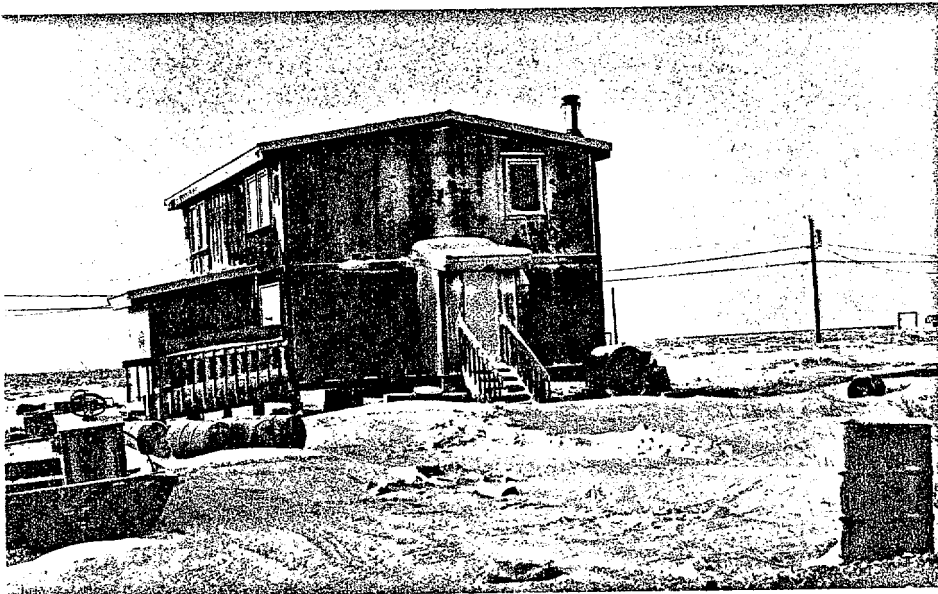
PHOTOGRAPH 4: Teacher Housing (1976/77 ?)



PHOTOGRAPH 6: Third Housing (1979/80)



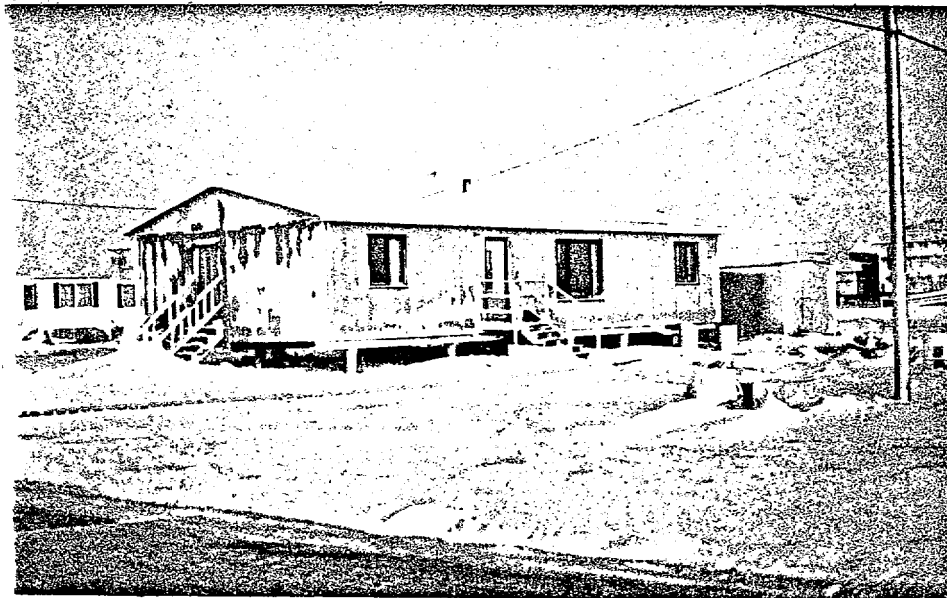
PHOTOGRAPH 7: Fourth Housing (1980/81)



PHOTOGRAPH 8: Fourth Housing (1980/81)

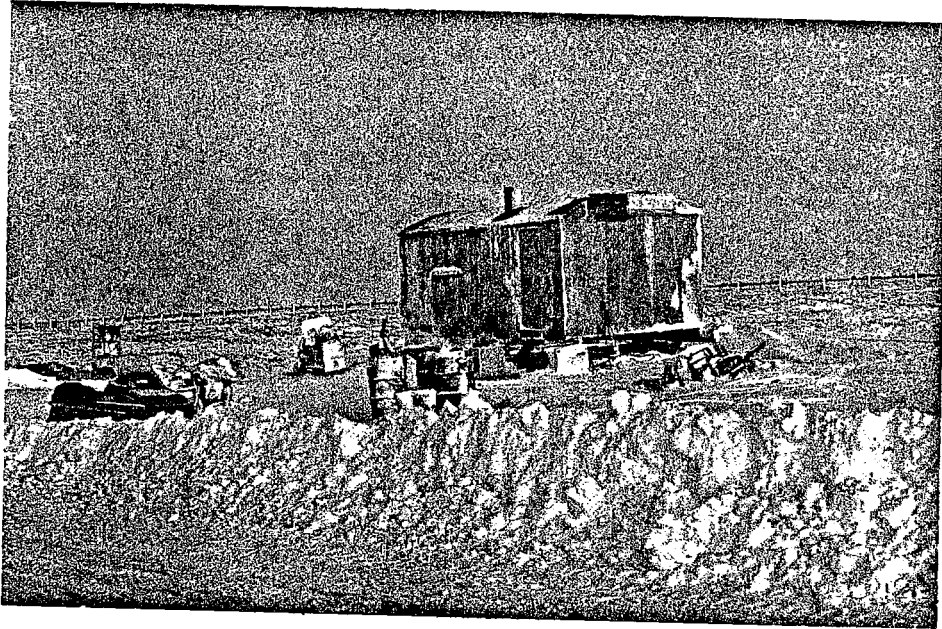


PHOTOGRAPH 9: Fifth Housing (1981)

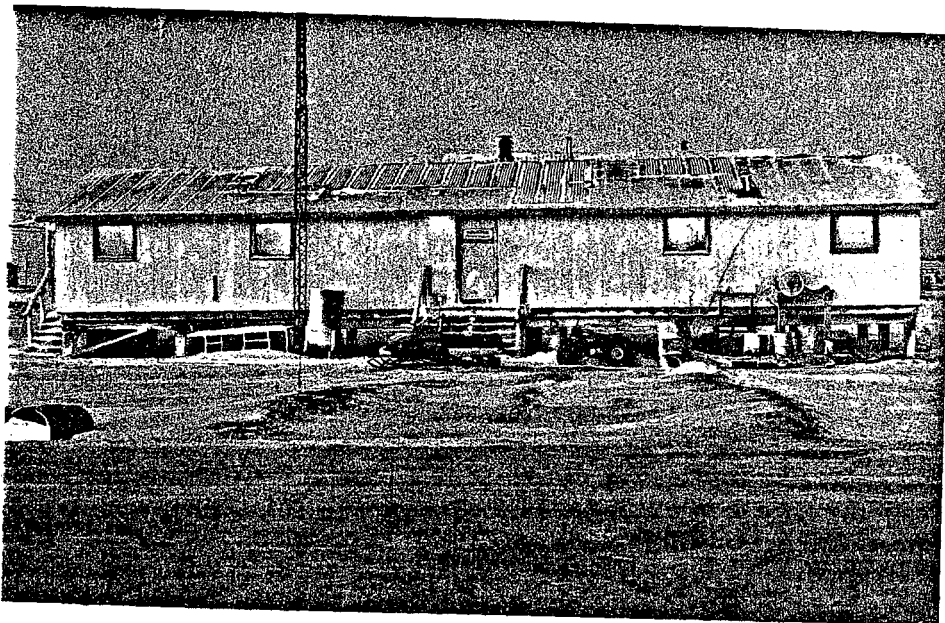


PHOTOGRAPH 10: Privately Constructed House (1981)

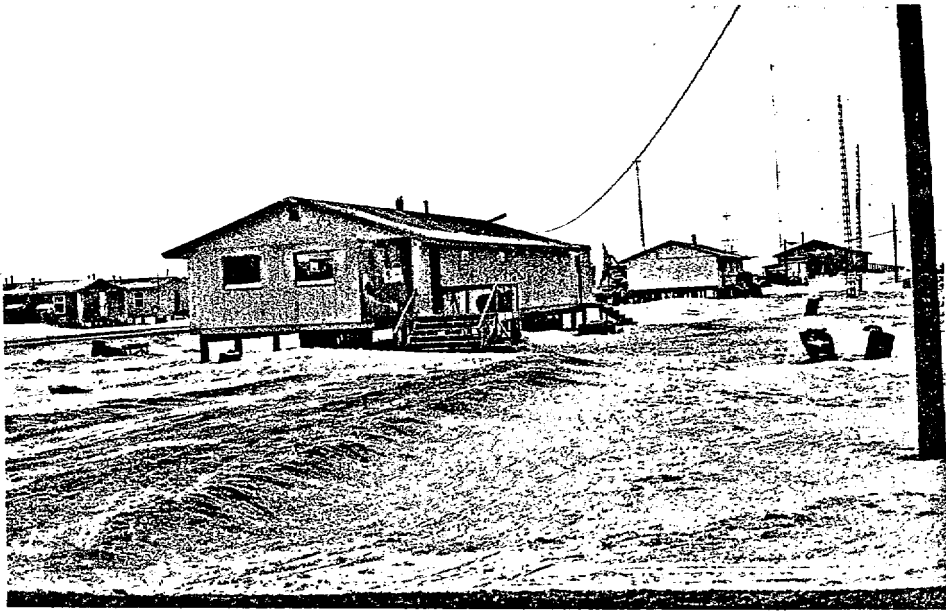




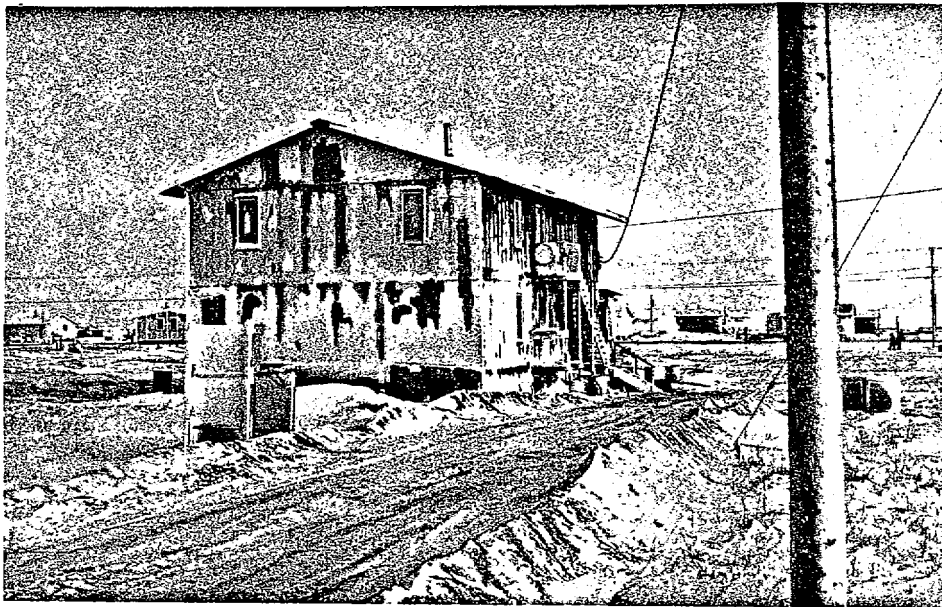
PHOTOGRAPH 11: Non-Standard House



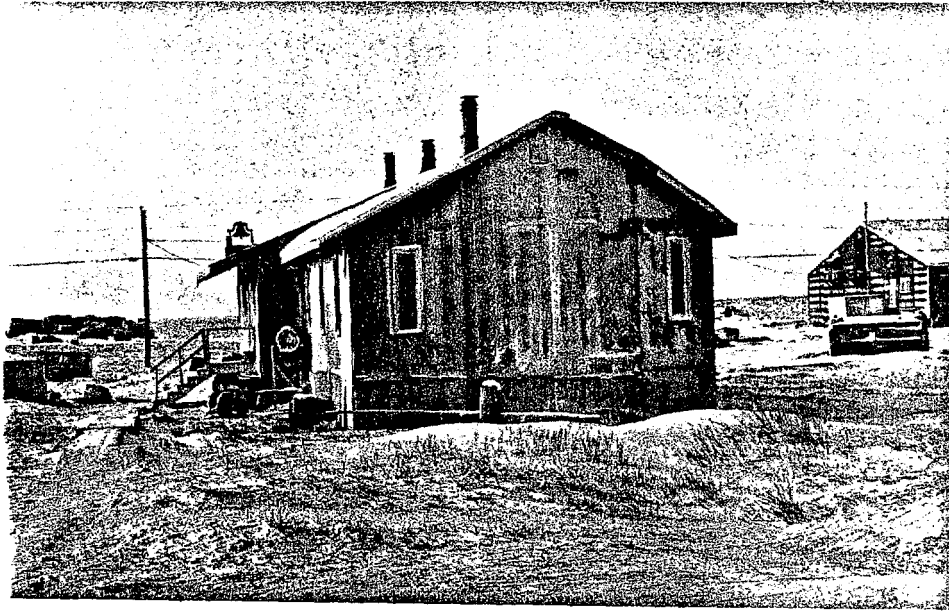
photograph 12: Kuukpik Corporation Building and Nuiqsut Clinic



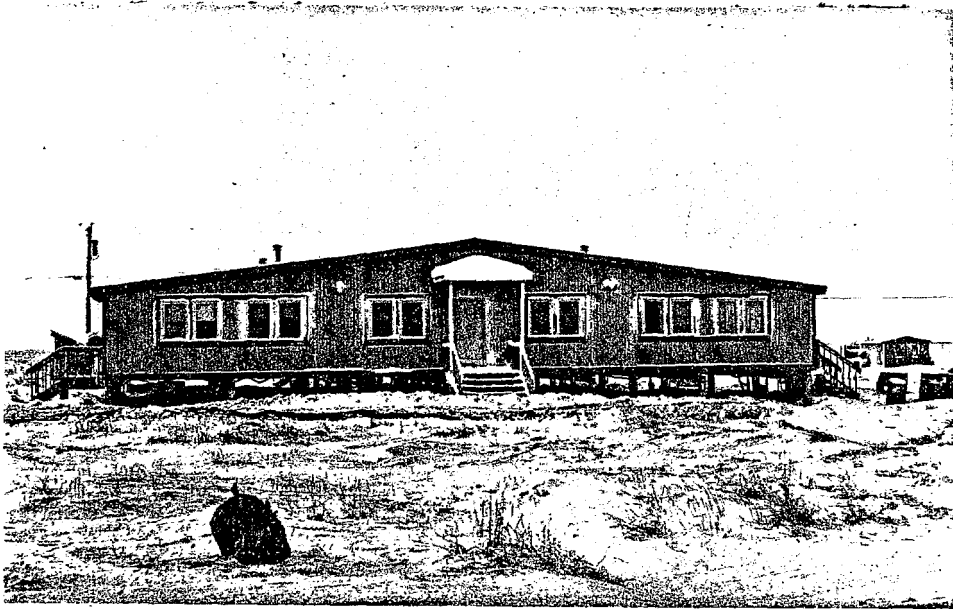
PHOTOGRAPH 13: Kuukpik Corporation Store



PHOTOGRAPH 14: Assembly of God Church and Parsonage



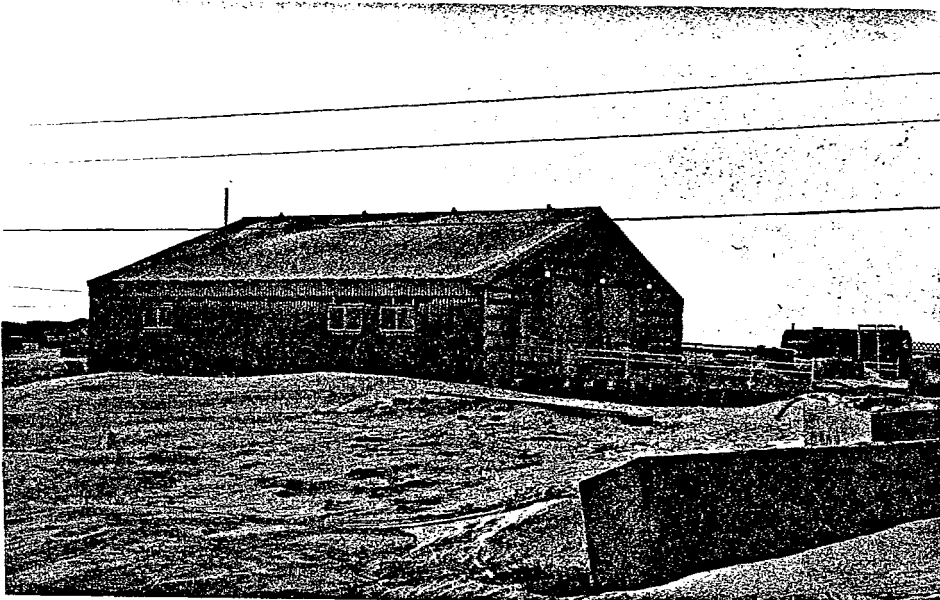
PHOTOGRAPH 15: Presbyterian Church



PHOTOGRAPH 16: Four-Plex Apartment Building



PHOTOGRAPH 17: North Slope Borough School (left)  
North Slope Borough Construction Camp (right)



PHOTOGRAPH 18: Fire Hall

structure existed on the site. All other families lived in 10' x 10' tents or two tents sewed together. They were to live in tents for a year, some longer, until they could build the first houses in Nuiqsut. This first building phase in Nuiqsut (1974/75) was funded by ASRC. They built 30 houses, a store building, a corporation/clinic building, and school buildings. The houses were essentially 800 square foot single rooms. Houses were assigned to families by drawing lots as the houses were completed. House occupants were to purchase the house from the ASRC by paying \$100 a month for five years. However, the Kuukpik Corporation has assumed this debt as most people have made few payments.

Since their construction, most of these houses have been modified. For the most part, the doors originally faced east or west. As the prevailing wind is from the east, and secondarily from the west, most houses have been modified to move doorways to the north or south. Most of these houses have also had an enlarged exterior arctic entranceway added onto them. Photographs 1-3 illustrate these points. The structure in Photograph 1 faces south, hence there was no need to relocate the door. The structure in Photograph 2 had a door originally facing west, while that of Photograph 3's structure faced east. The first now faces south, the second north, by means of an exterior arctic entrance. The long building in Photograph 3 is a recently constructed pool hall. Note that its doorway also faces north.

Most of these 30 houses have also been internally subdivided since their construction. Examples can be seen in Figure 6, HP1-HP4. These floor plans are not strictly accurate. They were drawn by Inupiat informants, from memory, without using either an absolute or a relative scale. The number and arrangement of rooms are accurate, but not necessarily their relative sizes or shapes. Figure 6 HP1 shows a house which

at the time of its construction housed a married couple, their children, and at least one grandchild. Since then, the oldest son has married and moved into a newer house in Nuiqsut. The room divisions date from the more crowded times. Figure 6 HP2 shows a house in which more people live, with an accompanying decline in privacy. Figure 6 HP3 depicts the home of a single individual who operates a small store. The rest of his family (parents and perhaps as many as nine siblings) have moved to a newer house in Nuiqsut. He uses one bedroom as a stockroom. Figure 6 HP4 is a multi-use structure: home, store, and post office. A couple with their young children live there. As their children grow older, this family may well require more space with a higher degree of privacy. Internal partitioning, from these examples and other observed cases, seems to achieve the separation of sleeping quarters from house areas used by other household members who are no longer young children. The need for more private sleeping quarters for children is also shown by the prevalence of two and three bedroom arrangements.

The growth of Nuiqsut since 1975 has essentially been the result of the North Slope Borough Capital Improvement Projects Program. There are few buildings in Nuiqsut not built by the ASRC or NSB CIP program--one frame house, five makeshift houses, a pool hall, and two churches. Roads, airstrip, public buildings, sewage lagoon, and the city dump are all products of the CIP. Appendix B lists all Nuiqsut projects and expenditures 1975-1981, and Table 2 lists total CIP fund expenditures by year for Nuiqsut and the North Slope Borough. Figures 3-5 display the Nuiqsut totals from Table 2 graphically. Figures on CIP expenditures in Nuiqsut were not available for 1982, but the airstrip was completed that summer. Twenty-some houses are currently under construction.

Table 2: CIP FUND EXPENDITURES  
In Dollars

Year	Education & Service			Public Roads, Streets, Etc.		
	NSB	Nuiqsut	%	NSB	Nuiqsut	%
1973						
1974						
1975	NA	137,932			150,661	
1976	8,215,920	605,124	7	2,770,754	513,890	19
1977	3,230,888	66,683	2	1,573,319	810,738	52
1978	11,330,579	1,330,071	12	4,160,389	632,903	15
1979	22,535,951	6,114,055	27	3,878,544	441,174	11
1980	24,400,987	3,946,598	16	6,605,153	1,070,638	16
1981	25,070,133	881,995	4	9,433,404	335,049	4
<b>Total</b>	94,784,458	13,082,458	14	28,414,563	3,955,053	14

Year	Public Housing			Sewage Treatment & Disposal		
	NSB	Nuiqsut	%	NSB	Nuiqsut	%
1973						
1974						
1975	NA	136,159		NA	NA	
1976	6,285,589	277,520	4	10	0	0
1977	5,272,699	203,822	4	1,982	155	8
1978	10,299,948	443,082	4	217,801	0	0
1979	21,136,202	1,451,342	7	2,014,803	55,861	3
1980	33,281,291	1,373,757	4	5,036,114	314,583	6
1981	23,989,395	3,234,737	13	21,284,054	556,813	3
<b>Total</b>	100,265,124	7,120,419	7	28,554,764	927,417	3

Year	Airport & Airport Terminal			Sanitary Facilities		
	NSB	Nuiqsut	%	NSB	Nuiqsut	%
1973						
1974						
1975	NA	0	0	NA		
1976	44,375	43,980	91	6,751,969		
1977	13,743	220	2	1,498,252		
1978	8,870	4,090	46	4,968,634		
1979	884,727	64,915	75	13,181,217		
1980	1,277,004	285,315	22	3,192,699	0	0
1981	5,061,234	4,377,563	86	10,163,528	182,716	2
<b>Total</b>	7,289,953	4,776,083	66	39,756,299	182,716	0

Table 2: CIP FUND EXPENDITURES, Continued  
In Dollars

Year	<u>Light, Power &amp; Heat</u>			<u>Water Facilities</u>		
	NSB	Nuiqsut	%	NSB	Nuiqsut	%
1973						
1974						
1975	NA	0			35	
1976	200,156	79,020	39	2,160	399	2
1977	1,835,447	4,104	0	622	155	25
1978	2,216,899	44,828	2	564,331	270	0
1979	5,033,411	1,045,990	21	1,784,870	502,369	28
1980	5,342,698	763,776	14	6,475,072	86,347	1
1981	7,641,591	706,404	9	19,377,007	220,921	1
Total	22,270,202	2,644,122	12	28,204,062	810,496	3

NSB CIP FUNDS FOR WHICH NO NUIQSUT EXPENDITURES LISTED

Year	<u>Urban Dev.</u>	<u>Public Safety</u>	<u>Health</u>	<u>General</u>
1973				
1974				
1975	NA	NA	NA	NA
1976	2,132,842	0		
1977	380,782	0	174,193	
1978	391,641	0	243,469	208,155
1979	362,398	568,544	151,469	356,174
1980	544,737	1,989,989	1,721,756	494,951
1981	2,439,153	3,626,717	643,901	143,609
Total	6,251,553	6,185,250	2,934,770	1,202,889

Year	<u>Library/ Cultural</u>	<u>Communications</u>	<u>Parks &amp; Recreation</u>
1973			
1974			
1975	NA	NA	NA
1976		26,569,439	
1977		63,442	
1978		0	
1979	43,590	6,534	
1980	750	158,230	
1981	1,858	2,159,070	175,000
Total	46,198	28,956,719	175,000



Table 2: TOTAL CIP FUND EXPENDITURES, Continued  
In Dollars

<u>Year</u>	<u>Nuiqsut</u>	<u>NSB</u>	<u>%</u>
1973			
1974			
1975	427,787	NA	
1976	1,519,933	52,963,214*	
1977	1,085,877	14,045,369	8
1978	2,455,244	<b>34,610,698</b>	7
1979	9,675,706	71,938,434	<b>13</b>
1980	7,841,019	90,524,431	<b>9</b>
<b>1981</b>	10,496,198	131,291,804	8
<b>Total</b>	33,498,764	395,291,804	8

\* NSB excludes the large Communications expenditure in 1976 from CIP totals

All buildings in Nuiqsut are constructed on top of pilings sunk into the permafrost. This provides a firm foundation and also ensures that heat leakage from the house does not degrade the tundra. The air space in effect insulates the tundra from the house. In the summer, some structures are surrounded by water and elevated houses are the most functional. There has been talk of using gravel pads instead of piling, as it would be a cheaper method. It would potentially disturb drainage, however. All substantial structures are made from prefabricated components. Designs change from year to year, but the oldest houses are the simplest and there is a trend towards elaboration.

An example of teacher housing, built after the original 30 houses, is shown in Photograph 4 (two teacher couples also live in the **four-plex**, Photo 16, as do the Presbyterian **lay** minister and another NSB School **District** couple). This structure is much larger than the original houses, and was built with three bedrooms, a living room, a family room, kitchen, large water tank, central heating, a shower, and two places for honey buckets. Whereas the original houses have no oil tanks except for the 55-gallon drums which the oil comes in, this house has a larger tank (perhaps 150 to 200 gallons).

Photograph 5 shows one of the five houses built in 1976/1977. Figure 6 HP6 is the floor plan of another of these houses. They have many of the same features as the teacher housing above, but may be somewhat smaller in terms of **floorspace**.

The eight houses **built** in the 1979/80 building phase are represented by Photograph 6 and Figure 6 HP7. Again, they are not the same structure but are **built** on the same design. The house appears to be somewhat larger, with the **differentiation** of a living/family room from the dining room. The door is moved from the end of the house to the middle of one of the sides. A second large "snow mobile" entrance is added to the storage/garage space, with **an** attached ramp.

Eleven houses were constructed in the building phase of 1980/81. The floor plan of the house in Photograph 7 is very similar to that of the house in Photograph 6. The **main** doorway does have a larger external arctic **entranceway**. Two of the three two-story structures which **exist in Nuiqsut** were **built** at this time. One of these appears in Photograph 8. No floor plan was obtained, but these two houses have a large living/dining room, a kitchen, a large storage space, a furnace room, and garage downstairs and

three or four bedrooms upstairs. Again, central heating, **large** water and oil tanks, and a shower were standard.

Photograph 9 and Figure 6 HP8 show houses **built** in **1981**. Again, the house plan is basically the same as that of the houses **built** in **1979/80**. Additions are an end door and a **larger** garage extending from the body of the house. We were told that this house design was actually intended for Barrow, where the **larger** garage was meant to protect automobiles. There is **little** need for this in **Nuiqsut**. One family has **built** a temporary **additional** bedroom in this garage. Permanent alterations are against NSB policy. These are the newest **NSB-built** houses in **Nuiqsut**. There are up to 22 more houses currently under construction.

Photograph **10** and Figure 6 HP9 show the only substantial house not built by the NSB or the ASRC. Photograph 11 and Figure 6 HP5 (not the same structure) show the sort of structure more commonly built by private individuals. These structures are **small**, built of plywood and "scrap" lumber, and are occupied by single men or couples with two or fewer young children. There are vacant houses in **Nuiqsut**, available for rent, but prices tend to be relatively **high**. Prices quoted **to** us for one of the original 30 houses was \$400-\$500 per month. Since few people actually formally own these houses the situation is unclear, **but** the **ASRC** (or the **Kuukpik** Corporation) evidently lets the first occupants of these houses rent them out. The houses now under construction **will** only be rented by the NSB, not sold. The ownership status of other housing in the village is unclear from **village** informants. Individuals in **Nuiqsut** did express a desire to own a house rather than to rent one. This **could** explain the presence of small self-made structures when more substantial housing remains vacant. Financing for the sale of **NSB-**constructed housing has become a problem. The original

houses cost \$30,000 each to build. Current houses cost 10 to 20 times that. The North Slope Borough no longer wants, or cannot afford, to subsidize housing. The only alternative funding source is from a state agency with which Natives have had poor experiences in the past. The North Slope Borough may end up maintaining title to the new houses and renting them to the new residents as the best compromise solution. **Nuiqsut** people simply cannot afford to buy them.

Our data allow some generalizations about housing in **Nuiqsut** to be made. People prefer newer houses to the older ones and prefer to buy rather than rent. Thus, a common pattern is for one of the original families to move from an old house to a new one. Either a new family moves into the old house or part of the original family remains to set up a separate household. **No** multi-household family at present owns/lives in more than one newer house. Thus new houses seem **to** be rationed one to a family, with additional family households living in **old** houses. Some families relocating to **Nuiqsut** have moved directly into newer houses, either because of their own influence or because no older house owner could afford to move at that time.

Because the houses now under construction will be rented rather than sold, there is increased **local** interest in building one's own house. There is also increased interest in the older houses and the non-standard residences which exist. However, they are generally only suitable for single people, young families with few children, or older people who do not mind the lack of central heating, running water, and so on. The households in the original houses tend to be young and small, old and small, or collections of males. Newer houses are occupied by families who have moved from one of the original houses or from outside of **Nuiqsut**. Some

households are very large in size, but others are small. Most of the latter have elderly heads of households. The biggest households in Nuiqsut live in the newer houses.

Of the 34 older residential structures in Nuiqsut, 10 are vacant. Inupiat occupy 22, with an average household size 4.83 (for 23 households). Mixed couples (non-Inupiat male/Inupiat female) occupy two structures with a household size of 3.5. Of the 27 newer residential structures, Inupiat occupy 4 (average household size of 2.75) and 1 is vacant. The four-plex houses 3 non-Inupiat households (average household size is 2.33) and one Inupiat household. There are six non-standard structures in Nuiqsut, two of which are occupied by mixed households (average size 3.5). Two are occupied by single Inupiat men. The other two are sometimes occupied, sometimes not. There are 75 residential units available in Nuiqsut (The Assembly of God minister lives above his church), with perhaps 13 vacant. Inupiat households are larger in the newer housing. Teachers and other professional non-Inupiat live in newer housing. Mixed households live in older houses, non-standard structures, or partition off part of an Inupiat household for themselves.

#### Other Structures.

The new high school was started in 1978 and completed 1981; the sewage plant was started in 1979 and is still being completed; the new airstrip was put in mainly in 1981; the city dump (landfill) was developed in 1981; and the new utilities plant was begun in 1979 and completed in 1981 or early 1982. In addition, a Public Safety Building and a Fire Hall have been built, although they do not appear on the NSB list of CIP fund project expenditures. The houses

now being built and the clinic, when completed, will require nearly a doubling of the present electrical generating capacity of the utilities plant. The momentum of this growth is best seen by looking at the graph of total CIP expenditures in **Nuiqsut** by year (Figure 5).

The Assembly of God Church (Photograph 14), the first two-story structure built in **Nuiqsut**, dates from approximately 1975/76 and the Presbyterian Church (Photograph 15) was built in 1977. Flake-shift dwellings have appeared sporadically. The pace of change has been very quick (compare the series of land use maps, Figures 8-11). A careful study of CIP expenditures in **Nuiqsut** will give more of an understanding of this than any amount of narrative. It will also impress upon the reader the commitment the North Slope Borough has to the existence of **Nuiqsut** and the resources backing up that commitment (figures for 1982 were not available to be included).

#### The School System.

The development of the school system in **Nuiqsut** has closely followed that of the city itself. This could be expected, as one cause of the "abandonment" of the **Nuiqsut** area as a permanent residence was the requirement that families with children move into Barrow or other municipalities with BIA or other schools. The formation of the North Slope Borough, which then assumed responsibility for the educational function, allowed this policy of centralized education to be reversed. As a direct consequence, the outlying "traditional" villages again became viable as population centers since families with children once more found it possible to live there permanently. We will trace the physical and structural growth of the educational system

in **Nuiqsut**, and then discuss some of its present characteristics. "Understanding this institution's origins, development, **functions**, and dysfunctions, is essential for beginning to understand **Nuiqsut**, and perhaps the North Slope as a **whole**.

The responsibility for establishing the first formal **school** in **Nuiqsut** fell to Mary Eleanor Tener (**later Sanders**), a **non-Inupiat** Presbyterian missionary. She first went to **Nuiqsut** in November of **1973** as a volunteer worker for the Presbyterian church. She was then convinced to stay for four to six weeks as an employee of the **NSB**, to help establish the school. As no one **else** was available to take over after this **time**, she agreed to stay the year (**Tener 1974**).

Ms. **Tener** supervised the classes, which were actually taught by five **Inupiat** women using correspondence course materials supplied through the Alaska State Department of Education. Classes were held in the tents of the teachers, which thus became very crowded at times. The first school building was completed in the **last** part of March **1974**, which allowed **all** classes to be moved from tents into that building, trailers, and the **Inupiat** Builders annex. Other **school** buildings were completed **late** that May. Ms. **Tener** stayed through the **school** year as the supervisor and led church services much of the time as well (**Tener 1974**). Many people in **Nuiqsut** remember her fondly--as a teacher, a supervisor, a spiritual helper, and a good neighbor.

The **school** opened the **fall** of 1974 with new buildings and a new staff. The principal and five teachers (one who would remain only three months) were all **non-Inupiat**. The summer of **1975** another teachers' housing building was put up and two **non-Inupiat** teachers were added to the faculty in the

fall. An additional **non-Inupiat** teacher was hired the next spring. Two teachers may well have left sometime during this year as only six teacher-administrators appear in the 1975/76 yearbook (the first). The next school year, 1976/77, only one teacher remained from the year before. The principal and four other teachers were new to **Nuiqsut**. All were **non-Inupiat**.

Information for the 1977/78 school year is lacking to us. We relied on written information (yearbooks, mimeographed recollections) and casual conversations, as school officials were unwilling to discuss the topic of teacher turnover. Unfortunately, we did not examine each **class** yearbook. In the 1978/79 school year, only two of the teachers from 1976/77 remained in **Nuiqsut--one** as a teacher and the other as principal. There were six additional **non-Inupiat** teachers and one non-certified **Inupiat** teacher. The **Inupiat** teacher was a graduate and a native of the village and taught **Inupiat culture** courses. The next school year, 1979/80, only the **Inupiat** teacher and two **non-Inupiat** teachers remained, so it is likely that five **non-Inupiat**s were hired. We lack information about faculty continuity for 1980/81, but for 1981-82, five new **non-Inupiat** faculty members were hired to replace people who left. An additional **Inupiat** teacher was hired to bring the total staff size to 12.

Faculty turnover has thus been a fact of life in **Nuiqsut**, as it has been for the North Slope in general. **Non-Inupiat** teachers are generally hired as couples. One such couple has taught in **Nuiqsut** for five years. They are the exception, however. Only one other teacher, a single woman who taught 1974-1977 or 1978, has remained over two years. There are indications that no faculty changes will be made for the 1983/84 school year.



Enrollment in the first year of operation was estimated at 62. Enrollment for 1975/76 was approximately 68, for 1978/79 it was 54, and currently it is approximately 85. As soon as school buildings were constructed, they were also used as recreational centers. As the only non-business, non-residential buildings, this was to be expected. Dances, games, movies, and other activities were held in these multi-purpose buildings after school hours. Once the new school was built, most of these functions moved there. The new **school** has a large gym, a library, good-sized classrooms, and excellent shop, and a **small** swimming **pool**. The **old** school buildings **were** converted to other uses (storage, a restaurant, and community activities). These recreational functions, and the operation of the school itself, are of great **value** to the **village**, but can better be discussed in a later section.

### Eco-Political Development

This section will discuss the structure and development of **village** institutions in terms of Inupiat leadership arenas. This **will** thus prepare for a later discussion of socio-political structures and dynamics. Some of the institutions discussed here may not at first glance appear related to this section, but **Nuiqsut** lacks many of the formal differentiations found in larger, non-kin based communities. The main arenas discussed **will** be the **Nuiqsut** City Council, the **Kuukpik** Corporation, the North Slope Borough (as it relates to **Nuiqsut**), the churches, community service groups, the NSB school system, the Post Office, and private enterprises.

## CITY COUNCIL

The **Nuiqsut** City Council is made up of seven members as required by Alaska State law. They are elected at large. At their first meeting after the election, they elect their officers--mayor; deputy mayor, and secretary. Informants say that the individual with the highest number of votes in the general election should be elected mayor. This was the case in the last election (1982), **which** was the first **legal** official election **held**.

The current **Nuiqsut** City Council consists of two women and five men. Two are in their **late** 30s, three are in their early 40s, and two are in their 50s. The **oldest** member, a man, is mayor. A woman in her 30s is deputy mayor and a man in his 30s is secretary. Council meetings are on the first Monday of each month, but are frequently changed. Special meetings are also common, but are many times combined with other village organizations (such **Kuukpik** Corporation) or unofficial meetings to give comments to governmental agencies holding public hearings. The council members receive no remuneration as such, but members do have travel and per diem paid for when they are away on city business. As elected officials, they often are asked to represent **Nuiqsut** on various committees and boards for the North Slope Borough or other governmental units and they receive expenses for these as **well**. The only paid city employee is the city clerk. At present, this is a **non-Inupiat** female who has served since about August 1982. Before that time, village residents had served as clerk for various periods of time.

Minutes of the **Nuiqsut** City Council are available only since the meeting of August **1982**. This corresponds to the arrival of the incumbent city clerk. She states that essentially

no prior records exist, so that minutes of meetings, records of expenditures, or even lists of **former city** government members are not available for the period before August 1982. Thus, this section **will** rely heavily upon information gathered from interviews and informal conversations.

As has been described, **Nuiqsut** was refounded in 1973. **Kuukpiik** Corporation (the **ANCSA** village corporation) was formed in Barrow in the months prior to this event so that officers of **Kuukpiik** Corporation, and especially its first president, were instrumental in the resettlement movement. The president of the corporation **also** served as city mayor. The council **at** this time was informally organized. The situation then was as **Worl et al** described (**Worl et al. 1981:185-186**):

Currently, issues between the city government and the village enterprises are relatively easily resolved because of the **small** number of persons involved, the ties among them, and the multiple hats worn by key individuals. For example, the mayor is **also** the president of Pingo Corporation and represents the community concerns to the **ASRC**; he has other duties as **called** upon. **He** has occupied these and other roles simultaneously for a number of years. Undoubtedly, his philosophy, as **it** is shared by the sentiments of the community (as represented on the **village** council), **will** have a powerful institutional influence on the future of **Nuiqsut**. The burden of wearing these different hats sequentially and simultaneously has provided him with a significant opportunity to shape the future of the village and has also placed stressful burdens on him.

This informal arrangement persisted **until** 1981, when the first actual election was held. At that **time**, the **role** of the first mayor was legitimized by his formal election as the first official mayor of **Nuiqsut**.

Nuiqsut had developed greatly in that time. The first 30 houses, along with the first public buildings (school, government, corporation, and utilities buildings) had been funded through ASRC, no doubt in large part through the efforts of the first mayor. Capital Improvements Programs had constructed other housing and buildings. The village had grown, and yet maintained its claim to a subsistence way of life.

The community asserts itself through the village council. As interpreted by Mayor Thomas Napagiak, Nuiqsut is pursuing both traditional ways and values and some degree of economic development (Worl et al. 1981 :185)

However, the first election in 1981 was ruled invalid, due to procedural irregularities. Thus, it was necessary to hold another election. At this time, **only** three of the seven then-serving council members were retained. The first mayor was not among them, and this was attributed to his being too "**prodevelopment**". The new mayor, who had moved from Barrow a year or so before, had a more "traditional" orientation.

Unfortunately, this traditional dichotomy does not describe the case fully. Of the three members returned to the council, one was associated with the Kuukpik Corporation and is now president (the first mayor is now vice president of Kuukpik Corporation). More significant than the issue of development/traditional seems to have been the fact that villagers were uncomfortable with the influence of non-residents ("outsiders") who were hired as consultants but often took on more authority than was truly legitimate in terms of their job descriptions. Since, before this second election in 1982, "**..Mayor Napagiak** resides in Anchorage in order to run the affairs on Pingo Corporation," (Worl et al. 1981:186), he found it necessary to hire a resident city administrator. Voters evidently decided that a resident mayor was desirable.

The man elected mayor was a recent arrival in **Nuiqsut** and not even a shareholder in the village corporation. However, **he** moved from Barrow (where he is a shareholder) for the same subsistence and ideological reasons as the original settlers did. He is **also well** known for his role in the passage of the **Alaska** Native Claims Settlement **Act** and **the** formation of the North Slope Borough. His wife is a shareholder in **Kuukpiik** Corporation. **The Inupiat** city clerk, who had been **a** council member, was not **re-elected** but remained the city **clerk**. He probably had been acting as city administrator in the mayor's absence. Later a **non-Inupiat** woman was hired as city clerk, but it is unknown **if** the position was vacant at that time or not. The former **Inupiat clerk** is an officer of the **Kuukpiik** Corporation. There is **also** some confusion as to who, if anyone, was actually mayor at the time of this second election. Several people evidently claimed this role at that time.

Ties, interests, and cooperation between the **Nuiqsut** City Council and the **Kuukpiik** Corporation are **no longer** as **close** as they were (indeed, of that early time people remarked that they were one and the same). No one at present serves as a member of both boards although the present mayor is the father-in-law of the present **Kuukpiik** Corporation president.

#### **KUUKPIIK CORPORATION**

The **Kuukpiik** Corporation is the village corporation set up under the provisions of the Alaska Native Claims Settlement Act. As such, **all** 208 **original** enrollees in **Nuiqsut** (now about 230) are shareholders. All adult shareholders can vote. **All** enrollees are, of course, **Inupiat**. The corporation has five officers, whose public titles vary somewhat: president, vice president, chairman, treasurer, and secretary,

with "land manager" being another name or title for one of them. There **are also** two board members elected from the membership at large. These members change fairly frequently. The officers also change yearly, but tend to switch titles, so that there has been a good deal of continuity from board to board. An annual meeting is held during which officers are elected and necessary business conducted. Any shareholder may attend and speak, but meetings are closed to non-stockholders. The financial records are also open to **all** shareholders, but few (or none) take advantage of this to monitor the conduct of the corporation. Board meetings are held at irregular times during the year, when necessary, and special shareholder meetings have been called occasionally.

Other permanent employees of **Kuukpik** Corporation, besides the officers and at-large board members, are a **non-Inupiat** accountant, a secretary, a fuel clerk, two fuel delivery men, a store manager, and two store clerks. Many people, mostly men, are seasonally-employed on construction and similar jobs. **Kuukpik** Corporation has also set up **sub-ventures**, such as its own construction contracting corporation, which have separate boards of directors. **Kuukpik** also has on-going coventures with other village corporations and the ASRC, which sometimes have boards or directing committees of their own upon which **Kuukpik** Corporation has representation.

The **Kuukpik** Corporation was formed in Barrow before the village was resettled, with the **man** who assumed the first mayorship as president and two present-day officers were officers then as well. Two members of that first corporation board are now members of the **Nuiqsut City Council**. Since then, several different men have served as president, with the first mayor and president serving subsequently as vice president or on the board.

This should perhaps be elaborated as an indication of leadership specialization in **Nuiqsut**. The 'first city mayor, who was also **Kuukpik** Corporation's first president, spends most of his time in Anchorage as he is the President of Pingo Corporation. Clearly, having a permanent representative of the **Kuukpik** Corporation in Anchorage is perceived to be an advantage. Much of the financial activity taking place in **Alaska** is centered in Anchorage, and commercial transactions are facilitated by a presence there. Indeed, corporation officers are often absent from the **village** attending to business in Anchorage. Just as clearly, the titled president can function best in **Nuiqsut**. His signature is required on many documents and his advice required during frequent meetings. **People also** expect the "head man" to be available and familiar with **local** situations. Having as enterprising a businessman as the first mayor on the **Kuukpik** Corporation's Board of Directors, but not as President, serves both imperatives. The shift of personnel from the City Council to the **Kuukpik** Corporation Board (and back) with no current overlap **also** demonstrates the locally **felt** need for cooperation between these two entities as well as the realization that their interests are not completely the same,

Since the **Kuukpik** Corporation is a for-profit corporation, its central concern must be with economic enterprise. **This** creates some tension, especially in regard to the **local** store and fuel facility that **Kuukpik** operates, but **also** in the balance of economic development with subsistence protection. **Kuukpik's** aim is to make money and provide **jobs**. They have done this in the past mainly through construction subcontracts with the North Slope Borough on Capital Improvement Projects, either **directly** or through Pingo Corporation. Pingo Corporation was set up as a joint effort with **all** the non-Barrow village corporations of

the North Slope Borough, but evidently has always been spearheaded by Kuukpik Corporation and the first mayor, the present president of Pingo. More recently, Kuukpik has set up its own construction contracting firm, so as to bid more effectively on NSB Capital Improvement Projects slated for Nuiqsut. This fosters more use of Nuiqsut employees since if Pingo wins such contracts, they may well have to import some non-Nuiqsut Inupiat workers to maintain an employment force representative of its corporate membership. Kuukpik Corporation has also recently formed a joint venture with ASRC. This was a friendly, but almost forced, deal. Kuukpik owed ASRC \$1,400,000. This severely hampered Kuukpik Corporation's day-to-day operations. In return for discounting this debt by more than 50%, Kuukpik transferred a share in the surface rights of 1,500 acres of its land to ASRC. However, Kuukpik acquired a share in the subsurface rights of this land through this transfer, rights which previously had belonged solely to ASRC under ANCSA. The purpose of the transaction was to form a venture for the extraction and sale of gravel from Kuukpik land from which Kuukpik Corporation could benefit. Because the status of gravel as surface or subsurface is unclear, and the fact that subsurface and surface rights are separated as to ownership on village corporation land, the deal was made to allow Kuukpik Corporation to share the profits and so be able to repay its debt. The venture also obtained working capital this way. Snags have developed, but interesting in themselves as examples of the village-village corporation-borough-regional corporation interrelations and leadership patterns which will be developed later.

#### NORTH SLOPE BOROUGH

The North Slope Borough is headed by a strong, directive,



Mayor. **This is** a legacy from **the first** NSB mayor as much as anything else. The NSB Assembly consists of seven members, most of whom are from Barrow. One, however, is a resident of **Nuiqsut**. He recently moved from **Kaktovik**, where he **lived** following a political career in Barrow. When NSB Mayor Eben Hopson died in 1979, this individual returned to politics and " . . .**helped** forge **the** political **coalition** which enabled the Borough to meet the difficult period of transition" (campaign literature 1982). He is acknowledged to be one of the most influential men on the North **Slope** and **clearly is** a major power broker. He was instrumental in the **Inupiat** land **claims** movement and the passage of **ANCSA**, and served as a member of the ASRC board of directors for eight years. He is also a Presbyterian **lay** minister with considerable education and **travel** experience.

The **North Slope** Borough has a number of departments, but several have more apparent influence than others, either through design or historical leadership development patterns. Utilities, Public Works, and Public Safety seem **to** predominate. The first two are primarily staffed by **Inupiat** and are a training ground for **Inupiat** leadership. The **last**, while overseen by the **Inupiat** NSB Assembly, is primarily **non-Inupiat**. It is charged with keeping **public** order and so has a visible presence, especially in Barrow. Because of their **role** in developing leaders and the recent rise in **CIP** expenditures, the former two departments have **acquired** special prominence, both in terms of their influence on **Nuiqsut** and apparently within Barrow and NSB politics as well.

The history of the political formation of the North Slope Borough is not totally germane here and several detailed sources are available, among which **McBeath** and Morehouse

(1980) seems the clearest. The NSB was officially organized in 1972. It was a direct response to the production of oil on the North Slope. **Nuiqsut** was refounded as a result of the Alaska Native Claims Settlement Act, also a response to oil exploration and production. The two, the NSB and **Nuiqsut**, are not inherently linked, because the two responses are independent and complementary. The NSB is governmental, aimed at taxing resource production and thus redistributing revenue being generated from the extraction of mineral natural resources. **Nuiqsut**, and especially the native corporations, are economic entities aimed at the conservation of land-subsistence resources and the investment of a cash settlement payment from ANCSA so as to attain a sustained yield for their shareholders. The corporations have not been consistently successful, although they have been providing some job opportunities for wage employment. The NSB and the corporations agree to some extent on major issues, although there are occasional differences of opinion. The NSB, as a **redistributive** agent, has had a great effect on **Nuiqsut**.

The CIP program design was essentially completed in 1974 with a simple but very ambitious goal:

This is . . . a program designed to provide a basic level of public facilities and services which should be in existence now and should, in fact, have been here for many years. It is a program to provide basic public facilities and services that do not now exist - that have never existed here. . . (NSB 1974).

Since 1975, an average of 8% of total NSB CIP funds have been spent in **Nuiqsut** each year, somewhat more than would be expected on the basis of population alone (Table 2). Expenditures have been especially high since 1979, in some years approaching \$50,000 per capita. The NSB has also been looked to by the **residents** of **Nuiqsut** when problems

have arisen which are beyond the apparent capabilities of village institutions.

#### ARCTIC SLOPE REGIONAL CORPORATION

Our direct information on ASRC is very sparse and general. ASRC has no direct representation in **Nuiqsut** and our research time in Barrow was very limited. ,ASRC's business ventures with **Nuiqsut** entities were not matters of public discussion, and the parties involved were understandably reluctant to talk about them with the researchers in private. Also, at **present,there** appears to be a **schism** between **ASRC** and the **NSB** in Barrow. **In the last** election, the defeated incumbent moved immediately into a Vice-Presidency at **ASRC**. **It is said** that when he was mayor of Barrow, he **forced** the man who is now mayor of Barrow **to** leave his **(then)** position in the Utilities Department. The first mayor **of Nuiqsut** reportedly supported him in **this**. Given the connections between this individual and the **Kuukpik** Corporation, and the parallel interests of **Kuukpik** and **ASRC** in private industrial development, such an alliance would not be surprising. **ASRC** provided the **loan** funds for the first **30** houses and other assorted buildings in **Nuiqsut** during 1974-75. **ASRC** also **helped** with moving expenses and educational expenses in **1973**, when **Nuiqsut** was **re-established**.

#### THE CHURCH

The church in **Nuiqsut** does not formally exert a great **deal** of overt pressure. The Presbyterian Church has the strongest presence in **Nuiqsut**. Indeed, the Assembly of God Church has only a very **small** active congregation and a **non-Inupiat** pastor who is frequently out of the village. The

Presbyterian lay minister does not so much exert his congregation as he tries to gently lead them. While his congregation is larger than his **colleague's**, he sometimes feels quite frustrated by his apparent lack of influence on their everyday behavior.

Most of the original settlers were nominally Presbyterians. Only two families belonged to the Assembly of God. Nonetheless, the Assembly of God Church was built first (in 1975/76) and used by both congregations. The Presbyterian Church went up in 1977. Both were built by **local** volunteer labor.

**The** role of the church in **Nuiqsut**, and the relationship between the two congregations, is not quite as dynamic as in Barrow. Nonetheless, **Klausuer** and **Foulks (1982:36-43)** trace the development of both on the North **Slope** and their description of Barrow could prestage the future situation in **Nuiqsut**. **Nuiqsut's** churches still look to Barrow a great deal for guidance. The Presbyterians may do so primarily because of kin ties, while the Assembly of God depends on **Inupiat** leadership infusions from Barrow. The political overtones **which** can accompany denominational affiliation in Barrow have yet to appear in **Nuiqsut** politics, due to the smallness of the Assembly of God congregation.

The formal structure of the Assembly of God Church is unclear. Services are attended by only three or four individuals so formal offices are not held as such. The Presbyterian Church has formal elders and deacons. The same people tend to be repeatedly rotated in and out of these.

The lay minister of the **Presbyterian** Church is a recent arrival in **Nuiqsut**. He is one of the most influential men

in the **village**, however, as he is a **NSB** Assemblyman and linked with key Barrow political figures. He was involved in the ANCSA struggle and is well-respected across the borough.

#### COMMUNITY SERVICE GROUPS

As a community grows, the number of organized groups within it is expected to grow. These groups often serve to train people for leadership in broader **roles**. The number of such groups, their functions, and the extent of membership overlap can be **useful** indicators of community changes. The most obvious such groups in **Nuiqsut** will be outlined in this section.

##### Health Board.

The **Health** Board essentially oversees the functioning of the **clinic**. It has run bingo for three years to raise funds to **help** pay for transportation for medical cases. Members are **all** females, although this **is** not a formal requirement. They are elected/appointed by the City Council.

##### Mother's Club.

The Mother's Club was formed in October **1974** to raise and administer a fund to **help people** in need. They began running bingo games a year ago for this purpose. The Health Board and the Mother's Club work closely together and have an overlapping membership. Leadership of the Mother's **Club** has been fairly stable from October **1974** to the present.

### Search And Rescue.

Search and Rescue was just recently formed and is predominantly male. **Women** are members only of the ambulance team, as nurse aides. Leadership is provided by those who already were leaders in other community spheres. This has caused some dissatisfaction among the younger members, since they feel that a small number of people are trying to run the entire community. **The** initiative for the formation of Search and Rescue came from the completion of the Fire Hall (the NSB) and the frustration of the Public Safety Officer (**PSO**) of being responsible for emergency searches because no one else was trained to do so. This is not a PSO function and PSOs have been instructed not to leave the village on non-criminal matters. Simply, their job is to maintain public order and they cannot shirk this responsibility by leaving the village to conduct a search. Thus, **non-Inupiat** or at least non-village forces were instrumental in the formation of this group.

### Subsistence Activities.

Fish and Game Advisory Boards and other groups that deal with subsistence resources have a long and checkered history. **Nuiqsut Inupiat** seem to lump all of them together, whether state, federal, or regional, and to treat all public hearings as a pipeline to the outside. The only exception is the Eskimo **Whaling** Captain's Association, which is a native organization. **Kuukpik** Corporation people tend to represent village interests on these boards. At public meetings, they and the mayor and other council members tend to be speakers.

## PRIVATE ENTERPRISES

Essentially **the** only private businesses that can be seen on the ground in **Nuiqsut** are the stores, the cafe, and **the pool hall**. They are discussed at **length** in the cash economy chapter. When the **village** was refounded, **only** the corporation store was open. Shops have opened and closed since then, but there seems to have been two additional **stores** to the **Kuukpik** Store for some time. Non-store private commercial activity **is** relatively new in **Nuiqsut**.

## COMMUNITY INSTITUTIONS

### The Post Office.

**The** post office has changed locations since the village was formed and several different people have served as postmaster. **It is still** run out of the postmaster's house. At present, the postmaster **is** a fairly recent arrival from Barrow. He is **also** head of NSB utilities and runs a store with his **wife**. The post office, in operation, is **still** run as it was in 1973 except that **mail** planes come and go more often (daily instead **of** weekly). **It** serves as a meeting **place** in that everyone **picks** up the household mail there (**as** there is no door-to-door delivery).

### school .

Several points must be made about the **school** as an **institution** as **opposed to** the school as a physical **plant**. The school **developed** from a tent **school** administered by one female **non-Inupiat** with several village women as teachers

to temporary building quarters with mostly non-Inupiat teachers to a multi-million dollar physical plant with nearly all **non-Inupiat** teachers. Village satisfaction with the school sometimes seems to be in inverse proportion to the money invested in the physical plant. Clearly, village residents see the school as an invading institution which in some ways teaches their children **non-Inupiat** ways. The school advisory board does not always reflect these views. The dominant person on the board favors a **non-Inupiat** education for students so that they may compete on fair terms in the wider world (outside of **Nuiqsut**). He sees cultural survival as a family/household/village responsibility, not as a task for the formal education system. He believes that **Inupiat** culture cannot be taught from **9:30** a.m. to **3:00** p.m. at the school. Rather, culture is a consistent way of viewing the world and living one's life, and **cannot** be segmented into time slots.

The secretary of the Board has contrasting views, but seldom expresses them. He favors an **all-Inupiat** school, with no **non-Inupiat** teachers. **While** the principal and teachers exercise control over access to certain resources, namely education, no teacher in **Nuiqsut** has as yet tried to assume a position of general leadership or control. They have considered that inappropriate.

#### **NON-NUPIAT INFLUENCE**

We will have to consider the roles of **non-Inupiat** in the village. The general effects of **Inupiat** wage labor under **non-Inupiat** direction, transient **non-Inupiat** workers, and imposed institutional forms are generally recognized as important. The effects of specific individual people may also be significant, partly because of these more



general effects. Clearly, several **non-Inupiat** have acquired a great deal of influence over village institutions due to their expertise. This is especially true of the **Kuukpik** accountant and **the City Clerk**. To a lesser extent, the opinion of the **Public Safety Officer** frequently carries weight with people because of the strength of this individual's convictions. The opportunity for **non-Inupiat** to have such influence is structural in nature. The development (creation) of **Inupiat** institutions faster than the development of **Inupiat** leaders to operate them is the fundamental problem. Phrased another way, the imposition of **non-Inupiat** institutional forms upon the **Inupiat** before the development of enough trained **Inupiat** to adequately man them creates a need to rely on **non-Inupiat** experts (**Worl et al. 1981:186**). We have only begun our discussion of this topic and **will** return to it **later. It** is one of the crucial issues and much work remains to be done.

### Kinship and the Community

#### **SOCIAL HISTORY AND KINSHIP RELATIONS**

In April **1973**, the original settlers of **Nuiqsut** were divided into **31** households. Many of the kinship ties of these original households can be traced to individuals and families who used the **mid-Beaufort** Sea region throughout the **late** eighteenth - early nineteenth century (**NSB 1980**). Kinship ties in traditional North Alaskan societies and in contemporary **Inupiat** communities have been described as important factors for establishing subsistence use areas by the native population (**Spencer 1959, Burch 1975**). **Burch (1975)** discusses the **Inupiat** principles of consanguinity (**blood** relations) and affinity (relations to non-blood kin through marriage ties). All kin related through direct biological

descent are recognized as **consanguineal** kin.

"The traditional Eskimos did not distinguish between actual and ideal descent" (Burch 1975:45). All known biological connections between generations were considered "good", even when the sexual relations which produced a child were not. Bilateral **consanguineal** relationships represent the strongest set of kin ties. Relationships formed through marriage were secondary. Such **affinal** ties included one's spouse, the spouse's consanguine, and the consanguine's spouses (Burch 1975:49). There are two systems of recognizing **affinal** relatives: (1) **affinal** excluding system where all real **affinal** kin are distinguished from real consanguine, and (2) **affinal** incorporating kin where many **affinal** kin are incorporated into the **consanguineal** category (Burch 1975:49). In our discussion of the role of kinship in the resettlement of **Nuiqsut**, we refer to **consanguineal** kin ties as relations of direct biological descent and **affinal** kin ties as relations of individuals through marriage. We also discuss the relative strength of **consanguineal** relations over **affinal** relations.

Through the use of kinship data from the Barrow genealogy and our own collection in **Nuiqsut**, we were able to characterize the settlement of **Nuiqsut** in 1973 as a kin-based group of 31 households. Almost all household groups had both **consanguineal** and **affinal** links to traditional users of the **Mid-Beaufort** Sea Region. In fact, many household heads of the 1973 settlers were born in the **Colville** River area. We traced the kinship ties of the original settlers of **Nuiqsut** in 1973 to the **pre-1940s** populations with the assistance of the Barrow genealogy (MacLean 1971).

Of the 31 original households in 1973, there were 29 male household heads and two female household heads. Of the

29 male household heads, 19 were linked to Nuiqsut land use through direct descent, 8 were linked to Nuiqsut land use through close or distant affinal ties, and two had undeterminable kinship ties. The two female household

Table 3

ORIGINAL SETTLERS OF NUIQSUT AND KIN RELATIONS  
TO THE PRE-1940s TRADITIONAL LAND USE  
OF THE MID-BEAUFORT SEA REGION

<u>Kin Ties</u>	<u>Male Household Heads</u>	<u>Female Household Heads</u>	<u>Total</u>	<u>Spouses of Male Household Heads</u>
<b>Direct</b>				
Descent	19	2	21	17a
Affinal	8		8	2
Unknown	2		2	8
	<hr/>	<hr/>	<hr/>	<hr/>
	29	2	31	27B

a Includes 10 husband and wife household units where both male and female spouses have direct descent ties.

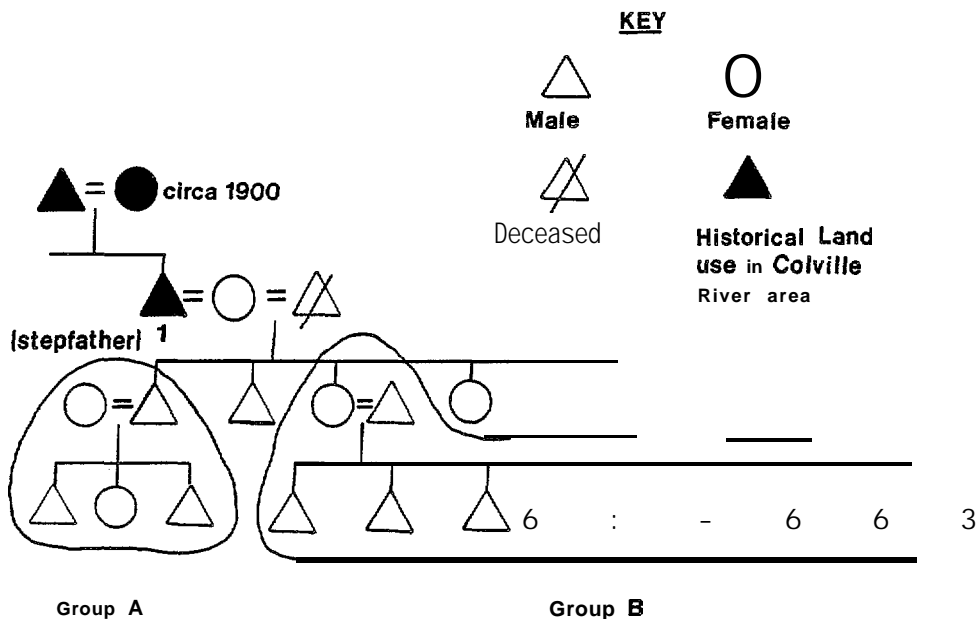
b Two male household heads do not have spouses.

heads had ties to Nuiqsut land use through direct descent. One of the women was single and lived with her adopted son. The other woman, the granddaughter of a pre-1940s family, lived with two unmarried children. Her son-in-law also established a household in Nuiqsut at this time.

We then examined the kinship ties of the 29 male household heads' wives to the documented users of the **Nuiqsut** area. Of the 27 wives of male household heads, 17 women had direct descent ties to users of **Nuiqsut** land, and the remaining 10 had **affinal** links through their husbands or could not be traced. Ten of the 31 original **Nuiqsut** households were cases in which both the husband and wife had direct descent kin ties to traditional **Nuiqsut** land users. This would indicate that one third of the original **Nuiqsut** household heads derived from an intermarrying population located in the **Colville** River area. Although marriage propinquity is often noted for aboriginal **Inupiat**, the fact remains that many of the **Mid-Beaufort** populations during the twentieth century had moved to Barrow and other North Slope areas. Therefore, we must conclude that kin ties to the **Mid-Beaufort** region and the **Colville** River remained effective throughout the twentieth century, despite dispersal of family groups. Kinship and marriage ties continued to perpetuate an earlier pattern of traditional land use in this region. Several case studies will be used to illustrate the nature of these ties and importance of **kin** relations in the traditional and contemporary settlement of **Nuiqsut** and its surrounding environs.

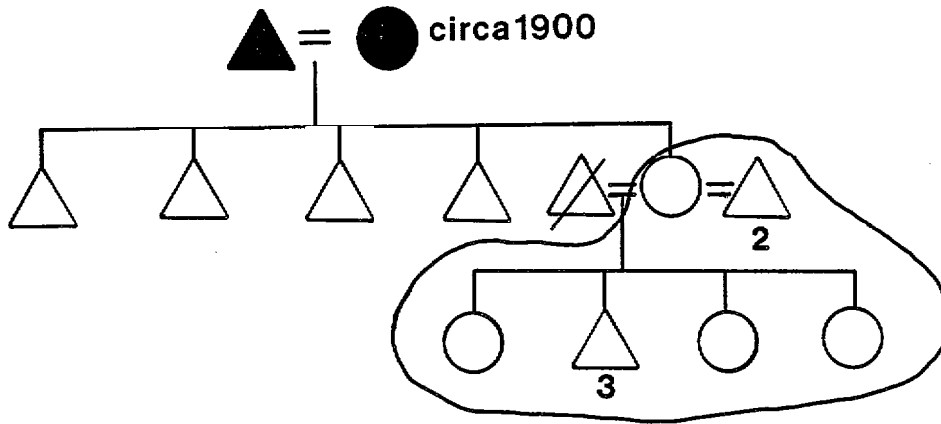
Case study 1 involves two of the households which moved to **Nuiqsut** in 1973. The male head of household A is the brother of the wife of the head of household B. Their natural father, their mother's first husband, is dead. His parents were probably historical users of the **Nuiqsut** area. Their mother's second husband, individual 1, was the son of parents who had lived in the **Colville** River area before 1940. Thus both household groups have distant **affinal** claims to local **Nuiqsut** land use. Group A has a one stop tie through the male head of household whose stepfather (**affinal** link) has traditional ties to the **Nuiqsut** area. Group B has a

Case Study 1



two step tie through the wife (affinal link) of the male head of household. The wife's stepfather (a second affinal link) then connects this group to the traditional use of land in the Colville River area. These relationships of distant affinal ties by Group A and Group B to historical use of the Nuiqsut area are important in understanding the dynamics of the modern-day settlement. The political and social strategies (whether conscious or not) must be to increase their networks within the community, most obviously by marriage, to reinforce their right to local land and resource use. This is especially important for Group B, whose male head of household is from another North Slope community. He is, in fact, among the most politically and economically active men in Nuiqsut. Some of his children have married into other Nuiqsut households. Members of household A are much less active. Their children are still too young to marry.

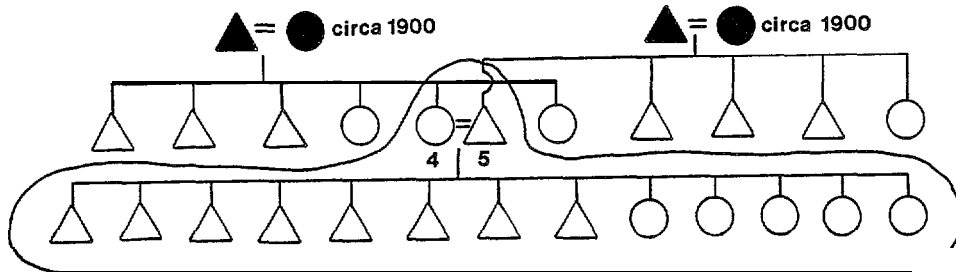
Case Study 2



See Key, Case Study 1

In case study 2, one of the original families in the 1973 Settlement of **Nuiqsut** was a male household head (individual 2) who was the husband of a woman who had direct descent ties to pre-1940s users of this area. This woman, her husband, and children set up residence in the 1973 settlement. Ten years later in 1983, the woman and her second husband reside in Barrow and rent their **Nuiqsut** dwelling to another village family. They maintain ownership of the house. The woman's children from her first marriage remain in **Nuiqsut**. Her daughters have all married men who have established households in **Nuiqsut** (two newer houses, one older). Her son has married and started a household of his own in one of the newer houses. There is little need for this family to establish any stronger claims on local land use. Their marriages integrate them into the community. Their mother's brother is head of the largest household in **Nuiqsut**. The households are all young, financially stable, and have few overt political ambitions as yet.

**Case Study 3**



See Key, Case Study 1 Group A

In case study 3, both Individuals 4 and 5 (husband and wife) have **direct** descent ties to families who used the **Mid-Beaufort** Sea area **Prior** to 1940. These individuals had a very extensive kinship network in the 1973 settlement of **Nuiqsut**. In 1983, their offspring who reside in the **village** have political and occupational positions in the **village** corporation and the North Slope Borough. They have intermarried with several families and represent the single strongest kin grouping in the village. For the most part, they are related to "everyone" in **Nuiqsut**. We have discussed the high frequency of original households in the 1973 **Nuiqsut** settlement of households in which both husband and wife have direct descent ties to individuals who maintained traditional subsistence resource use in the **Mid-Beaufort** Region. This is **simply** the most extreme, strongest example.

These three cases illustrate how kinship ties operate through both **affinal** and **consanguineal** principles in several **Nuiqsut** households. The knowledge about and the consequent ability to make use of the **Colville** River and the **Mid-Beaufort** Sea was passed on through **consanguineal** and **affinal** kinsmen to the present day occupants. A majority of male household heads of the **original** 1973 settlers had direct descent ties

to the pre-1940s populations who used this region. This is true of the male heads of household in 1983-84 as well. A **small** group of 1973 male household heads had only **affinal** ties to the traditional population of this region. Of this group, most male household heads are married to women who have direct descent ties to the **pre-1940s** users of this region. In two cases, distant **affinal** ties through a mother's second husband occur. In these cases, the individuals have increased their social and political networks through other positions and roles. As stated earlier, **consanguineal** ties represent the most enduring kin relations. One third of the original households of 1973 had such relations to traditional users of the **Colville** River area through both the male head of household and his wife. However, other factors enter in as well. Less than one half of these **kin** embedded households maintain social and political networks in contemporary **Nuiqsut** which equal or expand their 1973 situation.

#### CONTEMPORARY KINSHIP IN NUIQSUT

Of the **Inupiat** households enumerated on the November 1982 census, all but ten are original households or split from original households due to marriage, growth in family **size**, or some other reason. The ten "new" families are **essentially** seven cases, as there is one case of two brothers each having a separate household, one of a father and son in the same situation, and one of a father and his **son-in-law**. In each of these three situations the two men arrived in **Nuiqsut** together. Six of the seven cases have ties to traditional users **of** the **Nuiqsut** area through relatives of the spouse of the male head of household. Three cases have such ties through both the head of household and his spouse. The male heads of households are presumed to be registered



as members of other village corporations. **The** registration of their wives is unknown. Four of the male heads of households came to **Nuiqsut** to provide the town with expertise in some area, that is, to fill a specific skilled wage position. A fifth may have done the same, but sufficient information to say is lacking. The sixth may actually be registered in **Nuiqsut**, which **would** make his moving back understandable. The seventh case involves one of the most influential men in the village, to whom ordinary circumstances do not **apply**. **He would** be at home anywhere on the North **Slope**, since his kinship network is so wide, his personality so engaging, and his influence so pervasive.

Of the ten families **with** the strongest link to the **land** in **1973**, four have maintained and expanded their position in the village. The other six, through death, lack of children, or advanced age in **1973**, have not been able to add additional linkages to bolster their tie to the **land**. The **adults** of the four original families mentioned above, **along** with five of the **six** newest families, and the **Nuiqsut** individuals their family members have married, essentially make up the core of political **Nuiqsut**.

**In** contemporary **Inupiat** communities, kin networks are the foundations upon which political factions may **be** formed. **In** Barrow, the division of major **family** groups and their political interests have been summarized by one informant who stated his interpretation of Barrow politics as, "the Brewers own the town, the Hopsons run the town, and the Leavitts work for the town." Political support in **Nuiqsut** is mediated through kinship in a less conspicuous manner, but the influence from Barrow is **clear**. **All** but one of the original **Nuiqsut** households is recorded in the Barrow genealogy. This one family has lived in and around **Nuiqsut** since before the 1940s. Therefore, **Nuiqsut**

households maintain vital support from kin-based factions in Barrow as well as kin-based factions in **Nuiqsut**. In some political respects, we believe that **Nuiqsut** is in its early stage of kinship factionalism within major political arenas.

The major political arenas of **Nuiqsut** are the **Kuukpik** Corporation, the **Nuiqsut** City Council, and the North Slope Borough. In the first two political membership occurs by election, and in the case of North Slope Borough villagers are employed in positions within the North Slope Borough government. The village corporation holds elections for the positions of chairman, president, vice-president, treasurer, secretary, and two members. All positions are salaried except the two elected members. They draw no salaries as council members. The City of **Nuiqsut** has transferred all powers except for recreation and cemeteries to the North **Slope** Borough Assembly Board (an elected body). In this sense, the North Slope Borough Assembly represents a substantial but unseen political entity in **Nuiqsut** except for the presence of one assemblyman who moved to **Nuiqsut** in the last year. The political presence of the North Slope Borough is directly tied to the employment positions and occupational status held by **Nuiqsut** residents.

The **Kuukpik** Corporation administration, in 1982-83, consists of five salaried positions. Two positions, president and treasurer, are held by siblings from the largest family in the village. Of this family's 14 siblings, five are married, three to village residents. In their parents' generation (50-60 age group), their mother and father each have one married sibling residing in the village. This family could well continue to dominate politics in the village corporation, and may in subsequent years attempt to elect younger

siblings to major positions. Already, in City Council discussions where the city's interests have been in conflict with the Kuukpik Corporation's, other Nuiqsut residents have been quick to voice their resentment against this family's dominant political and economic interests in the village corporation and land distribution.

Another interesting aspect of the composition of the Kuukpik Corporation is that all elected officers come from the 31 original households which settled in Nuiqsut in 1973. Three of the members, the secretary and two elected, unsalaried members come from families in which both the male household head and his spouse had direct descent ties from families who had occupied the Mid-Beaufort sea region before 1940. In these three cases, this has afforded these individuals considerable political support from kinsmen.

