

(683)



(673) In 1968, it was reported that small craft could find some protection from west winds in indifferent weather in a small cove west of Bluff. The cove can be recognized by a small low house somewhat back from a point. Caution should be exercised in this area to avoid being swept into the cove as a result of sudden wind changes.

(674) **Solomon** is an abandoned mining village at the mouth of the **Solomon River**, 11 miles west of Topkok Head and 17 miles east of Cape Nome. A road runs north to Council and west to Nome via a bridge at Port Safety. The depth on the bar at the entrance and inside Solomon River is about 3 feet, but local knowledge is necessary to keep in the best water. In 1968, it was reported that no lights were visible from offshore, and that there were no good marks for entering the river. A few old steel oil tanks were reported to stand on the north side of the river west of the entrance.

(675) It was further reported in 1968, that small craft should make a straight-in approach to the river entrance from well outside. When once inside, however, the river to the west was particularly good, and that small craft could tie up to the shore on either the north or south sides; the north side appeared to be a little deeper.

(676) An anchorage approximately 2 miles offshore in 8½ fathoms, hard gravel and sand bottom, is on the following bearings: Cape Nome **254°**, largest house in village **358°**, Topkok Head **079°**. Use 45 fathoms of chain. The only protection against heavy winds is to stand out to seaward.

(677) **Port Safety**, about 8 miles east of Cape Nome, is a small anchorage for vessels of less than 7-foot draft. A bridge crosses the entrance to Port Safety; vertical clearance is unknown. The channel is narrow and has a reported depth of 7 feet. Sheltered anchorage for several small vessels can be had in the narrow sloughs that lead between the flats inside the entrance.

(678) **Cape Nome** is a bluff about 650 feet high, 1 mile broad, and rounded down to the water on either side, where the land at the shore is low, with higher land farther back. The water off this cape is quite deep.

(679) From Cape Nome to Cape Rodney, the coast, except abreast of Sledge Island, is a comparatively straight stretch of low sand beach, with no projecting points, and higher land some distance back. Abreast of Sledge Island for a distance of several miles the hills slope down to the beach, giving this part of the coast the appearance of a point. The stretch of beach is broken by a number of small rivers. The entrances to **Nome River**, **Penny River**, and **Sinuk River** have shifting bars, but there is generally enough water in the channel over these bars to permit boats of 3-foot draft to enter. When approaching the coast between Cape Nome and Sledge Island, the water shoals regularly and gradually until a depth of 5 fathoms is reached; inside this depth the bottom is irregular, especially near the mouths of the rivers.

(680) An isolated area with a depth of 7 fathoms, 4 feet is in 64°20'15"N., 167°09'46"W., and another area with a depth of 6 fathoms, 5 feet is in 64°18'03"N., 166°44'10"W.

(681)

Chart 16206

(682) **Nome**, the metropolis of northwest Alaska, is on the beach at the mouth of the **Snake River**, 11 miles west of Cape Nome. An aero radiobeacon is 2.5 miles east of Nome (shown on charts 16200 and 16206), and an aerolight is at the Nome Airport.

(684)

Channels

(685) The entrance channel to Nome Harbor leads northeast between a causeway on the west and a breakwater on the east, both marked on the outer ends by seasonal lights. The entrance channel continues northeast through the mouth of the Snake River and turns southeast to an inner harbor. The entrance to the inner harbor is marked by a **29.9°** lighted range and private, seasonal buoys. Mariners are cautioned that the inner harbor channel range does not mark a safe passage to the outer harbor; a course east of the inner range is recommended for vessels transiting the breakwater.

(686)

Anchorage

(687) The general anchorage for deep-draft vessels is in 7 to 8 fathoms about 1 mile from the beach abreast of Nome. Vessels of less draft anchor in about 6 fathoms a little closer to the beach. In strong south winds vessels should anchor farther offshore.

