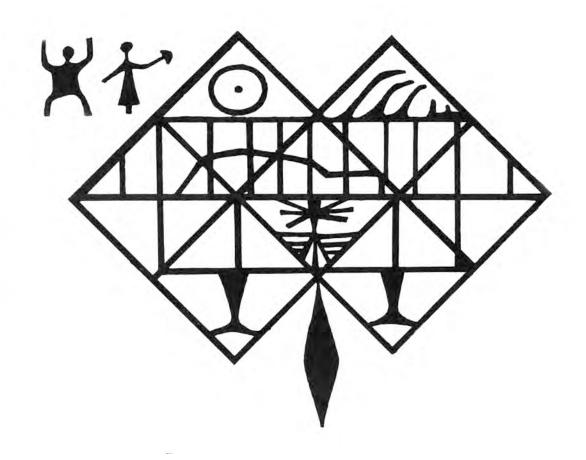
Iñupiatun Uqaluit Taniktun Sivunniuġutiŋit North Slope Iñupiaq to English Dictionary

Compiled by Edna Ahgeak MacLean



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Dedicated To **Dr. Michael Krauss**

In Recognition of his Leadership in the Retention, Maintenance and Preservation of Alaska's Native Languages

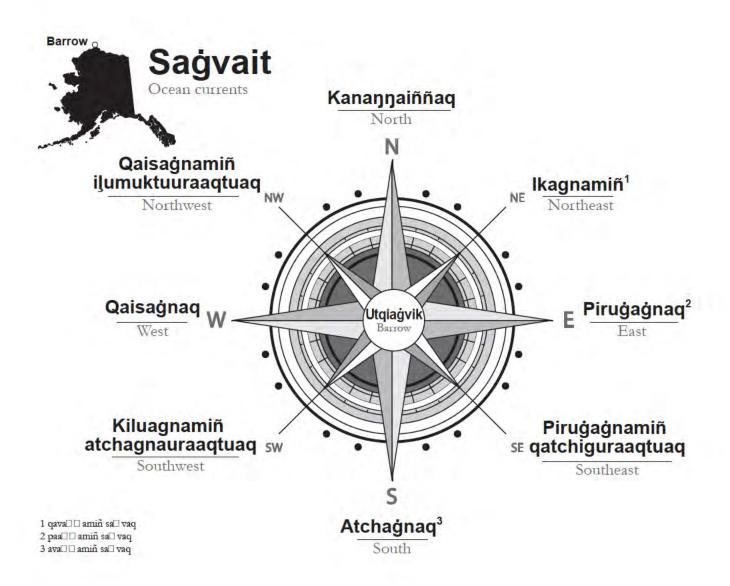
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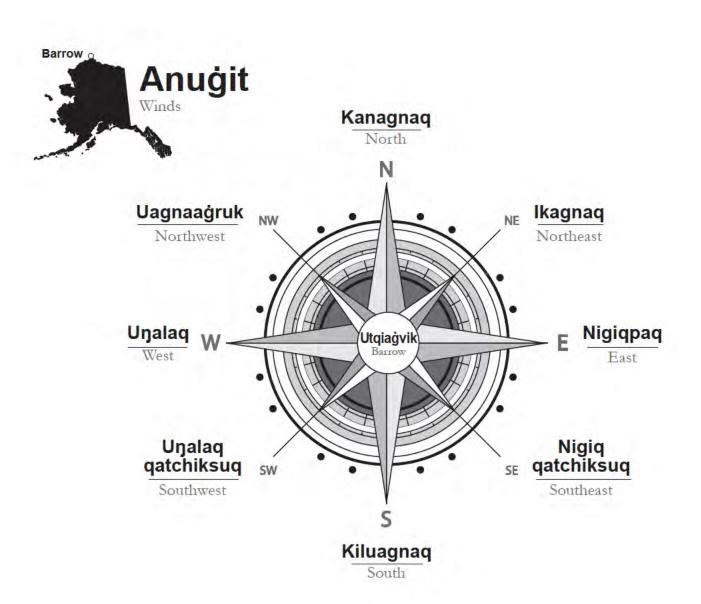
All Iñupiat

For Keeping the Iñupiaq Culture Alive and Vibrant

And to my Inspiration and Tutaaluuraq

Gwendolyn Sirrouna MacLean





APPENDIX 6

Sikukun Taggisit

Ice Terms

Sixty-five (65) terms for ice are in this list. Sixteen (16) of which are based on the term **siku** "ice".

agiukpak or (Ti) agiuppak wall of sheared ice along the edge of the open lead that has been formed by the grinding action of the free ice against the shore-locked ice

alliviñiq ice under another piece of ice which may surface due to ocean currents or wake of boat

apuqtinniq ice which has been pushed onto shore

arguqtagniq or **arguqtinniq** newly formed thin ice on the downwind side of a ploynya or lead

asitaq cracked ice made by force of moving ice when it attaches to free floating ice **ataitchuaq** shore ice not anchored to ocean floor

atiġniġaq new ice which forms along pre-existing ice

aulaniq moving lead ice

aunniq or aupkagniq rotten ice

augniqsraq patch of ground from which the snow has melted while the surrounding area still has snow; area where sea ice has become dangerous due to melting

avarraullaktuaq large ice floe which breaks off from the landlocked ice and begins to move in a circular motion

ayaaqtinniq ice trapped in a narrow part of a river or lead

ayiupaq ice chipped off by ocean waves

ayuksraq piece of ice that does not freeze to shore-fast ice and goes out with ocean current I

ignigluq crushed, thin, young ice found in ice cracks

ignignaq stretch of smooth ice parallel to shore between pressure ice ridges and beach **ikugaagniq** ice adhering to ice that has been added to shore ice

ikuġaaq(-) depression on ice full of water; to become full of depressions full of water (of ice on ocean)

illagauraq ice which has begun to melt and although solid is spongy and dangerous **iminniq** mound of earth or ice that makes an echoing sound when stamped on

imuniq young ice which has been crushed by moving ice

irriqutit diamond dust or ice crystals in the air (indicating that a cold spell is imminent)