The chairman of the Kuukpik Board of Directors has a small network of kin-based support through his first marriage to a family with some influence in Nuiqsut. The Chairman's role has been to preside over the Board of Directors' meetings. This individual appears to be a "behind-the-scenes" man who also is the foreman for many of the projects operated through the Corporation. The vice-president, who was the founding president of the Corporation and the first city mayor, has some kinship based support. By and large, his political base comes from recently established linkages, his dynamic personality and financial acumen, and success as a whaling captain.

The City Council hierarchy consists of a mayor, a deputy mayor, a secretary, and the other four council members. The city mayor elected in 1982 has only recently moved to Nuiqsut. The majority of his kin-based support comes from his wife's kin who consist of several of the original

households in the 1973 settlement. Although the mayor is technically an outsider (he is a member of the Barrow and not the **Nuiqsut** native corporation), he profits from a well developed kin-based network in Barrow. He and his family reside full-time in **Nuiqsut**, his personality projects a low-keyed and decisive political style unlike that of younger politicians in **Nuiqsut**. Two of the six councilmen are also arrivals to the village within the last two years. One of these two new residents of **Nuiqsut** is the head of the Public Works Department. This individual has been able to use his political network from Barrow to **help** obtain an employment position in the local Borough government in **Nuiqsut** - and obtain a new political position as council member. This individual also derives some kin-based support through his wife's family who is one of the original households in the 1973 settlement of **Nuiqsut**. He is the brother-in-law to another council member.

Four of the six council members come from the 31 original households in 1973. One woman council member also serves the position of Village Coordinator, a position salaried through the North Slope Borough. The other woman council member is a North Slope Borough health aide. Three of the six council members thus have jobs in the NSB and hold elected positions in the village. One member is related to the current Mayor of Barrow. The membership of the City Council shows much stronger ties with the North Slope Borough organization, both in kinship relations and actual employment positions, than does the **Kuukpik** Corporation Board. Also, more council members have ties to Barrow through former residence (the mayor and two recently arrived members) than do **Kuukpik** Corporation Board members.

## Nuiqsut in Brief

**Nuiqsut** was founded, or refounded, in **1973** in response to a welter of complex pressures. The area has a long history of use for subsistence hunting. The passage of The Alaska Native Claims Settlement Act and the formation of the North Slope Borough allowed people with links to that history of use to return to the Colville River. The return was not to a strictly subsistence way of life, however. Subsistence resources support only a very limited number of people in any event, but the settlers wanted to combine a subsistence lifestyle with improved housing, health care, education, and similar products of modern Anglo-American society.

**Nuiqsut** grew very quickly in response to the demand for housing and a developed physical plant. Wage income is now an essential element of the Inupiat economy. New political and economic institutional forms have been introduced to administer the development, which has thus introduced social organizational changes as well. These issues will be elaborated in later sections, as they are central to the Inupiat of Nuiqsut. How can Inupiat control the changes that having cash as an important part of their economy produces in their way of life? How can Nuiqsut people continue to behave and think as Inupiat while in the midst of such social and institutional change?

Kinship as the basis of social organization was developed as one such continuity. Traditional Inupiat society was centered on kinship relations. The population which resettled Nuiqsut in 1973 was closely related to the historical users of the Nuiqsut area. Kinship continues as an important element in Nuiqsut's political, economic, and social organizations. Later chapters will expand on this theme. Politics and leadership must especially be examined with

an emphasis on kinship and marriage relations.

The North Slope Borough supports the existence of **Nuiqsut** through the CIP program and the provision of most community services, but by the same token, **Nuiqsut** is nearly totally dependent upon the NSB. Oil companies provide the source of income for the NSB (and hence **Nuiqsut**) but also impinge on the life that **Inupiat** would like to live. **Nuiqsut**, then, is a village caught between private industrial development on the one hand and **public** regional government development on the other. It must try to balance these forces against its own separate identity and strong commitment to traditional values and continued use of traditional subsistence resources. A need for such dynamic adaptation is inherent in **all** situations of rapid change. This chapter has described the outlines of change in **Nuiqsut** and introduced the topics to be treated at greater length.

### III. DEMOGRAPHIC DESCRIPTION

#### Introduction

Demographic analysis for **Nuiqsut** is constrained by the lack of registration of **vital** events (births, deaths, and marriages). This is true for **nearly all** of the **Arctic** (Freemen 1973). We will thus **limit** our **discussion** primarily to those features of the population which can be elucidated from household census **data**.

The most important gap in **Nuiqsut** demography at present is mortality, for there **are no** indirect means of ascertaining death rates from the available data. Because of the **small** size of the population, **several** years of mortality statistics **would be** required to build up a sample sufficiently large to make meaningful statements. The **lack of** mortality data places a severe restriction on the assessment of the **Nuiqsut** population. Mortality is an important aspect of demographic **analysis** for many reasons:

... Uniformities and differences of mortality within a country **reveal** the distribution of other related factors. **Similar** conclusions can be drawn from the evidence of [mortality] trends. The patterns of mortality [e.g. age and sex patterns] are sometimes **valuable** indications of the **levels of health**, **having** considerable medical significance. Changes of mortality **also** are a basis for appraising the effects of a program that seeks to improve **public** health. Estimates of mortality are a step, usually the most **reliable** step, in estimating the size of the population at dates before or after a census. Finally, analysis of mortality contributes to the study of replacement and population growth... (Barclay 1958: 123).

A second area of concern in this analysis is the estimation of individuals ages. Again, due to the **lack of vital** registration, an accurate assessment of ages **is difficult**. Many of the ages used are self-reported. Where possible, these

have been checked against other sources, in particular, school records and the Barrow genealogy (MacLean 1971). Where discrepancies exist, priority is given to the Barrow genealogy, then to school records, and lastly to reported ages. Where there is no recorded age for an individual, attempts were made to **place** him or her in an age bracket (e.g. under 15 years, 15 to 44 years, **45+** years), for purposes of computing sex ratios, dependency ratios, etc.

The demographic data for **Nuiqsut** come primarily from four unpublished sources:

- A listing of the individuals who left Barrow to settle in **Nuiqsut** in April 1973. This listing was compiled from interview data.
- A household listing of residents for **July** 1981. This listing was compiled by a native resident for genealogical and other research purposes for the **Alaska** Department of Fish and Game, Subsistence Division.
- A household listing of residents for July 1982, from Alaska Consultants. This listing enumerates everyone expected to be in **Nuiqsut**, and was put together by native informants.
- Three household censuses taken during the course of field research for this project. The census dates are November **18, 1982**, January 15, 1983 and February 22, **1983**.

Our censuses differ from the previous listings in that **only** those individuals physically present in **Nuiqsut** on the day of the census were included. They are limited in that they are not door-to-door enumerations. That **would** have taken much more time than was available and was not feasible in terms of community relations. Rather, we periodically sat down with informants with our latest list of residents listed



by household and asked who was **still** present, who had left (**for where**, when, for how **long**, and why), and **who** new was present. No one informant **knew** everything. We had **to talk** with several informants for each data date, and cross-check the information we received. Much of the detailed information (exact dates, destinations, reasons) **is incomplete**. For our purposes, the data are reasonably good, and much better than any **other** information available.

The data were numerically coded for computer analysis. Individuals were coded for household membership, sex, age, birthdate (**if known**) **ethnicity**, and presence/absence in **Nuiqsut** by household residence for each of the census and **listing dates, hereinafter called "data dates"** (**April 1973, July 1981, July 1982, November 1982, January 1983, February 1984**). In order to insure anonymity, no names have been coded into this or any other computer **file** constructed in the course of this research.

#### General Description of the Population

The average population size of **Nuiqsut** during our **field** research based on our three censuses **is 268; of this total** approximately 85% are **Inupiat (Table 4)**. This average is somewhat **lower** than the **July 1982** figure of **301** residents, which is more representative of a maximum population size **in** that it includes **all** individuals considered residents of **Nuiqsut**, whether present or absent. The **July 1981** figure is somewhat low, especially the **non-Inupiat** population. It appears **likely** that many **of** these individuals were omitted from the listing, as their inclusion **would** have been irrelevant in view of the intended use for the **listing**.

Table 4: TOTAL POPULATION OF NUIQSUT

Date	Inupiat		Non-Inupiat		Total
	Number	Percentage	Number	Percentage	
04/1973 <sup>a</sup>	175	100.0	0	0.0	<b>175</b>
1974 <sup>b</sup>					145
1977 <sup>c</sup>					157
1980 <sup>d</sup>					208
07/1981 <sup>e</sup>	214	99.5	<b>10</b>	<b>4.5</b>	224
07/1982 <sup>f</sup>	262	87.0	<b>39</b>	<b>13.0</b>	301
11/1982 <sup>g</sup>	227	83.8	<b>44</b>	<b>16.2</b>	<b>271</b>
01/1983 <sup>g</sup>	239	86.0	<b>39</b>	<b>14.0</b>	278
02/1983 <sup>g</sup>	<b>215</b>	84.3	<b>40</b>	<b>15.7</b>	255

<sup>a</sup>Reconstructed founding population

<sup>b</sup>University of Alaska

<sup>c</sup>North Slope Borough

<sup>d</sup>U.S. Census

<sup>e</sup>Subsistence Division, Alaska Department of Fish and Game

<sup>f</sup>Alaska Consultants for the North Slope Borough

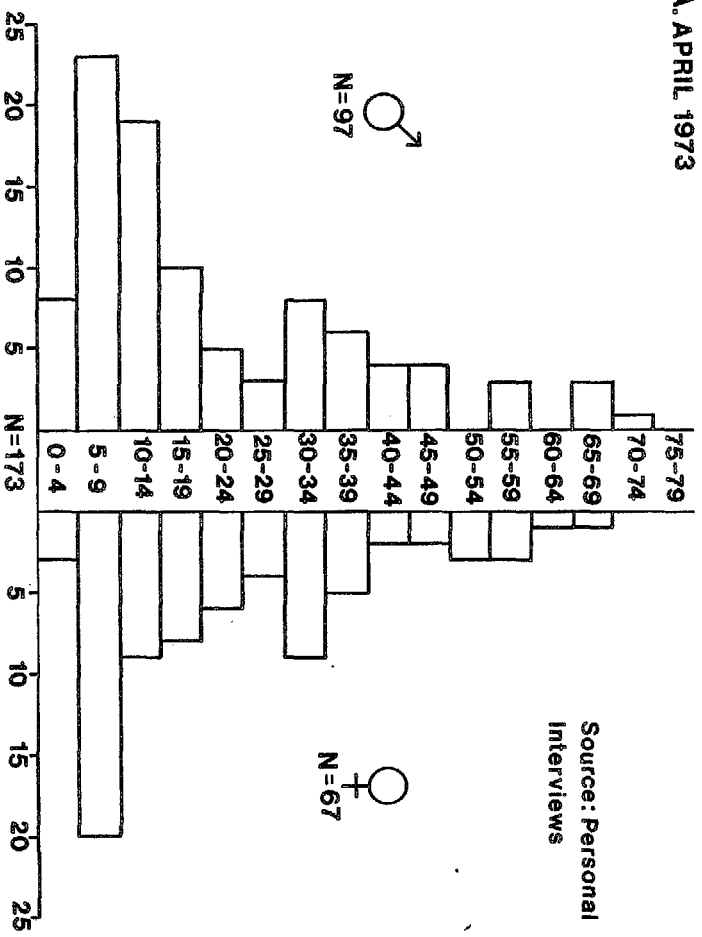
<sup>g</sup>Field data

The population pyramids for the six data dates are shown in Figure 13 (the numbers differ from Table 4 due to a small number of individuals whose ages are unknown). One of the most prominent features of the population is the irregular shape of the pyramids, particularly a constriction of the age groups 5-9 and **10-14** in the current population and in the 0-4 age group of the original population.

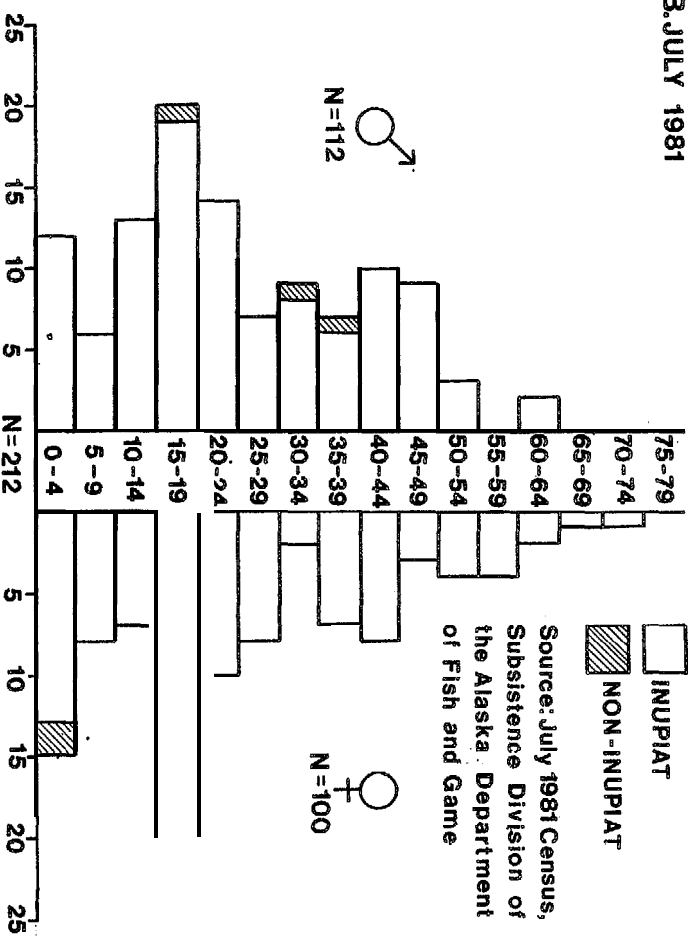
The overall sex ratios for **Nuiqsut** are high (Table 5). This is especially true for the founding population, who seem to have brought a preponderance of **male** children with them.

Figure 13a indicates that most of this imbalance is found in the 10-14 age category. This imbalance is reflected in the generally higher sex ratio among individuals of reproductive age in the current population, as compared to the founding population. Thus, among individuals aged **0-14** years, the sex ratio has decreased from 156 to a mean of 118 during the period of field research, while the ratio for 15-44 year

**A. APRIL 1973**

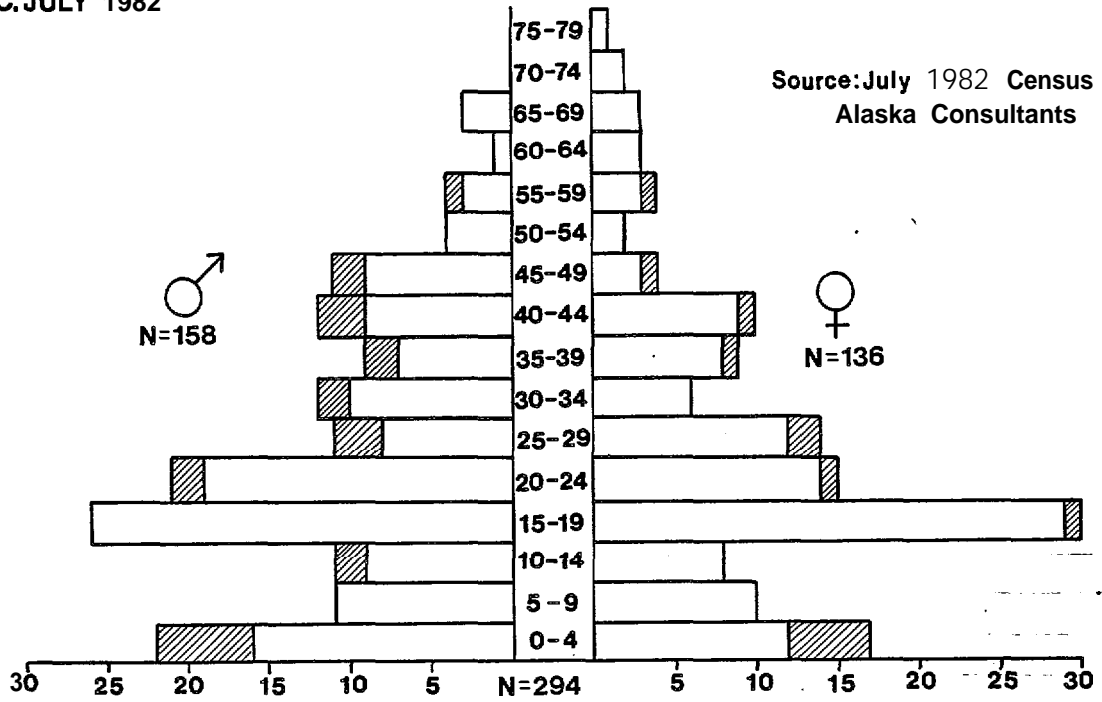


**B. JULY 1981**



**FIGURE 13 NUIQSUT POPULATION PYRAMIDS A&B**

C. JULY 1982



D. NOV 1982

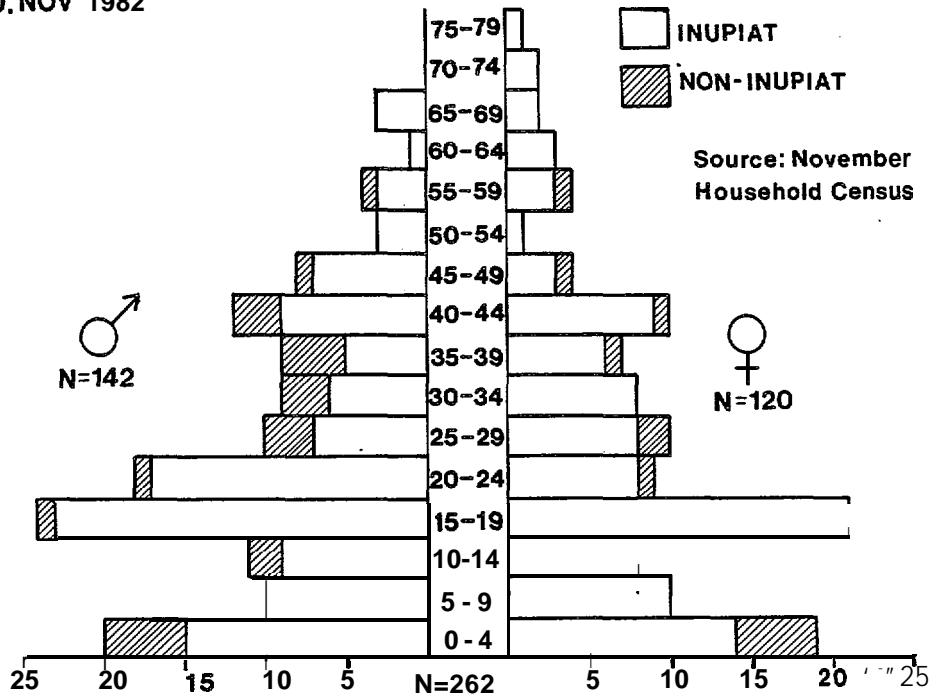
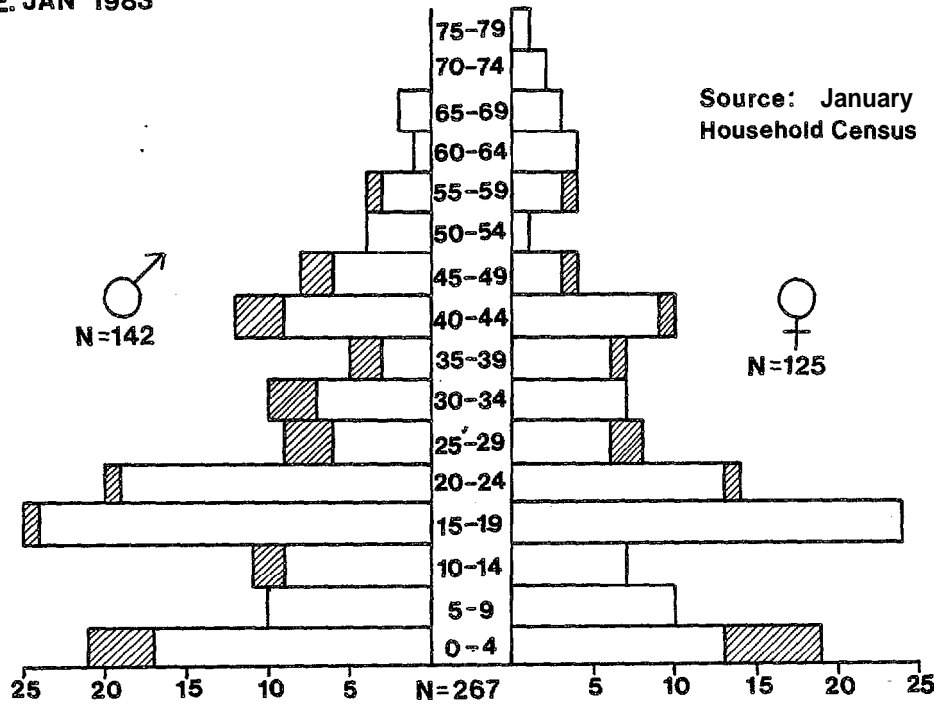


FIGURE 13

NUIQSUT POPULATION PYRAMIDS C&D

E. JAN 1983



F. FEB 1983

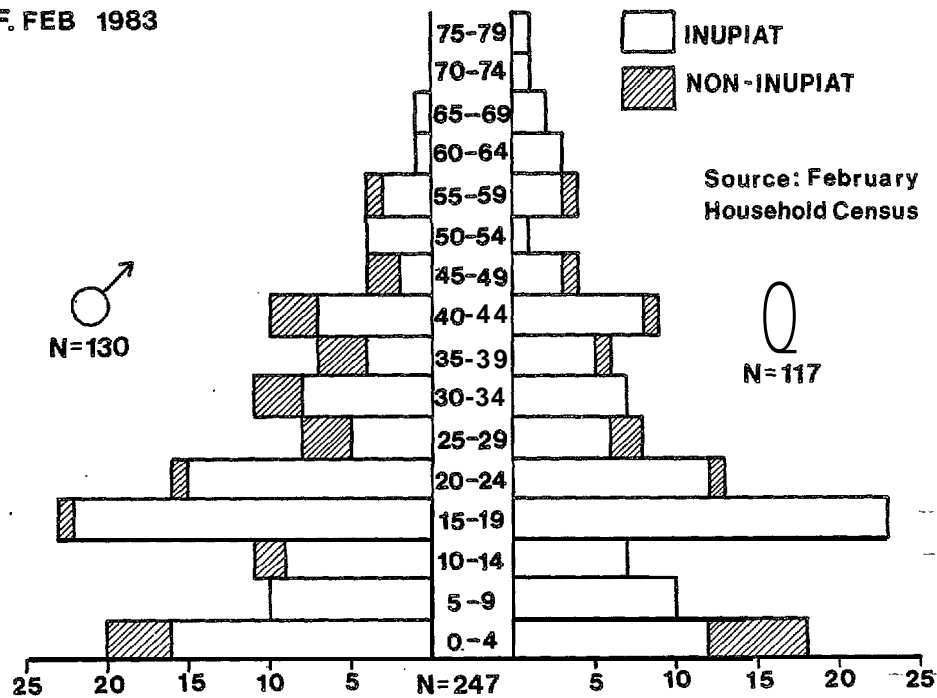


FIGURE 13 NUIQSUT POPULATION PYRAMIDS E&F

**olds** increased from 109 to 122. The sex ratio imbalance appears **to** be largely limited to a cohort of the founding population, at least for the **Inupiat** residents.

Table 5: **NUIQSUT SEX RATIOS - TOTAL POPULATION**

		<u>April</u> 1973	<u>July</u> <b>1981</b>	<u>July</u> 1982	<u>Nov</u> 1982	<u>Jan</u> 1983	<u>Feb</u> 1983
Overall	<b>Male</b>	98	<b>117</b>	<b>163</b>	149	<b>148</b>	<b>136</b>
	Female	77	<b>103</b>	<b>138</b>	<b>122</b>	<b>129</b>	<b>118</b>
	Ratio	<b>127.3</b>	<b>113.6</b>	<b>118.1</b>	<b>122.1</b>	<b>114.7</b>	<b>115.3</b>
Ages <b>0-14</b>	<b>Male</b>	<b>50</b>	<b>31</b>	47	42	<b>43</b>	42
	Female	<b>32</b>	30	35	<b>37</b>	<b>36</b>	<b>35</b>
	Ratio	<b>156.3</b>	<b>103.3</b>	<b>134.3</b>	<b>113.5</b>	<b>119.4</b>	<b>120.0</b>
Ages 15-44	<b>Male</b>	37	<b>70</b>	93	<b>87</b>	84	<b>79</b>
	Female	34	<b>55</b>	84	<b>67</b>	<b>72</b>	<b>66</b>
	Ratio	<b>108.8</b>	<b>127.3</b>	<b>110.7</b>	<b>129.9</b>	<b>116.7</b>	<b>119.7</b>
Ages 45+	<b>Male</b>	<b>11</b>	<b>15</b>	<b>23</b>	<b>20</b>	<b>21</b>	<b>15</b>
	Female	<b>11</b>	<b>14</b>	<b>19</b>	<b>18</b>	<b>21</b>	<b>17</b>
	Ratio	<b>100.0</b>	<b>107.1</b>	<b>121.1</b>	<b>111.1</b>	<b>100.0</b>	<b>88.2</b>

Sex ratios do not include 3 children **of** unknown sex.

Sex ratios do not include 1 infant of unknown sex.

Sex ratio = # of males/# of females x 100

The dependency ratio provides an estimate of the number of dependents per **100** potentially economically active individuals.

**It** is based on the number of potential producers, as opposed to those actually employed in **either** wage **labor** or subsistence activity. The dependency ratio for **Nuiqsut** is currently

quite low (Table 6), indicating a proportionately **small** number of very young and very old individuals. This **contrasts**

sharply with the dependency ratio of the founding population, which was excessively high. The aging of the population is

clearly seen in the movement of the large, dependent cohort of the founding population into the economically active age

categories of the present population.

**Table 6: NUIQSUT DEPENDENCY RATIOS**

April 1973	98.9
July 1981	44.7
July 1982	41.9
November 1982	47.3
January 1983	45.8
February 1983	47.7

Dependency ratio is computed as:

$$\frac{\text{Population aged 0-14, 65+}}{\text{Population aged 15-64}} \times 100$$

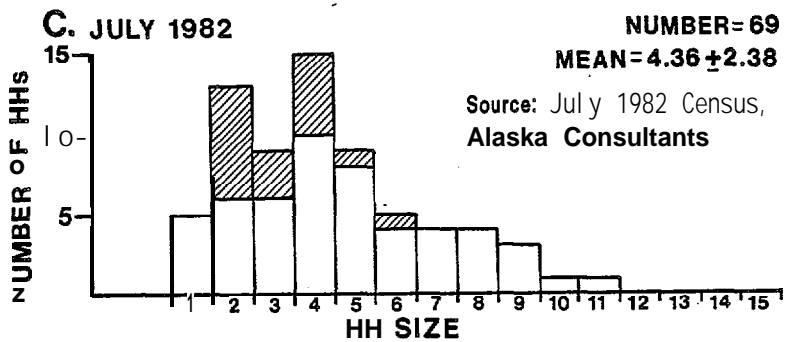
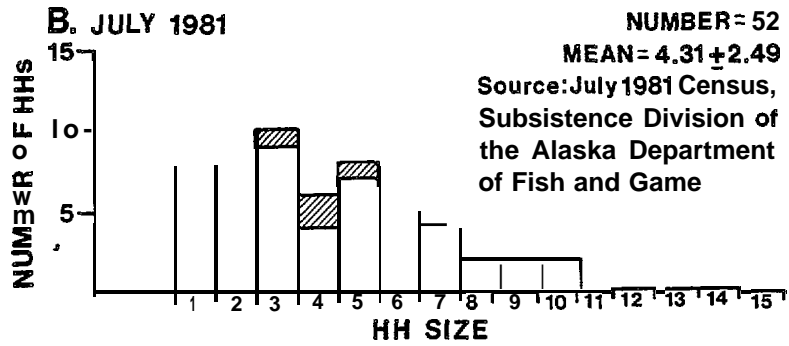
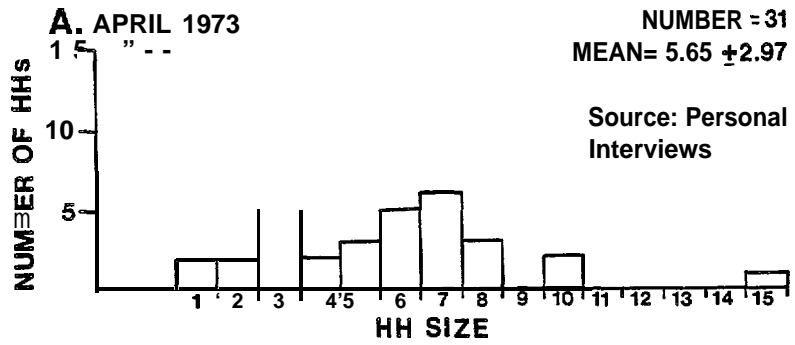
Household Size and Composition

The average number of individuals per household varies between 3.9 and 4.4 for the four most recent data dates, with an average of 66 households for the village. Figure 14 shows the distribution of household sizes, with mean and standard deviation, for each data date. The number of non-Inupiat and mixed households (those with both Inupiat and non-Inupiat individuals) is also designated for the three census dates. Inupiat households clearly show a tendency to be larger than non-Inupiat and mixed households.

Most households consist of nuclear families (Table 7). As used here, the term nuclear family designates couples or single adults with their offspring (biological or adopted), and couples without offspring. The next largest category is that of composite households, which includes a variety of relationships among individuals: in general, such households include at least one individual who is not a member of the nuclear family (if one even exists in the household). The compositions of the composite households for the November census are given in Table 8, to illustrate the type of

FIGURE 14

**NUIQSUT HOUSEHOLD SIZE**



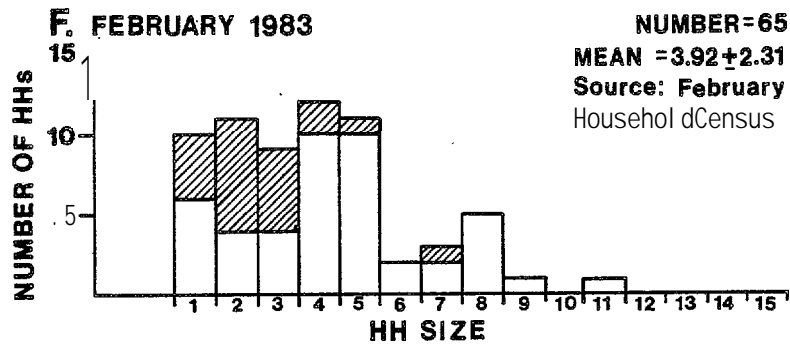
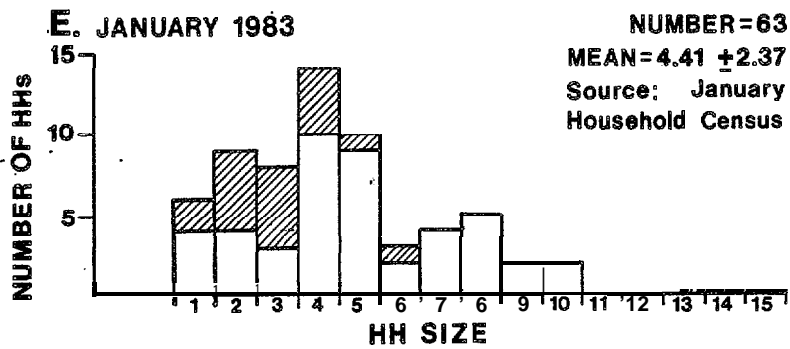
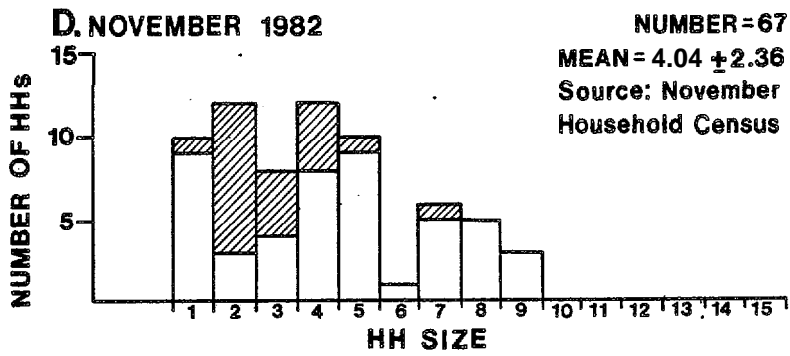
KEY:

• 1 INUPIAT

▨ NON-INUPIAT/ MIXED



**FIGURE 14**  
**NUIQSUT HOUSEHOLD SIZE**



□ INUPIAT  
 ▨ NON-INUPIAT/MIXED

T a b l e 7: INUPIAT HOUSEHOLD COMPOSITION

	INUPIAT									
	Single Person Households	Nuclear Family		Composite Related		Composite Unrelated		Unknown Relationship		
	# of Hhs	# of Hhs	Mean # of Ind	# of Hhs	Mean # of Ind	# of Hhs	Mean # of Ind	# of Hhs	Mean # of Ind	
April 1973	2 (6.5%)	23 (74.2%)	5.3 ±2.2	3 (9.7%)	7.7 ±2.1	-	-	3 (9.7%)	9.7 ±4.7	
July 1981	8 (16.7%)	18 (37.5%)	4.4 ±2.1	7 (14.6%)	5.4 ±2.1	-	-	15 (31.3%)	5.5 ±2.6	
July 1982	5 (9.6%)	28 (53.9%)	4.9 ±2.4	11 (21.2%)	4.9 ±1.6	-	-	8 (15.4%)	6.4 ±2.8	
Nov 1982	9 (19.2%)	22 (46.8%)	4.9 ±1.9	10 (21.3%)	5.7 ±2.0	-	-	6 (12.8%)	6.5 ±2.5	
Jan 1983	4 (8.9%)	25 (55.6%)	5.0 ±2.1	11 (24.4%)	5.5 ±2.5	-	-	5 (11.1%)	7.0 ±1.6	
Feb 1983	6 (13.3%)	24 (53.3%)	4.9 ±2.1	10 (22.2%)	4.8 ±2.1	-	-	5 (11.1%)	6.0 ±2.6	

	NON- INUPIAT									
	Single Person Households	Nuclear Family		Composite Related		Composite Unrelated		Unknown Relationship		
	# of H H s	# of H	Mean # of Ind	# of H	Mean # of Ind	# of Hhs	Mean # of Ind	# of Hhs	Mean # of Ind	
April 1973	-	-	-	-	-	-	-	-	-	
July 1981	-	3 (75.0%)	4.3 ±0.2	1 (25.0%)	3.0	-	-	-	-	
July 1982	-	13 (76.5%)	2.9 ±0.9	1 (5.9%)	4.0	-	-	3 (17.6%)	4.0 ±.94	
Nov 1982	1 (5.0%)	12 (60%)	2.9 ±1.1	3 (15%)	4.7 ±2.1	2 (10%)	2.5 ±0.7	2 (10%)	2.0	
Jan 1983	2 (11.1%)	11 (61.1%)	3.0 ±0.9	3 (16.6%)	4.3 ±1.5	1 (5.6%)	4.0	1 (5.6%)	2.0	
Feb 1983	4 (20.0%)	11 (55.0%)	2.9 ±1.0	3 (15.0%)	4.7 ±2.1	1 (5.0%)	2.0	1 (5.0%)	2.0	

relationships that may exist between individuals residing in such households. The two households with unrelated individuals present were designated as such due to the presence of members of the research team.

Single person households form a fairly large proportion of the Inupiat population for the November census (19.2%).

In January, this proportion decreased to **8.9%** (4 out of 45 households). It increased **again** somewhat in February to **13.3%** (6 out of 45 households). The decrease in **single** person households was due **mainly** to the addition of other individuals **to** the household, either visitors from **out** of town **or** relatives from **other** households. A secondary cause **is** the temporary absence of some individuals, whose **subsequent** return in February then increased the proportion of **single** person households **again**.

For the **Inupiat** population, there has been an increase in the proportion of composite households, from **10%** in April **1973** to approximately 22% in 1982-83. The number of nuclear **family** households has remained **fairly** stable, with **23** nuclear **families** in **1973** and **an** average of **25** in 1982-83. The percentage of nuclear family households has declined, however (from **74%** to about 50%). How the **July 1981** population compares to these figures **is** not **clear**, since there are insufficient data for the classification of **31%** of the households.

**Table 8:** COMPOSITION OF COMPOSITE HOUSEHOLDS  
NOVEMBER 1982

<u>Household Composition</u>	<u># of Households</u>
Nuclear <b>family</b> + grandparent(s)	1
Nuclear <b>family</b> + grandchildren)	5
Nuclear <b>family</b> + niece/nephew	2
Nuclear <b>family</b> + individuals with a variety of kin ties to the <b>family</b>	4
Co-residence of kin-related <b>and/or</b> unrelated individuals where <b>head-of-household</b> <b>is</b> not part of a nuclear <b>family</b>	2
Insufficient <b>information</b> on some member(s) of the household	1

As seen in Table 7, composite households are generally larger than nuclear households, and **Inupiat** households are generally larger than non-Inupiat/mixed households. Household size has decreased since the original population settled in **Nuiqsut**. However this difference is not statistically significant, when a t-test is performed for nuclear family household size. The difference could be **easily** explained by the extreme conditions faced by the founding population and the increased availability of housing in recent years.

The majority of households are headed by both a male and a female in **Inupiat** and **non-Inupiat/mixed** households (Table 9a-f). The **non-Inupiat** and mixed households are too few in number to warrant detailed assessment. For the **Inupiat** population, single person households are predominantly **male**. For nuclear and composite households with only one head, the three census data dates show a majority headed by females, while the listing data dates show a more equal balance between the sexes. The preponderance of females in the census data probably reflects the temporary absence of male spouses or mates from the household. For the November census data, the average difference between **Inupiat** spouses or mates was found to be  $3.9 \pm 4.78$ .

### Fertility

The founding population shows a definite constriction in the 0-4 age category, which is subsequently reflected in the 5-9 and 10-14 age categories ten years later. **Masnick** and Katz (1976:43) provide a population pyramid for Barrow in 1970 which shows a similar constriction of the 0-4 age category. They attribute this reduction to the introduction of modern contraceptive technology in the late 1960s. It seems likely

**Table 9: HEAD OF HOUSEHOLD BY HOUSEHOLD TYPE**

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		2					2 (6.5%)
Nuclear Family	22	1					23 (74.2%)
Composite	3						3 (9.7%)
Unknown	2	1					3 (9.7%)
<b>Total</b>	<b>27</b>						<b>31</b>
	<b>(87.1%)</b>	<b>(15.9%)</b>					

**a. April 1973**

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		5	3				8 (15.4%)
Nuclear Family	13	4	1	3			21 (40.4%)
Composite	4	1	2	1			8 (15.4%)
Unknown	10	2	3				15 (28.8%)
<b>Total</b>	<b>27</b>	<b>12</b>	<b>9</b>	<b>4</b>			<b>52</b>
	<b>(51.9%)</b>	<b>(23.1%)</b>	<b>(17.3%)</b>	<b>(7.7%)</b>			

**b. July 1981**

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		5					5 (7.2%)
Nuclear Family	22	3	3	13			41 (59.4%)
Composite	6	2	3	1			12 (17.4%)
Unknown	4	3	1	1	1	1	11 (15.9%)
<b>Total</b>	<b>32</b>	<b>13</b>	<b>7</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>69</b>
	<b>(46.4%)</b>	<b>(18.8%)</b>	<b>(10.1%)</b>	<b>(21.7%)</b>	<b>(1.4%)</b>	<b>(1.4%)</b>	

**c. July 1982**

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		7	1		1		9 (13.6%)
Nuclear Family	18	2	3	10		1	34 (51.5%)
Composite	7		3	2	2	1	15 (22.7%)
Unknown	3	1	2		2		8 (12.1%)
<b>Total</b>	<b>28</b>	<b>10</b>	<b>7</b>	<b>12</b>	<b>5</b>	<b>2</b>	<b>66</b>
	<b>(42.4%)</b>	<b>(15.2%)</b>	<b>(10.6%)</b>	<b>(18.2%)</b>	<b>(7.6%)</b>	<b>(3.0%)</b>	

**d. November 1982**

Table 9: HEAD OF HOUSEHOLD BY HOUSEHOLD TYPE, Continued

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		4			2		6 (9.5%)
Nuclear Family	20	3	2	11			36 (57.1%)
Composite	6		5	2	1	1	15 (23.8%)
Unknown	2	2	1		1		6 (9.5%)
<b>Total</b>	<b>28 (44.4%)</b>	<b>9 (14.3%)</b>	<b>8 (12.7%)</b>	<b>13 (20.6%)</b>	<b>4 (6.3%)</b>	<b>1 (1.6%)</b>	<b>63</b>

e. January 1983

HH Type	Inupiat			Non-Inupiat/Mixed			Total
	Male & Female	Male Only	Female Only	Male & Female	Male Only	Female Only	
Single Person		6			4		10 (15.4%)
Nuclear Family	17	3	4	10	1		35 (53.8%)
Composite	4	1	5	2	1	1	14 (21.5%)
Unknown	2	1	2		1		6 (9.2%)
<b>Total</b>	<b>23 (35.4%)</b>	<b>11 (16.9%)</b>	<b>11 (16.9%)</b>	<b>12 (18.5%)</b>	<b>7 (10.8%)</b>	<b>1 (1.5%)</b>	<b>65</b>

f. February 1983

that the lower ratio of the **Nuiqsut** founding population reflects the continued use of contraception prior to leaving Barrow. The constriction of the 5-9 and 10-14 age categories of the current **Nuiqsut** population suggests that contraception continued in use at a **similar** level after the move to **Nuiqsut**. **Within** the last five years, however, there has been an increase in the number of children as seen in the expansion of the base of the population pyramid.

The increase in the number of individuals aged 0-4 is probably related to the aging of the population. **Individuals** who were 5-14 years of age in 1973, and who comprised 41% of the population, are now 15-24 years of age and beginning their reproductive careers. This cohort comprises 26% of the present population, which is a 10% increase over the same age group of the founding population. Thus, even if individual fertility were the same now as ten years ago,

the number of **births** per year in Nuiqsut would be increasing.

It is not possible to compute age-specific fertility rates from the census data due to the unknown mortality and adoption rates. For an assessment of Nuiqsut fertility over time, the only measure suitable to the data is the child-women ratio, which must be used with caution due to its indirect nature. The child-women ratio is the number of children under five years of age per 1,000 women-of reproductive age. The ratio is affected by mortality, but since it is a group measure rather than an individual measure of fertility, it is less likely to be affected by adoption practices unless the number of 0-4 year olds adopted into the community is substantially different from the number of adoptions out of Nuiqsut.

Table 10 provides child-women ratios for the six data dates, and for Barrow in 1970. As can be seen, the ratio has remained fairly constant, with the exception of April 1973 and July 1982. In April 1973, the lower ratio is clearly due to the very small number of young children brought to Nuiqsut (see Figure 1a). The low ratio for July 1982 appears to be due to the inclusion of a large number of older adolescents in the household listing, who may not have been regular residents of Nuiqsut.

Nuiqsut Clinic data indicate there were four births in Nuiqsut in 1982. However, since most births take place in Barrow, this number does not adequately reflect Nuiqsut fertility. A better approximation may be found in the number of pregnancies as an estimate of the number of births, a crude birth rate of 52.4 is obtained for 1982. The actual crude birth rate is probably somewhat lower, as some proportion of the pregnancies actually represent 1983 births. Even so, Nuiqsut appears to have a rate of fertility at least as high as that found among native Alaskans in the

Table 10: **INUPIAT CHILD-WOMEN RATIOS<sup>a</sup>**

<u>Date</u>	<u>Location</u>	<u>Ratio*</u>
1970	Barrow	<b>490.6<sup>b</sup></b>
<b>April</b> 1973	<b>Nuiqsut</b>	323.5
<b>July</b> 1981	<b>Nuiqsut</b>	454.5
<b>July</b> 1982	<b>Nuiqsut</b>	<b>359.0</b>
November 1982	<b>Nuiqsut</b>	483.3
January <b>1983</b>	<b>Nuiqsut</b>	461.5
February 1983	<b>Nuiqsut</b>	459.0

<sup>a</sup> See discussion in text.

<sup>b</sup> From **Masnick** and Katz 1976

\* Child-women ratio is computed as:  $\frac{\# \text{ of children under 5 years}}{\# \text{ of women 15-44 years of age}} \times 100$

Table 11: **NUIQSUT CLINIC PREGNANCIES AND BIRTHS**

<u>Age Groups</u>		<u>Pregnancies</u>		<u>Births Abortions Control</u>		
<u>Ages</u>	<u>Total<sup>a</sup></u>	<u>#</u>	<u>% of Total</u>	<u>#</u>	<u>#</u>	<u>#</u>
<b>15-19</b>	25.5	<b>7</b>	27%	<b>2</b>	0	3
20-24	12	<b>3</b>	25	<b>0</b>	0	0
25-29	12	3	25	<b>1</b>	0	2
30-34	7	<b>1</b>	14	<b>0</b>	<b>1</b>	<b>1</b>
35-39	8.5	1	<b>12</b>	<b>1</b>	<b>0</b>	<b>1</b>
40-44	<b>9.5</b>	0	0	0	0	<b>1</b>

<sup>a</sup> Based on mean number of females in age category in **July** and November populations.

1950s (Alaskan Health Survey Team 1954). Appropriate data to compute crude fertility rates from more recent reports were not available. For example, numbers of births would be given without corresponding population **totals** for the same geographic area or similar period.



When **the clinic** fertility data **are broken** down by five year age categories, it can be seen that **almost** 50% of the pregnancies (and **Nuiqsut** births) occur among **15-19 year olds**. It appears that women enter their reproductive careers **early**, and continue to have children at a high rate throughout their twenties. **The** reported **use of** contraceptives seems to be more **evenly** distributed across the age groups, with the exception of the **20-24 year olds (Table 11)**.

A high teenage pregnancy rate **is** a common phenomenon throughout the North Slope (Barbara **Bathany**, personal communication). Reasons for early childbearing are complex and may range from a strong cultural value **for** children, and **cultural** systems for shared **childcare** and adoption, **to** a **lack** of sex education in the home or at school, **or simply** individual or peer group phenomena. **Nuiqsut could** be structurally different from other North Slope villages because of its recent founding, however.

The abortion rate **in Nuiqsut** appears to be quite **low**, with **only** one individual appearing in clinic records for abortion counseling. However, this **low** rate may simply be a reflection of the high cost of abortion, as the woman must go **to** Anchorage for this service. **Those** women who do go may very **well** make their own arrangements, rather than working through the clinic.

The increase in the number **of young** children coincides with increased expenditures for housing in **Nuiqsut**. Beginning in **1977**, expenditures began to rise, and tripled between **1978** and **1979** to **almost \$1.5 million** (Figure 5). By **1981**, this amount had again doubled, to almost \$3.2 million. This increase in housing may have made larger families or earlier formation of families more feasible in recent **years**.

A decrease in the number of births in **Nuiqsut** is expected in ten to fifteen years, due to the constriction in the number of individuals currently aged 5 to 14 years. If the present increase in the number of young children is largely due to an earlier age at first birth among women, and if these women subsequently limit the number of offspring they have, a reduction in the number of births within five years is possible. If, however, the increase represents a change in attitude concerning the desirability of a large family, the number of children born per year **will** remain high for the present, decrease somewhat in **10** to 15 years, and then increase again when the present cohort aged 0-4 years reaches reproductive age.

Population Movement In and Out of **Nuiqsut**

In order to assess the movement of individuals in and out of **Nuiqsut**, a binary coded variable was developed. This **variable** consists of a string of six integers, each integer position representing a time of observation. If an individual was recorded in the listing or census for a given **date**, the appropriate integer position was coded with a "1". If an individual was not recorded, the integer was coded with a "0". For example, suppose there were three individuals (**A**, **B**, and **C**) with the following residence patterns:

<u>Individual</u>	<u>4/73</u>	<u>7/81</u>	<u>7/82</u>	11/82	<u>1/83</u>	2/83
<b>A</b>	Present	Present	Present	Present	Absent	Absent
<b>B</b>	Present	Absent	Absent	Absent	Absent	<b>Absent</b>
<b>c</b>	Absent	Absent	Present	Present	Absent	Present

They would be coded as follows:

<u>Individual</u>	<u>Binary Movement Code</u>
<b>A</b>	<b>111100</b>
<b>B</b>	100000
<b>c</b>	001101

A master computer file incorporating all individuals known to have resided in Nuiqsut was developed, and a movement variable was generated for each individual in the file, as outlined above. Analysis of this variable indicates two basic types of residence for Nuiqsut - continuous residence, and sporadic residence.

Table 12 summarizes the data on continuous residence. In interpreting this table, the following points must be kept in mind:

- The first three data dates (April 1973, July 1981, and July 1982) are listings of all individuals considered to be residents of Nuiqsut, whether actually physically present at that time or not.
- The last three data dates (November 1982, January 1983, and February 1983) are censuses

Table 12: CONTINUOUS RESIDENCE IN NUIQSUT<sup>a</sup>

		Arrival in Nuiqsut 8Y:						
		04/73	07/81	07/82	11/82	01/83	01/83	
Residence in Nuiqsut until at Least:	04/73	Binary Code <sup>b</sup> # of Indiv. % of Total	000001 42 15.97%					
	07/81	Binary Code # of Indiv. % of Total	000011 4 1.52%	000010 6 2.28%				
	07/82	Binary Code # of Indiv. % of Total	000111 5 1.90%	000110 6 2.28%	000100 14 5.32%			
	11/82	Binary Code # of Indiv. % of Total	001111 0	001110 4 1.52%	001100 1.14%	001000 2 0.76%		
	01/83	Binary Code # of Indiv. % of Total	011111 12 4.56%	011110 3 1.14%	011100 4 1.52%	011000 0	010000 0	
	02/83	Binary Code # of Indiv. % of Total	111111 78 29.66%	111110 36 13.69%	111100 36 13.69%	111000 5 1.90%	110000 3 1.14%	100000 0
		Total	141	54	57	7	3	0

<sup>a</sup> Table includes only individuals of known age greater than 10 years in 1982.

<sup>b</sup> See text for explanation.

of only those individuals physically present in **Nuiqsut** on a specific date.

- **It** is not known how much movement in and out of **Nuiqsut** occurred between the data dates.

A total of 302 **Inupiat** have resided in **Nuiqsut** at some time since April 1973. Of these 263 or 87% fall into the "continuous residence" category, which consists of those individuals who appear to have taken up permanent residence in **Nuiqsut** at some point. The remaining 39 individuals show a pattern of "sporadic residence", moving in and out of the village.

**Almost** one-half (45%) of the original founding population has been in continuous residence in **Nuiqsut**. Of those who **left**, most had left permanently **by** July 1981 (24% of the original number). Another 16% has taken up sporadic residence (see Table 13). As of February 1983, there were **158 Inupiat** with continuous residence in **Nuiqsut** (52% of the total number ever residing there). In addition, **all** but three individuals included in the sporadic residence category were present in **Nuiqsut** for at **least** one of the censuses taken during the **field** research period. Thus, almost two-thirds of those **Inupiat** ever residing in **Nuiqsut** maintain membership in the community.

#### Discussion

Adequate knowledge about a community's demographic structure does not ensure successful economic and social needs planning. The lack of such knowledge severely hinders the ability to plan, however. The data from **Nuiqsut** are incomplete, but can serve as a foundation. Recommendations as **to** future vital statistics collection will be included in our monitoring

Table 13: SPORADIC RESIDENCE IN NUIQSUT<sup>a</sup>

<u>Binary Code<sup>b</sup></u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
000101	1	2	3
001101	0	1	1
010001	1	1	2
010100	0	1	1
010101	1	0	1
011101	0	2	2
100001	0	1	1
100111	2	1	3
101000	1	0	1
101110	2	1	3
110011	1	0	1
110100	1	0	1
110101	1	0	1
110110	1	2	3
110111	1	4	5
111001	1	0	1
111010	0	1	1
111011	1	0	1
111101	<u>3</u>	<u>4</u>	<u>7</u>
Total	18	21	39

<sup>a</sup> Table includes only individuals of known age greater than 10 years in 1982

<sup>b</sup> See text for explanation

methodology. Here we will confine ourselves to statements on the information currently available.

Total population appears to be increasing, but it is difficult to say how fast due to the different methods of census collection. This makes determining the absolute population size difficult as well. Alaska Consultants (1982:27), based on past growth trends and a 1982 population of 302, assumes a seven percent annual growth rate through 1987 and two percent thereafter to the year 2000. Kruse et al. (1983:C-20) assume a rate of increase between two and three percent until 2010 and a 1980 base population of 208. The **Inupiat** population is increasing due to net in-migration as well as the natural increase of present residents. The **non-Inupiat** population has also been increasing, due **almost** entirely to in-migration to **fill** positions at the school. As the school is now complete, the resident **non-Inupiat** population will probably not substantially increase. One teacher-couple has had a baby while in **Nuiqsut**.

Our expectation is that total population will continue to increase along the line of Alaska Consultants' projection. Their base population seems too high, but a period of relatively large **scale** in-migration can be expected until the housing now under construction is fully occupied. This **could** increase village housing units by nearly 33%. Thereafter, natural increase offset by out-migration will **slow** the rate of increase. Natural increase, or fertility, **will** depend on the demographic characteristics of the population, cultural practices, and individual desires. **Out-**migration will likely depend upon economic opportunity and individual choice.

Detailed demographic information with time depth is perhaps the best source of measures for what is going on. Growth or

decline, differential in- or out-migration, changes **in** average household size, and the age and sex **structure** **all** reflect the **socio-economic pulse of** the community. **We will** discuss **these** issues **briefly in** Chapter **VII** and **later** suggest how systematic collection of demographics information **should** be central to any monitoring methodology.

#### IV. CASH ECONOMY

##### General Introduction and Orientation

Table 14 provides a quick overview of **Nuiqsut's** cash economy as of March 1983 (the end of our fieldwork). Two employers, the North Slope Borough and the **Kuukpik** Corporation, dominate. Together they account for 78 of the 97 positions listed. Women comprise about 1/3 of the Inupiat labor force, but only **1/4** of the **non-Inupiat** labor force. **Table 14** is probably not complete in that seasonal construction projects were in the start-up phase. **It will** serve as a platform for more detailed discussion, however, after the general village context is briefly described.

##### INUPIAT WAGE ECONOMY

Jobs are very flexible in **Nuiqsut**. It is not at all uncommon for people to substitute on very short notice at the Post Office, the stores, or the restaurant. Turnover in such departments as the NSB Utilities, NSB Public Works, and the NSB School has historically been high. For **Inupiat** workers, two factors seem most important. First, individuals sometimes find that a steady job interferes with their preferred **style of life**. This is not **always** the case, and in fact may not be the most common case (even though many **non-Inupiat** seem to consider it so as a matter of course). **Kruse et al. (1981:67)** found that most North Slope subsistence hunting occurred in the evening and on weekends, implying that it is scheduled around work activities. Also, since 1975 and especially since 1978, North Slope Borough Capital Improvement Projects have been in operation every summer. As the wages are substantially higher than those paid to year-round **employees**, the temptation exists to trade a long-term, lower paying job



**Table 14: EMPLOYMENT IN NUIQSUT, 3/83**

<u>Employer</u>	<u>Inupiat</u>		<u>Non-Inupiat</u>		<u>Total</u>
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	
NSB					
Utilities Department.	6	0	0	1	7
Public Works	4	0	0	0	3
Clinic	0	2 <sup>a</sup>	0	0	2 <sup>a</sup>
Public Safety	0	0	2	0	2
School					
Teachers, Adm.	0	2	5	5	12
Maintenance	2	3	1	0	6
Support	0	5	1	0	6
Other <sup>b</sup>	7	1	3	0	11
<b>City of Nuiqsut</b>	0	0	0	1	1
Kuukpiik Corporation					
Permanent					
Officers	5	0	0	0	5
"Office" Staff	3	1	1	0	5
Store Staff	0	3	0	0	3
Seasonal <sup>b</sup>	12	0	0	0	12
<b>Blackstock</b>	0	0	3	0	3
Post Office	1 <sup>c</sup>	0	0	0	1 <sup>c</sup>
NSB Presbytery	1	0	0	0	1
Self-Employed <sup>d</sup>	2	3	1	0	6
Prudhoe Bay <sup>e</sup>	2	1	0	0	2 <sup>e</sup>
Other	<u>4</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>6</u>
	48 <sup>f</sup>	22	20	7	97 <sup>f</sup>

<sup>a</sup> Two full-time **health aides**. Substitute fill-in not counted.

<sup>b</sup> Fluctuates widely during the year, depending mostly on construction activity within the **village**. As of 3/83, these numbers were increasing. The maximum in years past has been approximately **60**.

<sup>c</sup> Not counted in column totals. Postmaster **also** works for NSB Utilities.

<sup>d</sup> Does not include craft activities (see text).

<sup>e</sup> Long-term employees **only** (greater than 6 months - see text).

<sup>f</sup> See note c.

for a short-term, higher paying one.

/

A job with the utilities department, at about \$12.50 an hour, yields gross earnings of \$500 a week. There is little opportunity for overtime. A summer construction job or similar work starts at \$25.00 per hour and usually guarantees at least 2 to 4 hours of overtime a day. This yields gross **weekly** earnings of **\$1,375** to \$1,750. We were told that on the cat train, transporting **bulky** items across the tundra, workers are paid \$30 an hour base pay, but have a workday 20 hours long. Gross **weekly** earnings on the cat train would thus be at least \$3,900 for a five-day week. Extra days and possible double-time would increase this. **So long as CIP** funds are expended on the North Slope and **Nuiqsut**, such a "trading" strategy will indeed make economic and cultural sense.

There are no **clear** relationships between **Inupiat** household size, the number of adults, and the number of wage earners (Tables 15, 16). Seventeen households (33%) have two or three wage earners **while 21** (40%) have one. The three households (6%) with no wage earners are very small--one or two people--and so **would** seem to be households that could very easily live on subsistence products and the exchange of these for non-subsistence product items. The "sporadic" worker households (7 or **13%**) **also** tend to be small. The **5** "unknown" households (9%) have the same sort of distribution as the "sporadic" worker households. All households larger than 4 people have some sort of steady cash income (though our information on 2 of the 9 five-member households is very scanty). Households with more working age adults tend, logically enough, to have more wage earners. Mothers with large, young families tend not to work. However, one or two young children are not a great barrier to wage employment, especially if an older child or a third adult lives in the household.

Table 15: NUMBER OF WORKING AGE ADULTS<sup>a</sup>/INUPIAT<sup>b</sup>  
HOUSEHOLD BY HOUSEHOLD SIZE  
3/83

# Adults	Household Size										Total Households	Total Adults	% of HH
	1	2	3	4	5	6	7	8	9	10+			
1	4	2									6	6	11
2		3	8	7	3		2	1			24	48	45
3			1	3	1	1	1	1	2	1	11	33	21
4				1	3		2				6	24	11
5					2		1	1			4	20	8
6							1				1	6	2
7													
8										1	1	8	2
<b>Total</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>11</b>	<b>9</b>	<b>1</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>53</b>	<b>145</b>	<b>100</b>

- <sup>a</sup> "Working age adult" is an individual between the ages of 15 and 65 and no longer in school. Thus, high school students employed only in the summer are excluded.
- <sup>b</sup> Inupiat head of household or Inupiat spouse.

Table 16: NUMBER OF WORKING ADULTS<sup>a</sup>/INUPIAT<sup>b</sup>  
HOUSEHOLD BY HOUSEHOLD SIZE  
3/83

# Workers	Household Size										Total Households	Total Workers	% of HH
	1	2	3	4	5	6	7	8	9	10+			
0	2	1									3	0	6
Spor- adic <sup>c</sup>		1	2	3			1				7 <sup>c</sup>	0	13
1	2	1	3	3	6	1	4			1	21	21	40
2		1	3	3	2		1	1	2	1	14	28	26
3					1		1	1			3	9	6
Unknown	1	1	2					1			5		9
<b>Total</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>11</b>	<b>9</b>	<b>1</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>53</b>	<b>58</b>	<b>100</b>

- <sup>a</sup> See Note a, Table 15.
- <sup>b</sup> Inupiat head of household or Inupiat spouse.
- <sup>c</sup> Not currently working, but has history-of seasonal or unsteady wage employment. Households listed as 1, 2 or 3 can also include "sporadic" workers as well.

It is clear from Table 16 that most **Inupiat** households have **at** least one steady wage earner (38 of **53** or 72%). Many of these households also include people who work "sporadically" or seasonally, either because the work itself is of that nature or they have other commitments to fulfill as **well** (school, subsistence, child care). In addition, Table 16 lists 5 households (9%) as unknown and 7 households (13%) as having only "sporadic" wage earners (one or more). Thus, only 3 households (6%) are listed as having no wage income. This is likely to be an overstatement of their numbers as not **all** jobs inventoried in Table 14 are firmly allocated in **Tables 16** and **18**.

Information from an informant familiar with most of the payrolls in **Nuiqsut** confirms this general picture of relatively easy access to cash. The average household income was estimated as at least \$30,000 per year, which agrees reasonably well with the 1980 NSB housing survey median household income figure of \$24,167. **While** not excessive when the costs of living in the Arctic and the size of some households are considered, this is still not an **inconsiderable** sum. The articulation of subsistence activities and wage employment **will** be dealt with elsewhere.

Cash requirements vary from household to household, depending on type of housing, household composition, and consumer preferences. Housing payments (rentals) range from **\$100** to \$500 per month. Heating oil, at about \$112 for 55 gallons, costs about \$485 a month in winter. Food costs are relatively high and since about 50% of consumed food comes from the store, probably \$500 to \$800 per month is spent in this way. Households which drink spend a considerable amount on liquor. Phone bills average **\$150** per month. Travel expenses **are** common. An average cash requirement of \$1,500 per winter month per family would not seem like an unreasonable estimate.

## NON-INUPIAT WAGE ECONOMY

The employment pattern of non-Inupiat households is very clear. All working age adults are employed full-time. Households size does not seem to matter (Tables 17, 18). As no non-Inupiat household has more than two adults, household size measures marital status (or presence of spouse) and number of dependents. Of the four non-Inupiat couples with dependents, one has arranged for Inupiat babysitters. Another has one young child and a teenager who cares for him much of the time. The third couple has a visiting nephew fully capable of looking after himself, The fourth couple relies on the teenager of the second couple and also takes advantage of the flexibility of their work schedules to take turns with child care.

Table 17: NUMBER OF WORKING AGE ADULTS<sup>a</sup>/NON-INUPIAT  
Household BY HOUSEHOLD SIZE  
3/83

# Adults	Household Size					Total		# of HHs
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Households	Adults	
1	2					2	2	20
2		4	2	1	1	8	16	80
<b>Total</b>	2	4	2	1	1	10	18	100

<sup>a</sup> See note a, Table 15.

<sup>b</sup> Both head of household and spouse non-Inupiat. Excludes construction camp personnel. There is one male who has been in Nuiqsut long enough to perhaps be considered another household of 1. This would not alter the pattern however, although it would change the %s of 1 and 2 (working) adult households.

Table 18: NUMBER OF WORKING ADULTS<sup>a</sup>/NON-INUPIAT Household BY HOUSEHOLD SIZE / 3/83

# Workers	Household Size					Total		% of HHS
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Households	Workers	
1	2					2	2	20
2		4	2	1	1	8	16	80
<b>Total</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>10</b>	<b>18</b>	100

No direct information was obtained on **non-Inupiat** household income but it can reasonably be estimated to be at **least** \$70,000. The starting salary for an **inexperienced** teacher with a **B.A.** is \$36,000. They are generally employed as couples, and can supplement their earnings by supervising after-school activities. Teachers are the largest single group of **non-Inupiat**. Some **non-Inupiat** earn more, some probably **less**, but an average household income of \$70,000 to \$80,000 represents a good guess.

Material goods to make life in **Nuiqsut** more pleasant were much in evidence. One major topic of conversation among **non-Inupiat** was the saving of money and what that person or **couple** intended to do with it once they had saved enough. Of the ten households **listed** in **Tables 17** and **18**, three never talked about their plans for "after **Nuiqsut**." It was clear for **all** three that they **would** not retire and stay in **Nuiqsut** but that for now their work was there and they were satisfied with it. For four of the ten households, there was a definite short-term commitment to staying in **Nuiqsut**. Most seemed **to** indicate five years or so in their time tables. They do not foresee remaining in **Nuiqsut** beyond that. One household seemed quite willing to leave the village soon, and one other

was uncertain as to future plans. Information on the last household is not available. It is clear, however, that the income earned in **Nuiqsut** will be used by most of these **non-Inupiat** households to fund **post-Nuiqsut** plans.

This contrasts with the transient **non-Inupiat**, who were not **listed** in the **tables** as they were not **part** of any household. They essentially pass through the village **on** a short-term job basis. Such **people** include construction workers, researchers, geologic consultants, and so **on**. Their incomes can be substantial, but **little** information is available on **how** it is spent. Many seem to have future, post-North **Slope, plans** that they enjoy talking about, **but** few had **as** yet taken steps to put them into effect. Some had been on the North Slope for ten years or more and showed few indications of changing. Their pattern is work for 8 to **17 weeks and** then to take a break **in** Anchorage, Fairbanks, Seattle, or elsewhere. Informants say **they always** return **to** the North **Slope** however, as they can't stay **away. No** suggestions as to why, or even if, **this** pattern persists, can be made as no data exist on the topic. **The** effect on **Nuiqsut** of this **non-Inupiat** population **will** be impossible to assess **until** better information is **available**. This topic **should be** Investigated.

### Inupiat Wage Employment

#### INUPIAT WAGE EMPLOYMENT OUTSIDE THE VILLAGE

Referring once again to **Table 14**, it is clear that few **Nuiqsut people** choose **to** work outside of the **village**. Three people have become regular employees at **Prudhoe** Bay and two other **Inupiat** men who work **in** Barrow are included in the "other" category. **While** we were conducting fieldwork, eight

young to middle-aged **Inupiat** men began work at Prudhoe Bay. Each returned shortly **after** he had begun, apparently as his own decision. Interference with subsistence activities is somewhat of a factor, but not an overwhelming one. Individuals who work full-time within the village (and one who spends much of his time in Anchorage) have managed their time **to** accommodate both wage employment and subsistence activities, as **will** be **discussed** below. Rather, other factors seem to be at work.

Most **Nuiqsut** people hired **at Prudhoe** (and perhaps **all**) are hired through Pingo Corporation, a corporation set up by and for all of the North Slope communities except Barrow. They are ideally suited to recruit for the oil companies "minority hire" program. However, as one **Nuiqsut** former Prudhoe employee put it, over there minority hire means "... Puerto Ricans, South Americans, and others from the Lower 48." The opinion that oil companies do not **really** want to hire Inupiat workers is common. Individuals say that the oil companies policy of **having** only one **Inupiat** per drilling crew makes it extremely difficult for them, due to their feeling socially isolated and different.

**It** is interesting to note that the two long-term employees in **Prudhoe** from **Nuiqsut** do not work on drilling crews but in a central maintenance garage, where they can readily associate with other **Inupiat** after work if not during it. The pace of such work also allows more for breaks to visit and such, whereas the rapid and dangerous drilling jobs do not. Informants say that what is needed is a program to train drilling crews comprised entirely of **Inupiat**. They believe this **will** reduce the prejudice often displayed towards them on mixed crews, increase their feeling of comfort, and lead to very tightly integrated crews. This is also clearly an attempt to **apply** a traditional form of social organization



and group recruitment to a "modern" setting. Indeed, it may be beneficial to both the Inupiat and the oil companies to try to adopt the whaling crew model for oil rig drilling crews. No information was available on industry reaction to such a proposal, although it was mentioned to us in the village with great regularity. It is commonly acknowledged that the more inexperienced people there are on a drilling crew, the more dangerous it is to work on that crew.

The two people from Nuiqsut known to be working in Barrow still have a primary identity as being from Nuiqsut. Their reasons for being in Barrow are singular and particularistic, and not necessarily long term (beyond the end of summer). In this regard, they can perhaps be regarded in the same way as people who visit Fairbanks, Anchorage, Hawaii, and so forth.

#### MALE INUPIAT WAGE EMPLOYMENT

Of the 72 men of employable age in Nuiqsut during March 1983, 48 (67%) had wage earning jobs. Of these, 25 (35% of employable men, 52% of men's jobs) were permanent, year-round positions (Tables 14, 19). This compares with a figure for employment of 25% for March 1977, the only information available for comparison (Kruse et al 1981:52). Kruse's information is from a limited number of informants and so is only an estimate. Also, 1977 was a year of relatively low CIP expenditures. The high employment figure given for a period during 1977 was 60%. Employment in Nuiqsut is expected to reach well above what it is at present as the CIP projects for the summer of 1983 have yet to reach full manpower.

**Table 19: NUIQSUT EMPLOYMENT STATUS BY SEX  
AND ETHNICITY  
March 1983**

<u>Employment Status</u>	<u>Inupiat</u>		<u>Non-Inupiat</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Unemployed	24(33%)	50(69%)	2(9%)	1(12.5%)
Full-time	25(35%)	19(26%)	14(64%)	7(87.5%)
Seasonal	23(32%)	3(4%)	6(27%)	0
<b>Total</b>	<b>72</b>	<b>72</b>	<b>22</b>	<b>8</b>

**EMPLOYMENT STATUS BY ETHNICITY**

	<u>Inupiat</u>	<u>Non-Inupiat</u>	<u>Total</u>	
Full-time	44	21	65	$\chi^2=16.6, df=1$ hypothesis of no significant difference must be rejected
Unemployed & Seasonal	100	9	109	
	144	30	174	

**INUPIAT EMPLOYMENT STATUS BY SEX**

	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Unemployed	24	50	74	$\chi^2=25.4, df=2$ hypothesis of no significant difference must be rejected
Full-time	25	19	44	
Seasonal	23	3	26	
	72	72	144	

**INUPIAT WORK STATUS BY SEX**

	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Full-time	24	19	43	$\chi^2=13.4, df=1$ hypothesis of no significant difference must be rejected
Seasonal	35	3	38	
	59	22	81	

From **Table 19**, it is clear that **Inupiat** men have a higher employment rate than **do Inupiat** women. This is due to the **almost** total lack of seasonally employed females. Full-time employment **for Inupiat** men and women is **fairly** comparable. **The Inupiat** employment rate is much **lower** than **the non-Inupiat** employment **rate**. **All** these differences **are statistically significant (Table 19)**.

Information on how many **people** work at some **point** during the year would obviously complement knowing how many people work at specific times during the year. Our **March 1983** inventory (**Tables 14 & 19**) is point-time information. **For yearly** information, we **relied** on informants' **reports** as to past work histories. **We** collected this information for everyone who appeared **in any of our** censuses. **Transient, non-Inupiat** were **not** included **as** this was beyond the scope **of our field** effort. **We** then coded these by employment status (unemployed, **full-time** or seasonal work, unknown), **ethnicity**, sex, and **age group**. **The total sample size** was of course **larger** than the **March 1983** inventory (**for which** the population figures of the February census are applicable). This confirmed the results **of** the March 1983 inventory: 24 (**26%**) **Inupiat** males were employed full-time and 35 (38%) seasonally **for a total of 59 (65%)**. Eight (9%) were unknown and **24 (26%)** did not work. **As** last year there were not as many **CIP** construction projects as this year, **employment is** expected to be higher. This anticipation was **felt** especially toward the middle of March, when we had to leave the **field**.

The differential employment of **Inupiat** men and women found **in March 1983 is also** demonstrated by the constructed annual data (**Table 20**). Full-time employment **is** about the same for each (25% of the population] but men have much greater opportunities for seasonal employment. **In fact**, seasonal **male** wage earners outnumber full-time **male** wage

Table 20: NUIQSUT EMPLOYMENT STATUS BY SEX AND ETHNICITY CONSTRUCTED ANNUAL DATA

Employment Status	Inupiat		Non-Inupiat	
	Male	Female	Male	Female
Unemployed	24 (25%)	57 (67%)	2 (12%)	1 (12.5%)
Full-time	24 (26%)	21 (25%)	14 (82%)	7 (87.5%)
Seasonal	<b>35 (38%)</b>	4 (5%)	0	0
Unknown	<b>8 (9%)</b>	3 (4%)	<b>1 (6%)</b>	0
<b>Total</b>	<b>91</b>	<b>85</b>	<b>17</b>	<b>8</b>

EMPLOYMENT STATUS BY ETHNICITY

	Inupiat	Non-Inupiat	Total	
Full-time	45	21	66	$\chi^2=33.5, df=1$ hypothesis of no significant difference must be rejected
Unemployed & Seasonal	<b>120</b>	3	<b>123</b>	
	165	24	189	

INUPIAT EMPLOYMENT STATUS BY SEX

	Male	Female	Total	
Unemployed	24	57	81	$\chi^2=38.4, df=2$ hypothesis of no significant difference must be rejected
Full-time	24	21	45	
Seasonal	<b>35</b>	4	<b>39</b>	
	<b>83</b>	<b>82</b>	<b>165</b>	

INUPIAT WORK STATUS BY SEX

	Male	Female	Total	
Full-time	24	21	45	$\chi^2=13.2, df=1$ hypothesis of no significant difference must be rejected
Seasonal	<b>35</b>	4	<b>39</b>	
	<b>59</b>	25	84	

earners. **There** are very few **female** seasonal wage earners. **Thus**, only 25% of **Nuiqsut Inupiat** men do not work **for** wages **during** at **least** some part of the year, compared to 67% of **Nuiqsut Inupiat** women who **do not**. **Also**, **non-Inupiat** are **again** seen **to** have a higher employment rate than do **Inupiat**.

