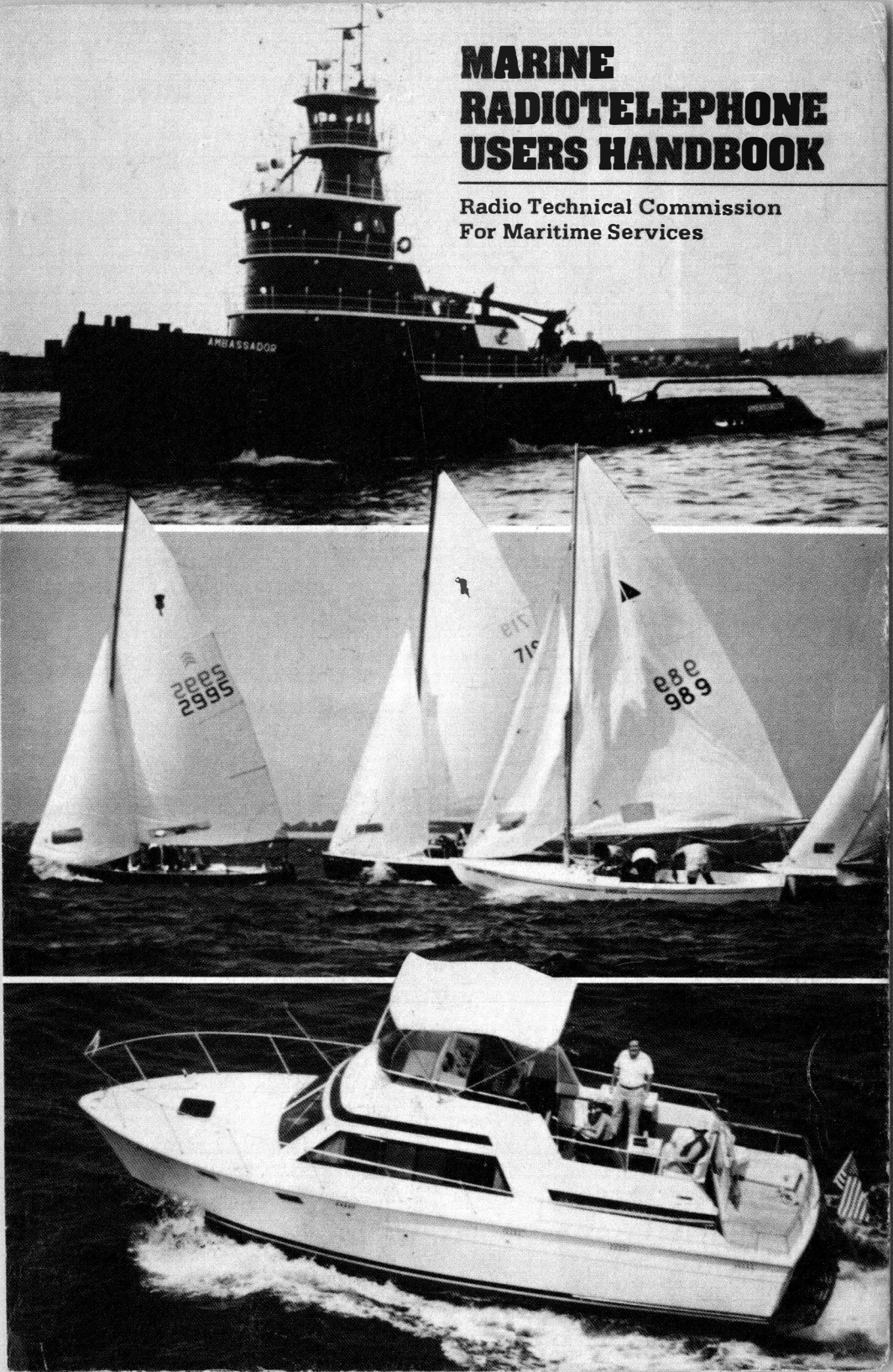


MARINE RADIOTELEPHONE USERS HANDBOOK

Radio Technical Commission
For Maritime Services

PHONETIC SPELLING ALPHABET

The spelling alphabet is to be used to identify letters when spelling out words, names, abbreviations and call signs in voice communications.

Letter to be Indentified	Identifying Word	*Spoken as:
A	Alfa	**AL** FAH
B	Bravo	**BRAH** VOH
C	Charlie	**CHAR** LEE (or **SHAR** LEE)
D	Delta	**DELL** TAH
E	Echo	**ECK** OH
F	Foxtrot	**FOKS** TROT
G	Golf	GOLF
H	Hotel	HOH **TELL**
I	India	**IN** DEE AH
J	Juliett	**JEW** LEE **ETT**
K	Kilo	**KEY** LOH
L	Lima	**LEE** MAH
M	Mike	MIKE
N	November	NO **VEM** BER
O	Oscar	**OSS** CAH
P	Papa	PAH **PAH**
Q	Quebec	KEH **BECK**
R	Romeo	**ROW** ME OH
S	Sierra	SEE **AIR** RAH
T	Tango	**TANG** GO
U	Uniform	**YOU** NEE FORM (or **OO** NEE FORM)
V	Victor	**VIK** TAH
W	Whiskey	**WISS** KEY
X	X-ray	**ECKS** RAY
Y	Yankee	**YANG** KEY
Z	Zulu	**ZOO** LOO

*The syllables to be emphasized are in **bold face** type.

0	Nadazero	NAH DAH ZAY ROH
1	Unaone	OO NAH WUN
2	Bissotwo	BEES SOH TOO
3	Terrathree	TAY RAH TREE
4	Kartefour	KAR TAY FOWER
5	Pantafive	PAN TAH FIVE
6	Soxisix	SOK SEE SIX
7	Setteseven	SAY TAY SEVEN
8	Oktoeight	OK TOH AIT
9	Novenine	NO VAY NINER
Decimal point	Decimal	DAY SEE MAL
Full stop	Stop	STOP

Marine Radiotelephone Users Handbook

An authoritative handbook prepared by the

RADIO TECHNICAL COMMISSION FOR MARITIME SERVICES

1984 edition, 1st printing

Copies may be purchased from
RADIO TECHNICAL COMMISSION FOR MARITIME SERVICES
Post Office Box 19087
Washington, D.C. 20036
(price: $7.95)

Cover photos courtesy of: U.S. Coast Guard and American Waterways Operators.

Chapter 1. General

WHO NEEDS THIS BOOK

This manual is addressed primarily to owners and operators of vessels voluntarily equipped for radiotelephone communications. If you decide to equip your boat with radiotelephone equipment, there are certain regulations of the Federal Communications Commission (FCC) that you must observe. These regulations are reflected in the text of this manual, and are set forth in Volume IV, Part 83, of the FCC Rules and Regulations. (See Chapter 10.)

Boats carrying more than six passengers for hire, as well as many other commercial craft, are required to carry radio equipment. If you operate any type of commercial vessel, consult your nearest FCC office to determine the requirements which may apply to you and your boat.