isaamaniq narrow piece of ice that juts out from the main piece of ice

ivunigauraq small ice pressure ridge

ivuniq ice pressure ridge

ivuniqpaaluk or ivuniqpait big ice pile, pressure ridge

K

kangilaq or (Nu) kangutailaq smooth ice with no frost on top

kaniqtaq ice formed by frost; fragile, refrozen ice

kaniqluk bay, inlet; indentation in sea ice where whales often surface

```
kiapku solid pancake ice
kisisaq or kisitchaq grounded ice pile (which keeps landlocked ice from floating away);
   grounded iceberg
kuklugaq chunk of ice in house placed over water bucket to melt, drip, providing drinking
   water
M
mauraġaq(-) small ice floe used as stepping stone
mayuqtinniq ice on the beach
mayuqtitaq(-) slush ice pushed onto to shore
miġaliq(-) (Ti) slush ice; slush and small chunks of new sea ice which wash up on shore
   in fall; to be covered by small chunks of sea ice in fall (of beach)
mitik<sup>1</sup> (Nu) slush ice (in a fishing hole)
mitu(-) (Nu) first chunks of ice which form in ocean in the fall (clings to nets)
muġałłiq or (Ti) miġaliq or muġaliq slush ice, waterlogged snow (on ocean) (foam-like
    in appearance), snow and thin ice on water when freeze-up begins, slushy ice which
   forms on shore at the first freeze
muġrak slush ice
napaayuq upright ice cake
nilak layer of granular snow found under another layer (can be melted for potable water);
   moist crushed ice
nutagun fresh snow on ice-free water; refrozen crack less than ten feet wide
nutaqliq smooth ice covered by snow with moisture between the ice and the snow
paagiiq ice propelled by the wind and ocean current simultaneously in opposite directions,
    making it appear to move
pauk(-) ice that serves as an anchor to shore-fast ice
pinu(-) isolated ice mound; knoll, dome; isolated hill; pimple, swelling on skin; swell
   (crestless wave or succession of waves); (i) to develop a pimple; to swell (of ocean)
pigaluyak large chunk of freshwater ice from river, good for drinking water; multiyear sea
   ice that has become fresh due to multiyear thawing
piquniq mound formed by pressure from below; place where river ice over deep water is
   pushed up so that it cracks and water flows through
pituggig flat, secure ice at edge of ocean lead (where whaling camp can be set up at the
   end of the trail that's been made)
puġrak (Ti) slush ice
puktaaq floating mass of ice; iceberg, large piece of ice
puktaaqat ice floe attached to another ice floe
qaatchiñiq (Ti) depression on ice filled with water
qaigilu ice with irregular surface features, partly rough and partly smooth
qaigilguq (Nu) ripple on ice
qaimguq first shore ice in fall
qaimnuq white frozen edge of water; frozen foam on beach; (Ti) smooth ice parallel to
   shore, a cake of ice smoothed by spray
gaigsuagtat smooth ice between areas of rough ice
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qaivagniq flat round cakes of ice frozen together
qanaiñaqtuaq pack ice moving directly toward shore fast ice
qanatchiniq (Ti) ice with hollow space beneath it (easy to fall through)
qanattaaq ice or snow which has one edge partly off the ground; hollow area (as from
    erosion); hollow area between the ice and the water
qimaktinniq shore fast ice left behind when the ice is carried away by an ocean current
qinu(-) layer of slush ice which forms on ocean at freeze up and clings to shore; to form a
    thin layer of slush ice (of ocean at freeze-up)
quasa or quasiraq(-) or quasiraaq(-) bare, smooth ice on lake or pond which one can
    slide on; (i) to slide along swiftly on a slippery surface; to skate
qukhiaq (Nu) small cracks which fan out through ice or glass
sagrat assembled pieces of ice traveling with the current in ocean
sarri or (Ti) sarrik floating ice pack away from shore-fast ice
sigmiq or (Ti) sigmiq(-) substance that hardens and can be used for patching; patch for
    sled runners of water and snow to improve their sliding; (Ti) ice which forms on boat
    or sled; (t) for it=boat or sled to get covered with ice; \(\timeg\) glacier
siiqsinniq water flowing through crack in ice; underground springs, water flowing out of
    the ground; frozen overflow on top of river ice; glaciated stream (melts in summer)
siku(-)<sup>1</sup> ice; to freeze over; to become icy
sikuag(-) thin ice on body of water; (Ti) ice on boat or sled; to become covered with thin
    ice (of water); (Ti) to ice over (of boat or sled)
sikuatchiaq(-) newly formed thin ice
sikuayaaq(-) new ice, young ice on water; to have new ice, young ice (of water)
sikuġaq (Nu) small chunk of floating ice
sikuġlak(-) or sikuġlalaaq frozen rain and snow on ground; hailstone; (Ti) icicle; (Ti) old
    packed snow good for drinking water; to freeze over ground or snow (of rain); to start
    forming (of ice); to hail; (Ti) (i) to form (of icicle); to get packed hard so that it is good
    for drinking water (of snow)
sikuġliñiq ice formed from water spilled on something
sikulġauraq (Nu) new thin ice
sikuliaġruaq ice which is about one and a half feet thick
sikuliaq young ice formed around edge of old solid ice on open lead
sikuliuraq newly formed ice
sikulluataq freshwater ice
sikunaq(-) ice fog; ice crystals which settle out of the air; for there to be ice fog, ice
    crystals in the air
sikuqqaq (Ti) block of ice
sikuggat small icefloes
sikutchiaq new ice
suġaiñnuġruaq very large mass of pack ice
tuvaq(-) or (Ti) tugaq or tuvagruaq shore-fast ice; to come in to shore (of ice); (Ti) shore
tuvaqtaq shore fast ice covering only a portion of the beach
tuuniq cracked ice made by force of main pack ice
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 ${f U}$ **utuqqaviñiq** piece of old shore-fast ice which has broken off; chunk of thick shore ice

APPENDIX 7

Aputikun Taggisit

SnowTerms

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There are seventy-six (76) terms listed for snow and frost in this dictionary. Six (6) terms are based on the stem:
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api- to become snow-covered from snowfall (of landscape, ground);

(t) for it to become snow-covered from snowfall"

Many of the terms are based on the shape, quality, and condition of the snow.

A

agniq(-) *or* **anniq**(-) blizzard, snowstorm, blowing snow; *(i)* for there to be a blizzard **aluktinniq** snow cliff

agviuraq snowdrift in the shape of a whale back (usually about 30 feet in length) **aniu** packed snow

aniuvak mound of hard packed snow; snowbank

aniuvauraq a snowdrift with a sharp downwind side and a more inclined upwind side **apiqqaagun** first snowfall

apiqqammiaq(-) or apirgammiaq new snow

apitchiq snowdrift; female polar bear which bears young in a hollow snowdrift

apivaalluqqaagniq first lasting snowfall of the year

apun snow (lying on a surface); fallen snow

apuyyaq or aputyaq (Nu) snow block shelter; snow patch

aqilluk a bank of deep soft snow

aqilluq (Nu) soft snow

aqiluqqaq soft snow

auksalaq or auksallak rapidly melting snow

I

iksiaksraq snow to be melted for drinking water

 $i | u(-)^1$ frost in house; (t) to form frost on it

K

kaataq (*Ti*) maktak which has thick blubber sliced off; block of hard snow for building a snow house

kaniq(-) frost; (i) to be covered with light frost; (t) to have light frost cover it = ground, house or any object

kanguraq (Nu) light or spotty frost

kanigaagruk(-) (Nu) frost, rime; to form a layer of frost

kaniġruaq(-) heavy frost; (i) to form a thick layer of frost

katiġruġniq (Ti) snowdrift

M

manuġli(-) (Ti) frost from breath; (i) to form frost from breath (e.g. of parka ruff)

masak(-) or matchak(-) slush, waterlogged snow; to be damp of ground

masallak(-) damp snow; (i) to be damp snow (damp enough for making snowballs)

mauya or mauyaq soft dirt or deep snow into which one may sink as one walks