The constructed annual data **also** shows the age patterning of **Inupiat** wage earners (**Table 21**). The young and the **old** have higher unemployment rates than **the** middle-aged. **This** interacts **with** the **sexual distinction** so that women apparently enter the wage force **later** and **leave** sooner than do men. **Men** aged **21-30** are **mostly** employed (at **least** seasonally), **and** **stay** that way **until** after age **50**, when unemployed men again out number employed **ones**. Only **in** the **31-40** age category do employed women narrowly out **number** unemployed women. The pattern **is** the same for both sexes, **but** women must **combat** both age and sex factors **while** men need **only** overcome age (**or** experience). **We** suspect that this **is** again the effect of most seasonal wage earners being men.

Men occupy a relatively well-defined set, of occupations within the **village**. **As** has been stated **above**, few men work outside of the village for any **length** of **time**. **Kleinfield et al (1981)** document **this** pattern for the North **Slope** Borough as a **whole**. **Our** information from **Nuiqsut** **fits** this case **well**. However, with the more detailed information available, we can refine the analysis as **it** pertains to **Nuiqsut**.

The primary distinction has already been made between permanent and seasonal or temporary employment. Temporary employment, for men at **least**, nearly **always** involves construction, heavy machinery operation, or other physical **labor**. Language **skills** and formal education needed are minimal. A worker need not commit himself to work a

Table 21: **INUPIAT** EMPLOYMENT STATUS BY SEX AND AGE CONSTRUCTED ANNUAL DATA

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Unempl oyed</u>	<u>Seasonal &amp; Full -ti me</u>	<u>Unempl oyed</u>	<u>Seasonal &amp; Full -ti me</u>
16-20	13	11	20	3
21-30	6	16	15	8
31-40	1	13	6	7
41-50	1	17	5	4
51-65	2	1	7	2
66+	1	1	4	0

MALE **INUPIAT** EMPLOYMENT STATUS BY AGE

<u>Age</u>	<u>Unempl oyed</u>	<u>Seasonal &amp; Full -ti me</u>	<u>Total</u>	$\chi^2=10.7, df=1$ hypothesis of no significant difference rejected at 0.001 level.
16-30	19	27	46	
31+ <sup>a</sup>	5	32	37	
	24	59	83	

<sup>a</sup> There are too few males aged 51+ for a chi-square with three age categories to be computed.

FEMALE **INUPIAT** EMPLOYMENT STATUS BY AGE

<u>Age</u>	<u>Unempl oyed</u>	<u>Seasonal &amp; Full -ti me</u>	<u>Total</u>	$\chi^2=7.2, df=2$ hypothesis of no significant difference rejected at 0.001 level.
16-30	35	11	46	
31-50	11	11	22	
51+	11	2	12	
	57	24	79	

**longer period** than **he** wishes. This has been seen as a work pattern which reinforces, or is at least compatible with, subsistence resources harvesting (**Kruse 1982:39**). **The evidence of such a pattern in Nuiqsut is clear. Table 2 lists the yearly expenditure of NSB CIP funds in Nuiqsut, and shows that Nuiqsut consistently has about 8% of such funds expended on village projects. As these are mostly construction projects, much of this money goes for wages during the summer, the only time when such work has taken place. The scope of such expenditure and activity can be gauged from 1981, when \$131,209,658 was spent on Nuiqsut. That is about \$500,000 per capita. As of March 1983, approximately 20 Nuiqsut residents were so employed in Nuiqsut. These were spread among CIP construction projects and a project to move the Nuiqsut dredge to Atqasuk.**

A similar distinction must **be** made when permanent wage positions are addressed. Here there is one group **of** jobs which fit the description of what had previously **only** been seasonal work--maintenance, heavy equipment operation, machinery repair, and **such**. The creation of these **jobs** is a **direct result** of CIP projects. Once **a physical plant is built**, it needs to be maintained. The second group **of** permanent jobs are those which require **an** ability to understand and **use Inupiaq** and English, and to operate beyond a **village-bound** system. The complexities of modern society bear down most directly on these people who must try to serve the best interests of the village through instruments and institutions introduced from outside.

**Of** the 22 permanent jobs **held** by men, **all** but **6** are of the first sort. They require **no** training or **skills** beyond those already possessed by many **Inupiat** men. The **North Slope Borough Utilities Department** in **Nuiqsut** employs **6 Inupiat** men ranging in age from **20 to 40**. Their duties are to

maintain and deliver the water supply and to maintain and operate the electrical system. Electricity is locally generated using diesel generators. All employees may have to drive heavy trucks. All could reasonably be expected to learn how to take meter readings. Little actual maintenance is involved as mechanics from Barrow handle most complicated problems. The head of utilities in **Nuiqsut** is a relative newcomer who has lived in Barrow but is enrolled as a member of the **Doyon** Regional Corporation. He is not the **only** utilities employee with **college** education, but he is **recognized** as having the best formal education. In addition, he has experience from his military service. The typical utilities employee has a high school education and is enrolled in **Nuiqsut** as a shareholder **of** the **Kuukpik** Corporation.

The Public Works Department employs three **Inupiat** men, with characteristics similar to those of the Utilities Department employees. The head is again a man from outside the village **in** the sense that his enrollment is not **Nuiqsut** and he thus is not a shareholder in **Kuukpik** Corporation. The school employs two **Inupiat** men as maintenance people, and the village corporation employs two **Inupiat males** to dispense and deliver fuel oil. One **Inupiat** man (perhaps two now) is employed at Prudhoe Bay, one **Inupiat** man is a storekeeper, and a third manages a restaurant (co-operated by his wife). Two other **Inupiat** men **help** their wives with stores for which the wife is mainly responsible.

The five officers of the **Kuukpik** Corporation, the **Kuukpik** Corporation fuel clerk, and the Presbyterian **lay** minister who is also a NSB Assemblyman, all fall into the second group of wage earners. Their work requires language **skills** and training of an advanced nature. Perhaps the heads of NSB Utilities and NSB **Public Works** in **Nuiqsut** belong in this category as well. After all, they oversee agencies on which millions of



dollars are spent (see Table 2; Figures 3, 4). They are both from outside the village and perhaps were chosen because people with the necessary **skills** had not yet **developed** in **Nuiqsut**. **Male** employment opportunities as they have developed on the North Slope may well have contributed to this. There have been few incentives hitherto for individuals in **Nuiqsut** to develop such **skills** because of the seasonal abundance of work **for** which no new training was needed. Barrow, **as** the largest **local community**, **could** have been expected to develop **the** most diversified and segmented economy, and the **first** cadre of **local** leaders. Thus, connections between **skilled** positions in **Nuiqsut** and Barrow through the transfer of personnel **should** come as no surprise.

In addition, there **is** the **Inupiat** man who operates a store, as **well** as the **man** who runs the restaurant. **It** is difficult to say **to** what degree they are economically viable enterprises. The **volume** of business at the **store would** not seem to warrant the effort to keep **it** open, but **no** hard information **is** available on **this**. The restaurant apparently does an adequate business but has yet to attract a **large** and steady clientele. This private service area **could well** be a third sector or type of job situation for **Inupiat** men. **In** this regard, it should be noted that the head of utilities **also** operates the post office.

**Inupiat** men are beginning to acquire more formal education. **At** utilities and public works, everyone has a **high school** diploma. One utilities worker has a vocational degree **while** another has some college. The head of utilities is less than a year from a college degree. The store proprietor **of** the previous paragraph has been to college. Several of the **Kuukpik** Corporation's officers have college experience. This increased educational experience is not reflected in **Inupiat** **male** employment patterns in **Nuiqsut**, however. Most men **still** work as equipment **operators** and laborers.

Kuukpiik Corporation is at present still seen as a conduit for North Slope Borough money in providing construction jobs. The Corporation is beginning to try to develop economic plans of its own. This corporate growth requires internal managerial growth and the development of political solutions for what at first seem to be economic problems. A salient question with regard to Inupiat wage employment has always been its effect on subsistence. We will continue in this chapter to discuss wage employment in Nuiqsut, and turn to subsistence and the articulation of the subsistence and cash economies in the next chapter.

#### FEMALE INUPIAT WAGE EMPLOYMENT

The community of Nuiqsut has experienced the increasing participation of Inupiat women in the work force. This trend, which has been characteristic of America in general, may continue as overall job opportunities for both men and women increase due to the development of economic resources. Nuiqsut patterns of female wage labor employment reflect the generalized pattern of class and occupational status of contemporary Inupiat women. In this section, we shall contrast traditional economic and productive roles occupied by Inupiat women with their emerging roles based upon American class and occupational structure.

Our perspective of Nuiqsut women in the contemporary work force parallels a more general study of Inupiat employment conducted by Kleinfield, Kruse, and Travis (1981) in 1976-1977 for the North Slope Region. The data collected from Nuiqsut on female wage labor employment is based upon observations made by researchers from November 1982 until March 1983. Therefore, our understanding of wage labor employment with regard to changing women's roles is

observational **and** specific **in** contrast to a generalized and quantitative analysis of survey information collected from respondents' answers to questionnaires. Our findings on Native women's employment are a base-line measure--one point **in the** changing trends of women in the **Nuiqsut** work **force**.

Women in contemporary **Inupiat** society **hold** positions within **both** the paid **labor** force and the domestic household sphere. Native women who work for wages contribute substantially to the cash income of their immediate or extended kin group. **The** transfer of cash income into the domestic household unit and its articulation with the subsistence economy **is** crucial to our understanding of the pivotal position that women have come to play **in** both economies. **In this** sense, women's productive capabilities are **still** perceived and exploited as "economic resources" within the traditional subsistence sphere. This **shall** be discussed following the presentation and summary **of** the **Nuiqsut** employment data.

In 1982-1983, during the **field** work period, information on jobs or economic opportunities open to **Nuiqsut** women was compiled **by** both field researchers. **Table 22** shows the **22+** **job** positions **held** by Native women in **Nuiqsut**. **With** the exception of one woman who worked year--round **at** Prudhoe Bay, **all** of these positions were **held** in the Village of **Nuiqsut**. **Women** in **Nuiqsut** very **rarely** travel to Prudhoe Bay for employment. One young woman, when asked why she did not seek higher paying employment **at Prudhoe** Bay, stated that it **would** interfere with her **family** and household responsibilities **in Nuiqsut**. This particular woman was responsible for providing a cash income for her mother, a younger sibling, **and** her own **child**. **When** women **dicuss** the necessity for new job opportunities in **Nuiqsut**, they are concerned that wage **labor** does not remove them from their families. **In** the past, there was strong sentiment of **Nuiqsut** women for a day-care

Table 22: **NUIQSUT** 1982-1983  
WAGE LABOR POSITIONS OCCUPIED BY NATIVE WOMEN

<u>Unskilled Labor</u>	<u>Number of Positions</u>
School maintenance (NSB)	3
Dredge camp <b>buil</b> cook	1
<b>Kuukpik</b> Store cashiers (village corporation)	2
Service garage employee ( <b>Prudhoe</b> Bay) (Seasonal construction work 2/20/83)	1 1-5
<u>Skilled Labor</u>	
<b>School</b> teachers (NSB)	2
<b>School</b> teacher aides (NSB)	2
School cook (NSB)	2
<b>School</b> secretary	1
Village Coordinator (NSB)	1
Public Health Aides (NSB)	2
<b>Kuukpik</b> Corporation secretary	1
<b>Kuukpik</b> Store manager	1
<u>Self-employment</u>	
*Store managers/owners	3
*Air charter service/mail pick-up	1
<b>Craft</b> production (skin sewing, masks)	5+

22+ full or part-time positions occupied by Native women on a yearly basis.

1-5 seasonal construction jobs occupied by Native women.

5+ individuals who participate in craft production.

\* in partnership with husband.

**center which would** allow them greater freedom to take **on** wage-labor employment. However, it was **our** observation **that** most employed women were **able to find** immediate **or** extended kin **to** assist in child-care. **Due to** the greater flexibility **of familial** obligations in child-care **in Inupiat society,** child-care **facilities** are probably not as **essential** for the **female** work force as in contemporary Western communities.

Some **of** the positions **listed in Table** 22 such as **school** employment. or dredge camp **bull** cook are not year-round positions, yet they do require more steady employment than seasonal construction **jobs**. The few positions as seasonal construction workers **held** by women were available from February **20, 1983** through the month of March and **could last** into the summer. These construction jobs were semi-skilled **labor** positions in the construction of new housing **in Nuiqsut.**

There were approximately five individuals who participated in craft production activities. **Local** crafts are sold mostly at the **local** stores, but one woman does send everything she makes to shops in Fairbanks and Anchorage. **Retail** prices in **Nuiqsut** and Barrow were similar to each **other**. Skin masks ranged from **\$50** to **\$100**, snow shirts ranged from **\$25 to \$50**, parkas with **fur linings** ranged from \$300 upward, and seal skin or leather **mukluks** ranged from **\$250** to **\$350**. Craft production does not represent a substantial aspect of the cash economy as no one person produces a great **deal** to sell. However, craft activities do provide some supplementary cash income, primarily to **women**.

Craft production in **Nuiqsut** is predominantly restricted to women's crafts, **unlike** the craft production in Barrow which includes both men's and women's crafts. The absence of ivory carvers, baleen basket-makers and other **men's** craft activities in **Nuiqsut** may be a **result** of the relatively **small** population

size of **Nuiqsut** and demographic accident. There are few men in the 50 to 60 year old age group who might have learned traditional crafts. However, four **Nuiqsut** men do trap and clean furs, a type of subsistence/craft economy. Both furs and women's craft items are usually displayed in the **Kuukpik** Store.

Of **Inupiat** women employed in **Nuiqsut**, seven occupy unskilled **labor** positions, twelve occupy skilled labor positions, and four (excluding individuals involved in craft **production**) are self-employed. **Table 23** lists seven additional positions held by **non-Inupiat** women. There were approximately 48 **male Inupiat** wage earners in **Nuiqsut** in 1982-1983 (**Table 19**), so clearly fewer females than males engage in wage **labor**.

**Table 23: NUIQSUT 1982-1983**  
**WAGE LABOR POSITIONS OCCUPIED BY NON-NATIVE WOMEN**

<u>Skilled Labor</u>	<u>Number of Positions</u>
School teachers (NSB)	5
Utilities Department clerk (NSB)	1
Village of <b>Nuiqsut</b> clerk	1

7 full or part-time positions occupied by Non-Native women on a yearly basis.

Our observations are consistent with the findings of **Kleinfeld, Kruse, and Travis (1981:8-9)**. In **Nuiqsut** and the five other North Slope Borough villages outside of Barrow, male wage earners predominate. In Barrow the reverse is true. Female wage earners outnumber male wage earners on a monthly, seasonal, or annual basis. We believe that several reasons may contribute to an explanation of why male employment is greater than female employment in **Nuiqsut** and other North

**Slope** villages. In the case of **Nuiqsut**, there are fewer wage **labor** positions in occupations defined as women's work. Positions in **Nuiqsut** held by women include clerical and secretarial work, health and **social** services jobs, store management, and work in education. A majority of wage **labor** positions in **Nuiqsut**, and perhaps in other villages, are defined as men's work (i.e., jobs in **Public** Works, the Utilities Department, Dredge Camp employment, management jobs in the **Kuukpik Village** Corporation, and rotational **labor** positions on oil **rigs** or camps in **Prudhoe Bay**). Therefore, we **would** expect that. **unless Nuiqsut** undergoes further administrative and bureaucratic **development, Inupiat males will** dominate the work force.

The wage **labor** positions held by both Native and White women in **Nuiqsut** appear to **follow** the traditional development of women's occupation in American society (**Table 24**). Future economic development in **Nuiqsut will likely result, as in** Barrow, in increasing wage labor employment for **Inupiat** women, with a proportionately **slower** growth in wage **labor** employment opportunities for **Inupiat men**.

The high participation rate of **Inupiat** women in the wage economy results from a number of favorable positions. On the labor demand side, the specific type of development that has occurred on the North **Slope** had brought **large** numbers of jobs which the majority culture has conventionally defined as women's work. Since the **1960s, govern-**ment has been a steadily expanding industry, and government employs **large** numbers of clerical, education, health and **social** service workers (**Kleinfeld, Kruse, and Travis 1981: 19**).

A shortage of **Nuiqsut** women trained in clerical secretarial **skills** may exist since two of these positions are currently held by white women. There is a publicly advertised preference for Native hire. However, in both cases it may be that non-Native women are employed because they represent

Table 24: **NUIQSUT** 1982-1983

A CLASSIFICATION OF EMPLOYMENT OF AMERICAN WOMEN AS REFLECTED BY EMPLOYMENT STRUCTURE OF RESIDENT **NUIQSUT** WOMEN

<u>Unskilled Labor</u>	Domestic Help/Maintenance Construction Work Service Garage	Total 6-10
<u>Skilled Labor with High School Ed.</u>	Clerical Staff Secretaries Cashiers School Teacher Aides	<b>Total 6</b>
<u>Labor requiring Professional skills</u>	School Teachers Village Coordinator - Administrative Ass't. Health Aides	Total <b>13</b>
<u>Self-Employment</u>	Craft Production Management of Air Charter Service and Mail Pick-Up Store Management/Ownership	Total 9+

nonpartisan positions in jobs where political factionalism in the economic or social spheres of the Native community may readily compromise the job security of Native women **holding** such positions. **In** the position of city clerk, the employee is responsible for handling **important secretarial** duties, minutes of the council meetings, and communications written by the Mayor of **Nuiqsut**. This position also requires **considerable** tact because the city clerk's office is housed in the same building as the for-profit village corporation. The position of the utilities clerk also entails a certain degree of non-partisan participation. In this position, the clerk must handle **all** utilities and water accounts for each village household. Additionally, this individual is responsible for billing each household and collecting the monthly payments.

Many wage positions on the North Slope are dependent upon characteristics which differentiate **Inupiat** women from **Inupiat**



men. Some of these characteristics are acquired (learned) and others are a product of **Inupiat** culture and socialization (**Kleinfeld, Kruse, and Travis 1981**). These characteristics include: **1)** educational background, **2)** experience and proficiency in the English language, **3)** additional vocational training, and **4)** cultural values which encourage women to provide the productive stability of the domestic household unit. In Table 25, we have outlined the approximate minimum **level** of English language **skills** or proficiency that a person must have to **hold** the jobs that are currently held by Native **women**. The same kind of break-down may be expected for jobs held by Native men, although some job descriptions would not **apply** to **Inupiat** men in **Nuiqsut**. For example, there are no **male** clerks, secretaries, **health aides**, or **school** teachers. There **are at least** two men who have translation **skills** in **Inupiaq** and English. The Presbyterian **lay** minister and a former **para-legal** aide have assumed occasional responsibilities as bilingual translators. **In** general, however, it appears that **Inupiat** women in the **para-professional** and professional fields represent a relatively highly educated sector of the population.

The greater numbers of **Inupiat** women who have para-professional or vocational **skills** can be attributed to the greater emphasis **placed** upon **Inupiat** women completing their high school education and the availability of additional training for jobs defined as women's work. Also, **Inupiat** men in **Nuiqsut** have a far greater range of **unskilled employ-**ment opportunities available, within **Nuiqsut** and at Prudhoe Bay and the other North **Slope** communities. **Nuiqsut** males may seek employment in seasonal construction work, rotational shifts at Prudhoe Bay, as members of cat-train crews, and at other blue **collar** jobs in the neighboring communities of the North **Slope**. **In** addition, **Inupiat** men can **also** work for the North Slope Borough or the **Kuukpik** Corporation within the village of **Nuiqsut**.

**Table 25: NUIQSUT 1982-1983**

CLASSIFICATION OF JOB POSITIONS OF WOMEN AND APPROXIMATE LEVEL OF ENGLISH LANGUAGE SKILLS/PROFICIENCY\*

Spoken Command of <b>English</b>	3	School Maintenance Workers
	2	School Cooks
	1-5	Seasonal Construction Workers
	2	<b>Kuukpik</b> Corporation Cashiers
	<b>1</b>	Garage Employee
Spoken/Written Command of <b>English</b>	<b>1</b>	School Secretary
	<b>7</b>	<b>School</b> Teachers (5 <b>non-Inupiat</b> )
	<b>2</b>	School Teacher Aides
	<b>1</b>	Village Coordinator
	<b>2</b>	Public Health Aides
	<b>1</b>	Village of <b>Nuiqsut</b> Clerk ( <b>non-Inupiat</b> )
	<b>1</b>	<b>Kuukpik</b> Corporation Store Manager
	<b>3</b>	Store Management/Owner
Translation Skills in <b>English</b> and <b>Inupiat</b> Languages	<b>1</b>	Village Coordinator
	<b>1</b>	<b>Kuukpik</b> Corporation Secretary
	<b>1</b>	School Teacher of <b>Inupiat</b> Culture and Language
	<b>1</b>	Special Education Teacher
No <b>English Skills</b> Necessary	<b>5+</b>	Craft Production

\* Individuals holding these positions may have a greater command of the English or **Inupiat** languages; however, these categories represent the bare essentials of language skills to conduct the jobs held by the individuals.

The relative mobility of **Inupiat** men, both **in their traditional roles** as hunters and their contemporary roles as wage laborers, **allows** them a flexibility and variety in employment opportunities that **Inupiat** women **lack**. **Inupiat** men appear, on the **whole**, to be **less** concerned with staying in the **village** close to their **families**, although some men might state a preference for village **life** and there may be several interacting factors involved. Women seem to marry **at** a younger age than men and more jobs are available for men than for **women**. The last is especially true for young men and women--one **of** the more **mobile** age groups. It may be that the opportunity for work draws more men than women away from the village.

Women, on the other hand, are more **closely** tied to their families, their children, and the **village**. Employment opportunities for women are for **the** most part confined to jobs which require **skills** and proficiency in **English**. However, greater educational and **para-professional** training gives the **Inupiat** woman a **better** chance for obtaining those sorts of positions when they are within the confines of her community.

Furthermore, women participate in subsistence procurement **less** than **men**; therefore, it **is** easier for women to take on full-time, year round employment than it is for men who may wish to engage in seasonal subsistence activities. The **role** of the subsistence economy in wage **labor** employment of **Inupiat** men and women is expressed by **Kleinfeld, Kruse, and Travis (1981)**:

**In sum, Inupiat** men maintain moderate **levels** of activity in both the subsistence and wage economies. The pattern **is** typical of young men as **well** as the older generation. In contrast, **Inupiat** women maintain levels of activity comparable to men in wage economy but are less active in the subsistence economy. Young

**Inupiat** women especially appear to be more attached to the wage economy and less active in the subsistence sector (**Kleinfeld, Kruse, and Travis 1981:21**).

In **Nuiqsut**, men participate in the majority of subsistence activities such as caribou and moose hunting, bird hunting, fishing and netting, and fur-trapping. Village women mostly participate in the subsistence activities of winter ice fishing, and the hunting and the fishing activities at summer fish camps. Therefore, the strong dichotomy between **female** wage labor employment and male subsistence activities (a sexual division of labor) has not occurred to the extent that it occurs in Barrow (**Kleinfeld, Kruse, and Travis 1981**).

#### **INUPIAT WAGE EMPLOYMENT--MEN AND WOMEN**

The pattern of employment shown by our March 1983 job inventory (Tables 14 and 19) is basically the same as that exhibited by our constructed annual data (Tables 20 and 21). As Table **19** shows, there were 72 **Inupiat** men of working age in **Nuiqsut** during March 1983. They were divided as follows: 25 (35%) permanently employed, 23 (32%) seasonally employed, and 24 (33%) unemployed. Of 72 working age Inupiat women, **19** (26%) were permanently employed, 3 (4%) temporarily employed, and 50 (69%) unemployed. The difference is clearly in the availability of seasonal work for men and not for women.

Construction and heavy machinery work are considered men's work. Such jobs tend to be seasonal. **Clerical** work and inside work in general, which tends to be more year-round, seems to be within the female sphere. Thus, school maintenance is logically enough carried out by more women than men (though there is a mixture). Cooking is also logically feminine, as is health care. Interestingly enough, managerial-administrative positions also gravitate towards

women. **The Kuukpik Corporation Store** is run by women. the village coordinator has always been a woman (and not always the same one)., and teachers and teachers' **aides** are women. We noticed this same pattern among **non-Inupiat** hired administrators **within the village**. The **Kuukpik Corporation** seems to be the **only** organization whose administration is composed entirely of men. There are female members **of** the board of directors. **Kuukpik Corporation** at times seems content to be a conduit for North Slope Borough money. This view would have the corporation be primarily responsible for creating temporary jobs for **men**. Clearly men as a **group fill** jobs requiring less **formal** training than **do** woman, and the North **Slope Borough** and **Kuukpik Corporation** have been successful in creating such **jobs** on a seasonal **basis**.

About equal numbers of men and women are permanently employed. The types of permanent positions the two sexes **hold** are quite different, however. Men essentially monopolize unskilled and semi-skilled **jobs**, as **well as** those **involving** machinery. Women hold clerical positions or function **within a nurturing** and/or domestic situation such as the **village clinic** or the school . Men are perceived as the primary providers and main wage earners. **In all** age classes, more men than women are engaged in some **form** of wage **labor (Table 21)**. This is especially true **on** a percentage basis for those age groups **likely to** have children (ages 26-50, which aggregate to 33 out of 40 or **82.5%** men employed compared **to 12 of 29 of 41%** women employed). These are **also** the age groups **with** the highest percentages of working adults.

Of 49 **Inupiat** households, 9 have female heads of households (Table 26). Of the nine **female** heads of households, none has a wage job. They are **all** widows (eight) or never married (one). They are **all** elderly or otherwise not employable. **In six** of these households (67%), men provide wage income.

Table 26: SOME INUPIAT HOUSEHOLD CHARACTERISTICS<sup>a</sup>

February 1983

Age	Sex of Head of HH		Type of Wage Earner(s) <sup>b</sup>	Sex of Head of HH		HH Size	Sex of Head of HH	
	Male	Female		Male	Female		Male	Female
16-20	1		M-S	11	3	1	4	0
21-30	4		M-P, F-P	9		2	1	3
31-40	11		M-P	5	2	3	5	1
41-50	18	1	M-S, F-P	5	1	4	6	4
51-60	4	2	None	3	2	5	8	1
61-65	0	2	M-P, F-S	3		6	3	
66+	2	4	M-P, M-S	2		7	5	
			M-S, F-S	2		8	4	
			F-P	0	1	9	2	
Total	40	9	F-S	0		10	2	
				40	9		40	9

<sup>a</sup> Excludes 3 Inupiat female permanent wage earners living in mixed households.

<sup>b</sup> M = male, F = female, P = permanent, S = seasonal.

Table 27: INUPIAT HOUSEHOLD WAGE EARNER CHARACTERISTICS<sup>a</sup>

HH Size	Type of Wage Earner <sup>b</sup>										Total
	M-S	M-P, F-P	M-P	M-S, F-P	None	M-P, F-S	M-P, M-S	M-S, F-S	F-P	F-S	
1	1	-	1	-	2	-	-	-	-	-	4
2	2	-	1	-	1	-	-	-	-	-	4
3	2	-	-	-	2	1	1	-	-	-	6
4	4	2	3	-	-	-	-	-	1	-	10
5	4	2	-	2	-	1	-	-	-	-	9
6	-	2	-	-	-	-	-	1	-	-	3
7	1	1	1	1	-	-	1	-	-	-	5
8	-	1	-	2	-	-	-	1	-	-	4
9	-	1	-	1	-	-	-	-	-	-	2
10	-	-	1	-	-	1	-	-	-	-	2
Total	14	9	7	6	5	3	2	2	1	0	49

Age Head of HH	M-S	M-P, F-P	M-P	M-S, F-P	None	M-P, F-S	M-P, M-S	M-S, F-S	F-P	F-S	Total
16-20	1	-	-	-	1	-	-	-	-	-	2
21-30	2	-	1	-	-	-	-	-	-	-	3
31-40	2	2	3	-	1	1	1	-	-	-	11
41-50	4	5	1	6	-	-	1	2	-	-	19
51-60	1	1	-	-	2	1	-	-	1	-	6
61-65	-	-	1	-	1	-	-	-	-	-	2
66+	4	1	1	-	-	-	-	-	-	-	6

<sup>a</sup> Excludes 3 Inupiat female permanent wage earners living in mixed households. SEE TEXT

<sup>b</sup> M = male, F = female, P = permanent, S = seasonal.

of these men, two are permanently employed and four work more seasonally. In five cases (56%), these men provide the sole monetary income for the female-headed household. Women provide monetary income to two (22%) of the female-headed households and are the most regular monetary supports for their households (one is the **sole** support). Both have permanent **jobs**. Two households (22%) have no apparent source of earned cash income. **Males** are thus the primary wage earners for these nine households. In **the** three cases **where there is no** male wage earner, two are households with no known wage earner and one has no **male** member of employable **age**.

Of the 40 male head of household cases, three (8%) have no identified wage earner (**Table 26**). Eighteen (45%) are dependent **solely** upon **male** wage earners (5 permanent, 11 seasonal, and 2 combinations of the **two**). None are dependent **solely** upon female wage earners. In **five** cases (13%), females appear as the primary wage earners, with **males** providing seasonal wage income. Three cases (8%) have the opposite situation. In nine cases (23%), both male and female household members have permanent jobs, and in two cases (5%), **male** and female members have seasonal **jobs**. Thus, female wage income is a significant factor in 19 of these 40 cases (48%). Women provide the steadiest source of income in five of the 40 cases (12.5%) **while** men do so in 21 cases (52.5%). The contribution is about **equal** in 14 of the 40 cases (35%). For all 49 Inupiat households, the figures for the most regular source of cash income are men 26 (53%), women 7 (14%), and equal 16 (33%). This is basically the same as for the two **subsamples**. Household size and age of head of household do not have any **simple** relationship to the type of wage earner(s) present (Table 27).

This describes the regularity of cash income flow to households, but not the amount. This issue **could** have logically

been dealt with when discussing male **Inupiat** wage labor by itself, but has wider application that can be developed here. For the most part, seasonal work pays much better than steady, year-round employment in terms of an hourly wage. Everyone in **Nuiqsut** realizes this. Department heads have remarked to us that turnover used to be very high, **since** men would quit in the summer to work construction, the cat train, or something else. A regular job pays a straight wage for eight hours and occasionally time-and-a-half for overtime. Summer construction pays at **least** twice that straight rate, and guarantees perhaps as many hours a week of overtime as straight **time**. The cat train pays no less than construction in terms of straight pay and pays an employee for 20 hours work out of the **24**. Thus, a seasonal employee can earn much more than a permanently employed individual, or at **least** the same amount in a much shorter time. Given this situation, the pattern of seasonal **male** employment is not difficult to understand; nor is the relative lack of seasonal positions for women then much of a mystery. What is **surprising** is the number of permanently employed males with **skills** that would enable them to be hired on seasonal projects who have expressed satisfaction with their lower-paying permanent positions. In the absence of long-term information, we **will** present what informants tell us has been the case and what they expect the future to **bring**. Their expressed rationale provides an important **clue** to the future situation.

Both the utilities and public works department are expected to be fairly stable. Present employees evidently favor a lower but more regular income to higher but irregular income. They give several reasons for this. First, it is easier to budget expenses when one knows what one's income is and when it will be available. Second, there is no uncertainty as to whether one **will** have an income from year to **year**. Third, there is never any need to try to find work outside of



**Nuiqsut**, even if for some reason no **CIP** projects for **Nuiqsut** materialize that year. Fourth, these people want **to** make **Nuiqsut** **their** home, and a steady job not only **helps** an individual to become a constant part of the community, **it** **also helps define** a stable structure **within** and of the community. These jobs are essentially the long-term results of shorter-term **CIP** projects. The jobs they provide are at **least as** important a contribution **to** the **community** as the capital improvements and services themselves. **Fifth**, these jobs offer advancement in terms of a career. **While** this is limited in the number **of people** who can take advantage of it, **the** number of people who **would** wish to may also be limited. Such advancement would most **likely mean** relocation to at **least** Barrow, **and** perhaps elsewhere. At present, this has worked in reverse. Both the head of utilities and the head of public works are originally from Barrow. This is not expected to **always** be the **case**.

**All** of the employees of the two departments discussed are men (except for the **clerk**, a **non-Inupiat** female, **who will** be discussed below). **All** wish to be a **stable** part of **the** community. **All** except one have started a family, and he has demonstrated a wish **to** establish a **family** (**whenever** that may happen) **in Nuiqsut**. **The** reasons **given above**, therefore, seem reasonable, and answer the **original** question by turning it around. These men have taken the opportunity to convert a short-term surplus (**CIP** projects) **into** long-term sustenance (steady employment). As the job tasks are **all** traditionally male (although some females have worked on **CIP** projects) and as **males** are perceived as primary providers for their **households**, the maleness of these departments should cause no wonder.

Other areas of wage employment are not so transparent. Turnover at the **school** has apparently been **high**. **Inupiat**

are employed as two special purpose teachers, up to five teacher aides, up to five maintenance people, two cooks, and the secretary. The teachers, the cooks, and the secretary have **all** been stable positions. They are also occupied by women. The teacher aide positions, also mostly held by women, tend to be open most of the time. Two were filled for most of our research time, but only one individual was a teacher aide for the duration of our stay in **Nuiqsut**. The maintenance people were in constant flux, but tended to consist of more women than men. **It** was the **only** position **Inupiat** men **held** at the school.

It seems apparent that maintenance is the only suitable male job at the school, and that it is only marginally so. The **school** appears as part of the domestic and nurturative sector of **Nuiqsut**, and so is a proper sphere for female employment. The-relatively low pay also makes it relatively unattractive for males. While all the utilities and public works employees are married or formerly married, male **Inupiat** school employees are young and single. Female **Inupiat** school employees tend to have dependents (8 to 10) and **to** be older. It appears that males only work at the school until something better comes along. We have been told that the maintenance positions are especially subject to turnover.

Only **women** have been health aides. Only **women** have been the NSB village coordinator. Only women work at the **Kuukpik** Corporation Store, although men do operate private stores of their own. Only men are officers in the **Kuukpik** Corporation and a man serves as fuel clerk, selling **fuel** and keeping records. A woman works as secretary. Two young, unmarried men work for **Kuukpik** Corporation delivering fuel. Only men have so far been hired on the construction projects starting in the village. The sexual domains of employment are again clear.

### Non-Inupiat Wage Employment

It is clear from looking at a job census (whether that for March 1983 or our constructed annual data) that Nuiqsut is "home" to Inupiat in a way that it is not to non-Inupiat. Whereas roughly one-third of total Inupiat adults are permanently employed and another one-third to one-half of Inupiat adults are men seasonally employed, nine-tenths of the total non-Inupiat adult population is employed permanently. A non-Inupiat does not live in Nuiqsut unless he or she has a job there. This is even more true if one includes the construction workers who are only temporary village residents. We will only deal with non-Inupiat with relatively permanent residences in Nuiqsut, however.

There are 17 non-Inupiat adult men and 8 non-Inupiat adult women. Five of each are school teachers and can be dealt with as a group. The remaining women, all married to non-Inupiat men also in the village, work at various jobs. One is the NSB utilities clerk. Another is the city of Nuiqsut clerk. The third has no paying job but is the wife of the Assembly of God minister. As such, she has clear community duties. Of the men not married to school teachers, two are Public Safety Officers (PSO). One PSO is married to the utilities clerk, while the other's wife has not yet arrived in Nuiqsut (housing has not yet been found for them). The husband of the city clerk is the head of the physical plant at the school, One man is the Assembly of God minister.

Of the 8 non-Inupiat adult men remaining, 6 are married to Inupiat women. Two of these men are currently unemployed (one worked for the NSB school until recently). Two of the others work for the NSB, one in the school and the other maintaining NSB housing. One runs a store, and the last is a plumber for a subcontractor in the village.

The cook at the **NSB Dredge Camp** is **single** and has certainly been in **Nuiqsut** longer than most of the other **non-Inupiat**. He has no residence in the village as such (**other** than the **Dredge Camp**) but has been in **Nuiqsut** long enough for people to feel that he belongs. This is **of course still** only a partial integration **into the village**.

The last **non-Inupiat**, the former **Kuukpiik** Corporation accountant, is a special **case**. His status as **of** the end **of** our fieldwork was unclear, so he is included in the employment figures. He was under investigation for embezzlement. He **fled** and his present whereabouts are unknown. He was charged, tried (even though absent), and convicted. **At least** part of the money was traced **to** Swiss bank accounts, and connected to prior embezzlements committed in **the** state of Washington. He had been in **Nuiqsut** less than **two** years, spent more time away from the village than in **it**, and seemed **to** be indispensable to the corporation officers. He was paid **well** and no business was conducted without **his** advice. His **role** was more as **chief** executive than as mere accountant. **At the** same time, few people trusted him. He was respected for his business sense and ability to keep the corporation **viable** even with its **large** debt **load**. Corporation officers **really** had no way to **judge** his performance, business practices, **or** character, however. **This** issue and its implications **will** be explored in a **later** chapter.

In any event, it is **clear** that **non-Inupiat** come to **Nuiqsut** for the express purpose of making money. They **also** provide **skills** that, for the most part, **Inupiat** do not yet have. Most **non-Inupiat** work for the North Slope Borough, which has a Native hire preference (except for **public** safety officers). **It** is thus **clear** that job performance is the criteria in these positions held by **non-Inupiat**. At the same time, turnover has been historically **high**. Eight of the ten teachers

were new in September, as was the school physical plant manager and the **Nuiqsut** city clerk (actually starting in the summer). The PSO and the utilities clerk have been in **Nuiqsut** about 18 months. All have received good comments on their work, and most express hope that **Inupiat** will someday replace them (if possible, by this afternoon). This means that the presence of non-**Inupiat** workers essentially measures the work skills that **Nuiqsut Inupiat** lack. They are either certified positions, such as school teachers, or positions where specific learned and general managerial skills are needed, such as city clerk-administrator, utilities **clerk, plant** manager (and chief fixer), and accountant. Outsiders are accepted in **Nuiqsut** for what they are and why they are there. There simply is not an adequate pool of **Inupiat** talent to man **all** the village's needs as yet.

It is interesting that both **non-Inupiat** with **administrative-**managerial duties are women. Their husbands do what is traditionally men's work which is, on the whole, less socially sensitive. This reinforces the male/female division of jobs among **Inupiat** wage earners. There **also** seems to be a division between the types of positions held by **non-Inupiat** married to local **Inupiat** and those held by **non-Inupiat** from "outside". The former "local" **non-Inupiat** often occupy positions that **Inupiat** could hold just as well in that they require no skills that most **Inupiat** do not already possess. School study hall supervisor, store manager/owner, and school maintenance are not special skills. Plumbing and house maintenance are, but use some **of the skills Inupiat** already have. In the future, the division of jobs between **Inupiat** and **non-Inupiat** will be increasingly interesting. This will measure the development of local **Inupiat** skills as well as the growth of the local **non-Inupiat** population.

## Commercial Business

A segment of the cash **economy we cannot** ignore **is** that of commercial businesses. **Although it is not greatly** developed **in Nuiqsut** as yet, **it has** great importance as an economic indicator **of** dependence or independence from **other** market centers, the development and specialization of **supply** and demand, and the direction and pace of change. The current situation **is also** ethnographically interesting (**Table 28**).

The white pages of the **Nuiqsut** telephone book list phone numbers for seven commercial establishments: three stores, one construction company, an **airline**, the village **corporation**, and the telephone company. **When field** research began, **there** were **13** that were physically evident: **five** stores, two dormitory construction camps, one **pool hall**, one arcade, one restaurant, the village corporation, two airlines, and the telephone company. The **last** had no employees in **Nuiqsut**. **When** research **ended**, there was one **less** store and the arcade had closed. Information from the North **Slope** Borough tax office on business licenses indicates four stores, the **village** corporation one **pool hall**, and one game **room**. One of the store business licenses **is in** the name of the owner/operator of the restaurant. State of Alaska business licenses indicate six stores, one cafe, a game room, a **pool hall**, two security companies (apparently operated **by non-Inupiat**) and two establishments owned by **non-Inupiat**s. These and the security companies apparently did not operate long in **Nuiqsut** or have suspended operations for a **while**. There was little evidence in the village for their existence. Thus, Alaska State business licenses seem to overstate certain types of commercial activity in **Nuiqsut**. The best indication of commercial establishments is undoubtedly personal observation. **Nuiqsut itself** has **no formal** regulations governing commercial businesses or licensing them.

Table 28: COMMERCIAL BUSINESSES IN NUIQSUT, 1982-1983

	Tel ephone Book	NSB Tax Office	Alaska Busi ness Licenses	Observati on
Stores	3	4	6	5
Constructi on Camps	1			2
Pool Hall		1	1	1
Arcade		1	1	1
Restaurant			1	1
Village Corporation	1	1		1
Airline	1			2
Tel ephone Company <sup>a</sup>	1			1
Security Company			2 <sup>b</sup>	
Other			2 <sup>b</sup>	
<b>Total</b>	<b>7</b>	<b>7</b>	<b>13</b>	<b>14</b>

<sup>a</sup> No employees in Nuiqsut.

<sup>b</sup> Licenses issued to **non-Inupiat** names. There is no evidence that these businesses ever operated, nor were they ever mentioned except in direct response to questions asked of the license holders.

#### STORES AS COMMERCIAL BUSINESSES

The five stores existing in **Nuiqsut** on November 16, 1982 were not at all the same sort of businesses, even though people often talk about them as if they were. Table 29, a simple breakdown of shelf inventory composition, demonstrates this. Store A, the village corporation store, is by far the largest store in the village. Many of the "different" product types are **merely** flavor differences but the line of products it carries still is far greater than that of the other stores, all of which are owned and operated by **individuals**. These are **all** located in homes of the basic one-room design. It will be useful to describe the operational characteristics of each store, and also to discuss each in terms of the economic opportunities it provides its owners/employees and the economic role it plays in the village.

**Table 29: NUIQSUT STORES**  
 NUMBER OF DIFFERENT PRODUCT TYPES IN INVENTORY  
 January 1983

	store _ A	<u>Store</u> <u>B</u>	Store _ c	Store <u>D</u>	Store <u>E</u>
Number of Different Product Types in Store Inventory	551	48	75	78	13
Food Product Types in Inventory	269	34	23	76	8
Percent Food Items	49	71	31	97	62

Store A is the only store with employees. All the others are run by their private owners. As the village corporation store, Store A is caught in an operational bind. It is obligated to make a profit, as Kuukpik Corporation was organized as a for-profit corporation. At the same time, the Kuukpik Board of Directors and the residents of the village want prices to be as low as possible. In a purely economic operation, the extension of credit would be closely monitored, while village people prefer the convenience of charging orders to their name (or head of household's name). A compromise seems to have been reached for these situations. Everyone has the option of buying on credit. This means, pragmatically, that the store constantly carries a certain level of uncollected debts. Our informants did not tell us if there was a limit beyond which credit was not extended, but we assume that this is the case. Thus, a bill could be outstanding for a long time but the absolute size of bills outstanding would be limited. Prices have been set, it seems, to allow for this debt load, or deferred payment of bills. Prices tended not to be the highest in the village on items available elsewhere as well, but also tended not to be the lowest (see Table 30).



Table 30: COMPARISON PRICE<sup>a</sup> LIST - GROCERIES

		<u>Nuiqsut</u> <u>A</u> <u>2/14/83</u>	<u>Nuiqsut</u> <u>B</u> <u>2/14/83</u>	<u>Barrow</u> <u>2/14/83</u>	<u>Anchorage</u> <u>2/14/83</u>	<u>Seattle</u> <u>12/2/82</u>	<u>Binghamton</u> <u>12/2/82</u>
<u>STAPLES</u>							
Flour	10 lb	\$ 6.78		\$ 6.69	\$3.25	\$2.30	\$1.90
Rice	28 oz	2.29	\$ 2.59	2.19	1.49	.82	.83
Corn Flakes	18 oz	2.24		2.45	1.49	1.69	1.25
White Bread	1.5 lb			2.15	.79	.49	.63
Margarine	1 lb	1.28		1.09	.39	.75	.79
Mayonnaise	1 qt	4.08		3.89	2.09	1.55	1.19
Sugar	10 lb	8.52	11.95	7.35	4.25	3.70	3.54
Cofea drink	6 pack	5.10		4.20	2.65	1.69	2.29
Toilet paper	4 rolls	2.88	3.13	3.35	.99	1.15	1.49
Fresh milk	2 qt			3.55	1.49	1.12	.99
Ice cream	2 qt			5.39	2.39	1.59	1.79
Butter	1 lb	4.28	4.28	3.35	1.99	1.85	1.79
Evap. mi 1 k	13 oz		1.39	1.05	.59	.53	.49
powdered mi 1 k	14 qt			9.84	5.99	4.99	6.38
Eggs	1 doz	1.84		2.05	1.05	.88	.85
<u>MEAT</u>							
Chuck roast	1 lb	7.22			1.89	1.59	2.28
Hamburger	1 lb			3.75	1.49	1.29	1.48
Pork chops	1 lb	3.67			1.79	1.69	2.28
Bacon	1 lb	Unpri ced		4.25	2.79	1.99	1.89
Wieners	1 lb			2.09	1.69	1.69	1.38
Frying chicken	1 lb			1.39	1.59	.79	.54
Precooked "	1 lb	3.02					
<u>PRODUCE , lb</u>							
Apples		b		1.66	.79	.69	.38
Bananas				1.22	.69	.47	.35
Oranges				1.26	.49	.29	.38
Potatoes				1.08	.59	.13	.08
Onions		Unpri ced		1.26	1.39	.20	.13
Carrots				1.19	.65	.30	.19
Lettuce				1.10	.97	.59	.79
Cabbage (red)					.59	.33	.17
Tomatoes				1.30	1.49	.99	.99
<u>CANNED</u>							
Jui ces							
Grapefruit	46oz		3.53	2.95	1.49	1.15	.89
Tomato	46oz			2.79	.99	.85	.83
Orange-frozen	16 oz			3.69	1.89	1.55	1.39
Pears	16 oz	.93	1.68	1.45	1.19	.59	.69
Peaches	16 oz		1.70	1.59	1.12	.69	.69
Fruit Cocktai 1	16 oz		1.80	1.45	1.25	.67	.79
Corn	16 oz		1.52	1.18	.69	.51	.54
Tomatoes	14 oz	2.22	1.60	1.29	.77	.65	.65
Baby food	4½-5 oz	.68		.69	.33	.28	.27
Coffee	3 lb	12.90		11.95	7.23	6.00	6.87
Mushroom Soup	11 oz	1.27		1.45	.45	.39	.40
Tomato Soup	11 oz			.79	.37	.31	.26
Tuna Fi sh	9 oz	2.57		1.95	1.05	1.18	1.80

<sup>a</sup>Price per stated unit. If a store did not have the exact size, price was computed.  
<sup>b</sup>Blank means item not available.

Table 29 clearly indicates that Store A is a grocery and general merchandise store. As the main outlet in Nuiqsut, this is what could be expected. The model of Stuaqpakin Barrow seems applicable. The total inventory is split about evenly between food (49%) and non-food (51%). Non-food items include clothes, hardware, toys, kitchen and household items, drugstore and cosmetic items, and Inupiat crafts.

Shelf items available also seemed to vary tremendously over time, a problem all stores except Store D seemed to have. A consistent inventory is difficult to maintain in the face of uncertain weather (all items at present are transported by air) and unpredictable and fluctuating demand. Personal income, and hence cash flow, is sporadic for the most part except for the summer construction period. A certain base level is established by the permanent jobs which exist in the village, but the variation possible is very great. The population of the village can fluctuate widely, depending upon events and conditions elsewhere. All these factors can make managing an inventory a huge problem. In some respects, it is more difficult for a large store than a small one. More people depend upon the large store and the short-term fluctuations in demand, patronage, payment, etc. possible are thus far greater in magnitude. More items must be stocked but the inventory of each item may not be much larger than that which a smaller store would maintain, because storage space in Nuiqsut is currently at a premium. How the stores deal with these problems will be discussed below.

Store A does guarantee a certain income to its three employees, all of whom are women. Thus, irrespective the volume of business and the profitability or unprofitability of pricing policy, the manager and the two cashiers can depend upon earning a known amount of money each week. They also know

they will earn no more than that amount, but this security of income is something that no other store can provide. The corporate owner of the store has apparently not, up to this **point, been** adversely affected by the deficits generated by the store. Whether the bottom line for Store A is positive or negative is unknown to the researchers, but our impression was that Store A was not a profit maker.

Stores **B, C, D,** and E are **all** owned and operated privately. Three are run by **Inupiat**, one by a **non-Inupiat**. Store B and Store D are primarily grocery stores, although Store B has a substantial number of non-food items. The other two are special purpose stores and operate intermittently. Store C is primarily a gift and snack food store. Store E must be discussed as a special case as it has the appearance of a grocery/general store but is much to viable, even in **Nuiqsut** (or perhaps especially in **Nuiqsut**).

The proprietor of Store C **left Nuiqsut** in mid-December and **did not return until late** February. His store was **closed while** he was gone. No comments were heard that people were inconvenienced by not being **able** to shop at Store C, even though his store is the only **Nuiqsut outlet** for many of the items he carries. The owner/operator is a **single** male who spends a significant amount of time away from **Nuiqsut**. It **would** thus be difficult for him to run a grocery store or other sort of store where he depends upon repeat customers who in turn depend on him to have what they want. He is not open regularly enough to generate a clientele of regular customers for items such as groceries, as they would find themselves going elsewhere anyway when Store C was closed. **It** thus makes sense for the proprietor to **specialize** in terms of what he **sells**.

His "food items", which comprised about one-third of the different types of things he had on the shelves March 2, 1983, were **mainly** all candy or snack **foods**. He did **carry** two types of rice and one of macaroni, but clearly was orienting his **edible** products toward those of **small** size/lightweight, rapid **and/or** immediate **use**, and **long shelf life** (so that his inventory **would** survive his absences). They **are all** also relatively **low in price** (\$.30 to \$.65 for candy **bars**, \$2.29 for **10 oz.** of hard candy, \$3.29 for **8 oz.** of **potato** chips). He can thus order things sent **by mail**, but need not worry **too much** about spoilage. The expense of shipping is **lower** for him per **dollar** of merchandise ordered because of its size and weight. His inventory **sells** relatively quickly and appeals to a consumer group, **school age people** and young adults, with the money to buy and the acquired tastes to want **to**.

Store C's non-food items range from \$.89 **Bic** Shavers and \$1.95 key chain cap pistols (\$.60 for **caps**) through knives, perfume, pens and mirrors priced at \$10 to \$30 to more expensive electronic equipment. The highest priced cassette recorder costs \$159.95. The two sorts of items which seem to be featured are jewelry and home decorations. The former is **mostly** Southwestern Indian **in** appearance, with a great deal **of silver** and **blue**. There **is** a wide assortment of rings and necklaces. The home decorations are such things as **Oriental-**type bamboo **scroll** paintings, religious **wall** plaques, and varnished wooden Bibles open to short **but** significant **verse**. Many homes display one or more **of** these items, and most came from Store C.

Store C is probably not the proprietor's main source of support. He has worked as **clerk** in the village before, and undoubtedly **at** other jobs as **well**. He is included as a full-time store

keeper in our employment census, as that is how he tends to identify himself. His wage earning history is nearly unknown to us.

Store E is by far the smallest store, both in terms of numbers of different items carried and the size of the inventory of each item. This store went out of business (at least temporarily) when the family moved from their **old** house to a new one. This has been the pattern of this store in the past. The female proprietor orders an inventory and **sells** it out, after which she is inactive (commercially) for a **while**. She may reorder several times before closing down temporarily. She also has a full-time wage position, so her store is open only after **4:00** p.m. on weekdays. Thus, her operation is limited in somewhat the same ways as Store C is. Her customers cannot depend upon her always being open or having what they want. However, the primary object of her business is not to earn money. She told us that the store was run for the tax benefits it provides. As it is run out of her home, certain household expenses become deductible as business expenses. The inventory also **allows** the household to stockpile certain consumer goods (canned milk, bread, **pilot** biscuits, tuna fish, paper goods) **while** at the same time these goods are not subject to community sharing expectations. Clearly the reasons behind the operation of this store are economically sophisticated, and they allow the store to function as an outlet for her husband's furs as well. The store insulated the woman's wage income and the husband's cash income from fur sales from government taxation (extraction).

Stores B and D are serious commercial efforts and sell mostly groceries. Store B is run by a female **Inupiat** whose husband works full-time for wages. Thus, especially since it is run out of her home in similar fashion to Stores C, D, and

E, there would **be** household tax advantages even if the store lost money. This store is much more **fully** stocked than Store E, however. **It** does tend to have **highly** fluctuating inventory, but is seldom **out** of many **items unless the** proprietors are away on vacation. As the post **office is also** in **this** house, a steady stream of potential customers **is** assured. The store **is** normally open **all** day. Staples and other canned goods constitute most of the items carried.

None of the above three stores extend credit. **It is** usually possible to cash a paycheck at **Store B**, or at the post office, but not Stores C and **E**. This does **limit** purchases to some degree, but **also clearly** prevents customers from **using** kin ties or other **social** sanctions to keep a **large** balance outstanding. The **lack** of credit, relatively **small** inventory, and **small** cash supply combine **to** keep the **level** of economic activity relatively low. Such an establishment can have advantages for someone already resident in the village, but **could** not support **an** outsider relocating to the **village**.

Store D, established in **1982** and run by a **non-Inupiat** male ' married to an **Inupiat**, provides a comparison case. The inventory of Store **D** is almost **all** groceries, and **in size is** second only to Store **A**. Store C appears to have as **large** an inventory as Store **D**, but in fact specializes in **quite** different things and actually has a very limited inventory. Store D is essentially the grocery competition **for** Store **A**. Its selling points are a greater availability **of** meat and lower prices. Most **prices** are indeed lower (**Table 30**). **It also** extends credit and so can generate more cash flow than **the** other private stores. The amount of credit available to each household is determined on a case by case basis. The owner/operator does have a large cash base to rely upon, so that carrying a debt load is easier for him than **it** would be for the other private stores. He has a non-local partner

with whom **he** also owns income generating property in Fairbanks. This serves to buffer his **Nuiqsut** operation in much the same way that **Kuukpik** Corporation buffers the operation of the **Kuukpik** Store. Store D is clearly profit-making, however. Store D will also cash checks, subject **to** the availability of cash.

Store D is patronized by essentially the same people who shop at the **Kuukpik** Store. The **Kuukpik** Store is still their primary **place** to buy most store food. Store D started as a specialty store for meat and has been gradually adding items. **Plans** are for Store D to expand, but this depends upon the availability of space or the feasibility of construction and the consent of the community. The residence which Store D is part of is not a North **Slope** Borough structure and no formal lot designation was ever made to its occupants. Public opinion **often** is against the owner of Store D as he is rather vocal in the expression of his opinions and strong in the exercise of his rights. Also, he never asked the **City** Council for permission to open a store. There is no legal necessity to do so but there is an informal feeling that such permission should be sought. Even with these vague ill-feelings, his store is used to complement items available at the **Kuukpik** Store and **it** is conceivable that, pending the resolution of community conflicts (which is probable, given store owner D's wife's village kinship ties), he could become a strong competitor of the **Kuukpik Store**.

Store D tends to have the most stable inventory in town, a strongly competitive point that residents of the village did not yet seem to value highly (no one mentioned it) but which should prove more important if **Nuiqsut** continues to grow. All other stores, **Kuukpik** included, have highly sporadic inventories due to the problems with air shipment, Store D circumvents this to some degree by transporting goods over-

land from Prudhoe Bay via snowmobile and sled. Calculations show that for meat and heavy grocery items this is a competitive means of transpiration, if men willing to do it are available. Public opinion is not unanimous against Store Owner D, because there are Inupiat whom he regularly employs for this sort of work. Some are close relatives of his wife. Store D's inventory does become rapidly depleted once Kuukpik Store runs out of an item, however, as it has not as yet begun to try to service that large a part of the village population. Store D would need more storage space before trying to capture a larger share of the market.

Store D also has a competitive position in that the owner's partner in Fairbanks can buy goods in bulk at sale prices and send them to Nuiqsut via Prudhoe Bay/Deadhorse. The other stores must buy through more regular, higher-priced, outlets. The conclusion seems to be that Store D demonstrates how a private store can operate competitively in Nuiqsut. The corporation store, even with the advantage of size, is beaten consistently on price. Inventory control and control of consumer credit seem to be the areas of major advantage for Store D, along with product specialization (meat).

Of the three other stores in Nuiqsut, one specializes in non-food items not available anywhere else, one seems to operate mainly as a tax shelter/storeroom for its owner, and the last depends upon its location by the post office and prices consistent with the Kuukpik Store's to convince people of the convenience of picking up occasional staples instead of going across town to Store A or Store D. It is interesting, and perhaps to be expected, that the private store which seems economically most viable is that run by an outsider who is in many respects marginal to the community at large. In fact, Store D thus escapes some of the social pressures which hinder the Kuukpik Corporation store in its operation.



**It** can have a rational credit policy **and** need not balance a profit motive with a feeling for service **to** the community. The net effect may be the same, as in this case the profit motive seems to have resulted in a store providing better service at lower cost to customers. Whether this competitive advantage can be maintained if Store D does expand its line of goods remains to be seen.

#### OTHER COMMERCIAL ENTERPRISES

There are three enterprises comparable to stores **in** that they are attempts at generating a cash income. A pool **hall** was opened by an **Inupiat** family in 1982, and for most of our research period was the **sole** monetary support of the family. The income from this source was not great and was probably meant to be supplemental to seasonal wage labor. A video arcade operated briefly before our research began but was closed due to insufficient profits. The **Colville** Cafe is a restaurant run by an older **Inupiat** couple. During our research, their business was generally **slow**, but there were fewer transients than in the summer, and residents have less expendable income in the winter than in the summer. The restaurant probably netted no more, and perhaps **less**, than the pool **hall**. These three establishments are discussed further in the section on recreation.

The security companies and other businesses owned by **non-**Inupiat are obvious attempts by temporary residents to capitalize on their **skills** and the fact of being in **Nuiqsut**. The two security companies are now dormant, if they ever operated at **all**. The other two enterprises never seem to have been in operation. They were formed in case economic opportunities **should** arise. **Non-Inupiat** residents **consistently** display a greater preoccupation with long-range monetary plans than do **Inupiat** residents.

The **airline**, headquartered in Barrow, maintains a warming house for passengers and temporary storage. They also retain an agent in Nuiqsut to sell tickets, give information to local people, relay weather data to Barrow, and to handle incoming and outgoing freight. This agent is also the NSB village coordinator and a member of the Nuiqsut City Council. She is helped by her husband, a non-Inupiat who is in charge of the maintenance of the North Slope Borough owned housing in Nuiqsut. This couple was one of the most active in the village. Near the end of our field research, a second airline (specializing in charters) began to base a plane in Nuiqsut. This was due to the happy chance that the Assembly of God minister was a qualified pilot and owned a plane. He then hired both to the charter service, which could then provide faster and cheaper service for Nuiqsut. It cuts out the flight from Barrow to Nuiqsut to pick up those hiring the plane. This is especially beneficial in case of medical emergency.

The telephone company has no employees in Nuiqsut. In evidence is a satellite receiving dish and a small structure housing switching equipment. When repairs are needed, people from outside come in. There is talk of constructing a ground station for cable television reception, but this is still in the planning stages. This would involve at least one local employee as an installer-repairman.

#### KUUKPIK CORPORATION

The Kuukpik Corporation is the for-profit village corporation of Nuiqsut. It was actually formed before people returned to rebuild the village in 1973. Barrow, the source of most of the people who moved to Nuiqsut, was where the corporation began. There are still some obvious ties between Kuukpik

Corporation, Barrow, the North Slope Borough, and the Arctic Slope Regional Corporation.

**Kuukpik** Corporation operates a store, discussed above. They also maintain the village's oil supplies and keep records of sales. **When** their truck is operable, they deliver the oil. **Kuukpik** Corporation subcontracts with **the** North Slope Borough to provide labor for the **NSB's** Capital Improvement Projects in the village. **Kuukpik** Corporation is the main place where people can cash their paychecks, as there is no bank in **Nuiqsut** and no one regularly has much cash. Stores B and D can cash checks occasionally, but not as a matter of course.

**Kuukpik** Corporation enters into joint ventures with other corporate entities such as the Arctic **Slope** Regional Corporation, the North Slope Borough, and the other village corporations. Non-corporation employees have varying degrees of influence on these corporations, but such joint ventures are considered the main avenue by which the **Kuukpik** Corporation can generate **local** jobs. The **Kuukpik** Corporation is currently trying to develop local gravel resources in concert with **ASRC**. They are, as part of Pingo, working with the other NSB villages in providing **oil field** services to oil companies.

The **Kuukpik** Corporation and the North Slope Borough provide most of the employment in **Nuiqsut**. The **Kuukpik** Corporation cannot be considered **merely** an economic entity, however. **Kuukpik** Corporation is as much political and ideological as it is economic. Its board, employees, and shareholders (listed in order of active interest shown in the day-to-day affairs of the Corporation) are by no means in agreement on **all** things. There are too many cross-cutting loyalties. As a separate economic entity, the **Kuukpik** Corporation's interests cannot be the same as those of the city of **Nuiqsut** government, the North Slope Borough, or the Arctic Slope

**Regional Corporation.** At the same time, cooperation with all of these bodies is necessary. As we shall see when discussing socio-political structure and leadership, these governmental economic bodies are the main political arenas. This is understandable, as the corporations control to a great extent what the governments feel they are mandated to regulate and distribute, as well as individual access to resources. Such conflicts were inherent in the Alaska Native Claims Settlement Act, and it is no wonder that village corporation shareholders who also are regional corporation shareholders and residents of a particular village and the North Slope Borough are sometimes bewildered trying to sort out what alternative action(s) benefit(s) them most. That the most common response is withdrawal or inaction should be no surprise. We will address these issues, especially Kuukpik Corporation - City of Nuiqsut interrelation, in the socio-political chapter.

#### NORTH SLOPE BOROUGH

The North Slope Borough is not a commercial enterprise as such, but is the source of much of the income in Nuiqsut. The North Slope Borough maintains a construction camp in Nuiqsut which houses not only NSB employees temporarily in Nuiqsut but also accommodates many of the other outsiders who must be in the village for a short time. There is a set daily charge for this. The service is useful and necessary because there is no other facility in Nuiqsut to house transients. As such, the camp assumes great importance both as the outsiders' main contact with Nuiqsut, and as a means to minimize the unwanted or non job-related impacts on the visiting population.

As with the **Kuukpik** Corporation, the North Slope Borough is not simply a "one-sphere" organization. This political entity is also a strong, and perhaps the strongest, economic entity on the North Slope. The Alaska Native Claims Settlement Act set up Native corporations, but in the North **Slope** Borough these corporations have had to deal with a political entity with great resources and better access to managerial expertise. The NSB Capital Improvements Program has hitherto had much greater effects upon the **Inupiat** population than any activity of the village corporations. In fact, the village corporations have **mainly** been used as ways to implement (at least partially) such projects. We cannot address this issue in general, but **will** examine the North Slope Borough - **Kuukpik** Corporation relationship in the **socio-political** chapter and discuss ways **Kuukpik** Corporation is trying **to** wean itself from dependence upon the NSB. Economics and politics are never too far from each other. On the North Slope, especially with subsistence concerns thrown in, they seem to be one and the same.

#### **Inupiat** Wage Labor and Cash Economy: Predictions and Future

**Nuiqsut** conforms to the occupational and employment structure of other North **Slope** communities. The study made by **Kleinfeld**, Kruse, and Travis (1981) shows that more men are involved in wage labor than **women**. They compare monthly employment statistics for 1976-1977 for village males and -females with monthly employment statistics for 1976-1977 for Barrow males and females (Tables 3 and 4, **Kleinfeld**, Kruse, and Travis 1981). Two trends in this comparison are: 1) **Inupiat** village males hold a higher percentage of jobs than **Inupiat** village females (the opposite is true in Barrow), **and** 2) **Inupiat** village males are more likely to participate in seasonal labor, therefore resulting in monthly percentage fluctuations of village male

**employment, while Inupiat** village females occupy permanent full-time positions (this parallels trends shown in the Barrow case). The employment structure **in Nuiqsut** may **follow** future trends similar to Barrow employment as it was in **1976** and **1977**.

The contemporary situation in **Nuiqsut** shows that the North Slope Borough is the main employer of **Inupiat** residents in **Nuiqsut**. The North Slope Borough also manages the Capital Improvement Project which provides seasonal construction jobs for **Nuiqsut** residents. **At** this particular point in time, most employment is provided **by** the Borough except **in** areas where the village corporation and private enterprise provide a **small** number **of jobs**. **Since** the Borough is the chief employer of **Nuiqsut** residents, we expect that its **role shall** remain central to the employment structure **of Nuiqsut**. **In** this sense the employment structure dominated by the governmental sector **will** be centered **on health** and **social** services, the welfare **of** its constituents, and the administration and bureaucratization **of** such services. Therefore, if the North Slope Borough continues to dominate the **employment** structure, employment of **Inupiat** women **will** continue to increase and **will** eventually exceed the employment of **Inupiat** men. Women **will** continue to sharpen their English language **skills** and **para-professional** training in clerical, **secretarial, health,** education, and management fields. This trend **will** result in raising the **class** and occupational status of women, and the slower increase and perhaps stabilization of permanent employment of **Inupiat** men. The net effects should reflect the Barrow situation in which men **fill** a majority of wage labor positions, many of which are tied into a seasonal labor pattern of **blue collar work**.

The Capital Improvement Program is the **chief** employer of male seasonal **blue collar labor** throughout the North Slope Borough.

The CIP provides the necessary infrastructure (roads, **facilities**, physical plants) for North Slope communities. However, **Inupiat** men employed for seasonal construction jobs sponsored by CIP are faced with a short-term strategy for entry into the cash economy. As necessary infrastructure for the community of **Nuiqsut** is developed and the **CIP** program winds down, there shall be a concomitant decrease in the number of seasonal wage labor positions for blue collar laborers. Those **Inupiat males** who count upon seasonal construction jobs during the summer months **shall** eventually find themselves in a double bind. There **will** be a decreasing number of available construction jobs through **CIP** and they **will** have only acquired skills suitable for short-term rather than **long-term** wage **labor** employment in the community of **Nuiqsut**. Furthermore, the permanent long-term employment opportunities (desk or service jobs) created and filled through the North Slope Borough **will** be occupied by Inupiat with more experience or training in such jobs. From a mainstream Anglo-American perspective, seasonal unemployment of **blue** collar workers **will** become structurally institutionalized.

In terms of an economic development program, such a pattern makes **local** capital accumulation (saving) difficult. The seasonal wage laborer receives a large amount of cash over a short period of time, and then receives little for a longer period of **time**. The short-term benefits of seasonal employment for the average **Nuiqsut** man create a system of boom or bust cycles. This characteristic cycle of cash flow in Alaskan Native (and white) employment creates a major flow of cash resources into expendable consumer goods and entertainment.

Within **Nuiqsut**, Inupiat seasonal constructional workers who are employed at Prudhoe Bay or on **CIP** projects in the village experience this boom or bust cycle in an **Inupiat**

**cultural** context. This cultural **value system** emphasizes the **ethic of** prompt sharing and dispersal of cash acquisitions through the **redistributive** network of **family** kin and friends. Various debt and **bill** payments also contribute to the rapid depletion of cash. Among younger **Inupiat** adults, sudden cash windfalls accrued through seasonal wage **labor (which** pays higher **hourly** salaries than long-term permanent employment) may be redistributed through the use and sharing of **drugs** and **alcohol as well as in the** provisioning of family, kin and friends with food and consumer **items**. The purchase **of large** expendable items, some of which may be used for subsistence hunting, occurs during the boom part of the **cycle**. Within the context of the **village** economy, economic resources acquired in employment outside of the **village will** most **likely** be transferred quickly **into** more traditional, **redistributive levelling-off** mechanisms.

**While** some villagers understand the western ethic of "saving for a rainy day", **this** is not an **easily realized ideal in Nuiqsut**. There are **formal** institutional and informal **social** and **cultural** barriers towards adopting a **policy** of "saving cash resources." First of **all**, there are no **formal** banking arrangements in **Nuiqsut**. **All** saving and checking accounts must be operated through Barrow. Secondly, the **Inupiat** do not view cash resources as stored items **in** the same manner as they regard storage caches of food, **fuel**, or equipment. The uncertainty and vicissitudes of Arctic survival have **always** required that **Inupiat live** in the present to provide for the future. **All** these cultural factors, in addition to the **lack** of a **formal** banking, institution within **Nuiqsut**, contribute to the "bust" aspect of the **cycle**. When **Nuiqsut** villagers speak about necessity for more wage employment opportunities in **Nuiqsut**, they may be expressing their own dissatisfaction with the consumption pattern fostered by seasonal wage labor.



The boom or bust consumption cycle does have a **logic** of its own, separate **from that** of a more steady-state (Anglo-American) economic model. "Saving" may be defined in different ways, or accomplished by different mechanisms, in the two cases. The object of saving, for an individual, is to ensure that at some future time that individual **will be** able to call upon and use certain resources. Anglo-Americans tend to treat "savings" as a noun to which very specific ownership rights are attached and "spending" or "consumption" **as** an activity which uses up savings. **Inupiat** do not seem to make these same distinctions. For them, immediate consumption through redistribution is a culturally **valued** sharing mechanism, and indeed, makes economic sense within an Inupiat context.

Averaged over a long period of time, a traditional **Inupiat** hunter could provide for his family unit. However, there would be periods of time when he would be very successful and others when he **would** get no game. This variability would be a hardship and perhaps even **fatal**. The dangers of this time-variable success rate could be minimized by cooperating with other hunters and their family units. The group expectation of sharing the fruits of the hunt buffers the entire group from temporary (and inevitable) individual hunter failure. It is the same statistical solution which governs group insurance policies. For the traditional **Inupiat**, it is not likely that production exceeded consumption (or demand) by very much, due to the sparseness and unpredictability of the resource base which required this sort of group cooperation in the first place.

Thus sharing and redistribution (consumption) are mechanisms of investing resources that are at present surplus to an individual so as to ensure the future availability of similar resources to that individual. Traditional **Inupiat** had no

bankable resources, **or** rather, **the system of rights and obligations** created by sharing rules constituted their banking system. Resources were used, not passively conserved. In **Nuiqsut** today, sharing network resources are **still** more liquid than money **in** many respects. There is no easy access **to** bank accounts **as** the nearest bank is **in** Barrow. **Even** with a banking account, there is often **too little** money in **Nuiqsut** for a person to **be able** to cash a **check**. **Even** with money the stores often do not, have what a **person** wants to buy. Very often such items can be obtained from friends or kinsman.

The earnings from seasonal **labor** are thus redistributed **in** a way similar to **the** fruits of a spectacularly successful **hunt**. They are invested in the **redistributive** system. **After** debts are paid and consumer purchases made, redistribution **is** the **only** real **option** left. Money must be converted into tangible objects or into "social credits." No other money storage mechanism exists. Bank accounts tend to **be** used more as lines of credit than as stored funds. "**Social** credits" place an obligation on the receiver of gifts or entertainment to reciprocate in a similar way **in** the future. When this takes **place**, the debt is reversed (**not** canceled). "Social credits" thus are at some future time converted into consumable resources, but usually cannot be reconverted into money. They establish a general **social** relationship, not merely a narrow or limited economic contract or agreement.

**In** traditional **Inupiat** society, this mechanism worked **well** to spread risk. Hunters were differentially successful and often experienced bad luck. The **redistributive** system evened out the unavoidable variation **in** individual production with the constant **level** of individual need (consumption) within the community over **time**. However, in **Nuiqsut** the **redistributive** system may now be amplifying variability in

Individual production (income) throughout the year. Whereas one hunter's success was more or **less** independent of another's, seasonal wage earners have incomes that are almost perfectly synchronized. Seasonal wage earners **all** experience the good times and the bad times at the same time. This makes for boisterous boom times **while** the work lasts, but for very depressed bust times when the work ends. The case is not totally **bleak**, of course, as there are approximately 50 full-time wage positions in **Nuiqsut**. Most seasonal workers have kin relationships to people with permanent **jobs**. This suggests that in the summer seasonal wage earners can amass social credit, which they use up during the rest of the year when permanent wage earners can gain social credit. There should, logically, be a point of optimal **seasonal/permanent** wage labor balance. At the present time, especially given the synchronicity involved, the system appears to be **too rich** in seasonal work and too poor in permanent work.

Further increases in seasonal **labor** among **Inupiat** males would provide only relatively narrow opportunities for blue collar laborers. Although seasonal construction jobs do give many **Inupiat** experience and training in a wide range of skilled and semi-skilled **labor**, these **skills** may not be transferable to more permanent wage positions. One development scenario that may alleviate the lack **of** transferable skills among seasonal construction workers is actual development or establishment of industry within **Nuiqsut**. The exploitation of **oil**, natural gas, and coal provides "outside" industry external to the "sphere" of **Nuiqsut** community life. **In** some other Alaskan native communities, village councils have specifically requested that "industrial development", including that of natural resources exploitation, occur away from the **community** because of the disruptive influence of outside laborers (Morehouse and Leask 1978). Industrial development within or near the village may allow

for the establishment of more permanent blue **collar** wage labor positions. Canadian researchers (Hobart 1975) have weighed the advantages and disadvantages of rotational **labor** away from the village or the development of labor forces **in local** industry **within** the confines **of native** communities. The former has fewer obviously disruptive influences on the community, but requires difficult adjustments on the part of the **Inuit** workers.