COMMUNICATIONS

With the distress, safety and calling frequencies—Channel 16 (156.8 MHz) VHF-FM and 2182 kHz—as the keystones, the marine radiotelephone system is designed to

- Provide monitored distress and safety frequencies. By designating the distress frequencies as calling frequencies, the radio regulations ensure that a maximum number of stations will be listening at any given time. *The success of this arrangement depends on the cooperation* of all users to maintain a listening watch on 2182 kHz or Channel 16 (156.8 MHz) and to keep those frequencies clear of all unnecessary communication.
- Provide frequencies for communication between your vessel and local and Federal agencies.
- Provide frequencies for the exchange of information pertaining to navigation, movement or management of vessels.
- Provide special frequencies for stations and vessels engaged in commerce.

- Provide noncommercial frequencies for the special needs of recreational boating people.
- Provide separate frequencies for vessels to communicate with shore telephones.

In addition to suggesting the most effective ways to use your marine radiotelephone, this manual also contains lists of the various available frequencies you may wish to have installed in your radio, together with the authorized use of each frequency.

Chapter 2. How To Get Ship Station and Operator Licenses

[*Station and operator license fees were suspended temporarily as of January 1, 1977.*]

Licenses are issued to ensure the safety of life and property. In order to be certain that radio transmitting equipment is used properly, the Federal Communications Commission issues radio licenses. In the case of voluntarily equipped vessels, two licenses are required: one for the equipment (the Ship Station license) and one for the operator (the Restricted Radiotelephone Operator permit). Thus for a radio transmitter to be legally used, two conditions must be satisfied. First, the radio installation must be licensed, and second, the individual transmitting with the set must either be licensed or be operating under supervision of another licensed individual. These licenses cannot be transferred from vessel to vessel or from person to person.

Obtain FCC forms for license requests from the FCC Private Radio Bureau Licensing Division in Gettysburg, Pennsylvania 17325 or from any FCC Field Office (see the list at the end of this chapter).

TEMPORARY OPERATING AUTHORITY

A temporary permit to operate your radiotelephone transmitter aboard your vessel may be used for a period of 60 days while your application for a ship station license (FCC Form 506) and Restricted Radiotelephone Operator Permit (FCC Form 753) is being processed by the Commission subject to the following conditions:

(1) Owner must first obtain the assignment of a U.S. Coast Guard Certificate of Documentation or a state Certificate of Vessel Registration, as appropriate, for the vessel before submitting a Form 506 for license.

(2) Temporary operating authority is granted for 60 days from the date the Form 506 is mailed to the FCC provided an FCC Form 506-A is completed and posted on board the vessel. Form 506-A is a part of FCC Form 506.

(3) Temporary call sign for a documented vessel will consist of the letters "KUS" followed by the six digit documentation number, for example, "KUS234567." However, new owners of previously documented vessels who intend to keep their vessel in documentation may use the radio call sign associated with the vessel documentation number.
(4) For state registered vessels, the temporary call sign will consist of the letter "K" followed by the vessel's registration number, for example, "KNY1234A."
(5) If the vessel meets legal requirements for use and does not have either a state registration or Coast Guard documentation number, the temporary call sign will consist of the name of the vessel and the name of the licensee.

SHIP STATION LICENSES

Application Procedure

Application for a ship station license, including RADAR and Emergency Position Indicating Radio Beacon (EPIRB), is made on FCC Form 506. This form may be obtained from any FCC Field Office. A list of these offices can be found at the end of this chapter. The completed and signed application is then sent to the Federal Communications Commission, P.O. Box 1040, Gettysburg, PA 17325. Application processing time is approximately 6 to 8 weeks. The regular term of a ship station license is 5 years.

The Commission realizes that some individuals may want to start operating their equipment immediately and not wait the 6 to 8 week processing time. If you have such a need, see the preceding section in this chapter titled "Temporary Operating Authority."

Changing a Ship Station License

An application for modification of the station license must be filed when any transmitting equipment is added that does not operate in a frequency band or bands authorized in the ship station license. This application should be filed on FCC Form 506.

No application for modification is required for additions and/or replacement of FCC type accepted radiotelephone transmitters that operate in the same frequency band(s) as specified in the station license.

The licensee must promptly notify the Commission when the name or the mailing address of the licensee is changed, or in the event that the vessel name is changed. This notice, which may be in letter form, should be sent to the Federal Communications Commission, P.O. Box 1040, Gettysburg, PA 17325. A copy of the letter should be posted with the station license. No application or fee is required in these cases.

Renewing a Ship Station License

An application for renewal of a ship radiotelephone station license is made on FCC Form 405-B. The FCC will ordinarily mail a copy of this form to the station licensee 120 days before the expiration date of the license. If the licensee has not received the form 30 days before the expiration of his current license, it is suggested that he file an FCC Form 506 in lieu of Form 405-B.

Applicants who file for renewal before the license expiration date may continue operating after the license expiration date until the application for renewal is acted on by the Commission.

Discontinuing Ship Station Operation

If you permanently discontinue the operation of the ship radio station, as for example, if you sell your boat, you are required to promptly return the station license to the Federal Communications Commission, Gettysburg, Pennsylvania 17325. In the event that the license is not available for this purpose, state the reason why the license is not available and request that the license be cancelled. Otherwise, any violations committed in the operation of the station may be your responsibility.

OPERATOR PERMIT

The radiotelephone transmitter in a ship station may be operated only by a person holding an operator license permit or license or by others under direct supervision of such licensed operator. The authorized operator may permit others to speak over the microphone if he starts, supervises, and ends the operation, makes the necessary log entries, and gives the necessary identification. The authorization usually held by radio operators aboard small vessels is the Restricted Radiotelephone Operator Permit. This permit is valid for operation of a ship station radiotelephone on voluntarily equipped vessels when the radio's output is not greater than 100 watts carrier power or 400 watts peak envelope power (PEP).

You may check your set's power rating by consulting the owner's manual or a qualified technician. The Restricted Radiotelephone Operator Permit is the minimum authorization required for the operation of a ship station.

Application Procedure

An application for a Restricted Radiotelephone Operator Permit is made on FCC Form 753. The completed form is sent to the Federal Communications Commission, P.O. Box 1050, Gettysburg, PA 17325. No oral or written examination is required. Applicants must be at least 14 years of age. Part III of the Form 753 may be retained as a temporary permit to operate

your radio equipment until you receive your permanent license from the Commission. The Restricted Radiotelephone Operator Permit is issued for the lifetime of the licensee.

Note: Special provision for aliens. Except for foreign governments and representatives of foreign governments, aliens may be granted ship station licenses and Restricted Radiotelephone Operator Permits. The operator permit granted to an alien is valid only for operating the ship station licensed in his name. Special forms and provisions are applicable to aliens and, therefore, an alien should contact an FCC Field Office for information before applying for his license and permit. FCC Form 755 is used by aliens to apply for a Restricted Radiotelephone Operator Permit.