(688)

Tides

(689) The water levels are influenced more by the wind than tide. An offshore wind sometimes causes a level of from 2 to 3 feet below mean lower low water for days at a time; a level of 14 feet above mean lower low water has been noted as a result of storms.

(690)

Currents

(691) About 2 miles offshore in Nome roadstead the tidal current averages about 1 knot at times of strength. It is chiefly diurnal. The flood sets east, and the ebb northwest.

(692)

Weather, Nome and Norton Sound Vicinity

(693) The moderating influence of the open water of Norton Sound is effective only from early June to about the middle of November. Storms moving through this area during these months result in extended periods of cloudiness and rain. The nearly continuous cloud cover during July and August results in an average of 45 cloudy, 12 partly cloudy, and only 5 clear days for the 2-month period. During the summer the daily temperature range is very slight. The freezing of Norton Sound in November causes a rather abrupt change from a maritime to a continental climate. Most low-pressure systems during

this period take a path south of Nome, resulting in strong east winds, accompanied by frequent blizzards, with the winds later becoming north and reaching Nome across the colder frozen areas of north Alaska.

(694)

Temperatures generally remain well below freezing from the middle of November to the latter part of April; February is usually the coldest month of the year. Temperatures usually begin to rise near the end of February and continue to rise until they reach a maximum in July. Occurrences of below zero (-18°C) temperatures have been noted in every month from October through May. An unusual aspect of the yearly temperature trend is the short period of thawing weather in January. Despite the generally low temperatures, the maximum during the month is often above freezing and the “January thaw”, generally expected by old time residents is a usual occurrence. The extreme maximum for the station is 86°F (30°C) recorded in July 1968 and 1977 while the extreme minimum is -54° F (-47.7°C) recorded in January 1989.

(695)

Precipitation reaches its maximum during the late summer months and drops to a minimum in April and May. For a locality with better than 200 days a year with precipitation, average annual precipitation at Nome is light at only 15.8 inches (401.3 mm). Precipitation extremes have ranged from 24.25 inches (616 mm) in 1950 to 7.42 inches (188.5 mm) in 1962. Snow has fallen as early as August, but usually does not accumulate on the ground until the first part of November. Every month has recorded snowfall except July. The accumulated depth increases during November, December, and January, reaching a maximum depth usually in late February or early March. The snow cover decreases rapidly in April and May, and normally disappears by the middle of June. The average annual snowfall is nearly 59 inches (1499 m) with extremes of 102 inches (2591 mm) and 18.6 inches (472.4 mm).

(696)

Average wind speeds for each month are not excessive, ranging from around 9 to 10 knots. Severe windstorms do occur with winds over 61 knots recorded several times. Velocities exceeding 61 knots have been recorded during all months from October through March. The strongest gust recorded at Nome was 62 knots in December 1977. These strong winds during the winter when there is snow cover produce blowing snow conditions that severely hinder transportation in the area.

(697)

(See Appendix B for **Nome Climatological table**.)

(698)

Navigation is difficult because of the ice from early December to early June and is usually suspended from late December to mid-May.

(699)

The National Weather Service maintains a weather station at the Nome Airport and monitors VHF-FM channel 16 and 2182 kHz.

(700)

Quarantine

(701)

Quarantine is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) A hospital is in Nome.

(702)

Wharves

(703) There are three open cell sheet-pile docks on the causeway in the outer harbor—City Dock (south), Middle Dock and West Gold Dock (north). The City Dock can accommodate vessels up to 425 feet in length, 230 feet for Middle Dock and 250 feet for West Gold Dock. The City Dock is primarily used to moor tank vessels that conduct bulk oil transfers, cruise ships and container barges. Middle Dock and West Gold Dock are normally used to moor barges exporting gravel, handling heavy equipment, loading and offloading containers. The Middle Dock is equipped with a Ro/Ro ramp. Larger vessels may moor at Middle and West Gold Docks when no vessels or smaller vessels are moored at adjacent docks. The reported alongside depth at these three docks is 22 feet. Prior clearance for mooring must be obtained from the Harbormaster on VHF-FM channels 12 and 16. A mooring request form is available on the port's web site.