The effect of transfer payments (Social Security, unemployment., and various welfare programs) remains to be assessed. Total income from these sources cannot **be large** at the present **time**. Statistics are not kept at the **village level**, however, so numbers of recipients and benefit amounts are unknown. The availability of such incomes makes **eligible** individuals household assets. They become, in essence, another form of savings or investment. The **elderly**, the **unemployed**, and the unwed mother **with** her **child** can then be included **within** the **village redistributive** system as **people** with a steady access to **outside** resources. **This** certainly reinforces the **Inupiat** value of respect for the aged, since the elders then have resources with which to maintain their **role** in the household. Unemployment benefits **could** reinforce the seasonal work pattern by buffering the slack time. Benefits **are** much lower than **wages**, however. **We** have **no** information on the receipt of any sort of welfare payments.

**The Nuiqsut** employment structure shows a concentration and major dependence upon local government employment. The situation, typical throughout the North Slope, **is** satisfactory insofar as the municipal government's tax base from **oil** revenues continues to generate enough income (and support for bond issues) for it to remain the major employer of **Nuiqsut** residents .

The issue of wage labor is of major importance **to** most residents. During state and federal lease sale **hearings**, **Nuiqsut** residents complain that oil companies provide neither jobs nor cheaper fuel for **Nuiqsut** residents. Consistently, **Nuiqsut** people express a great **desire** to enter into employment with the private sector. This underlines the finding that actual participation in industrial (and specifically **oil**-related) wage employment may underestimate desired participation, and that economic growth may increase desired participation (**Huskey 1982:77**). This **will** become increasingly important as seasonal **CIP** employment declines. The CIP program, when complete, will generate **only** a limited number of jobs. There is a necessity to train **Inupiat** workers (**male** and female) at all **levels** of industrial employment, as such programs are for the most part non-existent (**Nebesky 1982:150:51**). Seasonal wage labor on dredging projects, oil rigs, and other industrial blue collar positions only allows the **Inupiat** worker to enter at the bottom of the private sector's employment structure. Long-term strategies for improving employment of **Inupiat** residents would improve relationships between the villagers and the private sector of the oil industry.

To date, the most formal linkage between **Nuiqsut** and other non-Barrow North Slope communities and the oil industry is through the Pingo Corporation. A former mayor of **Nuiqsut** is the Pingo Corporation president. Pingo Corporation provides oil fields services for the **oil** companies. These services include recruiting of native laborers for employment and **equipmental** rental. As such, a possible **socio-economic** development scenario may be the establishment of Pingo as an effective conduit for **Nuiqsut** employees and the oil industry. Nonetheless, this kind of middle-man position may not necessarily encourage other private sector development within North Slope communities.

In summary, **there** are several predictable trends in wage **labor** employment in **Nuiqsut**. The most pervasive trend suggests that further development of community infrastructure through the **CIP** program under the North Slope Borough government provides a short-term advantage, but long-term disadvantages to **blue collar labor in Nuiqsut**. **Seasonal construction labor under** the jurisdiction of the North **Slope Borough or** through private industries creates a "boom **or bust**" **cycle** of cash resources for the individual **Inupiat** worker. This **cycle** is exacerbated by an **Inupiat value** system which does not recognize cash resources as "storable" items for **future** consumption. **Blue collar** positions are threatened by the exigencies of the **CIP** program and the "boom and bust" **cycles** of cash accumulations among workers. The new North Slope Borough infrastructure of schools, clinics, utilities department, **public** safety, **public works**, and administration **built** under the **CIP** program does provide full-time employment for a **limited** number of individuals with relatively high acquisition of English language **skills**. **Inupiat** women **will** probably **fill** a majority **of jobs** created by **the** bureaucratic and administrative structure of the North Slope Borough, especially **in** areas where clerical, secretarial, educational, and **para-professional health** training is required. The dependence upon the North **Slope** Borough for **major** employment opportunities can **only** be replaced by an increased role of the private **sector** in economic development **within** the confines of the **village** community. Involvement by the private sector may include strengthening of native corporations' role **in** private industry or **actual** presence of private industry within the village area.

The petroleum industry's **major** exploration efforts in the Harrison Bay area and continuing development of the **Kuparuk oil field** are promising in this regard. **Fields** east of **Prudhoe** Bay, as **well** as Prudhoe Bay itself, will continue to

offer employment opportunities. Even if only **15%** of such employees are local hire (Nebesky 1982: 147 gives this estimate for total production phase OCS employment) the **Inupiat** population is small enough for this to be significant. Such work, most often arranged on a rotational shift basis (two weeks on, two weeks off), could fit the **requirements** of **Inupiat men** very well. CIP jobs will be at a much lower level, but Inupiat need for a cash income will continue. **Inupiat** men have worked away from **their** homes in the past, and it may be that a two week rotational shift **could** be considered a hunt for money interspersed with other subsistence activities. **Oil** fieldwork would thus continue to **allow the** flexibility needed for a cash/subsistence lifestyle. The relative lack of success of **Nuqsut** men, and northern Natives in general (Hobart and Kupfer **1975**), in oil-related jobs only makes the need for **oil industry - Inupiat** cooperation greater.

The potentially disruptive effects, if such male oriented full-time jobs are not created, **will** not be confined to the economic sector, however. Economic organization has direct effects upon **all** other spheres of social relations. A continued and even exacerbated discrepancy between typical **male** and **female** work schedule **will** further strain the marriage tie. Seasonal work provides time freedoms which steady work does not. The more work duties separate people, the more difficult it is for **them** to share activities and to maintain a healthy relationship. Male-female relationships in **Nuqsut** are currently subject to stresses which create severe personal and social problems. Additional stress produced by still more of a dichotomization of males and females into seasonal and year round employees will **alter** the nature of Inupiat family and household structure. It is this structure which will then be the context for the socialization of young **Inupiat**. What **values will** remain to be taught is the haunting question.

## V. SUBSISTENCE ECONOMY

### Introduction

The **Inupiat** of the Lower **Colville**, known as the **Kukpikmiut** (**Stefansson** 1914: 10), exploited the sea mammal resources of the **Beaufort** Sea and land mammal and fish resources from the terrestrial and **riverine** environments of the tributaries of the **lower Colville** and **delta area**. The traditional **Inupiat** of this region **relied** upon caribou and **riverine** fish the most (**Burch** 1980:287). Sea mammals, **polar bear**, moose, waterfowl, and fox, **wolf** and wolverine were **less** hunted resources. The strategies for subsistence hunting described by **Nelson (1969)** for the **Wainwright** area **could be** applicable to harvest practices **in the Colville region**, with a far greater concentration on strategies related to the hunting of caribou and fishing **on** inland streams and the **delta**. The harvesting of these resources **by** the aboriginal and **historical** populations resulted **in** the settlement **of the lower Colville by family** groups. The particular advantage of settlement of nomadic groups of Eskimo on the **lower Colville** was expressed by **Stefansson (1910)** who spent a winter **on** the Lower **Colville** above the **delta** because he knew that fish resources **could** be procured throughout the winter on the **lower Colville**.

The **Colville Delta** also served **as** a summertime **location** for the trade fair of **Nigliq** where the **inland** groups traded with the coastal groups of the Arctic Coastal Plain. From a historic standpoint, the **Colville Delta** afforded a rich subsistence **base**. **It** was **also** a natural geographical buffer zone for several different subsistence areas and thus a logical and convenient location **for** important economic and **social** interaction of different Eskimo societies.



The relative abundance of the mainstay of caribou and fish was complemented by a variety of **mammals**, sea mammals including bowhead and **beluga** whale, spotted and ringed **seal**, and a wide variety of waterfowl species. The major fish resources included seasonal harvest of Arctic char, **grayling**, whitefish, **ling** cod, salmon, and **cisco**. The successful exploitation of caribou and fish by Eskimo populations continued on the **Colville** until the **early** 1940's when relative depletion of caribou, decline in the value of fur sales, and general depopulation due to factors of western acculturation (including disease and illness) led to an abandonment of settlement in this area of rich subsistence resources. The 1973 resettlement at **Nuiqsut** confirms the overall importance of the lower **Colville** Delta for procurement of subsistence resources.

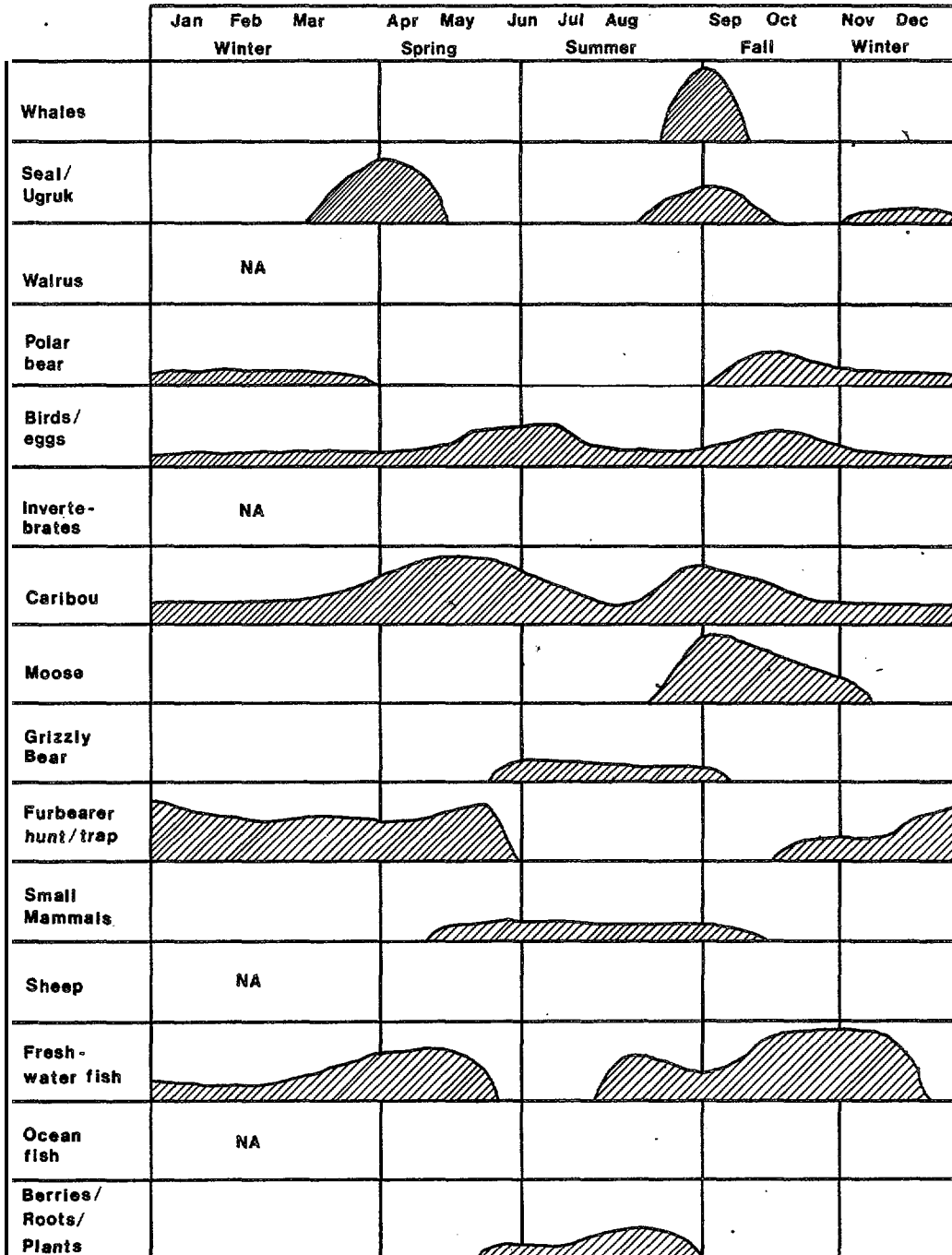
#### General Subsistence In Nuiqsut

The annual subsistence cycle for hunters in **Nuiqsut** (Figure 15) demonstrates the importance of caribou as the single most available food source. This species represents the greatest harvest from one source (Hoffman et al 1978:51, Underwood et al 1978:143, Brown 1979:25, Nelson 1979:5, Pedersen 1979:9). However, this resource is not necessarily stable. **Total** caribou population fluctuates widely, evidently in a cyclical fashion. Migration patterns vary from year to year, so that predicting where concentrations of caribou will be is not **always** possible (Pedersen 1979:9, Nielson 1977:53). **Nuiqsut** hunters say that caribou are usually available **at** any time of the year within snowmobile range of the village.

Freshwater fish resources can also be exploited during the entire year except for a **small** hiatus during the late spring - early summer months. Sea hunting is generally confined to the months of March and **April** except for a **small** degree of fall

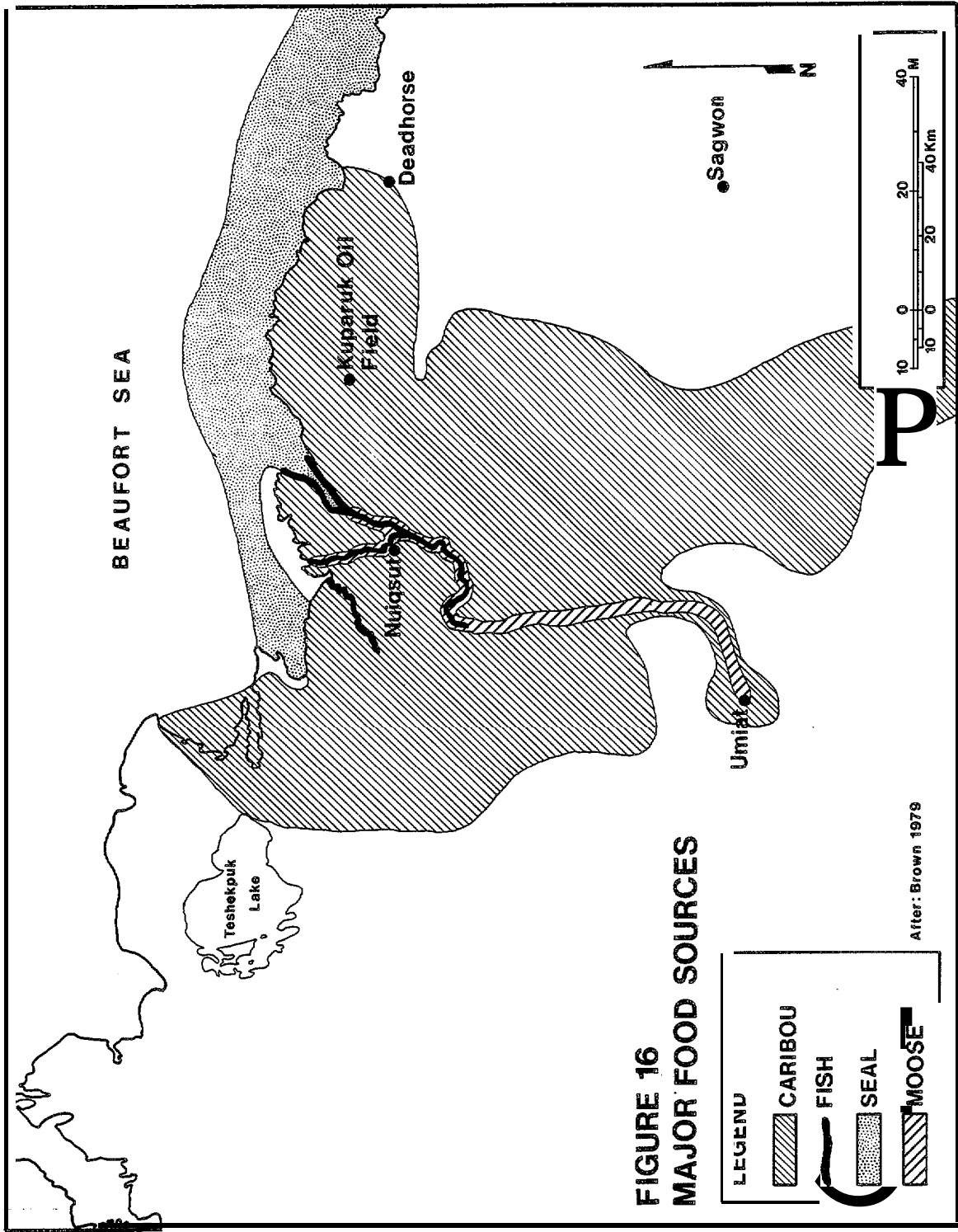
# FIGURE 15 NUIQSUT YEARLY CYCLE

After: Libbey, Spearman, and Hoffman 1979

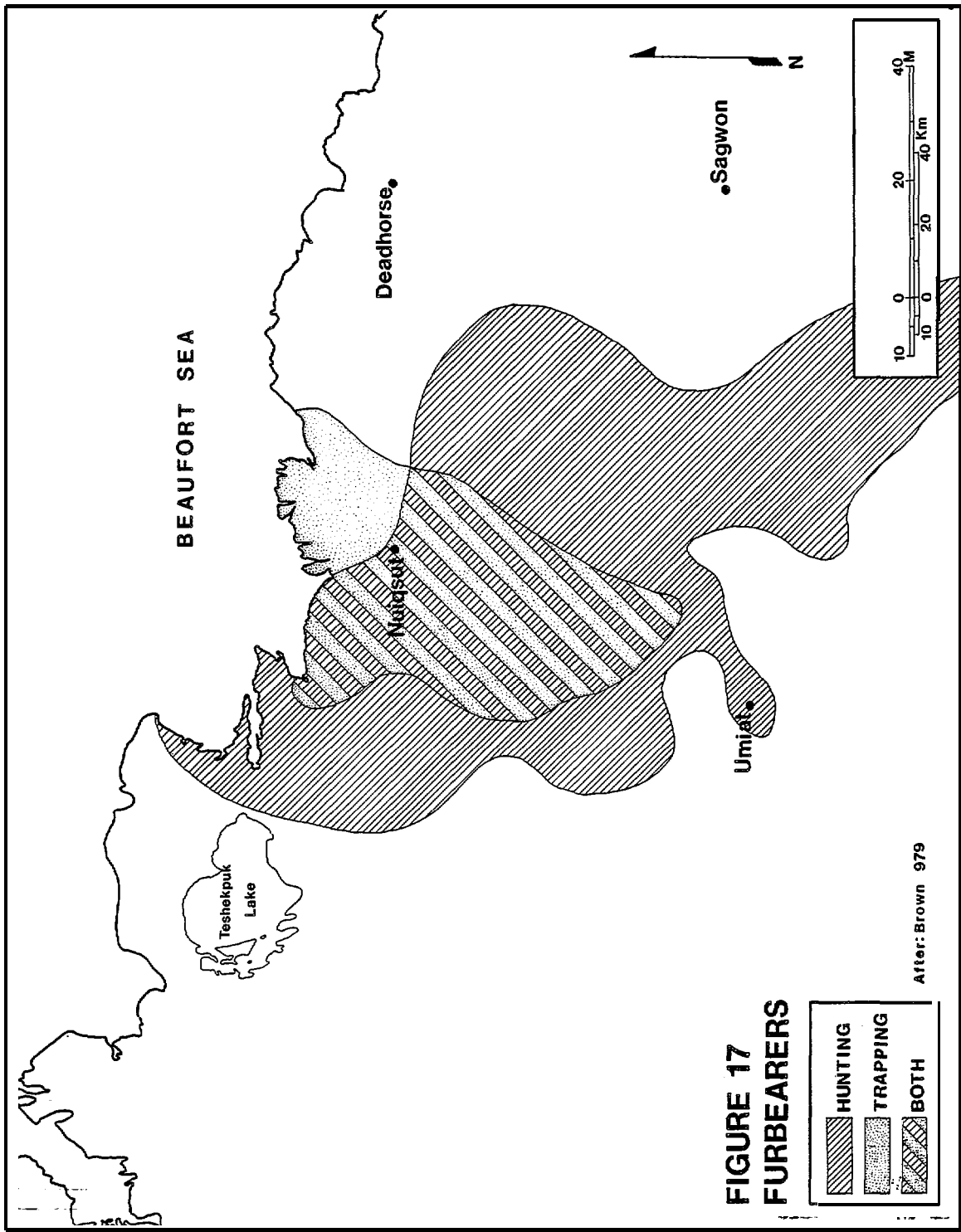


and winter sealing (**Libbey** et al 1979). We did not observe any sealing while we were in **Nuiqsut**. Whaling, often carried on in the **Beaufort** Sea near **Flaxman** Island, is restricted to the fall months since whales migrate too far offshore during the spring. There is a relatively high frequency of moose harvest from late **August** through November. Forbearing animals such as fox, wolf, and wolverines are harvested during the winter and spring months. A monthly description of the subsistence resources available to **Nuiqsut** hunters is presented by Hoffman, Libbey, and **Spearman (1878:37-44)**. Their reporting of the scheduling and **seasonality** of subsistence hunting was based upon mapping projects from six **Nuiqsut** hunters (NSB Contract Staff **1979:Plate 2**). More specific information is pretty much absent in **all** sources.

Hunting and fishing remain a major activity of many **Nuiqsut** residents. Individual hunters and small parties travel by snowmobile during most of the **fall**, winter, and spring months for caribou. Most hunting and activities during November through January are diminished by the period of darkness. However, the period of four or five hours from about **10:00** a.m. to **2:00** or **3:00** p.m. affords the Arctic caribou hunter enough time to travel away from the settlement to good hunting areas. Fishing, both with nets and hook and line, takes place on all of the **lower Colville** tributaries during the summer months. Permanent fish camp locations on these inland rivers have been documented from the early twentieth century to the contemporary period (Brown 1979). **Ice** fishing occurs in and around the **village** area during the late winter and spring months. Jigging for **grayling** and **ling** cod during the period of fall freeze-up is a common activity for women and children. In addition, bird hunting, moose hunting and other **inland** subsistence **activities** contribute to the subsistence diet of **Nuiqsut** residents (Figures 16, 17).



**FIGURE 16**  
**MAJOR FOOD SOURCES**



## The General Significance of Subsistence

The importance of subsistence hunting and fishing to native livelihood has been documented at great length (Spencer 1959, Nelson 1971, Pedersen 1979, Worl 1980). However, detailed information on the harvest of subsistence resources in the Nuiqsut area is lacking (Pedersen, personal communication). Indeed, such harvest information is generally unavailable. When it does exist, it is fairly old. Aggregate harvest figures are given for five North Slope villages by Patterson (1975) and earlier coastal harvest data come from Foote (1959, 1961). These sources do not really apply to Nuiqsut, however. Most recent work on the North Slope dealing with subsistence activities has concentrated on land use--where people go in the pursuit of various subsistence resources. Specific kill sites were not solicited as much as general hunting/fishing/gathering areas were delimited. The question was phrased in terms of where people look for resources rather than in terms of what people actually harvest. Pedersen (personal communication) says that such land use information is much less sensitive, and thus easier to collect, than actual harvest data. He will eventually, with the help and cooperation of Nuiqsut villagers, try to obtain such information to aid the village in its documentation of the importance of subsistence. He and they realize that documenting the use of land for subsistence does not necessarily establish the importance of that use. Information on harvest amounts is needed for that. This sort of project has been completed in Kaktovik, and Pedersen hopes to apply the same techniques in Nuiqsut. This is still in the preliminary stages, however.

Subsistence concerns are addressed by a number of state, regional, and local organizations. Several institutions are directly tied to regulating subsistence resources so that

**Nuiqsut's** representation is potentially very important. The North **Slope** Borough Fish and Game Management Committee is a NSB regulatory agency. The Eastern Arctic Fish and Game Advisory Committee is a regional body which comments on (and proposes) state and federal regulations. The Alaskan Eskimo Whaling **Commision** was formed to counter pressures to reduce subsistence whaling from the International Whaling Commission. **Nuiqsut** has several active representatives, although as yet only one whaling captain has conducted whaling from **Nuiqsut**. Representatives to these bodies are appointed volunteers and most are active in the **Kuukpik** Corporation. The mayor is **also** asked to serve on these sorts of boards in his role as spokesman for the people.

The importance of the procurement of subsistence foods for the Eskimo in general has been addressed from the perspective of its dietary and nutritional importance (Draper 1977, Draper et al 1979). In 1982-1983, we also observed the necessity for contemporary **Inupiat** communities such as **Nuiqsut** to continue subsistence harvesting for social and cultural reasons. Subsistence food is most often shared among family, kin, friends, and visitors. The **Inupiat** ethic for sharing and reciprocity through the distribution of game and fish is a central theme in village life. The community feasts at Thanksgiving and Christmas, held in the **Nuiqsut** school, both involved the distribution of **muktuk**, fish, caribou, and duck **to** all village families. Although the distribution of some store-bought, non-native foods such as **pilot** bread and white bread was also observed, by and **large** most cases of food redistribution required subsistence items.

Before the 1982 Christmas feast, several households discussed the necessity of contributing frozen fish for redistribution, since the **actual** number of community members who had participated in **fall** fishing was quite **low**. The harvest of a wide

variety **of items** thus serves a social **purpose** as well as nutritional, dietary necessities for the **Inupiat**. The spirit of redistribution and sharing among village families is expressed not **only** during feasting periods **but is also** the foundation of **daily** household etiquette. Visitors **are usually** offered food if they arrive **at meal times**. Meals with a high percentage of subsistence items **are** relished and **often** shared with non-household members such as kin and friends.

**The Inupiat** subsistence economy continues to reflect the traditional and contemporary **values** of **Nuiqsut** residents. The hunt itself, a seasonal and sporadic activity, engages **the** individual **in** the main activity **tying** him to **land** and sea. The individual's extraordinary knowledge of environmental conditions and **the** behavior of migratory game, and his cognitive mapping **of** essential subsistence resources, gives that individual a sense of **mental** and physical wellbeing. **The** fact that snowmobiles, **rifles**, and motor **boats** have changed the nature of subsistence hunting **in** the twentieth century is self-evident. The Inupiat experience which requires an intimate knowledge and relationship between the hunter and **the** environment persists and continues despite the **influx** of western values. **"To** be a hunter **is** to be **Inupiat"**, remains the ethos of contemporary **Inupiat**. **In** this sense, we may argue that the **harvesting of** subsistence resources is a central organizing principle **in** the world-view of **Nuiqsut** residents.

**In** the following sections, we present **our** observations of subsistence practices in **Nuiqsut**, their bearing **upon** household consumption patterns, and the relationship of subsistence to the cash economy. Consumption occurs year **round**, while subsistence activities are seasonal and highly variable. **Due** to storage, consumption of subsistence foods continues



throughout the year, although the amounts no doubt vary. For this reason, as well as the limited time available for field research, we will concentrate on consumption rather than production (or harvest).

### Measurement of Subsistence Activity in Nuiqsut

#### INTRODUCTION

Information on the harvest of fish and game is difficult to obtain, and is often of questionable reliability. Recall as to time and place, and sometimes even quantity, is uneven even if the wish to cooperate exists within the informant. When there is reason for the informant not to trust the questioner to protect the informant's self-interest, or if the informant for some other reason does not want his "take" and/or resource area known, the information is misleading as well as uneven. Thus, observation is about the only accurate way to collect such harvest information. The limited time available, the lack of adequate personnel, and the feeling that the village could only accommodate a limited level of research at any given time excluded our systematic gathering of such harvest data.

This is not to say that such information was ignored. Hunters' general statements that they now prefer to travel to the west and north were common. The east was said to be closed off due to **oil** development activities (not **closed** legally, but the quality of the game there was said to be **low**). People do hunt south of the village but do not **talk** about hunting there as much as they do about hunting to the west orientation, but hunters were **also** observed to hunt to the east with success. The disparity between verbal description and actual behavior is interesting. The Kuparuk (and **Prudhoe**) oil fields are to

the east and are **in** production. **NPR-A**, where production is for the present banned, is to the **west**. Fish Creek, perceived **as** one of **Nuiqsut's** primary subsistence resource areas, is **to** the northwest. Perceptions of environmental disturbance **rather** than actual behavior differences may account for the disparity in reports, **In any event**, our total number of observations **is** too **small** to consider adequate, either **in** number of hunters observed **or** pieces of **information about** any one hunter. The same is true for counts of animals actually harvested.

**Our** main information about subsistence activity approaches it from the other end. **People** eat or **sell** what they harvest. As it is **legal** to **sell** handicrafts made from materials obtained from hunting but not the food product of the hunt itself, what people eat and in **what** quantities is a measure of the amount of effort devoted to subsistence activities, "Subsistence activities" must be taken to mean more than the act of hunting in **this** context. The primary mechanism by which households procure subsistence resources **is** by directly harvesting them. However, the products of the hunt are also redistributed, so that participation **in** an exchange network becomes subsistence activity. Our observations of such exchanges **in Nuiqsut fell** into two sorts. Those that tended to even out over time (delayed reciprocity) were between friends or same generation kinsman. Those that tended to be primarily unidirectional were from one kinsman to a senior kinsman (**usually** female). The **later** case involves what **Burch** would **call** "**local** families" (**Burch 1980**). These are closely related kin groups which occupy more than one household but often function together. The former case may or may not be similar. **In any case**, **while** exchange within such **local** families may be unidirectional, exchange between **local** families (within **Nuiqsut** or with a family in a community outside **Nuiqsut**) again tends to even out over time. This

fits the most recent **ethnohistorical** models of localized **Inupiat** groups (Burch 1980). Thus, since the subsistence resources eaten in any one household are either harvested by that household, a near kinsman, or eventually "paid for" by a return gift of subsistence food, consumption can be taken as a **gross** indicator of participation in the subsistence economy. The use of subsistence resources to make products sold for cash is relatively insignificant in **Nuiqsut**.

Consumption of subsistence resources is of course a direct measure of the economic importance of subsistence activity, as the relative amounts of harvested versus store-bought foods can be directly observed. The cultural importance of subsistence activity of course goes beyond this economic aspect. **We will** concentrate on economics here as a way to determine a minimum value for subsistence in **Nuiqsut**. **We will** later discuss the social/cultural value of subsistence activities to evaluate the central place these activities hold in **Inupiat** life. The two sorts of values are not incompatible, but are not easily convertible into each other. Subsistence activities evaluated in merely economic terms can be easily replaced with money to buy substitute foods. **When** seen as the manifestations of central **Inupiat** belief systems, however, the question of substitution becomes much more difficult. **All** societies undergo value change over time, but imposed value change is tyranny. **Inupiat** understand this point much more clearly than most Americans and even most social scientists. The economic discussion which follows **simply** sets a minimum value using a reasonable rigid, readily quantifiable, method.

## HOUSEHOLD CONSUMPTION SURVEY

### Methods.

Opportunistic observations were made of what people were eating (or comments were elicited about past meals) whenever this could be done without being obvious, disruptive, or a cause of anxiety (our own or the informants). In addition, we made more systematic observations of a small sample of households. This included interviews about food preferences, practices, and consumption with those willing to do so. This sample consisted of eleven native households, two mixed-marriage households, and three non-native households. Characteristics of the sample are tabulated in Table 31.

Table 31: NUIQSUT HOUSEHOLD CONSUMPTION SAMPLE CHARACTERISTICS  
11/16/82 - 3/9/83

Household No.	HH Type <sup>a</sup>	HH Size	Age & Sex Head/HH	Cash Income <sup>b</sup>		Time Lived In Nuiqsut	Est. % Harvested <sup>c</sup>	Est. % "Store" <sup>c</sup>	# Obs. <sup>d</sup>
				F-T	SPO				
1	I	6	44 M		H,S	6-	75	25	4
2	I	4	56 F	0		10	10	90	5*
3	I	4	68 M		H,0	10	35	65	12*
4	I	8	68 M	0,0		10	80	20	3*
5	I	2	77 F		0	10	70	30	4*
6	I	9	57 M	0,0	H,S	3	65	35	4*
7	I	5	50 M		S	10	75	25	4*
8	I	8	43 M		S H	10	60	40	3*
9	I	4	71 F		0,0	10	40	60	3
10	I	5	35 M		H S	?	40	60	3
11	I	7	50 M		S H,0	10	35	65	4*
12	M	2	45 M		H,S	3	10	90	3*
13	M	4	44 M		H,S	4+	30	70	3*
14	C	5	34 M		H,S	2	0	100	9
15	C	3	38 M		H,S	5	0	100	3*
16	C	2	30 M		H,S	1	0	100	4

<sup>a</sup> I means Inupiat household, M, means non-Inupiat male head of household with Inupiat wife, C means non-Inupiat household.

<sup>b</sup> F-T means full-time wage employment. SPO means sporadic wage employment and is usually seasonal construction work. H is head of household, S is spouse, 0 is other (usually child of head of household).

<sup>c</sup> This estimate must be interpreted with extreme caution. SEE TEXT.

<sup>d</sup> Number of main meals witnessed and/or participated in. "\*" indicates conversation about food and diet both in general and for that particular household.

Estimates were based on these observations, interviews, and additional reported information if the latter seemed to be reliable.

Records were made of what was eaten, by whom, the relative amount of each food eaten, what was present that was not eaten, who was present, time of day, and any special circumstances. No weights, volumes, or other direct measurements were taken. Rather, eyeball estimates of amounts consumed were made on a relative basis in terms of serving size or area of plate covered. This was converted **to** a more absolute **scale** for comparison with other meals and other households after the meal was over by calibrating the relative measurement units. This was a compromise between obtaining no quantitative data **at all** and introducing a more obtrusive data collection technique into **Inupiat** households.

This system enabled us to estimate the "percent of harvested foods consumed" by each of the **16** households in our sample (for our observations, during the time period we were in the village). These estimates are thus very rough. No confidence **levels** or ranges can be **placed** around them.

Before discussing the data, some of the methodological problems should be pointed out. These are fairly numerous and should convince the reader that at best these figures are rough indicators of current behavior. To rely on them as completely accurate measures **would** be doing an injustice to both the people of **Nuiqsut** and the researchers.

**An** attempt was made to collect meal information from informants, but this tended to elicit responses that were normative and incomplete. That is, unusual foods were left out and common foods usually overstated in importance. **Recall** of amounts consumed was very unreliable. This is our conversational data base, but is not at all adequate to **talk** about what people are actually eating. Thus, our best and most reliable information had to come from personal observation. Because

of the **need to** base recorded data **on** observations and **not** self-reports, the sample is **small**.

The **sample** is representative in terms of the types of **housing in Nuiqsut** (old housing **is** approximately 50% of the existing housing **stock**) and the **range in** size of household. **No house-**hold headed by an **Inupiat** individual younger than **35** is **in the** sample, and there are **eight** of these in **Nuiqsut** (and two more **with a** household head **aged 35**). **Thus**, the **sample** may be somewhat too **old**. This **is** further suggested by the **length** of residence **in Nuiqsut**, where eight of the **eleven Inupiat** households have been **in Nuiqsut** since **it was** refounded. **Thus**, more traditional food **habits** may **be** somewhat over-represented.

Observations **on** the **sample** were confined to household consumption. **Family** members not eating **in** the home were thus not represented. These **would** be **mostly school** age children, **school** employees, and young **adults to about** age **25**. **All school** children and **school** employees eat **lunch** at the school, which serves **100%** "store" **food**. Children **and young adults** tend to eat snacks bought at a store or to eat at the restaurant much more commonly than do **older** people. The restaurant, **like** the school, serves **only "store"** food.

The **sample** observations were not made at **random times** of the day, so not **all** of the variety of food activity was necessarily observed. Observations clustered around **lunch** time, dinner **time**, and evening "parties" (socializing). Breakfast was not observed very often because it quickly became **clear that** it was pretty much a "store" food **meal for nearly** everyone who ate **it**. **It was also** not a time of day **that we felt we could** impose our visits upon people. Eggs and **cereal** with bacon **or** sausage predominated. Some **people** did **talk** about having caribou kidney for breakfast, but no subsistence food was observed to be eaten at breakfast.

Lunch was also often a "store" meal, especially for the young who were used to such food in school. This meal also tended to be informal, so that it lent itself **to** the use of **lunch-**meat for sandwiches and such. However, among older people, lunch consisted almost exclusively of subsistence food. Again, it tended to be informal. Mostly people at quag (frozen fish, frozen caribou), muktuk, or leftovers from previous days (soups, stews, roasts). The idea seemed to be to keep preparation time to a minimum.

Dinner, then, was the meal where the most mixture of subsistence and store foods was observed. Whereas breakfast was 100% **store**, and lunch tended **to** be either 100% store or nearly 100% subsistence (except for tea, crackers, **etc.**), dinner could consist of **nearly** any proportions of subsistence and/or "store". Dinner was also the main **meal** of the day.

A factor which could be too easily overlooked is that the household consumption information covers only a limited time. Our field research was conducted from November 16, 1982 to March 9, 1983. The consumption survey itself began in December 1982. There is **little** reason to suspect that food consumption patterns are the same throughout the year. Thus, our three or four month information, no matter how accurate it is, cannot be extrapolated beyond the time period in which it was collected. Too many factors vary throughout the year, and the effects of one may carry through many yearly cycles. A year's information is the minimal amount which can realistically be interpreted. The more time depth that is added, the more meaningful the interpretation can **be**. We will attempt to put our information within a wider context by transmitting some of the special circumstances which **Nuiqsut Inupiat** verbalized to **us**. We cannot hope that this is complete, however. These will be discussed in the next section, after the data are presented.

## The Data.

With the qualifications stated above and below, our survey indicates that a little over 50% of the food consumed in Inupiat households is harvested food. This can be compared to the estimate of 50% to 67% for Southwest Alaskan Natives some time near 1978 (Knapp and Panruk 1978 cited in Fienup-Riordan 1983:45) and the figures from Kruse's (1982) North Slope survey (Table 32]. Mixed households (non-Inupiat male, Inupiat female) consume 20% harvested foods and 80% "store" food. Non-Inupiat households do not use subsistence resources. We will discuss these cases in reverse order (in order of complexity).

The three non-Inupiat households sampled made no use of subsistence resources. Two of the households never hunted. The head of the third non-Inupiat household did go hunting with some of the villagers, but the product of the hunt went to the Inupiat participants. Two of these households have eaten subsistence food and can appreciate its taste, but neither makes it a regular part of their diet. One household does regularly eat the subsistence food shared at public village feasts.

The two "mixed" households in our sample made less use of subsistence resources than did all but one of the Inupiat households. The pattern of use was not the same for each of these households. In one, the non-Inupiat husband hunted quite regularly and supplied a substantial amount of the household's meat in this way. Other meats (ham, poultry, pork, beef) were also an integral part of the diet, as were starchy accompaniments (bread, potatoes, pasta, rice). The adults also fished quite a bit and stored fish for year-round use. Overall, subsistence resources provided perhaps 30% of their total food. The wife's mother (who maintained



Table 32: FOOD OBTAINED FROM SUBSISTENCE ACTIVITIES

Food Obtained from Subsistence	NSB, All Villages <sup>a</sup>	Other than Barrow <sup>a</sup>	Other than Barrow <sup>a</sup>	Nuiqsut <sup>b</sup>
Most	30%	37%	49%	<b>55%</b>
Half	15	<b>12</b> }		
Some	42	<b>35</b>	35	36
None	<b>13</b>	<b>16</b>	<b>16</b>	9
Respondents	<b>290</b>	<b>136</b>	<b>136</b>	<b>11</b>

Sources: <sup>a</sup> Kruse (1982:18) -  
<sup>b</sup> Nuiqsut Household Consumption Survey 1982-83

her own household) also partook of their subsistence harvest. The second "mixed" household did **little** or no harvesting of subsistence resources. The husband was never known to eat subsistence food. The wife sometimes ate with her parents' however, which is the basis for the **10%** estimate for this household. Subsistence foods are much less a part of the household diet than they are in the case of the first "mixed" household.

The **Inupiat** households sampled can be divided into three groups of estimated percentage of household consumption of harvested resources (Table 33). The low subsistence resource consumption group (one case) has a diet of about **10%** harvested food and 90% "store" food. The medium group (4 cases) consumes 35-40% harvested food and 60-65% "store" food. The high group (6 cases) consumed 60-80% harvested food and **20-40%** "store" food. Probably 80% is as high a dependence upon subsistence resources as is currently practical given the use of tea, sugar, crackers, and other snack foods. We **shall** examine the characteristics of each

**Table 33: NUIQSUT HOUSEHOLD CONSUMPTION SAMPLE  
USE OF SUBSISTENCE RESOURCES  
November 1982 - March 1983**

<u>Use of Subsistence Resources</u>	<u>Inupiat</u>	<u>Household Type Mixed</u>	<u>Non-Inupiat</u>
High	6		
Medium	4	1	
Low	1	1	
None			3

of these consumption groups and then compare cases to see what sort of processes affect the availability and use of subsistence resources.

The "low" group consists of only one case, Household 2. The head of the household is an older woman. She does not hunt or work for wages, but may fish on occasion. There are no men in this household. The other household members are a non-hunting female who works full-time, a female high school student, and a young boy. There are thus no household personnel available to harvest subsistence resources. Close family relations in other households have responsibilities which prevent their giving more than occasional contributions of subsistence foods. Thus, this household relies a great deal upon its cash income and store food.

The "medium" group consists of Households 3, 9, 10 and 11. All these households include hunters as members. Two of the households have elderly heads (one male, one female). The other two have middle-aged heads. One is 35 and the other 50. Each is his household's main hunter. The older man hunts more than the younger, who is employed full-time. However, the older man has a larger family and children who are older

and eat more. Further, the older **man's** children have acquired a taste for "store" food in school and as his wife is employed full-time, his household has the resources to buy such food. The older man **also** traps, fox for the most part. He sells these for cash, and his wife uses some for skin sewing. Because of the different composition of these households, their consumption pattern appears the same even though their **level** of effort devoted to subsistence activities is quite different. Good information on how these households fit into subsistence exchange patterns is not available to us.

The two other households in the "medium" group also serve to emphasize the effects of household composition on subsistence consumption. Household **9**, is headed by an elderly woman who **lives** with a son, a grandson, and a granddaughter. She is the recipient of shares of subsistence food from hunters from other households. This is usually expressed in terms of exchange and sharing among kinsmen, but the degree of kinship need not be close and indeed sometimes cannot be reliably stated (this is generally true of **all** exchange within the village). The son and grandchildren are **all** in their twenties and the two men occasionally will hunt. They **also** work for wages on an intermittent basis and are most steadily employed **in** the summer when **CIP** projects start **up**. They eat out quite often and have a taste for "store" **food**. Household 3 is headed by an elderly man who is the household's primary hunter. He also is a meat supplier for several other households in the village and is one of the most accomplished hunters in the village. Other household members are a son and a grandson. Neither has been out to hunt in the last year except perhaps for geese. The household head went out for caribou twice while we were in the village. His subsistence activity was relatively low (compared to his reported past activity), and the consumption of store food in the household relatively high, for a number of reasons:

- the head of household eats meals at other people's houses quite **often**, most commonly when they are **having** some traditional subsistence food,
- e the head of household was in relatively poor **health** for much of **this time**, and spent more than a month out of the **village** seeking medical **help**,
- in the household **head's** absence, **either visiting within the village or** on stays **outside the village, his son** and grandson prepared **mostly** "store" food, **along with caribou** and muktuk from **their** storage **shed**; and
- e another **son**, head **of Household 1**, **is** a frequent and successful hunter and shares his **meat** with Household **3**.

In this regard, **still** another (**older**) son has recently returned to **Nuiqsut** and **joined this Household 3**. He had started to go **out** hunting (**along** with a male member of Household **1**) and **seemed to be capable** of **supplying** an abundance of meat. He had gone out **twice**, and each time came back with several caribou. Indeed, the "non-hunting" **son** of the household, who had **left** for Barrow to work for wages, said that this was what he **had** expected. **Thus**, subsistence resource **use** and dependence can **be** expected **to** increase for this **household**. The dynamics of household composition influence **the** food consumed **in** this household greatly. The difference in food **choice** between age groups **is** also quite important. It operates in **all** of these "medium" group households to some extent and also is a major reason for caution in interpreting the numbers as isolated and "objective" measures.

A difference between Households **3** and **9** on the one hand and **10** and **11** on the other **is** that both Households **10** and **11** include steady full-time wage earners and are complete families with young children. Households **3** and **9** are partial

families with more sporadic wage earners and no young children. Households 10 and 11 are larger than Households 3 and 9. Again, stage of household development and household composition are very important.

The "high" subsistence dependence group is our largest group consisting of Households 1, 4, 5, 6, 7, and 8. They all have different sets of specific circumstances. Household 1 and 8 have middle-aged **male** heads of households who **are** employed full-time (**on** a seasonal basis) and are successful hunters. **In** addition, the spouse in Household 8 has a full-time, steady, wage job. The families are complete nuclear (2 generation) families with young children. The heads of Households 6 and 7 are older, and neither has a wage income as such. One is known as an excellent hunter, especially of forbearers and caribou. **He** also fishes with his wife. The other reverses those priorities. The spouse in Household 7 has a full-time, steady, wage job. The three children are **all** 18 or older and work for wages seasonally. Household 6 contains individuals from three generations and includes some young children. There are two steady wage earners **in** this household and three (including the head) who work for wages more sporadically. Household size, composition, and access to money seem to be the significant differences which account for a similar outcome.

Household 4 is headed by a very traditional **older** male and consists of **his** wife and their children. Both he and his wife eat mainly subsistence food (as do the adult couples in Households 6 and 7). Their children eat more "store" food than do the parents. **It** is unclear whether anyone from **Household** 4 hunts on a regular basis. However, they do receive regular shares of the subsistence harvest from other people in **Nuiqsut**, as well as items from Barrow unavailable in **Nuiqsut** (seal, etc.). This sharing is through kinship

lines, both **patrilateral** and **matrilateral**. Household 5 consists **of** an elderly woman and her unmarried **son**. **He** is a trapper and a hunter, and may occasionally work for **wages**. She **is** an active fisher and skin sewer and their household is a center for the exchange **of** subsistence items. Her married son **is** the head of Household 11. **She** receives frequent gifts **of** harvested food from other households.

#### Discussion.

From an examination of these three groupings and the various sets **of** factors that seem to have produced our estimate of subsistence dependence, certain variables stand out:

- access to cash income--whether wage earner, head of household, spouse, or other(s);
- **sharing**--how much the household is involved in a network of subsistence product sharers; and
- e composition of **household--numbers** and ages. Certain statements about these factors can be made and then elaborated by reference to the cases above.

Access to cash income, at **least** on a part-time or sporadic basis, is fundamental both to preferred consumption patterns and to subsistence activity. Cash income **is** needed both **to** buy food stuffs from the store and to obtain the **items** needed to be able **to** hunt effectively. Hunters tend to be seasonally employed, whereas other members of the household are more **likely** to be employed year-round. Households with no active hunter are either active in an exchange and distribution network or **else** rely primarily upon "store" food. Households with **people** of younger age (especially **10-25**) tend to consume more "store" food, while "older" households

tend **to** consume more harvested foods. Thus, households with high use of harvested foods are likely to be characterized by:

- one older seasonal employee who hunts, other household members with full-time employment, and a higher average age, or
- household members with full-time employment and active participation in a **kin-**based network of resources sharing (age composition is not as important in households which obtain harvested resources through exchange).

All households, **in** the sample, have access to cash income (see Table **31**). Household composition determines who is available to work for wages and who can hunt. The two are not mutually exclusive categories, of course, but are being discussed in functional terms. They each place certain time demands upon household personnel. One person can fulfill both, as in Household **10** where the head of household is employed full-time and is also the household's main hunter, but this is unusual. His subsistence needs are at present not very large, the tastes of his young family are more "store" oriented, and in fact the household's subsistence consumption is **only** moderate. He is the only sample hunter employed full-time **all** year (see Table **34**).

The obvious counterpoint to this case is Household 5, where the hunter's sporadic work appears to be the **only** cash income source. However, this hunter **sells** furs (as well as exchanging them) and his mother sews masks and clothing which are also sold and exchanged. The consumer needs of this household are very **small**. Their meals consist of harvested resources in the main, with store food being mostly bread, crackers, tea, rice and other such introduced staple extenders. The household contains no young children with their acquired tastes for "store" food. The house is one of the oldest in the village and so requires much less **oil** to

**Table 34: NUIQSUT HOUSEHOLD CONSUMPTION SAMPLE  
 INUPIAT HOUSEHOLD EMPLOYMENT**

<u>Households with Hunters</u>	<u>Employment</u>		
	<u>Full-Time</u>	<u>Sporadic</u>	<u>None</u>
Hunter(s) <sup>a</sup>	1	7	1
Other(s)	4	4	1
<u>Households without Hunters</u>	2	0	0

<sup>a</sup> Hunters need **not be** heads **of** households.

**heat**, has fewer electrical appliances, and has **overall lower** maintenance costs, than the newer house occupied **by** Household 10. Household 5 is **also** much more involved **in** the sharing network than is Household 10. **This** seems to **be partly** age dependent and **partly** kin dependent. The two are not separate, as the aged usually have more kin **and** more who also **live in Nuiqsut** than do the young. Age **in itself is** respected in **Nuiqsut**, and sharing is one way to show respect.

Looking at the cases **with elderly** heads **of** households (cases 3, 4, 5, and 9) reinforces this **point**. **All rely on** a kinship based network of harvested resource sharing **in** one form or another, and their dependence **on** subsistence resources is in **large** measure reflective **of** the utility of their social-kin network. Household 5 has been discussed, as has Household 3 to some extent. Household 5 receives a good number of subsistence food contributions, whereas the head of Household 3 shares a fair number of **others' meals**. Household 4 and 9 are more similar to Household 5 than they are to Household 3. However, the younger members of these households eat less subsistence food than do the **older** ones, which is a central characteristic of Household 3. Of interest is that these



elderly head of household cases also contain all but one (3 of 4) of the cases of households with no full-time wage earners. **Only** one of these cases has a household member with a full-time job, and clearly in this case house expenses as well as "store" food for younger household members are the main expenses. The other three households live in **older** housing. Only one non-elderly head of household case, Household 1, **relies** solely on sporadic labor for cash income, and this household is one whose consumer needs, at **least** in the way of "store" food, are not great. Two of their children are infants, the parents prefer subsistence food, their teenage son lives with his grandfather (Household 3), and their teenage daughter eats elsewhere fairly often. Recently, the head of Household 1 did go to work full-time on construction and a cousin (father's brother's son) has been visiting and going out hunting (as well as working for wages a little).

These cases are those in which one would expect to find difficulties arising from the lack of appropriate people to fulfill the necessary tasks, either because there are too few people in the household or the people in the household are too old. As among most people, elderly **Inupiat** tend to do **less** in terms of economic production as they grow older, and the fragmentation or segmentation of the extended family into separate households can aggravate a manning problem resulting from this. Other mobility increasing factors also affect this. Household 4 has no hunters because this couple's sons have mostly moved out into houses of their own. This couple **relies** on their sons and other kinsmen to hunt for them. These kinsmen all have jobs which require their time, and frequently must leave the village. The extent of Household 4's sharing network is testified to by its continued reliance on subsistence foods in such circumstances. Household 9 includes some sporadic wage

earners and occasional hunters, but they tend to be fairly mobile. Thus, they cannot supply a steady supply of harvested food. Household 4 thus relies on money and cash income more. Household 5 solves its problem of lack of a wage earner by having few needs for which money is required, transforming subsistence products into money, and relying on an extensive kin network. Household 3 also is a case where children have moved out of a parent's house after marriage, but where support still continues. Clearly, this household uses kin ties to maintain a supply of subsistence food, as at times it uses these ties to distribute a surplus. Wage income is **also** of importance to supplement subsistence.

Related to these cases is Household 2. Household 2 has a manning problem similar to that of Household 4. Married children have moved out, leaving a single parent with a household of unmarried individuals. There is no one with the **skills** and qualifications to be a hunter, but there is a person available to work for wages. However, Household 2 receives much less subsistence food from other households than does Household 4. The head of Household 2 is not so old as that of Household 4, and the other members of Household 2 are younger than those of Household 4. The underlying reasons for this difference in the use of sharing networks are not clear.

These "problem cases" aside, **we can** now deal with the typical, fully-manned cases. Note that the typical cases comprise only 5 or **6** of the 11 **Inupiat** households in the sample, however (since Household 1 does have a fairly steady wage earner now, but did not when the consumption survey began). These are households in which there are recognized hunters/fishers and full-time wage earners. They are **all** family units, but only in one case are there three generations. In only one case is the hunter also the full-time wage earner.

In **all** cases, the food habits of the younger household members are different from those of the older. In some households, this tends to be indicated by **people** eating at different **times**. Other households simply have meals that mix store and subsistence food in a compromise proportion between the preferences of younger and **older** members.

**These** cases have **all** been discussed previously, but are worth looking **at** again from a slightly different viewpoint. Households **8, 10,** and **11** are **all** young families, and consume a middle to somewhat high **proportion of** harvested foods. Households **6** and **7** **have** essentially grown families and consume **mostly** subsistence foods. This pattern of "store" food **being** preferred by younger **people is** evident in the other cases as **well,** although not as **clearly** perhaps. Young children eat in the household, whereas teenagers and young **adults** more often have the choice of **eating** elsewhere. This seems to confirm that parents and children do have different food preferences.

Observations in other contexts confirm this interpretation. Young field assistants preferred to be **paid** by the researchers every **day**. They frequently used their money to eat **at** the restaurant (hamburgers and such) and to buy snacks **at** the store. The shopping patterns for the **people in** whose **household** our researcher lived were as **clear**. The head bought staples and occasional treats. A **22** year **old male** brought staples, soda and assorted non-staple food items. A teenage male usually bought candy, soda, cookies, canned **fruit,** and canned pudding.

## Cash in the Subsistence Economy

Nearly everyone agrees that modern equipment is necessary for the successful harvest of subsistence resources and that such equipment is not inexpensive (Underwood et al. 1978:313, Hoffman et al. 1978:45). The history of social contact and change producing this result is well outlined by Kruse (1982:9-13). Simply put, with the development of commercial whaling, traditional subsistence resources (whales for the commercial market, other game animals to feed the whaling crews) gained commercial value. The Inupiat were forced to choose between traditional sharing obligations and western goods. The introduction of new technology such as the rifle aggravated this split by allowing individual hunters to succeed where before groups of hunters acting in cooperation had been necessary (most notably for caribou). Traditional weapons and ritual were replaced by a reliance on a new technology. Disease, alcohol, and western religion caused further population dislocations and reduced the viability of traditional Inupiat society through the drastic reduction in population size and the sapping of a culture's strength.

From the time of these dislocations, cash (or exchange eventually contacting westerners) became an essential element for Inupiat subsistence activity. The old subsistence techniques were gone. Firearms for both land and sea hunting were necessary if a hunter were to be successful. Steel traps were standards, especially after the declining in whaling, and furs became the only subsistence resource with any real commercial value. The dictates of an outside market economy were to a large extent determining Inupiat subsistence activity.

The exploration of NPR-A, the extension of social programs to Alaska, military construction, and private oil development

increased opportunities for **Inupiat** wage employment. For **the first time**, this was a non--subsistence resource context. This potentially creates a conflict situation requiring people to choose either to engage in subsistence activities **or** wage activities. **Whereas** before the product of subsistence activities **could** be converted into cash, now the two spheres are separate and perhaps mutually exclusive. **It** was the purpose of **Kruse's** 1977-78 study to assess this **situation** and to determine the effect of energy development (and wage employment) **on** subsistence activity (**Kruse** 1982). **As** his results are directly applicable to **Nuqsut**, we will summarize **his** findings.

Household incomes have understandably increased since **oil** development began and the NSB was formed. Nearly **all Inupiat** households consume subsistence foods, and 45% obtain **half** or more of their food from subsistence resources. This compares to **59% in** the **NANA** region and **55% in** the Yukon-Porcupine region. **Kruse** suggest that the significantly lower subsistence food consumption **in** the North **Slope** region is due **to** the relatively **higher** per **capita** income of the region. **Kruse** further notes that within the North **Slope** region, personal income **is higher in** Barrow than **in** the other Native **villages** and that consumption of subsistence foods is higher **in** the other Native villages than in Barrow. He concludes that wage income and subsistence food consumption are inversely related (**Kruse 1982:18-19**). To put this **in** perspective, **Kruse** notes that **Inupiat** per capita income **is still** relatively low. Also, there **simply** are not enough wage labor jobs for **Inupiat** on the North Slope to **allow** for the complete substitution of subsistence resources by cash, even if the **Inupiat** wished to do **so**. Jobs available have increased, but so has the number of people looking for **jobs**. He concludes that dependence upon subsistence resources may **well** be declining but that wage employment opportunities **alone** are not great enough to provide

the economic base for the North **Slope** (or at **least** the resident **Inupiat** population). "Without these subsistence products, the average living standard of the North Slope **Inupiat** would drop far below that of the vast majority of "Americans" (**Kruse 1982: 20**).

While **Kruse** suggests a decline in subsistence resource consumption on the North **Slope**, he indicates that young **Inupiat** are as interested in subsistence activities as their elders, at least for men. Women's interest in subsistence activities may be declining (**Kruse 1982:27**). **Kruse's** information is based on self-reports of the number of different subsistence activities engaged in and the number of months during which some time was spent on subsistence activities. This does seem a better indicator of interest than of actual behavior, since self-reports of the time and frequency of behaviors are notoriously unreliable. He suggests that men and women differ for perhaps two reasons. New technology has increased a hunter's effectiveness and mobility but done nothing to ease women's subsistence activities. Women may also be focusing on acquiring the skills needed for professional and semi-professional wage positions rather than spending the time necessary to learn traditional subsistence skills. Men tend to take mainly unskilled labor, seasonal jobs (**Kruse 1982:29**, see also "Cash Economy"). Outside education seems to reduce women's interest in subsistence activities, but not men's. Increased interest in subsistence activities is directly related to household incomes (**Kruse 1982:31-32**). This means that either wage employment and subsistence activities are not **incompatible or** that different household members specialize in one or the other. It certainly suggests that cash availability heavily influences the degree to which a household can participate in subsistence activities.

Kruse examined whether the **time** spent on wage employment reduced the **time** spent on subsistence activities. Historically the two have not been in **major** conflict because both were seasonal. When the two did conflict **wage** labor usually took precedence. The time conflict has been **put off** technologically **by use** of firearms which improve the chances **of a kill** and the use of motor transportation (**snowmobiles**, outboard motors, etc..) which increase mobility and the speed of a hunt. **This** reduces the time needed **to** hunt, **but** increases the resources needed in **terms** of cash greatly (**Kruse 1982:35**). Kruse finds that **male** subsistence activities and wage employment **are** currently compatible. Indeed, subsistence activity increases **in** direct **relation** to months worked (**and**, one assumes, income) (**Kruse 1982:39**). **This** does not necessarily contradict the inverse relationship suggested between income and subsistence food consumption, however.

Kruse does not **claim** to measure the time or effort devoted to subsistence activities, but speaks **in** terms of interest in subsistence activities. He measures this **by** counting the number of different subsistence activities an individual reports that he or she engages in as **well** as by counting the months that each individual reported were spent at **least** partially on subsistence activities. His findings **could** then reflect a pattern of those **Inupiat** with higher incomes being **able** to purchase expensive equipment to engage **in** wider variety of subsistence activities, especially those which **yield** high prestige but relatively **little** in the way of subsistence food (trapping and hunting fur bearers). Most subsistence activity is reported to take place on weekends and **in** the evening (**Kruse 1982:35**). Thus, those with **higher** incomes are able to **easily** engage in quick hunts and trips to subsistence resource areas that those without such income (and the equipment it can buy) cannot make on a regular **basis**. Higher income **Inupiat** can thus engage in higher prestige

subsistence activities, but ones that yield a lower return of subsistence foods, than can lower income **Inupiat**. The **latter** concentrate on a few cost-efficient activities of subsistence food harvest. Thus, it is likely that cash is being used to widen the range of subsistence activities engaged in by reducing **the** time required (**Kruse 1982:35-39**). The **differential** availability of cash determines who can do so, however. **Kruse** does not examine the relationship between his measure of interest in subsistence activity and **actual** subsistence food consumption, unfortunately.

The situation for women is more complicated. There is no evidence for conflict between subsistence and wage activities, but **Kruse** cites different reasons than he does for men. Fewer **Inupiat** women, especially older women, work for wages than do **men**. **Women** who do work tend to work for 9 months or more. Third, women's subsistence activities are **likely** to occur in and near the home. Thus travel time is zero. **Inupiat** women who work for wages and engage in subsistence activities report that the latter take **place** mostly on weekends or in the evening (**Kruse 1982:39-40**). Women as a **whole** seem to be reducing the time spent on subsistence activities, however.

**Kruse** establishes that subsistence resources are currently essential in an economic sense. Available cash resources available to residents of the North **Slope** are inadequate to buy a completely "store" food diet even **if** they wished to. He also notes that subsistence activities may serve as a socially binding force. Subsistence resources have a predominate **role** in sharing networks. Subsistence activities are not a cure-all for the **social** stresses accompanying rapid social change, however (**Kruse 1982:43-44**). They do provide one of the few **links** of continuity to a meaningful past:



**Current** subsistence activities on the North Slope, particularly whaling, appear to provide most of the opportunities that today's **Inupiat** need to maintain a **viable** social fabric. This view, however, is yet to be supported by research. Of the many facets of subsistence that require further **study**, perhaps **its social role is most critical** (Kruse 1982:45).

### Women in the Subsistence Economy

Women have **always** occupied essential **roles** in the **Inupiat** domestic economy (see "Social History"). Their participation in subsistence activities seems to be declining, however (**Kruse 1982:29**). This certainly seems to be the case **in Nuiqsut**, especially among younger women. This may **be** a combination of several **factors**. Younger women are seeking semi-professional wage positions, are spending **a great deal** of time in **school** rather than **in** the home from ages **5-17**, and do **not** want to spend a great **deal of** time **skin sewing or making** traditional clothes when commercial substitutes are **available**. They **would** rather work for cash **to** buy something commercially available. Even those women who do sew traditional garments often use imported **fleece** or calfskin.

**We** observed no women hunters, although we were **told** of past instances when women from **Nuiqsut** have gone out hunting. **Women** did go out fishing through the ice in February and **March**, often accompanied by their husbands but sometimes **alone** or with other women. **All** these women were **at least 30**. One was the oldest person in the **village**. Nets **were** not set under the ice as people do not **like** the work involved in deicing the net. Hook and **line** fishing can be very productive, but was not during the period of our fieldwork. **Men** usually cut the **holes** through the ice after which women could keep them open.

The few active crafts people in **Nuiqsut** are women, most of whom are middle-aged to elderly. They make masks and clothing to be sold and/or given to kinsmen. This activity does not generate much income as no one person makes very many items. The school has taught skin sewing; but only one or two young women continue to make hats and mittens for sale outside of this class. These young women do not make anything more time consuming to sell. In fact, only snow shirts, hats, mittens, and masks were made for sale, **only** older women made parkas, **mukluks**, and other time consuming items and then only for kinsmen. The one woman in her 30's who had made a pair of **mukluks** said that it would be her **last** as it took too **long**.

Women are still responsible for preparing meals, especially those including subsistence **foods**. The one seal we saw eaten in **Nuiqsut** (an exchange from Barrow) was skinned and prepared by the spouse of the head of the Household 4 of our consumption survey. The head of Household 3 ate at other peoples' houses partially because there were no females in his household to cook and he preferred not to. No unmarried **female** was observed to have prepared subsistence food, but that was not something we specifically looked for. We did observe many unmarried females preparing "store" food, however.

At the present time in **Nuiqsut**, it appears that the primary role of women in the subsistence economy is as food processors. Men skin the caribou they shoot and the animals they trap, but women are responsible for everything else. This is similar in many respects to (stereotyped) Anglo-American society **at** large and may parallel the developing **role** of **Inupiat** women in the wage economy. **Inupiat** women are partial suppliers of fish, but their role as clothing manufacturer has been supplanted by commercial suppliers for the most part. Some

Inupiat males have expressed a **desire** for a traditional Inupiat life with a traditional Inupiat wife, **but their wives** seem not to have taken this to heart. One rarely, if ever, sees a **skin** parka made **with** anything but fleece. Commercial parkas outnumber **skin** parkas, **especially** for **people** 40 and under. Less than ten **people** wear mukluks on an everyday **basis**, although many more wear them on special occasions. **A women's** primary domestic function is **clearly** as a food processor and housekeeper, however.

### Nuiqsut: The Cash and Subsistence Economies

The **situation** of Nuiqsut in particular seems to **be** so of the NSB in general (Kruse 1982). Men continue **to be** more **active** **in** subsistence activities than do **women**. Hunting traditionally had higher status than domestic activities and continues to have higher status. Access to cash **largely** determines the subsistence activity **level** of any given household. Such access is usually directly through a wage earner but can be achieved through kinship based sharing networks. **It** is unusual for individuals to combine the functions of full-time wage earner and hunter. Hunters are much more **likely to be** sporadic or seasonal wage employees (Table 34). Full-time wage earners tend to be non-hunters. Just who works and **how** much depends upon **actual** household composition and available support groups. Sharing, traditional **values, and village** social organization **all** shape a household's consumption pattern.

A general assessment **of** how our **sample** represents Nuiqsut must be made. **Overall, it would** appear to overestimate the dependence on subsistence resources somewhat. Our **sample** was skewed towards **older** individuals. It was **a** household sample and so did not take into account the vast amounts of store

food eaten at the school, or the snacks obtained **at** the stores by both school children and adults, or the meals eaten **at** the restaurant. Rough estimates can be made of these amounts, and can be credited mostly to people below the age of 26.

Probably our sample adequately represents the hunters of **Nuqsut**, in terms of percentage. Our sample includes the three or four **people** most often pointed out as good hunters, however, and so may over represent the better hunters. Our gross estimate that perhaps 50% of food consumed comes from subsistence sources is somewhat greater than **would** be expected from **Kruse's** Table 2 but we **would** expect that our assessment is not too far off the mark (see **Table 32**). We have taken our three groupings and simply relabeled them so that high use is half or most, medium use **is** some, and **low** use is none.

The model developed to explain the mixture of store and harvested food consumed in any given household is that of rational beings trying to solve a problem within given boundary conditions. **All** households go through certain developmental stages--married couple, married couple with young children, **etc.** **All** families or households have certain sets of resources available, and not all sets are equivalent. Some have more kin than others, some have more workers available than others, and so **on.** The developmental stage of a household (that is, the composition of each household in terms of age, sex, and ability) seems to be the most important consideration in explaining the percentage of household food obtained from harvested fish and game. Most **Inupiat** households appear to try to maximize subsistence food use, subject to household composition constraints.

All households need cash income, both for store purchases and **to** participate in subsistence activities. **Small households** made up of **older** adults, with fewer "store" tastes, need the **least** cash income. Large households with many children, especially **school** age children, need **the most**. Households with grown children have the most flexibility **as** they can contribute **either** cash **or** subsistence resources **to** the household. At the present time, **with a** minimum cash income being necessary **for** effective subsistence **activity**, **it** is easier **to** support oneself on wages than **by** hunting. **It** is almost, if not totally, impossible to support a **family with** children by hunting and fishing **alone**. The demographics **of Nuiqsut** thus ensure that **the** cash economy is **an** absolute prerequisite for subsistence activities. There **simply** are too many dependents **for** the available providers **using** a traditional subsistence resource base. This problem **is** being **solved** by **resorting to** a **different** set of production resources, that of the wage economy.

**Nuiqsut** households have certain predictable characteristics. Parents with young children tend to have wage income jobs, although subsistence hunting is not thereby precluded (sample Households 8, **10**, and **1**). Parents with school age children require even more wage income due to the acquired store food tastes of the children (sample Household **11**). Somewhat older children can provide **for** themselves, thus requiring **less** household cash expenditure (Households **6** and **7**). Older heads of households depend upon others present in the household or their kinship network **in** the village and the relative strength of these resources determines the harvested food available (sample Households **3**, **4**, **5**, and 9--while 3 may appear to be a problem, it **is** explicated above). Households with no available hunter and school age children **will** almost certainly **rely** on cash income (Household **2**). Thus, household composition characteristics--how many adults

and how many children, who is available to work for wages and who is available to hunt, how many males and how many females--to a large extent determines the pattern of household consumption. Food preferences, which appear to be the product of age and socialization experiences, are also factors. They can be included when considering household age composition, however. Other factors that must be considered for the argument above are:

- school age children are usually not productive individuals in **Nuiqsut**, at **least** not during the **school** year;
- infants and young children eat less than **older** children and adults;
- school age children tend to acquire a taste for "store" food;
- **Inupiat** subsistence food producers are primarily (but not always) men; and
- the child-women ratio in **Nuiqsut** seems to currently be increasing.

All indications seem to be that the **Inupiat** are succeeding very well in articulating wage labor with subsistence activities. However, the disparity between the sexes in full-time wage labor functions and degree of participation in subsistence activities may cause severe social strains. This is especially likely if these trends continue. There is also speculation that if technology has been substituted to some degree for traditional subsistence hunting **skills** that a decrease in the availability of cash would cause a decrease in subsistence activity. Men who had not needed such **skills** due to snowmachines and powerful rifles would not be able to successfully hunt, lacking the financial assets to acquire and maintain the necessary equipment. This substitution does indeed seem to have occurred (Nelson 1969:111, 131, 384; Kruse 1982:33).

Kruse maintains that **at the** present such equipment **is** expensive but affordable for most **Inupiat** households. Our information from **Nuiqsut** confirms this in general but suggests that the situation is far from comfortable. There is **well** under one operational snowmobile for each **Inupiat** household (see "Well-Being" chapter). Borrowing of snowmobiles, or teaming up with one snowmobile and **sled, is not** uncommon. The resources that are concentrated on **are** those that are **least** expensive to harvest. **Fishing near the village** requires little equipment and no snowmobile, although a snowmobile is handy to transport one's **catch**. Caribou are usually nearby enough so that the expense of running a snowmobile is not great and the **time** required **is** short enough so that a borrowed one can **be used**. **No** distant fish **trips** were undertaken by villagers during our period of **field** research. Such activity has evidently declined, at **least** temporarily, as there was very **little fish** distributed at the Christmas **Feast**.

There are several possible explanations. One is that **long-range** transportation is too expensive. Another is that wage **labor** does interfere with this sort of subsistence activity. Not incompatible with **this**, we were **told** that **last** summer **large** catches **could** not be made near the **village** because the **gravel** dredging operation contaminated the fish on the drying racks with too much sand. Such nearby fish camps are the cheapest way to harvest subsistence resources.

Those resources that are most expensive **to** harvest are not sought after as **much**. Only two individuals maintain a number of traps, and even they no **longer** run a regular **trapline**. Trapping requires ownership of a snowmobile and traps, and gas to run the snowmobile. These same men are the only men who regularly hunt **wolves** and wolverines. These are chased down on snowmobile, and thus use up a great **deal**

of gas. Such usage is also hard on snowmobiles. The only subsistence activity more expensive than this is whaling (Hoffman **et al. 1978:49**). Only one man has captained a crew from **Nuiqsut**, although other men have-made-plans to do so in the future. The one active **Nuiqsut** whaling captain has not whaled every year. He is justifiably held in high esteem for his past whaling activities,

Seals are cheaper to hunt than fur bearers, but do not confer as much status. **It is** cheaper to pay to have seal shipped from Barrow than to hunt it (Hoffman **et al. 1978:49-50**). It is **nearly** impossible to buy a wolf or wolverine pelt as most hunters use **all** they can obtain. Thus it is not surprising that no seal hunting took **place** during the **period** of our **field** study but that fur bearer hunting did. People said that seal hunting was not a regular activity for them.

**If** wage employment opportunities were to become fewer, as appears **likely** to be the case now that the NSB CIP program is nearing completion, subsistence activity **would** decrease or focus still more on inexpensively harvested resources. Oil development is unlikely to create many new jobs for **Inupiat (Nebesky 1982:153, Brown 1979:39)**. The permanent jobs created by building **Nuiqsut's** infrastructure **will** not offset the loss of seasonal construction **jobs**. If and when wage employment opportunities decline, adjustments will no doubt be made. Subsistence activities **will** not cease, as they will be even more economically necessary than before and it would be logical for them to increase by emphasizing more efficient harvest. Other alternatives **would** be population migration (probably not too likely) or more use of transfer payment programs (unemployment, welfare, **etc.**).

Until better information on what subsistence harvesting activities are actually going on and by whom is available,



further speculation about the future **is** groundless. One can make statements about the future wage economy in **Nuqsut** because it **is** observable. Subsistence activities, taking **place** far from the village in many cases, are **all** but invisible. Consumption studies at **least** potentially use observable measures of subsistence activity that are on a **par with** readily observable measures of wage activity. The problem that wage activity is essentially **public while** subsistence activity remains essentially private **still** constitutes a major obstacle when examining their relationship **to each other**.

## VI. SOCIO-POLITICAL STRUCTURES

### Ethno-Historical Socio-Political Structures

Contemporary **Inupiat** behaviors are rooted in traditional **Inupiat** social organization, and are linked to traditional sets of norms and values associated with the yearly pattern of aboriginal social organization of villages and camps (Spencer 1959, **Burch** 1975, 1980). It is thus necessary to extend our contemporary analysis by including an **ethno-historical** account of former patterns of **Inupiat social** organization. Unfortunately, most reliable information concerns coastal groups rather than inland or riverine **Inupiat**. As was referred to in "Social History", it is unclear to what degree such groups were **truly** different (**Burch 1980**, Nielson 1977). Most of the people now living in **Nuiqsut** came from Barrow. Before living in Barrow they **or** their parents most commonly had an unsettled history of living on the land interspersed with periods of time spent in Barrow or other population centers. Thus, what follows may not apply so much to traditional **Kukpigmiut** as it does to the ancestors of present day **Nuiqsut Inupiat**. The **ethno-historians** do agree that all **Inupiat** societies shared enough in common so that the following outline is not **misrepresentative**.