Marine Radio Operator Permit

A Marine Radio Operator Permit is required of those persons who will operate a radiotelephone (voice) station:

- on a cargo ship of 300 gross tons and upward which is navigated in the open sea.
- on a vessel sailing the Great Lakes which meets any of the following:
  —over 65 feet long.
  —tows another vessel which is over 65 feet long.
  —carries more than six passengers for hire.
- on a vessel which is navigated in any tidewater or in the open sea and which transports more than six passengers for hire.
- at a coast station which uses frequencies below 30 MHz and is not located in Alaska.

Application for a Marine Radio Operator Permit is made on FCC Form 756. Consult with the FCC Field Office concerning the examination required for this permit. The Marine Radio Operator Permit is issued for a term of five years. Application for renewal must be filed during the last year of the license term, or during a one-year period of grace after the expiration date. Form 756 is also used for renewing and reapplying for a Marine Radio Operator Permit. Aliens authorized for employment within the United States can also apply for a Marine Radio Operator Permit. Information is available from FCC Field Offices.

FCC FIELD OFFICES

Private Radio Bureau Licensing Division
Gettysburg, Pennsylvania 17325
Phone: (717) 337-1212

District Offices

Anchorage District Office
James E. Sutherland, EIC
Federal Communications Commission
1011 E. Tudor Rd., Room 240
P.O. Box 102955
Anchorage, Alaska 99510
Phone: (907) 563-3899
(907) 561-1550 (Recorded Information)

Atlanta District Office
Angelo R. Ditty, Jr., EIC
Federal Communications Commission
Room 440, Massell Building
1365 Peachtree Street, NE
Atlanta, Georgia 30369
Phone: (404) 881-3084/5
(404) 881-7381 (Recorded Information)

Baltimore District Office
Robert M. Mroz, EIC
Federal Communications Commission
1017 Federal Building
31 Hopkins Plaza
Baltimore, Maryland 21201
Phone: (301) 962-2728/9
(301) 962-2727 (Recorded Information)

Boston District Office
Vincent F. Kajunski, EIC
Federal Communications Commission
1600 Customhouse
165 State Street
Boston, Massachusetts 02109
Phone: (617) 223-6609 (PS)
(617) 223-0689 (ENF & ENGR)
(617) 223-6607/8 (Recorded Information)

Buffalo District Office
David A. Viglione, EIC
Federal Communications Commission
1307 Federal Building
111 West Huron Street
FTS 437-4511
Phone: (716) 846-4511/2
(716) 856-5950 (Recorded Information)

Chicago District Office
Russell D. Monie, Jr., EIC
Federal Communications Commission
830 S. Dearborn St., Room 3940
Chicago, Illinois 60604
Phone: (312) 353-0195
(312) 353-0197 (Recorded Information)

Dallas District Office
James D. Wells, EIC
Federal Communications Commission
Earle Cabell Federal Building
U.S. Courthouse, Room 13E7
1100 Commerce Street
Dallas, Texas 75242
Phone: (214) 767-0761
(214) 767-0764 (Recorded Information)

Denver District Office
Dennis Carlton, EIC
Federal Communications Commission
12477 West Cedar Drive
Denver, Colorado 80228
Phone: (303) 234-6977
(303) 234-6979 (Recorded Information)

Detroit District Office
Irby C. Tallant, EIC
Federal Communications Commission
1054 Federal Building
231 W. LaFayette Street
Detroit, Michigan 48226
Phone: (313) 226-6078
(313) 226-6077 (Recorded Information)

Honolulu District Office
Jack Shedletsky, EIC
Federal Communications Commission
Price Kuhio Federal Building
300 Ala Moana Blvd., Room 7304
P.O. Box 50023
Honolulu, Hawaii 96850
Phone: (808) 546-5640

Houston District Office
Daniel A. Cantrell, EIC
Federal Communications Commission
New Federal Office Building
515 Rusk Avenue, Room 5636
Houston, Texas 77002
Phone: (713) 229-2748
(713) 229-2750 (Recorded Information)

Kansas City District Office
James A. Dailey, EIC
Federal Communications Commission
Brywood Office Tower—Room 320
8800 East 63rd Street
Kansas City, Missouri 64133
Phone: (816) 926-5111
(816) 356-4050 (Recorded Information)

Long Beach District Office
Lawrence D. Guy, EIC
Federal Communications Commission
Room 501, 3711 Long Beach Boulevard
Long Beach, California 90807
Phone: (213) 426-4451
(213) 426-7886 (Recorded—PS)

Miami District Office
John L. Theimer, EIC
Federal Communications Commission
Koger Building
8675 NW 53rd St. Room 203
Miami, Florida 33166
Phone: (305) 350-5542
(305) 593-0399 (Recorded Information)

New Orleans District Office
William J. Simpson, EIC
Federal Communications Commission
1009 F. Edward Hebert Federal Building
600 South Street
New Orleans, Louisiana 70130
Phone: (504) 589-2095
(504) 589-2094 (Recorded Information)

New York District Office
Alexander J. Zimny, EIC
Federal Communications Commission
201 Varick Street
New York, New York 10014
Phone: (212) 620-3437/8
(212) 620-3435 (Recorded—ENF)
(212) 620-3436 (Recorded—PS)

Norfolk District Office
J. Jerry Freeman, EIC
Federal Communications Commission
Military Circle
870 N. Military Highway
Norfolk, Virginia 23502
Phone: (804) 441-6472
(804) 461-4000 (Recorded Information)

Philadelphia District Office
Ennis C. Coleman, Jr., EIC
Federal Communications Commission
One Oxford Valley Office Building
Room 404, 2300 East Lincoln Highway
Langhorne, Pennsylvania 19047
Phone: (215) 752-1324
(215) 752-1323 (Recorded Information)

Portland District Office
George F. Wager, EIC
Federal Communications Commission
1782 Federal Building
1220 S.W. Third Avenue
Portland, Oregon 97204
Phone: (503) 221-4114
(503) 221-3097 (Recorded Information)

St. Paul District Office
Garrett G. Lysiak, EIC
Federal Communications Commission
691 Federal Bldg. & U.S. Courthouse
316 North Robert Street
St. Paul, Minnesota 55101
Phone: (612) 725-7810
(612) 725-7819 (Recorded Information)

San Diego Office
William H. Grigsby, EIC
Federal Communications Commission
7840 El Cajon Blvd.—Room 405
La Mesa, California 92041
Phone: (619) 293-5478
(619) 293-5460 (Recorded Information)

San Francisco District Office
Serge Marti-Volkoff, EIC
Federal Communications Commission
423 Customhouse
555 Battery Street
San Francisco, California 94111
Phone: (415) 556-7701/2
(415) 556-7700 (Recorded Information)