(704) Restrictions on the size and maneuverability of vessels that can enter and moor in the port outlined in the port tariff are summarized as follows: No self propelled vessel over 420 feet in length shall enter the port; all self propelled vessels over 200 feet in length shall have twin screw and/or an operational bow thruster; and no vessels moored or requiring moorage in the outer harbor shall depart or enter when sustained winds at the breakwater are 25 knots or greater.

(705) Exceptions to the above operating restrictions may be allowed when the pilot and/or the vessel operator, upon consultation with the Harbormaster, determine safe transit and moorage can be assured through tug assistance or the vessel's maneuverability being enhanced by other factors. In no case shall vessels over 450 feet be offered moorage or be allowed to enter the port.

(706)

Supplies

(707) Water and some provisions can be obtained. Diesel oil is not available in large quantities.

(708)

Communications

(709) Nome maintains radiotelephone and radiotelegraph communications with other parts of Alaska and the world. Air service for passengers, mail, and freight is available the year round. Steamship service is available during the summer. From Nome, roads extend to Council, Teller, and to the Kobuk River south of Taylor.

(710)

Chart 16200

(711) **Sledge Island**, 31 miles west of Cape Nome and 4.5 miles offshore, is a rocky flat-topped island except near the south extremity where the highest point, a 760-foot jagged mountain, exists. Ruins of abandoned habitations are on the sandspit on the north end of the island and along the beach about midway of the east side. These are

probably ruins of the former village of **Aziak**. Except for the sandspit, the shores of the island are rocky and steep.

(712) **Sledge Island Light** (64°29'46"N., 166°11'56"W.), 32 feet above the water, is seasonally shown from a skeleton tower with a red and white diamond-shaped daymark on the north point of the island. The island may be safely approached from any direction except the east where a depth of 3 fathoms is 1 mile east of the light. Small vessels seeking shelter close in on the north side are cautioned to stay clear of the submerged bar making off northwest from the spit. It was reported that the cove just west of the spit provides a good anchorage. A depth of 6½ fathoms is about 3.7 miles offshore and about 7.5 miles east of Sledge Island. The passage between Sledge Island and the mainland has irregular bottom but has depths of 5 fathoms or more. Tide rips have been observed in the passage and on the east side of the island during heavy weather.

(713) With heavy south winds, vessels at anchor in the Nome roadstead usually seek shelter behind Sledge Island. Ice is reported to hang on longer in this area than to the east toward Nome.

(714)

Currents

(715) Current observations were made in the passage between Sledge Island and the mainland for a period of 6 days in 1950. The tidal current is diurnal with average velocity at strength of northwest current of 1 knot and average velocity at strength of southeast current of 0.5 knot. Maximum velocity observed during the period of the observations was about 1.5 knots setting northwest. (See Tidal Current Tables for predictions.) Vessels when in this vicinity should give special attention to the currents. Above Cape Rodney there is no perceptible current south or east; the general set is north and west.

(716) From **Cape Rodney** to **Cape Douglas**, the shore is a low sand beach, and the high land is farther inland from the beach than east of Cape Rodney. This coast is seldom approached close-to; the water is comparatively shallow and dangerous, shoals and ledges are found between Cape Douglas and Point Spencer.

(717) Vessels are cautioned to exercise care when approaching the shore south of Cape Rodney and to give the shore off Cape Douglas a berth of at least 15 miles; an irregular bottom with depths of 6 fathoms has been found by reconnaissance lines off this cape with indications of lesser depths inshore. From a point about 8 miles northeast of Cape Douglas the area to the north, covering the approaches to Port Clarence, has been surveyed.

(718) **Cape Rodney Light** (64°38'35"N., 166°23'47"W.), 24 feet above the water, is shown seasonally from a skeleton tower with a red and white diamond-shaped daymark on the point.