#### MARRIAGE AND INUPIAT SOCIAL ORGANIZATION

**In** traditional **Inupiat** society, distinctions between men's and women's roles were defined through the institution of marriage and the structure and functioning of the domestic household unit. The differences in male and female roles is a vital aspect of the division of labor in the traditional hunting economy. The **complementarity** of roles between the sexes is

**clear:** men are hunters of sea mammals, **caribou**, and other game **while** women are providers **of** small game, responsible for retrieval **of** game, butchering and processing meat, and **the** domestic chores of cooking, housekeeping, and **child** care. The argument, often made by **ethnographers of** traditional **Inupiat** society (Spencer 1959; Rainey 1947; Freuchen 1961) is that marriage and sexual relations between men and women were regulated through the economic necessity of the man-women partnership for survival in **Inupiat** society.

**In fact,** more contemporary **ethnographers** such as Burch (1975, 1979) discuss the brittle and fragile nature of traditional marriage ties. Marriage is viewed as **an** economic necessity, unmarked by actual ceremony or associated taboos, and without change in **social** position as **much as** change in economic **role** and position of husband and **wife**.

The complete absence **of ritual** recognition of establishment of the basic marital **relation-ship** in traditional society indicates the **low** position held by the relationship in the **Eskimo** view of their own **social world**. Not **only** was the relationship institutionalized as weak--as I shall argue later--it was regarded as a more **or less** utilitarian arrangement by means of which the problems **of** daily existence **could** be most efficiently handled (Burch 1975:82).

This attitude towards **Inupiat** marriage seems to espouse the view that marriage is an utilitarian and economic necessity, **vital** for the proper functioning of the domestic household. Both men and women contributed **to** the **overall** functioning of the households in separate, **vital**, but not equally rewarded **in** terms of status, productive **roles**. Burch (1975) also emphasizes that authority **roles in** the household **were** unevenly divided. The husband held authority over the **use** of weapons, tools, and boats, **while** women were responsible for **all** household goods, including the butchered and processed game placed in ice cellars or storage rooms. Their power to

alienate such goods remains unclear. An individual hunter had **the** privilege **to** distribute his own kills (non-whale) as he chose, but game or meat placed in the cellar or storage area was then under the jurisdiction of the wife's authority as part of the household items and was usually used for household needs. Despite these apparent references to the complementarity of male and **female** roles, the overall position of most ethnographers has been one which emphasizes a woman's subservience to her husband and her generally **lower** status and less powerful (or independent) position in Eskimo society.

In the discussion of traditional patterns of wife-exchange, this mechanism for sanctioning extra-marital sexual relations seems to have had an economic basis. **Rainey (1947:242)** explains wife exchange as a mechanism for extending kin status to hunting partners and their offspring.

Out of this, I believe, grew the practice of wife exchange, which at Point Hope was generally a practical, not an emotional, arrangement. The immediate families of men who exchanged wives were considered to be blood relatives, and thus their children would expect mutual support. Moreover, when one man exchanged wives with another, he might expect to borrow his boat or hunting gear when a critical need arose. The practice drew unrelated families together for mutual support and protection and was a recognized method of extending the family membership (**Rainey 1947: 242**).

Although **Rainey** also **mentions** that women often found wife exchange unsatisfactory and complained of these imposed sexual relations, it seems apparent that sexual relations promoted and strengthened economic ties.

**Burch (1975:109)** found among his informants that the most plausible explanation for co-marriage was the extension of kin relatives over a short period of time. He then asserts

that exchange or co-marriage furthered alliances between different regional Eskimo societies. Clearly the **formal** sanctions of extramarital relationships through the mutual consent of **all** four members of both couples served as a mechanism for extending fictive kin relationships. We have seen that sexual relationships between a man **and** woman combined with co-residence constituted marriage as an economic institution. Given this, sexual relationships governed through principles of wife exchange mediated a set of economic and **social** relations through principles of fictive **kin** affiliation which then **could** be extended **beyond** the shared **sexual** partners themselves.

The threat of infidelity and jealousy was seen as one of the major threats to marriage and economic and **social** stability. **In** the case of **divorce**, the breaking of the residential **tie** was **usually** a **result** of either infidelity and jealousy or the **lack** of economic participation of one marital partner. **Burch (1975:92)** states that neither partner had recourse to **legal** sanctions in marital grievances. **In** the case of a husband's grievances, a man **always** had the option of resorting to physical coercion through wife-beating. A wife, on the other hand, usually employed the informal sanction of nagging her husband. **In** some cases, she might **call** upon her brothers, fathers, and relatives for support against her husband. Here the use of kin ties to impose informal sanctions in marital strife confirms the impression that although marriage did promote **affinal** kin affiliations, it was a brittle form of alliance that **could be** overridden by **consanguineal** kin ties.

There are several principles which are inherent **in** the institution of marriage in Eskimo society. First, if the contention that marriage has a **stronger** economic function than a **social** function is correct, then values associated with traditional **Inupiat** society would stress: **1)** marriage as the

institution which resulted in the production of children as economic insurance in **old** age, and 2) marriage sanctioned sexual and social relationships which promoted the economic partnership and division of labor between sexes in a viable household unit. The dissolution of marriage would be seen as having an **"economic"** impact more than as a loss of social status or sexual privilege. A spouse who did not fulfill economic responsibilities in the economic sphere was breaking the very basis for this tie. Moreover, infidelity resulting in jealousy could be viewed as "breaking" the property basis for the marriage tie. Unsanctioned sexual relations outside of marriage would threaten the "economic" bond. In any case, the argument must be made for traditional Inupiat societies that: 1) **sexual** relations which usually accompanied marital status cemented economic and productive ties between husband and wife; 2) as in most societies, non-sanctioned sexual relations outside of marriage relationships threatened the stability of marriage (whether socially or economically important); and 3) sanctioned co-marriage or wife-exchange governed social and sexual relations so as to extend economic or social ties to non-kin and their respective families.

#### MALE STATUS

The traditional cultural system of the **Inupiat** emphasized the equality of status among adult male hunters, the seasonal variation of subsistence hunting and social organization, and the complementarity of male and female roles within the domestic household unit. The process of stratification of individuals by wealth, power, or prestige was severely limited by the ecological conditions of the environment and the productive capabilities of the economic system. This point requires elaboration.

**Traditional Inupiat** social organization has been characterized by a settlement pattern of large winter coastal settlements in which village cohesion was influenced by organization for communal whale hunts. The social foci of whaling were/are the umialik or leader in the whale hunt, the karigi or the mens' house which represents membership in certain whaling crews, and nuclear or extended family households practicing a loose pattern of virilocal residence (Spencer 1959; Burch 1975, 1980). Summer residence camp groups were large multi-family or smaller household units depending upon the kinds of resources hunted, their overall availability, and the necessity for group effort hunting.

This model of hunter-gatherer social organization implies principles of flexibility and fluidity among camp and village groups. These principles govern the formation (cohesion) and disintegration (dispersal) of group membership due to seasonal variation in settlement pattern. The principles of flexibility and fluidity of groups would be applied to the organization of labor, where such factors as the kinds of resources to be procured and the skills and resources required for success must be taken into account. Different group sizes are necessary for different productive activities.

Principles of kin affiliation were not the only kind of mediating mechanisms governing social relations between individuals. The nature of leadership and the role of the umialik in seasonal whaling activities suggest that principles of achieved status on the basis of skill and access to economic resources changed the "egalitarian" nature of Inupiat society. If the umialik were to own and maintain the umiak (skin boat), a necessity if he were to sustain his position of leadership in communal whale hunts, then he had to maintain a set of relationships with his whaling crew. Some of the crew would be kinsmen and others

would not be. One problem posed in **Inupiat** social organization is simply stated: how was leadership maintained by an umialik over both kin and non-kinsmen?

Of special interest in the analysis of Alaskan social organization is the explanation of the **karigi**. Not only is this a highly distinctive institution, but also through the specific social relations implied in membership, the possibility of incorporating non-kin in stable production units is critically facilitated (Riches 1981: 79).

As in most egalitarian societies in which leadership is defined by ability, the umialik had to insure his continued prowess as a leader, as well as his ownership and continued up-keep of the equipment required. The karigi afforded him an area of influence and cemented his position of leader more fully. Whaling crew members were affiliated with the karigi of their umialik. In this sense, the karigi tended to represent a fairly stable production unit within Inupiat society.

Traditional social organization of the **Inupiat** was based upon often conflicting personal alliances to immediate family and kin, to the karigi and the whaling crew, and to the leadership of umialik:

This would place membership (in the hunting crew) on the level of the family tie but in view of the **role** played by the umialik and the fact that the crew together carried on ceremonial life as a unit, **karigi** ties seem to rest in the hunting group and to be worked out without regard to relationship (Spencer 1959:186).

The distribution of whale and other resources at the winter settlement was indicative of communal redistribution and reciprocity. However, labor and equipment demands were greater on the umialik than on other crew members. He had to maintain access to enough economic and social resources



so that he **could** provide equipment for successful **whale** hunts and **thus** gain the reputation of successful hunts. This had to **be** combined with great personal **skill and** ability to lead the **crew**.

The overall focus of winter cohesion was that of the **karigi** or **men's house**. This may **well** have been a constant, year **round**, orientation (Burch 1980:271). The idiom of leadership and unequal access to leadership roles had a strictly "**male**" context. Additionally, both **kin** and non-kin relationships had to be emphasized **in** the traditional **social** system:

**In** summary, the individual belonged **to** a **family** unit which consisted **of** his nuclear family group and extended **circle of kin**. He had non-kin associations with trading partners, friends in his **joking** partners, relations to **an umealiq** in his crew membership, and he was tied, by virtue of this **last**, to a karigi (Spencer 1959:192).

This pattern **of social** relations among **male** household heads **in Inupiat** societies is of particular interest for **interpreting** the principles of egalitarian hunting-gathering societies **in** a contemporary context.

Woodburn (1982) divides such societies into two types--those with "short-delay" production systems and those with "**long-delay**" production systems. "Short-delay" systems are more individualistic and less structured than "long-delay" systems. The traditional **Inupiat** winter settlement system was a characteristically "long-delay" **type**. **Whaling** constituted **an** activity that required leadership **planning**, organizations group decision-making, and teamwork. Leadership was achieved through individual qualifications as a **hunter** and was marked by boat ownership. The notion of property ownership by male household head defines this egalitarian **model** of society as composed of more "**equal**" status for the male household head than for other **family** members. In addition, leadership is

the result of the abilities of the most capable hunter who must then also maintain access to invaluable equipment such as skin boats, harpoons, and such.

Thus, the egalitarian principle is modified by unequal achievement and the exercise of personal leadership as well as the unequal ownership of important equipment. Competition among crews (and cooperation within each crew) enters into the valuation of each umialik's status. While consensus appears to be at the base of contemporary Inupiat political and economic spheres, the traditional pattern of umialik leadership indicates that group decision-making is, in certain circumstances, the **result** of leadership. The position of the **leader** is based upon competitiveness, economic advantage and access to resources, proven and recognized abilities, and the ability to attract followers. In fact, there are contemporary situational contexts where leadership positions are obtained through competitiveness and the transformation of access to cash resources into subsistence equipment, when combined with kinship ties and proven and recognized success as a leader. The relative importance of these factors is not **always** easy to determine in specific cases. We **will** make some attempt at this later in this section. In Nuiqsut the position of mayor has always been occupied by an umialik (except for a brief transitional period about which we can obtain no **public** agreement).

Other leadership positions in the village apparently do not follow this recruitment pattern. At the same time, they seem to have the same requirements as traditional leadership in the sense that the leader is expected to command presence and maintain greater access to resources than do other community members. Leadership recruitment within the Village Corporation is not based so much upon **solely** traditional **skills** as it is on education and experience in both the

Inupiat and Anglo-American worlds. This flexibility is no more a recent development than is the umialik pattern:

The life of the traditional Point Hope people was focused to an extraordinary degree on the harvest of the bowhead whale. On the pursuit and capture of this single species was lavished a substantial quantity of their time and energy, as well as a major portion of what Wanniski (1979:55) has called their "intellectual capital". But the large human population which was made possible by the successful pursuit of this huge marine animal was unsustainable by the harvest of whales alone. The Point Hope people had to harvest other species in order to survive. If this study has any thesis at all, it is that the Point Hope economy, hence the Point Hopers' use of their land, was much more comprehensive and sophisticated than either Native Theory or the Literature would suggest. Whales were merely the central focus of a relatively complex subsistence system which incorporated virtually every food resource that the region had to offer (Burch 1981:2).

We do not argue that all leadership roles require the characteristics of an umialik, or that the same resources are necessarily mobilized in attaining all leadership positions. Many positions are so filled, however, among them those that are most visible in the village. This is understandable in terms of the central metaphor of Inupiat life (the "intellectual capital" of whaling which dominates so much of Inupiat thought).

#### FEMALE STATUS

A women's status in traditional Inupiat society was identified with that of the nuclear family or household group to which she (more or less literally) belonged. Spencer (1959) alludes to the fact that women prepared meals for the family, including their husbands and sons who stayed

at the karigi in the winter settlement. The implications of this description are clear. The women maintained their own households separate from the karigi and yet still provided food for the communal consumption of their male household members who spent considerable time in the karigi. It would appear that there was little political or social equality between the sexes. In addition to the obvious division of labor between male activities of big game hunting (sea mammals, caribou, bear, etc.) and **female** activities of fishing and small game hunting, it has often been noted that women conducted the necessary household tasks such as child care, food preparation, skin sewing, preparing hides, and skinning and butchering animals.

The set of values in an egalitarian society distinguishes between men and women in such a manner as to establish the necessity for women as a fundamental but not necessarily equal element of each household. The division of property between women's equipment and men's equipment in the household also indicates a principle of mutuality and a recognition of the separate, complementary, and vital role of each of the sexes. Despite this notion of mutual dependence the problem remains that any principle **sexual** equality was overridden by male preeminence, most obviously during the winter when cohesion was promoted through **male** membership in a karigi and affiliation with a **whaling** crew and umialik. As in most "egalitarian" societies, only male-male relations usually fall under this ideology. Men have much greater independence than women, both ideologically and pragmatically.

If we examine the role of women in whaling ceremonies, it is apparent that the umialik must have benefited from his wife's organizational abilities to supervise the other crew members' wives in the preparation and sewing of the new skin covering the umiak frame (Spencer 1959:334). In the four

days of ritual before the onset of the spring whaling season, the umialik's wife had to perform rituals associated with the umiak that would carry the crew to its successful capture of a whale. In this sense, the umialik's wife's position was complementary to his leadership role. By virtue of her relationship to the umialik, she took social and ceremonial leadership among the women of the whaling crew's members. In a ritual context, she held a significant role in emphasizing her husband's claim to leadership through her productive and ritual position vis-a-vis the umiak, her husband's materially symbolic claim to leadership. Although women did not have equal status in the winter village, they contributed necessary productive labor in the preparation of food for the karigi, the sewing of the skin boat, and in the case of the umialik's wife the symbolic legitimation of her husband's leadership position.

In contemporary Inupiat whaling practices, the umialik's wife continues to play this role of provisioning the crew members and conducting rituals associated with the whale and the subsequent feasting events (personal communications). One Nuiqsut informant mentioned that she had traveled in the umiak with the whaling crew during her husband's last whale hunt. In this sense, leadership has a duality of both male and female roles. Although the idiom of male leadership prevailed traditionally, the role of the umialik was supported by the complementary role of his wife. Their roles were separate, complementary, and unequal. This sexual inequality was culturally recognized. The fiction of egalitarianism among males and households was maintained by the distribution of whale among crew members, their kin, and the village community at large at the preparatory feasts before the onset of spring whaling and again at the whale feasts after a successful hunt.

Thus, umialik leadership had its ultimate social and **ritual** expression through the household and extended kinship units. The whaling crew is a male hunting group which does not override and is indeed dependent upon the **social** and productive organization of the basic household unit. The duality and complementarity of male and female **roles** may have served to maintain the flexibility and fluidity of **Inupiat** social organization. Cohesiveness in the winter settlement was promoted through the karigi while the independence of camp groups during the summer and **fall** was maintained through the kinship principles of immediate kin defining a household unit.

In contemporary **Inupiat** social organization, whaling crews bound to the leadership of whaling captains no longer engage in formal karigi activities. The continuities in **social** relations and values associated with subsistence whaling rest with the leadership position of the whaling captain and the alliances of individual whaling crew members to the captain. In contemporary **Inupiat** society, and in **Nuiqsut**, information about whaling crew membership indicates recruitment and alliance based upon kinship. If Spencer (1959) is correct, whaling crew membership and karigi membership included both kin and non-kin relations. The influence of new patterns of social organization due to Western cultural and religious influences may have resulted in imposing a system of kin-based alliances on the whaling crew as a substitute for the extra-familial institution of the karigi. This point remains debatable. **Burch's** ethno-historical analysis of **Inupiat** societies indicates that an individual's affiliation to a whaling crew and other hunting groups was based upon kinship alliances (**Burch** 1975, 1980). Nonetheless, whether one accepts a model of kin based affiliation or extra-familial affiliation to a umialik and thus to karigi, the issue for explanation of contemporary **Inupiat** social organization remains the same. The traditional principle of

egalitarianism **is** based upon equal but competitive status **roles** of **male** household members and the affiliation **of male** household members to a whaling **crew**. This must be juxtaposed against contemporary Western **social** organization that stresses inequality of status position, whether ascribed or achieved, **and** affiliation through **Western** economic **and** political system.

#### EGALITARIAN LEADERSHIP

Despite the great contradictions between traditional **Inupiat** social organization and the influences of Western **social** organization, contemporary **Inupiat** behavior can be seen as integrative. Traditional practices of reciprocity and redistribution, along with the leveling mechanisms which controlled status, wealth, **and** power accumulations in the **winter** settlements, continue to shape and influence contemporary **social** organization and their attendant **social** and cultural values. **The following** arguments **will review** the current literature on egalitarian hunting-gathering societies and delineate the manner in which the principle **of** egalitarianism is maintained **in** contemporary **Inupiat** social organization. The contradictions and **discontinuities which** remain **in** contemporary **Inupiat** social organization arise out **of** the disparity of the traditional **values** associated with **winter** settlement social organization and those of the **class** and economic structures of contemporary American **social** organization.

**In Woodburn's** discussion (1982) of African egalitarian societies, he explores the issue of how hunting-gathering **societies** prevent the unequal accumulation of status, wealth, or access to resources among individual hunters.

The principal occasions in which individuals in these societies are brought into association with valued assets which could be accumulated or distributed to build status are when large game animals are **killed**. And **it** is then that the most elaborate formal rules disassociating the hunter from his kill and denying him the privileges of ownership are brought to bear. Leveling mechanisms come into operation precisely at the point where the potential for the **development** of inequalities of wealth, power, and privilege is greatest (Woodburn 1982:440).

This situation can be generalized and applied to traditional **Inupiat** society. Spencer outlined the division of the whale as follows: 1) the muktuk was divided amongst all present members of the community, 2) each individual was allowed as much meat as he could carry, 3) the flippers and the heart belonged to the boat owner, 4) the meat **was** divided by the crew responsible for taking the whale, and 5) the meat was divided by crews assisting the successful whale crew (Spencer 1959:345:346). In fact, it should be obvious from Spencer's account that a successful umialik could not amass wealth after **fulfilling** his social obligations through communal feasting unless he captured more than one whale.

The successful **umealiq** paid off his obligations when he had taken a whale. Indeed, having feasted the community and seen that his crew was properly provided by meat, there was little left for the **umealiq** himself. His wealth began to increase only when he took a second whale. He had obligations for those who had been of assistance in any aspect of the preparation for whaling. These included any **anatqut** who may have helped with magic and songs, the **kaakliq**, the artisans who may have made such items as the special mittens, the pot, or the like (Spencer 1959 :347).

The mechanism of muktuk and meat distribution among community and whaling crew members, in addition to the payment of social debts to craftsmen, shamans, and kinsmen, greatly reduced the



potential for wealth accumulation. There does seem to be a provision for the accumulation of wealth if a umialik could be successful in the procurement of more than one whale in a given season. Power and prestige accumulation could only occur with successive yields from whaling. In this manner, the advantage of occupying the position of umialik lay in the power and prestige afforded by successful whale hunts. Yet the accumulation of power and prestige in the egalitarian Inupiat society would probably engender no greater permanent position for the leader than for any other member of society, since it would then be his continued responsibility to maintain this position of umialik. Power and prestige may have afforded him some "edge" over competing umialik, but he still had to maintain his position and standing through generosity, distribution of his wealth, and maintenance of equipment.

Herein lies the distinction between what Woodburn (1982) labels as the effortless egalitarianism of a short-delay procurement systems and the competitive egalitarianism of a long-delay procurement system. The Inupiat, especially with respect to coastal whaling subsistence practices, invested great amounts of equipment, organization, and labor in the procurement of whales. As such, the cohesion of winter settlements represented a long-delay procurement system. Egalitarian status relationships could only be distributed among the male whaling crew members. Household members such as wives, children, and young sons were expected to support their household members who belonged to a whale crew and a karigi. If we subscribe to Woodburn's argument (1982:446) that "keeping up with the Joneses may be hard work, but keeping up with all other male adults of a community is incomparably harder", then tradition! Inupiat society must be characterized as that of competitive equality in which competition for wealth, power, and prestige is expressed

through the position of the umialik.

The success of **Inupiat** social organization and culture was the result of the dynamics between processes of personal competition and those of personal cooperation. Competitive-ness leads to increased subsistence harvests and to the emergence of recognized leaders to coordinate the whaling efforts (which itself required cooperation among the whaling crews). Certain social institutions and **ritual practices**, such as the karigi, division of whales, and whaling festivals served as processes for the redistribution of accumulated wealth resulting from the harvest and insured the availability of adequate resources for the entire population. Redistribution also served to maintain the competition and made it necessary to renew or reaffirm leadership through continued successful efforts, assuring that leadership would be maintained as an achieved status.

**While** the system may never have been truly static and there were always fluctuations in leadership patterns and competition, these oppositional processes resulted in a dynamic equilibrium and a stability of overall social organization. This reconciled what may have appeared to others to be irreconcilably opposite forces of competition and cooperation. The leveling mechanisms in **Inupiat** society such as social and economic obligations to crew members and kin and general responsibilities to the community apparently mitigate the effects of surplus production. Foodstuffs and other non-durable goods are rapidly redistributed. Capital goods and equipment pose more of a problem, as shared use of a privately owned and maintained durable good is an asymmetrical relationship between owner and fellow user with little chance of role reversal.

Today, egalitarian competitiveness remains an important feature of modern **Inupiat** community organization. Thus, it can be said the North Slope **Inupiat** have been successful in adapting to the competitive roles of leadership in a Western capitalist society. Modern **Inupiat values** of competition remain supported by traditional **Inupiat social** organization. The traditional system based upon the principle of **equal status, wealth, power,** and prestige among **all male** household members remains strong despite the presence of Western leadership roles.

**For** example, among contemporary **Inupiat** whaling captains, cash resources accumulated through wage labor and access to Western economic **or** political influences allows the **modern-day umialik** to transfer **or** transform his cash accumulation into boat ownership and other whaling equipment. **If** this is the case, then we **would** expect that access to cash resources would **allow** any man to qualify for the status of **umialik**. However, not every man who can financially afford to do so can actually achieve a position as a whaling captain (although there is some evidence that more men than before can do so). Although the modern-day **umialik** can transform material cash resources derived from the Western society into the traditional **symbol** of boat ownership, he must **also** subscribe to traditional patterns of leadership. That is to say, he must participate in the leveling mechanisms which require that he display great generosity towards the **village,** the whaling crews, and his **kin** and satisfy all other social and economic obligations engendered **by** the whale hunt. His competitiveness must be tempered through a system of traditional principles with which he establishes his leadership **role** while maintaining egalitarian principles with respect to the accumulation of wealth, power, or privilege.

Great accumulations of wealth, power, or prestige among contemporary whaling captains in Barrow and **Nuiqsut** do happen. When a whaling captain's possessions, power, and position are not accompanied by traditional acts of generosity and social equality, conflicts and contradictions between the traditional and contemporary definitions of status occur. It is this contradiction between traditional Eskimo **values** and contemporary Western values that creates disintegrative aspects of contemporary **Inupiat** society. For example, if competitive equality represents the basis of traditional leadership **roles**, then an individual who **successfully** amasses status and position by virtue of his role as an **umialik** is expected in traditional terms to be a leader without great accumulation of wealth, power, or prestige.

#### Present Leadership

People in **Nuiqsut** seem to regard the office of mayor as another sort of **umialik-position**, so it is natural for mayors to be **umialik**. Both are decision-makers for relatively permanent groups of people. The size of the village, a permanent settlement made possible by the introduction of non-traditional resources, seems to have fostered the development of a "super **umialik**" mayorship. The extension of this pattern would then seem very natural.

The present mayor of **Nuiqsut** is a leader who fulfills traditional criteria for leadership, while differing somewhat from the mayor he succeeded. The first mayor led the group from Barrow which refounded **Nuiqsut** in 1973. He has lived in the village ever since (when not in Anchorage on business). The present mayor has had a long political career in Barrow, twice serving as mayor, and "retired" to **Nuiqsut** in 1980, only two years before he was elected mayor. Both men are closely

related to many people in the **village**. However, the **first** mayor **is** registered under the **Alaska** Native Claims Settlement Act (**ANCSA**) as a resident of **Nuiqsut**. The present mayor is registered under the **ANCSA** as a resident of Barrow (his wife is registered **in Nuiqsut**). The present mayor may **be** more closely connected to the powers that **be** in the North **Slope** Borough than the first mayor **is**.

The two display quite different **styles of** leadership. The present mayor has a **large** household, is usually physically in residence in the **village**, and does not appear particularly wealthy. He emphasizes sharing and helping. One may even suggest that this **individual would** undermine his political position in traditional terms were he to begin to emphasize **his** unequal status with respect to wealth, power, and prestige. His experience in two of the most important **political** processes affecting the **Inupiat**, the passage and implementation of the Alaskan Native **Claims Settlement Act** and formation of the North **Slope** Borough, make him **part of a** powerful political network. Combined with **his** success as a **umialik**, he has a reputation **for** unselfish service to his people. He strives as mayor to maintain this.

On the other hand, the former mayor does not have **nearly** as much a reputation for service, even though he has been the **only umialik** to capture a **whale** with a crew from **Nuiqsut** (**all other Nuiqsut umialik** captured their **whales** before they moved **to Nuiqsut**). He is a successful businessman, at the time of our fieldwork heading a native-based (and native service oriented) corporation, and appears to be relatively wealthy. He is **able** to maintain a semblance of **equal** status with other community members through a set of modern leveling mechanisms: 1) his income has been at least partially spent and invested outside of the North **Slope**; 2) he emphasizes his long experience and continued success whaling; 3) he expresses

values of generosity through the distribution of subsistence food at community feasts; 4) his business role enables him to distribute wage labor positions (at **Prudhoe** Bay, etc.) among community members; and 5) while much of his time must be spent outside of **Nuiqsut**, his wife and children continue to live in the community as one household among equals.

In both instances, a parallel can be drawn such that both leaders have managed **to** subscribe 'to traditional **Inupiat value** systems that emphasize competitive equality. The former mayor can be seen as a success in terms of both **Inupiat** cultural values and of Anglo-American standards through his access to economic and political positions. He may, indeed, have been too successful in this regard. The former mayor is the topic of much more village gossip than almost any other person in the village. The truth or content of such loose talk is immaterial here and impossible for us to judge, but its existence results from the former mayor's ability to amass and use resources as well as his highly visible community roles. Gossip is one mechanism a community uses to promote egalitarian **competitiveness**. People perceive his success, but may wish the benefits to be distributed differently.

In the community arena, the former mayor tries to emphasize his equal, rather than unequal status with other community members. He does this by sharing his success in last **year's** whaling and through his continued distribution of wage labor positions to other community members. He simply cannot please **all** of the people all of the time. In contrast, the current mayor is not **expected to** display economic wealth and thus maintains parity with other community members. Generosity is not the same as wealth. The present mayor shares what he has in what others perceive as an equitable way. From this perspective, we suggest that traditional

definitions of leadership continue to be exhibited in contemporary Inupiat **social** organization. **Leadership roles** in a traditional **Inupiat** idiom have survived the imposition of **Western** economic and political institutions, most clearly through the activities and organization of subsistence whaling (**Burch 1980:267-268**).

Organization of contemporary **Inupiat** men into whaling crews with each crew aligned **to** a whaling captain preserves the aboriginal pattern--competitive **equality** among male **household** heads and leadership based upon responsibility, **proven** ability, and generosity towards the community. Furthermore, capital accumulation of money **can** be transferred from Western economic sphere into the traditional **Inupiat** subsistence sphere. **This** buffers **traditional** activities from the potentially disruptive effects of wage **labor** and **also** serves as a leveling mechanism. A whaling captain's economic and social wealth is invested **in** whaling equipment and **in** provisioning crew members. **This** can easily total over \$10,000 (**Worl 1980:313**). Individual cash resources gained in the Western economic sphere seem to be seldom invested in the community itself, except in the context of subsistence whaling. **The** successful **whale** hunt thus allows contributions from the cash economy to be redistributed to the community in **the** form of subsistence **food**. The importance of subsistence **whaling is** considerable because both **participants** and community members are **able** to reinforce **their** own **Inupiat** cultural **values** through traditional **ritual and** subsistence activities, and by conducting their modern version of the leveling mechanism of egalitarian redistribution (**Worl 1980**).

The frequent conflict of cultural values between the **Inupiat** way of life and Western standards of **living** cannot be ignored. **Koster** talks about the "**proletarianization**" of original native

populations by administrative bureaucracies (**Koster 1978: 179**). However, this obvious set of conflicts is usefully examined within the **ethno-historical** context of traditional Eskimo social **organization** presented above. Today the complexity of community and social organization in **Nuqsut** involves the rapid establishment of economic, political, and bureaucratic institutions of Western society. Obviously, the development **of Western** institutions since the founding of **Nuqsut** in 1973 creates a mammoth set of conflicts for an **Inupiat** population many of which expressed a desire to form this community as a continuation of a traditional subsistence lifestyle. We will discuss this below by examining the sorts of leadership positions which exist in **Nuqsut** and considering them in terms of the resources that are used to create (attain) and maintain leadership positions

One such resource not yet examined is followers, perhaps because followers are so much taken for granted. In order to understand **Inupiat** leadership, it is useful to discuss **Inupiat "followership"**, the rules which logically constrain leadership. Such behavior is often easily observed and yet is often neglected by observers. In contemporary **Nuqsut** political and social settings, **followership** is demonstrated by deference, whether by people's attitudes towards speakers, the speaking order itself, or by simply not initiating actions or conversation. By this deference to those persons who are allowed to lead and speak for them, the leadership pattern is reinforced. As with the **umialik**, present political leaders and elected officials fill positions of leadership only as long as there are followers. **Seldom** will leadership change as a result of confrontation or a **single** event, and it is only with the establishment of systems of balloting and election that decision points are institutionalized and leadership transitions made abrupt.



A characteristic pattern demonstrating **followership** occurs **at public** meetings and hearings. Those present defer **to those** persons who regard themselves as leaders and who usually speak first, after whom come others who habitually support the initially presented position. The rise of a leader can be as **rapid** as the leader has opportunities **to lead**, as **other will** defer to the actions **and** directions as **long** as they are not directly harmful. However, the **fall** of a **leader** is usually the-result of a gradual withdrawal of **followership** (with elected officials, **this** decline precedes the **formal** recognition of **an** election **loss**).

Deference also influences day-to-day decision making within councils and other **groups** and is carried **over** to elected officials whose leadership tasks one might expect **to** include decision making. Here the pattern **is** similar, where people are reluctant to take any action (positive or negative) and adopt a deferral pattern. However, **should** any participant in these events initiate a direction, in the absence of strong opposing feelings, others may simply defer (**or** acquiesce) and let that direction **go**. This **is** a central characteristic of village decision-making.

Some observers, noting the extreme amount of deference paid to leaders by the rank-and-file (followers) in the villages such as **Nuiqsut** are tempted to use the word "apathy". Such a view does not do justice either to the **people** involved or to the complexity of the situation. **While** it is true that shareholders of the **Kuukpiik** Corporation have never asked to examine its financial records, and that **public** attendance at City Council meetings is generally very **low**, and that **meaningful** discussion (that is, about matters not already known) seems rare at **public** hearings, **all** these behavioral descriptions leave out the **Inupiat** context within which they occur. Such acts would imply a mistrust of the **leader** by

his public, and would be keenly felt. A silent presence, **or** a trusting absence, is taken as the basis for a leader's public support. These **Inupiat** values often conflict grossly with the formal mechanisms that have been introduced to the North Slope, and this conflict is the **source of** much **cross-cultural** misunderstanding.

A conscious sense of accountability to the public, according to what informants have told us, is foreign to the Inupiat. Even to raise such a question is insulting, as to achieve a traditional leadership position a man had to be respected. A personal style of leadership within a small group society ensured that leaders were for the most part responsive to their followers, and that followers could rely on their leaders. As levels of government become less personal and the issues dealt with become larger, the developing **style** of **Inupiat** leadership and **followership** will be crucial. The balance between leaders and followers is **seldom** precise or static. **How well** traditional **Inupiat** values are melded with formal institutional structures will determine to a great extent how active the "average" **Inupiat** will be in making crucial future decisions.

This problem of scale is frequently encountered in situations of **social** and cultural change. Traditional **Inupiat** leadership was exercised among local kin groups (the "local families" of **Burch 1980:263**). The population dislocations which have resulted in the widening of such kin-related networks from relatively narrow geographical areas to the entire North Slope may well contribute to resolving the scale problem. Local, kin-based, patterns of leadership could then be applied borough-wide in **larger** contexts. Indeed, this seems to be what has happened.

## Political/Economic Relationships--Issues and Leadership

### INTRODUCTION

The administrative structures established by the Alaska Native **Claims** Settlement Act contain certain inherent conflicting interests and introduce **basic** problems in relations among governmental authorities. The division of surface and subsurface rights between the **village** and the regional corporation ensures that any mineral development project will have regional review. **It also** ensures a **local** voice in such projects developed **on village** corporation **land**. However, it **also** creates a dependence of the village corporation on the regional corporation **which** gives the **latter** considerable leverage, **should it** choose to exercise it. Both are for-profit **organizations**, so that the smaller often has **less** freedom of action than **the** larger. This has, **so far**, worked out. The Arctic **Slope Regional** Corporation appears to be relatively benign to **Kuukpik** Corporation, as both are interested in providing funds and jobs to **local** people. **So far**, **Kuukpik** has not been in a position to do so **to** any degree **on its own**. The North **Slope** Borough or **ASRC** have **always** been involved.

The corporation (**ASRC** and **Kuukpik**) and the governmental **units** (the **NSB** and the City of **Nuiqsut**) **also** have the conflict of profit interest versus resource protection and redistribution. Attempts to run the corporations **within** the framework of the common good are more successful **in** theory than in practice. The **result** is a village corporation such as **Kuukpik**, which was two million dollars in debt when its current president was elected to office. It has since partially recovered, thanks in no **small** part to **ASRC**, but as **Kuukpik's** accountant put it, the corporation tries to feed its **people** more than run **itself** as a business. Nonetheless, the corporation often

resists the service demands **of** the political bodies as uneconomical ventures.

The segregation of concerns, awareness, loyalties and values that **Worl** et al. (1981:186) talk about thus has begun to appear. There is **still** a shortage of qualified individuals willing to fill leadership roles. However, the housing of the **Nuiqsut** City Office in the **Kuukpik** Corporation Building, which was an advantage when their administrations consisted of the same people, is no longer so clear. A private conversation, and even record security, in such a situation is impossible to maintain. The city **clerk** is very aware of this, both from her attempts to protect the confidentiality of city records and from the resentment sometimes expressed by **Kuukpik** Corporation officials at her proximity. Such a development clearly indicates the development of institutional interests which compound the political/kinship factionalism already present.

#### ISSUES--LAND

**While** we were in **Nuiqsut**, perhaps the clearest issue bringing these conflicts to light was that of **land** conveyance, and of **land value** in general. The basic situation is simplicity itself. The North Slope Borough wished to begin construction on the newest phase of its housing Capital Improvement Project in **Nuiqsut**. **To** do so, it needed title to the lots upon which the houses would be built. The **Kuukpik** Corporation present **legal** title holder to the land, was prepared to sell the **land** once an agreeable price was negotiated. However, members of the **Nuiqsut** City Council objected to this. Under Section 14(c) of ANCSA, each village corporation was to convey title of 1,280 acres of its **land** to its municipality. This has yet to be done in **Nuiqsut**. As the city has no

source of **income** except for **grants** generated **by the city clerk**, which are quite specific **in** terms of for what they can be spent, some **people** thought that the money from the **sale of house lots should go** to the **village**. They, therefore, pressed for a delay in construction **until** Kuukpik Corporation conveyed **title** of **1,280 acres** to the **village**. **There is some** question in the **village** as to whether this **1,280 acres should include** the **land** under present structures **or whether it** is meant **only** for "growth expansion". **The** city passed a resolution to **hire a lawyer** to contact Kuukpik Corporation requesting conveyance of the land. **He** was to sue **for such** conveyance if necessary. "**Kuukpik Corporation** was evidently **at** the same time negotiating **their gravel extraction coventure** with ASRC, which ran into some problems from the NSB. **The easiest way to follow this** dispute **would** be to relate events as they unfolded at City Council meetings. **We will** then be **able to talk** about interests, leadership, factions to some degree, and the influence of **non-Inupiat** upon **Inupiat** decisions.

**We did not arrive in the village until** November 16, 1982.

The first meeting which discussed the transfer of **land** was on November 1, 1982. The subject **was** brought up by the presence of a lawyer and a **land** consultant from Anchorage, evidently invited for this purpose, **in** the context of the necessity of the Kuukpik Corporation to transfer **city lots** to **the NSB to allow** construction to start. **The** construction materials had **not** yet been transported **to Nuiqsut**, due to various delays, and the NSB and **Blackstock (the** subcontractor) wanted to clarify the land ownership question as soon as possible. **It** is unclear whether Kuukpik Corporation representatives were present as **well**, or what was **really** said, as the minutes are rather **terse**. Five of the seven council members were present.

At the meeting of December 6, the issue was discussed again. Representatives from the NSB Planning Department (housing), **Blackstock** Construction Company, and the **Kuukpi k** Corporation (the president, the chairman, the accountant, and one at large board member) were present, along with the city **clerk**. In addition, a researcher, one **non-Inupiat** villager, and three **Inupiat** villagers, attended. The meeting began at **7:41** p.m. and ended at **9:50** p.m. with the **land** transfer issue taking about 45 minutes (**8:15 - 9:00**). Another meeting was **scheduled** for the next day. This business was brought up after the **ASRC -- Kuukpi k** Corporation gravel deal was introduced by a letter and tabled. The housing situation was summarized to the council as a "three member party". Three corporate entities, each with its own interest, are involved. The North Slope Borough wants to build houses in **Nuiqsut**, for which it first needs to obtain lots. The **Kuukpi k** Corporation wants to sell the **lots** but at a higher price than the NSB wants to pay. The **Nuiqsut** City Council wants the houses and is seen as unofficial mediator, and may **itself** feel that the city is entitled to receive the proceeds from house **lot** sales.

The basic argument, at this meeting, was over the value of the **land**. The NSB assessed surface rights, which is all that the **village** or **Kuukpi k** Corporation **would legally** have to sell anyway, at \$.25 per square foot, or \$4,800 for the standard 200' by **100'** **Nuiqsut** house **lot**. The NSB wanted to purchase 22 lots for houses, two for the **health clinic to be constructed**, **and** the two on which the new firehall stands, for a total of 26 lots for \$124,800. The last house **lots** had been sold for \$3,000 each (\$.50 per square foot). **Kuukpi k** Corporation, speaking through its accountant, assessed the land at **\$3.25** per square foot, or \$65,000 per **lot**. This would be \$1,690,000 for 26 **lots**. The main sentiment expressed at the meeting by **non-Kuukpi k** people (residents who may be **Kuukpi k** Corporation shareholders, but who are not officers) was that since the

people who moved into these houses **would** have **to** buy them from the NSB, and since the land **price** was **built** into **the** purchase price, the lower the land price the better **it would** be. The **Kuukpik** Corporation accountant then suggested that, as at present the city had no assets except its (potential) **14(c) land**, to set too low a value on this **land would** be very short sighted. **What was** needed was a united City **Council--Kuukpik** Corporation front to negotiate with the NSB. The mayor said that people were applying great pressure on him to get the housing construction started because they needed the employment. **He** thought that the NSB knew they needed the jobs **badly** and so were trying to obtain the **land** at a cut-rate price. **Kuukpik's** accountant again talked about **Kuukpik's deal** with **ASRC** which **would** potentially create jobs for **Nuiqsut** independent of the NSB. **It** was agreed that there would **be** a joint City **Council/Kuukpik** Corporation open meeting the next day, after more talk of the necessity for a united city-corporation front.

The meeting of December **7**, 1982 began about **3:05 p.m.** In attendance were six City Council members, five **Kuukpik** Corporation people (the president, the chairman, the treasurer, the accountant, and one of the **at large board members**), one researcher, one other **non-Inupiat**, and **two Inupiat villagers**. **It** discussed the **Kuukpik-ASRC gravel** agreement until **3:22 p.m.** **As laid** out by **Kuukpik** Corporation's accountant, the coventure **would** relieve the corporation's debt, give it access to a money-making investment, and increase **local** employment. City approval was not needed as the land involved was **Kuukpik land**. This discussion was made pertinent when the mayor asked how **Kuukpik could** agree to transfer **1,500** acres of **land** to ASRC at essentially \$.02 per square foot and then ask **\$3.00** per square foot for housing lots, especially when construction cannot start **until** the lots are transferred and people are desperate for work.

**Kuukpiik's** accountant explained how the **Kuukpiik-ASRC** gravel agreement was not a sale as such. The land is transferred to ASRC in exchange for a debt reduction and the right to share in subsurface mineral rights. Surface damage payments are also a possibility. This investment has enormous income potential, he said.

There was then a dispute over how much land the corporation had already transferred to the city. There was no **clear** resolution before the topic returned to land value, **In** Barrow, it is priced at **\$3.00** to \$3.25 a square foot, and in other villages at \$.08 to **\$1.00** per square foot. The **Kuukpiik** accountant repeated the argument that the land and surface rights were the only permanent resources the people had, and that as oil development came physically closer to the village and subsistence harvests were reduced, the value of land must go higher to compensate. At this point, the city clerk spoke out (as she had at the previous meeting) to draw the **distinction** between the city's interest and **Kuukpiik's**. The city only wants its land conveyance from **Kuupik**. After that, the value of **Kuukpiik's land** is of value **only** to its stockholders, as **Kuukpiik** only benefits the city by the employment it provides. A member of the council, at this point, asked what the point of the discussion was.

The **Kuukpiik** accountant explained that sand and gravel--that is, the basis of the **Kuukpiik** agreement with **ASRC--was** not the focus of the meeting. The support of the city was not necessary for that, although that deal would be easier with city support. Rather, **Kuukpiik** Corporation wanted advice from City Council on the price to ask for their (**Kuukpiik** Corporation's) land, which they wanted to **sell** to the **NSB** for house lots.



At this, the city clerk reminded the council that the lots were within the city confines, **so** that the payment should logically come back to the city. **Kuukpik** derives many benefits from the city, so if the city has any sort of representation on **Kuukpik's board**, they should **insure** that the city benefit somehow from the land **sale**. The **Kuukpik** accountant began a rebuttal, or an alternative way **to look** at the problem, starting with the corporation **giving** the city **1,280 acres** free of charge. This sparked spirited exchange **on** native allotments which contributed **little** to the clarity of the discussion. The mayor brought this to a close by pointing out that it was not **really** pertinent to the central point of the meeting. The **Kuukpik** accountant then asked the mayor for his price suggestions.

The mayor then offered a compromise. **..**"**between** the **\$.02** [per square foot] you took and the \$3.00 you are offering and the **\$.24** **the NSB** is offering". The **Kuukpik** Corporation treasurer started to "correct" this but was stopped by the accountant, who then explained again how seeing the **Kuukpik-ASRC** agreement in terms of **\$.02** per square foot was inadequate. He then asked what price the board agreed upon, stating that the mayor was offering **\$1.00** per **square** foot as a **compromise**. The mayor objected to this as potentially endangering the construction contracts, and asked what he **tell** the 60 applicants for housing who would be disappointed if the housing project were **cancelled**. The accountant agreed that this fear made sense. Housing and jobs are both needed. **Still**, what other income source do **Kuukpik** people have **if** they **do** not bargain over land value? At present, they do not get management contracts from the North **Slope** Borough so they make no money (other than as laborers) **on local** CIP projects. The mayor asked how a sharp increase in lot value in one year **could** be justified. The accountant replied that **last** year may have been a time when it was necessary to make an economic sacrifice. Now ,

the NSB wants to use **Kuukpik's** hard times as a negotiating weapon. At this point, people began to speak in **Inupiaq** and one at large **Kuukpik** board member said that high land prices just hurt people and kept jobs away.

A City Council member brought up the high cost of living in **Nuiqsut**. Jobs pay well but living costs are high. Better management around the village **would** help. Flying in diesel oil for heating makes **little** sense. The city clerk then compared the price the **school** pays for **fuel** with that which **Kuukpik** pays, to **Kuukpik's** disfavor. The **Kuukpik** accountant took this as both an attack and an opportunity. He began a speech on **Kuukpik's** current projects; a long-term, cheaper source of **fuel oil**; a better method of ordering motor gas to ensure a steady supply; a way to reduce their \$3 million **dollar** debt (including \$130,000 **still** due ASRC for first village houses and \$130,000 outstanding credit at the **Kuukpik Store**); and the benefit of City **Council-Kuukpik** Corporation cooperation to create permanent jobs. He closed with a striking offer. He said it was not a matter of \$3.00 per square foot. Whatever **Kuukpik** can get from the NSB, it will give to the city. **Kuukpik** has no money to pay **its bills** right now, but is **only** asking for village work to be done by village people. The mayor's office could be a strong source **of** support for the **Kuukpik** Corporation at NSB. After some more general discussion, he asked the mayor for a price to ask for. The mayor refused to name one, saying there are four rates and a compromise is needed. The accountant brought up the case of Kaktovik, which sold **land** in one month at **\$.10** per square foot and at **\$1.80** per square foot the next. He argued that high land appraisal leads to community health. To this, the mayor replied "The offer is \$.24, you ask \$3.00. Do we stand pat?" The accountant suggested a compromise of \$1.00 per square foot.

The mayor asked if **that would be fair** to the **Kuukpik** Corporation. The accountant said it **would** require some work. The mayor then asked if such a price **would still enable** people to buy the houses. The accountant thought **so. It** then became apparent that the **NSB** and the **City of Nuiqsut** were **having** problems finding the funding for someone to hold the mortgages on the new houses when **people** bought them. The mayor said the **NSB** was currently trying to **sell** them to the Alaska State Housing Authority (ASHA) at \$78,000 **each**. **ASHA** would demand a five percent down payment (\$3,900) **with** the buyer **being** responsible for insurance and maintenance. Failure **to** make three payments would **result in loss** of the house. **To** this, the accountant replied that much better funding was available from a native bank if a **Kuukpik** Corporation note sponsored it. **A** general and muddled conversation ensued, with no one wanting to **direct** the meeting or make a decision.

This was **halted** by the city **clerk who** asked if **it would** be wise to negotiate with **NSB**, over house **lot** prices, since everyone wanted the houses here. To do so might take a great **deal** of time. The land could be sold now at \$4,800 per **lot** with alternatives being investigated for later **sales**. A council member seconded this, especially if monthly house payments could be lowered. The **Kuukpik** Chairman reminded **people** that such payments were based on need (income available). The **clerk** reminded the meeting that the problem was that the NSB had not been **able** to find funding that the **people** who wanted to buy houses in **Nuiqsut** could **qualify** for. The mayor expressed displeasure with the ASHA **as** a funding agency. The **clerk** asked for a counter proposal. The **Kuukpik** accountant suggested if the NSB did not want to compromise on the land price, that they sell the houses to **Kuukpik** rather than have **Kuukpik sell land** to the NSB. **A** council member asked what price **Kuukpik** wanted and the

accountant said at least \$1.00 per square foot (\$20,000 per lot).

There was a series of conciliatory remarks made after this point. The city clerk spoke to bargaining strategy. The mayor agreed that a \$1.00 figure was not ridiculous and that even \$3.00 would be equitable on paper. He did not see where the NSB would **lose** money. The **clerk** spoke again of the mutual benefits to the city and the corporation. An agreement was reached to send a joint **Kuukpik-City** group to meet with the NSB Mayor to ask for \$1.00 per square foot. The mayor reminded everyone that the City Council was merely a mediator in this process, however. The accountant repeated his promise to pass on any gain from land **sales** to the city. There were general grumbling about an outside firm (**Blackstock**) getting the housing contracts, and implications that kickbacks had been involved, which strengthened the resolve to be firm on asking for their price. If they could not get the management contract, at least they could get fair land price and some of the jobs. There was general discussion and an agreement to recess at **5:13** p.m. until **2:00** p.m. the next day. Representatives from **Blackstock** were to be invited to that meeting.

The meeting of December 8, **1982** was supposed to be short. It **lasted** from **2:10** p.m. until **3:00** p.m. There were five council members present, two **Kuukpik** Corporation people (the president and the accountant), a researcher, and several **Inupiat** villagers. The mayor began by restating his position. The 22 houses are still in limbo. No answer will come until **people** talk in Barrow. The village is only a mediator. He will listen to **Kuukpik** present their case to the NSB mayor. The question is whether the **value** of a lot has increased to \$20,000. The **Kuukpik** accountant then spoke about why land values should be high. He repeated his argument that it is

the **only** resource the people have and, **if** valued at a **low** price, will soon be gone.

There was much dispute over this, with some villagers maintaining that it was strictly a **Kuukpik affair** since the city owned no land as yet and others saying that the **value** was too high. The accountant **was** essentially arguing long-term considerations **for** the case when **oil** development **would** increase **local** land values (and general **costs**) and provide more stable employment. The villagers, arguing more **short-term**, said this was good for the corporation but not for them. **Oil** companies provided few jobs now, and they did not think that the future would be different. The accountant then told them to **talk** to **the Kuukpik** Board members, who make the decisions, and not to **him**. **He finally also** agreed that the city has no **legal** voice in the matter, as no land has been transferred to them.

The city **clerk** and the accountant **at** this part became embroiled in somewhat of a misunderstanding. Each wanted to represent the interests of her/his institution of employment. The clerk maintained that the **Alaska Native Claims Settlement Act** provision of **1,280** acres seemed like a **large** amount of **land**, but the city needed even more. The **reply** was that, **at** present, no city existed as the land was **still** untransferred. Only **Kuukpik** Corporation existed. The city can request land and can receive as much as **Kuukpik** wishes to transfer, but **Kuukpik** need not transfer more than **1,280** acres.

The mayor ended this by calling for order, and tried to summarize again. Every two days for the **last month**, he had **called** the **NSB** about the housing, with no results. Now, the **NSB** suddenly wants to push things through. **He** hates to see them (both the **NSB** but here perhaps especially **Kuukpik**) hold to their positions at the expense of citizens. A villager

adds the \$20,000 a lot is too high. The accountant again brings up the \$1.80 per square foot sale in **Kaktovik**. This again led into a wrangle over corporation profit at the expense of individual shareholders. Some of this was in **Inupiat**. One council member suggested that **Kuukpik** hold a shareholders' meeting before this decision was made. Essentially the same arguments were made by the same people as before. The **Kuukpik** accountant said the situation was very **clear for Kuukpik**: 1) to convey 1,280 acres to **the** city of **Nuiqsut** and, 2) to bargain in Barrow for the benefit of the corporation's shareholders, and obtain the highest price possible. This sparked more discussion, with the same arguments, and ended with those objecting **to** high land values thanking the **Kuukpik** representatives for listening to them " even if they still disagreed. Another project of interest to the village; **the** ice road to Deadhorse, was briefly discussed, but we **will** consider that issue later.

Later the mayor, representing the City Council, did go to Barrow with four or **five Kuukpik** Corporation people to see the NSB mayor. They reached a compromise price of \$.50 per square foot, paid to the corporation (\$10,000 per lot for a **total** of \$260,000). The City Council meeting of January 3, 1983 did not deal with this issue except that the city clerk reminded the board that **Kuukpik** had offered at least part of the lot payment to the city, and she had not received any of it yet. No one instructed her to go after it and the topic changed. The houses had been started in that **holes** were being drilled and pilings placed in them. This continued through the end of our research. The actual houses were **still** in crates being **flown** in. The main topic of this meeting was the ice road and how to obtain State and Federal money for use within the village. There were four council members present, the city clerk, a researcher, and the city clerk's husband. No **Kuukpik** Corporation **people** were present.

The February City Council meeting was **cancelled** since only the mayor and one other council member showed **up**. The meeting **of March 7, 1983** was attended by five council members when the roll call was taken and by **all seven** by the time business was attended to. **The city clerk, her husband, the public safety officer, and one Inupiat villager were** also present. No one from **Kuukpik Corporation** was there. **Dog control and sewage disposal were addressed before the land conveyance issue.** This was **being held up**, the mayor **said**, pending the outcome of an embezzlement charge brought by the **Kuukpik Corporation** against their accountant. There had **also** been no determination of who would **be** allowed to buy housing and with what financing. The meeting then **passed** to other construction project matters, after the **city clerk** suggested the city do something to protect **their claims to Kuukpik land** (that is, a **law suit**). A cable television project was discussed and the **teen center**. The **latter** became the center of a **hot** dispute. **First**, the city clerk said the funds for construction were available but not any **for operation and maintenance**. In the absence of city revenues, she suggested caution in committing the city to **it**. The mayor, speaking for the council, said maintenance funds **could** be worried about **later**. **He** was currently working on getting the **NSB to** provide a gravel pad for it (instead of the city paying for more expensive piling). **Second**, the city **clerk said** money for construction was not available **until** the city **actually** had **title** to the **lot(s)** upon which **it would** sit. This depended upon the **Kuukpik Corporation** conveying **lots** to homeowners and **1,280** acres to the city. The mayor said there was nothing the city **could** do about **this**. Council members said they wanted a lawyer to speed the land transfer **along**. They were supported in this by the city **clerk** and the public safety officer. The mayor resisted this action by saying that information on who had applied to **Kuukpik** for a **lot** was necessary. Two of the younger council members were insistent

upon hiring a lawyer. They introduced a motion to the effect and it passed unanimously. The discussion returned to the teen center building then, and possible NSB help. The meeting wound down with some more routine items (announcements, the fire station opening, and such) and ended at **9:37** p.m. On his way out, the mayor told the city clerk to type up his letter of resignation. To the best of our knowledge, he is still mayor.

#### ISSUES--THE ICE ROAD AND OTHER

There is no land travel to **Nuiqsut** in the summer. In the winter, when enough snow covers the tundra, water can be **laid** down to form ice thick enough to support trucks and protect the tundra. **Nuiqsut** obtains most of its fuel over this sort of road, as the transportation fee is much less than air freight (**\$.12** to \$.48 per gallon compared to \$2.00 per gallon). The past several years the state and the NSB have provided the money (\$400,000) for this road to **Prudhoe**. This year, with **oil** running low in the village and the new housing materials **still** not hauled into **Nuiqsut**, neither the State nor the NSB was anxious to proceed with building the road. At the City Council meeting of December 8, **1982**, the **Kuukpik** accountant announced that the corporation might have to do it on its own. At the meeting of January 3, **1983**, with **only** council members in attendance, the need for an ice road was brought up again by the head of Public Works (a member of the council). The surface on the make-shift road was too rough. There was still no money available for work on the road, however. If there were, **Nuiqsut Public Works could** open it in two or three days. People at the meeting thought that money for the ice road would be forthcoming.



Kuukpik Corporation clearly favored an ice road, and a much more expensive permanent road if it were fundable, to Prudhoe Bay. It would be to their benefit because of the gravel coventure they had entered with ASRC. However, the NSB was holding up the permit for the permanent road. The ice road may be held up for the same reasons, which the Kuukpik accountant stated as a desire on their part to have bargaining power with the oil companies when they came in around Nuiqsut to drill. If the "environmental" argument can be made, he said that it may be worth up to 100 million dollars to the oil companies for permission to cross the Colville to drill. Gravel extraction or a road would weaken the environmental case. As the road is a smaller matter compared to \$100,000,000 the NSB is not anxious to see the road happen.

An ice road was eventually opened, but not over the tundra due to expense and the lack of snow cover. It was built on the already frozen Colville River so only some smoothing and crack filling was needed. The road was not well marked, however, and people did sometimes get temporarily lost at night. The surface was not well maintained, Environmental pressure groups forced the closing of the road shortly after it was opened. The only exception was to allow the Kuukpik Corporation two weeks to truck oil in. Most of the oil ended up being flown in with assistance from the NSB when Kuukpik's trucking arrangements fell through and the village became very low on fuel oil. The housing construction materials were also flown in.

#### ANALYSIS --THE DIVERSITY OF INTERESTS

Our information may be interpreted in several ways. The data revealed from City Council meetings about land conveyance, the ASRC-Kuukpik gravel coventure, and road construction

clearly reveal different economic-political agendas. A short analysis **should** pull this into focus.

The city of **Nuiqsut's** interest seemed to be economic. Villagers were willing to trade some minor disruption of caribou for much lower fuel costs, the ability to truck in food and other durable goods from Prudhoe, and access to **Prudhoe** itself. The ice road also facilitated access to hunting by those who preferred truck travel to snow machines.

**Kuukpik** Corporation's interest was also economic. An ice road to **Prudhoe** would cut some of their costs. If this road were built so as to satisfy another of **their** needs, transporting the projected **gravel** extracted from the land now held in coventure with ASRC down the **Colville** to sea for **oil** rig drilling island construction, they would be happier. Whereas **Nuiqsut** wants a road to reduce costs, **Kuukpik** wants a road to create profit.

ASRC has the same profit motive as **Kuukpik**, but is perhaps more benevolent. They have substantial outstanding loans to **Kuukpik**, dating back to **1974** and the first houses constructed. **It** is in their interest to have an economically healthy **Kuukpik** Corporation pay them back rather than to have **Kuukpik** default and disappear. They thus wish to **help Kuukpik** get itself out of a **hole while** at the same time encouraging an industrial development project to benefit **Inupiat**.

The North Slope Borough evidently sees the road as a potential weakening of its bargaining position several years hence. They are willing to trade a delay in **gravel** extraction (gravel will always be there and will be worth more once **oil** companies are nearby anyway) and are willing to subsidize flying oil and other supplies into **Nuiqsut**, at least in the short term. They are using their land zoning-permit powers to

prevent the construction of a road to haul gravel, and **thus** prevent the extraction of the gravel itself. This was confirmed by the **NSB** assemblyman resident in the village who told us that he was opposed to the gravel deal because of the land use precedent it would set. He **could stop** it in the **NSB** Assembly if he wished to, but **people** in **Nuiqsut** did not oppose it so he had not made the effort. He had not pushed the issue either. The **NSB** was **also** said to **be** tired of paying for **Nuiqsut's** ice road every year, when **CIP** projects were supposed to be confined to long-term investments.

#### ISSUES--PUBLIC MEETINGS

**It** has been said that **Inupiat** treat **all public** hearings as if they were the same, as if information and issues discussed at one should be common to **all**. "**Oil** development" is used to **label all** agencies, whether private, state, or federal, trying **to** collect or disseminate information about proposed actions. **Inupiat**, at these meetings, **also** tend to behave as if they were talking to people with the power to make decisions, which of course is usually not the case. Five meetings **of** this sort were observed. **We** begin by noting several aspects of each.

The meeting of January **10, 1983**, concerned State Lease **Sale 39** (**Beaufort** Sea). The date and time had been set by agreement between the state agency responsible and the mayor's office. Two City Council members, two **Kuukpik** Corporation officers, about **18** other **Inupiat**, and five **non-Inupiat** attended. Comments were made by **Inupiat** villagers **on** what they perceived as the vast amount of information collected already (for at **least** three years), how the State **selling** this **land** while the people who use it are **still alive** deeply hurts them, **about** grave sites destroyed by the installation of a **DEW-line**

station, harm to subsistence resources, and the high cost of fuel. The **Kuukpik** accountant spoke several times, at length, about the need for a road between **Nuiqsut** and Prudhoe Bay. Another **non-Inupiat** said that big money was available if the village, **Kuukpik**, and the NSB work together. Comments were also made that decision makers never came to **Nuiqsut** and that the NSB just pushed paper and ASRC was perhaps too friendly with the oil companies. The meeting started late and **lasted** three hours.

The meeting of January 27, 1983 was held by the Army Corps of Engineers on the **Endicott-Sagg** River Delta project. No council member or **Kuukpik** representative was present. One NSB assemblyman was present and served as translator. He did so as a public service, as the Corps had not arranged for a translator. The mayor had told them that a translator was not necessary. However, the bilingual villager the mayor had expected to attend the meeting did not. Twenty-two **Inupiat** and four **non-Inupiat** were there. People wanted to reschedule the meeting so that elected officials could be present. They decided to reschedule a meeting **but to** proceed with this one as well. Most comments concerned potential effects on subsistence resources. The cost of fuel and the potential of a gas line from Prudhoe to **Nuiqsut** was raised. The DEW-line grave site desecration story was recounted. **All** in all, people seemed impressed that Colonel **Neil Saling**, the person with the final decision, was actually there. The meeting started very late and **lasted** only 90 minutes or **so**.

The meeting of January 31, 1983 was conducted by Minerals Management Service, again at a time arranged with the mayor's office. One member of the City Council was present. No **Kuukpik** Corporation or NSB personnel were present. About **17 Inupiat** and 4 **non-Inupiat** were present. Concern was expressed **at** the absence of the mayor and council. **MMS** said that the

comments of **"plain folks"** were just as important. Concern was expressed about making draft EIS available in **Inupiat**. People again expressed concern over a **public** meeting held without the **mayor**. There was some confusion of this lease **sale** with the Corps project meeting of January **27, 1983**. Environmental issues predominated, based on potential **oil** contamination and offshore gravel dredging operations. Much concern was expressed over the potential reduction of subsistence resource harvests. A discussion of the purpose of **fish** tagging resulted when the observation was made that no **Nuiqsut** person sent these tags **in** as their purpose had never been explained. This **led** to extended **talk** about fish resources. The need for subsistence **activity** access and the recruitment of **Inupiat** for other than **"stickpicker"** work **in oil** lease areas was stressed. The feasibility of a gas pipeline was broached again, as was the question of a road **to Prudhoe**. The meeting started **late** and **lasted** for about four **hours**.

The meeting of February 23, **1983** was **held by** the Fish and Game Advisory Committee and "officiated" by a staff member of the **Alaska** State Department of Fish and Game, Subsistence Division. Two council members were present, as was one of **Kuukpik** Corporation's officers. Eight other **Inupiat** (some from **out of town**) and one other **non-Inupiat** attended. **All** business items considered were proposed regulations governing fish and game. Attendees tended to be **older** than for the three meetings above. The meeting started **late** and lasted a **little** under three hours.

The meeting of February 24, **1983** was conducted by **ARCO**. The Atlantic-Richfield Company is one of the main partners at the **Prudhoe** Bay field, and wished to discuss several things with the people of **Nuiqsut** as part of their **public** relations and information dissemination programs. The main agenda item had

been advertised as a briefing on the **Oliktook** Point oil facilities project, but a great deal of time was spent discussing **Inupiat** access to harvestable resources in the Kuparuk and **Prudhoe** oil fields.

Three City Council members, one **Kuukpik** Corporation official, the NSB Mayor, and a NSB Assemblyman attended. The **Nuiqsut** Mayor "chaired" the meeting. Twenty-six other Inupiat and four **non-Inupiat** were present. The invocation was given by the NSB Assemblyman (a lay minister) after which the **Nuiqsut** Mayor introduced the NSB Mayor. The **Kuukpik** officer then introduced the three **non-Inupiat** present who were not residents of the village (apparently for the benefit of the NSB Mayor). He knew only one of them by full name, and she had been **the one** dealing with the village longest. **He** knew our researcher's first name, and forgot the NSB mechanic's name.

The ARCO people were late, so other issues were discussed **while** waiting for them. The ice road was brought up and the NSB Mayor said it was costly and **Kuukpik** would have to pay for part of it. The **Kuukpik** officer and the NSB Mayor discussed **NSB-Kuukpik** concerns. The NSB Assemblyman took no part but was and is a member of the board of a corporation formed by **Kuukpik**. **Nuiqsut** people used the chance to ask the NSB Mayor about their **land** conveyance problem **and** the **lot** evaluation question. **When** the ARCO **people** came in, the NSB Mayor said they had saved his hide and then asked if they were "running on Eskimo time?" The main topic first discussed was that of hunting restrictions in the **Kuparuk** oil field.

Essentially, there are no hunting restrictions except those self-imposed by the hunters themselves. **Non-Inupiat** oil field workers are the **only** people not allowed to hunt. Some testy questions were asked, and information sharing arrangements

were agreed **to**. Comments were made to **ensure** prior **village** notification **of any** new proposed regulation. A **non-Inupiat** offered his advice on how to ensure **village/oil** company communication. The discussion became heated again **until** an **Inupiat** said that "ARCO did not come here to argue. **You** came here to **listen to the** residents of **Nuiqsut**". A recess was **called, after** which the **ARCO** representative made a summary, conciliatory in tone. **He then** went **on to** discuss the **Oliktok** Point project. The issues of expensive heating **oil** and the possibility of a gas pipeline to **Nuiqsut** from **Prudhoe** Bay were brought **up** again by several villagers. **Gravesites** at **Oliktok** were mentioned. The meeting had to be **called to order** by the **Nuiqsut** Mayor (the **NSB** Mayor had **left** earlier for fear of **losing** his temper at a very **vocal** **Nuiqsut** resident, we were **told**) and the **actual** nature of the **water-intake** project was then discussed. The discussion was rather **tame**, although **gravesites** were brought **up** again at the end of the meeting. The **ARCO** people were there two and one **half** hours. The **assembled were** there for somewhat over **three**.

#### Analysis--The **Politics** of Public Meetings

These meetings **seem to** be used **by** one or both (or however many there may be) parties more for **ideological/political** purposes than for the open exchange of information and an explanation of the issues. At four of these five meetings, the idea of the feasibility of a natural gas pipeline from **Kuparuk Field** to **Nuiqsut** was asked about. An answer was never given. However, **Wickersham** and **Flavin (1982:382)** directly addresses this issue and finds that such a pipeline makes no economic sense at this time or in the foreseeable future. **Gravesites** destroyed at a DEW-line not connected with these projects were brought **up** at three of the meetings. Concern over the absence of City Council members was expressed

at three of the meetings. The content of most hearings was quite predictable and follows closely the summary of **Inupiat** concerns listed as examples in the **Wickersham and Flavin (1982 : 194-195)**.

Attendance at such meetings is quite high in **light** of the few rewards received. A fairly constant "core" of villagers attend most of the public hearings held in **Nuiqsut**. The comments they make tend to **be** the same, and on the same topics, regardless of the specific focus of the hearing. When the mayor is present, he is expected to moderate the meeting. This often takes the form of his ensuring that everyone who wishes to speak has the chance to do so while at the same time guarding against anyone sidetracking the hearing too far off the topic." The mayor also steps in when passions become aroused and exchanges threaten to become heated. In the mayor's absence, other people (often surprising to the researcher) emerged to perform this role. This was not done easily, however, and partially explains why villagers prefer that the mayor and/or other elected officials be present.

The **only blatantly** self-serving comments are made by **non-Inupiat**. The **Inupiat** maintain a fairly united front stressing the importance of subsistence resources and the need for cheaper **oil** and food. Even the strongly pro-development **Kuukpik** Corporation accountant often spoke in terms of the subsistence rhetoric. Thus, **it** appears that in **public** meetings with outside groups, villagers present a united front of an ideological nature. Internal village meetings (City Council , etc.) deal with problems where such a **front** would be counterproductive, as interests do differ **fundamentally** on occasion. One seldom hears about subsistence at a City Council meeting, however. Land **value**, the need for a road, and dog control are all more commonly discussed problems.



In **one** sphere, the **local**, leaders are competitive. In the other sphere, the outside world, leaders are cooperative. **This is of course** a very common sort of pattern found in anthropological studies of kinship based **societies**.

### Groups and Political Influence

Kinship **is** the **idiom of** authority of **Nuiqsut**, but authority in **Nuiqsut** is not **as** absolute **as non-Inupiat** Americans may **be** used to. Kinship is the conveyor of **rights and** obligations. The "Social History" subsection on "Kinship and the **Community**" makes this point **clear**. Nearly every household in **Nuiqsut** can trace direct kin ties to someone known to have used **the Colville** River area as a subsistence area at some time in the past. As might be expected from a situation where enrollment as a member of a **particular** native village, and hence of a particular village corporation, took **place** at one **point** time and was not changeable thereafter, newer resident households are related to historical **land** use in the **Nuiqsut** area more through spouse (**female**) kinship ties than through those of the male head of household. **Males** so related came back to **Nuiqsut** in 1973 or soon thereafter.

The **Kuukpik** Corporation, because shareholder membership is based on enrollment, is expected to have a much **closer** pattern of kin relations than the City Council, and this is the case. Three council members are enrolled in the village corporation of Barrow, whereas **all** seven **Kuukpik** board members are from **Nuiqsut**, as they are required to be shareholders. Spouse connections, however, **link at least** two **Kuukpik** board members with Barrow families. Spouse connections on the council are all solidly **Nuiqsut** related. The mayor and the newest councilman are **affinally** related to the president and chairman of **Kuukpik** Corporation. The **Kuukpik** officers

are a generation younger. Ages of the other council members muddies the issue somewhat, but the council appears to be dependent more on seniority and **Kuukpik** on education as a recruitment criterion.

Kinship ties through spouses also explains the presence of so many **Inupiat** "outsiders" impositions of prominence. The kinship **link**, once made, is what matters. Thus the mayor, the Head of Utilities, and the I-lead of Public Works all **acknowledge** that they are not "of" **Nuiqsut** in the same sense as the officers of **Kuukpik** Corporation are, but they are nonetheless part of the same system. It is interesting that ANCSA, through the forced choice of single enrollment, has limited the traditional flexibility in **Inupiat** use of kinship ties. The **Kuukpik** Corporation's 1983 annual meeting (January 14, **1983**) began as an open meeting out of courtesy to guests. However, a motion was made and passed (after much discussion) to **close** the meeting to non-shareholders. This excluded not only the researchers, but also the mayor of **Nuiqsut** and people representing the NSB who otherwise, through various kin ties, **would** have been expected to be included.

The NSB Assemblyman resident **in** the village has few direct kin ties in **Nuiqsut**, but he has an extensive kinship network throughout the North Slope. He is also a lay minister and is very personable besides. Since assemblymen are elected at large, too close an association with any community other than Barrow would probably be disadvantageous. The power of this man's position and the sincerity and force of his personality also increase his influence. He has had long-term **relationships** with most NSB political figures, including the **Nuiqsut** and NSB Mayors.

## Village Decision Making

Observations at every sort of meeting (Public Hearing, **City Council**, **Kuukpiik Corporation**) and informal questions to "people in charge" revealed a common **sort of** decision making dynamics. Issues are discussed at length, but **facts** and implications are not **always fully laid out**. **The object is to** achieve the **lack of** objection. A sense of agreement, of acquiescence, is striven for. **At** times, facts and events may, to **less** political **eyes, be** misrepresented **in** the hot pursuit of **this goal**. **People** do not like to make decisions. Given a representative **form** of city government, they expect their elected officials to make the decisions, or rather, to serve as the spokesman for **the** position of "unanimity" that **is** arrived **at**. This seems to be the reason villagers object to public hearings without the **mayor**. As their official spokesman he establishes and legitimizes the **lack** of dissension which **is** taken as the basis of consensus. **Public** hearings to collect a diversity of opinions or to disperse information **are** foreign concepts to **Inupiat**. A strong mayor can shape or even lead the consensus **of** a meeting. 'This is a common small group phenomenon very characteristic **of** the North **Slope**. **Eben Hopson**, the first **NSB Mayor**, was a prime example. The present mayor of **Nuiqsut** may not have been so **diplomatic**, and indeed may have **lost** the last election because of a perception of him as too directive. That his actions may have benefited the people did not matter in this context.

Thus, **all** decisions made at the City Council were without dissension. At the Presbyterian Church **annual** congregational meeting, the **elders** election was actually competitive in that a choice did have to **be publically** made among a number of **people** (the **result of** a secret ballot). Three candidates for the three available positions were nominated. There was a lull, and then one of the candidates nominated a fourth person.

This seemed unexpected and a secret ballot was taken. After these results were in, deacons were then elected. They were selected unanimously by nominating **only** as many candidates as there were positions open. This pattern was also observed at civic group meetings. At the **Kuukpik** Corporation, officers answering the phone would **rarely** commit themselves to an answer on behalf of the corporation unless two or three other **Kuukpik** people were available for consultation. When they went to Anchorage on business, it was always as a group of two or more. Making decisions affecting other people does not come easily to **Inupiat** individuals.