San Juan District Office
Leonard R. Langley, EIC
Federal Communications Commission
San Juan Field Office
747 Federal Building
Halo Rey, Puerto Rico 00918
Phone: (809) 753-4567
(809) 753-4008 (Recorded Information)

Seattle District Office
Gary P. Soulsby, EIC
Federal Communications Commission
3256 Federal Building
915 Second Avenue
Seattle, Washington 98174
Phone: (206) 442-7653/4
(206) 442-7610 (Recorded Information)

Tampa Office
Ralph M. Barlow, EIC
Federal Communications Commission
Interstate Building—Room 601
1211 N. Westshore Blvd.
Tampa, Florida 33607
Phone: (813) 228-2872
(813) 228-2605 (Recorded Information)

PS—public service
ENF—enforcement
ENGR—engineering

Chapter 3. VHF Radiotelephone Equipment

SELECTING A VHF RADIOTELEPHONE

Before purchasing a VHF-FM radiotelephone, you should carefully consider your requirements for a radiotelephone and select a unit that will meet these needs. You should remember that VHF communications are essentially "line of sight." The average ship-to-ship range is about 10 to 15 miles, while the normally expected ship-to-shore range is 20 to 30 miles. These figures vary depending upon transmitter power, antenna height, and terrain.

The FCC limits the transmitter power for VHF-FM to 25 watts for vessels and also requires the capability to reduce transmitter power to no more than one watt for short range communication. No matter how powerful your transmitter is, if you can't hear the other station—you can't communicate. The receiver performance of your radiotelephone is therefore an important aspect of your communication capability.

Two of the most important receiver specifications are SENSITIVITY and ADJACENT CHANNEL REJECTION. These two factors are usually a good indication of how a particular receiver will perform.

In a VHF-FM receiver, the sensitivity is usually given as the number of microvolts required to produce 20 decibels (dB) of quieting. The LOWER or SMALLER the number of microvolts for the same amount of quieting, the better the sensitivity of the receiver; for example, 0.5 microvolt is better than 2.0 microvolts. (Note: Some manufacturers specify the sensitivity at other than 20 dB quieting, so you should be sure you are comparing receivers based on the same criteria.)

The adjacent channel rejection is one of several different specifications that indicate the receiver's ability to reject unwanted signals and accept only the desired signal. It is usually given as a negative number of dB. The LARGER the absolute number of dB, the better the adjacent channel rejection of the receiver. For example, a receiver with an adjacent channel rejection of (–) 70 dB would normally perform much better than one with an adjacent channel rejection of (–) 50 dB.

Although many manufacturers do not include these figures on their data sheets, they are a highly reliable indication of the performance of a receiver; and, the prospective buyer would be well advised to contact the manufacturer to obtain this information.

FCC TYPE APPROVAL, TYPE ACCEPTANCE, AND CERTIFICATION

Before a radiotelephone transmitter can be legally used in a ship station, the FCC must recognize that it meets their specification. Such a radio will be labelled "type approved," "type accepted," or "certified" as appropriate. It is possible to have an FCC type accepted maritime mobile transmitter which is authorized for use only from coast radio stations. Any FCC Field Office can advise you whether a radio is legal for shipboard use if you furnish them with the manufacturer's name and the "FCC ID" on the transmitter.

INSTALLATION OF A VHF RADIOTELEPHONE

The licensee of a ship station may install a *pretested* VHF marine radiotelephone transmitter in his ship station. No operator license is required to perform this kind of installation. This permission does NOT authorize the ship station licensee to add or substitute channels or to make any modifications to the transmitter, with the exception that where the FCC has type accepted a transmitter in which factory sealed pretested "plug-in" modules are used for the addition or substitution of channels in the transmitter, the licensee may add or substitute channels using these "plug-in" modules. Unless the individual is experienced in working with coaxial cable, he should have a technician attach the coaxial cable plug to the antenna cable.

ADJUSTMENTS OF TRANSMITTING EQUIPMENT

All repairs and adjustments to your radio must be made by, or under the supervision of, an FCC licensed commercial operator holding a General Radiotelephone Operator License. Persons holding a valid first or second class Radiotelephone Operator License may also repair and adjust your radio. Anyone responsible for servicing and maintaining ship radar equipment must hold the Ship Radar Endorsement to the General Radiotelephone Operator License.

REQUIRED FREQUENCIES AND EQUIPMENT CHANNELIZATION

All ship radiotelephone stations in the 156 to 162 MHz band MUST be equipped to operate on:

1. Ch. 16 (156.8 MHz) . . . . . International Distress, Safety and Calling frequency for VHF.
2. Ch. 6 (156.3 MHz) . . . . . Intership Safety Channel.
3. At least one working frequency.

The marine VHF band in the United States consists of 48 channels, including three weather channels. The following table lists the frequencies available and explains the use of the various channels.

If your set is equipped with a synthesizer, you will normally be able to tune to any of the channels in the maritime mobile band. If your set is not equipped with a synthesizer, you will only be able to tune to such channels as have been previously set up in your equipment. For non-synthesized equipment, the number of channels installed in your set will depend largely on how the set will be used, where the vessel will be operated, and what coast stations are operating in your area. While fewer than twelve channels may be satisfactory for some vessels, installation of a radiotelephone with less than twelve channel capability is not recommended.

The more channels you are able to use, the better your communication capability will be. Caution must be exercised, however, in selecting and using channels in accordance with their authorized purpose.

AVAILABLE MARINE CHANNELS AND THEIR USES

Frequencies (MHz)			CHANNEL USAGE
Channel Number	Ship Transmit	Ship Receive	Intended Use
1A	156.050	156.050	PORT OPERATIONS AND COMMERCIAL. (Intership and Ship-to-Coast).
63A	156.175	156.175	Available for use within the U.S.C.G. designated Vessel Traffic Services (VTS) area of New Orleans, and the Lower Mississippi River.
5A	156.250	156.250	PORT OPERATIONS (Intership and Ship-to-Coast). Available for use within the U.S.C.G. Vessel Traffic Services radio protection areas of New Orleans and Houston.
6	156.300	156.300	INTERSHIP SAFETY. Required for all VHF-FM equipped vessels. For intership safety purposes and search and rescue (SAR) communications with ships and aircraft of the U.S. Coast Guard. Must not be used for non-safety communications.
7	156.350	160.950	INTERNATIONAL USE.
7A	156.350	156.350	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). A working channel for commercial vessels to fulfill a wide scope of business and operational needs.
8	156.400	156.400	COMMERCIAL (INTERSHIP). Same as channel 7A except limited to intership communications.