```
mauyaqisaaq soft deep snow
mavsa or mapsa overhanging snowdrift, ready to fall; snow cornice; overhang; spleen
mavsaq(-) (ti) or (nu) mavsat- deep soft snow; (i) to fall into deep soft snow; (i) to fall
    down, creating a snowslide (of snow cornice)
miġaliq(-) (Ti) slush ice; slush and small chunks of new sea ice which wash up on shore
   in fall; to be covered by small chunks of sea ice in fall (of beach
milik very soft snow
misak(-) wet ground, slush, swamp; waterlogged snow; (i) to be slushy (of snow), be
    wet (of ground)
misałhak slushy surface of young saltwater ice; water-soaked ground, swamp
misulik sleet, wet snow
mitik<sup>1</sup> (Nu) slush ice (in a fishing hole)
muġałłiq or (ti) miġaliq or muġaliq slush ice, waterlogged snow (on ocean) (foam-like
    in appearance), snow and thin ice on water when freeze-up begins, slushy ice which
    forms on shore at the first freeze
N
natigvik(-) snow swiftly drifting along the ground (usually blowing not above the knee); (i)
    to blow, drift low along the ground (of snow or dust)
natiglit(-) snow swiftly blowing along the ground (with drifts no higher than the ankle); (i)
    to be at the bottom (of it); to be as far down as one can go
nikuvlalaaq(-) (Ti) corn snow, good for drinking water; (i) to be good, as frozen meat that
   has been frozen then thawed, then frozen again, and it has ice crystals
nilak layer of granular snow found under another layer (can be melted for potable water);
   moist crushed ice
niñnuq<sup>3</sup> soft snow packed on top of sod house (to provide extra insulation for the house)
niviluk(-) wet snow; (i) to be unkempt, slovenly (of a person); to be damp, slushy (of
    snowy and rainy weather
nivvigiksi- to become wet enough to stick together (of snow)
nutagaq young person; fresh powder snow
nuturuk packed snow (good for making snow house)
patuk(-) frost of breath on ruff; to be wet or foggy; to form on the parka ruff (of frost)
piagnaq snow condition good for sled travel
pigsig(-) wet snow storm; (i) to be stormy with wet blowing snow in the air
pukak granular snow found under hard packed snow, good for melting into water
pukarraaq (-) (Ti) old packed snow good for drinking water; (i) to get packed hard so that
    it is good for drinking water
O
qakuak frost on ground
qannik(-) snowflake; falling snow; (i) to snow
qannialaaq(-) light snowfall; (i) to snow lightly
qanattaaq ice or snow which has one edge partly off the ground; hollow area (as from
    erosion); hollow area between the ice and the water
gaquq(-) (Ti) frost on ground; (t) to become frosted over (of land)
qayuqlak ripple on surface of snow
qiğuviak refrozen slush
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gikaaluk- (i) for it (usu., snow or ice) to be crunchy when walked upon
qikigʻaq creaking noise made by walking, running, crawling on frozen snow
qikkuaq(-) (Ti) frost on ground; (t) to get frosted over (of land
qimuagruk snowdrift blocking trail or in lee of high building; high snowdrift
gigsruggag(-) hardened glazed snow in spring time especially during the night after a
   thaw; for it to be frozen again so one can travel without sinking into the wet snow
givlignag small frost crystal
quvyugagnaq white-out snow weather condition
saggutyaq (Nu) snowhouse made of soft, new snow
sikuġlak(-) or sikuġlalaaq frozen rain and snow on ground; hailstone; (Ti) icicle; (Ti) old
   packed snow good for drinking water; to freeze over ground or snow (of rain); to start
   forming (of ice); to hail; (Ti) (i) to form (of icicle); to get packed hard so that it is good
   for drinking water (of snow)
silliq snow made crusty and hard by strong winds (most suitable for making snow houses)
silligruaq hard and shiny surface snow
silligsrug super hard, often icy snow
sitliq (Nu) hard snow, windpacked snow
sisuuk(-) snowslide (esp. of snow over a creek); avalanche; (i) to slide (esp. of snow over
   creek)
sisuuksraq (Nu) snow cornice; snow build up as a potential avalanche
upkaganak snow with hard top and soft underneath
uupkaagnag (Nu) snow with hard top and soft underneath
```

The Meaning of Ice

People and sea ice in three Arctic communities

ALASKA GN 673 M43 2013 c. 8

IPI

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Hunters at the floe edge off Pond Inlet, Nunavut, 2008. Gretchen Freund.

Sea Ice Terminology: Barrow

| Taģium sikua | sea ice ("the ocean's ice"); "siku" = ice | Killiŋiqsinniq | meltwater along the edge of a lake or bay |
|----------------|---|---------------------------------|---|
| Qinuaqtaliqsuq | first stage of ice formation; looks like ice-fog inside the water | Qaaminniq | overflow on the ice |
| Sikuliuraq | very young, soft ice | Aputaiññiq | free of snow |
| Sikuliaq | thin ice, but one is able to walk on it | Qaiqsuaq | flat area of sea ice |
| Sikuliaġruaq | sea ice formed and considered thick | Qaiģiiluuraq | small area of sea ice with rough spots |
| Tuvaġruaq | land fast ice; grounded ice | Qaiģiiļaq | rough area of sea ice |
| Piqaluyak | multi-year ice; sea ice with no salt | lglaunaqtuq | possible to go forward or travel on the sea ice |
| Puktaaq | floating chunk of sea ice | lvuniġaurat | rubble field of sea ice |
| Alliviñiq | large, thick ice from under water | lvuniq/lvunģich | pressure ridge or piled up sea ice |
| Saģvak | when two different currents collide into each other; very dangerous | lgniġnaq | grounded pressure ridge closest to shore; creates a safe zone for whalers |
| Nigayuq | small water hole; polynya | Piquniq | buckle in the ice |
| Sikuqqammiaq | recently formed sea ice | Nutağun | refrozen lead or a fresh crack that has refrozen |
| Augniq/Aunniq | melted hole or pond in the spring time | | retrozen |
| Saģvaqturuq | an area that has a strong current | Nutaqutaq | young crack in shorefast ice |
| Killaq | melt hole | Uiniq | open lead |
| Kilautiŋaruq | has a hole through the ice | Aiyugaq | crack or pressure ridge across bay or large lake |
| Allu | seal breathing hole | Quppaq | crack |
| lmmaktinniq | melted water on top of ice in the springtime | Qimmiaqrugauraq — qimmiayaaq | sound created from sides of crack in sea ice rubbing together; sounds like a |
| Isuqtuq | murky water | | small puppy calling for mom |

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| Siqumniq | loose ice floes | Muġaliq | soft ice, slush |
|-----------------------------|--|-----------------|---|
| Quvluŋaruq | is all cracked up | Kitchinit | large iceberg |
| Aulaniq | ice pack movement | Sarri | pack ice |
| Siñaani | floe edge or shore line | Tuvaq | shorefast ice |
| Qaimģuq | shore ice formed by waves or frozen ocean spray; different in Barrow from | Sik†aq | ice pick |
| | year to year | Isuq | dirty, cloudy water |
| Nunam sininga, taġium siñaa | shoreline that meets land fast ice | lŋiuliit | large waves |
| Sugaiñŋuq | large ice floe (not broken ice); multi year ice | Nikpaq | to wait expectantly for (verb stem) |
| Puktaagruaq | large piece of floating ice | lmi | cold weather |
| | 생물하는 10kg (10kg) 이 전문을 하는 것이 되었습니다. 사용물 (10kg) | Uli | high tide |
| Sugaiñŋuqpak | larger ice floe that is one piece, not bro- ken up; multi year ice | Taģiuqsiutikput | "our ocean vessel," ocean traveller; chunk of sea ice |
| Anaġlu | dirty or dark chunk of floating sea ice, caused by scouring sea bed | Palusungnak | warm southeast wind meets ice; means sea ice will be coming in |
| Napaayuq | tall ice feature used as a landmark | | |
| Uupkaaqtuq | breaks off, as an overhang | Uyuayuk | when ocean current and wind are in opposite directions |
| Siqummaġniq | broken ice | Sagraq | small piece of floating ice |
| Puktallaktuk | the process of floating to the surface; in the context of sea ice, a chunk of sea | Nigayuqpak | large water hole |
| | ice that breaks off from underneath and floats to the surface | Kurriñiq | channel connecting one hole to another |
| Miàialagatus | | Qaisaġnaq | westerly current |
| Miģialaaqtuq | to break apart, as an unfrozen pressure ridge would | Piruģaģnaq | easterly current |
| Angurraktuq | to turn around 180 degrees | Palusagnaq | current that flows toward shore (only in summer) |

Sea Ice Terminology: Barrow, continued

Atchagnaq current that flows away from shore

llumuktuqtuaq current that flows toward shore at an

angle (year round)

Aulaniq moving ice that stops and goes again

Atuagnaq wind from SW that runs parallel with

shorefast ice

Nuvuģaq a point of land or ice

324 Nuvuģauraqpak a long slender point

Iluliaq the far side of a bay or cove

Pituqqiq place along the ice where the whales like

to surface

Kanjqłuk bay or cove on the shorefast ice

Maniliñaaq A whale camp with a good view of the

whales traveling; situated opposite

"iluliag"

Puktaagruaq large floating ice

Nigayuq small water hole

Uivraluktaq to do a somersault (verb stem); can be

used for an ice flow overturning

ALASKA SHOREFAST ICE: INTERFACING GEOPHYSICS WITH LOCAL SEA ICE KNOWLEDGE AND USE

Α

THESIS

Presented to the Faculty
of the University of Alaska Fairbanks

in Partial Fulfillment of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

Ву

Matthew L. Druckenmiller

Fairbanks, Alaska

August 2011

Appendix B. List of Iñupiaq sea ice terminology from Barrow

The sources for the Iñupiaq sea ice terminology used throughout this thesis were the many interviews and informal discussions I had with Barrow whalers between 2007 and 2011. Accordingly, these terms are specific to Barrow and may vary considerably when compared to similar terminology lists that originated from other Iñupiaq speaking coastal communities, such as the lists complied for Wainwright (Nelson 1969) and Wales (Weyapuk and Krupnik, in press). The following alphabetical listing offers explanations according to how the terms were used throughout the individual chapters. Ronald Brower, Sr., an Iñupiat language teacher at the University of Alaska Fairbanks and Barrow native, assisted to determining the most appropriate spelling for this list. Exceptions are indicated in the footnotes.

Agiuppak Ridge formed through shear motion of the ice

Akilinaaq Ocean current from east of Nuvuk

Amuaq Ramp cut at the ice edge to launch a boat or pull a whale from the water

Atchagnag Offshore ocean current that pushes the ice open