(719) **King Island**, 1,196 feet high, is about 34 miles west of Cape Douglas. It is triangular in shape, about 1.5 miles long and about 1.2 miles wide, rugged and rocky, and

has nearly perpendicular cliffs, deep water, and generally rocky bottom on all sides. **Ukivok** is a native village on the south side, the houses being built in the sides of the cliffs some distance above the water. Off the village, but close inshore, vessels may anchor in about 15 fathoms, muddy bottom, with good protection from northwest winds. In clear weather the island is an excellent landfall for vessels coming from south and bound to Port Clarence.

(720) **Cape York** (65°25.0'N., 167°30.0'W.), is a high, rocky, nearly vertical cliff, with numerous ravines and a range of high rugged mountains immediately back of it. The cliff is about 10 to 12 miles in extent. There is no distinct promontory, and no exact point along the cliff that can be defined as the cape.

(721) The area from Cape York to Port Clarence has been surveyed with no depth less than 6 fathoms being found 1.5 miles from the shore. The general depths fall off to a submarine valley about 2 miles offshore, extending east, with depths of not less than 10 fathoms, to within 6 miles of the entrance to Port Clarence. A rock is reported about 0.8 mile from the shore southeast of **York** village.

(722) Between Cape York and the high land of Cape Prince of Wales is a bight, with comparatively low rolling land back of it, that extends across the peninsula to the north shore. The beach is low, and the water shoals gradually when approaching the shore. The east part of the bight is slightly shoaler than the west part; about 6 fathoms will be found 1 mile offshore; in the west part of the bight 8 fathoms will be found at the same distance from the beach. When standing W alongshore, and when abreast of Cape Mountain, the water deepens suddenly to 20 fathoms.

(723)

Chart 16204

(724) **Port Clarence**, a large bay indenting the Seward Peninsula about 35 miles southeast of Cape Prince of Wales, provides the only good harbor close to the Bering Strait. The bay is formed by a low sandspit which extends from the mainland in a north direction for about 10 miles to **Point Spencer**. The highest elevation on the spit is a round knoll near the south end, 24 feet above sea level. This knoll is inconspicuous except at close range. An airstrip is on the northern end of the spit.

(725) **Point Spencer Light** (65°16'38"N., 166°50'56"W.), 22 feet above the water, is shown seasonally from a skeleton tower with a red and white diamond-shaped daymark on the north end of the point at the entrance to Port Clarence. The light is the only conspicuous landmark to aid the navigator in making the entrance into Port Clarence.

(726) The channel between Point Spencer and **Point Jackson** is 4 miles wide and free of dangers, with depths of 7 to 8 fathoms. The north half of the bay has a general depth of 7 fathoms as close as 1 mile from shore with depths shoaling gradually to the beach. The south half of

the bay shoals gradually to the bars and flats along the low shoreline at the south end. Along the west side of the bay the sandspit may be approached fairly close except for the shoal 2 miles south of Point Spencer which makes into the bay from the spit with depths of 2 fathoms, 1 mile off. To the east the water shoals to the entrance to **Grantley Harbor**, which is connected with Port Clarence by a narrow channel marked by a seasonal daybeacon and light. **Grantley Harbor Light** (65°16'37"N., 166°20'52"W.), 15 feet above the water, is shown from a skeleton tower with a green and white diamond-shaped daymark on the north side of the entrance to the harbor. The channel is subject to continual change; local knowledge is advised. The current is strong with many eddies and tide rips.

(727)

Anchorage

(728) Anchorage with good holding ground is available anywhere in Port Clarence with the best holding ground on the eastern side. Being very careful in the entrance, shallow-draft vessels will find greater protection in Grantley Harbor.