9	156.450	156.450	COMMERCIAL AND NON-COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Some examples of use are communications with commercial marinas and public docks to obtain supplies or schedule repairs and contacting commercial vessels about matters of common concern.
10	156.500	156.500	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A.
11	156.550	156.550	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A. It should be noted, however, in certain Ports channels 11, 12 and 14 are used selectively for the U.S.C.G. Vessel Traffic Service.
12	156.600	156.600	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Available to all vessels. This is a traffic advisory channel for use by agencies directing the movement of vessels in or near ports, locks, or waterways. Messages are restricted to the operational handling, movement and safety of ships and, in emergency, to the safety of persons. It should be noted, however, in certain ports 11, 12 and 14 are used selectively for the U.S.C.G. Vessel Traffic Service.
13	156.650	156.650	NAVIGATIONAL—(SHIP'S) BRIDGE TO (SHIP'S) BRIDGE. This channel is available to all vessels and is required on large passenger and commercial vessels (including many tugs). Use is limited to navigational communications such as in meeting and passing situations. Abbreviated operating procedures (call signs omitted) and 1 watt maximum power (except in certain special instances) are used on this channel for both calling and working. For recreational vessels, this channel should be used for listening to determine the intentions of large vessels. This is also the primary channel used at locks and bridges.
14	156.700	156.700	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Same as channel 12.
15	——	156.750	ENVIRONMENTAL (RECEIVE ONLY). A receive only channel used to broadcast environmental information to ships such as weather, sea conditions, time signals

			for navigation, notices to mariners, etc. Most of this information is also broadcast on the weather (WX) channels and EPIRB.
16	156.800	156.800	DISTRESS, SAFETY AND CALLING (INTERSHIP AND SHIP-TO-COAST), ALSO EPIRB's. Required channel for all VHF-FM equipped vessels. Must be monitored at all times station is in operation (except when actually communicating on another channel). This channel is monitored, also, by the Coast Guard, public coast stations and many limited coast stations. Calls to other vessels are normally initiated on this channel. Then, except in an emergency, you must switch to a working channel. For additional information, see Chapters 6 and 7.
17	156.850	156.850	STATE CONTROL. Available to all vessels to communicate with ships and coast stations operated by state or local governments. Messages are restricted to regulation and control, or rendering assistance. Use of low power (1 watt) setting is required by international treaty.
18	156.900	161.500	INTERNATIONAL USE.
18A	156.900	156.900	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A.
19	156.950	161.550	INTERNATIONAL USE.
19A	156.950	156.950	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A.
20	157.000	161.600	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Available to all vessels. This is a traffic advisory channel for use by agencies directing the movement of vessels in or near ports, locks, or waterways. Messages are restricted to the operational handling, movement and safety of ships and, in emergency, to the safety of persons.
21	157.050	156.050 (or 161.650)	INTERNATIONAL USE.
21A	157.050	157.050	U.S. GOVERNMENT ONLY
22	157.100	161.700	INTERNATIONAL USE.
22A	157.100	157.100	COAST GUARD LIAISON. This channel is used for communications with U.S. Coast Guard ship, coast and aircraft sta-

			tions after first establishing communications on channel 16. Navigational warnings and, where not available on WX channels, Marine Weather forecasts are made on this frequency. *It is strongly recommended that every VHF radiotelephone include this channel.*
23	157.150	156.150 (or 161.750)	INTERNATIONAL USE.
23A	157.150	157.150	U.S. GOVERNMENT ONLY.
24	157.200	161.800	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Available to all vessels to communicate with public coast stations. Channels 26 and 28 are the primary public correspondence channels and therefore become the first choice for the cruising vessel having limited channel capacity. Also, consult the listing of public coast stations contained in Chapter 8 for the stations operating in your boating area.
25	157.250	161.850	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
26	157.300	161.900	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
27	157.350	161.950	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
28	157.400	162.000	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
65	156.275	160.875	INTERNATIONAL USE.
65A	156.275	156.275	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Same as channel 12.
66	156.325	160.925	INTERNATIONAL USE.
66A	156.325	156.325	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Same as channel 12.
67	156.375	156.375	COMMERCIAL (INTERSHIP). Same as channel 7A except limited to intership communications. In the New Orleans U.S.C.G. Vessel Traffic Service protection area, use is limited to navigational bridge-to-bridge intership purposes.
68	156.425	156.425	NON-COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). A working channel for non-commercial vessels. May be used for obtaining supplies, scheduling repairs, berthing and accommodations,

			etc. from yacht clubs or marinas, and intership operational communications such as piloting or arranging for rendezvous with other vessels. It should be noted that channel 68 (and channel 70 for intership only) is the most popular non-commercial channel and therefore is the first choice for vessels having limited channel capacity.
69	156.475	156.475	NON-COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 68.
70	156.525	156.525	NON-COMMERCIAL (INTERSHIP). Same as channel 68, except limited to intership communications.
71	156.575	156.575	NON-COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 68.
72	156.625	156.625	NON-COMMERCIAL (INTERSHIP). Same as channel 68, except limited to intership communications.
73	156.675	156.675	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Same as channel 12.
74	156.725	156.725	PORT OPERATIONS (INTERSHIP AND SHIP-TO-COAST). Same as channel 12.
77	156.875	156.875	PORT OPERATIONS (INTERSHIP). Limited to intership communications to and from pilots concerning the docking of ships.
78	156.925	161.525	INTERNATIONAL USE.
78A	156.925	156.925	NON-COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 68.
79	156.975	161.575	INTERNATIONAL USE.
79A	156.975	156.975	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A.
80	157.025	161.625	INTERNATIONAL USE.
80A	157.025	157.025	COMMERCIAL (INTERSHIP AND SHIP-TO-COAST). Same as channel 7A.
81	157.075	161.675	INTERNATIONAL USE.
81A	157.075	157.075	U.S GOVERNMENT ONLY.
82	157.125	161.725	INTERNATIONAL USE.
82A	157.125	157.125	U.S. GOVERNMENT ONLY.
83	157.175	156.175 (or 161.775)	INTERNATIONAL USE.
83A	157.175	157.175	U.S. GOVERNMENT ONLY.

84	157.225	161.825	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
85	157.275	161.875	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
86	157.325	161.925	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
87	157.375	161.975	PUBLIC CORRESPONDENCE (SHIP-TO-COAST). Same as channel 24.
88	157.425	162.025	In the areas of the Puget Sound and of the Great Lakes except Lake Michigan and along the St. Lawrence Seaway available for use by ship stations for public correspondence. Same as Channel 24.
88A	157.425	157.425	COMMERCIAL (INTERSHIP). Except in Lakes Erie, Huron, Ontario, and Superior and along the St. Lawrence Seaway. Same as Channel 7A except limited to intership communications and between commercial fishing vessels and associated aircraft while engaged in commercial fishing.
WX1	—	162.550	WEATHER (RECEIVE ONLY). To receive weather broadcasts of the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).
WX2	—	162.400	WEATHER (RECEIVE ONLY). Same as WX1.
WX3	—	162.475	WEATHER (RECEIVE ONLY). Same as WX1.

NOTE. The addition of the letter "A" to the channel number indicates that operations on this channel in the United States are different than international operations on this channel. In the United States, stations transmit and receive on the same frequency. Internationally, stations transmit on one frequency and receive on another (different) frequency. The table above lists international use of affected frequencies.