This desire for the appearance of unanimity and the lengthy public meetings that result from it are characteristic of small local governments, and **small** groups in general. What distinguishes **Nuiqsut**, and probably most **Inupiat**, is that even when such decisions are made they are often not carried out. In other parts of the United States, even if most people are only lukewarm (**at** best) to the course of action decided **upon**, it would most likely be initiated by its few strong proponents. In **Nuiqsut** such dynamic advocacy is considered improper and a unanimous decision about which some people have reservations will probably not be carried out. Thus, land conveyance continues to be an issue even though the law is clear on what should (and indeed must) be done. Bootlegging and selling of alcohol is universally decried, but no concerted local effort has been made to reduce this activity. Dog control is a recurrent problem, but the solution of requiring people to restrain their dogs is resisted. Being a formal leader in such circumstances can be very frustrating, although leaders in **Nuiqsut** have managed to use these characteristics of the system to their advantage as **well**.

## NON-INUPIAT INFLUENCE

**These** dynamics may explain why **non-Inupiat** can appear to influence **Inupiat** decisions so much at times and yet affect behavior so little. A discussion of the **school** system in this regard **would be** relevant, but **would** also require extensive research and the school system's **close** cooperation as the topic **is** no doubt very sensitive. Our information **is** of a more **public** nature.

**We** did observe several **non-Inupiat** residents of the **village** speak out at **public** meetings. Three **individuals** stand out-- the city clerk, the **Kuukpik** Corporation accountant, and a **NSB** mechanic. The **last** seemed to **be simply** trying to establish a reasonable comfortable **social** niche for himself **while** working **in Nuiqsut**. The **Kuukpik** accountant consistently stressed the need to run the **Kuukpik** Corporation as a business, **while** he perceived **it** being operated more as a service organization. Information here is very tentative, however, as the corporation has **filed** suit against the accountant for embezzlement. The differences in perception between the Iranian accountant and the **Inupiat Kuukpik** officers may be enough to explain the dispute. The accountant has fled and newspaper accounts say that \$300,000 to \$800,000 is unaccounted for in the **Kuukpik** Corporation's ledgers. The corporation (**and the city as well**) does have a reputation for keeping rather shoddy books and records, **and** the corporation is known to be heavily in debt.

The fact remains that the accountant possessed an expertise and was willing to express a forceful opinion. He often carried the day, temporarily, while he was present., by his air of assurance. Such imposed courses of action, if not supported by an understanding of why and how by the **Inupiat** involved, usually soon fell by the wayside. The accountant recognized this fact in several conversations with the

researchers and in fact mentioned that at times he refused to accompany **Kuukpik** Corporation officers to Anchorage in the hopes that they would learn to make independent decisions.

The land conveyance issue, involving the City Council, the **Kuukpik** Corporation, the city clerk, and the accountant, illustrates this. Over ten years since **ANCSA**, the **Kuukpik** Corporation has yet to convey land to **Nuiqsut**. The accountant, who was only in **Nuiqsut** a year or so, was always more interested in establishing a value for the land than in conveying it. The city clerk would like to see some real city revenue and so wants an actual land base for the city. If **Nuiqsut** had land, it could potentially sell or tax it and thus have an independent, stable, and regular source of income. **Inupiat** residents of the village seem to care little. Few realize that they do not own the land on which their houses sit (and fewer own the houses that they live in than think they do as well). Most see no difference between city ownership of the land and native corporation ownership. Thus, the issue has never been pressed.

Given the poor financial situation of the corporation, the city clerk has recently begun **to** push for the conveyance, just in case the corporation should go under. She does not want to administer a landless city. The mayor sees this as no problem. The corporation, in his view, will not be allowed to fail. If it were to do so, village claims would be protected. Most of the City Council seems to take this position but at last meeting we attended, the two youngest members both pushed this issue. They suggested that the city hire a lawyer to speed the process up. The mayor was hesitant to do so, as it would cost money and could create friction between the City Council and the **Kuukpik** Corporation. His son-in-law is the corporation's president, but the mayor was probably thinking more in terms of most people in the village

as. both city residents (represented **by the** council) and corporation shareholders (represented by **Kuukpik**). Both council members wanting the lawyer were **shareholders**, however, **while** the mayor is not. There is money available to the **city** for **hiring** the lawyer.

The mayor was doing well at stonewalling the request, **claim-**  
**ing** it was all **up** to **Kuukpik** and that there was no **money** for a lawyer and so **on**, when the city clerk make **it clear** that these things were not exactly **so**. She essentially refused to accept the mayor's attempt to defuse the situation by his acceptance of the conveyance in principle **while** not **taking** any real action. With her vocal and moral support, the two younger council members introduced a motion to hire a lawyer. There were no dissections to the motion. The mayor remarked, "So we'll go to court". Others did not think it would come to that. Afterwards, people told me that the resolution would not have been made and the vote taken **if** the city **clerk** had not been so forceful. The **mayor would** have created a consensus for another informal appeal to **Kuukpik**. **It is to be** noted that nothing further was done on the conveyance issue for nearly a year. The mayor informs us that the **land** has now been conveyed.

### Summary

The definition, discussion, and resolution of **public** (political ) issues in **Nuiqsut** is still **largely** informal, even when carried out within "formal" institutional structures. The institutional structures that have been imposed on more traditional decision-making processes seem to be mainly matters of form. The idiom of kinship remains essential for understanding the dynamics of the overlapping memberships of the "separate" political and economic entities. "Conflict of

interest" never comes up as an issue important to **Inupiat** about other **Inupiat**. **Inupiat** culture is based upon small groups, and **Nuqsut** remains a polity operating upon small group dynamic principles. Perhaps that tentative idea could be extended **to** the North **Slope** Borough as well. Social differentiation is at an as yet low level throughout the North **Slope** in general, and particularly in the villages outside of Barrow and Deadhorse. This makes **socio-political** and economic processes less visible and harder to understand for outsiders, especially when a very visible "rationalized" set of formal structures has been superimposed onto them. Observers note the frequent ineffectiveness of the socio-political structures and make the mistake of assuming that they are observing **socio-political** process as **well**.



## VII. SOCIAL/PHYSICAL/MENTAL HEALTH--WELL BEING

### Introduction

Quick judgments about any community are difficult to **make**. Informed opinions must be based upon a great deal of information gathered in **a** systematic way. Our time in **Nuiqsut** was limited and documentary and historical records about **Nuiqsut** are for the most part **lacking**. Thus, **Nuiqsut is**, at best, **as** difficult a community as any to evaluate and understand **in a** dynamic sense. Nonetheless, there are certain general aspects of **Nuiqsut's** appearance which give some indication of its overall state of **social** health.

**Nuiqsut** is a very regular town in terms of its physical layout. The maps of the village demonstrate a rectangular grid arrangement. This is not typical of North Slope and sets houses much farther apart than in most other **Inupiat** villages. Residents remark on this now and again. **Nuiqsut** also appears to be, as it **is**, a new **village**. **Most houses look** in good repair, although it is easy to **tell** the **older** originally one-room homes from those built since. Each subsequent building phase is stylistically distinguishable (see Figure 12). **All** houses except for one were **built** under the sponsorship of the ASRC or the NSB. There are **also** five (four when we arrived in November) non-standard residential buildings, much smaller than the houses in size, which also serve as homes. These were built by individuals at various times and display no particular **style** except for frugality. The new school, new public safety building, new utilities complex, new fire station, and new satellite dish all create a favorable and modern impression.

There are some discordant characteristics as **well**. One is the existence of non-standard residential units when some regular

residential units were obviously vacant (Tables 35, 36). When we arrived on November 16, 1982, those structures vacant were mostly older units but also included newer houses and one non-standard unit. Three of the newer vacant houses were not inhabitable at this time. In all, including the apartments in the **four-plex** and the non-standard units 10 of 63 (16%) of residential units were vacant when we arrived. When we left on March 9, 1983, there had been some shifting, as a new non-standard structure had been **built** and two of the three uninhabitable newer houses had been repaired and reoccupied. Vacant structures were still mostly **older** but also included two newer structures and two non-standard structures for a total of 10 of 64 (16%). If one subtracts **non-Inupiat** housing (units set aside for the NSB School District, the PS0, and the **Kuukpik** Corporation accountant) from these figures, vacancy rates are 10 of 54 (19%) for November and 10 of 55 (18%) for March.

Table 35: VACANT RESIDENCES IN NUIQSUT, ALASKA

<u>Plot Location*</u>	<u>11/16/82</u>	<u>03/09/83</u>
B1 L08 <sup>a</sup>	Vacant	Vacant
L09 <sup>a</sup>	Vacant	Vacant
L18 <sup>c</sup>		Vacant
L20 <sup>a</sup>	Vacant	Vacant
B2 L04 <sup>b</sup>	Vacant	Vacant
L16 <sup>a</sup>		Vacant
L18 <sup>a</sup>	Vacant	Vacant
L19 <sup>a</sup>	<b>Vacant</b>	<b>Vacant</b>
B3 L01 <sup>c</sup>		Vacant
L19 <sup>b</sup>	Vacant	
B6 L01 <sup>b</sup>	Vacant	Vacant
L10 <sup>c</sup>	Vacant	
L15 <sup>b</sup>	Vacant	

\* B = Block, L = Lot.

<sup>a</sup> Original housing.

<sup>b</sup> Newer housing.

<sup>c</sup> Non-standard housing.

Table 36: NUMBER OF VACANT RESIDENCES BY HOUSING TYPE

<u>Housing Type</u>	<u>Number of Vacant Units</u>	
	<u>11/16/82</u>	<u>03/09/83</u>
<b>Original</b>	<b>5</b>	6
Newer	<b>4</b>	2
Non-standard	1	2

Interpretations of various sorts are possible. Occupancy rate is a measure of housing demand, ability to pay for housing, or both together. A high vacancy rate can indicate a **low** rate of growth (not necessarily bad in this case) or a deterioration of the quality of the housing stock (or a rise in general expectations or standards by which housing **is** judged, which usually is to the disadvantage of older housing). A high vacancy rate may indicate that non-residents own homes and do not wish to rent or **sell** them, resulting in less efficient use of resources, especially when people **claim** that others do wish to move to **Nuiqsut**. Rents or prices asked may be too high, or **people's** resources too **low**, for the **lease** or sale of these structures. Uninhabitable housing indicates lack of maintenance or actual abuse or natural calamity. Occupied non-standard housing implies one or **all** of these interpretations. The explanation that people **would** rather **live** near kin in non-standard housing than farther away in a "better" house accounts for only one of the five non-standard housing cases. Expense does seem to be the key. A high vacancy rate is usually taken to be the sign of a troubled economy, which would be consistent with this.

A survey **of** material items outside residential structures is also indicative of a community's general economic and **social** health. **In Nuiqsut**, such a survey resulted in a count of **79** snow machines, 35 (44%) of which were judged to run. One cannot **tell Inupiat** from **Non-Inupiat** owned snow machines, but

excluding public safety snow machines gives 33 operational snow machines out of 77 (43%) as of February 1983. As there are 54 permanent resident households, this is less than one operational snow machine per household. Informants said places such as Anuktuvuk Pass had many more snow machines than this, and were somewhat surprised at the low number. Maintenance is difficult, and parts not always easy to get. There is no snow machine outlet in **Nuiqsut**, unlike some other NSB villages.

There were 23 trucks and cars in **Nuiqsut**, most of them parked by **Inupiat** households. Of these, 15 (65%) appeared operational during the winter period of observation. Most were vehicles owned by the NSB, **Kuukpiik** Corporation, or construction companies. There were approximately 26 boats in and around the village. There were 47 sleds for hauling things by snowmobile. Ten ice cellars were counted, mostly near the older residential structures. One main store was **evident**. The general impression was one of a young community investing heavily in infrastructure but lacking a strong local economic base, as shown by vacant housing and a relative lack of durable subsistence-related consumer goods. This is consistent with our knowledge of the North Slope Borough's monetary economy, which is based primarily on the extraction of non-renewable natural resources and not upon sustainable economic production.

### Public Health

#### INTRODUCTION

The physical and mental health of a community can be measured by the incidence and seriousness of illness, and the attention paid to them. **Nuiqsut** has a clinic staffed by two health aides in phone contact with doctors in Barrow. Procedures

exist for air evacuation of patients to Barrow, and funds to help pay for such transport are also available. Generally, we were **told** people get **ill mostly in** the **spring** and **fall** when the weather changes (flu) and in the winter with ear infections and other problems. The **clinic** records provide further information **of this sort**.

## CLINIC RECORDS

**Clinic** records from **Nuiqsut** for the past year were available for use in the analysis of illness and **health care in** the community. The records list day and time of **visit**, the patient's age and sex, the patient's complaint, and the treatment.

Table 37 lists the **total** medical complaints for 1982 by category of complaint. Respiratory complaints comprise almost one-fifth of the **total**. Infectious diseases (mainly strep throat), ear problems, and accidents/injuries each contribute about **13%** to the total number of complaints. Another 12% of the complaints are related to health maintenance, which includes such things as **blood** pressure checks, medication refills, and well-baby clinics. **All** other categories of complaint contributed less than 5% to the **total** number of complaints. Approximately 15% of the visits to the **clinic** were for multiple complaints (**1,424** complaints in **1,214** visits).

**In the** major categories of medical **complaints, males** outweighed females for accidents and injuries (62.7%), and **slightly** outweighed females for **health maintenance visits (51.2%)**.

**Nearly** half of all male visits to the clinic for health maintenance reasons were by individuals aged 45 and over,

Table 37: TOTAL MEDICAL COMPLAINTS, NUIQSUT CLINIC 1982  
BY CATEGORY

<u>Category</u>	<u>% of Total</u>	<u>% of Category Male</u>	<u>% of Category Female</u>	<u># of Complaints</u>
Respiratory	19.3	46.9	53.1	275
Infectious Diseases	13.4	40.3	59.7	<b>191</b>
Ear	13.0	44.3	55.7	<b>183</b>
Accidents/Injuries	<b>13.0</b>	62.7	37.3	<b>185</b>
Health Maintenance	<b>11.7</b>	<b>51.2</b>	48.8	<b>166</b>
Undiagnosed	4.8	42.0	58.0	69
<b>Oral/Dental</b>	<b>3.0</b>	55.0	45.0	42
Skin	<b>2.8</b>	55.0	45.0	40
Pregnancy Related	<b>2.7</b>		100.0	3
Digestive System	<b>2.6</b>	<b>21.6</b>	78.4	37
Alcohol/Drug Related	<b>2.2</b>	80.6	6.0	31
Eye	<b>2.0</b>	50.0	50.0	28
Female Genitalia and/or Breast	<b>1.7</b>		100.0	24
Family Planning	<b>1.3</b>		100.0	19
Poisoning/allergic	<b>1.3</b>	<b>31.6</b>	68.4	19
Cardiovascular	1.1	50.0	50.0	16
Urinary Tract	<b>1.1</b>	<b>13.3</b>	<b>86.7</b>	<b>15</b>
Other <sup>a</sup>	<b>3.0</b>			45
Total				<b>1,424<sup>b</sup></b>

<sup>a</sup> 13 categories, none over .7%.

<sup>b</sup> Higher than total yearly visits (Tables 38, 40) because of multiple complaints on some visits.

and were primarily for the purpose of monitoring cardiovascular problems. Male activities (hunting and **construction-type labor**) characteristically present more opportunities for accidents and injuries than do female activities.

**Males** were the only complainants to visit **Nuiqsut** clinic with alcohol related problems, **while** two-thirds of **all** drug related visits were by females. However, caution is advised **in** drawing any conclusions from **this**, since the **actual** number of visits in both categories is quite **small**. **In** particular, **the** alcohol related visits were dominated by abuse therapy administered to a single **patient**. Alcohol and intoxication **is** evidently not perceived as a medical problem requiring a **clinic** visit in **Nuiqsut**.

**Mental** illness related visits to the **clinic** were made primarily by females (**80%**) with complaints of depression, stress, and schizophrenia. However, we again have a situation involving a **small** number of **total visits which**, as with alcohol and drug related problems, represents a **very** few individuals. It is possible, however, that females with **mental** or emotional problems are more **likely to** seek professional **help** than are males **with similar** complaints. Perhaps **males**, rather than perceiving this as a condition deserving medical treatment, seek other outlets for their problems. **Our** information in this area is very limited.

Visits **to** the **clinic** related to venereal disease were made predominantly by males (**89%**). Perhaps the **small** proportion of females in this category is due to differential diagnosis of males and females. **It could** reflect differences **in** sexual activity or of contact with **non-Nuiqsut** individuals (**more likely** for males than females). However, numbers are again small and **will** not support much interpretation.

Complaints involving the digestive system were made primarily by females (78.4%), with **gastroenteritis** as the most common complaint/diagnosis. Differences between the sexes in this category of illness are especially marked in the 5-14 year old and 15-44 year **old** age groups. The most likely explanation for this discrepancy between the sexes is dietary differences. However, the initial data gathered from **Nuiqsut** did not include sufficient information to resolve this unexpected situation. The preponderance of female complaints in the other categories is even more significant than the figures here indicate when one takes into account the fact that the sex ratio is generally skewed in favor of males (approximately **120** males to 100 females).

Females may be more likely to seek medical help for general symptoms of distress than are **males**. Further research would be necessary to determine if a sex difference exists in perception of illness and the desirability or appropriateness of seeking medical attention. Another likely explanation for higher female participation in the health care process is the possible role visits to the clinic **play** in socializing. A visit to the clinic is an ideal opportunity to see and speak with other members of the community. The fact that health aides have always been female may also be a factor promoting more visits from females than males. Another reasonable explanation is that women usually are responsible for **childcare** and 30.6% of all **clinic** visits involved children 14 or younger (Table 38). More than likely an adult accompanied the child, and most probably a **female** adult. They then may feel inclined to ask about their own health as **well**, or may simply feel more at ease going to the clinic, as they do so more often than males. Since more men than women work the hours that the clinic is open, **10:00 a.m.** to **4:00 p.m.** with a likely closing for lunch, this strongly favors visits by women.



Table 38: YEARLY VISITS, NUIQSUT CLINIC 1982

		<u>Unknown</u>	<u>0</u>	<u>1-4</u>	<u>5-14</u>	<u>15-44</u>	45+	<u>Total</u>
Male	#	<b>11</b>	34	<b>116</b>	<b>72</b>	218	<b>102</b>	553
	%	0.9%	2.8%	9.6%	5.9%	18.0%	<b>8.4%</b>	45.6%
Female	#	<b>18</b>	19	<b>95</b>	88	346	<b>95</b>	<b>661</b>
	%	<b>1.5%</b>	1.6%	7.8%	<b>7.2%</b>	28.5%	7.8%	<b>54.4%</b>
<b>Total</b>	#	<b>29</b>	<b>53</b>	<b>211</b>	<b>160</b>	<b>564</b>	<b>197</b>	<b>1,214<sup>a</sup></b>
	%	<b>2.4%</b>	<b>4.4%</b>	<b>17.4%</b>	<b>14.1%</b>	<b>46.5%</b>	<b>16.2%</b>	

<sup>a</sup> Less than **total medical** complaints (Table 37) because of **multiple** complaints on same visits.

Selected medical complaints are broken down by age and sex in **Table 39**. For individuals under one year of age, ear problems are the major **reason** for clinic visits, although a significant number of females also come in with respiratory complaints. In the **1-4** age category, females again show symptoms of respiratory and ear problems. Infectious diseases are **also** prevalent for males aged **1-4**, but respiratory complaints and **ear** complaints are again the most prevalent. Both males and females aged **5-14** most commonly have infectious diseases. Accidents and injuries comprise 43% of the complaints for **males** aged **15-44** years. Approximately one-fourth of the visits **by** both **males** and females in this age category are for respiratory complaints. For individuals age 45 and over, health maintenance visits are prevalent, especially for **males**. Respiratory complaints are also frequent for females in this age category.

**Clinic** visits peak in February, March and **April** and again in **July**, August, and September (Table 40). **Female** visits outnumber male visits for every month except **March**, **July**, November and December. **No** obvious explanation suggests itself to us.

Table 39: SELECTED MEDICAL COMPLAINTS NUIQSUT CLINIC 1982  
BY AGE AND SEX

	<u>MALE</u>						<u>Total</u>
	<u>Unk</u>	<u>0</u>	1-4	<u>5-14</u>	<u>15-44</u>	45+	
Respi ratory Compl ai nts	4	10	37	21	41	16	129.0
% of Age Total	28.6	28.6	32.5	29.2	25.0	18.0	26.4
I nfecti ous Di seases	<b>1</b>	0	15	24	32	5	77.0
% of Age Total	<b>7.1</b>	0	<b>13.2</b>	33.3	<b>19.5</b>	<b>5.6</b>	15.8
Ear Compl ai nts	<b>1</b>	16	32	<b>10</b>	<b>13</b>	9	81
% of Age Total	<b>7.1</b>	45.7	<b>0.9</b>	<b>13.9</b>	7.9	<b>10.1</b>	16.6
Acci dents I nju ri es	3	1	<b>11</b>	14	<b>71</b>	16	<b>116</b>
% of Age Total	<b>21.4</b>	2.9	9.6	19.4	43.3	18.0	23.8
Heal th Mai ntenance	5	<b>8</b>	19	3	7	43	85
% of Age Total	35.7	22.9	16.7	4.2	4.3	<b>48.3</b>	17.4
<b>Total</b>	<b>14</b>	35	<b>114</b>	72	<b>164</b>	89	488

	<u>FEMALE</u>						<u>Total</u>
	Unk	<u>0</u>	<u>1-4</u>	<u>5-14</u>	<u>15-44</u>	45+	
Respi ratory Compai nts	3	5	31	<b>18</b>	62	27	<b>146.0</b>
% of Age Total	25.0	35.7	30.7	21.7	26.8	38.0	28.5
I nfecti ous Di sease	0	0	23	37	47	7	<b>114</b>
% of Age Total	0	0	22.8	44.6	20.3	<b>9.9</b>	22.3
Ear Compl ai nts	2	5	32	16	44	3	<b>102</b>
% of Age Total	16.7	35.7	31.7	19.3	<b>19.0</b>	4.2	19.9
Acci dents I nju ri es	3	0	3	<b>10</b>	42	11	69
% of Age <b>Total</b>	25.0	0	<b>3.0</b>	<b>12.0</b>	<b>18.2</b>	15.5	13.5
Heal th Mai ntenance	4	4	12	2	36	23	<b>81</b>
% of Age Total	33.3	28.6	11.9	2.4	15.6	32.4	15.8
<b>Total</b>	12	14	101	83	231	71	512

Table 40: MONTHLY VISITS NUIQSUT CLINIC 1982  
BY SEX

<u>Month</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	<u>% of Total Visits</u>
Jan	22	34.4%	42	65.6%	<b>64</b>	5.3%
Feb	45	40.2	<b>57</b>	50.9	<b>102</b>	<b>9.2</b>
Mar	<b>92</b>	<b>52.6</b>	<b>83</b>	47.4	<b>175</b>	<b>14.4</b>
Apr	<b>64</b>	<b>39.0</b>	100	<b>61.0</b>	<b>164</b>	<b>13.5</b>
May	<b>39</b>	<b>41.1</b>	<b>56</b>	58.9	<b>95</b>	<b>7.8</b>
Jun	<b>25</b>	<b>39.1</b>	<b>39</b>	<b>60.9</b>	64	<b>5.3</b>
Jul	<b>73</b>	<b>55.7</b>	<b>58</b>	44.3	<b>131</b>	<b>10.8</b>
Aug	53	<b>39.8</b>	<b>80</b>	60.2	<b>133</b>	<b>11.0</b>
Sep	<b>52</b>	44.4	<b>65</b>	55.6	<b>117</b>	<b>9.6</b>
Ott	<b>22</b>	46.8	25	<b>53.2</b>	<b>47</b>	<b>3.9</b>
Nov	32	<b>59.3</b>	<b>22</b>	40.7	<b>54</b>	4.4
Dec	34	50.0	<b>34</b>	50.0	<b>68</b>	<b>5.6</b>
Total	553	45.6	<b>661</b>	54.4	<b>1,214</b>	

<sup>a</sup> Less than **total** medical complaints (Table 37) because of multiple complaints on some visits.

Analysis of the **clinic** data for November 1982 in terms of the population structure is made possible by use of the November 18, 1982 household census. In this month, there were 54 **clinic** visits out of a population of 271 individuals, resulting in a 20% visitation rate for **Nuiqsut**. However, this rate is somewhat too high, as it assumes there were no repeat visits by individuals. Male visits outnumber **female** visits in terms of both real number (32 **males** vs. 22 females) and percentages of the **male** and **female** populations (**21.8%** of the **total male** population vs. **17.7%** of the **total female** population).

Table 41 breaks down the November **clinic** data in terms of age and sex. One of the most striking contrasts is the very high visitation rate for males under five years of age and over 45, and the very low visitation rates for females in the same

Table 41: DEMOGRAPHIC ANALYSIS OF NOVEMBER 1982  
 VISITS TO NUIQSUT CLINIC  
 BY AGE AND SEX

Age	Males <sup>a</sup>			Females <sup>b</sup>		
	Total Population	# of Visits	% Of Pop. <sup>c</sup>	Total population	# of Visits	% of Pop. <sup>c</sup>
0-4	20	8	40.0	21	1	4.8
5-14	23	5	21.7	19	4	21.0
15-44	80	10	12.5	65	16	24.6
45+	19	8	42.1	17	1	5*9
?		1			0	

- <sup>a</sup> Population figures do not include 5 males of unknown age.  
<sup>b</sup> Population figures do not include 1 female of unknown age.  
<sup>c</sup> % of Population of age group represented by clinic visits.

age categories. In the 15-44 age category, males fare somewhat better, with a 12.5% visitation rate, than females with a 24.6% rate. The proportion of visits for 5-14 year olds is comparable for males and females (21.7% and 21.0%, respectively).

An attempt was made to determine what factors are associated with and have an effect on the degree of illness that occurs within individual households. A measure of household incidence of illness was created. This consisted of the total number of non-health maintenance visits made by the members of each household, divided by total household membership. This yielded the average per capita visits to the clinic for each household (AVPC). Several other measures were created on a household basis for factors believed to have an effect on the incidence of disease and injury. These were size of household (SIZE), average per capita alcohol consumption among the adults of the household (PCAC), the age structure of the household (RNAA—the ratio of non-adults to adults), and the average per-capita adult employment

in the household (MONEY). These measures allowed the **testing** of several hypotheses in the relation of **socio-economic** factors and illness:

- Larger households **would** suffer from increased incidence of illness. Large numbers of individuals living in close contact would permit rapid transmission of infectious disease. **Secondarily, large** numbers of individuals within a single household might **lead** to crowded conditions, and a consequent rise in health problems. Furthermore, the more individuals in a household, the farther the household income has **to** go, and health is **likely** to suffer as the standard of **living** declines.
- High alcohol consumption has been shown **in** numerous studies to be associated with a high degree of illness, for a number of reasons, (social, biological, economic, nutritional, etc.). **In** addition, high alcohol consumption is **likely** to increase the number of accidents and injuries.
- Children are a **highly** susceptible sub-population, both for infectious disease and for accidents and injuries. Therefore, it is **likely** that the more children in a household the higher is the incidence of ill-health.
- The higher the degree of **adult** employment within a household, the higher is the standard of **living** **likely** to be, due to better food, clothing, housing, heat, etc. This contributes to improved health.

Correlations of each of the above measures were computed against the average per capita visits to the **clinic** (IIVPC) for 55 **Nuqsut** households. Of the four variables tested, **only** two, SIZE and MONEY, were found to have a statistically significant relationship with **AVPC**. Size of household was found to be positively correlated with average **clinic** visits (significant at the .05 level), demonstrating a direct relationship between size of household and household **incidence** of illness. As the size of a household rises, so does illness within the household. MONEY was found to be negatively

correlated with **AVPC** (significant at the .005 level), **demonstrating a clear cut** inverse relationship **between** the average adult employment in a household and household incidence of illness. As the amount of adult employment in a household rises, incidence of illness falls.

The correlation of PCAC with AVPC failed **to** prove significant. This **could** be due to the almost ubiquitous consumption of alcohol in the community. The correlation of **RNAA** with **AVPC** also failed to prove significant, demonstrating that the age structure of the household has no **clearly** defined relationship to the incidence of illness in the household.

One may conclude that any **socio-economic** changes in the community which have the effect of lowering the size of households or of raising household employment will likely have the additional effect of lowering household incidence of illness, **all** other things being equal.

A further test was done to determine if household **ethnicity** had any clear relationship to illness. The nature of the data precluded conducting correlation tests, so household average visits to the **clinic (AVPC)** were converted into ranked categories of "Low", "Medium", and "High", and a Chi Square test of homogeneity was carried out to test if **Inupiat** households had a significantly different incidence of illness than did **non-Inupiat** and mixed-ethnic households. Seventy-five **Nuqsut** households were used in the test (18 **non-Inupiat**). A significant difference was found (at the .025 level) between the two populations. Unfortunately, the Chi Square test is not powerful enough to determine the direction of the ethnic difference.

Further examination of the data did provide clarification of this situation, however. Of the 18 **non-Inupiat** households,

only 7 (belonging to the teachers, the public safety officer, and the **school** maintenance head, with their spouses) were of a permanent or semi-permanent nature, existing as a household in **Nuiqsut** for a period of a year **or** more. **Of** the remaining 11 households, **6** consisted of temporary households **of** construction workers who generally stayed in **Nuiqsut** for a period of 3 to **6** months. **The 5** remaining households were of a mixed-ethnic nature. Of these 18 households, **12** averaged **less** than one visit **per person** to the **Nuiqsut clinic** in 1982.

One must be cautioned not to interpret the results of this test as indicative of any differential susceptibility to illness by **Inupiat** members of the community. **A more likely** explanation is simply that **non-Inupiat** do not visit the **clinic** as often as do **Inupiat** because **non-Inupiat** do not see it as serving their needs. **Non-Inupiat**, in **Nuiqsut** at least, tend to treat themselves or to go out for treatment when a serious **problem** arises. **The** clinic's financial operation may **also** affect this, as **Inupiat** are treated without charge while **non-Inupiat** are supposed to pay for treatment.

**In** conclusion, the limitations of **health** care in **Nuiqsut** must be discussed. **Clinic** records provide information on the treatment administered or prescribed for each **clinic** **visit**. When no doctor was present at the **clinic** certain complaints were sent to Barrow without preliminary treatment locally. These generally consisted of serious injuries such as fractures or burns, pneumonia in elderly patients, or unusual conditions such as appendicitis, breast abscess, hernia, **loss** of vision, or severe **allergic** reactions. These conditions were beyond the ability of the trained health aides to treat locally. When a doctor was present in **Nuiqsut**, some conditions **could still** be effectively treated **only** in Barrow. These include, for example serious injuries (such as hypothermia) and conditions such as facial paralysis,

as well as symptoms of a condition requiring further diagnostic tests and/or treatment (such as **blood** in the stool). /

In certain cases, preliminary treatment was administered in **Nuiqsut** before sending the patient on to Barrow. In some cases these involved emergency situations, such as heart failure or stroke, but most involved cases where more comprehensive health care was necessary, such as abscessed gums, mental illness, and venereal disease.

In certain other cases, the patient was recommended to visit Barrow for further care. Usually there existed persistent **but** non-urgent symptoms of a condition beyond the diagnostic capabilities of the clinic. Sometimes a condition was not responding to treatment. These generally involved, for example, vaginitis, enlarged uterus, masses or lumps, swelling, **etc.**

The handwritten records were often difficult to read accurately, but a preliminary assessment of the treatment administered indicates that when no doctor was present, the **health** aides prescribed a fairly narrow range of drugs and treatment for certain conditions. When a doctor was available a wider range of drugs was prescribed. However, there appears to be no significant difference between the health aides and the doctor in the amount of drugs prescribed.

As a last note, it must be remarked that nearly all adult **Inupiat** smoke cigarettes. Some smoke quite heavily. This no doubt aggravates respiratory illness, the most common medical complaint. There are also indications that the incidence of lung cancer (and other cancers) is increasing.



## Social Health

### INTRODUCTION

**This** section will have two major parts. The first' **will deal** with disruptive behavior in terms of public safety **records**, Informants' information, and observation. The second **will** consider alcohol and drug use in the village and the **implications** of the patterns which emerge.

### DISRUPTIVE BEHAVIOR

Disruptive behavior occurs in **all** communities and is basically any behavior against which sanctions are made. Sanctions can **be** very mild (**being** ignored or lightly corrected) to very harsh (physical pain, **imprisonment**, or even death). In Nuiqsut, gossip was probably the most common **social** sanction and mechanism for **social** control. **Inupiat** attempt to **deal** with **all** within this **social** pressure sort of mechanism. Only in the case of very serious disruptive behavior is public safety **called** in. The argument **could** be made that too much **disruptive** behavior is **dealt** with informally, and public safety involved too seldom. However, the success of **village** residents in solving problems without resort to the **public** safety department can **also** be seen as a resiliency or strength of the community. Which interpretation one chooses depends upon one's assessment of the results.

Unfortunately, an assessment of these results is not easy, due to a lack of information. Records only exist in those cases where **public** safety has been called in and is involved and a service **call** is recorded in the monthly report to Barrow. We did not have access to local Public Safety

records, and so we had to rely on the summary statistics available in Barrow. These records are not totally accurate. Some monthly records are missing, or possibly combined with the month following. It is not clear whether public safety officers are totally consistent in what they decide to report from month to month. Also, for that behavior subjected only to informal social sanctions, no records exist as such. Collection of informal information is easy, but validating it, or deciding what is reliable and to what degree, is almost impossible. This provides good information on values and on community approved behavior types, but no hard information on frequency of behavior. Thus, what we must do is present and review the Public Safety statistics available, and then discuss them in terms of **village** dynamics.

#### Public Safety and Court Records

We obtained the monthly frequency counts of service **calls** from Public Safety in Barrow. We **also** searched the court records in Barrow and **pulled** and tabulated all those with defendants whose address was **Nuiqsut** (Tables 42, 43, 44). Problems with these data are obvious, but they are nonetheless suggestive. Figures for service calls in the city of Barrow were included for comparison purposes. We will only **deal** with identified **calls**, excluding the categories of "other" and "optional", as **Public** Safety in Barrow could attach no consistent meaning to them. Unfortunately, this excludes 33% to 63% of the yearly total calls (See Table 45) but this is unavoidable given the weakness of the records. As of March 11, 1983, the latest statistical summaries available were from September 1982. One **hopeful** sign is that the percentage of identified service calls is much higher for 1982 than for **1981**. The records themselves may or may not

be more reliable. Two months of 1982 are either missing for **Nuiqsut** or combined with the following month, and April and May are exactly the same. Be that as it may, these are the figures available to us.

The information for **Nuiqsut**, sparse as it is, supports the Public Safety Officer's (PSO) contention that troublesome behavior is more frequent in the winter (**cold** and dark) than in the summer (warmer and light). Barrow does not show this same pattern **nearly as well**. This **could** be expected in a **larger city** with a less homogeneous population and less susceptibility to such seasonal influences. If **Nuiqsut** continues to grow and develops a **stable** core of permanently employed residents and a more diversified population, such seasonal variation can **be** expected to decrease. The present PSO explains the present pattern as due to people either working in the summer or being at fish camp. **In** either case, they are out of the **village** and not **likely** to make trouble. **If Nuiqsut** becomes more **like** Barrow and 40 hour a week permanent jobs **become** more common, this may change. A significant increase in rotational **oil field** employment could have the same effect.

One must be creative when dealing with such data. Comparing the categories **in Nuiqsut** and **Barrow** which include 10% of the known reported service **calls** is one basic approach. These figures are displayed in **Table 45**, along with values for the same category which come **close** to **10%** or show that one year may have been uncharacteristic. For both years, three categories of problems are significant in both cities, Assault, **liquor** offenses (mostly drinking underage), and domestic problems and disturbing the peace are each above **10%** of identified **calls**. Together they account for 54% of identified **calls** in **1981** in both cities, and 69% in **1982**. Burglary is fairly significant in **Nuiqsut**, but less so **in**

Table 42: NORTH SLOPE BOROUGH PUBLIC SAFETY RECORDS

Nuiqsut 1981

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Homicide	-	-	-	-	-	-	-	-	-	-	-	-	0
Rape & Sex Off.	-	-	-	-	-	-	-	-	-	-	-	-	0
Robbery	-	-	-	-	-	-	-	-	-	-	-	-	0
Assault	2	1	-	-	-	-	-	1	-	-	2	3	9*
Burglary	3	1	-	-	-	-	-	-	-	1	1	1	7*
Larceny	1	1	-	-	-	-	1	1	1	-	-	-	5
Motor Veh. Theft	-	-	-	-	-	-	1	-	-	-	-	1	2
Vandalism	1	1	-	-	-	1	-	-	-	-	2	1	6
Narcotics	-	-	-	-	-	-	-	1	-	-	-	-	1
<b>DUIIA</b>	-	-	-	-	-	-	-	1	-	1	-	-	2
<b>Liquor/Doc<sup>b</sup></b>	-	-	-	1	-	1	1	1	1	1	2	-	8*
Traffic Off.	1	-	1	-	1	-	-	-	-	-	-	-	3
Animal Prob.	1	1	-	-	-	-	1	-	-	2	3	1	9*
Domestic Prob.	1	-	-	1	-	-	1	-	1	1	3	3	11*
Prem. Sec.	-	-	-	-	-	-	-	-	-	-	-	-	0
Disturbing Peace	-	-	-	-	-	-	-	1	2	2	4	3	12*
Optional	2	-	2	1	1	-	2	1	2	-	4	8	23
Other	18	14	1	3	3	3	8	5	8	18	13	7	101
Total	30	19	4	6	5	5	15	12	15	26	34	28	199

<sup>a</sup>Driving under the influence.

<sup>b</sup>Mostly underage drinking.

\* 10% or more of "known service calls."

Table 43: NORTH SLOPE BOROUGH PUBLIC SAFETY RECORDS

Nuiqsut 1982<sup>c</sup>

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Homicide	-	-	-	-	-	-	-	-	-	-	-	-	0
Rape & Sex Off.	-	-	2	-	-	1	-	-	-	-	-	-	3
Robbery	-	-	-	-	-	-	-	-	-	-	-	-	0
Assault	-	-	1	2	2	1	4	-	1	-	-	-	11*
Burglary	-	-	1	-	-	-	2	-	3	-	-	-	6
Larceny	-	-	1	-	-	1	1	-	3	-	-	-	6
Motor Veh. Theft	-	-	2	-	-	-	2	-	1	-	-	-	5
Vandalism	2	-	1	-	-	1	2	-	1	-	-	-	7
Narcotics	-	-	1	-	-	-	-	-	1	-	-	-	2
<b>DUIIA</b>	-	-	-	1	1	-	-	-	-	-	-	-	2
<b>Liquor/Doc<sup>b</sup></b>	4	-	5	2	2	1	5	-	4	-	-	-	23*
Traffic Off.	-	-	-	-	-	-	-	-	-	-	-	-	0
Animal Prob.	-	-	3	-	-	-	-	-	2	-	-	-	5
Domestic Prob.	3	-	2	2	2	1	5	-	7	-	-	-	22*
Prem. Sec.	-	-	-	-	-	-	-	-	-	-	-	-	0
Disturbing Peace	3	-	2	2	2	4	2	-	5	-	-	-	20*
Optional	1	-	-	-	-	1	-	-	-	-	-	-	2
Other	9	-	9	5	5	7	5	-	14	-	-	-	54
Total	22	-	30	14	14	18	28	-	42	-	-	-	168

<sup>a</sup> Driving under the influence.

<sup>b</sup> Mostly underage drinking.

<sup>c</sup> Blank months not reported. May be included in following month.

\* 10% or more of "known service calls."

Table 44: NSB PUBLIC SAFETY SERVICE CALLS AND COURT CASES FILED

	1981												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ott	Nov	Dec	
Service Calls, Barrow	287	263	287	243	286	383	337	379	339	353	321	379	3,857
Service Calls, Nuiqsut	30	19	4	6	5	5	1	5	1	2	1	5	199
Court Cases Filed, Nuiqsut Misdemeanors	1	2	-	-	-	-	-	-	-	-	-	1	4

	1982												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Ott	Nov	Dec	
Service Calls, Barrow	327	113	331	265	239	209	26B	175	269	-	-	-	2,196
Service Calls, Nuiqsut	22	NR <sup>a</sup>	30	14	14	18	28	NR <sup>a</sup>	42	(44)	<sup>b</sup> -	-	168
Court Cases Filed, Nuiqsut Misdemeanors	2	1	2	1	1	1	1	1	1	2	1	2	16
Court Cases Filed, Nuiqsut Felonies	-	-	1	-	-	-	-	-	-	-	1	-	2

<sup>a</sup> Not reported. May be included in following month.  
<sup>b</sup> Personal communication.

Barrow. In both cities, animal problems were a high percentage of calls in 1981, but not in 1982.

Computing service calls per capita in both communities for both years, using the 1980 census population (2,207 for Barrow, 208 for Nuiqsut) yields the same basic ratios whether one uses total service calls, known calls only, or most common call categories. Barrow's rate is twice Nuiqsut's in 1981, but in 1982, they are equal (Barrow's rate is stable from 1981 to 1982, Nuiqsut's essentially doubles). The profiles of offenses are very similar. This is somewhat surprising in that one reason informants gave for preferring life in Nuiqsut to life in Barrow was the lower "crime rate" and lower incidence of trouble. This suggests again that official NSB Public Safety records do not reflect all that occurs in a community. People who choose to live in Nuiqsut find it, for some reason, a less pressured place.

Table 45: NSB PUBLIC SAFETY SERVICE CALLS  
SELECTED CATEGORIES

	Nuiqsut				Barrow			
	1981		1982 <sup>a</sup>		1981		1982 <sup>a</sup>	
	#	%	#	%	#	%	#	%
Total Service Calls	199	100	168	100	3857	100	2196	100
"Other"	101	51	54	32	<b>1564</b>	<b>41</b>	792	36
"Optional"	23	12	2	<b>1</b>	781	20	242	<b>11</b>
Identified Calls	<b>75</b>	37	<b>112</b>	67	<b>1512</b>	<b>39</b>	<b>1162</b>	53
Burglary	<b>7</b>	<b>9</b>	<b>6</b>	<b>5</b>				
Liquor/Dot	<b>8</b>	<b>11</b>	<b>23</b>	<b>21</b>	271	18	201	<b>17</b>
Animal Prob.	9	12	<b>5</b>	<b>4</b>	134	9	<b>18</b>	<b>2</b>
Domestic Prob.	<b>11</b>	15	<b>22</b>	<b>20</b>	203	<b>13</b>	<b>250</b>	<b>22</b>
Disturbing Peace	12	16	20	18	239	16	267	23
Assault	9	12	<b>11</b>	10	110	7	87	7

<sup>a</sup> Nine months information **only**. October - December data unavailable.

Public Safety does maintain a much lower profile in **Nuiqsut** than in Barrow, probably because there is less need for the mere presence of authority to deter public disruptive behavior. **Nuiqsut** is a much tighter knit community than Barrow in terms of kinship relations, as would be expected of a smaller community of self-selected people. The informal mechanisms of social control work much more effectively in **Nuiqsut** than in Barrow. Resort to the courts, located in Barrow, has been infrequent in relative terms. Our search of the court records revealed four court cases (all misdemeanors) in 1981 and 18 court cases (16 misdemeanors and 2 felonies) in 1982 (Table 43). One in 1981 and two in **1982** seem to involve **non-Inupiat** as defendants. The pattern of timing of events leading to court cases is rather even, but looks to support the same sort of seasonal pattern for **Nuiqsut** as the service call information. It is, of course, not statistically significant.

Only two felony cases were filed in 1982, both for rape. This points out an important source of difficulty between **Inupiat** and **non-Inupiat** people. Situations that **Inupiat** have before treated within the kinship-community sphere are seen by Public Safety as matters of general **public** concern. This is by no means a problem restricted to the North Slope. Relations between the sexes, both within marriage and outside of it, and relations between parents and children are especially sensitive. **In Nuiqsut**, women are apparently changing their self-image or the idea of proper male behavior towards them. For whatever reason, women are becoming more willing to redress wrongs by using the court system rather than the more traditional informal community sanctions. This change is much more evident in Barrow and **could** be expected **to** increase now that a judge is stationed permanently in Barrow. **Nuiqsut could well** exhibit the same pattern. Similarly, a common observation of visitors to **North Slope villages** is that children seem to be loved and coddled and yet at times **also** ignored or even mistreated. **We could** not **collect** any reliable information on such a sensitive issue, which even **public** agencies with that as their charge find difficult, but were able to observe instances where neglect or abuse was evident. The incidence or frequency of this is a question we cannot address. The most common observation is that many children come to **school** hungry, without breakfast. This **is**, unfortunately, not uncommon everywhere, especially as many **adult** Americans no longer eat breakfast. Students sleeping in school because they **could** not at home, and exhibiting bruises and cuts, are a different matter, however. They do seem to indicate a **social** health problem, but one of unknown magnitude.

Such cases are usually linked by **non-Inupiat** to the **Inupiat** use (and abuse) of alcohol. The Public Safety Officer states that 80% to 90% of service calls are for alcohol related

situations, and that **all** serious offenses are alcohol related. The court records bear this out in substance if not in literal truth. Of the twenty two court cases which comprise part of Table 44, 18 (82%) involved the use of alcohol. Those that did not involve alcohol were three theft cases and one reckless endangerment during a dispute. Most of the alcohol related cases involved the most common sorts of identified service calls abstracted from NSB **Public** Safety records (Table 45) -- assault (6), underage drinking (4), and domestic problems and disturbing the peace (4). The remaining four cases involved criminal mischief (2), reckless driving (1), and misconduct with a weapon (1). Since this seems to implicate alcohol as something underlying behavior disapproved of enough to necessitate **calling Public** Safety and then taking action through the courts, a discussion of alcohol consumption and its effects **on** behavior, and on the community in general, is essential.

## ALCOHOL CONSUMPTION IN NUIQSUT

### Introduction

Studies of alcohol use and abuse are common in nearly every **social** setting because the issue is such a common one. The subject is an especially sensitive one in the North, however, because of the sometimes callous manner in which such studies have been carried out and the conviction with which interpretations were made (**Hild** 1981, **Segal** *id*). What we attempted to do was **to** document alcohol consumption in **Nuiqsut**, observe the contexts in which it was used, and form some sort of understanding of why the pattern of use-which exists persists. That **Inupiat** and **non-Inupiat** (both residents and non-residents) have different perceptions of alcohol use in **Nuiqsut** must be admitted. **We will** attempt to find some



common ground by focusing on observable behavior and situational contexts.

**Nuiqsut**, like Barrow and several other North Slope villages, is a dry community. Potable alcohol cannot be sold or imported for sale. However, personal possession, drinking, or being intoxicated are not **legal** offenses and hence are not prohibited. People who are intoxicated and unable to care for themselves can **be placed in** protective detention without being charged. Alcohol is rather freely available **in Nuiqsut**, notwithstanding the official policy of the air carrier serving **Nuiqsut** not to transport **alcohol**. **The major** airlines can **legally** ship **alcohol** to Barrow, where it **is** often repackaged and sent to **Nuiqsut**. Alternatively, alcohol is sent to **Prudhoe Bay**, **which** is not a dry community, and repackaged for shipment to Barrow. People sometimes charter a plane to **fly** in alcohol, we were told, but can **only judge** the reliability of this information by who **told** us this **and** how many times (many different people, many times).

There are several different ways to obtain alcohol in **Nuiqsut**. We shall see some of these in action in later **sections**, but **will** sketch them here. The most direct way to buy it **is** to contact a **liquor** store in Fairbanks (usually, but **it could** be Anchorage as **well**) and have them send a package **to Nuiqsut via** Prudhoe Bay. If it is in a non-liquor box, **there** is no need to repack it. If it needs to be repacked, there is usually someone in Prudhoe Bay willing to do so. The second way to buy alcohol, more expensive than the **first**, is to contact a friend in Barrow, where access **is** easier than in **Nuiqsut**. **Usually a** bottle can be located quickly and put on the next plane to **Nuiqsut**. Such "packages" are eagerly awaited and most planes are greeted by **small** crowds in the hopes that such a package **will** arrive. The third way to buy a bottle is to approach a bootlegger in **Nuiqsut**. This is the

most expensive and quickest way, of course. None of our information in this regard is tested, as we never observed the selling of illicit substances as such. However, we observed bottles of Calvert Whiskey, the most common drink in **Nuiqsut**, selling in Fairbanks for \$8 - **\$10**. In Barrow, they were said to sell for \$40, and in **Nuiqsut** for \$100.

Social drinking, not involving the use of money, is also a common way to obtain alcohol. It does imply a tie of later reciprocity, and is somewhat risky in that only **close** friends and relatives can rely on someone else's bottle being shared with them. In most cases, a person is not refused a drink. He is simply not offered one or not shown the bottle. We did observe quite a bit of social drinking, as well as the "cruising" behavior which sometimes precedes **it**. Individuals, typically young men in groups of two to six, will drop in to visit houses where they have obtained and shared alcohol before (not all individual members of the group need to have done so, but at least a majority always had). If no offer of alcohol or other intoxicating hospitality seemed to be forthcoming, the group quickly left. Five minutes, an abnormally short visit by normal **Inupiat** standards, was about the longest an unsuccessful (or unlucky) "cruising" group was observed to stay before exiting to try another house. These groups had no stable membership, other than that friends tended to cruise together more often than with others. These groups sometimes carried one or two bottles of alcohol of their own, which were brought out if the **"host"** had opened his own supply. Female and mixed-sex "cruising" groups were observed, as well as an occasional solitary. Only a very few "cruisers" over the age of 30 were observed.

## Data Collection

Several sorts of information were obtained. Observations were made of peoples' drinking behavior, its frequency, who **else** was there, and **so** on. Personal observations were made and later recorded in coded form on 80 to **100** adults.

Anyone over the **age** of **15** was considered an **adult**.

**Information** on the drinking behavior of individuals **15** and **under** was too unreliable as **to be** able to make any general statements about that part of the population. Several reasons contribute to this. Drinking is **less** frequent for non-adults, so that informants are less sure of who drinks and how much. Non-adults especially avoided talking about drinking with the researchers, and other informants **simply** did not socialize in this way with this age group and so had no data base to share. Adult drinking is thus more visible in **Nuiqsut**, and more is known about it by the average community member than is known about non-adult drinking. Non-adult drinking no doubt exists, but our information **is** too poor to treat **it** in any systematic way.

Thus, our drinking observations cover approximately **1/2** to **5/8** of the potential **adult** drinking population **in Nuiqsut**. **In** addition, **observational** impressions were collected and coded for **later** use. Both **of** these were **simply** aspects of our more general **daily** note write-up. Once research was **well** underway and rapport had been established with various informants, a more concerted effort was made to obtain information on alcohol consumption. General questions about **alcohol** and its use were usually ignored, so we quickly learned not to ask such questions. An informant did agree to classify everyone on our census as to the frequency with which he or she drank **alcohol**. As one choice was "insufficient information", we are reasonably sure that these judgments were **all** made in good faith and with some

consistency. Our informant knows the community very well, and **could** classify someone as “unknown”, “does not drink”, “drinks occasionally”, “drinks regularly”, or “always drinking”. Our informant made no use of the last category, which displayed, to us, evidence of his objectivity. Our informant’s general views on alcohol consumption were that nearly everyone drank and that those who drank also had drinking related problems. This is not inconsistent with his pattern of judgments, especially given the uneven supply of alcohol **to Nuiqsut**, but demonstrates an ability to look at things in **detail** rather than in terms of broad generalizations.

Another source of confidence in these alcohol ratings is that one of our field researchers independently classified the same people-and reached just about the same results, both in terms of aggregated percentages and individual categorizations. Table 46 indicates that for **Inupiat**, the informant was more familiar with regular drinkers than the researcher but that the difference in overall ability to assess drinking was not great. Only 16 cases were unknown to both and so could not be assigned to a class. The informant was much less familiar with **non-Inupiat** drinking (Table 47). Thus, the **non-Inupiat** data set reflects the researcher much more than the **Inupiat** composite data set does. There are no actual disagreements of assessments for individual **non-Inupiats**, however, and only two from among the **Inupiat** population.

This overall agreement justified the formation of a composite data set from the two independent sets of values. An **individual** coded as “unknown” in one set but assigned a consumption code in the other was coded by that consumption code in the composite set. This reduced entirely “unknown” cases to 16, resulting in a more complete data set, without significantly changing its distributional composition.

Table 46: **NUIQSUT** ALCOHOL CONSUMPTION  
**INUPIAT** ADULT JUDGMENT COMPARISONS

	Drinking Frequency				<b>Total</b>
	<u>Unknown</u>	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
Informant	<b>39</b>	<b>19</b>	32	<b>72</b>	<b>162</b>
Researcher	<b>49</b>	<b>18</b>	<b>32</b>	<b>63</b>	<b>162</b>
Composite*	<b>16</b>	<b>26</b>	<b>44</b>	76	<b>162</b>

\* A combination of informant and researcher judgments. See text for explanation of method.

Table 47: **NUIQSUT** ALCOHOL CONSUMPTION  
**NON-INUPIAT** ADULT JUDGMENT COMPARISONS

	Drinking Frequency				<b>Total</b>
	<u>Unknown</u>	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
Informant	<b>14</b>	<b>0</b>	7	<b>3</b>	24
Researcher	3	<b>4</b>	<b>14</b>	3	24
Composite*	2	<b>5</b>	<b>14</b>	3	24

\* A combination of informant and researcher judgments. See text for explanation of method.

Data.

Definitions could pose a problem, but here the categories have the following meanings. "Unknown" means there is insufficient information of a **reliable** enough nature to make an assessment. "Never drinks" means that the individual has never been seen drunk or drinking and claims, or is reputed to claim, not to drink. "Drinks occasionally" means that the individual has no set pattern of drinking. **If** he is observed in an intoxicated state, it is an unusual but not startling event. No **non-Inupiat** in this category were ever observed in an intoxicated state. "Drinks regularly" means that the individual drinks consistently

within certain contexts when liquor is available, but not that the individual drinks consistently in a temporal pattern (daily, weekly, etc. ) due to the often sporadic supply of liquor, **It** is not uncommon to observe these individuals when they are drunk. Everyone in category three has been observed to be in such a state. No individual in **Nuiqsut** was observed or known to be in a constant or semi-constant drunk state. That sort of steady drinking over a long period of time appears to **be** absent.

Information for individuals below the age of 16 does not seem very reliable. The characteristics of both adult populations are fairly clear. Most **Inupiat** drink (Table 48). Below the age of 20, occasional drinkers outnumber regular drinkers and there is a significant number of non-drinkers. For the 21-30 age group, the numbers are reversed and drinkers far outnumber non-drinkers. Regular drinkers outnumber occasional drinkers. For the 31-40 and 41-50 age groups this pattern intensifies. Regular drinkers far outnumber occasional drinkers. There are few non-drinkers. Above the age of 50 there is an abrupt change, as non-drinkers far outnumber regular drinkers and there are no occasional drinkers at **all**. The differences are statistically significant.

The simplest explanation is that increased drinking is directly related to ease of access to alcohol. The older one is, the more **likely** one is to obtain **alcohol**. This is no doubt partly a matter of resources (adults tend to earn more than adolescents) and partly a matter of social setting (the older one is, **the wider one's social** network is, in terms of number of **people** as well as different geographical locations). The disjunction at age 50 may be evidence for a change in socialization practices, differences in life experiences, and/or differences in values between **Inupiat** over 50 and those younger. In **Nuiqsut** there are 20 people

**Table 48: NUIQSUT ALCOHOL CONSUMPTION  
INUPIAT ADULT, AGE BY FREQUENCY**

<u>Age</u>	<u>Drinking Frequency</u>				<u>Total</u>
	<u>Unknown</u>	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
16-20	8	6	<b>21</b>	<b>11</b>	46
<b>21-30</b>	<b>7</b>	<b>1</b>	15	<b>22</b>	45
<b>31-40</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>17</b>	23
<b>41-50</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>22</b>	28
<b>51-60</b>	0	<b>6</b>	<b>0</b>	3	<b>9</b>
<b>61+</b>	0	<b>10</b>	0	<b>1</b>	<b>11</b>
<b>Total</b>	<b>16</b>	26	44	<b>76</b>	<b>162</b>

<u>Age</u>	<u>Drinking Frequency, Inupiat Adult</u>			<u>Total</u>
	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
16-20	<b>6</b>	<b>21</b>	<b>11</b>	<b>38</b>
<b>21-30</b>	<b>1</b>	<b>15</b>	22	<b>38</b>
<b>31-50</b>	3	8	39	<b>50</b>
<b>51+</b>	16	0	4	<b>20</b>
<b>Total</b>	26	44	<b>76</b>	<b>146</b>

$$x^2 = 84.9, df = 6$$

hypothesis of no-significant difference must be rejected.

<u>Age</u>	<u>Drinking Frequency, Inupiat Adult ≤ 50</u>			<u>Total</u>
	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
16-20	6	<b>21</b>	<b>11</b>	38
<b>21-30</b>	<b>1</b>	<b>15</b>	<b>22</b>	38
<b>31-50</b>	<b>3</b>	8	<b>39</b>	50
Total	<b>10</b>	44	<b>72</b>	<b>126</b>

$$x^2 = 17.9, df = 4$$

hypothesis of no significant difference must be rejected at the 0.005 level.

over 50. By chance, **13 (65%)** are women. None drink (Table 49). Many are active in church. **All** speak **Inupiat** most of the time. Only a few can readily understand English. Of the 7 men over 50, 4 drink regularly and 3 do not drink at **all** (Table 50). Those who do not drink have had little direct

Table 49: NUIQSUT ALCOHOL CONSUMPTION  
 INUPIAT ADULT FEMALE, AGE BY FREQUENCY

<u>Age</u>	<u>Drinking Frequency</u>				<u>Total</u>
	<u>Unknown</u>	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
16-20	<b>7</b>	3	10	3	23
21-30	5	<b>1</b>	<b>7</b>	9	22
<b>31-40</b>	<b>1</b>	<b>2</b>	<b>1</b>	9	<b>13</b>
<b>41-50</b>	<b>0</b>	0	<b>3</b>	6	<b>9</b>
<b>51-60</b>	0	4	0	0	<b>4</b>
<b>61+</b>	0	<b>9</b>	0	0	9
<b>Total</b>	<b>13</b>	<b>19</b>	21	27	80

<u>Age</u>	<u>Drinking Frequency</u>			<u>Total</u>
	<u>Never</u>	<u>Occasional</u>	<u>Regular</u>	
16-20	3	<b>10</b>	3	<b>16</b>
21-30	<b>1</b>	<b>7</b>	<b>9</b>	<b>17</b>
<b>31-50</b>	<b>2</b>	<b>4</b>	<b>15</b>	<b>21</b>
51+	13	0	0	13
<b>Total</b>	<b>19</b>	<b>21</b>	27	<b>67</b>

$\chi^2 = 52.9$ ,  $df = 6$   
 hypothesis of no significant difference must be rejected.

<u>Age</u>	<u>Drinking Frequency, Inupiat Women <math>\leq 50</math></u>		<u>Total</u>
	<u>Never or Occasional<sup>a</sup></u>	<u>Regular</u>	
<b>16-20</b>	<b>13</b>	3	<b>16</b>
21-30	8	<b>9</b>	<b>17</b>
<b>31-50</b>	6	<b>15</b>	<b>21</b>
<b>Total</b>	27	27	54

$\chi^2 = 10$ ,  $df = 2$   
 hypothesis of no significance must be rejected at the 0.010 level.

<sup>a</sup> There are too few women  $\leq 50$  in the "never" category for the computation of a valid chi-square test.



Table 50: NUIQSUT ALCOHOL CONSUMPTION  
 INUPIAT ADULT MALE, AGE BY FREQUENCY

Age	Drinking Frequency				Total
	Unknown	Never	Occasional	Regular	
16-20	1	3	11	8	23
21-30	2	0	8	13	23
31-40	0	0	2	8	10
41-50	0	1	2	16	19
51-60	0	2	0	3	5
61+	0	1	0	1	2
Total	3	7	23	49	82

Age	Drinking Frequency		Total
	Never or Occasional <sup>a</sup>	Regular	
16-20	14	8	22
21-30	8	13	21
31-50	5	24	29
51+	3	4	7
Total	30	49	79

$\chi^2 = 11.4$ ,  $df = 3$   
 hypothesis of no significant difference must be rejected  
 at the 0.010 level.

Age	Drinking Frequency, Inupiat Men $\leq 50$		Total
	Never or Occasional <sup>a</sup>	Regular	
16-20	14	8	22
21-30	8	13	21
31-50	5	24	29
Total	27	45	72

$\chi^2 = 11.5$ ,  $df = 2$   
 hypothesis of no significance must be rejected at 0.005  
 level.

<sup>a</sup> There are too few males in the "never" category for the  
 computation of a valid chi-square test.

contact with **non-Inupiat**, whereas those who do drink have histories of wage labor. Drinkers' knowledge and use of English is greater. Non-drinkers rely to a much greater extent on subsistence resources. The characteristics of non-drinkers over the age of 50 thus suggest that contact with **non-Inupiat** (and alcohol) facilitates the acquisition of alcohol and, indeed, that such contact has resulted in the **Inupiat** acceptance of the use of alcohol.

There is a statistically significant difference in drinking frequency between **Inupiat** males and **Inupiat** females (Table 51). Since **Inupiat** males in **Nuiqsut** have more contact with **non-Inupiat**s than their female counterparts do, this reinforces the above discussion. Examination of **Tables** 49 and 50 reveals that the sexes do exhibit a similar pattern. Drinking intensifies with age, reaches a peak, and then declines. However, female **Inupiat** drinking intensity seems to peak at ages 31-40, whereas for men it peaks at 41-50. Older women do not drink at **all**, whereas some older men do. Firm conclusions cannot be made, since the population is small for statistical treatment. Random factors such as the relative surplus of women over age 60 may account for some of the variance. Age as a factor does seem more important than sex, overall.

The **non-Inupiat** population is smaller and subject to more chance fluctuations than is the **Inupiat** population. Occasional drinkers predominate. Age does not seem significant (Table 52). There are no female regular drinkers (Table 53). Only males over 30 drink regularly (Table 54). These three males were the only **non-Inupiat** who were seen when drunk. Thus, the drinking behavior of "occasional" drinkers does differ in the two populations. **Non-Inupiat** occasional drinkers drink more consistently over time but in small amounts at any one time. **Inupiat** occasional drinkers tend

Table 51: NUIQSUT ALCOHOL CONSUMPTION  
 INUPIAT ADULT, SEX BY FREQUENCY

Sex	Drinking Frequency			Total
	Never	Occasional	Regular	
Male	7	23	49	79
Female	19	21	27	67
Total	26	44	76	146

$\chi^2 = 1, df = 2$

hypothesis of no significant difference **must** be rejected at the 0.005 level.

Table 52: NUIQSUT ALCOHOL CONSUMPTION  
 NON-INUPIAT ADULT\*, AGE BY FREQUENCY

Age	Drinking Frequency				Total
	Unknown	Never	Occasional	Regular	
16-20	0	1	0	0	1
21-30	0	0	6	0	6
31-40	2	1	1	1	5
41-50	0	2	5	2	9
51+	0	1	2	0	3
Total	2	5	14	3	24

to drink less consistently over **time** but **in large** amounts when they do drink. Regular drinkers **in** both groups tend to **follow** the same drinking pattern, **but non-Inupiats** have better or more regular access to **alcohol, it** seems.

To state that **Nuiqsut** has a problem with alcohol (and other drugs) would not be to say anything that **people there do** not already know. Undoubtedly, the extent of the problem is

Table 53: NUIQSUT ALCOHOL CONSUMPTION  
NON-INUPIAT ADULT FEMALE, AGE BY FREQUENCY

Age	Drinking Frequency				Total
	Unknown	Never	Occasional	Regular	
16-20	0	0	0	0	0
21-30	0	0	3	0	3
31-40	1	0	0	0	1
41-50	0	1	2	0	3
51+	0	0	1	0	1
Total	1	1	6	0	8

Table 54: NUIQSUT ALCOHOL CONSUMPTION  
NON-INUPIAT ADULT MALE\*, AGE BY FREQUENCY

Age	Drinking Frequency				Total
	Unknown	Never	Occasional	Regular	
16-20	0	1	0	0	1
21-30	0	0	3	0	3
31-40	1	1	1	1	4
41-50	0	1	3	2	6
51+	0	1	1	0	2
Total	1	4	8	3	16

\* Excludes all camp residents except 1 resident camp cook.

much better known to them than to the researchers. Resolution E-02-83 at the **Inuit Circumpolar Elders Conference** states "... that we as concerned Elders strongly recommend that **Inuit** communities consider banning alcohol and drug introduction and **consumption**..." [Arctic Policy Review, October-November 1983:28). The nature of the subject precluded our formally investigating it, especially as recent research on the North Slope has sensitized people to this **topic**. We had no wish to jeopardize our other,

more primary, research interests for this one **specific** type of information.

**Also**, it rapidly became clear that **Nuiqsut** is such a small community that ethical considerations would prevent us from disclosing any information by which specific individuals and their activities in **this** sphere could be identified. **People** are sensitive enough when their open and **public** activities are discussed. Thus, **the** decision was made **early** to keep our discussion on a general **plane**.

**At** the same time, a rather broad view of **alcohol** use cannot **help** but be obtained by anyone who lives there for several months who observes carefully and is not biased by the reports or expectations of others. Who **drinks** how often and when is not necessarily a question one **should** ask, but is certainly a question one can investigate. Unexplained work absences, a package followed by a party or **lots** of guests, a change in physical appearance or behavior, **all** are indirect measures (**or** rather, potential measures) of alcohol consumption. These, combined with **public** opinion, can become the basis of solid data when they are bolstered **by** some independent and reasonably **reliable** confirmatory information. Our information is **mostly of** this soft **variety**, but we have confidence in its validity for **all** that, mainly because it correlates **well** with **Tables 47 - 53**.

#### Alcohol Acquisition and Distribution in **Nuiqsut**.

Alcohol is flown into **Nuiqsut**, as was **briefly** sketched **above**. There are reputed to be three bootleggers in **Nuiqsut**. This seems reasonable to us, given our other information on income and expenditures, and the potential market for liquor. **In** addition, people returning from Barrow, Anchorage,

Fairbanks, or Prudhoe often bring back other drugs, mainly marijuana. These are sometimes sold, but more often are given away or used with a group of kin and friends in a **social** context. "Packages", an euphemism for goods that Cape Smythe Airlines would normally not carry repackaged in a way so that they will, are also treated in this way. On days when such packages arrive, kin and friends (**at** least those who drink) come visiting. The phone rings constantly if one has a name for receiving liquor and people notice that a package has arrived for you. Since a crowd greets every **plane**, someone always notices such packages.

For the reasons stated above, we wish to get no more specific on this topic. Also, no matter what one thinks of the **alcohol** survey part of their work, **Klausner** and **Foulks** have done a good job of describing the context and mechanisms of **alcohol** consumption on the North Slope. Their section on bootlegging and distribution (**1982:137-142**) applies to **Nuiqsut** as **well** as it does to Barrow. A great deal of bootlegged liquor goes to young people. **Older** people tend to acquire liquor in a more **social** context, in many cases the one they consume it **in**. The **label** "bootleg" often appears inappropriate for this latter context, where economic motivations are plainly secondary. That is not to say that **liquor** is always willingly shared, but **merely** that social considerations often outweigh economic ones.

We observed several parties or social gatherings where drinking was going on. We also observed several smaller, more informal drinking groups. The more people there were, the noisier and more active the people were, the same as anywhere **else**. In all cases, **only** certain people were welcome to come in and drink, the **Inupiat** value of hospitality notwithstanding. We were told that when **Inupiat** drink they keep the bottle on the table for all to see, so that anyone

can have some **if he** wants. It was far **more** common for us to see bottles protected by a person's feet, **in a purse, under** a table, or in a similar area of control. A decision to **"brush off"** a new arrival was not uncommon in informal drinking groups, **especially when the liquor supply was** limited. **Larger** social gatherings tended to select **people** at the door. **No** one came in **unless** they were to be part **of** the party.

**In all** cases of observed **liquor** consumption, the drinking went on until the **liquor** was gone. **In** most cases, this meant that **nearly** everyone was drunk or noticeably under the influence (**as** judged by a non-drinking observer). The **amount** consumed per person varied from three-fourths of a **bottle** in about two hours (three bottles for four people) to three or four glasses of strong punch plus some **beers**. **Several** drinking sessions were marked by verbal and/or **physical aggressive-ness** on the part of drinkers. This was **usually** displayed towards other drinkers, but once occasioned the departure **of** the researcher. **Only** two physical encounters were actually seen, although accounts of others were **reliably** verified. Chapter **11** of **Klausner and Foulks (1982:202-224)** fits **the Nuiqsut** empirical pattern of drinking and behavior, although **their** psychosocial explanations and use of the **MAST** test cannot be generalized to the **Nuiqsut** population. Drinking does seem to trigger guilt feelings rather than social shame. **"Guilt** is what one suffers when one **judges** oneself as **having** failed, a matter of conscience, not of **social** appearance" (**Klausner and Foulks 1982: 210**). Fighting and **family** strife are **also** common problems associated with drinking. Job absence and poor performance due to drinking are also apparently becoming more common. **If** more jobs **in the village** become permanent year round, the problem can **be** expected to **grow**. Certain NSB departments during our research period were seriously undermanned for short periods of time due to the incapacitating after effects of extensive socializing.

### Alcohol Consumption Outside of Nuiqsut.

Extreme intoxication is sanctioned within the village, although sometimes only by silent disapproval and social distancing. This is enough **to** cause some people to do most of their drinking outside of **Nuiqsut**, however. This type of drinker is thus even more of a “binge” drinker than is the typical **Nuiqsut Inupiat** drinker. **Travel** is used as an excuse to drink. Alcohol also tends to be cheaper in such places. It is not uncommon for official business to take two or many times as long as **would** be possible due to social activities, including drinking, which go on around them. Villagers are aware that part of their City-Corporation money may be used in this way. On one **level** it upsets them while on another they see it as a prerogative of leadership.

Private individuals are sometimes also “stuck” away from **Nuiqsut** when on a drinking binge. They run out of money to fly back. There are special programs designed to aid such people in Fairbanks and Anchorage. Shopping trips and medical visits also tend to be conjoined with drinking bouts. Visiting **also** can encourage drinking when away from **Nuiqsut**. In the larger communities of central and southern Alaska, the pressures of the smaller northern communities are evidently relaxed and **Inupiat** feel that their behavior is less scrutinized by those who count, their **fellow** villagers.

### The Use of Alcohol.

Interpretations of why people drink are fraught with **peril**. That people do drink a great deal in **Nuiqsut** is beyond doubt. That when they drink they exhibit more aggression than when sober is also without doubt (not **all** villagers, but a



significant number). Some become physically aggressive, **while** others are more vocal. Negative feelings are easier **to** express when one is drunk. One **Inupiat** **told** a researcher that **it** was inappropriate for the researcher as **well** as himself **to** be in church, because that was **God's place** and private and above man's secular pursuits such **as** science or drinking. He overlooked the researcher's possible need for **church** attendance and the community members' observations of each other, perhaps because he was inebriated (**one** of the few intoxicated **people** ever seen in church). Another **Inupiat** says he **is** only strong enough to say what he **feels** when he **is** drunk. **What he mostly** says then is that **all non-Inupiat should** leave the **village**, and the **North Slope too**. **Fights between Inupiat occur mostly** when both are drinking.

**Alcohol** is used **in** contexts of sociability but **easily** turns such a situation into a series of confrontations. These either end in at **least** one party leaving or the complete termination of the drinking context. Such confrontations are **easily** patched up **later** when the effects of the **alcohol** have worn off, but tend to be repeated once drinking begins again. **We** are not qualified to **say** what underlies the use of alcohol in **Nuiqsut**, but clearly it is **being** abused. This abuse is just as clearly an indicator **of** social disarray or of an **ill-fit** between the demands of social situations and the capabilities of individuals to cope with them.

#### Social Effects.

**In** spite of this information, we have **little** to offer in the way of measuring the impact of alcohol on the community. At best, we can offer attempts to estimate **it**. This **is** one area where community support of research effort is necessary, not **only** during the research, but **in** the design phase as **well**.

One's information is only good as what people choose not to conceal.

There are, nonetheless, some good indicators of the social effects of alcohol. Those dealing with **social** health and disruptive behavior have been discussed above in terms of Public Safety records. Public Safety cases are almost always alcohol related. The **clinic** records may indicate the **level** of physical injury potentially related to alcohol consumption. The existence of bootleggers speaks to the amount of cash flowing into the purchase of alcohol. Conservative village estimates by those in the village who know payroll incomes and consumer patterns conservatively estimate that \$45,000 is spent each month in the village on **alcohol**. They estimate that as much as 80% of some people's income is spent on liquor, other drugs, and gambling. We had no way to verify such figures, but found the statement interesting even if somewhat implausible.

**Alcohol** also occupies a prominent position in Christian **Inupiat** testimonials. Many of these public confessions of faith spoke about past personal problems with alcohol and how the church and faith in God gave one the strength to overcome them and resist the temptation to drink. This indicates that alcohol is a major concern and a fundamental reason for church membership for a significant number of **Inupiat**. Social effects of alcohol in **Nuiqsut** can also be gauged by their effects in Barrow. Barrow has begun an extensive publicity campaign to combat alcohol abuse. The case has been made that **Nuiqsut** is becoming more like Barrow, and this appears to be one area where this is true. Since better documentation of spouse abuse, **child** abuse, police (Public Safety) calls and such exist **in** Barrow, that is the logical place to begin a search for trends in **Nuiqsut** changes.

## Leisure Activities

RESIDENCE (VISITING).