Ignignag Zone of flat ice

liawwaqtuk ¹ When rough water acts to chip away the ice edge

liquag Ice that weakly attaches to the outer edge of the shorefast ice

Ikalgusak Shoal north of Nuvuk where ice ridges typically ground

Iluliaq A location at the ice edge where you generally have only a view of whales

traveling away

Ivuniq Pressure ridge

Kananaiññag Current from Northwest that pushes ice toward shore

Kanikļuk Embayment along ice edge

Kisitchat Anchored (grounded) ridge; means "anchor"

Kasruq When a whaling crew is finished whaling and pulls their skin boat off the ice

Katak A sudden drop in sea level; means "to fall"; may cause floating ice near

grounded ridges to crack

Manilinaaq A good place along the ice edge to watch whales coming toward you;

camping on the north side an embayment in the ice edge and facing south

Muġaala When pieces of submerged ice detach or become free and emerge in the open

water of the lead; means "to throw-up"

Muġaliq Piled up slush ice or brash ice that forms through shear and the incorporation

of snow

Nanjagtuġvik Safe place on shorefast ice where hunters store their whaling equipment and

camp when waiting for the lead to open or for other favorable conditions to

develop

Nipaaq To be along the edge of the ice observing the environment, watching the

water, and looking for whales

Nutaggutag Cracks which are kept from freezing by repeatedly being opened by either

currents or tides; often get covered with snow and can't be seen

Nuvuġaq Promontory of ice extending out from the ice edge

Nuvuġaqpuk Large promontory of ice extending out from the ice edge

Palusagniq ² Weather system that begins with winds out of the Southeast that continue to

swing around to the Southwest where the wind direction leads to dangerous

increases in sea level and tends to bring pack ice in toward the coast

Pamiuqtak To launch a boat from the ice edge and travel toward a whale's path

Pigaluyuk Old ice that is fresh enough to drink

Piruġaġnaq Current from Northeast

Oaiġsuag ³ Flat pan of ice

Qaisagnaq Current from the Southwest; current that brings the animals in spring

Oinu Slush ice that piles up during the early stages of freeze-up in late fall or early

winter, and, due to cold temperatures, develops into ice that is considered

stable

Sagrat ⁴ Moving ice floes

Sikuliaq Young ice

Tuuq When pack ice impacts shorefast ice and acts as a chisel; means "to chisel"

Tuvaġruag Stable ice; ice that will not break-up or shatter when impacted by pack ice

Tuvaq Shorefast sea ice

Tuvaqtaq Bottom-fast ice along the coast; ice frozen to seafloor

Uiñiq Open lead

Uisauniq A shorefast ice separation or break-out event resulting in people adrift

amongst the pack ice

Yuayuk ² A place where currents meet (for example, north of Point Barrow)

Notes

1. Term, definition, and spelling provided by Lewis Brower.

- **2.** Term, definition, and spelling provided by Joe Leavitt.
- **3.** Term and definition provided by Lewis Brower. The correct spelling was unknown.
- **4.** This spelling was provided by Ronald Brower, Sr., however it differs significantly from that provided by George et al. 2004, who published the term as Sarri.

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SNOW AND ICE TERMINOLOGY AND DEFINITIONS

Source: NSB Inupiat History and Language Commission

| ALUKTINNIQ = nature | | | |
|--|--|--|--|
| caused hollow area | SAĠVAQ = current (ocean, water) | QANIKULA- = to snow intermittently | |
| ANIU = packed snow | MASALLAK -/MASAYYAK | OANNIIV - encudado | |
| ANIUVAK = snow bank; | = to be damp enough for | QANNIK = snowflake | |
| snow patch | making snowballs of snow/watery snow (inland) | QANNIK- = fresh falling snow without wind | |
| APIQQAAĞUN / | MANGA - overheading | NIDIA CWA O - ios suss | |
| APIQQAMMIAQ / APPUTIQQAAQ = first snow | MAVSA = overhanging snowdrift/ready to fall | NUNAGVAQ = ice once used by walrus | |
| APITCHIQ-/APITCHIQSUQ = when female polar bear | MIÑIK = mist | PUIÑIQ = hole on ice made by seal or other sea mammal | |
| which bears young allows | MILIK = very soft snow/Roxy | by seal of other sea maininal | |
| herself to get snowed under | allayuaqtuaq uqalugmik | AISITAQ = cracked ice made by force of moving ice/a part | |
| APUN = snow | MISULIK = sleet | of ayukaq | |
| AQIĻĻUQ = light snow, deep for walking | MUĠAŁŁUK = slush ice on land | TUUNIQ = cracked ice made by force of main pack ice | |
| AQIĻĻUQQAQ (MAUYA) = soft snow | MUĠALIQ = slush ice on sea | AYIUPAQ = ice chipped off by waves | |
| UUŁŁUKKUU = snow melts instantly | NATATQUĠNAT = hailstones | ISAAMANIQ = ice formed as a long peninsula | |
| ILLUK = snow-blind | NATIĠVIK = (low) drifting snow | ATAITCHUAQ = shore ice cut close to the coast | |
| KAATCHI = to slice into | NHITA CAO - fronh | | |
| layers | NUTAĠAQ = fresh snow/powder snow | QANAIÑAQTUAQ = main pack moving in directly | |
| KAATTIQ/KAATCHIRUAQ = | DIA COMA O | toward sea ice | |
| to cut blocks of hard packed snow for house | PIAGNAQ = snow condition good for sled travel | UMIAGLU = ice used for | |
| KANIQ = to be covered with | PIQSIQ/AGNIQ = snowstorm | raft/bottom ice | |
| light frost in early autumn | | MAURAGAQ = ice used for | |
| when frost collects indoors | PUKAK (MIĻAK) = | stepping to cross wide crack | |

crystallized snow found under soft snow/good for

melting into drinking water

MASAK/MISAK = slush

snow/waterlogged/swamp

IQUGAAQ = west wind opening ice at leeward ice of point

IMUNIQ = young ice crushing

ALUQSRAQ = young ice punched by seals forming a seal blowhole

AVAAQTINNIQ = ice caught in a narrow part of river or lead

IGNIGNAQ = strip of smooth ice between shore and ice ridges

UIÑIQ = "open lead", the edge of the ice?

AGIUPPAK = a smooth wall of ice along the edge of fast ice formed by other moving ice

KUSULUKKAT = icicles on ice or ice caked on structures

QIMAKTINNIQ = ice between anchor and shore (usually with open water on either side)

AUQUPARAQ = shingle ice (dinner plate size)

AUQUPARUAQ = shingle ice but larger than kaspik

MAYUQTITAQ = slush ice pushed onto the shore with warps frozen into waves

QAIVAĠNIQ = round cakes frozen together (flat ice)

SIKULIAĠRUAQ = thick ice (greater than 3 feet)

TUVAIYAGAAQ = once shorefast ice/snow is floating due to high winds (mostly in waters)

TUVAIQ = once shorefast ice/snow floating due to gradual breakup

SIKUAQ = freezing hole/confined area

TUVAGRUAQ = old ice

QANIQTAQ = slightly refrozen ice pieces but fragile, this ice will quickly spread out when it is stepped on

QANIĠNIQ = uulsugnaq after it has spread out

PUKTAAQAT = a small cake of ice

PUKTAAQ = ice cakes

IMAIQ = ice broken up but pressed together so that there is no leads

PUKTAAT = scattered floes (navigable)

SIKULIAQ = ice that is not thick (approx. 1 foot deep), the first ice to arrive near Barrow in the fall, may be smooth or broken, not formed locally, able to hold a walrus/already thick ice, of no danger to walk on, one of the first types of ice to arrive at Gambell in the fall

QAIMNUQ = a cake of ice smoothed by sea spray

QAIMŊUĠNIQ = Kulusig type ice over a large area, a type of ice seen at Gambell early in the fall

SIKUAQ = thin ice, dangerous to walk on

MAPSA = cornice (overhanging formation of ice, snow or rock usually along a ridge), overhanging snow

IVUNIQ = pressure ridge (rough ice blocking passage)

PIQALUYAK = salt-free ice or old ice gone thru several seasons, perhaps glacial ice

AAYUGAQ = ice ridging, or long crack across the shallow lagoon or bay

PIQUNIQ = ice mounting that has bottom air, also used by sea mammals

SEA ICE TERMINOLOGY

SIKU = ice

QINU = slush ice

QAAPAAQ = slush ice piled up on the beach ice ridging

PUKTAAT = small chunks or cakes of ice apart from others

NAPAAYUQ = an upright ice cake

AUGAŊARUAQ = ice thrust up at an angle (approx. 45°)

ANAGLU = black ice

IĠNIGLUQ = crushed refrozen ice, as found in cracks

PAAĠIIQ = ice pushed by the wind and current one way and then the other making it appear to move

QAISUATAT = smooth ice lying between areas of rough ice

NULAGUN = refrozen cracks (less than 10 feet wide)

QAIĠIITCHUQ = rough ice

QAIGILU = ice not rough nor smooth but with some irregularity QUVLUNARUAQ = ice with small ripples (bouncy)

AUNIQ = spring ice with melt holes

ATIGNIQ = new ice forming a smooth apron around preexisting ice (which may be thin or may be thick enough to walk on)

IIGUAQ = ice that is added or pressed onto shore ice

ARGUQTAGNIQ = newly formed thin ice collecting on the downwind side of a polynya (a large area of open water surrounded by sea ice) or lead

SAGRAT = a few cakes of ice in mostly open water or lead

ALLIVIÑIQ = ice that was under other ice but resurfaces smooth and dirty

NUTAQIIQ (?) = smooth ice covered by snow with wetness between snow and ice

TUVAQ = shore ice

TUVAQTAQ =shore ice covering only a portion of the beach

KISITCHAT = anchor ice, fast ice touching the ocean floor

SARRI = good, thick ice from the north (pack ice), floating pack ice (across from landlocked ice)

NUVUĠAQ = a pointed portion of ice, peninsula or corner surrounded by water KAŁIQŁUK = a bay or cove in the ice

KANIQŁUK = frost on sea water

QUGRAQ = where ice pinches off a lead or crack either against other ice or the shore

NUTAGUN = when snow covers a water hole (with no ice), snow on water with no ice

QANATTAAQ = snow or ice which one end partly off the ground

QAYUQŁAK = snow formation caused by prlvailing ninł

QIMUAGRUK = high snowdrift

QIQSRUQQAQ = glazed snow in thaw time (upinġaksraġman)

SILLIQ = hard crusty snow

SISUUK = snowslide, avalanche

snowiceterm.doc

HUNTERS OF THE ORTHERN ICE

RICHARD K. NELSON

The University of Chicago Press

CHICAGO AND LONDON

APPENDIX 2

Eskimo Sea-Ice Terminology

Because so many of their activities are carried out on the sea ice, Ekimos have elaborated their vocabulary relating to it. There are many separate terms dealing with the various types of ice and ice formations some of which do not have equivalents in the English language. The writer is not a linguist, and does not speak the Eskimo language. This list is included for its general ethnographic value, though it may not meet the standards for accuracy and completeness set by linguists and ethnoscientists.