Chapter 4. Other Transmitting Equipment That May Be Used Aboard a Boat

MEDIUM AND HIGH FREQUENCY SSB RADIOTELEPHONE EQUIPMENT

Your VHF radio is intended mainly for short range communications, generally within about twenty miles of a coast station. To communicate over distances beyond twenty miles, you will need another type of radiotelephone operating on frequencies between 2 MHz and 30 MHz. Marine radiotelephone equipment operating in this band utilizes single sideband emission (SSB), thus the radio is often referred to simply as SSB.

(Note: You may hear someone refer to "AM" equipment. AM (amplitude modulated) equipment was used prior to the advent of SSB and is no longer used in the maritime mobile service.)

SSB radiotelephones provide coverage of the 2-3 MHz "medium frequency" marine band, plus one or more of the "high frequency" marine bands. Prior to the availability of VHF, the 2-3 MHz band was used extensively for marine communication. With hundreds of thousands of radios in use, the band became so congested that safety of life at sea was endangered. Today, to help ease the crowding, an operator must attempt to make a call on the appropriate VHF channel, before using the 2-3 MHz band or higher frequencies, unless he is clearly beyond normal VHF range. To further relieve congestion, the use of the 2-3 MHz band when in harbors, ports, or lakes and rivers is PROHIBITED for intership communication. However, the 2-3 MHz band may still be used to contact a public correspondence station when beyond VHF range of that station or for distress communications.

You cannot obtain a ship station license for an SSB installation alone—you must also have a licensed VHF radiotelephone station.

Selecting a Single Sideband Radiotelephone

Most SSB radiotelephone transmitters are capable of 50 to 150 watts of power output. The selection of an SSB radiotelephone will depend largely on the range required. The maximum reliable range of the 2-3 MHz medium frequency marine band is 50 to 150 miles in the daytime. The high frequency bands, extending up to 23 MHz, can provide communications for thou-

sands of miles. The range depends on a number of factors, such as radio frequency band used, atmospheric noise, interference, radiated power, and time of day.

The most important factors are the frequency bands selected and the time of day or night when the radiotelephone is used. For example, at noon, the 4 MHz band will only operate over about 100 miles. When the sun is near the horizon, the range increases to around 300 miles. At night, 4 MHz is excellent for contacts of 600 miles or more. The 8 MHz band, on the other hand, has a noontime range of 500 miles or less, while at night the signal will travel several thousand miles. Higher frequency bands will generally cover distances up to 10,000 miles at certain times of day. Choose an SSB radio with your cruising plans in mind. If you're planning extended voyages, you will need more bands with higher frequencies. Your marine electronics dealer can assist you in recommending the equipment best suited to your communications needs.

Installation of a Single Sideband Radiotelephone

For proper operation, the SSB installation requires considerable care. Unlike VHF, SSB radiotelephones require a good ground system and must be installed by an FCC licensed technician.

SSB Channels

All ship radiotelephone stations in the 2-3 MHz band must be capable of operating on 2182 kHz, the international distress and calling frequency, and at least two other frequencies.

Many frequencies are available for both coastal (MF) and high seas (HF) ship-to-shore service. Instructions on the use of this service and a list of the 2-3 MHz stations are given in Chapter 8. Contact your local telephone company for more information on the high seas telephone service. There are also several intership frequencies available in all the MF and HF marine bands up to 23 MHz.

Several of the more popular carrier frequencies in the medium frequency band are given below, along with their authorized use:

Frequency	Use	Area
2003 kHz	Intership Safety	Great Lakes only
2082.5 kHz	Intership Safety	All areas
2142 kHz	Intership Safety	Pacific coast area south of lat. 42°N. (daytime only)
2203 kHz	Intership Safety	Gulf of Mexico only
2638 kHz	Intership Safety	All areas

2670	kHz	Intership and ship-to-coast (U.S.C.G. ship and coast stations only)	All areas
2738	kHz	Intership Safety	All areas except Great Lakes and Gulf of Mexico
2830	kHz	Intership Safety	Gulf of Mexico only

All of the frequencies listed above (except 2670 kHz) may also be used for operational and business communications, provided no interference is caused to safety communications. 2670 kHz is a Coast Guard (Government) frequency and may be used to receive Coast Guard weather and marine information broadcasts. It may also be used to communicate with Coast Guard ship and coast stations after first establishing communications on 2182 kHz.

Coast Guard Long Range Liaison

Vessels planning offshore passages where MF or VHF will not provide adequate communications should be capable of operating on one or more of the following pairs of frequencies in SSB equipment. These are continuously monitored by the United States Coast Guard as part of their Contact And Long Range Liaison (CALL) system, and are also used for High Seas voice weather broadcasts as well as emergency, essential navigation, or medical communications.

Since the Coast Guard uses the same transmitter for communications on other channels, sufficient time (a period of at least one minute) should be allowed for the Coast Guard to respond to your call before switching to an alternate channel.

YOUR TRANSMIT CARRIER	YOUR RECEIVE CARRIER
4134.3 kHz	4428.7 kHz
6200.0 kHz	6506.4 kHz
8241.5 kHz	8765.4 kHz
12342.4 kHz	13113.2 kHz (on call)
16534.4 kHz	17307.3 kHz (on call)

Up to date information on high seas navigational conditions and the location and path of tropical storms will be found on these broadcasts. A competent dealer in SSB equipment usually can recommend the choice of frequencies for your planned voyage.

EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB)

The EPIRB is basically a small VHF transmitter that sends out a distinctive signal to aid search and rescue operations by indicating the position of a distress situation. At the present there are three kinds of EPIRBs. They are known as Class A, Class B, and Class C EPIRBs.

The Class A EPIRB is one which is capable of floating free of a sinking vessel and activating automatically. The Class B EPIRB must be activated manually. These EPIRBs operate on 121.5 MHz and 243 MHz, which are aeronautical emergency frequencies and are monitored by commercial, private (121.5 MHz), and military (243 MHz) aircraft. In the aviation industry, these devices are known as emergency locator transmitter (ELTs). Both the Class A and the Class B EPIRBs may be authorized for use by boats that expect to go beyond normal VHF coverage.

The Class C EPIRB operates on Channels 15 (156.75 MHz) and 16 (156.8 MHz) and it is intended for boats operating in coastal waters.

It is required that all EPIRB operations be licensed by the FCC. Use FCC Form 506 when making application.

RADIO DETECTING AND RANGING (RADAR)

RADAR is an acronym for Radio Detecting and Ranging. RADAR is used primarily to identify objects, such as land, vessels, and other objects, during inclement weather and periods of poor visibility. RADAR is also of great value as a navigational device giving the azimuth and range of objects for navigational purposes. The frequency bands are 2900-3100 MHz, 5460-5650 MHz, 9300-9500 MHz and 14.00-14.05 GHz. No operator permit or license is required to operate RADAR equipment, but a station license is required. Applications should be filed using FCC Form 506. Mail the application to the Federal Communications Commission, P.O. Box 1040, Gettysburg, PA 17325.

