

## Rate Schedule, Terms Amended for Loran-C

Planned expansion of the Loran-C navigation system to accommodate the entire Coastal Confluence Zone of the continental United States has prompted the Coast Guard to expand the present Loran-C rate structure and amend its terminology, that agency reports. The Coastal Confluence Zone (CCZ) includes U. S. coastal waters extending to the 100-fathom curve or to fifty miles offshore, whichever is further.

Expansion of the Loran-C navigation system is planned to cover waters of the Gulf of Mexico, the west coast and Gulf of Alaska. To facilitate this planned expansion additional Loran-C rates will be required. Details on the new rate structure were published in the Federal Register of 11 February 1975.

Present and potential owners and manufacturers of Loran-C receivers are advised that most present receiver designs will not accommodate the new Loran-C rate structure; however, use of these receivers in the CCZ will not be affected by the change to the Loran-C rate structure. Existing Loran-C rates will be used to provide coverage of the CCZ; only the terminology in which they are identified will change. Any further expansion of the navigation system beyond the CCZ, such as inland, would require additional new rates which present receivers will not accommodate.

## Continuous Vessel Radio Watch is Established to Get Marine Weather Data

The Coast Guard has established a continuous radio watch on vessel voice frequencies to gather marine weather observations requested by the National Weather Service. The weather observations will supplement reports received from regular weather reporting stations and ships which may be too far from a storm center to provide accurate weather conditions in coastal waters.

The Coast Guard radio watch is also expected to augment collection of reports which may aid the Coast Guard in conducting its Automated Mutual-assistance Vessel Rescue (AMVER)

program. AMVER is a worldwide ship location reporting system operated by the Coast Guard and used primarily in search and rescue and other emergency type situations.

Coast Guard communication stations participating in the radio guard are in Washington, D.C., New Orleans, La., San Francisco, Calif., Kodiak, Alaska, and Honolulu, Hawaii. The Coast Guard communication station in Boston, Mass., may be added later if ships respond to the program. The appropriate carrier and assigned frequencies for ship and coast stations are as follows:

Guard period	Ship stations		Coast stations	
	Carrier freq (kHz)	Assigned freq (kHz)	Carrier freq (kHz)	Assigned freq (kHz)
24-hr	4094.8	4096.2	4393.4	4394.8
24-hr	6207.2	6208.6	6521.8	6523.2
24-hr	8226.8	8228.2	8760.8	8762.2
Upon request	12365.0	12366.4	13144.0	13145.4
Upon request	16495.0	16496.4	17290.0	17291.4
Kodiak/NOJ				
24-hr	6207.2	6208.6	6521.8	6523.2

Anyone interested in participating in the weather observations reporting part of the program should contact the Office of Technical Services (W52), National Weather Service, 8060 13th Street, Silver Spring, MD 20910. Information on participating in the AMVER phase of the program can be obtained by writing to the AMVER Center, Atlantic Area Coast Guard, Governors Island, New York, NY 10004. Technical questions on the program should be directed to the Commandant (G-OTM/74), U.S. Coast Guard, 400 7th Street, S.W., Washington, DC 20590.

## Stocked Cohos Bolster Alaska Salmon Fishery

Stocked silver salmon returning to Alaska's Resurrection Bay last summer contributed 5,660 fish, or over 30 percent of the bay's total sport harvest of 18,600 silver salmon, the Department of Fish and Game reports. The fish resulted from fingerling plants made in rehabilitated Bear Lake in 1972 and smolts stocked in Seward Lagoon during 1973 by the sport fish division of the Department of Fish and Game.

The majority of the marked silver salmon which escaped through the Resurrection Bay sport fishery returned to spawn in Bear Creek from late August to mid-November. Of the 2,600 fish which escaped, more than 1,600 were passed above Bear Creek weir for natural spawning in Bear Lake inlet tributaries. The remaining 1,000 silvers were retained at the Bear Creek holding facility and were artificially spawned.

Ted McHenry, department research biologist, noted that the bulk of the department's Southcentral Alaska silver salmon egg requirements were obtained from the Bear Lake return. Approximately 2.7 million eggs were taken from 660 silver salmon, then incubated and reared to fingerling stage at the Fire Lake hatchery at Eagle River.

Several hundred thousand of these fingerlings will be restocked in Bear Lake this summer to augment natural silver salmon production for the rapidly expanding Resurrection Bay sport fishery. The remainder of the eggs will be utilized at gravel incubation sites and for freshwater smolt rearing and stocking in Southcentral Alaska lakes.

## CG Issues Marine Sanitation Rules

The Coast Guard has issued regulations governing the design, construction, testing, certification, and manufacture of marine sanitation devices for vessels. The regulations, which apply to vessel owners and marine sanitation device manufacturers, were published in the 30 January 1975 issue of the Federal Register.