Ice Age or Thickness

Imak: water.

Taġeoķ: salt water.

Teshak: salt-water lagoon.

Uguruģiizaķ: grease ice; the earliest stage of freezing, causes wind ripples to disappear from patches of the water surface.

Maullik: slush ice or ice rind; heavy development of grease ice, almost to the point of being nilas.

Isigoaŋazuķ: slush ice or ice rind; similar in meaning to the preceding term.

Pogazak: slush or mush ice formed by grinding along the edges of ice pans, floes, or cracks.

Mogazak: similar in meaning to the preceding term.

Iginik: similar in meaning to the preceding terms, except ice may be solidly frozen. Eskimos sometimes refer to this as "file ice," because it is formed by the ice "filing" itself.

Migalik: pancake ice; circular pieces of young ice, 1 to 6 feet in ameter, with raised rims; the shape and appearance result from rotation and collision with other cakes.

rotation and collision with other of

Puktellhak: similar in meaning to the preceding term.

Salogok: nilas, or black young ice; a thin flexible sheet of newly formed ice which will not support a man, is weak enough to enable seals to break through it with their heads to breathe, and breaks through with one firm thrust of the unaak.

Sikuliwzak: similiar in meaning to the preceding term.

Sikuliak maptizoak: gray young ice; young ice which rides high enough in the water to be grayish in color, and has become thick enough to support a man. Seals probably cannot break through ice of this thickness, but open breathing holes by scratching and gnawing. One firm thrust of the unaak, or ice tester, will not break through ice of this thickness.

Sikuliagezoak: heavy or thick young ice; according to the Eskimo

informant this is ice about 1 foot thick.

Sikuliak: young ice; general term including all ice which is newly formed, from the time it becomes a cohesive mass until it has been modified by piling or rafting. This is a rather abstract term because it is used to refer to so wide a range of ice thickness.

Tokaviñek siku: winter ice; probably refers to ice which is about 5 feet thick, has not been modified by piling, and is still in its first

season of growth.

Utokagaviñek siku: "old ice"; probably refers to polar ice; ice which has not melted during one or more summers and has become fresh. This type of ice differs from winter ice in its topography, its darkblue coloration, its thickness and height above the sea surface, and its occurrence along the northwest Alaskan coast.

Pakaliak: polar ice; synonymous with the preceding term.

Aakaŋa siku: "mother ice"; heavy floe ice; probably a general term for the Arctic ice pack.

Atanan: synonymous with the preceding term.

Aungazuk: rotten ice.

Various Conditions and States of Ice Movement

Aulaalwichok: literally, "no motion"; the sea ice is not moving.

Igiliktak: the sea ice is moving.

Summuktuktuk: the ice is being carried away from the land.

Nunamuktuktuk: the ice is coming in toward the land.

Tuwagaatigut siku: the floe ice "comes ashore" and becomes attached to the landfast ice.

Tuwayagaatigut siku: the floe ice breaks away fom the landfast ice.

Siku sukumitkaksigaa: the sea ice is breaking up.

Eyechektok: opening crack.

Eyechektaktok: a crack which is pulsating or opening and closing. Apuktak: ice coming together or hitting together; probably refers to

the convergence of large floes.

Kaloagasitok: the process of rafting, where one layer of ice is thrust over another, forming two thicknesses of ice.

Ivuzuk: the process of ice piling.

Ivoaksizuk: the condition of ice which is about to begin piling.

Ivaluktaktok: the noise of piling ice.

Agiaktok: shear or parallel crack movement, such as would commonly occur when an ice floe is drifting parallel to the edge of the landfast ice.

Ikolivsaak: a floe or floeberg which is grounded firmly.

Sea-Ice Topography

Kupak: a crack in sea ice.

Kupaġaluuzaķ: a small crack in sea ice. Kupakpak: a large crack in sea ice.

Kupasuguzuk: similar in meaning to the preceding term. Kupagazoak: similar in meaning to the preceding terms.

Nutak kupak: a newly formed crack.

Imak kupak: a crack with open water in it.

Sikuichak kupak: a crack without ice (with open water) in it.

Kupak aputilik: a crack with snow blown over it.

Putu: a hole in the ice.

Imaurak: a small polynya or open spot in the sea ice. Imakpak: a large polynya or open spot in the sea ice.

Killigisiñek: shore lead; open water along the coast between the beach and the ice offshore; formed in the spring and summer.

Imaktinik: a freshwater puddle on sea ice; formed during spring and summer.

Ivuuk: a pressure crack which has folded or "buckled" downward, the resultant basin having filled with water.

Uiñek: and open lead; refers to a wide lane of open water, usually between the landfast ice and pack ice, from 50 yards to several miles wide.

Kanellluk: a bay or bight along the edge of a lead; also refers to the water on either side of a point along the lead edge.

Nuwuk: a point, either in the sea ice along a lead or on the land.

Tuwak: landfast ice; an expanse of ice which parallels the coast, extending outward for one-half mile to several miles, held stationary by large piles of ice within it which are grounded solidly on the bottom.

Kukuluginik: a crack or pressure area where the ice has buckled" upward to form a "roof" with open space beneath. The water underneath soon freezes, but such places are favored by seals for breathing holes, or if the formation is large, for dens where seals rest and give birth to young.

Tuhuzuginik: young ice which has been subjected to pressure and has "wrinkled" or formed undulations in its surface, leaving open spaces

beneath. Also favored for seal breathing holes and dens.

Pikunik: similar in meaning to the preceding term.

Kaigechuk: rough ice.

Kayagalaak: rough ice; probably refers to large areas with rough ice caused by crushing of the edges of ice pans and floes.

Sikukazzaak: a piece or block of ice; probably refers to a large conspicuous piece.

Napaiuk: one large piece of ice which has been pushed up vertically to form a conspicuous landmark.

Ivunnik napaizoak: similar in meaning to the preceding term, but refers specifically to an unusually large vertical block, perhaps 20 to 30 feet high.

Napasalik: rough ice area which consists largely of pieces of ice which have been pushed into a vertical position.

Ivuunik: ice pile, ridge, or hummock.

Ivunnigich: rough ice; implies an area with many ice piles. Plural form of the preceding term.

Ivunikpak: a large ice pile or ridge.

Agayagnik: "file ice"; flat walls of ice, from 1 foot to 30 feet high, caused by ice piling followed by shear (parallel) movement along the ice pile. This creates a very steep vertical wall of ice which has been planed off by abrasion of ice surfaces. May indicate the edge of landfast ice, because such parallel movement often takes place there.

Agaipak: similar in meaning to the preceding term. Agaiupak: similar in maning to the preceding terms.

Agaiupakpak: an unusually large "file ice" wall, 10 or more feet high.

Agaiupaurak: a small "file ice" wall, less than 2 feet high.

Kalagsinik: rafting of young ice which is too thin to support a man, but which becomes safe wherever it has rafted and doubled its thickness.

Ivuunik kalligaich: areas where the ice has rafted; one layer of ice is

thrust up over another.

Kaiaksuak: flat area in sea ice; may be surrounded by rough ice, forming an "island" of flat ice, or may be a huge flat expanse; general term Kaiaksuakpak: a very large area of flat ice.

Kaiaksuzak: a small area of flat ice.

Kaimuguk: a flat "ice foot" along the beach, created by building up of ice from the splashing of storm waves. (Differs from the tidal ice foot which is formed along cliffs in the eastern Arctic.)

Ateginegak: "ice apron" or fringe of young ice built out by freezing from the edge of open leads; important for travel while hunting be-

cause it is smooth.

Anagalu: an ice pile which has sand, stones, and other bottom debris incorporated into it, because it has been forced solidly into the bottom by ice piling and later being carried back to the surface.

Alliviñek: a piece of sea ice which rises to the ocean surface after having been buried and held in the bottom by earlier ice piling. This happens during the spring and summer.

Kisissak: a large grounded ice pile or floeberg; may become frozen into

the new ice in the fall.

Aulaylik: a large floe or floeberg, of sufficient size that current prevails over wind in determining its direction of movement.

Puktaak: an ice pan or floe which is sufficiently small so that wind prevails over current in determining its direction of movement.

Kanattaak: a ledge of ice overhanging the edge of an open pond or lead; caused by undercutting by warm currents and waves during the summer.

Itcheak: a shelf of ice extending outward from the edge of an ice flow or pan beneath the water surface; probably caused by erosion of the ice above the water.

Phenomena Related to Sea Ice and Its Movement

Kissuk: water sky; reflection of the dark color of open water in the clouds.

Puguzoak: "steam fog"; steam which rises from the water surface of cracks and leads during cold weather.

Iññipkak: a refraction phenomenon or mirage, which causes the ice water or land surface that is over the horizon to "loom" above it usually appears as a white curtain along the horizon, resembling low clouds or a fog bank.

Kanik: frost crystals which form on young ice as soon as it begins to develop. Scattered frost crystals become more and more dense as the ice thickens until, on gray young ice, they completely cover the surface.

Masallhok: moisture on young ice, which causes slush to form in foot-

prints or sled tracks.

Mafshaak: an open hole or crack which has been covered by stormblown snow; open water lies beneath the snow, creating a dangerous condition for ice travelers.

Pilaġaġniķ: a sinuous line of ripples or wavelets which forms on the ocean surface; probably caused by the meeting of two differently flowing currents.

Terms for Wind Directions

Kysenegek: south wind. Unnalak: southwest wind. Kanagnak: west wind. Ikagnak: north wind. Nigik: northeast wind.