27 MHz CITIZENS RADIO BAND (CB)

Operations in the Citizens Band Radio Service is intended primarily to provide an individual means of conducting personal or business communications over a short range. You may operate CB equipment aboard your boat on any of the 40 channels that have been made available in the 27 MHz Class D service on a shared basis to communicate with other CB stations.

Channel 9 in the Citizens Band has been designated as an emergency channel for emergency communications involving the safety of life of individuals, protection of private property, or for rendering assistance to a

motorist. Citizens Radio Service is NOT a substitute for the marine distress system.

Selected Coast Guard shore stations monitor Citizens Band (CB) Channel 9 on a secondary, not-to-interfere basis with existing primary voice guards on VHF-FM and 2182 kHz. CB provides an alternative means of alerting the Coast Guard for boaters not equipped with VHF-FM or 2 MHz systems. Although the Coast Guard monitors CB, it should be clearly understood that it has not reduced its emphasis upon a viable national maritime communications and distress system associated with VHF-FM. The performance capabilities of the existing short range maritime communications system will continue to make it the primary system and one that will continue to be strongly recommended for safety. The Coast Guard has not instituted a CB maritime distress system.

An FCC license is not required to operate a station in the Citizens Band Radio Service; however, such a station must be operated in accordance with Subpart D of Part 95 of the FCC's rules.

Chapter 5. Special Uses for Your Radio Receiver

NATIONAL WEATHER SERVICE

NOAA Weather Radio is a service of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce. It provides continuous, around-the-clock broadcasts of the latest weather information directly from National Weather Service offices. Taped weather messages are repeated every four to six minutes and are routinely revised every two to three hours, or more frequently if needed.

The broadcasts are tailored to weather information needs of people within the receiving area. For example, stations along the sea coasts and Great Lakes provide specialized weather information for boaters, fishermen, and others engaged in marine activities, as well as general weather information.

During severe weather, National Weather Service forecasters can interrupt the routine weather broadcasts and substitute special warning messages. The forecasters can also activate specially designed warning receivers. Such receivers either sound an alarm indicating that an emergency exists, alerting the listener to tune in the weather frequency, or, when operated in a muted mode, are automatically turned on so that the warning message is heard.

NOAA Weather Radio broadcasts are received on one of seven VHF channels listed below. The frequency 162.475 MHz is used only in special cases where required to avoid co-channel interference. These channels are generally designated on marine VHF equipment as WX-1 through WX-7.

NOAA Weather Radio broadcasts can usually be heard as far as 40 miles from the antenna site, sometimes more. The effective range depends on many factors, particularly the height of the broadcasting antenna, terrain, quality of the receiver and type of receiving antenna. As a general rule, listeners close to or perhaps beyond the 40-mile range should have a good quality receiver system if they expect reliable reception. If practicable, a receiver should be tried at its place of intended use before making a final purchase.

If more information on NOAA Weather Radio is required, you may write to: National Weather Service (ATTN: W/OM15X2), National Oceanic and Atmospheric Administration, Silver Spring, Maryland 20910.

NOAA VHF WEATHER STATION LIST

WX-1: 162.550 MHz
WX-2: 162.400 MHz
WX-3: 162.475 MHz
WX-4: 162.465 MHz
WX-5: 162.450 MHz
WX-6: 162.500 MHz
WX-7: 162.525 MHz

ALABAMA

Anniston	3
Birmingham	1
Columbia	4
Demopolis	3
Dozier	1
Florence	3
Huntsville	2
Louisville	3
Mobile	1
Montgomery	2
Tuscaloosa	2

ALASKA

Anchorage	1
Cordova	1
Fairbanks	1
Homer	2
Juneau	1
Ketchikan	1
Kodiak	1
Nome	1
Petersburg	1
Seward	1
Sitka	2
Valdez	1
Wrangell	2
Yakutat	1

ARIZONA

Flagstaff	2
Phoenix	1
Tucson	2
Yuma (P)	1

ARKANSAS

Fayetteville	3
Fort Smith	2
Gurdon	3
Jonesboro	1
Little Rock	1
Mountain View	2
Star City	2
Texarkana	1

CALIFORNIA

Bakersfield (P)	1
Coachella (P)	2
Eureka	2
Fresno	2
Los Angeles	1
Merced	1
Monterey	2
Point Arena	2
Redding (P)	1
Sacramento	2
San Diego	2
San Francisco	1
San Luis Obispo (P)	1
Santa Barbara	2

COLORADO

Alamosa (P)	3
Colorado Springs	2
Denver	1
Grand Junction	3
Greeley	2
Longmont	1
Pueblo	2
Sterling	2

CONNECTICUT

Hartford	3
Meriden	2
New London	1

DELAWARE

Lewes	1

DISTRICT OF COLUMBIA

Washington, D.C.	1

FLORIDA

Clewiston	2
Daytona Beach	2
Fort Myers	3
Gainesville	3
Jacksonville	1
Key West	2
Melbourne	1
Miami	1
Orlando	3
Panama City	1
Pensacola	2
Tallahassee	2
Tampa	1
West Palm Beach	3

GEORGIA

Athens	2
Atlanta	1
Augusta	1
Baxley	7
Chatsworth	2
Columbus	2
Macon	3
Pelham	1
Savannah	2
Valdosta	6
Waycross	3

HAWAII

Hilo	1
Honolulu	1
Kokee	2
Mt. Haleakala	2
Waimanalo (R)	2

IDAHO

Boise	1
Lewiston (P)	1
Pocatello	1
Twin Falls	2

ILLINOIS

Champaign	1
Chicago	1
Marion	3
Moline	1
Peoria	3
Rockford	3
Springfield	2

INDIANA

Bloomington	5
Evansville	1
Fort Wayne	1
Indianapolis	1
Lafayette	3
South Bend	2
Terre Haute	2

IOWA

Cedar Rapids	3
Des Moines	1
Dubuque (P)	2
Sioux City	3
Waterloo	1

KANSAS

Chanute	2
Colby	3
Concordia	1
Dodge City	3
Ellsworth	2
Topeka	3
Wichita	1

KENTUCKY

Ashland	1
Bowling Green	2
Covington	1
Elizabethtown (R)	2
Hazard	3
Lexington	2
Louisville	3
Mayfield	3
Pikeville (R)	2
Somerset	1

LOUISIANA

Alexandria	3
Baton Rouge	2
Buras	3
Lafayette	1
Lake Charles	2
Monroe	1
Morgan City	3
New Orleans	1
Shreveport	2

MAINE

Caribou	7
Dresdon	3
Ellsworth	2
Portland	1

MARYLAND

Baltimore	2
Hagerstown	3
Salisbury	3

MASSACHUSETTS

Boston	3
Hyannis	1
Worcester	1

MICHIGAN

Alpena	1
Detroit	1
Flint	2
Grand Rapids	1
Houghton	2
Marquette	1
Onondaga	2
Sault Sainte Marie	1
Traverse City	2