On 30 January 1977 the regulations will go into effect for "new" vessels. "New" vessels are classified as any vessel the construction of which began after 30 January 1975. For "existing" vessels, those the construction of which began before 30 January 1975, the new regulations will become effective 5 years thereafter.

The regulations are consistent with water quality standards published by the Environmental Protection Agency (EPA) pursuant to the Federal Water Pollution Control Act. However, it was recommended by a joint Coast Guard/EPA working group that the EPA's "no-discharge" standard be revised to permit the installation on new

and existing vessels, of certified "flow-through" devices, which provide adequate treatment of sewage. The Coast Guard/EPA working group was formed to reassess the "no-discharge" standards after a review of more than 150 comments concerning the standards

from the boating public.

Based on the probable revision of the "no-discharge" standard during the next 12 months, the Coast Guard regulations contain a waiver to permit certified "flow-through" devices to be installed on "new" vessels for one year,

thereby effectively treating a "new" vessel constructed during this 1-year period as an "existing" vessel. The new regulations will also permit the recognition of marine sanitation device testing facilities which will certify marine sanitation devices for the boating public.

#### Publications

### Recent NMFS Scientific Publications

Data Report 91. Owen, R. W., Jr., and C. K. Sanchez. "**Phytoplankton Pigment and Production Measurements in the California Current Region, 1969-72.**" November 1974. 185 p. on 3 microfiche. For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

#### ABSTRACT

Phytoplankton production, standing stocks, and some relevant environmental characteristics were for the first time systematically measured in the California Current system during the period from 1969 through 1972. This work describes the systems and methods of measurement, and presents the data obtained.

Data Report 92. Misitano, David A. "**Zooplankton, water temperature, and salinities in the Columbia River estuary, December 1971 through December 1972.**" August 1974. 31 p. on one microfiche. For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

#### ABSTRACT

Sampling was conducted at seven stations in the Columbia River estuary throughout 1972 to provide baseline information on species diversity, relative abundance, and seasonal occurrence of zooplankton, as well as ambient water temperatures and salinities.

Data Report 95. McNulty, J. Kneeland, William N. Lindall, Jr., and Ernest A. Anthony. "**Data of the Biology Phase, Florida portion, Cooperative Gulf of Mexico Estuarine Inventory.**" Sep-

tember 1974. 229 p. on 4 microfiche. For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

#### ABSTRACT

Data of the Florida portion of the Biology Phase of the Cooperative Gulf of Mexico Estuarine Inventory are recorded. They consist of the catches made by seine, trawl, and plankton net at Chokoloskee in the Ten Thousand Islands, Bokeelia in Charlotte Harbor, Maximo Point in Tampa Bay, Atsena Otie Key near Cedar Key, and at the mouth of the St. Marks River. Monthly samples were taken from April 1968 through March 1969. Water temperature and salinity at the times of sampling are recorded.

Data Report 96. Hughes, Steven E. "**Groundfish and Crab Resources in the Gulf of Alaska—Based on International Pacific Halibut Commission Trawl Surveys, May 1961-March 1963.**" October 1974. 87 p. on 2 microfiche. For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

#### ABSTRACT

Results of a trawl survey of groundfish and crab resources occurring between Cape Spencer and Unimak Island, Alaska, are presented. The survey was conducted by the International Pacific Halibut Commission during 1961-63; catch records from 1,272 stations were recently analyzed and prepared by the Northwest Fisheries Center. Information presented shows seasonal patterns of geographic and depth distribution, in addition to relative

abundance of all major species occurring in the Gulf of Alaska. For each group (flatfish, roundfish, rockfish, elasmobranchs, and crab) and major species, a brief narrative of results is accompanied by figures showing percentage and catch rate information by area-season-depth categories. In addition, 40 charts show detailed seasonal information on eight major groundfish as well as king and Tanner crabs.

Data Report 97. Pullen, Edward J., and Lee Trent. "**Hydrographic Observations from a Natural Marsh and a Marsh Altered by Dredging, Bulkheading, and Filling in West Bay, Texas.**" October 1974. 15 p. on 1 microfiche. For sale by U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22131.

#### ABSTRACT

Hydrographic data were collected from a natural marsh and a marsh altered by dredging, bulkheading, and filling in West Bay, Texas. Water samples were taken at 2-wk intervals during the day and night at 10 stations from 25 March to 21 October 1969. This report contains the location, depth, date, and time the samples were taken and corresponding measurements of water temperature, salinity, dissolved oxygen, dissolved organic nitrogen, nitrite, total phosphorus, inorganic phosphate-phosphorus, pH, carbon dioxide, total alkalinity, carbonate alkalinity, and turbidity.

Fishery Facts 7. Hipkins, Fred W. "**A Trapping System for Harvesting Sablefish, *Anoplopoma fimbria.***" November 1974, 20 p., 17 figures.

#### ABSTRACT

An improved method of commercial fishing for sablefish, commonly known as black cod (not related to