Nigikpak: similar in meaning to the preceding term.

Kiloagnak: east wind.

Harvest of the Sea: Coastal Subsistence in Modern Wainwright

A Report for the North Slope Borough's Coastal Management Program

> Richard K. Nelson December 1981

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APPENDIX: IÑUPIAT SEA ICE TERMINOLOGY

The Iñupiat have developed an elaborate and comprehensive vocabulary for sea ice. These terms describe the development stages, topographic features, patterns of movement, and other phenomena associated with ice on the northern ocean. I must emphasize that the list here is incomplete (though it contains well over 100 ice terms); and it probably contains errors of spelling and definition, since I am neither a linguist nor a speaker of Iñupiat. Despite these shortcomings, the list gives another indication of the ways that Iñupiat hunters have elaborated their knowledge of the sea ice environment.

Imaq:

water (undrinkable)

Tagiuq:

salt water

Tasiq:

salt water lagoon or estuary

Qiuviruq:

water freezes

Qiqitkaa: Uqsrugiiraq:

water in the process of freezing grease ice (literally "seal oil" ice) slush ice, heavier than above

Mugaliq Isiguaŋaruq:

slush ice covering water in a thin layer

Qinu: Maugrak: slush ice that comes ashore with wind or current in fall slush ice formed by freezing beneath the water surface, often kept under by the currents; later rises to freeze

more thickly on the surface

Saattug: Migalik:

thin ice, not thick enough to walk on

slushy ice caused by grinding between floes; formed at any season but most dangerous in spring, when it does

not freeze but looks like solid ice

Qinut:

young slushy ice that is broken by wind, often abraded

to form circular pans 1 to 6 feet in diameter similar in meaning to the preceding term

Puktihagag: Saalguag:

thin, black-colored young ice covering an open place

amid heavier ice; one thrust with an unaag will

penetrate it

Sikuliiraq:

ice the same thickness as above, but in a larger field,

not necessarily surrounded by thicker ice

Sikuliaq map-

turuaq:

gray young ice, thick enough to support a person; one unaag thrust will not penetrate it

Sikuliagruag: Sikuliag:

heavy ice-of-the-year, from one to ten or more feet thick general term for young ice, from the time of formation through the winter or until it is modified by rafting or pil-

Tuvaagruag:

very thick ice-of-the-year, but still in its first season of

growth

Utuqqaviñiq siku: old ice that has lasted through one or two summers, but not as old as the following type

Pigaluyak:

very old ice that has lasted through several or many

Ice Age or Thickness

summers; identified by its rounded topography, blue

color, and great thickness

Sarri: the ice pack itself, the mass of heavy ice that is usually

well offshore and separated from landfast and near

shore ice

Aakaŋa siku: same as above; literally "Mother Ice," because it stays

out in the sea at all times and is the place where

animals always live

Aunniq: rotten ice

Augaruq: same as the preceding term

Aunniguruq: sea ice with many rotten places in it

Ikiaqtitkaa: a layer of fresh water beneath melting sea ice after mid-

June, formed by the thaw not mixing with salt water below; this often refreezes due to the higher freezing temperature of fresh water, but it later thaws and mixes with the sea water (seal nets must be removed so they

do not freeze into this fresh ice)

Quppaq: a crack in the ice

Quppagruaq: an old crack in the ice Nutaaq quppaq: a newly-formed crack

Quppaq aputilik: a narrow crack (up to a foot or so) with open water or

thin ice, but hidden by snow that has drifted over it; easy

Sea Ice Topography

to fall through

Quppaq

apinaruaq: same as preceding term

Putu: a hole in the ice

Nigayu: a patch of open water surrounded by ice

Imagauraq: a small open pond in the ice

Imaqsuk: a pond or puddle (in the ice or on land)

Imaqpak: a large open pond in the ice Kuugaurat: small streams in summer ice

Killiniqsinniq: shore lead, opened along the beach during spring thaw shore lead that stretches along a whole stretch of coast Kurriñiq: a crack in spring ice that is widened by melt water run-

ning into it

Quppasugruk: a large, wide crack

Ikugaaq: open water or lead that opens on the north side of a

large point (such as Icy Cape) and curves in to make a

bight close to the land

Uiñiq: open lead, a wide lane of open water, usually between

the landfast ice and the pack

Kanjiqluk: a bay in the lead edge

Nuvuk: a point of ice along the lead edge; also a point of land

along the coast

Atignigaq: an apron or fringe of young ice that extends out from

the lead edge; allows easy travel along the lead

Imaqtinniq: a large puddle on the ice in spring

Imagtittuq siku: ice with many puddles on it

Aunniq killaurit: holes or perforations in the rotten ice beneath ponds Tuugniq: a crack running perpendicular to the coast, often

caused by the pack moving parallel to the landfast edge

and striking it with much force; such cracks create no

danger of drifting away

Uitqayaun: a crack running parallel to the coast, about a foot wide;

refers to the ice almost opening but then not doing so (cracks that parallel the coast are considered dangerous, because they may allow the ice to drift

away)

Tuvaq: landfast ice

Uiguaq: ice that becomes attached to the landfast ice, adding to

its seaward extent

Tuqsruliñiq: wrinkled young ice (about an inch thick); may be a short

"bubble" or long ridge

Piquniq: young ice (usually several inches or more thick) buckled

upward to form a rooflike ridge, cracked down the center; seals often make breathing holes or dens under

such ridges

Qaigiitchuq: rough ice

Qaigiilaq: large area of rough ice

Sikuqpak: a large piece or block of ice pushed up by piling

Napaayuk: one large piece of ice pushed up vertically, forming a

conspicuous landmark

Ivuniq naparuaq: similar to above, but usually large

Napasalik: rough ice area with many pieces pushed up vertically

Ivuniq qaanaaq: a large slab of ice that forms an overhang from the edge of a ridge or pile; could serve as an emergency shelter

Ivunig: general term for an ice pile, hummock, or ridge

Ivunigich: an area with many ice piles or ridges

Ivunigruaq: small ridge or hummock

Ivuniqpak: a large hummock or ridge; or a large grounded ice pile

in open water during summer

Kisisaq: a large grounded ice pile or a grounded floeberg in the

summer

Ikkalgisitaq: a grounded ice ridge or pile; similar to the preceding

term

Agiuppak: a ridge with a shear face caused by mobile ice grinding

against it; usually seen at outer edge of the landfast ice

Agiuppasugruk: a large shear-faced ridge, ten or more feet high

Agiagniq: "filed ice" caused by floes grinding against each other

Anaglu: an ice pile that has been ground into the bottom and incorporated sand, stones, and other bottom debris into

itself

rafted young ice, otherwise too thin to support a person

but made safe by doubling its thickness

Ivuniq qaligiich: a large area of rafting ice

Qaligiiksinniq:

Ignignaq: a long stretch of smooth ice running parallel to shore;

usually part of the landfast ice; makes for easy travel

along the coast

Qaiqsuaq: general term for a flat ice area; may be surrounded by

rough ice or a hugh flat expanse

Qaigsuurag: a small flat area surrounded by rough ice

Qaiqsuaqpak: a very large area of flat ice, or a large flat ice floe in

summer

Qaimunuuq: ice that builds up on the beach in fall, either by slush

being pushed in or by water splashing up during storms; can be a ridge, a wide bumpy area, or a wide smooth

area that makes an ideal trail along the shore

Aulaiļaq: a large flat ice floe, a mile or more long, drifting in or

near the summer pack ice

Tuvaqpak: same as above

Puktaaq: a large pan of ice floating in open water or frozen into

the pack; like the types above, this ice moves with the

current even against an opposing breeze

Saġvaqtat: loose ice pans, about twenty feet in diameter, floating in

the ocean

Sikuggaich: small bits of ice floating in open water

Alliviñiq: a loose mass of ice bits that suddenly flushes out from

beneath the ice edge and spreads on the surface; usually seen in April or May when the ice is moving

Qanattaaq: ledge of ice overhanging the edge of an open pond or

lead, caused by warm water undercutting the ice in

summer

Itchiaq: a shelf of ice extending outward from the edge of a floe

or pan beneath the water surface; apparently caused

by wave erosion or thawing above the water

Aulaalgiitchuq: the sea ice is not moving

Aulalaitchuq: same as above

Igliqtuq: the sea ice is moving

Uitkaa: the ice is opening (like an eye opening), to form a lead

Itiqtusigaa: a crack or lead is opening
Sunmuktuqtuq: the ice is moving away from land

Nunamuktuqtuq: the ice is moving toward land

Tuvagaatigut: floe ice comes in and attaches to the landfast ice Tuvayagaatigut ice breaks away from the outer edge of the landfast ice,

siku: diminishing its seaward dimensions

Cilcu

siqumitkaqsigaa: the sea ice is fracturing or breaking up

Aatchaqtuq: an opening crack
Aatchaqtaqtuq: a crack pulsates, or opens and closes

Apuqtuq: ice coming together or colliding; probably refers to

large floes

Qaliġiiksittuq: ice in the process of rafting Qaapaaktuq: similar to the term above

Qaapaaktuq: similar to the term above

Ivuruq: the process of ice piling or crushing Ivuaqsiruq: the conditions of ice about to begin piling

Ivuallaktuq: ice beginning to pile or crush Ivuapaluktuq: the sound of piling ice

Ivuapaluktuq: the sound of piling ice
Aulanig: ice moving along in a lead

Agiaktuq: sheer or parallel movement of the ice along a crack, as

happens frequently at the edge of landfast ice

Saġvaqtuaq

apuqtuq: moving ice hits the landfast ice and becomes stopped

Qisuk: water sky, the reflection of the dark color of open water

in low clouds; often used to locate open leads or large

ponds

Miscellaneous Terms Related to Sea Ice

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Sea Ice Movement

Sikum

qilagaugaunina: ice blink, the white reflection of ice in clouds near the

horizon in summer, revealing the pack's location from

lñipkag: refraction or "mirage" which causes the ice, water, or