One of the strengths of a **small** community anywhere **is** the **sense of** cohesion generated **by social** bonds between households. **In Nuiqsut**, these **are** doubly important. **The ties of kinship which web the village are** reinforced and sometimes supplemented by **visiting** and friendship **ties**. **There** are a **number** of "typical" social activities **which** can go on **during** such a visit. **We will** discuss each in turn briefly after we look at a typical residence.

One may enter a kinsman's house without knocking (**other** things being equal) but **should** knock **on the inner** door of other people's houses. Upon entry, one notices that the television is **almost** always on. As there are **only** two channels in **Nuiqsut** to choose from at present, no **particular** attention is paid **to** the particular content of the program except in prime time **or** sports **viewing** times. The television is usually not a focus of attention but rather something to orient to avoid looking directly at the person to whom one is speaking. Often, the sound **of** the television is **turned** off or is very **low**. A tape player may be accompanying the television picture with **music**, readings of the **Bible**, or recorded church services. **The** television is on a great deal in **all** households, but how much is watched **is** unclear. **People seldom** talk about television **in** terms of program content, and are seen to actually watch it intently in the evening or when sports or **Inupiat culture** programs are on. Radios are not played much as reception of **KBRW** (Barrow) is very poor.

After an initial welcome, and a short chat or perhaps **mutual** silence in the presence of others (the comfort **of** company),

one is usually offered tea and something to eat. This is not inevitable, but is usual and **allows** one to stay for a fairly indefinite period of time. Conversation will flow as the spirit moves people. If there is no common spoken language, gestures and pictures often will serve as means of communication. Small gifts and favors are much appreciated, and are certainly an important part of the social exchange system. The visit itself, the personal attention of the visitor in selecting that household to visit, often seems to be the thing exchanged in return for hospitality. This is especially evident when visiting **older Inupiat**, who are so gracious as to make one feel as if the visitor is the one providing the more **valued** behavior. Younger peoples' visits **will be dealt** with below.

One may also visit someone to offer assistance of some sort. This could range from changing a light bulb or pumping heating oil to fixing a snow machine. It was especially true that adolescents and young adults generally had social obligations to fulfill when they visited. These could be domestic tasks (dishes, washing the **floor**, cooking) or the **caretaking** of children or simply keeping someone company. Elderly people often **looked** after young children for working mothers as well. Such visits tend to follow kinship lines. The distribution of fish and game tends to follow the same pattern. Indeed, the researchers found certain houses easier to visit because of the household in which one of them resided. He had become part of the household and had at least temporary access to a kin network. In fact, certain social visits came to be expected of this researcher.

Invitations to eat are also a major type of visiting. These meals tend to be more elaborate than meals to which one is spontaneously invited. They also tend to include more native food elements, and to be part of an evening's program

of **socializing**. The gathering may **be only** two **or** three **couples** or as many as 20 people. **Drinking** seldom follows **such** a dinner, but **cards or** some other entertainment very **well might**. Occasions for such gatherings **are** birthdays, special accomplishments, someone's return to the village, **or** the **recent gift** of a special sort **of native** food not **usually** available in Nuiqsut. Such gatherings **almost always** are of married adults, and the **meal/snacks almost** always are predominantly harvested native foods. Bread, crackers, fruit and candy are used to supplement and **fill** out the featured offering.

Card playing gatherings can either **follow** such a **meal or happen on their own**. **Poker games run, but we** never observed one except among relatively young and inexperienced players who played their own rather simplified version. Rummy and **"snerts"** were the two games of choice, with Pinochle also **being** popular. Some games are continued from week to week for as **long** as a year. They seem to be competitive, yet not too pressure **laden**. They are the occasion for much **light** banter.

The visits of adolescents and **young adults** differ greatly from that of adults, described above. Young people **talk less** and orient to the television set more. **When they** are in an **all** young group, casual consumption of alcohol and/or drugs is common. **Adults** rarely do this during such chance visits. Young people often "cruise" several houses together before deciding where to stay awhile. These differences seem typical **of young-old** distinctions discoverable in other parts of the country. Youth in Nuiqsut are at a disadvantage in that they have few, if any, places to be together free of **adult** supervision. This is what made the arcade and **pool hall** so special, it seemed. Houses **could not be** used for young people's parties **unless** the household **adults** were

away. This partially explains the "cruising" behavior of this age group. They could **simply** look **for** where their age group action is, and possibly where the adults are not.

Drinking behavior has been referred **to** above. Other **social** behavior, gatherings without drinking, occur much more often than gatherings with drinking. The young people smoke marijuana more often than they drink, but they indulge more heavily in alcohol once they start drinking. Marijuana is used in more moderation, but in greater frequency, than alcohol by the young. **People** over the age of 35 seem not to use marijuana that much, but our information is not very complete. The frequency **of adult** drinking parties is unknown, other than that at least three nights a month show signs that extensive drinking is taking **place**. The times of the month are not consistent **but** weekends are more **likely** to be drinking nights than weekdays. Young adults seem to follow the same pattern in their drinking, probably acquiring much of their alcohol from their parents.

## GATHERINGS

### Church.

Among other things, church is a **social** event. Church attendees are **fairly** regular. Those who come, come **fairly** often. Greetings are exchanged before and after the service. On Sundays, there is a coffee session after the morning service. People use this opportunity to talk as well. Announcements are made in church. In the absence of a newspaper and an effective radio station, this is the only central source of information. The church is also the base for the Jubilee Singers and the informal **Singspirations** which are held at intervals in various homes throughout the village.

Church attendance, the congregation **size**, and such **is dealt** with elsewhere. As a formal voluntary association with an ideology of fellowship, **it** is the model of community **social** relations. The **formal** structure of **lay** minister, elders, deacons **and** congregation, forms a constructed extended **family** composed of biological **family** households. In this sense, the church is one of the most significant **social** activities in the community. Unfortunately, average attendance is fairly **low**.

### Singspirations.

These **events** are essentially hymn sings held **in** individual's households, either on special occasions **of joy** or grief or when a person wants **to** have **an** enjoyable **social** evening of singing. Generally, at **least 20** people **will** come and the home becomes crowded. The singing can last from **7:30 p.m. until 2:00 or 3:00 a.m.**, but usually ends earlier. The people who come are **mostly** the same **people** who attend church. Some irregular church attendees attend **singspirations fairly** regularly, however. Refreshments are usually served during the singing. Anyone may request that a particular hymn be sung. One function of **singspirations** is to **enable** people to practice singing new hymns.

### Feasts.

The Thanksgiving and Christmas feasts occurred during **our** research period. **A** researcher attended both. Perhaps 200-250 people attended each of the feasts. They were pretty much alike, except for a shortage of frozen fish at the Christmas Feast. People sit in the **school** gym and are served different kinds of food sequentially. Extra muktuk

and frozen fish are provided for later consumption.

The feasts are important for several reasons. They demonstrate a community solidarity. They allow the community to offer hospitality to whoever is visiting the village. They also allow the redistribution of harvested fish and game. All of these reaffirm cultural values and remind villagers of ideal modes of behavior. The feasts also serve to draw back into the village those residents who work in other places, again reaffirming the community identity.

The feasts are also events at which prestige and honor are awarded those who provide the food to be redistributed, especially the **whale**. They have thus become political in a personal sense as **well** as remaining an expression of community identity. There need be no conflict between these two, so long as the sense of community identity does not become entangled with an identification with any one particular individual. If that were to happen, the nature of the event, and probably of the community, would have changed unalterably. A community of **equals** honoring its successful hunters would have been co-opted by an individual or an elite group and transformed into a stratified community. Because of the nature of events and resources, this may have already occurred in Barrow and for the North **Slope** Borough. **If** that is the case, **Nuiqsut will** not be far behind and the feasts should be a sensitive indicator of that. People's attitudes and contributions towards the feast **will** tell.

#### Eskimo Dances.

For a long time, perhaps as long as two years before our research, there had been no Eskimo dances. From November 16, 1982 to March 9, 1983 there were two or three of **them**.



They **again** reaffirm community ties and cultural continuity. By how **well people** know the dances one may judge the transmission of traditional culture. Eskimo dances **could** also **be** a way to co-opt the form of traditional **Inupiat** culture for political and **i**geological purposes, of course. **A living** culture cannot avoid **this** sort of adaptation, in fact, **but** must beware **of** maintaining an empty form **simply** in the name **of** tradition. Eskimo games and dances **will be** good indicators in that sense. The number of participants and how **skillful** they are **will** indicate resources allocated **to** these events. Frequency is a gross indicator of interest.

The form of **an** Eskimo dance can be described **in terms of** the **roles** which comprise the event. Drummers, singers, and dancers perform together for an audience. Individuals can pass from one role to another, so that the composition of these role groups is constantly in **flux** (some more than others). Indeed, at times it seemed that these transitions, the sharing of **role** responsibilities and a community identity, were what the event is **about**.

The dance **itself** is a short sequence of hand, foot, and body movements. These movements may be a standard, learned, dance or one that is improvised. The dance is accompanied by the rhythmic beats of the drum and sometimes by a chant-like song **as well**. The dance is usually repeated, but **rarely** lasts longer than two minutes. There are pauses of perhaps **15** seconds between dances.

The drum is a **light** wooden hoop about eighteen inches **in** diameter which is covered with an **animal** membrane. **It is** sounded by striking its rim from underneath with a wooden stick. **All** drummers play in unison, but they have a **leader** who starts each dance song. Drummers sit in a **line**, holding their drums, and are **usually** face to face **with** the dancers.

Drummers sometimes sing while playing, but not always.

A line of singers stands behind the drummers. They accompany the drumming with chant-like songs. Some songs are meaningful, while others are merely vocalizations, we were told. Not all dances were accompanied by **songs**.

Drummers seem to always be men, and standing non-drummer singers are apparently always women. Dancers can be of either sex and sometimes drummers and singers will temporarily give up their roles to dance. In fact, the female singers at times initiate certain dances. The watching audience provides most of the dancers, however. Occasionally, a member of the audience **will** drum for a short period while a drummer dances. The main role switches are from audience to dancer and from singer to dancer, however.

**Dances** may be done by a single individual or a group of any size. Groups may be of a single sex or mixed. There seemed to be certain types of dances for each such combination of number and sexual composition, but we were not knowledgeable enough to make detailed and specific observations in this regard. Age did not seem to be an important factor except that most solo dances were by older men. Older dancers seemed more skilled than younger dancers. **Women** danced only in company.

Dance movements are usually meant to be meaningful. Some are traditional, such as hunting movement dances. Others include such modern actions as tipping up a bottle. Group dances tend either to have a formal structure, synchronized movements and a limited number of dancers, or to be more free-form mass dances of social solidarity. The former often involve same-sex groups or mixed groups formed by the dance initiators inviting specific others to join them. The latter

**are always** sexually mixed and include whoever wishes to join in.

A description **of** the Eskimo dance held in **Nuiqsut** on Christmas Day **will** flesh out **this** general **form**. There were **four** male drummers and three female singers. A fifth drum was shared by **three** other men. There were two periods of dancing separated by a **15** minute rest period. Approximately **150** people attended. Younger age groups **tended** to sit together--tots of 3 to **7** years, high **schoolers**, and people **18 to 25**, Older **people** sat near friends and relatives.

The first period of dancing consisted mostly of spontaneous couples and group dancing. A few individuals did try to initiate dances by inviting others to join them, **but** nearly **all** dances started as group dances. The second period of dancing started with one of the three singers initiating the dance. The three singers continued to do so, sometimes inviting specific **people** to join them, for about **30** minutes. Most were very controlled dances. The pattern then changed to more audience initiated activity.

**During** both periods, dances varied from **solo** dances to mass group dances. The former mayor of **Nuiqsut**, at the time of our research **living** mostly **in** Anchorage to attend **to** the business of Pingo Corporation, started several dances as the captain of the whaling crew that brought in **last** year's **whale**. These dances ended as mass "stomps" which **could** rightly be said to be the highlights of the evening. **Nearly** everyone took part in them.

Few elderly men danced. Many more elderly women danced. The young were not well represented. **The** important thing seemed to be for **people** to dance at **least** once. The present mayor danced twice, but never went out to dance when the man

who had been the first mayor was out on the dance floor. Dances varied from **solo** patterned dances to more free-form group "stomps". In between were **multiperson** patterned dances. Some dances were unisex while others were mixed. Group "stomps" always became mixed although they usually began as predominantly male. The sequence of dances had some structure, but did not follow any sort of script. Age groups tended to dance together even if they did not sit together. Seating, except for adolescent and young adults, seemed to be mostly **along** kinship lines.

### Eskimo Games.

Our notes of the week-long Eskimo games after Christmas are extensive, but excessive detail is not necessary. The games run 24-hours a day and are essentially contests (mainly but not exclusively tests of physical endurance) between the individuals comprising two opposing teams. This year, in **Nuiqsut**, the teams were made up of married individuals versus single individuals. Last year the teams had been chosen by their captains. As last year's competition was much closer than this year's, people say that they will probably return to that system.

The games were organized and run by a volunteer committee headed by an active middle-aged couple. The **bulk** of the committee members were unmarried males between 20 and 30 years old. By the end of the week, the functioning committee was much smaller than at the beginning. There was always adequate manpower to do what needed to be done, however. In addition to organizing the events themselves, the committee was responsible for the refreshment stand.

The mechanics of the games are fairly simple. A coin was tossed to determine which team could choose the first event. Most games are competitions between individuals. An individual from the choosing team goes to the middle of the floor between the two teams. An individual from the other team then accepts the challenge. Once an individual loses, he can no longer compete in that game. An individual plays until he loses or until the other team no longer fields a player, either because everyone has been beaten or those remaining choose not to play. The team of the winning individual then wins the event. The losing team then chooses the next event and the process goes on. The event chosen must be "familiar". That is, it must have a recognized name and rules. It need not be something that everyone, or even most people, have done recently or ever at all. With the consent of the other team, events can be made up on the spot. There are sometimes wrangles before events as to the proper way to play. Most people do not practice these events apart from the actual games.

Events could only be played once, but variations on the same theme were allowed (different finger pulls, toggle pulls, high kicks, etc.). For individual events which did not pit one person against another, team members were not barred from future competition in that event as long as one member of that team succeeded. In the one-foot high kick, for instance, each team had to have one of its members leap up in the prescribed way and strike the object target at a higher height than an individual on the other team had just done. All team members can try, but each has only a certain number of attempts per height. Once one person succeeds, however, the other team must better it. The teams alternate until one team fails to better the others' height, and so loses. All team members can try at all heights, and not all of one individual's attempts need to be in succession. Thus

some people who have little chance of succeeding may compete in order **to** give a team member time to rest. Two person and relay events were done in the same fashion.

As could be expected from these mechanics, **only** rarely does an individual who starts an event **also win it**. Even if one is undeniably the best, a series of opponents can wear one out. Thus the team with more individuals, in this case the singles, has a large advantage. Married men tended **to** be bigger and stronger, but there were many fewer of them. **Thus**, the physical advantage which married men had in the strength events was partially negated. In addition, unmarried tended to be better at the jumping and dexterity events. The strategy of choosing events was thus part of the competition.

Attendance varied from a high of 160 people to a low of 20. Much partying and social activity was going on in **Nuiqsut** at the same time. The married teams especially had problems ensuring that enough team members were always present. Basically anyone in attendance was part of one of the teams. Only individuals below the age of 16 were excluded.

Men's events did differ from **women's** to some extent. Men concentrated more on physical contests, while women supplemented these with more "party-game" type events (blind **folded** find-your-shoe relays, balancing relay races, **etc.**). **Also**, men seemed to **feel** the need **to** compete in nearly **all** events, regardless of whether they **felt** they could succeed or not. This pattern did not seem to exist among the women, who sometimes had a sizable portion of team members decide not to try an event. Near the end of the games, when it was **clear** that the unmarried would win handily, men's events came to more closely resemble **women's**. Idiosyncratic events predominated over physical contests.

The tone **of** men's and women's games differed as **well**. The **men's** games were more competitive, **but did** not seem as **confrontational** as the **women's**. Women **did** tend to play more games which involved judgment **calls**. One especially, **which** required that one keep a straight face **while one's** opponent made faces and tried to make one **smile**, caused disputes about who **smiled** and who did not. **Married** women **were** generally **at** a disadvantage when competing **with** the unmarried women, so that the unevenness of the competition may have caused some of this tension. **The two men's** teams were more **evenly** matched as far **as** individual abilities went and seemed to **lack** this element of generational tension.

There are several possible explanations. Men interact in intergenerational work and hunting situations where they are part of a team. The whaling crew metaphor is central in their **minds**. Older men teach younger men where and how to **hunt**. Construction work **is** organized **in** teams, **with** older more experienced men **usually** supervising or teaching the younger. **Women** do not have this sort of experience as much. Many of the domestic **skills** of traditional **Inupiat** women are **no** longer taught. Hide preparation and skin sewing **is** for **the** most part no longer part of everyday **life**. Cloth, down, **calf-** and sheepskin, and **Sorel** boots have replaced much **of** traditional dress. Young women now spend their days at the **school** and not in the household. Intergenerational continuity seems to be much less explicit for **Inupiat** women than for **Inupiat** men. Social stresses result, and the problems **of** women's status and male-female relationships dealt **with** in "Cash Economy" and elsewhere seem to bear this out. The present day support systems of **Inupiat** culture are **male-**oriented, as has perhaps always been the **case**. However, adolescent females no longer have a **clear** behavioral **role model** within their households to follow. Women's **roles** and statuses are changing much more rapidly than are **men's**.

### The School.

The school provides recreation mainly for the young, those up to age 30. Most users are 25 or less. Adults use the school as a place to hold meetings, but not to socialize. The young **people** use the school for occasional movies and dances, but mostly for physical activities like swimming and basketball. The latter is by far the most popular sport in **Nuiqsut**. The gym is the focus of the school.

Several age groups use the gym. It opens at **7:30 p.m.** every night except Wednesday and Sunday, and has different hours on Saturday. A **non-Inupiat** school teacher has supervisory responsibility. Early in the evening, a mixed group of young children three to eight years **old** is in evidence. They average about eight in number. Men in their 20's dominate, however. When they want to play, they do. Men usually outnumber women two or three to one. Many times games are played full-court so that more people watch than play. An average night would have about 30 people in this age group **(16-30+)**. Those **people** aged 8-15 are more sporadic in attendance, but average perhaps four to six per night. The **people** who come tend to do so very regularly.

There are few alternative activities in the village. Movies are shown relatively rarely and attendance is sporadic - sometimes high, sometimes **low**. School dances were unobserved.

### The NSB Dredge Camp.

The construction camp is an unofficial visiting spot for many people. The cook has worked in **Nuiqsut long** enough to know people and is friendly enough to like to do **people** favors. **It** is a good place to drop in, visit, and have a cup of coffee.



It is also a good place to learn what is going on, since most of the transients in town stay there. It is also possible to occasionally get something to eat there. Most villagers who stop in tend to see it as a place to socialize and drink coffee, however. Mostly, NSB employees and men in their 20's and 30's stop in. The Mayor and the Presbyterian minister are also regular visitors.

### The Kuukpik Corporation.

The other place in the village with free coffee is the Kuukpik Corporation. This is much more of a social center. It is near the airport so that people can see arrivals and departures. It is the center of Inupiat power and activity in the village since the city office is in the same building. The clinic, in the other half of the building, brings in still more people for casual conversation. The Kuukpik Store is just next door. If Nuiqsut has a "downtown", this is it.

There always are at least two Kuukpik employees around, except during lunch (when no one is there) and on rare occasions when nearly everyone is out of town or under the weather. There are usually two or three Inupiat villagers sitting around talking. Non-Inupiat also commonly sit and chat here. At times, as many as 15-20 people may be in this building, but the peak is usually 10 or so.

### SPENDING MONEY ACTIVITIES

#### Bingo.

Bingo in Nuiqsut began in about 1980, sponsored by the Health Board. They have run Bingo for about three years. The

Mother's Club has been operating Bingo for about one year and now alternates nights with the Health Board. Bingo is usually held every night except Wednesday and Sunday (church nights). Both use the multipurpose building and start at **7:30** p.m. The session can **last** past midnight, but usually does not. To play three cards costs fifty cents. People can play as many cards as they wish. Every night a "black-out" jackpot game is played, **with** a limit on the number of numbers to be **called** (a minimum of 50, a maximum of 75). There are 24 numbers on a card and 75 possible numbers in **all**. To win at blackout, **all 24** numbers on a card must be covered. If no one wins one night, the pot keeps growing and the number of numbers called is increased. When more than one person has bingo, the pot is shared.

Before the jackpot game, any number of different games can be played. Basically, a "bingo" is any agreed upon arrangement or design of covered numbers. A number can be covered only after it is "called" by the person in charge, of course. Each game is known by the name of the arrangement or arrangements of numbers which constitutes a winning design for that game. A free game or two is included during the session before the jackpot game. Each evening's sequence of games is written out before hand. Special bets are possible on select games for intermediate bingos, on the way to the final bingo. **All in all**, the system is pretty complicated for such a conceptually simple game.

To learn the games, one sits down by a person one thinks is experienced and simply asks what each game **called** looks like. There is no central catalog of what various bingos look **like**, and no one seems inclined to compose one. In fact, no one seems to even conceive of the existence of such a thing. As an **Inupiat** learning experience, Bingo seems rather typical.

A typical **Bingo night will** have **17 women players** and 8 men players. The two **to** one ratio is maintained even on light **or** heavy attendance nights. Nearly everyone smokes and most **will** drink at **least** one soda during the night. Few **people** content themselves with playing **only three cards**. **In fact**, for jackpot games, people play **up to 42 cards**. Some **nights all** available cards are in **play**. Other nights, perhaps only one third **of** them **will be**. Men tend to sit with **men** and women with women, although there **is** some mixing. Married couples tend to break up when they enter the building and **sit** with same-sex friends or **kin**.

Besides the Bingo game itself, game of chance cards **similar** to instant lottery tickets are **sold** for **\$1.00** and **\$2.00**. The actual form **of** these tickets varies from night to **night**, but can take the idiom of a **slot** machine, poker **hands**, or similar games of chance. It **is clear** from the **volume** of these **sold** that the organizations make money on them and not **on** the Bingo itself. Not everyone who **plays Bingo also plays** the "**instant winners**", but at **least two thirds** of the players seem to. A common pattern **is** for a person **to** buy \$20 worth of these tickets at one **time**. There **is usually** some ritualized way of opening them and a proper way to display winning and losing.

Bingo **is** clearly seen as a **social** event even though the games move too fast for **people** to socialize during **them**. **Such** games as "straight **bingo, love thy neighbor**" foster a feeling of sociability, as the winner must choose someone with whom to share his pot. The few **false** bingos **which** occur are not treated with any overt displeasure even when they require that **all** drawn numbers be recalled. There **is usually** some form of good natured "ribbing" of the **caller** and the people playing, as the evening goes **on**.

The money which the Mother's Club and the Health Board realize from Bingo is used to help people pay their medical transportation from **Nuiqsut** to Barrow, Fairbanks, or Anchorage, or to otherwise help those **Nuiqsut** families who are in need. People in general have little idea how much money Bingo takes in, but gossip about who takes how much out of the till is constantly making the rounds. As with most gossip, this may have a little element of truth in it and a larger element of fabrication. The fact that such things happened at least once in the past makes it very difficult to maintain a completely clean image now. When Bingo was not **held** until March of 1983 due to a delay in obtaining the necessary state license, people suggested poor financial records as one reason.

#### Pool Hall.

The Pool Hall is owned and operated by a long-term resident of **Nuiqsut** (he maintained a fishing camp in the area in the period before the 1973 refounding of the village). He and his family live in one of the original houses **built** in **Nuiqsut**. They constructed the Pool Hall themselves, it appears, in the summer of **1982**. Since the family has many male members and the machine owned by the **Kuukpik** Corporation for drilling holes in which to set structural piles is expensive to rent, they dug the holes by hand. The **Pool** Hall has three **tables** and is heated by a **diesel oil** heater.

During most of our research, the Pool Hall was this family's sole source of cash income (the male head of the household went to work in Barrow near the end of our fieldwork). It cost \$1.00 per person per game for "slow" games such as cribbage or rotation, and \$.50 per person per game for "fast" games such as eight-ball. Money was collected at a table

near the entrance, **where** one **of** the male **family** members **sat**. **We** never heard any complaints about **the** amount charged to **play**. The **Pool Hall** was formally open non-church **nights** from about **7:00 p.m. or 8:00 p.m. to 1:00 a.m. or 2:00 a.m.** However, we noted that during our stay, these **hours** gradually lengthened. **First**, the **Pool Hall** stayed open on Wednesdays, the secondary church night in **Nuiqsut**. Then, the hours were lengthened **so** that at **least** the regular patrons **could play pool** pretty much as long as they **wanted** (**5:00 a.m.** on occasion). Finally, the **Pool Hall** was kept open on Sundays, or at **least** some Sundays. **We did** hear complaints about the **Pool Hall** being open on church days, thus tempting **people** from **God**. Complaints were also heard about the **hours**, since they allowed young people **to** stay out **late**. Many **adults also** thought that alcohol and drugs were **readily** available from the people who **played pool** at the **Pool Hall**. The **Pool Hall** **officially** prohibited alcohol **and** drug **use** in the **Pool Hall**.

**For** the most part, patrons at the **Pool Hall** were **fairly** young, ranging from high school age **to 25**. **A few older men would also play** sometimes. Most players were single, **but** both **males** and **females** were usually present. **A usual group to find** in the **Pool Hall** would be **8 to 15** individuals. On occasion, there **would** be more, but **this** caused crowding. People did **like** to watch and **talk as well as play pool**, and it was used as a **place** to go **to** meet others and to see who was there.

Because the **Pool Hall** was relatively drafty, **it was** difficult to heat when the weather was **cold**. Since there was one **7-10** day period when temperatures were **-60°F** or so, and **other** times when the **Pool Hall** ran out of **fuel oil**, the **Pool Hall** was not always open. Patrons **could** never **be** sure which days these would be, however, so one **social** question-was-**"Is the Pool Hall open?"** **It** seemed to be used as a **place** to

go to be with one's friends away from the supervision and authority of other family members. On those nights when the Pool **Hall** was closed and the gym was not open for recreation, Pool Hall patrons tended to gather and watch television or play cards.

### Arcade.

For at least a short time, probably the summer of 1982, there was a video arcade in **Nuiqsut**. This was comprised of about six video games in one of the original one-room residential structures. The owner of the house and Arcade was in Barrow, so the house was not being **lived** in at the time. A **Nuiqsut Inupiat** was managing the Arcade in November when our research began. It had just closed, however, and was never open **while** we were there. The video machines were eventually packed up and sent to Barrow.

The patrons of the Arcade were evidently junior high and high **school** students with a smattering of people in their twenties. Besides the games, the Arcade sold snacks, pop, and had a jukebox. The latter was a real attraction as record collections are relatively rare in **Nuiqsut** and even after the Arcade closed, people borrowed these well-worn records to record them onto cassette tapes.

The Arcade evidently closed for two reasons. First, it was not making money because it cost too much to heat and \$.50 per play mounted up **only** so **fast**. Second, adults complained about their children spending too much time there and the apparent availability of alcohol (and perhaps other drugs) there. There were times when the Public Safety Officer was needed at the Arcade, **people** told us. The minutes of the **Nuiqsut** Village Council meeting for September 7, 1982

**indicate** that **several** community members were concerned **about** the behavior **of** youths **at** the Arcade, and their **influence** on each **other**. However, villagers **told** us that community pressure was not enough to close the Arcade. **It** took economic reasons **to** do that. Even though **this** reduced the **number** of recreational opportunities or choices open to people, (especially young people), we heard no complaints about the closing of the Arcade.

### Colville Cafe.

Our information on the **only** restaurant **in** Nuiqsut is not very extensive. **It** seems to have **been** open **less than a year**. **The** proprietors were among the original resettlers of Nuiqsut and have extensive kinship relations throughout the village. He serves as manager, waiter, and cashier **while** she **cooks**. The food is exclusively mainstream American--hamburgers, **french** fries, beef steak, chicken, pie, etc. They say that business depends on economic activity **in** the **village**. **When** construction projects are running, **people** have the money to come in and **eat**. **Most non-Inupiat** construction workers and other specialists stay at a dormitory-type camp where food **is** provided, so they do not need **to** eat at the restaurant. **Inupiat** workers **will** sometimes **eat** there, however, and **non-Inupiat** workers who do not live at the camps find **it very** convenient.

**People** who eat at the restaurant, at **least** those who go there for **lunch** and dinner, tend **to** be young. At **least** some high school age **people** eat there by choice, if they have the money. Prices are considered somewhat high and quality not **all** it could be, but overall **people** are satisfied enough to keep going back. Young **single and** married **adults** frequent the cafe as **well**. Older **people** eat there **less** often than younger

people (based on informal conversations, off-hand remarks, etc.). Breakfast is eaten at the restaurant **mainly** by middle-aged and older **Inupiat**, however. This is a meal that even at home consists of eggs, cereal, bread, and such for most **Inupiat**. Young people tend not to get up early enough to eat breakfast at the restaurant, or must go to school instead. Village visitors also tend to eat at the restaurant.

Typically, only one or two of the six or so **tables** in the cafe are in use. Our observations were made during the **least** busy part of the year, however. Business in the summer can be expected to increase substantially. The cafe does not seem to be used as a social gathering spot, but our observations were limited and our entry always caused a change in the situation anyway. People eating in the restaurant were always willing to talk with us, however. There just was not always someone **to** talk with.

#### Outside Recreation.

This topic is not clearly defined for the **Inupiat**, or at least it was not evident to **us**. **Inupiat** ride snow machines, motorcycles, three wheelers, hunt, fish, etc. but do not seem to distinguish between doing so to acquire subsistence resources and doing so for recreation. This is consistent with earlier reports (Hoffman et **al.** 1978:46).

#### Summary.

There are quite a few behavioral settings for leisure activity in **Nuiqsut**. Each is characterized by a user population. The number of such settings and the characteristics of such settings are measures of social development and



change. Multi-function settings, such as the Kuukpiik Corporation, are especially significant because of the meeting of **several** different user groups, each with **its** own characteristics. **An** inventory of such **single** and **multi-**function settings is a valuable tool **in** assessing **social** change or stability.

### Summary

**An** inventory of the behavioral settings that exist in a community provide **a measure** of its degree of differentiation. Combined with the knowledge **of** how **people** interact **in** those settings, a measure of community **activity is** obtained. These can be tracked over time to study change. The monitoring chapter discusses this further.

Observations of material goods can give **an** accurate indication of a community's overall economic **state**. The **condition** of housing, consumer goods present, **and** the presence or absence of **litter** of various sorts are **all** easily observable. Clinic records reflect the population's physical health. **Public** service records record the **level** of the most severe disruptive behavior. Both sorts of records have limitations.

The most severe **health** problem is no doubt the abuse of alcohol. The effects of alcohol are recognized by everyone in the North to be devastating. **Ways** to **deal** with the problem are difficult to find. A community problem with alcohol does exist in **Nuiqsut**. **We** have attempted to measure the degree of that problem by looking at the extent of alcohol **use**. Given the patterns of alcohol use on the North **Slope**, no short-term mitigating actions are obvious.

## VIII. VALUES

### Traditional Inupiat Values

#### INTRODUCTION

**Values** are abstract generalizations seen as principles which underlie and account for patterns of consistent behavior. Hence, if a person is perceived by others as consistently not misrepresenting himself in discourse and behavior, he is said to demonstrate the value "honesty". The statement of a value is often difficult to interpret, however, as discussions of values tend too easily to lose contact with **actual** behavior and empirical reality. We hope **to** avoid this pitfall by relating value ideas to observed behavior. This behavioral approach will differ somewhat from that of others which rely more **heavily on** the statements of informants. For those aspects of culture which reflect the statements of **people** about preferred behavior, we use the term "norms". Within **Nuqsut**, we wish to concentrate on five aspects or domains of value inquiry--Kinship, Egalitarianism, Seniority and Respect **Inupiat** Identity, and Subsistence.

**Values** are often perceived to be threatened by contact with people who are different. Concern for the maintenance of traditional **Inupiat** values has been consistently expressed in a range of media, newsletter publications, **public** testimonies in hearings and at church, and posters in schools, churches, and public buildings speak to this concern. We observed two examples available to people in **Nuqsut**, and believe them to be typical expressions from this genre (**Table 55**). We will use their content as demonstration of the composition of contemporary values concerns and as an organization for discussion.

## Table 55: INUPIAQ VALUES

WHAT CAN YOU DO TO HELP PRESERVE THESE IMPORTANT INUPIAQ VALUES?

Know the **Inupiaq** Language.  
**Share** with others and **try to be helpful to people in your village.**  
**Treat all people with respect.**  
Cooperate with others.  
Respect the elders.  
Treat children **with love.**  
**Work hard and avoid laziness.**  
Know your **family tree.**  
Avoid unnecessary conflict.  
Respect **all animals and be grateful to them.**  
Don't **lose your** sense of humor.  
**Meet your obligations and responsibilities to your family.**  
Respect successful hunters.  
**Learn Inupiaq domestic skills.**  
Trust **in a spiritual power greater than yourself.**

PUT THESE VALUES INTO PRACTICE EACH AND EVERY DAY. LEARN AND TEACH THE INUPIAQ WAY.

Source: Posted on **wall** of **Kuukpik** Presbyterian Church, **Nuiqsut**, Alaska

### HUMAN VALUES INUPIAQ VALUES

Knowledge of Language  
Sharing  
Respect for **Elders**  
Love for Children  
Hard Work  
Knowledge of **Family Tree**  
Avoid Conflict  
Respect for Nature  
Spirituality  
Humor  
Family Roles  
Hunter Success  
Domestic **Skills**  
Humility  
Responsibility to **Tribe**

Source: Christensen **nd:9**

## KINSHIP

Kinship is the central organizing principle of **Inupiat social** organization. The operational mode has of course "undergone some changes in the adaptation from a nomadic or semi-nomadic society of **small** social groups to one of larger, permanently settled, communities. Much traveling **still** occurs, as we have seen, but the scale and rhythms have changed. The importance and flexibility of kin ties remains, and pervades **all else**.

Four or five of the values listed in **Table 55** related to kinship (elders, children, **family tree**, family roles, tribe). Earlier chapters have shown some of the ways in which kin ties function in economics and politics, and how important they were in defining the group of people who resettled **Nuiqsut** in 1973. In fact, **all** activities tend **to** be expressed in a kinship idiom.

## EGALITARIANISM

Five of the values listed relate directly to egalitarianism (sharing, avoid conflict, humor, humility, tribe). Our section on leadership developed the theme of competition in an egalitarian society. Redistribution, especially to those in need, through kin ties is a strong integrative mechanism for the community. Sharing is a stressed societal norm. **We** observed contexts where this norm was often ignored (drinking, for example) but overall the orientation is maintained. The reluctance to make a decision for someone else, to **tell** others what to do, was **also** discussed. To set oneself apart from one's fellows is inappropriate. Behavior at public meetings shows this. Lack of overt conflict is the ultimate goal--not necessarily a timely or definite decision. The

**confrontational** and adversarial **nature of** introduced **non-Inupiat** government and economic structures often seems inappropriate and stress provoking. The development of **Inupiat** leadership to **deal** with this disjuncture and stress must **be** further explored.

#### SENIORITY AND RESPECT

**Age** and experience are much respected and give extra weight **to a** person's words or actions, as **is** shown **by** five **values** (elders, work, **family** tree, hunters, tribe). However, new institutions and situations have reduced the active **role** of the **elders** somewhat. **Skills** not developed **by** the **older** generation are needed at **times**. **In** Nuiqsut, the question **is** made more difficult to address, both **for** the villagers and the researchers, by the **lack** of **elder** men. **The** effect of this relative lack **should** be explored.

#### INUPIAT IDENTITY

Perhaps four of the **values** speak to this relatively new concern (language, family **tree**, domestic **skills**, tribe). Before the onslaught of the seekers of **oil**, the **Inupiat** had no cultural-identity crisis as **such**. Serious problems did exist, but **Inupiat** did not have to think about learning **Inupiaq**, or their kin relatives, or domestic **skills**, or social responsibilities to other **Inupiat**, because they **did** not have a choice. However, this is no longer the case. **Where** before an Inupiat individual had to exert himself not to do these things, today an **Inupiat** individual must exert himself at **least** as much to accomplish them. This is due to increased contacts with other cultures, of course, and the resulting contexts for which traditional **Inupiaq** culture has

no rules. Tension, stress, and change are then inevitable.

## SUBSISTENCE

There is a continuous debate in anthropology over the definitions of "culture", "society", "values", and other such terms and whether it is possible to study any one apart from the others. Values are ideas about what sort of behavior is proper. They cannot be studied apart from behavior, however, even if the behavior is purely verbal reportage. Whether cultural values are expressed through specific and unalterable behavioral imperatives is a question most often avoided. It is the central issue when discussing harvest resources and the **Inupiat**, however. Is a culture defined by a set of behaviors, a set of ideas, or the two working in conjunction? The last seems the only sound premise to us, as it most easily accommodates cases of cultural change. Both values and behavior do change over time while cultural identity may remain the **same**. Values tend to change more **slowly** than do concrete behaviors.

The literature on harvest resources and the subsistence issue, on the North Slope specifically and **Alaska** in general, is extensive. The question is seldom examined from a value perspective however (**Kruse 1982:45**). Yet, **clearly** the **Inupiat** are involved in a continuing process of **social** evolution. Their economic production strategies have shifted, at least for a time, to a mixed wage income/game resource harvest economy. The **values** underlying the behavior remain the same as when **local** subsistence resources were depended on nearly totally. After all, many of the people have lived both ways. The real question is the continued transmission and relevance of traditional **Inupiat** values to younger **Inupiat** brought up in a "modernizing" North Slope Borough. The political question

of Inupiat identity, combined with that of the economic question of who benefits from change, appears to be more responsible for the considerable concern expressed for subsistence values.

Much of what Fienup-Riordan calls the ideology of subsistence on Nelson Island (Fienup-Riordan 1983) applies equally as well to Nuiqsut. This economy, as all economies are, is more than a set of behaviors merely for the acquisition of enough to live. No people easily change their way of life in terms of behavior. Most often this resistance is phrased in terms of values. When the behavior seen to be subject to change or threat of change is that behavior perceived as most vital to and supportive of the fundamental values of their culture and society, it becomes the center for debate.

Our information from Nuiqsut contains little of the detailed exchange data upon which Fienup-Riordan bases much of her ethnography of the Nelson Island Eskimo. Purposes of the research were very different. However, one way of measuring much the same thing is the content analysis of public testimonies during public hearings. This is one important aspect of a study recently conducted for the Minerals Management Service (Kruse et al. 1983). One of the three villages from which much of their material comes is Nuiqsut. Their study provides much better information on current North Slope value perceptions than is available elsewhere and allows better interpretations of contemporary behavior. Our treatment of public hearings mirrors their fuller treatment. Kruse et al.'s study does not have the fine behavioral components that Fienup-Riordan's does, but such data require intensive effort over a long period of time within a cooperative (and relatively small) community. Resource harvest information and such social-exchange data are both very difficult to collect. Short-term or sporadic research

cannot hope to do so. Our focus on observable behavior and measures is not meant to give short shrift to values. Rather, we see behavior as an expression of values. Values provide an abstract context within which to interpret behavior and behavioral change.

### Traditional Versus New Values

The comparison of the "traditional" to the "modern" is one which is commonly made but which appears to obscure more than it elucidates. What have changed for the **Inupiat**, so far, are the contexts of **social** behavior and organizational forms. The principles of **social** organization which are applied seem remarkably stable. The effectiveness of such applications in the most **recent**, rapidly shifting, **socio-economic** contexts is what must be evaluated. This is a question of adaptation and continuity, of how the **old** is transformed into the new or rather, of how the present is renewed to become the future. The words of John **Schaeffer** speak the most powerfully to the researchers, as conveyed in Inupiat **Ilitqusiak**: Yesterday, Today and Tomorrow (Christensen nd). This is the source of Table 52. We have shown the continuity in patterns of leadership, and **will** discuss others below. Continuing **Inupiat** concern for traditional values is the time and effort devoted to Elders' Conferences (Smith 1980, Okakok 1981) and the central **place** such values hold when speaking at public hearings (Kruse et al. 1983).

### Expressed Versus Observed Values

Values are not always expressed verbally and are **seldom** written down. Often, observed behavior contradicts



expressed **values** and norms. **Values are** inherently more conservative than behavior--the **rules** for behavior change more slowly than the behavior itself. **This** does not mean that values do not influence behavior. They serve as general guidelines. Normative **rules** do not determine behavior, however. This flexibility between normative **rule** (value **or** norm) and **actual** behavior can itself be taken as another **Inupiat** value. **We** have seen how **this is** expressed **in** the paragraphs above.

### New Social/Economic **Situations** and Organizations

There are many **topics which could** be profitably discussed here. The church as **an** historical **agent of** change **is** one. The **school** system as the primary meeting ground of the two cultures **is** another. New economic opportunities as they affect **the** family and male-female relationship are **vital**ly important. The political actions required of the City Council, **Village** Corporation, and regional organizations in relation **to** more external economic and political entities require new sorts of political and **social** leadership, or at **least** reapplications and modifications **of old** ones. The effects of resident **non-Inupiat** upon things **Inupiat** (**leader-**ship family, subsistence, **etc.**) must be addressed. Individual, unplanned, and unregulated events are **likely** to have significant effects, especially as they are often not anticipated (**interethnic** marriage, income competition, **etc.**).

### THE CHURCH

**It** is beyond the scope **of** our report to trace the role of the church on the North **Slope** (see Klausner and Foulks 1982:36-43) . While the church is a key institution in that

nearly every household in **Nuiqsut** is nominally Presbyterian, it seems to occupy a central position more because of its **social** aspects than because of its Christian doctrine. The Presbyterian Church provides a shared identity for **people** in **Nuiqsut**, but not one that people really think about. As in most American communities, attendance is **low** except for special holidays like Thanksgiving, Christmas, Easter, and such. Women normally outnumber men two or three to one. In **Nuiqsut**, normal attendance at the Presbyterian Church is approximately 25 people. Low attendance is 15-20, while 40-50 is high. Low attendance is more common than high. A higher attendance on ritual occasions supports the idea of a social rather than a uniquely religious identity.

The **lack** of an active Assembly of God core congregation in **Nuiqsut** is also indicative of this. The single most common difference between the two religions pointed out to the researchers by residents of **Nuiqsut** was the assertiveness and **almost** aggressiveness of Assembly of God services **which** feature testimonies by members of the congregation. These generally concern conversion experiences, troubles relieved through prayer, or the evils of smoking, drugs, and/or alcohol. Such testimonies were not common in the Presbyterian Church. Except for the Christmas holiday service, all testimonies in the Presbyterian Church were by elderly women who spoke in **Inupiaq**.

For this Christmas holiday service, more people than normal were at the Presbyterian Church, including some normally identified as members of the Assembly of God. The testimonies that night were quite involved, some including songs that had obviously been rehearsed. That in itself is not unusual as hymn requests, especially after a short dedication or explanation, are fairly common in the Presbyterian Church. This one night was different in that people accompanied themselves

with instruments and moved to the front of the congregation, almost as if performing for them. Several Inupiat informants commented on this afterwards.

No spontaneous testimonies by Nuiqsut people were observed other than these expressions of thanksgiving for the past year's blessings or much shorter requests for a prayer or hymn to help someone through a troubling time. When a delegation from the Barrow Assembly of God Church visited Nuiqsut in the middle of January for about five days, this behavioral difference became obvious. As an experiment, and to see if the Nuiqsut Presbyterian and Nuiqsut Assembly of God Churches could be merged, services were held jointly while the visitors from Barrow were in Nuiqsut. At the service held in the Nuiqsut Assembly of God Church, every Barrow visitor testified individually, most in Inupiaq. Only then did a few Nuiqsut people speak, and their testimonies were much briefer, less intense, and less personal than those of the Barrow people. The next night, in the Nuiqsut Presbyterian Church, the service began by having Nuiqsut people perform hymns. People also requested hymns that the congregation would then sing. Every Barrow person did eventually testify, however, when "people got tired of singing". A few Nuiqsut people testified, but again not many.

The lack of spontaneous Nuiqsut Assembly of God testimonies can be attributed to the small active congregation size. The fact that the Nuiqsut Assembly of God minister is non-Inupiat and does not speak or understand Inupiaq is no doubt also germane. He is also out of town fairly often and is relatively uncharismatic. His style simply does not seem conducive to success in Nuiqsut.

The style of the Nuiqsut Presbyterian minister is also quite important. He does possess charisma, and has a great deal of

influence even outside of his ministry. His religion is not of the ecstatic variety, however. He enjoys singing, and is obviously proud of his voice. He speaks quite capably in English, and is absolutely musical in **Inupiaq**. Yet, he feels uncomfortable about **public** testimonies. His religion is a deeply personal one, in terms of experience and **words**, and is oriented more towards helping to deal with human problems rather than trying to uphold or convince others to uphold specific behavior norms. Perhaps one can say his church is more for humans than for God, more forgiving than absolute (this is our observation, however, not a view reported to us). Services at his church rarely include many testimonies and seldom last over an hour. Testimony services that we observed last much longer.

Public testimonies run counter to traditional **Inupiat** sensibilities, as listed in **Table 55**, and this no doubt also is significant in explaining the absence of testimony in **Nuiqsut**. The values of respect for others, avoidance of conflict, humility, and not putting oneself forward all serve to discourage acts such as public testimony. The **Inupiat** Presbyterian minister in **Nuiqsut** recognizes his leadership role, but perceives it (as do others) as a service others allow him to perform in order to use his talents. He works to express the common will, which is attained only through a slow and involved, even if sometimes guided, process. Testimony often serves to short circuit the consensus process by defining issues too clearly too soon. The **non-Inupiat** Assembly of God minister in **Nuiqsut** may not be as sensitive to the social problems public testimony introduces, or perhaps he does wish to directly challenge **public** behavior in **Nuiqsut**. Barrow, with its larger **non-Inupiat** population and larger size in general, can handle **confrontational**, less personal, debate and decision mechanisms better than **Nuiqsut** can. Many people in **Nuiqsut** moved from Barrow precisely to get away from these sorts of problems.

We cannot adequately discuss the role of the church in Barrow, but a comparison between Barrow and **Nuiqsut would be** very interesting. The Presbyterian minister in Barrow is **non-Inupiat** but has much experience on the North Slope. His congregation is large. The few services we were able to attend in Barrow seemed more impersonal than those **in Nuiqsut**, perhaps because of **the use** of a translator (actually, **Inupiat** co-minister would be a more adequate **title** as the sermon in **Inupiaq** sounded more moving, was more animated, **and** took longer, than the English sermon). **The** church and pastoral style in **Nuiqsut** can be directly compared.

The Assembly of God congregation in Barrow is smaller than the Presbyterian congregation, but **is** very active and **should** be studied in relation to North **Slope** Borough and Barrow leadership positions. It could well be that such a religion, encompassing **public** testimony and thus potentially weakening traditional **Inupiat values** about self-effacement, conflict avoidance, egalitarianism, and **public** judgments, appeals to medium and higher **level** executives and younger **Inupiat** precisely because of this conflict. New institutional forms, such as corporations, have brought new forms of leadership to the North Slope. **It would** be interesting to see **if** this corresponds to the **appeal** of a different sort of religion. There is **also** some indication that in Barrow religious affiliation may influence political linkages (again, perhaps through leadership style). This potential development in **Nuiqsut could** be monitored, and would be expected to appear once a certain population size was reached (probably as low as 500 persons).

## THE SCHOOL

The school has already been described in terms of physical plant, faculty, turnover, and community use. The **actual** functioning of the school **will** be discussed here because of its central importance to **Nuiqsut** and **Inupiaq** identity. The school teaches a set of values as well as a set of techniques and a body of knowledge. Too many schools do too good of a job teaching an unintended or even unconscious set of the first and fail to teach either of the last two. Which is the more serious failing is unclear, and to what degree the school in **Nuiqsut** has achieved its goals is not for us to judge. We raise questions and explicate context, and suggest things to **look** at.

The program for the **Nuiqsut** school, as for all North Borough Schools, is set by the school board in Barrow. This is an **Inupiat** Board, but is advised by non-Inupiat staff and must no doubt act in accordance with state regulations. **It** is predominately what would be expected in a high school anywhere. Courses or sequences of courses relating specifically to the North Slope of Alaska are not as prominent as the **NSB's** commitment to them might have **led** one to believe. **Inupiaq** is taught from the early grades, but few students graduate who speak **Inupiaq** fluently unless they have learned it at home. The Alaska Native Claims Act **class** is taught from a series of simplified pamphlets by a **non-Inupiat** teacher and **little** connection between it and what is now occurring in **Nuiqsut** is made by the students. The other **Inupiat** culture courses are relatively popular but do not really serve to transfer the living essence of the skills involved. Little skin sewing or other craft activity takes place outside of these classes. Thus, the **school** in **Nuiqsut** is **little** different from what was found in **Kwethluk, Tuluksak, and Bethel** by John Collier Jr. in 1973 (Collier 1973).

Mainstream classes and values were being taught in a way which prevented the traditional learning of "subsistence skills" (hunting, trapping, survival skills, processing of harvest products) through experience.

A very suggestive observation, made earlier, is that the satisfaction of **Nuiqsut** people with their school seems to be inversely proportional to the size of the investment in its physical plant. Of course, along with this investment came a largely non-Inupiat faculty (with less and **less** use of **Inupiat teacher aides**) and a **closer** supervision of what was being taught from Barrow. The nostalgia of the first year **in Nuiqsut also** works **in** favor of the tent school.

Nonetheless, it appears clear that **Nuiqsut** villagers remember the early school as better suiting their needs, and responding to their desires, than the present system does (note that we say nothing about the quality of the education provided, as measured on some "absolute" **scale**). Some teachers **feel** that present students see the **school** as a resource-rich intrusion to be plundered whenever and however possible, either because it belongs to outsiders or to no one in particular. Students do not see **it** as "their" or **Nuiqsut's school**.

The first school operated with one **non-Inupiat** supervisor and five or six Inupiat teacher aides, and two **Inupiat** maintenance men. The present school employs twelve **teachers-administrators**, two **Inupiat** and ten **non-Inupiat**, and five **Inupiat** maintenance people with a **non-Inupiat** supervisor. An **Inupiat** secretary and a **non-Inupiat** study hall supervisor are **also** on the staff. Up to five **Inupiat** teacher aides are provided for in **Nuiqsut's school** budget, but **only** two of these positions were filled when we left the **field**. Qualified villagers, for whatever reason, have not wanted to serve as teacher **aides**. There are thus three or four

significant issues here: 1) a lack of **Inupiat** teachers, 2) rapid turnover of **non-Inupiat** teachers, and 3) little success in the recruitment of **Inupiat** teacher-aides, and 4) rapid turnover of teacher-aides. **All** reinforce the perceived separation of the school and the village. Another issue may be the **rigid** time constraints imposed by the school in comparison to the greater flexibility of the original tent school.

Teachers interact very sparingly with **Inupiat** residents. This is at least partly due to the great demands placed upon their time. The size of the faculty allows for little or no duplication of skills--each teacher has a **full** day's responsibility every day (although there is enough slack to cover teacher illnesses). Further, as the school is the center for village recreation, the teachers spend many evenings supervising gym, swimming pool, and sports teams' trips to other villages. This gives them the opportunity to earn additional income, but also increases their desire for privacy outside of the work situation. It also supports the pattern of **non-Inupiat** teachers working on the North Slope **only** long enough to save a nest egg, and then leaving for a location more to their liking. Some teachers in **Nuiqsut** express this as their goal, while others do not. None seriously plan on living permanently in **Nuiqsut**, nor has any **Inupiat** resident ever mentioned that possibility. The lack of school-village interaction is then seen as inherent in the structure of the system. Short-term teachers with severe time constraints and no **Inupiaq** language skills simply cannot "know" the village outside of the school. The fact that most teachers spend their vacations and breaks outside of the village also limits their interaction with **Inupiat** residents.

Teachers in **Nuiqsut** thus "enclave" themselves. Their interaction with, and influence on, the community as such is



minimal. **This** may seem paradoxical, since education is considered one of the vital community responsibilities in American culture at large. Apparently, the school in **Nuiqsut** does not hold such a position in the minds of the people of **Nuiqsut**, at **least** not yet. This may change as more students graduate. They will either stay in **Nuiqsut, go elsewhere** looking for work, or go to college. The first and the last would likely result in a **closer** relationship between the village and the school, especially **if Inupiat** teachers were eventually hired. The second **would** probably produce no change in the situation as it now **is**. The program of study actually presents few choices that are any different from those available in any other high **school** program (see Collier **1973:112-127**, especially **117**). Teachers **in Nuiqsut** do not voice **public** opinions on this precisely because of the sensitive topic **of Inupiat** identity and cultural transmission. They **feel** that their job tenure is tenuous enough as it is and that there **is** no consensus as yet among the **Inupiat** as to the proper form for a formal **Inupiat** education. **In** this they seem to be correct--there is as yet no operational **Inupiat** consensus. This **only** serves to further isolate the teachers from the village.

On the other hand, non-student villagers avoid the school for the most part. Employees, the Presbyterian minister, the mayor, and occasional **elders** are the only **Inupiat** adults in the school during school hours. The school is used for **public** meetings, **clubs**, and community feasts and celebrations, but then **non-Inupiat** tend to be absent. Parents of students have surprisingly **little** contact with the school. This is one cause for teacher disquiet. They feel much of the support they need from the families of their students **is** not **there**. How to generate such support from families who are often unaware of what the **school** is about, it being **totally alien** to their experience, is a difficult question. The

school advisory board, made up of **Inupiat** village residents, holds monthly public meetings. Few people come, however, except when a door prize of 55 gallons of oil is given away. Even then, most people merely listen.

The students' attitudes towards the school seem to range from neutral to hostile. Most in the higher grades seem bored or apathetic. Elementary classes seem more energetic. Universally, gym is the most popular **class**. Attendance before lunch is usually low (informant information confirmed by observation), so teachers never plan anything vital for the morning. Experiments of allowing recreation before school or starting a breakfast program in order to increase morning attendance have been discussed. Records on tardiness were not available to us. **Daily** attendance records, in aggregate form, were on file in Barrow and show relatively good attendance (Table 56). **Monthly** attendance figures showed little patterning. Many students see the school primarily as a place to eat a free hot lunch, to play basketball, and as a place to be free of home influences. One of the most effective sanctions teachers have is that of denying students access to free recreational periods.

The close identification of the school with community recreation is not an inevitable one. The recreation facilities are at the school, it is true, but if and when the community center is built, this would not have to be true. However, as the mayor has stated that he thinks recreation in general, and basketball courts in particular, are the school's responsibility, such a change in perception appears unlikely. Teacher supervision of recreation could be easily changed, however. While this may seem an ideal way for teachers and community to interact, it does not work out that way. Rarely do people over the age of 25 go to recreation, and this occupies a fair amount of teachers' time.

Table 56: NUIQSUT SCHOOL ATTENDANCE

	<u>08/20/80 - 05/19/81</u>	<u>08/18/81 - 05/26/82</u>	<u>08/23/82- 10/27/82</u>	<u>Total</u>
<b>Kindergarten</b>				
ADAb	158	117	77	352
(% of ADM)	(16%)	(26%)	(19%)	(19%)
<b>ADAt<sup>b</sup></b>	<b>831</b>	332	334	<b>1,497</b>
(% of ADM)	(84%)	(74%)	(81%)	(81%)
<b>ADM<sup>c</sup></b>	<b>989</b>	449	411	<b>1,849</b>
<b>Elementary</b>				
ADAb <sup>a</sup>	363	451	94	908
(% of ADM)	(9%)	(8%)	(9%)	(9%)
ADAt <sup>b</sup>	3,610	5,050	952	9,612
(% of ADM)	(91%)	(92%)	(91%)	(91%)
<b>ADM<sup>c</sup></b>	<b>3,973</b>	<b>5,501</b>	1,046	<b>10,520</b>
<b>High School</b>				
ADAb <sup>a</sup>	1,441	1,456	177	3,074
(% of ADM)	(16%)	(16%)	(9%)	(15%)
ADAt <sup>b</sup>	7,538	7,602	1,729	16,869
(% of ADM)	(84%)	(84%)	(91%)	(85%)
<b>ADM<sup>c</sup></b>	<b>8,979</b>	9,058	1,906	<b>19,943</b>
<b>TOTAL</b>				
ADAb <sup>a</sup>	1,962	2,024	348	4,334
(% of ADM)	(14%)	(13%)	(10%)	(13%)
ADAt <sup>b</sup>	11,979	12,984	3,015	27,978
(% of ADM)	(86%)	(87%)	(90%)	(87%)
<b>ADM<sup>c</sup></b>	<b>13,941</b>	<b>15,008</b>	3,363	<b>32,312</b>

<sup>a</sup> Aggregate Days Absent  
<sup>b</sup> Aggregate Days Attendance  
<sup>c</sup> ADM = ADAb + ADAt

Freeing them of this responsibility would give teachers time **to** interact with villagers in unstructured ways and **also** enable (force) villagers **to** take at least partial responsibility for their school. There seems to be little support for this change, though.

The gulf between the village and the school in **Nuiqsut** appears to be very real. Note that this is not related to either teacher quality or educational quality, neither of which we are qualified to evaluate and neither of which was considered above. Everyone is acting with the best of intentions. There may be additional factors, but we cannot say. **What** does appear as the vital issue to us is the lack of **Inupiat** involvement with the school and the resultant lack of relevant **Inupiaq** content in the program of study. The schools would seem to need to more clearly relate traditional **Inupiat** values to present day **Inupiat life** opportunities. This is, unfortunately, far from a simple matter.

#### MALE AND FEMALE ROLES

Reviewing the ethnographic description of Eskimo men's and women's roles is important when we investigate the foundations for contemporary **Inupiat** gender roles. Referring back to our discussion of the family and individual status, the traditional value system would seem to indicate that **Inupiat** men and women had necessary but separate complementary positions in an essentially household oriented economy. Even in the winter villages, when men participated in the **karigi** (or "men's" house), women still were expected to continue to cook or prepare food for their male family members. The ethnography of this region indicates that women's roles were subservient to men's social power and prestige positions. The social standing of an **umialik** or a hunter held in high

**esteem would** be transferred to the community evaluation of his wife's position **but** not necessarily vice versa. Undoubtedly any egalitarian society that embraces the symbolic and cultural **idiom** of hunting, especially as a **male** occupation, would have an overriding male **idiom** dominating **social** ideology. **We** believe that this is expressed in both traditional and contemporary **Inupiat** society. However, we qualify the extreme significance of the male idiom dominating **social values** in such a society by emphasizing the vital necessity of women's productive and reproductive labors. We should note that most ethnographic investigation was conducted by male ethnographers who may have **failed** to understand the underlying significance of the complementarity of sexes in productive **labor** and the economic necessity for the interdependence of gender **roles** in Eskimo society.

The continuity of traditional Eskimo **values** related to gender roles may be expressed in the contemporary economic and **social** positions of **Inupiat** men and woman. Researchers (**Klausner and Foulks 1982, Kleinfeld et al. 1981**) of contemporary North Slope communities have outlined two agents of change affecting gender roles--the influence of western religion (and **Judeo-Christian** values) and the influence of the western economy. Western religion, established in the early part of the twentieth century, gave women status and position in the Church and the community, more so than was obtainable in traditional society. Furthermore, the Church introduced the western institution of marriage which differed considerably from the less **formal** institution of traditional marriage. Because women were seen as relative "equals" in the eyes of the Christian clergy, a woman **could** hold **social** position by virtue of her membership in Church and her participation as a Church deacon or **elder**. This position is clearly used in this way by **Nuiqsut** women who hold positions in the bureaucratic structure of the Presbyterian Church as deacons and elders.

Whereas Eskimo women in traditional society had little or no access to leadership positions except as the wives of **umialit** or successful hunters, the presence and influence of the Christian Church has allowed Inupiat women of the last 50 years to hold social and community positions **within** the context of Church organization. Here women could carry out roles of ritual and ideological importance as **well** as participate in the maintenance of the Church organization. At the same time, a traditional society based primarily upon the **male** leadership role of **umialit**, hunters, and shamans was supplanted in the **early** twentieth century by western religious and **moral** values that did not encourage the full status equality of the sexes, but did permit participation by both sexes. Also, these religious institutions gave both men and women access to community and "spiritual" areas transcending the basic kin affiliations of traditional society. The formalization of marriage practices through the Church gave a more rigid bilateral definition to the marriage tie. The marriage tie now included concepts of religious and moral sanctity as well as necessary **social** and economic reciprocal obligations between both partners.

The changing value orientation of sex roles has been apparent in the present day wage labor situation of **Inupiat** men and women. **We** discussed the impact of cash economy and the definition of male and female occupational roles in earlier chapters. This valuation of productive labor through the cash economy is one driving force in changes in the roles and values of contemporary **Inupiat**.

In the past, the different roles of men and women have been complementary and independent, with each necessary to form the stable and most elementary social unit. However, this was traditionally expressed in behaviors that demonstrated that while the **roles** of men and women were both equally

necessary **to** the institution of family, their status was not equal. This distinction is important to an understanding of both traditional and contemporary male-female relations because as far as most **Inupiat** men are concerned, women are necessary **but** not equal. The social contracts of marriage, either formal or informal, are not necessarily between equal partners, when measured by political, social or economic power. Men have greater power and freedom of action. Hence, **while** the **roles** may be equally necessary to the proper establishment of families and other social and kinship units, relations within these units demonstrate the continued status dominance by males.

As the productive work of women comes to more closely resemble that of men, with both working for a cash income rather than obtaining/processing harvested resources in different ways, we would expect that the strain between male status dominance and male-female economic independence to increase. **This** is true for American society in general and in **Nuqsut** and the North Slope may be exacerbated by women obtaining higher paying and/or more permanent cash income jobs than men. The male-oriented complex of subsistence activities remains much more intact than the female-oriented activity **complex**. **Males** thus have more options and are psychologically less displaced by the market economy. On the other hand, females, with fewer options, have an incentive to succeed at what is open to them **and** to evaluate their worth in terms of their new economic activities. This could lead to pressures for formal acceptance of **sexual** equality, more reflective of Anglo-American social ideology than of **Inupiat** values. Resolution 83-02 of the **1983 Inuit Circumpolar** Conference is evidence for this development (Arctic Policy Review **1983**: 12). The **felt** need for such a resolution (for **equal sexual** representation within the ICC) reflects traditional **Inupiat male** dominance.

## THE FAMILY

The family is a key institution in **Nuiqsut**, as would be expected in an informal, kin-based, community. The proliferation of new housing has encouraged the division of traditionally large multi-generational households into smaller, less extended independent households. This in turn has reduced (**or at least is perceived to have reduced**) inter-generational contact. **Elders** cannot always get out as much as they like, and visiting never **allows** as much contact or the same sort of interaction as **living** with someone. Grandparents especially were noted to remark on how they missed being with their grandchildren.

Most couples want their own home when they marry. They prefer to buy one, but often rent as a more feasible course of action. The decline in the average household size thus reflects more the desires of the younger generation than of the old. Ties of affection and sharing remain strong. Grandchildren often spend much time, or may even live with, their grandparent(s) outside of their parental household.

Age at marriage may be declining, but this is hard to say. The availability of housing certainly helped certain residents make up their minds to marry early. However, there are also people well in their 30's who remain unmarried. Teenage pregnancy is not unusual in **Nuiqsut**. Half of the pregnancies during the last year were among this age group, a pattern typical of North Slope villages outside of Barrow. Most are unmarried but the institution of marriage does not seem to be at all essential for community acceptance of a stable union. Pregnancies do result from more casual affairs as well, however. Whether this is a continuation of the positive value placed on bearing children or a lack of "family planning" is not known. The sex education unit, prepared in Barrow, is



not used **i**n the **Nuiqsut** school. Evidently no formal sex education occurs in the school. Home sex education was not a subject of our research.

Grandmothers, mothers, or older siblings sometimes raise the infants of young **girls**. In fact, sometimes the firstborn **(or later) child** of a **couple will** be "given" to one of the couples' parents. Adoptions of various sorts are common and very flexible. The biological parents are **nearly always** known and a child of age **has** the right to choose his own residence. This was pointed out by an informant, himself both a biological and adoptive father, as superior to the white system where an adopted child does not know his biological parents. An **Inupiat** adopted **child** has many more relatives, and more **social** options and support. Thus, this adoptive flexibility is one factor countering the possible social constriction of **small** household **size**.

#### LEADERSHIP ROLES

Previous sections have shown the various new social settings within which **Inupiat** must function. Traditional men of influence must **learn** to serve **as** brokers or mediators (Harrison 1972). Chairing a meeting, or speaking out at a public forum, becomes a form of personal projection, separating a person from the **group**. The integration of such novel patterns of expression within an **Inupiat** identity becomes vital if cultural transmission, education, and effective representation are to succeed.

As a phenomenon, fellowship (or acquiescence to "leadership") is more traditionally supported than the new patterns of leadership, hence the greatest stress results from the demands of leadership in new organizational settings (public

hearings, for example) where the leveling effect of traditional and recognized leaders who are expected **to** represent community **consensus** is commonplace, even if disagreement exists with regard **to** the particular issues being addressed. Seldom will open contradiction of speakers occur and spoken deviation from any consensus will be tolerated to the extent that **it will** not be challenged openly. Consistent with these values is the practice of arranging the speaking schedule so that recognized leaders speak first, allowing others to speak later with comments which do not conflict with the points previously made. **Seldom will** public participation result in contradictory testimony under such a traditional pattern, although some deviation on the part of leaders or individuals will be tolerated which may not convey an accurate picture of an assumed underlying consensus.

Leaders and followers must also begin to think about issues in terms of new concepts, at least to the degree necessary to protect their own individual interests (Jones 1977). Land ownership is seen as unproblematic by most **Inupiat** in **Nuiqsut**. However, few **Inupiat** have considered the implications of private ownership. The traditional community of lands used for resource harvest makes such a concept difficult. Even oil field restrictions, such as that on high-powered rifles in the **Prudhoe** Bay field, have not raised the general consciousness of the implications of who owns, and can thus sell or control access to land. Oil companies at present **only** lease land. Some **Inupiat**, and some native corporations, are more pro-development (and hence more pro-land control) than others. Who has the rights to decide upon land use and the disposal of such rights will become increasingly important. Ways to influence land use upon Federal and State **land** have been, and will continue to be, of key importance.

An egalitarian society resists leaders. Yet, there are situations where a formal leader is necessary for action. The resulting checks and balances result in what we have been calling egalitarian competitiveness. The continuation of such a pattern seems essential. This requires the interpretation of new **social** contexts in terms of **Inupiat** interest and traditional values. For us to attempt a further discourse on this **would** be presumptuous,

#### "SMALL" THINGS

Large effects can result from the amplification or aggregation of **small** individual acts of behavior, done with **little or** no thought as to their long-term consequences at **all**. We cannot hope to deal with **all** or even many of these. A few **will** be discussed here in terms of their potential effects on traditional **Inupiat values** and thus **cultural** transmission.

The sudden infusion of **money** into the **North Slope** has meant employment. This is employment not **only** for **Inupiat**, but **also** for **non-Inupiat**. This in turn means increased **cross-cultural** contact. **In Nuiqsut, all non-Inupiat** were at first **school** teachers. **With CIP** funding, however, temporary workers, and permanent employees to take care of finished facilities, increased the intensity of such contact. Jobs were created for which, although there is an **Inupiat** preference policy, no **Inupiat** was qualified (Public Safety Officers are an exception, **there being a policy** to hire **non-Inupiat** to prevent complicated **family** troubles). The presence of such jobs also **allows** individual **non-Inupiat** to establish themselves in **Nuiqsut** (or some other North Slope Community) on a permanent basis. The community in essence **loses** its ability to protect **itself** from this individual as a contributor of change or difference, a protection which the seasonal nature

of construction or oil jobs had before provided. The person changes from being one of many temporary "camp" residents into a permanent, individual, village resident.

Increased cross-cultural contacts almost naturally increase the rate of cross-cultural marriage. The choice of one's marriage partner is of important cultural significance. The family unit provides most peoples' cultural identity. While **interethnic** relations and marriages on the North Slope date back to first contact with Europeans, there are recent changes that appear to be important in **Nuiqsut**. Nearly **all** such unions are between **Inupiat** women and **non-Inupiat** men, as has always been true. However, those couples with children tend to acculturate them more as "white" than as **Inupiat** (Black- **Inupiat** children may be an exception). Several factors may account for this. Female **Inupiat** traditional subsistence skills are in general decline, and **non-Inupiat** males lack subsistence hunting skills, for the most part. Few **non-Inupiat** can speak **Inupiaq**, so that the household language is usually English. These couples tend to live in their own household so that children's day-to-day contact with older **Inupiat** is minimized. These children often physically look more "white" than **Inupiat** and, for better or worse, **Inupiat** people in general treat others by how they look, the same as other groups of people do. These couples also often have **plans** to leave **Nuiqsut**, if not the North Slope, eventually and so convey a sense of transition to their children.

**Interethnic** marriages also prevent some **Inupiat** males from marriage, given roughly equal sex ratios and the lack of male **Inupiat/female non-Inupiat** unions. Men tend to live in their wife's village, when a choice has to be made, so few **Inupiat** women seem to have been "imported" to **Nuiqsut**. The **result** is either young men leaving the village, a net **loss**, or men remaining as bachelors. A sense of social frustration

may result, combining a feeling of inability **to** compete for women and perhaps for employment as **well**.

The effects on male-female relationships of changes in income availability, earlier discussed, can **be** expected **to** aggravate these effects. Effects on leadership may also be expected, but our information **on female** leadership in Nuiqsut is not **great**. Increased **non-Inupiat** presence in Nuiqsut will have definite implications for leadership **style**, however. The Public Safety Officer, now in **Nuiqsut** for about two years, has acquired a reputation for giving good advice. The **non-Inupiat City Clerk** is depended upon very heavily, both in financial matters (as grants are the **City's** only source of revenue at present) and in procedural matters. Her (often strongly worded and forcefully delivered) opinions are **also** often sought. The teachers as a group **still** tend to exert **little** influence outside of the school, apparently by **their** choice and with community assent. Other **non-Inupiat** residents have no official **village role**, but as permanent neighbors interact with the villagers a good **deal**. **Casual** conversations and remarks at public meetings seem to indicate that **non-Inupiat** residents are becoming increasingly visible in **Nuiqsut**.

### Summary

The best suggestion we can make is for the interested observer to read **Inupiat Ilitqusiatic: Yesterday, Today & Tomorrow** (Christensen rid), which reports on the message of John Schaeffer and the **Inupiaq Spirit** movement. Behaviors may, and indeed must, change, but the central **values** of a culture can remain the same. A culture adapts or eventually it dies or is engulfed. Cultural **isolates** can no **longer** exist **apart**. Values can be maintained even **while** behavioral

patterns are changing. Such continuities have been demonstrated but this does not mean that they are inevitable. Such continuities are not necessarily signs of successful adaptation, either, as one can argue that alcohol consumption patterns observed are simply a function of norms of sharing, sociability, and the lack of rigid time scheduling. The grim human consequences of this consumption pattern makes such an argument beside the point. The behavior can reflect traditional values and **still** be harmful. Thus, **maladaptive** continuities are as possible as adaptive ones. The challenge is to encourage the latter. **All** too often observers perceive only the former without even raising the possibility of the other.

People in **Nuiqsut** do not talk spontaneously about values. They will, when asked, but confine themselves to the generalities with which this chapter began. They will sometimes compare their ways with those of the white man, to the disadvantage of the latter. For the **Inupiat**, values are to be lived and are evident in one's behavior. Perhaps that is why their lists (Table 55) sound so universal.

We have examined five key domains with the **Inupiat** value system--Kinship, Egalitarianism, Seniority and Respect, **Inupiat** Identity, and Subsistence. They consistently are produced as central concepts (Table 55) and can be used to understand some of the stresses being produced by the present rapid rate of change. Topics discussed in this connection were the Church, the school, the family, male and female roles and relationships, and Leadership **roles**. The first two are institutions that have had and **will** continue to have a great effect on **Inupiat** life and culture. Adapting them to **Inupiat** needs is crucial for **Inupiat** cultural survival. The last three topics are several of the behavioral areas where significant change can be expected

in response to external demands. Wage employment has become and will continue to be a vital part of Inupiat economy, but its potential disruptions must be minimized. Leaders must deal with development pressures while protecting the Inupiat subsistence resource base. New adaptations are necessary, as the application of traditional Inupiat solutions will not protect Inupiat interests in what has become a much wider social and economic context. A dynamic form of Inupiat leadership and a new social contrast (or a larger scale application of the old one) must be developed.

## IX. A FRAMEWORK FOR ASSESSING CHANGE

### Aspects of the Framework

#### PURPOSE

The first task of this project was to produce a baseline ethnographic description of **Nuiqsut**. From this was to be developed an analytical framework with which to assess or measure the effects of offshore oil leasing and development on **Nuiqsut**. This framework will highlight the most salient variables of the ethnographic field research. Mitigation of undesired effects is the ultimate aim, for which knowledge of the boundaries of the problem is a key first step. Prediction, and prevention, of undesired effects may be possible at some future date. Until that happy day, the definition and measurement of significant variables in the present so as to assess change from the past requires our full attention. Given such variables, future assessments can be made much simpler through a systematic monitoring program.