(729)

Routes

(730) In approaching Port Clarence from the south in fog or misty weather, the low sand and shingle spit forming the west side of Port Clarence is not visible until close-to. The best procedure is to make a landfall on King Island from the east keeping in depths greater than 10 fathoms to avoid the foul ground north from Cape Rodney. From King Island a course may be set a little east of Cape York to within 3 miles of the coast, thence on course **096°** through the entrance into Port Clarence, where good anchorage may be obtained.

(731)

Tides

(732) The diurnal range of the tide at Port Clarence is subject to radical changes due to meteorological conditions. Moderate to strong south or southwest winds of several days' duration will raise the height of the tide in the area without appreciably increasing the range. This is actually a datum change and is appreciable along the entire south coast of the Seward Peninsula. It is reported that continued strong north winds produce a lowered datum, but to a lesser extent.

(733)

Currents

(734) Along the outside coast west of Point Spencer and south of Cape York there is a general west set of 1 to 2 knots. This velocity is appreciably affected by direction, force, and duration of the wind.

(735) Current observations in the entrance to Port Clarence indicate that the velocity seldom exceeds 0.5 knot 2 to 3 miles north of Point Spencer. One mile east of the point, velocities up to 1 knot were observed, the larger velocities generally setting west or north.

(736)

Weather, Port Clarence Vicinity

(737)

The weather, in general, is better than in the Aleutian Island area, with less fog and fewer bad storms during the short summer navigation season. Fog and high winds are generally of short duration so that it is seldom that planes cannot land at Teller at least once a week. The winter weather is generally better than the summer for plane service, as there is little or no fog during cold weather.

(738)

The first surface fog appears after the spring break-up and is of an intermittent character, generally local, and forming and disappearing at intervals as short as one-half hour. As the season advances, the fog is more prevalent, of greater density and longer duration, but in general it offers no serious obstacle to surface navigation.

(739)

Brevig Mission is a small village on the north shore of Port Clarence about 9.5 miles northeast of Point Spencer. Approaches to the village are easily made from any general direction, but approach from the southwest is best. There is deep water all the way to the shore at the village, and the gravel beach makes a good landing spot to beach a skiff. The beach at Brevig Mission is steep. The water depths hold fairly consistent until within close proximity to shore. The beach is exposed to winds and weather coming from the south. In these conditions, a beach landing is difficult due to storm surge. Services available in Brevig Mission include telephone, mail, and a store. The village has a Public Safety Officer and volunteer Search and Rescue teams. Several airlines provide daily flights to Nome.

(740)

Teller, a village about 12 miles east of Point Spencer, is on the base of the south spit at the entrance to Grantley

Harbor. The village can be seen from Port Clarence, however, most small vessels and skiffs beach or tie-off to shore on the Grantley Harbor side. Enter Grantley Harbor by heading to the northeast corner of Port Clarence until the north and south spits are visible. A seasonal light is near the end of north spit, and a daybeacon is at the end of south spit. In 1994, the USCGC IRONWOOD reported the best water was in the north part of the entrance maintaining a distance of about 100 yards from the north shore. When inside Grantley Harbor, good approach to the village was made by continuing east for another 500 yards then turning south.

(741)

There are no piers, wharves, or docks along the shore at Teller. The village has a Public Safety Officer and volunteer Search and Rescue teams. Services available at Teller include telephone, fuel, mail, and a store. The village has airline service which offer daily flights to Nome. In addition, the village has a road that connects with Nome, but is only passable during the summer months.

(742)

Imuruk Basin (see chart 16200) is a shallow body of water southeast of Grantley Harbor; the two are connected by narrow, difficult **Tuksuk Channel**.

(743)

Kuzitrin River rises in the Seward Peninsula and flows in a west direction about 75 miles to Imuruk Basin. The anchorage for oceangoing vessels is in Port Clarence, the head of navigation for powerboats and other vessels up to 12 feet in draft in the mouth of Kuzitrin River. Shallow-draft lighters can navigate the Kuzitrin for about 15 miles to **Shelton**. The river is open from June to October.