land to loom above the horizon; usually a white curtain

along the ice horizon, resembling low clouds or fog

Puyugruaq: steam fog that rises from open water in the winter Iqlapqutaq: clouds that form above steam fog; often used to locate

an open lead or pond in winter

frost crystals that form on young ice Kaniq:

Misalhak: moisture on young sea ice, present at any temperature

because of the salt content

icicles that hang from the bottom edges of piled ice (or Kusrulugaq:

elsewhere)

shoal; shallow water area offshore Ikkalguq:

Itiruq: deep water

Pilagagniq; a line in the open water marking the juncture of two

different currents; often a sinuous line of ripples or

wavelets

Qaisagniqsuq: current or ice coming from the south Pirugagnigsug: current or ice coming from the north

Aunmuktugtug: same as the above term (a less sophisticated word) current or ice coming from south (flowing northward) Kivanmun:

Kanannamin: current or ice coming from west

llutaktuqtuq: current trending onshore, "edging in" or flowing under

the edge of landfast ice

Atchagniqsuq: current running seaward

Itchagniqsuq; current trending offshore, "edging out" from under the

landfast ice

Ulimuktuqtuq: rising tide

Imaigaqsiruq: falling tide

Unalaq: south wind

Unalaqpak: heavy southerly storm Unalagsraag:

the condition of warm weather, and possibly light southerly breeze, that precedes a southerly storm

Uannagruk: southwest wind

Kanagnaq: west to west north/west wind

Kivagnaq: northwest wind Ikagnaq: north wind

Atuagnak: north, north/east wind, slightly from the ocean at Wain-

wright

Nigiq: northeast wind, approximately parallel to the Wain-

wright coast

Nigiqpak:

Kiluagnaq: east to southeast wind Kiluagnagiaq: southeast wind Kivagnagiaq: south, southeast wind

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Wind Directions

Current and

Tide Conditions

same as above

Richard Nelson, Hunters of the Northern Ice, 1969 Appendix 2: Eskimo Sea Ice Terminology (Wainwright): As corrected by: Ronald H. Brower Sr. and Wainwright Elder Rossman Peetook, 2009

Ice Age or Thickness:

Ugurugiizaq: [Ugsruġiisaq] grease ice; the earliest stage of freezing, causes wind ripples to disappear from patches of the water surface.

Maullik: [Muġaliq] slush ice or ice rind; heavy development of grease ice, almost to the point of being nilas

Isigoangazuq: [Sikuliaruq] slush ice or ice rind; similar in meaning to the preceding term.

Pogazaq: [Agiaġniq] slush or mush ice formed by grinding along the edges of ice pans, floes, or cracks

Mogazaq: [Muġaliq] similar in meaning to the proceeding term after grinding stops.

Iginik: [Agiġniq] similar in meaning to the proceeding term, except ice may be solidly frozen. Iñupiat sometimes refer to this as "file ice," because it is formed by the ice "filing" itself.

Migalik: [Sagsraq] pancake ice; circular pieces of young ice, 1 to 6 feet in diameter, with raise[d] rims; the shape and appearance result from rotation and collision with other ice cakes.

Puktellhaq: [Puktaaġruat] similar in meaning to the preceding term but bigger.

Salogoq: [Sikuliaq] nilas, or black young ice; a thin flexible sheet of newly formed ice, which will not support a man, [but] is weak enough to [e]nable seals to break through it with their heads to breathe, and breaks through with one firm thrust of the umiaq[unaaq]

Sikuliwzaq: [Sikuliuraq] similar in meaning to the preceding term but it is thinner in composition.

Sikuliaq maptizoaq: [Sikuliaq Mapturuaq] gray young ice; young ice which rides high enough in the water to be grayish in color, and has become thick enough to support a man. Seals probably cannot break through ice of this thickness, but open breathing holes by scratching and gnawing. One firm thrust of the umiaq,[unaaq] or ice tester, will not break through ice of this thickness.

Sikuliagezoaq: [Sikuliaġruaq] heavy or thick young ice; according to the Eskimo informant this is ice about 1 foot thick.

Sikuliaq: [also Sikuliraq] young ice; general term including all ice which is newly formed from the time it becomes a cohesive mass until it has been modified by piling or rafting. This is a rather abstract term because it is used to refer to so wide a range of ice thickness.

Toqaviñeq siku: [Tuvaq] winter ice; probably refers to ice which is about 5 feet thick, has not been modified by piling, and is still in its first season of growth.

Utoqagaviñeq siku: [Tuvaġruaq] "old ice"; probably refers to polar ice; ice which has not melted during one or more summers and has become fresh. This type of ice differs from winter ice in topography, its dark-blue coloration, its thickness and height above the sea surface, and its occurrence along the northwest Alaskan coast.

Paqaliaq: [Satchiġruaq] polar ice; synonymous with the preceding term.

Aaqanga siku: [Sarri] "mother ice" heavy floe ice; probably a general term for the Arctic ice pack.

Atangan: synonymous with the preceding form.

Aunngazuq: [Aunniq] rotten ice.

Various Conditions and States of Ice Movement:

Aulaalwichoq: [Aulanitchuq] literally, "no motion"; the sea ice is not moving

Igiliktaq: [Igliktuq] the sea ice is moving

Sunmuktuqtuq: [Sanmuktuqtuq] the ice is being carried away from the land

Nunamuktuqtuq: [Nunanmuktuqtuq] the ice is coming in toward the land

Tuwagaatigut siku: [Tuvagaatigut] the floe ice "comes ashore" and becomes attached to the landfast ice

Tuwayagaatigut siku: [Tuvaigaatigut] the floe breaks away from the landfast ice

Siku sukumitkaksigaa: [Siku siqumitkaksigaa or Tuvaiqsuq] the sea ice is breaking up

Eyecheqtoq: [Aitchaqtuq] Opening crack3

Eycheqtaktoq: [Aitchaktaqtuq] A crack which is pulsating or opening and closing

Apuktaq: [Apuqtaq] ice coming together or hitting together; probably refers to the convergence of large floes

Kaloagasitoq: [Qaluaġaqsituq] the process of rafting, where one layer of ice is thrust over another, forming two thicknesses of ice.

Ivuzuq: [Ivuruq] the process of ice piling

Ivoaqsizuq: [Ivuaqsiruq] the condition of ice which is about to begin piling

Ivaluqtaktoq: [Ivuvaluktaqtuq] the noise of piling ice

Agiaktoq: [Agiaqtuq] shear or parallel crack movement, such as would commonly occur when an ice floe is drifting parallel to the edge of the landfast ice.

Ikolivsaaq: [Ikalgisaaq] a floe or a floeberg which is grounded firmly.

Sea Ice Topography:

Qupaq: [Quppaq] A crack in sea ice

Qupaghaluuzaq: [Quppaġłuuraq] A small crack in sea ice

Qupaqpak: [Quppaġruaq] A large crack in the ice

Qupasuguzuq: [Quppiniq] Similar in meaning to the preceding term [one which can become a large crack]

Qupaghazoaq: [Quppahaaqtuaq] Similar in meaning to the preceding terms [shattered ice, when a large ice floe hits shore fast ice]

Nutaq qupaq: [Nutaaq quppaq] A newly formed crack

Imaq qupaq: [Quġluagaqtuq] A crack with open water in it

Sikuichaq qupaq: [Aavuġaq] crack without ice (with open water in it

Qupaq aputilik: [Nutagun] a crack with snow blown over it

Putu: A hole in the ice

Imaurag [Nakanaurag] A small polynya or open spot in sea ice

Imaqpak: A large polynya or open spot in sea ice

Qilligisingeq: [Qilligisiniq] A shore lead; open water between the shore and the ice offshore

Imaqtiniq: [Immaktiniq] a freshwater puddle on sea ice, formed during spring and summer

Ivuuk: [Quvlugaaq] Pressure crack, which has folded or "buckled" downward, the resultant basin having filled with water

Uiñeq: [Uiñiq] An open lead, usually between the fast ice and pack ice, from 50 yards to several miles

Qangelluk: [Kaniqluk] A Bay or bight along the edge of a lead: also refers to the water on either side of a point along the lead edge

Nuwuk: [Nuvuk] a point, either in the sea ice along a lead or on the land.

Tuwak: [Tuvaq] landfast ice; and expense[expanse] of ice which parallels the coast, extending outward for one-half-mile to several miles, held stationary by large piles of ice within it which are grounded solidly on the bottom.

Kuquluginik: [Ququlugniq] a crack or pressure area where the ice has "buckled" upward to form a "roof" with open space beneath. The water underneath soon freezes, but such places are favored by seals for breathing holes, or if the formation is large, for dens where seals rest and give birth to young.

Tuhuzuginik: [Tuuġniq] young ice which has been subjected to pressure and has "wrinkled" or formed undulations in its surface, leaving open spaces beneath. Also favored for seal breathing holes and dens.

Piquniq: similar in meaning to the preceding term. [ice mounting that has bottom air]

Kaigechuq: [Qaigiitchuaq] rough ice.

Kayagalaaq: [Qaiġiilaq] rough ice; probably refers to large areas with rough ice caused by crushing of the edges of ice pans and floes.

Sikukazzaq: [Puktaaq] a piece or block of ice: probably refers to a large conspicuous piece.

Napaiuk: [Napaayuq] one large piece of ice which has been pushed vertically to form a conspicuous landmark.

Ivunniq napaizoaq: [Kinjik] similar in meaning to the preceding term, but refers specifically to an unusually large vertical block, perhaps 20 to 30 feet high.5

Napasalik: [Ivunigruaqpait] rough ice area which consists largely of pieces of ice which have been pushed into a vertical position.

Ivuuniq: [Ivuuġniq] ice pile, ridge, or hummock

Ivunnigich: [Ivuuġnigich] rough ice; implies an area with many ice piles. Plural form of the preceding term.

Ivuniqpak: a large ice pile or ridge.

Ivuuniq qalligaich:[Qaligiiġsittat] areas where ice has rafted; one layer of ice is thrust up over another.

Agayagnik: [Agiagniq] "file ice"; flat walls of ice, from 1 foot to 30 feet high, caused by ice piling followed by shear (parallel) movement along the ice pile. This creates a very steep vertical wall of ice, which has been planed off by abrasion or ice surfaces. May indicate the edge of landfast ice, because such parallel movement often takes place there.

Agaipak: [Agiupak] similar in meaning to the preceding form

Agaiupak: [Agiuqpak] similar in meaning to the preceding form

Agaiupakpak: [Agiuġniġruaq] an unusually large "file ice" wall, 10 or more feet high.

Agaiupauraq: [Agiuġniuraq] a small "file ice" wall, less than 2 feet high.

Qalagsinik: [Qaligiiksinik] rafting of young ice which is too thin to support a man, but which becomes safe wherever it has rafted and doubled its thickness.