The primary beneficiaries of such a monitoring effort will be those people potentially most affected by oil development-- residents of **Nuiqsut** and the other Native villages of the North Slope. Effective mitigation will also benefit the North Slope Borough as a whole. Since nearly all North Slope Borough tax revenues are paid by oil companies, a cooperative relationship between the two based on well-founded and shared knowledge is likely to be more productive than adversarial relationship based on uncertainty and mutual suspicion. The same may be said for the Minerals Management Service (big government) and the North **Slope** Borough (local government and, ultimately, individual people). Agencies of the Federal and State governments are too often thought of as agents or tools of big business-- in the case of the North Slope, the oil



industry. **In** fact, these agencies have very complicated mandates **which** require a very careful balance **of allowing** one set of people to benefit from one set of resources **while** protecting the rights of another set of **people** to use a different set of resources. **Where** uses conflict, that is, where different people want to use the same resources for different things or where the use of one resource by one party lessens the value of another resource to **a second party**, useful compromises can only be based on an understanding of the cost and benefits of each use **to** each party. Lacking such complete predictive capability, a second-best solution is to be **able** to assess the effects of past and ongoing uses of resources upon present populations. Those effects that are negative can then be made the objects of mitigation **plans**. One key to the success of such mitigations **is** accurate and **timely** evaluation of the states of the components of the system in question. The ability to produce such evaluations on the village **level** for North **Slope** communities **is** the object **of** this technical chapter.

#### PROCEDURE

The **last** step in this research is to recommend a feasible monitoring methodology. The requirements for such a **methodology** are several:

- variables must be relatively few;
- variables must be significant indicators, and **all** potentially important areas must be measured;
- Techniques for measuring or observing variable states must be relatively easy and not require a great deal of time;
- variables should be able to measure any imaginable change, not just a few of the most likely projected possibilities;

- Changes in variable values must be interpretable. These requirements will be discussed below. Here we will outline how we arrived at our monitoring recommendations.

Prior to field research, an extensive literature search was undertaken. Potentially significant sorts of information were identified in terms of a search for meaningful social indicators. Appendix A contains the measures checklist with which we began fieldwork. Parts of it are of course more general than others and it is far too ambitious an outline for four months of fieldwork. This list guided our selection of variables to investigate in the field, however. Those that were significant and accessible became our main sources of data and the center of our monitoring methodology (a practical happenstance--see Louis Berger and Associates 1983: 279-299). Significant areas not easily investigated had to be made so. Thus the process of operationalizing took place primarily in the field situation. This extractive process was refined once fieldwork ended. Data were analyzed, areas thought to be sensitive to social change defined and diagrammed in a simple flow chart (Figure 18), and measurable variables related to those possible changes developed (Table 57). These, along with a description of some (but only some) of the potential changes to which Nuiqsut may be subjected form our analytical framework for monitoring change.

## TECHNIQUES

At the most general level, we wish to establish "measures" or variables using a **pre-post-test** paradigm. This is at best an ideal (see below) but can be approximated and improved by an ongoing monitoring program. Our main contribution is to provide ethnographic baseline data and a set of potentially significant variables (with measuring indicators). These

**Table 57:** PRIMARY OBSERVATIONAL VARIABLES

Demographic and Population

Total population census analysis  
Descriptive household statistics  
Inter-ethnic marriage, Differential sexual mobility

Social Development/Differentiation

Plumber of social groups  
**Public** place inventory  
Village facilities history and inventory

**Well-Being**

**Clinic** records  
Public safety records  
Visiting patterns\*

Economy (Cash/Subsistence)

Job inventory  
Work force characteristics  
**Village** economic enterprises  
Household income  
Household economic activities  
Cash/subsistence  
Consumption\*  
Percentage **of** wage labor in **village** working for  
government employer

**Politics**

Number of public meetings  
"Outsiders" in leadership positions

\* **Will** require household visits for interviewing and observation beyond that necessary for other data areas. See text.

variables can then be monitored, additions and deletions made as necessary, and changes assessed. We of course lack the time depth to test our variables in this way. ·

There are four methods that we could have used to collect most of our field data. They are not exclusive domains, however, so some people may consider our division arbitrary or think that we have lumped several different methods together. We make no claims for this treatment of method except that it seems useful for the discussion at hand. The four methods are social surveys, participant observation, unobtrusive measurements, and archival/document research.

Social surveys can be either formal questionnaires or systematic but non-formal endeavors. Here we are using the former meaning. While they can provide much useful information, especially regarding population characteristics, the terms of the contract did not allow the use of formal survey instruments. We will return to their potential use in our monitoring recommendations, where we consider them essential.

Participant observation is the **staple** of the anthropologist and provided much of our data. The presence of a stranger is always potentially disrupting to any social situation, but once that **informational-interactional** bias is accounted for the data can be systematically analyzed and compared. Because anthropologists (and members of the study population) differ in their social skills, comparable topical information is not always available from different people. The entire question of sampling in a strict sense is very problematic. There is no easy way to deal with **it** except to be aware of the bias which exists in the data collection method so that one can correct for it. Participant observation is very effective at recovering feelings and attitudes, especially if extended observations are possible. Most people and groups do not

possess the capability to change their behavior for very long just because a stranger is present. Perhaps that is why strangers are so often excluded from groups when possible. Participation is one good way to discover what is important to a group of people. It is thus very useful in formulating potentially significant variables and measures.

Informal interviewing can be considered a form of participant observation. **An** interview is quite different from a conversation, however. Interviews can be conducted with strict and rigid protocols even **if** no **physical** interview schedules are used. This **allows** relatively standardized information to be gathered in relatively short time. The information is seldom completely comparable, however, and the social-conversational aspects of the situation increase the time required over that needed for formal interview. The researcher who has no informal interviews, but only conversations, has taken on a set of social responsibilities that cannot be ignored and which greatly affect the data. Information is seldom comparable.

Conversations are **less** focused than interviews. They can clearly indicate an informant's central concern at that specific time, but informal conversations can **also** make it easier for the study population to be uncommunicative without being unsociable. Natives can avoid the researcher without being obvious or rude. These can **be** advantages as **well**, as long as they are not allowed to be sources of frustration. **If** the researcher is perceived as more of a **social** creature than as a **formal one, opportunities** for observation of important data increase. Behavioral observations made during such conversations may be more significant than the information contained in the verbal interchange. Systematic and structured observations can be made about informal and unstructured situations. Again, such information is useful in the

conceptual stage of variable formation.

Unobtrusive measures (Webb et al. 1966, Rathje 1979, Sechrest 1979) are potentially among the most useful of methods to social scientists, but have been little used to this point. They are also termed "non-reactive" measures because they are essentially non-participant observations. They do not require interaction with or the cooperation of the study population and, as long as ethical proprieties are **maintained, are** no invasion of privacy. They are objective in that they are quite comparable from case to case. They are constructed by the researcher, however, and so may have no meaning to the study population. This is not a **fatal** characteristic as no population is totally self-aware. Valid social indicators are not always obvious to those to whom they apply. When combined with participant observation, unobtrusive measures allow a cross-check on the correspondence of the researcher's model with those which the study population considers important. They make ideal social indicators if they are actually meaningful (this is, validly reflect the state of a significant variable).

Archival/document research was useful in that it often is much more efficient to use information that already exists than to try to collect it oneself. A great deal of general information already exists concerning **Inupiat** subsistence, goals and **values, and** other **life** aspects. Demographic information also exists, but often at a **level** of aggregation that is not useful at the village **level**. Even where good documentary resources exist, some new data must be collected to test the applicability and representativeness of the documentary information. Within **Nuqsut** not much in the way of documented history exists. Statistical information in some ways comparable to our baseline measures are available for period prior to our fieldwork (**Dupere** and Associates 1973, 1974, **Schultheis**

and Smythe 1978; **Wickersham and Flavin 1982; and** Alaska Consultants **1981, 1983**). More verbal treatments are also available (**World Associates 1978; World, World, and Lonner 1981**).

The problems inherent in producing a systematic monitoring methodology from a detailed ethnographic data base or a detailed ethnographic data base from a process designed to produce a systematic monitoring methodology are best handled within a discussion of the limitations of our technical approach. These are not to be minimized, nor **should** their existence be disheartening. A realistic appraisal of our results is what is intended. First we **will** clarify what we mean by social indicators.

#### **SOCIAL INDICATORS--WHAT ARE THEY?**

**Social** indicators are **disaggregatable** measures of social conditions measured over a period of time (time series) which display a pattern of variation associated with social change. The process of defining social indicators can be conceived as consisting of three steps:

- systematic relationships are formulated in terms of a model or set of variables,
- concepts which include **all** important aspects of these relationships and exclude those which are extraneous are formulated, and
- measures to **operationalize** these concepts are developed.

Of course, the process is iterative and self-improving over time. Properly applied, better and more accurate measures are developed (**Rossi and Gilmartin 1980:49-57**).

Direct indicators measure a variable of concern itself, but these are **rare**. Indirect indicators measure a variable assumed

to be closely related **to** the variable of main interest. Subjective indicators are based on informants' reports while "objective" indicators are based on counts or direct observations of behaviors and conditions associated with given situations (reactive versus non-reactive indicators). Descriptive indicators are not part of a theoretical framework or model whereas analytical indicators are interrelated with other variables in an explicit theoretical framework. The latter are easier to interpret and develop than the former.

There are many properties of social indicators that must be considered when constructing them. Among the most important **in** general, and clearly most important in our case for reasons developed below, are the issues of validity and **disaggregat-**ability. How well do the social indicators actually measure the variables and concepts they are meant to? To what extent can each **social** indicator be assessed and reported separately as a function of other variables? To a large extent, only by ensuring that our indicators are disaggregatable can their validity be tested and improved. Other characteristics of social indicators such as reliability, stability, responsiveness, availability of data, scalability, intertemporal and intergroup comparability, and understandability are **also** important. Responsiveness (the speed and magnitude of an indicator's response to changes in related aspects of society), data availability, and understandability will be addressed when appropriate in following sections. Many of the other characteristics can only be assessed longitudinally.

This briefest of outlines should suffice for the discussion to follow. The interested reader is referred to the social indicators literature (**Bauer** 1966; **Meehan** 1975; Taylor 1980; Rossi and **Gilmartin** 1981, especially pages 18-78, and **Carley** 1981) as well as to some of the more recent social impacts assessment literature (**Finsterbusch** and Wolf 1977; Soderstrom



1981; Leistriz and Murdock 1981; USDI, BLM 1982; and Finsterbusch, Llewellyn, and Wolf 1983).

## LIMITATIONS

Certain limitations are inherent in our study. Some are due to theoretical limitations. Others may be methodological or of a more practical nature. Most are interrelated, so our discussion will be general and not spend much time keeping the domains separate.

Our study is primarily a baseline ethnography and as such can provide none of the longitudinal (time series) data required to specify even suggested causal relationships. This lack of prior knowledge is what required a baseline study in the first place. Since there was little information to guide our initial selection of measures, our research design required a large set of variables. Research was necessarily confined to a smaller set of these. Thus, our social indicators began as descriptive rather than analytic indicators. All were linked to concepts, however, and are usable to create different scenarios of change in Nuiqsut. Even if our expected directions and rates of change are incorrect these measures should adequately describe the community and allow assessments to be made.

The collection of baseline information is quite different from the collection of monitoring information to assess change (and the adequacy of monitoring measures to do so). Monitoring, given valid measures, can be done quickly. The baseline, supplying the detail to construct the measures, supplies the context which allows the measures to be interpreted and takes more time. Measures by themselves are meaningless. It was the period of fieldwork which allowed us to weed out certain

variables and stress others by forming ideas about **how** they are interrelated. Even so, our measures of these variables have **only** the weakest sort **of** validity--face validity--and must be tested through use. There is no way to shorten this development process. The utility and validity of longitudinal measures can only be tested over time. There is no guarantee that we have picked wisely, although we think it probable that those variables most significant in the present will also be significant in the future. Our choice of measures to serve as social indicators for these variables must be seen as preliminary and subject to modification.

A more serious problem is the attempt to assign causal responsibility for identified **socio-economic** and **socio-cultural** changes to oil and gas development. Most of the changes being effected in **Nuiqsut** are the result of growth, which is being fueled with oil-derived money. However, this is a **socio-political** decision more than a purely economic one. The North Slope Borough can be identified as the agent of change. The Alaska Native Claims Settlement Act by **itself** may have allowed the continuance of a predominantly subsistence life-style on the land. One can only speculate. The financial aspects of **ANCSA** alone would not have allowed the massive cash infusion into **Inupiat** villages which is now occurring and which can be credited as the major direct agent of change.

Social effects assessment, or what in effect is prediction, is **also** difficult because the goals people strive for are never **really** known. Most social indicators are meant to measure aspects of social well-being, but these aspects (and measures) are all situation specific. Good health, low crime, etc. are perhaps universally desired, but measures of them are usually not transferable from one **social** context to another unless one can set up absolute standards. Social

indicators research **is** nowhere near such a **state and**, barring a world society probably never will be.

Even within any given social context (North Slope Native villages) when **peoples' goals** and desires are in theory known, compromise **is** always necessary. There **is seldom** complete agreement **on** such goals, there are often goal conflicts, and definitions tend to be fuzzy. One does the best one can within a limited set of resources and alternatives. The formation **of** the North Slope Borough took place within a **social** context of **oil** development and the assertion of a peoples' cultural identity. The use of the Borough as a regional government to represent separate **village** constituencies **is** a consequence of this context. **In** this sense, most of the change evident in **Nuiqsut** is causally **linked** to oil and gas development. A more fruitful representation of the situation is that one is witnessing the ongoing adoption of cash economy resources into a system that has a basic **non-monetary** tradition and ideology. Cash, **or** money, is being used as a temporary resource but is being **built** into the system as a permanent need in terms of maintenance costs, heating **oil**, and transportation. The short-term adaptational behavior of North **Slope Inupiat** to this sudden and limited financial bonanza will have long-term permanent consequences. How serious those are depends upon when the **oil** runs out (villagers in **Nuiqsut** say **it never will**) and money **alternatives** available at that time. Our variables are chosen to illuminate and measure the processes of the adaptation/adoption.

To summarize the limitations of our study in relation to our selection of significant variables:

- variables must be relevant to the problem or relationship in question;

- variables must be measured, either directly or indirectly;
- variables must be interpretable.

None of these has been shown to be so for our measures, and could not be **in terms** of an ethnographic baseline study. The establishment of such validity requires a lengthy development period, of **which** this study can be just a beginning.

A discussion of **disaggregatability** follows quite naturally from a concern with validity and refinement of measures. If one is very sure of the variables to be monitored and their expected changes in value, very specific measures could (in theory) be designed. Lacking such knowledge, one can rely on the **covariation** of indicators to suggest interpretations for changes. This requires disaggregated data collected in a systematic way. One of our recommendations will be the design and implementation of a system to do so. Our research was hampered in the collection of detailed data by a restriction on formal survey instruments. In the absence of existing documentation, this made the systematic collection of comparable disaggregate data very difficult. **We were able** to form an image of the community and isolate variables of key importance, but must admit that in some respects our baseline data are incomplete or not as point-time specific as would be desired. This will be noted in specific data section discussions as appropriate.

#### SUMMARY

Our research made use of three main data collection techniques. Documentary research was limited **mainly** to background information, previous research, and the few current records which exist in **Nuiqsut**. Participant observation and conversation were used when attending meetings, visiting people, and so on.

A preformed idea of what **to** be alert for, issues to explore, and topics to avoid guided these observations. Direct observations, often done with the aid of a formal recording sheet, allowed us to record non-sensitive observations quickly and accurately. Such observations were neutral in the sense that no informant or village resident had to **be** approached or bothered to make them. Most involved inventories **of** one sort or another--numbers of snowmobiles, orientation of **house** doorways, store shelf stocks, and **so** on. A fourth **data** collection technique, formal interviews with the aid of standard questionnaires, would have simplified and sped up the collection of some of the basic data we gathered **by** observation. Such questionnaires and **formal** interviews were forbidden by our contract however, and may have interfered with the establishment of **social** rapport **in** any event. They may **also** have **helped** to establish our role to the community, though. As **it** was, many villagers never were too sure why we **were** in Nuiqsut.

Some measures of concern are obviously easier to get at with one method than with another. The lack **of** much written documentation, the inability to use **formal** survey methods, and the lack of meaningful **Inupiat** verbal response to many of our (what were probably social **ly** inappropriate) questions made observation our primary data collection technique. This explains where and why our information is strong in places and weak in others. Our demographic and economic data are certainly good enough for **useful** statements, but are not **nearly** as strong as survey based information **could** be. Health and well being indices reflect the general weakness of written documentation. **Social** political information reflects the richness **which** observational techniques can **yield**, and the versatility of observation is attested to by the quality of the data we were **able** to amass.

## Analysis--Variable Interrelations and Measures

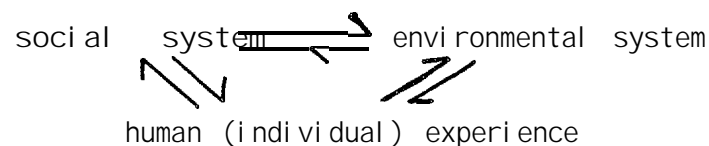
### INTRODUCTION

The analytical framework being developed to measure change in **Nuqsut** focuses on two of the areas discussed above. This is not because they are the only areas of importance or even because they can stand alone. Rather, they are easier to treat as dependent and independent variables. As the system is interactive, all variables of interest acquire a fuzziness as to causality. Demographics and economics will be our initial foci in a systems analysis approach to this specific case of development. A general rationale is followed by more specific hypotheses and assumptions about change which guide our choice of indicators. Qualifications and a general discussion follow that.

Introductory courses in anthropology often stress that the discipline very early identified itself with the study of peoples, their society, and culture, as whole units. "Holism" no **longer** appears in many anthropologists' discourse, but that quaint term still describes one of anthropology's strong ideological orientations. A peoples' society and culture are seen as a system, to be understood in terms of a functioning whole. Refinements in anthropological theory have taken the form of elaborating on the concepts of system and function. With the realization that systems vary in the degree to which they are complete in themselves (the continuum of open-closed systems) and that not all subcomponents of a system operate smoothly together, the ideal of society as a **structural-functional** system open to easy analysis is quickly dispelled. Perhaps that is why no **social** science has as yet generated a strong set of general theory. In any event, conceptual framework or analytical perspective is a better label for the orienting devices which social anthropologists rely upon.

Systems analysis is familiar enough not to need much elaboration in this context. Anthropologists have always treated societies as systems. Frequently, however, they were guilty of claiming completeness for a partial analysis. Culture and society were emphasized at the expense of other components of the system. In anthropology, the attempt to correct this bias, and to study society and culture as natural products of a human population within a given (restrictive) environment, has become known as human ecology. **This is** our general orientation.

This **can** be seen as an elaboration of a simple three component model (after **Craik 1972**):



That other people find this orientation useful is evident, but these researchers find that they must modify it **according** to their research interests. **Detail** is added and certain linkages are emphasized over others, Clearly the conception as diagramed above **is** too general to **be** a usable **model**. Yet, most social impact assessment scenario-generating analytical frameworks can be distilled to this central core (**Soderstrom 1981, Finsterbusch and Wolf 1977**).

The data requirements for such a general theoretical **orientation** can be cast in terms of the **social** indicator literature already cited. Measures are components (or reflections of components) of a system. To deal with the entire system is **in** most cases impossible. Therefore, what are seen as data **will** depend upon what are perceived as the most critical components and relationships of the hypothesized system. The important point is that data are not self-evident. The

researcher defines what data are by the definition of **the** research **problem**.

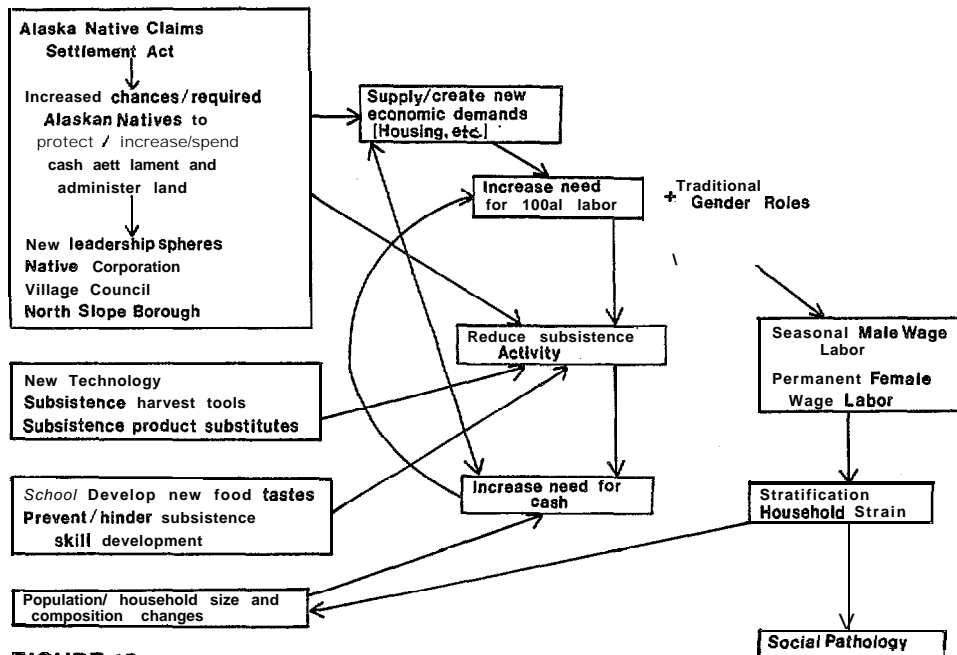
## VARIABLES AND CHANGE

Figure 18 represents graphically some of the connections we at present consider likely to be most significant. There seem to be four main areas of change represented:

- population/household characteristics are changing (Demographic Description, Subsistence Economy);
- sexual role division is becoming **increasingly** stressful (Cash Economy, **Socio-political** Structures);
- the relationship of wage labor and subsistence activity in the integrated economy is rapidly changing (Social History, Cash Economy, Subsistence Economy); and
- political and other sorts of leadership roles require a much different kind of individual or at least different level of functioning than was required before (**Socio-Political** Structures, Values).

All are related to the articulation of **Nuiqsut** with the wage economy. All relate back to fundamental **Inupiat** values, yet we have not included values on our diagram. This is likely because we see values as the interpretation of behavioral patterns. For **Inupiat** values, their culture, to survive, new behavioral patterns must be congruent with them. Our analysis does not allow us to project what we consider the most likely significant variables so as to say whether new behavioral patterns will support traditional **Inupiat** values. Our concern, obviously, is that they will not and our suggested measures are in the areas most likely to be detrimentally affected.





**FIGURE 18**

Some Hypothetical Developmental Relationships

We could not, on Figure 18, include a conceptualization of our household developmental **model for** household provisioning strategy in present day **Nuiqsut** except in rudimentary form. Population and household composition changes must be closely monitored, however. We believe, other things being equal, that an **Inupiat** family is most self-sufficient, and thus has more ability to choose how its adults will spend their working time, when children are few and either **pre-school** age or post-high school age. Of course, other **things** are not **equal**. **Nuiqsut** at present appears **likely** to experience an increase in total population (new housing) as well as an increase in households with dependents. This will **place** a strain on both village facilities and on subsistence resources. Wage labor appears the likely solution, but the NSB CIP program is scheduled to end in 1985, after which wage jobs will be difficult to find unless the NSB begins a new series of projects. The demographic situation describes the general provisioning problem in any event, and in **Nuiqsut** more dependents will create the need for more economic resources.

The present pattern of wage activity has certain implications for social policy. The current continued specialization of men as short-term seasonal wage labor and women as permanent year-round wage labor could potentially change the stability of the household structure and disrupt networks of kinship and sharing. Men still apparently treat wage labor as a short-term resource, to be exploited when "in season". Women are becoming professionalized as a sex-class, tending now **to** be more well educated than men. **Interethnic** marriage and differential sexual mobility will have to be monitored to see if females marry out of **Nuiqsut** (and perhaps **Inupiat** society altogether) more than men do. This would then have profound effects upon household composition and structure. In **Nuiqsut**, of the five mixed marriages/living together arrangements, all involve **an Inupiat** female with a **non-Inupiat** male. This

**could** be simply the result of few or no **non-Inupiat single** women in the north. However, also **likely** is the explanation that **Inupiat** men and women are diverging in the degree of their cultural **identity**.

Technological introductions replaced many subsistence products produced by women. Store parkas and lambskin take the **place** of caribou parkas. Commercial boots replace **mukluks**. Men **must** pay **more** for subsistence equipment, **but** the product of the hunt is as **valued** and perhaps increased in **value** because of the investment. Women are thus being, or have been, culturally disenfranchised faster than men have. **Employment**, especially female employment, should be carefully monitored.

Private employment has quite different implications than does the current emphasis on **public** employment. Private employment would decrease dependence **on** larger governmental bodies and **increase locally** generated stability. A **locally** based wage economy is potentially less seasonal than one dependent on outside financiers. One favorable economic scenario is for private, relatively permanent **extractive** industries such as gravel or **coal** to **employ** substantial numbers of **local** men. This does not seem **likely to** happen, however.

There are several related **relationships** that can be expected to affect **Nuiqsut's** social organization. Subsistence activities require an increasing capital **outlay** for necessary equipment. This means that those who have the **least** time for subsistence activities (because they are working for wages) are those who have the best chance to be successful (because they can afford the best equipment). They also tend to be more acculturated than non-wage earning **Inupiat**. Thus, the status they gain as hunters may not reinforce traditional values, and in fact may weaken **them**. This requires **further** study, building on the excellent work of Kruse (1982).

Those hunters with the most time to devote to subsistence activities tend not to be able to afford the best **equipment**. Thus restricted, they find it difficult to train young hunters. Thus, traditional **Inupiat** education and values are not being transmitted in an efficient manner.

Women have greater access to education than men, **which** gives them greater access to wage jobs. This can be related to the increased incidence of female **Inupiat**, male **non-Inupiat** marriages. Apparently these are more common than the reverse, and **pre-stage** another failure **in** the transmission of **Inupiat** values.

**All** these factors tend to reduce the amount of subsistence activity that actually occurs. This in turn reinforces the hold of the wage economy on Native Americans.

One surprising aspect of our study has been the minimal impact of oil employment in **Nuiqsut**. The North **Slope** Borough through its CIP program has had great impact, but oil development as such is difficult **to** quantify as a factor. Thus, **Nuiqsut's** village facilities should be monitored, as mirroring NSB **CIP** activity. Number of social groups and public places ("behavior settings") **will** also be an indicator of population growth as well as of qualitative change. There is a threshold of population beyond which an incremental **level** of services must be added. This will be different for different sorts of services, but if the new houses are completed as scheduled and only half are **filled** from outside of **Nuiqsut**, there will be need for an increase in utilities capabilities, and perhaps a rearrangement at the school. A new or expanded store may be needed. The post office is already overtaxed. However, if the houses are completed and the NSB CIP program terminates in 1985, people may not be **able** to afford to buy homes in **Nuiqsut**. Such a turn of events would once again

place the emphasis in the household procurement system upon the use of harvested fish and game. It **would** not require a return to as extreme a dependence as the 1973 situation but would be a distinct shift from the current situation. Thus, Figure 18 is only partial. The disappearance of NSB seasonal wage labor **would** increase the use of the subsistence sector in **Nuiqsut**, and **still allow** most households an access to cash income through permanent jobs which are **also** mostly for the Borough. At present this remains highly speculative.

Another problem seen in **Nuiqsut** relating to outside introduced entities is the apparent lack of **Nuiqsut** people to take charge of things. The cognitive dissonance inherent in **Inupiat** political **roles** needs investigation. The mayor and two councilmen, the head of utilities, and head of public works are **all** not registered as members of **Nuiqsut's** village corporation. None of them were among the original settlers, as **all** have come from Barrow within the past two years. This is a measure of the continuing influence of external **social** forces upon **local social** organizations. The **number of non-Inupiat** occupying key structural positions is likewise a sensitive indicator of **local skill** development and dependence/independence upon the broader society. "Enforcement" may be something relegated to outsiders to perform. As **Nuiqsut** grows, and it must if the houses are to be **sold**, the percentage of "outsiders" (those not registered as members of the village corporation) must increase. The number of **non-Inupiat** need not increase but **will** probably do so, at **least until** the NSB CIP program terminates. **It** is thus expected that **Nuiqsut will** remain entangled in a much **larger** and complex system external to itself, with interconnections becoming more obvious rather than less so.

**Nuiqsut's** growth **in** size will not be spectacular in absolute terms but **probably will** be large in relative terms, which

**will** be reflected in the well-being indicators. Public safety records should indicate an increase in service calls **faster** than population growth. Clinic records should indicate the same. Visiting patterns should become more formal and restricted to much narrower portion of people who live in **the** village.

These expected relationships are all those expected in any community undergoing rapid growth. There are some socio-political catch-22's which will exacerbate these trends, however. Native corporations have the potential to create social **class** differentiations among the Inupiat population, when in fact they endeavor to do the opposite. The protection of traditional subsistence rights through the use of a foreign legal-political system simply introduces another avenue for fundamental change. It will be important to document the characteristics of **Inupiat** leaders. Clearly, in **Nuiqsut** at least, there have been cases of eminently qualified **people** deciding that the most effective way to affect **village** life for the better was to act within the **larger** outside system. Local leadership positions are in fact subject to heavy regional influence. Clearly **Nuiqsut's** integration with the regional/state political system can be expected to increase.

People in **Nuiqsut** realize that change cannot be stopped. There are too many things to which they have become accustomed that are only available through the cash economy for them to do without cash incomes. The people of **Nuiqsut** want some say over the extent and speed of change, however. **Inupiat** culture and oil development can be compatible if efforts are made to make them so. One of the first steps in this direction is to determine what variables can best be used to assess the **Inupiat** adaptation to the cash/oil economy. We shall examine each of our data areas in an attempt to do so.

## DATA AREAS, VARIABLES, AND MEASURES

We will now try to briefly note what we consider the most useful significant variables and measures in each of our data areas. Some brief comments about measure justification, significance, or other indicator characteristics will accompany the list.

### Demographic and Population Information

Demographic **information** is perhaps the most important area for which systematic data collection is essential. The demographic dynamics of a community are the fundamentals of all **social** activity. Social organization does not reduce to demographics, but is certainly constrained by **them**. Unfortunately this information is almost totally lacking in **Nuiqsut** (and the North **Slope** Borough generally). Our attempts to **deal** with this are documented in our Demographic Description chapter. There are no vital statistics records in **Nuiqsut** and **all** census information is **flawed** for the purposes of demographic and mobility analysis (it was collected for other reasons).

For reasons stated above and **below**, the most **useful** data are those which can be disaggregate. Important demographic indicators for monitoring purposes are:

- o Total population structure--age, sex, **ethnicity**;
- Household size and composition;
- Length of time present/absent in **Nuiqsut** since the last census;
- Birth rate and death rate;
- Percentage of unmarried adults by sex;
- Type, number, and frequency of inter-ethnic marriages.

We refer you to "Demographic Description" for information on present day **Nuiqsut**.

We recommend strongly that the recording and collection of such basic demographic information be encouraged. The importance of good demographic information cannot be over emphasized. Nearly all social analysis is facilitated by a detailed knowledge of population characteristics. In the absence of such knowledge, **socio-economic** patterns are difficult to unravel. Projections in terms of growth, decline, or a steady state become informed guesses, at best. **If** Minerals Management Service were to undertake this task, the restrictions on the use of formal survey instruments would of course need to be modified. Acting in conjunction with the North Slope Borough Planning Department and the **Nuiqsut** City Council would no doubt be necessary, both ethically and pragmatically, to ensure community cooperation. The resulting information base would be invaluable for planning purposes at **all** levels.

Censuses, both of people actually physically present, and those which also include people only absent from the village temporarily, **should** be conducted on a regular basis (at least winter and summer every year, if possible). This is especially important as long as immigration **is a** significant factor, either of **population** growth or as a counter balance to **outmigration**. Mobility information could then be supplemented by sample interviews. The formal recording of births and deaths should also be instituted as a preliminary to and check on such systematic surveys.



## Cash Economy.

The cash economy must be monitored both as an area subject to change and as a major determinant of social well-being. As with demographic population, **disaggregatability** is advantageous in terms of meaningfulness. A job inventory, broken down by employer characteristics, and employment characteristics is extremely important. Ours was constructed from observation and many separate pieces of information gleaned from numerous conversations. **It** is thus not completely accurate. **We** had hoped to obtain information from the NSB to use as a check, but **could** not. **NSB** CIP fund expenditures are useful in this regard to some extent. Village Corporation records exist but are not available to **non-Kuukpiik** Corporation shareholders. Information on wages, hours, salary, etc. has similar constraints. Thus our estimates are based on informant information and extrapolation. Information on money from the sale of "subsistence products" comes from observation and informal interviews.

Most of the other information in "Cash Economy" was collected through selective interviews/conversations and observation. **We** refer you to that chapter for that discussion. Housing starts are observed and inferred from NSB CIP expenditures. Unemployment, sales tax receipts and revenues, and money orders are available as time series data from the appropriate offices. Unfortunately they are not completely comparable to each other. Some include **Nuiqsut** as part of a **larger** population, while others use an irregular time period to record the matter of interest.

Distribution of income and employment is a derived population characteristic. As such, it is a descriptive summary of much of the above. It is very **useful** in that regard.

It is a class of information very amenable to being collected by means of survey questionnaires.

Useful measures would be:

- Work force structure--age, sex, ethnicity, type of work;
- Percentage of jobs paid from government funds;
- Individual and household income (number of wage earners and hours worked is a good estimate); and
- Credit availability/liquidity and stability of money supply.

All except the last could be collected by a household survey. The cooperation of the village and the NSB would again be essential. As long as the CIP program continues, gross indicators of the above will be published by the NSB as CIP expenditures. Monitoring would require finer information, however. Surveys of employers rather than employees may be a faster data collection method, but may miss self-employed individuals. As differential access to cash and a sexual division of wage employment are two of the most significant change factors noted above, this information is critically needed.

#### Subsistence Economy.

Information on subsistence activity is difficult to document, as it occurs away from the village. Our "Subsistence Economy" chapter discusses this problem. People who hunted were identified but no way was found to gauge the level of hunting activity or the amount of resources actually harvested, except on an individual and opportunistic basis. The same is true for disposition or sharing of harvested resources and hunting/fishing party composition. Informants generally refused to talk about

these aspects of hunting; rather, they did not refuse but simply talked about something else. Our report thus does not deal with resource harvest activities as such. Perception information comes from informant interviews and written transcripts of conversations others have had with selected **Inupiat** elders. Attendance at public hearings, at oil **lease** sales, and transcripts of earlier such meetings, were also useful in this regard.

Household economic activity measures involved the **articulation** of information categories discussed above with intensive observation of a **sample** of households. This was essentially the consumption survey sample discussed in the text. Observation is the only feasible way to obtain such information. Cost of living estimates come from observation, informants' answers, and **our** own consumer experience in **Nuiqsut**. Material goods inventories, which **help** measure many things, were observational. They indicate traditional/modern orientation insofar as ice cellars, **sleds**, and such functional items predominate over items such as motorcycles, stereos, and so on. They are measures of expendable income. They are also measures of preferred use of leisure time.

Operational measures of subsistence activity that we can propose for monitoring purposes are few:

- Observations of consumption patterns of a sample of households;
- Presence/absence of material objects associated with subsistence--ice cellars, usable drying racks, equipment; and
- Self-report and attitudinal surveys similar to Kruse **1982**.

Observations could at least partially be coordinated with survey data collection. Such observations **would** require a

fairly high investment of researcher time, however. A protocol for recovering consumption information in an interview situation may be possible. A long-term study of consumption with the cooperation of a sample of **Nuiqsut** households would be ideal for collecting such information. The record keeping for this would be less than the detailed time **logs** that would **be** required for detailed harvest effort data.

#### Social Development/Differentiation.

Village facilities information can be obtained from informant **recall** (which is sometimes fuzzy as to years), checked by the NSB Capital Improvement Projects Funds expenditures for each year for most things. Some structures are built with other money and so are more of a problem. There are not many of these, however. Village facilities are also observable.

We collected information on existing structures mainly by external observation. Visits and informant information produced data on modifications, use, and inventories. Photographs facilitate comparisons.

Social groups were frequently observed, in formal and informal contexts. Informants could generally list groups that existed. A limited amount of written documentation exists. Informants were willing to discuss past activities and membership list of such groups to a limited degree. Observation was the primary source of information, however, especially about matters of process (topics, decisions made, decision-making, etc.). Public places and public events, once enumerated, again had to be observed more than talked about. People would tell us how well others spoke English by giving advice on when a

translation was necessary and when not. They would not rate or judge a person's fluency in general, however, or compare people to each other. **Intravillage** marriage patterns **fall** out of our census information. **Intervillage** marriages are **problematic** when people leave **Nuiqsut**, so our information there may well be incomplete. Number of children in school comes from a comparison of school enrollment lists with our censuses. School related events can **be** investigated by observation or conversation with **Inupiat** and **non-Inupiat** informants.

One failure on our part was in not being able to compile complete membership **lists** for village organizations. People were **quite willing** to **let** us observe, but rarely **would** they answer such questions as who belonged to what groups. Such formal lists do not always exist, apparently. Questions about who is expected to be at a certain meeting or to perform a certain task were **usually** not answered. At best they were seen as evidence of strange and perhaps improper behavior, at worst as "spying". This, **along** with the lack of written documentation, made the rapid collection of information **difficult**. Census information is basic and straightforward enough to obtain by means of a survey or questionnaire. This information **is** not, and requires a longer period of time for observation than was available to us. We could discover level of activity and gross patterns, but fine interactions and **kin-**related behavior require more intensive effort.

Measures in this area thus are most reliably confined to observations:

- Number and type of structures;
- Public facilities and services available;
- Number and size of **retail** outlets;

- Number of "public places", use of same;
- Number of local groups and organizations, size of each

More detailed information would be useful, but the outline above should adequately measure the physical components of community growth. All except the last could be accomplished by observation. Interviews and use of existing records would speed this up. A few key informants should provide adequate information on local groups and organizations.

### Well Being.

Visiting patterns, sharing and exchange, and frequency of such behavior were very difficult to accurately document. Systematic visits to selected households, which was expected of the researchers anyway, allowed an estimate to be made for specific households. These observational data could then be applied to unknown cases, and an attempt made to check on the accuracy of this application by a conversational interview. The success of this varied, as questions we asked were either too general to elicit much response ("how often do you go visit?") or too specific to be polite ("how often do you visit household X?"). Airplane arrivals/departures could be documented easily enough, but no one we approached was interested in doing so systematically, even when we offered to hire them for that purpose. Questions about freight are similar. Proper connections with the air carrier could make this information readily accessible, however.

**Health** and safety information is readily available. Clinic records from **Nuiqsut** were analyzed in terms of age, sex, time and date of visit, and complaint. Court records and public safety statistics are available but the former are too few

to really represent the community and the latter are uneven in quality and difficult to interpret. Access to the PS0 service log or more detailed information, even with confidentiality assured, was denied by the Barrow office as not being permitted under **current** laws. Alcohol and drug use information is primarily based on our own observations of use and people under the influence, due to the exaggerated stories that tend to surround these substances. Reliable informants' information" was accepted, subject to verification. Leisure time was investigated by observation and casual conversation. General questions were again seen as vague and specific ones as pushy. **School** attendance aggregate records, by month, were obtained from the NSB School District in Barrow. They are useful but flawed. **School** enrollment, from the same source, compared to our censuses gives us the percentage of **children** in school. High school graduates since 1979 are **listed** on the enrollment printout. Information on earlier graduates, obtained from informants, is incomplete.

Interaction and travel information is available, but takes time to obtain. We hoped to receive information on telephone **calls** to and from **Nuiqsut** but were unable to make the proper connections with the phone company. This **would** provide information on **Nuiqsut's** contact beyond the North **Slope**. Measures **would** then include:

- **Clinic** records structure--age, sex, **ethnicity**, **problem**;
- Percentage of population **visiting** clinic, by age and sex cohort;
- Public safety records structure--age, sex, **ethnicity**, offense;
- Public safety and health clinic time series trends;

- Airplane arrivals and departures--numbers, frequency, to and from where; and
- Telephone calls -- to or from where, number, frequency

Clinic records measure a population's physical health directly. Public safety records should measure community growth and impersonalization by a pattern of service calls increasing faster than population does. The last two measures relate to Nuiqsut's contact with other places. If and when a road to Prudhoe is built, number of vehicles in Nuiqsut and frequency of trips will be a measure (as would the presence of the road itself).

#### Politics.

Politics is an area where measures often fail to apply because the more successful a politician is, the more difficult it is to pin down exactly what he is doing and how he does it. Our field study is also complicated by the fact that Nuiqsut is part of a very complex, newly created and rapidly evolving political system. The education of the researchers as to where Nuiqsut fits into this is far from over. The information gathered on all political entities outside of Nuiqsut comes almost exclusively from printed sources. These entities are important, and Nuiqsut's economic and political position in relation to them must be examined-- but our report is not able to do justice to this analysis. That is a different sort of research topic, beyond our scope.

Formal political bodies and actors were observed in Nuiqsut. Informal political entities were also noted. Nearly all data was observational. Records for before August 1982 do not exist and all informants display considerable bias. While



knowing the direction and extent of such bias allows one to approximate what must really be the case, such information is best used only when validated by data obtained by some other method as well. The sorts of measures that are sensitive to change and easy to observe can be misleading:

- Number of political arenas or groups;
- Number of public meetings';
- e Number of political leadership positions and characteristics of the occupants--age, sex, ethnicity; and
- Voter registration and votes cast.

Leadership roles should be investigated further. There seems to be a cognitive dissonance between the actions outside agencies require of Inupiat and how Inupiat prefer to behave. The concept of "enforcement" seems alien to Inupiat and may be relegated to Anglo-Americans or other "strangers" to perform. Decision making at the village and representational levels would relate directly to this.

### Values

There is no good way to measure values, which are essentially guides to ideal behavior. Values-in-behavior are context specific, however. Anglo-Americans "obey the law", but very few actually stop at "stop" signs. It is much more direct to look at behavior, which usually changes before values are rephrased anyway. Monitoring values would serve no useful purpose except to mark when previously noted changes were formally recognized by the mainstream culture. Table 55 lists few values which an Anglo-American would not subscribe to. Of those few, one may argue that Inupiat behaviorally act in accordance with only one. Successful hunters are respected but fewer Inupiat youth than ever before are learning the Inupiaq language or traditional

domestic skills. Differences between expressed values and actual behavior, where the value specifies a unique behavior that is measurable, do indicate areas of change. These areas have been previously dealt with, however.

#### SUMMARY: PRIMARY OBSERVATIONAL VARIABLES

There are three basic criteria which primary observational variables must meet. Together, they must add up to an adequate baseline representation of the community at one point in time. The required information must be obtainable within a limited period of time using socially acceptable research techniques. The variables measured must be related to important factors underlying or subject to (at least potentially) significant social changes. Satisfying **all** three conditions at once is no easy matter and compromise is inevitable.

The importance of demographic and population information has already been stressed. Disaggregate census categories are one of the main devices used to sort other social data (household composition, village inter-ethnic marriage, etc.). Census information also allows one to begin examining mobility, both long-term and short-term.

Social differentiation and development can be measured most quickly with an inventory approach. Barker's "behavioral setting" concept is easily applied. Village facilities can be listed by inspection and observation. Locations for social activities are readily observable. Social groups can be observed and talked about. Indeed, one important characteristic of a social group or behavioral setting is just how visible it is to an outside observer. Observations

on use, group size, and so on can be made at the same time as the inventory.

Well-being can be investigated through the use of public documents. Given access to at least aggregated clinic and public safety records, basic indices of health and disruption can be formed. These can be compared over time. Visiting patterns between households are not so easy to observe and would require observation and interviewing. This could be potentially combined with the collection of census information.

Economic measures benefit, as does general population information, from the collection of data from a large sample of people. However, as long as the NSB and Kuukpik Corporation are the main employers in Nuiqsut, they could serve as a central source of this information. This would require their cooperation with the sponsor of the research, of course. Such a linkage would be much more efficient than if each research team responsible for each project had to forge such a connection independently. This would also serve to protect local populations and their interests and help them transform ethical principles (ACUNS Committee on Relations with Northern Peoples 1982; Society for Applied Anthropology 1974) from rhetoric into guides for behavior. The non-monetary sector of the economy requires such local cooperation even more, as observation is less useful here than it is for wage employment. Present information available is also relatively poor. The sorts of consumption observations made in our study can be made on a regular basis, but would need to adequately cover the entire year. Regularization would increase efficiency of observations, but the process would still be relatively time consuming.

Politics will remain a problematic area. A list of political positions, with current office holders and the length of their

tenure, is a start. Other community leadership positions (church, civic organizations, public social bodies) should be included. The number and frequency of meetings can now be counted from records, as local documentation has improved (accounts of debate and actions taken is still sparse, however). The **socio-economic** characteristics of leaders, in different positions and over time, can be compared. The observation of a meeting or meetings would give an opportunity for the observation of group dynamics. This should not be essential, however, as informal groups **will** have been observed in such social settings as the Kuukpiik Corporation Office, the school, utilities, the bingo hall, and so on.

With the help of Inupiat assistants, two weeks to a month should suffice to collect the information outlined above. It will not be as detailed as that contained in our report, but it will allow a feasible monitoring program to be carried out. Given community support, it should prove very successful. Without such support, the quick and efficient collection of information will be impossible.

#### "Recommendations

We start with a not unfamiliar observation:

. . .The outcome of any project is jeopardized when intended beneficiaries do not participate in project design and management; when overambitious objectives are placed on fragile organization; when there is inadequate leadership; when there is dependence on one imposing leader; when the project lacks access to technical support, funding and training; and when bad luck intervenes (Hartfiel 1982:28-29).

It is the first factor that most catches our eye. We will sketch some problems we encountered in the field work and

then suggest ways we think they may be minimized in the future.

In **Nuiqsut**, as in many other North Slope and more generalized research settings, eliciting critical information was very difficult. Villages were always hospitable and friendly to us as people. As researchers, we encountered problems. There was extreme resistance among **Nuiqsut** residents to talk about subsistence or wages in other than general terms. Rankings of other people or specific sorts of information about them were not expressed. People would change the subject or tell stories or remain silent or say they didn't know (the last was the first **Inupiaq** expression learned by the researchers).

The use of native assistants was **also** difficult. The wages we paid were attractive enough for high **school** age and just graduated young adults. Our wages **could** not compete with other available work, however. Assistants also preferred to be flexible about hours worked, mornings being especially poor. They wanted to be paid every day and occasionally **would** not work if they had no purchase they wished to make. Translators especially expressed a willingness to work with **us** but could never arrange the time. Those who did work with us were good assistants and very helpful to our efforts, but very quickly experienced the resistance toward many of our questions and the suspicions of being associated with our study. Eventually, they were used more as informant checks and observers of indirect measures than as interviewers.

Interviewing key leaders was a problem as **well**. They were frequently outside of the village. When in the village, they had their own lives to **lead**. Sometimes the resistance of villagers was intensified in the case of key people, who had a larger amount of potentially useful information but who also realized what releasing it might mean in terms of **social**

reputation. There was general mistrust of any study in any way related to oil development issues, especially if funded by the Department of Interior. There is also the feeling that this was simply another study imposed from the outside, one in a series which "studies them to death" but produces no tangible benefits. This is not an uncommon feeling in communities experiencing energy development, growth, and rapid change throughout the western United States.

An effective monitoring process must actively involve the people who **will** be most affected, the study population. A social indicators approach, if it is to be more than merely suggestive, must validate its measures through a systematic collection of longitudinal data. This is best done (in the absence of pre-existing data, which is the general case on the North Slope), and perhaps can only be done, through the use of formal survey techniques. Given the realities of survey research, this would be impossible without North Slope Borough and village cooperation. Ideally, the NSB and the involved villages would have a direct voice in determining variables to investigate and devising measures of change. This is a programmatic need and not one that can be addressed by individual researchers. In many cases, it may be **worth-while** for a NSB department (planning, for example) to set up a section to collect these measures. A local entity with an interest in the accurate collection of demographic and socioeconomic information would greatly increase the speed and ease of data collection.

Monitoring is a long-term project and requires a long-term commitment on the part of everyone involved. Everyone is somewhat leery of strangers, but much of the suspicion of outside agencies results from a lack of systematic intercommunication (see, for instance, **Wickersham & Flavin** 1982:194-195, 201). Ethical reasons aside, local participation is

required precisely because of this long-term need. Such a cooperative working arrangement would relieve the researcher of the task of coordinating anew with villagers, the NSB, and the OCS Office each time that updated **measurements** were desired. **It** also provides a **clear** mechanism for ensuring that the village and the NSB understand the data needs of the program and the benefits that can be expected more clearly. Such official cooperation **will** also prevent the blocking of data information **on** the grounds of suspicion of inappropriate use. Data collection can be formulated as a joint effort to mutually benefit **all** parties to the agreement while at the same time protecting each individual's privacy. Without a long-term working relationship with the **local** community, **informant** confidentiality can be guaranteed only by aggregating data. Such indices can be **useful** in well-known systems, but have little **utility** in this monitoring context.

**It is** recognized that such an official working partnership **would** be difficult to negotiate and maintain. It appears as the most feasible solution, however, if access **to** the necessary information is to be maintained while protecting research populations from any potentially harmful effects the release of such information may have. Such arrangements **also** increase the speed and efficiency with which information can be collected. Potentially, the quality of information is improved as **well**, as local **people** learn the skills, theory, and purpose involved in the **social** monitoring process. The **local** community benefits by ensuring that the **OCS** Office receives information representative of the community. Such direct communication **also** ensures that the **local** community is well-informed of **all OCS-oil** related activity (and **potentially** all development activity). The data base generated would **allow** for improved **local** services in the **fields of** health, housing, and utilities by improving the quality of data **available** for planning purposes.

If such a formalized (survey oriented) program cannot be implemented, there is little to expect from monitoring. Information comparable to ours could be periodically gathered in an ethnographic way. Sampling in a village as small as **Nuiqsut** is difficult, however. Too many factors **could** skew the data. Economic information could be adequately represented because of alternate data sources (employers) but demographic data would be impossible to collect. Crude growth measurements through number of structures and consumer demand could be made, but would lack the precision to even approximate rates of change. It is important to realize that the monitoring program we are recommending is not merely survey research. Survey research in Alaska in the past has tended to **be** short-termed and not directly responsive to the study population. A monitoring methodology would use survey instruments but in a precisely defined way. The results would be integrated with observational data where observation is the best collection method and guided by what are perceived as long-term issues of change. The observational components, **local** participation of the study population, and formalized research relationships would work together to ensure that measures are sensitive to local conditions and **useful** for dealing with change.





Appendix A: PRE-FIELDWORK VARIABLES/MEASURES CHECKLIST

DEMOGRAPHIC AND POPULATION INFORMATION

Total Population (number)

Males Disaggregated by as many variables as possible: age, occupation, education, Females **Ethnicity** income, wealth, subsistence activity, household characteristics, **ethnicity**. Some of these are detailed below.

Household Information

Age at marriage  
Number of children  
Age at birth of children  
Inter-ethnic marriages (type, frequency, number)  
Birthplace of married couple, of children  
Household size (number)  
Household composition (age, sex, relatedness)  
Length of time in household  
Length of time in village  
Community of origin/birth

Mobility

Absences from the village  
Who is absent  
Reason given for absence  
Length of absence (time)  
**Where** the person is in his/her absence  
Mechanism of travel  
Source of funding for travel, living expenses  
Permanent migration from the village  
Who, why, where, source of funds  
In-migration (to village)  
Prior residents  
"Strangers"  
Who, why, where from, funds source

ECONOMY

Cash economy

Job inventory, by employer  
a) **Male**, female, permanent, seasonal, irregular, **Inupiat, non-Inupiat** disaggregate by  
b) Public, private, self-employed  
Money wages/salary  
Hours worked and distribution (day, week, month, year)  
Method of obtaining work  
Self-rating of wage/salary employment  
Money from sale of "subsistence products"  
Self-employment  
Other cash income  
Grants, transfer payments, welfare benefits

Cash economy-Continued .

- Unemployment
  - Numbers, rates
- Credit**
  - Availability, distribution, differential use
- Local businesses
  - Numbers, volume
  - Number **filing** sales tax receipts
- Annual **sales** tax revenue, NSB
- Number and value money orders sold
- Number housing starts
- Number of stores in **village**
  - Degree of specialization (inventory)
  - Volume** of business (Inventory, money)
- Consumption patterns
  - Store stock inventories
  - Store** records
  - Village purchases (**in Nuiqsut**) vs. non-village purchases
  - Amount of food bought **vs.** amount gained from subsistence
  - Variety
    - Observed consumption behavior
    - Reported consumption preference
  - Material goods inventories
- Distribution of income and employment
- "Subsistence" economy
  - Number **of people** who hunt
  - Number/frequency/duration/itinerary of hunting trips
  - Number of fish camps
    - Occupied at what **time**, for how long
  - Resources actually harvested (per day, trip, aggregate)
  - Disposition of resources harvested
  - Necessary equipment for subsistence activities
    - Inventory
    - Cost (**cash**, time for manufacture, other)
  - Hunting/fishing party composition
  - Perception of resource availability
  - Perception of competition for subsistence resources
  - Number of whaling captains (active/inactive)
  - Number of whaling crews (active members)
  - Number man-days spent hunting
- Household economic activities (integrated economy)
  - Subsistence resources used
  - Wage earners/cash income
  - Cost of living
  - Ratio of Subsistence economy time/cash income time
  - % Livelihood gained from subsistence activities
  - Material goods inventories
    - Ice cellars (active/new/inactive)
  - Outboard motors
  - Boats

Material goods inventories-Continued

**S1 eds**

Vehicles (snow machines, trucks, autos,  
**tri-wheelers**, motorcycles)

Durable goods (television, radio, stereo, stove,  
washer, dryer)

Clothing worn

"Native" or "western"

Homemade or purchased

Age and worth (estimated)

POLITICS

Arenas

**Nuiqsut**

Barrow

North Slope Borough

**Alaska**

Federal

Governmental agencies

Non-governmental agencies

Native corporations

Non-native corporations

Non-profit organizations

Hierarchical (formal) relations between and among the  
above

Non-hierarchical (informal) relations

Formal bodies

Number

Composition (structure) and powers

Actors

Issues

Decision-making process and dynamics

Scheduled meetings, number and frequency

Actual meetings, number and frequency

How membership chosen

Membership characteristics

Payment or compensation

Employees

Overlapping authorities

Multiple role occupations

Actors who overlap boundaries of political arenas

"Outsiders"

**Non-Inupiat** intrusions/influences

SOCIAL DEVELOPMENT/DIFFERENTIATION

Village Facilities

**Water**

Electricity

Sewage Treatment

Recreation

Education

Public Safety

Fire

SOCIAL DEVELOPMENT/DIFFERENTIATION-Continued

Existing structures

Type (residential, government, etc.) and number of each

Interior square footage

"Typicalness" of (standard **plans**, similar styles, **etc.**)

Modifications

To increase space (amount)

To rearrange space (partition, repartition)

Stylistic

Maintenance

Fixtures

Use of structures

Residential

Household members/structure

Square feet/household member

Storage

Multi-function use of space

Organization of space

Other structures

**Daily person flow (minimum, maximum, average)**

Lot size-land associated with structure

Inventory of material possessions inside structure

Inventory of material objects within rooms

Inventory of things outside of, but associated with, structure

Inventory of junk **in the village** (litter index)

**Social** groups (households and politics separate)

Number

For each: Date of formation

Identity or category

Membership (active/passive)

Stated purpose

Topics of discussion/action

Decisions made (and process)

Frequency of meeting (expected/actual)

Dynamics (reported/observed)

**Social** service and other **formal** organizations (see above)

Organized churches (see above)

"Public places": number, type, use

**Public** events: what, where, who, when, why

Number English speakers

Fluency, when spoken

**Intra-village** marriage, number and percentage

Inter-village marriage, number and percentage

School related events

Number children in school

Place of birth

WELL-BEING

Visiting patterns and ties of solidarity

In village

Who visits whom

Sharing of possessions and foodstuffs

Who shares what with whom

Frequency

Number and frequency of airplane arrivals/departures

Scheduled or charter

Number passengers arriving/departing

Purpose of trip

Length of trip

Point of departure/destination

Amount of freight arriving/departing

Types of freight

Point of origin/destination

Health and Safety

Illness: types, numbers, frequency (rates)

Hospital admissions

Accidents: types, numbers, rates

Crime

Acts against: people, property

Type

Number and frequency

Same people (repeaters] or different

Own property or different

Number of court cases

Number and frequency of police calls

Alcohol use

Other drug use

Structure of leisure time (non-wage, non-subsistence)

Amount of such time

Distribution of such time (day, week, month, year)

Activities during such time

School attendance (age and sex, monthly, seasonal, daily)

Percentage of village children in school

Percentage population over 19 graduated from high school

Interaction, travel

Number long distance phone calls - when and where

Number telephones

Number local calls

Number trips - destination, length of stay, purpose source of funds

Amount postage sold

APPENDIX B

NORTH SLOPE BOROUGH CAPITAL PROJECTS FUND:  
SCHEDULE OF APPROPRIATIONS AND EXPENDITURES FOR NUIQSUT

Education and Service Center Facilities

<u>Year Ending</u>	<u>Project</u>	<u>Project Appropriation</u>
6/30/75	Nuiqsut Education Facilities	\$ 6,361,000
6/30/76	6-7 Nuiqsut Educational Facilities	6,475,000
6/30/77	6-7 " " "	3,900,000
6/30/78	6-7 " " "	8,925,000
<b>6/30/79</b>	<b>6-7</b> " " "	<b>9,696,000</b>
6/30/80	6-7 " " "	12,500,000
6/30/81	6-7 " " "	12,650,000
6/30/78	6-31 Nuiqsut Teachers' Housing	370,000
6/30/79	6-31 " " "	395,000
6/30/80	6-31 " " "	395,000
6/30/78	6-37 Nuiqsut Warehouse	60,000
6/30/80	6-52 Nuiqsut Maint. & Storage Bldg.	640,000
6/30/81	6-52 " " " " "	1,610,000
6/30/80	6-57 Nuiqsut Teacher Housing	200,000
6/30/81	6-57 " " "	392,000

Public Roads, Streets, Etc.

6/30/75	Nuiqsut Road to Airport	220,000
6/30/76	7-5 " " " new Airport	280,000
6/30/77	7-5 " " " " "	280,000
6/30/78	7-5 " " " " "	280,000
6/30/79	7-5 " " " " "	280,000
6/30/80	7-5 " " " " "	280,000
6/30/81	7-5 " " " " "	280,000
6/30/75	Nuiqsut Road to Water Source	211,000
6/30/76	7-6 " " " " "	550,000
6/30/77	7-6 " " " " "	550,000
6/30/78	7-6 " " " " "	650,000
6/30/75	Nuiqsut Road to Dump	304,000
6/30/76	7-7 " " " " "	435,000
6/30/77	7-7 " " " " "	435,000
6/30/78	7-7 " " " " "	435,000
6/30/79	7-7 " " " " "	1,000,000
6/30/80	7-7 " " " " "	1,000,000
6/30/81	7-7 " " " " "	984,000
6/30/75	Nuiqsut Community Roads	253,000
6/30/76	7-8 " " " "	1,273,000
6/30/77	7-8 " " " "	1,273,000
6/30/78	7-8 " " " "	800,000
6/30/76	7-31 Nuiqsut, Gravel Access	405,000

APPENDIX B

Education and Service Center Facilities

<u>Prior</u> <u>Years</u>	<u>Expenditures</u> <u>Current</u> <u>Year</u>	<u>Total</u>	<u>Unencumbered</u> <u>Balance</u>	<u>Encumbrances</u>
\$ 107,462	\$ 137,932	\$ 245,394	\$ 6,115,606	\$
245,394	605,124	850,518	5,624,482	
850,518	66,683	917,201	2,982,799	
917,201	1,174,942	2,092,143	5,623,795	1,209,062
2,092,143	5,829,539	7,921,682	1,418,581	355,737
7,921,682	3,938,776	11,860,458	465,373	174,169
11,860,458	737,008	12,597,466	29,329	23,205
	97,490	97,490	272,510	
97,490	284,516	382,006	12,994	
382,006	7,822	389,828	5,172	
	57,639	57,639	2,361	
			640,000	
	325	325	1,609,675	
			200,000	
	144,662	144,662	247,338	

Public Roads, Streets, Etc.

	725	725	219,275	
725	2,133	2,858	277,142	
2,858	2,998	4,856	275,144	
4,856		4,856	275,144	
4,856	958	5,814	274,186	
5,814	3,807	9,621	270,379	
9,621	41,099	50,720	229,280	
	14,673	14,673	196,327	
14,673	38,567	53,240	496,760	
53,240	3,866	57,106	492,894	
57,106	581,789	638,895	11,105	
			304,000	
			435,000	
			435,000	
			435,000	
	44,108	44,108	942,832	13,060
44,108	649,751	693,859	21,132	285,009
693,859	287,439	981,298	2,702	
	135,263	135,263	117,737	
135,263	201,665	336,928	939,072	
336,928	401,218	738,146	534,854	
738,146	51,114	789,260	10,740	
	69	69	404,931	



APPENDIX B

Public Roads, Streets, Etc. - Cont'd.

<u>Year Ending</u>	<u>Project</u>	<u>Project Appropriation</u>
6/30/76	7-30 Mobile Equipment Storage	\$ 900,000
6/30/77	7-30 " " "	900,000
6/30/78	7-43 Nuiqsut Comm. Center & Exp. Roads	250,000
6/30/79	7-43 " " " " " "	300,000
6/30/80	7-43 " " " " " "	550,000
6/30/81	7-43 " " " " " "	5.50,000
6/30/79	7-53 Nuiqsut Rd to Water Source, Ph.II	350,000
6/30/80	7-53 " " " " " "	150,000
6/30/79	7-55 Nuiqsut Road to Fuel Storage	200,000
6/30/80	7-55 " " " " " "	200,000
6/30/80	7-64 Nuiqsut Warehouse	500,000
6/30/81	7-64 " " "	500,000
6/30/80	7-72 Nuiqsut Equip. Storage Upgrade	100,000
6/30/81	7-72 " " " " "	100,000

Public Housing

6/30/75	Nuiqsut Housing - Phase II	236,000
6/30/76	8-7 " " " "	236,000
6/30/75	Nuiqsut Housing - Phase III	236,000
6/30/76	8-8 " " " "	236,000
6/30/77	8-7 Nuiqsut, Phase II and III	643,000
6/30/78	8-7 " " " "	643,000
6/30/75	Nuiqsut Housing - Phase IV	236,000
6/30/76	8-9 Nuiqsut, Phase IV	236,000
6/30/77	8-9 " " " "	550,000
6/30/78	8-9 " " " "	591,000
6/30/79	8-9 " " " "	756,000
6/30/80	8-9 " " " "	756,000
6/30/81	8-9 " " " "	771,000
6/30/77	8-10 Nuiqsut, Phase V and VI	1,100,000
6/30/78	8-10 Nuiqsut, Phase V	662,000
6/30/79	8-10 " " " "	662,000
6/30/80	8-10 " " " "	1,312,000
6/30/81	8-10 " " " "	2,067,000
6/30/78	8-30 Nuiqsut Public Employee Housing	370,000
6/30/79	8-30 " " " "	394,000
6/30/80	8-30 " " " "	394,000
6/30/81	8-30 " " " "	395,000

APPENDIX B

Public Roads, Streets, Etc. - Cent'd.

<u>Prior Years</u>	<u>Expenditures</u> <u>Current Year</u>	<u>Total</u>	<u>Unencumbered Balance</u>	<u>Encumbrances</u>
\$	\$	\$	\$	\$
271,456	271,456	271,456	628,544	
	402,656	674,112	225,888	
			250,000	
	214,580	214,580	82,092	3,328
214,580	293,909	508,489	40,585	926
508,489	6,291	514,780	35,220	
			350,000	
	122,004	122,004	27,996	
	181,528	181,528	18,472	
181,528	1,167	182,695	<b>17,305</b>	
			500,000	
	<b>183</b>	183	499,817	
			100,000	
	37	37	99,963	

Public Housing

	136,159	136,159	99,841	
136,159	94,125	230,284	5,716	
			236,000	
	145,220	145,220	90,780	
375,504	193,937	569,441	73,559	
569,441	10,018	579,459	63,541	
			236,000	
	38,175	38,175	197,825	
38,175	9,885	48,060	501,940	
48,061	110,979	159,040	309,390	122,570
159,040	473,362	632,402	123,169	429
632,402	123,791	756,193	(1,544)	1,351
756,193	11,959	768,152	2,848	
			1,100,000	
			662,000	
	5,342	5,342	656,658	
5,342	665,909	671,251	636,749	4,000
671,251	1,342,495	2,013,746	53,254	
	224,558	224,558	134,965	10,477
224,558	143,335	367,893	26,107	
367,893	25,999	393,892	(2,621)	2,729
393,892	557	394,449	551	

APPENDIX "B

Public Housing - Cent'd.

<u>Year Ending</u>	<u>Project</u>	<u>Project Appropriation</u>
6/30/78	8-38 Nuiqsut Housing, General	580,000
6/30/'79	8-38 " " "	975,000
6/30/80	8-38 " " "	1,011,000
<b>6/30/81</b>	8-38 " " "	998,000
6/30/80	8-63 Nuiqsut	4.54,000
6/30/81	8-63 "	748,000
6/30/80	8-64 Nuiqsut	507,000
6/30/81	8-64 "	780,000
6/30/81	8-74 Nuiqsut 3 Bedroom	988,000
6/30/81	8-75 Nuiqsut 4 Bedroom	355,000

Water Facilities

6/30/75	Nuiqsut Water Distrib. System	<b>31,000</b>
6/30/'76	9-2 " " "	31,000
6/30/77	9-2 " " "	<b>31,000</b>
6/30/78	9-2 " " "	310,000
6/30/79	9-2 " " "	79,000
6/30/80	9-2 " " "	77,000
6/30/78	9-10 Nuiqsut Water	900,000
6/30/79	9-10 " " "	1,161,000
6/30/80	<b>9-10</b> " " "	<b>1,161,000</b>
6/30/81	<b>9-11</b> " " "	<b>1,161,000</b>
6/30/80	9-25 Nuiqsut Water Distrib. Ph. II	53,000
6/30/81	9-25 " " " " "	158,000

Sewage Treatment Disposal Facilities

6/30/75	Nuiqsut Sewage T&D Facilities	31,000
6/30/76	10-2 " " Disposal Equip.	31,000
6/30/77	10-2 NQT Sewage Disposal & Lagoon	31,000
6/30/78	<b>10-2</b> " " " " "	79,000
6/30/79	10-2 " " " " "	79,000
6/30/80	<b>10-2</b> " " " " "	71,000
6/30/78	<b>10-11</b> Nuiqsut Sewage Disposal	900,000
6/30/79	10-11 " " "	1,161,000
6/30/80	<b>10-11</b> " " "	1,161,000
6/30/81	10-11 " " "	1,161,000
6/30/80	10-24 NQT Sewage Vehicle, Phase II	53,000
6/30/81	10-24 " " " " "	192,000

NOTE : Many houses (perhaps up to 20) are currently under construction.

APPENDIX B

Public Housing - Cent'd.

Prior Years	<u>Expenditures</u>		Unencumbered Balance	<u>Encumbrances</u>
	<u>Current Year</u>	<u>Total</u>		
\$	\$ 97,527	\$ 97,527	\$ 366,122	\$ 116,351
97,527	829,303	926,830	48,170	
926,831	66,299	993,130	16,740	1,130
993,130	4,785	997,915	85	
	229,518	<b>229,518</b>	<b>223,482</b>	<b>1,000</b>
229,518	501,210	730,728	17,272	
	262,241	262,241	<b>221,221</b>	<b>23,538</b>
262,241	482,354	744,595	12,866	<b>22,539</b>
	681,312	681,312	<b>306,688</b>	
	210,065	210,065	<b>144,935</b>	

Water Facilities

	35	35	30,965	
35	399	434	30,566	
434	<b>155</b>	589	30,411	
589	270	859	309,141	
859	73,728	74,587	2,199	2,214
74,587	1,408	75,995	1,005	
			900,000	
	428,641	428,641	570,766	161,593
428,641	84,939	513,580	484,996	162,424
513,580	120,272	633,852	527,148	
			53,000	
	100,649	100,649	57,351	

Sewage Treatment Disposal Facilities

			31,000	
			31,000	
	<b>155</b>	155	30,845	
155		155	78,845	
155	50,474	50,629	26,157	2,214
<b>47,499</b>	24,009	71,508	(508)	
			900,000	
	5,387	5,387	1,155,613	
5,387	290,579	295,966	865,034	
295,966	430,948	726,914	431,398	2,688
			53,000	
	125,865	125,865	<b>66,135</b>	

APPENDIX B

Airport & Airport Terminal Facilities Fund

<u>Year Ending</u>	<u>Project</u>	<u>Project Appropriation</u>
6/30/75	Nuiqsut Airport Design	4,700
6/30/76	11-2 Nuiqsut Airport	50,000
6/30/77	11-2 " "	45,000
6/30/78	11-2 " " and Terminal Bldg.	500,000
6/30/79	11-2 " " " " " "	3,500,000
6/30/80	11-2 " " " " " "	5,500,000
6/30/81	11-2 " " " " " "	5,500,000

Light, Power, & Heating Systems

6/30/75	NQT Elec Distrib. & Light	120,000
6/30/76	13-1 NQT Elec., Distrib. & Light	222,000
6/30/77	13-1 " " " " " "	222,000
6/30/78	13-1 " " " " " "	1,200,000
6/30/79	13-1 " " " " " "	1,250,000
6/30/80	13-1 " " " " " "	1,325,000
6/30/81	13-1 " " " " " "	1,425,000
6/30/78	13-23 NQT Distribution Expansion	30,000
6/30/79	13-23 " " " " " "	30,000
6/30/80	13-23 " " " " " "	130,000
6/30/81	13-23 " " " " " "	145,000
6/30/79	13-6 NQT Fuel Facility	4,000,000
6/30/80	13-6 " " " " " "	1,000,000
6/30/81	13-6 " " " " " "	1,000,000
6/30/80	13-37 NQT Elec. Expansion, Phase II	200,000
6/30/81	13-37 " " " " " "	650,000
6/30/80	13-44 Nuiqsut Equipment Storage	250,000
6/30/81	13-44 " " " " " "	1,150,000
6/30/81	13-50 NQT Distrib. & Light, Phase II	485,000

Sanitary Facilities

6/30/80	15-18 Nuiqsut Land-fill	200,000
6/30/81	15-18 " " " " " "	183,000

Health Facilities

A health center is currently under construction.

APPENDIX B

Airport & Airport Terminal Facilities Fund

<u>Prior Years</u>	<u>Expenditures</u> <u>Current Year</u>	<u>Total</u>	<u>Unencumbered Balance</u>	<u>Encumbrances</u>
\$	\$	\$	\$	\$
	43,980	43,980	4,700	
43,980	220	44,200	6,020	
44,200	4,090	48,290	800	
48,290	64,915	113,205	451,710	" 60,454
113,205	285,315	398,520	3,326,341	186,629
398,520	4,377,563	4,776,083	4,914,851	692,852
			31,065	

Light, Power, & Heating Systems

			120,000	
	79,020	79,020	142,980	
79,020	4,104	83,124	138,876	
83,124	44,828	127,952	1,005,554	66,494
127,952	733,230	861,182	105,655	283,163
861,182	375,377	1,236,559	34,159	54,282
1,236,559	167,913	1,404,472	11,507	9,021
			30,000	
	19,494	19,494	10,506	
57,204	47,025	104,229	16,145	9,626
104,229	37,191	141,420	(2,283)	5,863
	293,266	293,266	3,485,796	220,938
293,266	239,000	532,266	97,395	370,339
532,266	<b>48,694</b>	580,960	419,040	
	100,974	100,974	99,026	
100,974	289,974	390,948	214,650	44,402
	1,400	1,400	248,600	
1,400	91	1,491	1,148,509	
	162,541	162,541	301,199	21,260

Sanitary Facilities

			200,000	
	182,716	182,716	284	

APPENDIX B

Police Protection & Jail Facilities

<u>Year Ending</u>	<u>Project</u>						<u>Project Appropriation</u>
6/30/75		Nuiqsut Public Safety Bldg.					72,000
6/30/76	14-2	"	"	"	"	72,000	
6/30/77	14-2	"	"	"	"	84,000	
6/30/78	14-2	"	"	"	"	180,000	
6/30/79	14-2	"	"	"	"		
6/30/80	14-2	"	"	"	"	*	
6/30/81	14-2	"	"	"	"	*	
6/30/80	14-16	NQT Fire Station & Equipment					900,000
6/30/81	14-16	"	"	"	"	*	

NOTE : Both the Public Safety Building and the Fire Station have been completed (1981 and 1983, respectively)

APPENDIX B

Police Protection & Jail Facilities

<u>Prior Years</u>	<u>Expenditures Current Year</u>	<u>Tot al</u>	<u>Unencumbered Balance</u>	<u>Encumbrances</u>
			\$ 72,000	
			72,000	
			84,000	
			180,000	
*	*	*	*	*
*	*	*	*	*
*	*	* -	*	*
			900,000	
*	*	*	*	*

\* Information not available as the project does not appear in this report.

SOURCES

Annual Financial Report of the North Slope Borough

- 1) Years Ended June 30, 1975 and 1974
- 2) Years Ended June 30, 1976 and 1975
- 3) Years Ended June 30, 1977 and 1976
- 4) Years Ended June 30, 1978 and 1977
- 5) Years Ended June 30, 1979 and 1978
- 6) Years Ended June 30, 1980 and 1979

North Slope Borough Capital Projects Funds  
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