Qaiaqsuaq: [Qaiqsuaq] flat area in sea ice; may be surrounded by rough ice, forming an "island" of flat ice, or may be a huge flat expanse; general term.

Qaiaqsuakpak: [Qaiqsuaqpak] a very large area of flat ice.

Qaiaqsuzaq: [Qaiqsuaguraq] a small area of flat ice.

Qaimuguq: [Qaimġuq] a flat "ice foot" along the beach, created by building up of ice from splashing of storm waves (Differs from the tidal ice foot which is formed along cliffs in the eastern Arctic).

Ateginegaq: [Atiġniġaq] "ice apron" or fringe of young ice built out by freezing from the edge of open leads; important for travel while hunting because it is smooth.6

Amagalu: [Anaġlu] an ice pile which has sand, stones, and other bottom debris incorporated into it, because it has been forced solidly into the bottom by ice piling and later being carried back to the surface.

Alliviñeq: [Alliviñiq] a piece of sea ice, which rises to the ocean surface after having been buried and held in the bottom by earlier ice piling. This happens during the spring and summer.

Kisissaq: [also Kisitchaq] a large grounded ice pile or floeberg; may become frozen into the new ice in the fall.

Aulaylik: [Aulailak or Sugaiñnuq] a large floe or floeberg, of sufficient size that current prevails over wind in determining its direction of movement.

Puktaaq: an ice pan or floe, which is sufficiently small, so that winds prevails over current in determining its direction of movement.

Kangattaaq: [Qanattaaq] a ledge of ice overhanging the edge of an open pond or lead; caused by undercutting by warm currents and waves during the summer.

Itcheaq: [Itchiaq] a shelf of ice extending outward from the edge of an ice floe or pan beneath the water surface; probably caused by erosion of the ice above the water.

Phenomena Related to Sea Ice and Its Movement:

Kissuk: [Qisuk] water sky; reflection of the dark color of open water in the clouds.

Puguzoaq: [Puyuġruaq] "steam fog"; steam which rises from the water surface of cracks and leads during cold weather.

Iññipqaq: [Iñirraq] a refraction phenomenon or mirage, which causes the ice, water or land surface that is over the horizon to "loom" above it; usually appears as a white curtain along the horizon, resembling low clouds or a fog bank.

Kanik: [also Kanigruaq] frost crystals, which form on young ice as soon as it begins to develop. Scattered frost crystals become more and more dense as the ice thickens until, on gray young ice, they completely cover the surface.

Masallhoq: [Masalhak] moisture on young ice, which causes slush to form in footprints or sled tracks.

Mafshaaq: [Mavsaq also Nutaġun] an open hole or crack which has been covered by storm-blown snow; open water lies beneath the snow, creating a dangerous condition.

Barrow Iñupiaq Sea Ice Terminology

Alphabetical List, with English Explanations Compiled by Ronald H. Brower, Sr. ANLC; shared February 2008, updated 2015

Aayuġaaq Crack in sea or lake ice kept open by shifting currents so that it never

freezes solid.

Agiuppak Wall of shared ice along the edge of the open lead that has been formed by

the grinding action of the free ice against the shore-locked ice

Aisitaq Cracked ice made by force of moving ice mass that attaches to Ayuksraq

and moves with it.

Alliviñiq Ice that is under other ice that could at any moment come out from below,

due to current or boat wake

Aluksraq Young ice punched by seals forming a seal blowhole

Anaġlu Black sediment of ice, which becomes visible in spring as the ice melts

Arguqtagniq Newly formed thin ice collecting on the downwind side of a polynya or

lead. Other term is arguqtinniq

Ataiq To become loose, detached; when pack ice breaks off from shore ice

Ataitchuaq Shore ice that does not have kisitchat- icebergs, anchoring it

Atchagtu To be wide, whether land, ice or water

Atchik Far and wide open water

Atignigaq New ice forming a smooth apron around pre-existing ice which may be

thin or may be thick enough to walk on

Atitu for there to be a wide open lead in the ice

Aułłak to melt almost instantly like snow or suddenly on ice

Auganaruaq Ice thrust up at an angle

Augniqsraq Area where sea ice has become dangerous due to melting

Auniq Melting ice which become unsafe shards of ice

Aunniq Rotten ice

Aupkaġniq Melted spot on the ice

Aupkaq To melt through, leaving a hole in ice during spring

Ayaaqtinniq Ice caught up in a narrow part of a river or lead

Alliviñiq Ice buried and frozen to the ocean bed and surfaces during summer time.

Atiġniġaq Fringe of young ice built out from freezing along open leads and used for

travel while hunting

Ayiupaq Ice chipped off by waves.

Ayuksraq Piece of ice that does not freeze to shore fast ice and goes out with current

Ignigluq Thin young ice broken up or crushed and refrozen as found in cracks

Ignignaq Strip of smooth ice parallel to shore between pressure ridges and beach

liguaq Ice that is added or pressed onto shore ice

Ikikli or Ikigli To become narrow; to close up (of ocean ice)

Ikuġaaġniq Ice added onto iiguaq that can go anytime even with no wind or current

that one should not go beyond

Imaiq When the ice closes up, so that there is no water, no leads

Imaqpiaq Wide expanse of open water started from the edge of landlocked shore ice

Imauraq Hole in ice where whales breathe

Iminniq Mound of ice that makes an echoing sound when stamped on

Immiq For a channel of water to open as in a field of flow of ice

Imuniq Crushed young ice caused by moving ice

Igugaaq West wind opening ice at leeward side of ice point

Isaamaniq Ice formed as a long peninsula

Itchiaq Under water ice shelf extending outward from ice edge or ice floe.

Ivsaiġuti To be icebound

Ivu To form ice pressure ridges

Ivuaqpaluk or ivuvaaluk The sound of ice pressure ridge forming

Ivunigauraq Small ice pressure ridge

Ivuniq Ice pressure ridge

Ivuniqpaaluk Big ice pile; large ice pressure ridge

Kangilaq Smooth ice with no frost on top

Kanguraq Light or spotty frost

Kaniġruaq Heavy frost

Kaniq Frost; to be covered with light frost

Kaniqtaq Slightly refrozen ice pieces but fragile; this ice will quickly spread out

when it is stepped on; Ice formed by frost.

Kaniqluaq To surface in an inlet in a lead along ice like a whale

Kaniqluk Bay, inlet, indentation in sea ice where whales often surface

Kanniñiq Inlet along the shore; small bay in edge of ice, which is a good spot for

whaling because whales breathe in such places

Kapigli Ice coming together. Can be large or small ice floes.

Kiñiqtit When surface water percolates through ice

Kinik Pressure ridges that are high in elevation

Kisitchat Anchored icebergs; fast ice scouring the ocean floor

Kisitchiq To form anchored fast ice

Maġġuti To be unable to move in slush ice (of boat)

Maniilaq Surface that is not smooth or even

Maniit To be rough, uneven, especially ice when there are ice piles

Manik Smooth area of ice

Maut To walk in the direction of open water

Mayuqtitaq Slush ice pushed onto the shore with wraps frozen into waves

Miñiqutipkaq To become icebound while boating

Misałhak Slushy surface of young salt water ice

Muġaliq; muġałłiq Slush ice on sea

Muġrak Slush ice

Muqutipkaq For a boat to become ice bound

Napaayuq An upright ice cake

Natuġaaq For ice to crack or shatter or both at once

Nigayuq Open water surrounded by ice

Nutagun Snow on water with no ice below it; refrozen crack less than ten feet wide

Nutaqiiq Smooth ice covered by snow with dampness between snow and ice

Nuvuġaq A pointed portion of ice; ice peninsula or floe corner surrounded by water

Paagiiq Ice pushed by the wind and current one way and then the other making it

appear to move

Pauk Ice that is anchors to shore fast ice to shore

Piqaluyak Old salt free multi-year ice gone through several seasons; glacial ice

Piquniq Ice mount formation that has bottom air

Pituqqich A path or trail leading to an open lead on rough shore ice

Puktaaq Ice floe of various size

Puktaaqat Small ice floe attached to another ice floe

Qaigiitchuaq Rough ice

Qaiġilu Ice that is not rough nor smooth but with some irregularity

Qaimġuq A flat ice surface along the beach formed from splashing of storm waves.

Qaiqsuaq Smooth ice lying between areas of rough ice

Qaiqsuaqpak Smooth flat ice covering a very large area.

Qaivaġniq Flat round cakes of ice frozen together.

Qaligiiksinñiq Rafting of young ice which become safe to support a man walking.

Qanaiñaqtuaq Main pack ice moving in directly toward shore-fast ice

Qanattaaq Snow or ice jutting out over water caused by undercutting.

Qimaktinniq When the old ice is carried away, this ice is what is left behind

Quglugniq Pressure area where ice has buckled upward with open space in between

and water below freezes. Favored by seals for pupping or breathing den.

Quġraq Where ice pinches off a lead or crack either against other ice or the shore

Quppaġruaq Refrozen crack in ice

Quppaq Crack in ice

Quviugaaq Ice that buckled downward under pressure of ice then fills with water

Sagrat A few small cakes of ice in mostly open water or lead that originate as a

result of migiallak; (loose submerged ice surfacing pushed by currents)

Sarri Good thick floating pack ice from the north and some distance from the

land locked ice

Satchik To be far out in front or in ocean

Sikuaq Thin ice, dangerous to walk on

Sikuliaġruaq Thick ice approximately a meter thick and can be thicker

Sikuliaq Young ice formed around edge of old solid ice on open lead

Suġaiñnuq A large mass of ice moved by current prevailing over wind direction.

Suġaiñnuġruaq A larger mass of ice like above.

Tuuniq Buckled undulations on ice made by pressure of main pack ice on young

ice leaving the ice in a winkled state. Favored by seals for dens and breathing.

Tuvaġruaq Old ice

Tuvaiq Once (former) shorefast ice now floating, due to breakup

Tuvaiyagaaq Once shore fast ice now loose and floating due to high winds

Tuvaiyaq To break off inside the lead of land locked ice

Tuvaiyauti When shore fast ice breaks free to her/his disadvantage

Tuvaq Shore fast ice

Tuvaqtaq Shore ice covering only a portion of the beach

Uiñiq Lead, open water between shore ice and pack ice