MINNESOTA

Detroit Lakes	3
Duluth	1
International Falls	1
Mankato	2
Minneapolis	1
Rochester	3
Saint Cloud (P)	3
Thief River Falls	1
Willmar (P)	2

MISSISSIPPI

Ackerman	3
Booneville	1
Bude	1
Columbia (R)	2
Gulfport	2
Hattiesburg	3
Inverness	1
Jackson	2
Meridian	1
Oxford	2

MISSOURI

Camdenton	1
Columbia	2
Hannibal	3
Hermitage	5
Joplin/Carthage	1
Kansas City	1
St. Joseph	2
St. Louis	1
Sikeston	2
Springfield	2

MONTANA

Billings	1
Butte	1
Glasgow	1
Great Falls	1
Havre (P)	2
Helena	2
Kalispell	1
Miles City	2
Missoula	2

NEBRASKA

Bassett	3
Grand Island	2
Holdrege	3
Lincoln	3
Merriman	2
Norfolk	1
North Platte	1
Omaha	2
Scottsbluff	1

NEVADA

Elko	1
Ely	2
Las Vegas	1
Reno	1
Winnemucca	2

NEW HAMPSHIRE

Concord	2

NEW JERSEY

Atlantic City	2

NEW MEXICO

Albuquerque	2

Clovis	3
Des Moines	1
Farmington	3
Hobbs	2
Las Cruces	2
Ruidoso	1
Santa Fe	1

NEW YORK

Albany	1
Binghamton	3
Buffalo	1
Elmira	1
Kingston	3
New York City	1
Riverhead	3
Rochester	2
Syracuse	1

NORTH CAROLINA

Asheville	2
Cape Hatteras	3
Charlotte	3
Fayetteville	3
New Bern	2
Raleigh/Durham	1
Rocky Mount	3
Wilmington	1
Winston-Salem	2

NORTH DAKOTA

Bismarck	2
Dickinson	2
Fargo	2
Jamestown	2
Minot	2
Petersburg	2
Williston	2

OHIO

Akron	2
Caldwell	3
Cleveland	1
Columbus	1
Dayton	3
Lima	2
Moscow	4
Sandusky	2
Toledo	1

OKLAHOMA

Clinton	3
Enid	3
Lawton	1
McAlester	3
Oklahoma City	2
Tulsa	1

OREGON

Astoria	2
Brookings	1
Coos Bay	2
Eugene	2
Klamath Falls	1
Medford	2
Newport	1
Pendleton	2
Portland	1
Roseburg	3
Salem	3

PENNSYLVANIA

Allentown	2
Clearfield	1
Erie	2
Harrisburg	1
Johnstown	2
Philadelphia	3
Pittsburgh	1
State College	3
Wilkes-Barre	1
Williamsport (P)	2

PUERTO RICO

Maricao	1
San Juan	2

RHODE ISLAND

Providence	2

SOUTH CAROLINA

Beaufort	3
Charleston	1
Columbia	2
Florence	1
Greenville	1
Myrtle Beach	2
Sumter (R)	3

SOUTH DAKOTA

Aberdeen	3
Huron	1
Pierre	2
Rapid City	1
Sioux Falls	2

TENNESSEE

Bristol	1
Chattanooga	1
Cookeville	2
Jackson	1
Knoxville	3
Memphis	3
Nashville	1
Shelbyville	3
Waverly	2

TEXAS

Abilene	2
Amarillo	1
Austin	2
Beaumont (P)	3
Big Spring	3
Brownsville	1
Bryan	1
Corpus Christi	1
Dallas	2
Del Rio	2
El Paso	1
Fort Worth	1
Galveston	1
Houston	2
Laredo	3
Lufkin	1
Lubbock	2
Midland	2
Paris	1
Pharr	2
San Angelo	1
San Antonio	1
Sherman	3
Tyler	3
Victoria	2
Waco	3
Wichita Falls	3

UTAH

Cedar City	2
Logan	2
Salt Lake City	1
Vernal	2

VERMONT

Burlington	2
Marlboro	4
Windsor	3

VIRGINIA

Heathsville	2

Lynchburg	2
Norfolk	1
Richmond	3
Roanoke	3
WASHINGTON	
Neah Bay	1
Olympia	3
Seattle	1
Spokane	2
Wenatchee	3
Yakima	1
WEST VIRGINIA	
Beckley	6
Charleston	2
Clarksburg	1
Gilbert	7
Hinton	4
Romney	7
Spencer	6
Sutton	5
WISCONSIN	
Green Bay	1
La Crosse (P)	1
Madison	1
Menomonie	2
Milwaukee	2
Wausau	3
WYOMING	
Casper	1
Cheyenne	3
Lander	3
Sheridan (P)	3

Notes:

1. Stations marked (R) are low powered experimental repeater stations serving a very limited local area.
2. Stations marked (P) operate less than 24 hours/day; however, hours are extended when possible during severe weather.
3. Occasionally the frequency of an existing or planned station must be changed because of unexpected radio frequency interference with adjacent NOAA Weather Radio stations and/or with other government or commercial operators within the area.
4. The list of operating stations is updated periodically. For a current list please write:

NOAA
National Weather Service
8060 13th Street
Silver Spring, MD 20910
Attn: W/OM15X2

LORAN-C

Loran-C is a system of radio navigation which can fix your vessel's position to within 1000 feet. A Loran-C set measures the time interval between signals from two different Loran-C shore stations, and uses the time difference to locate its position.

RADIO DIRECTION-FINDER

A radio direction finder can help you locate your position by pointing to the source of any radio signal within range. If the source is shown on the chart of the area, the ship's position can be determined. Many navigational radiobeacons have been set up to help vessels avoid navigational hazards; lists of these can be found in the Coast Guard's *Light Lists,* available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Chapter 6. Operating Procedures
(Other than Distress, Urgency and Safety)

MAINTAIN A WATCH

Whenever your marine radio is turned on, and not actually in use on another frequency, keep the receiver tuned to the appropriate distress and calling frequency, 156.8 or 2182 kHz. This listening watch must be maintained at all times the station is in operation and you are not actually communicating. The Coast Guard maintains a silent period on 2182 kHz for three minutes immediately after the hour and for three minutes immediately after the half hour. During these silent periods only messages or transmissions concerning distress or urgency are made.

Since this watch is required for safety and to facilitate communications by providing a common calling channel, it is not permissible for one vessel in a fleet of vessels traveling together to maintain this watch while the other vessels guard another channel, such as a common intership channel. You may maintain a watch on a working channel, however, and may establish communications directly on that channel provided you simultaneously maintain your watch on the distress and calling channel.

CHOOSE THE CORRECT CHANNEL OR FREQUENCY

Each of the marine frequencies or channels is authorized for a specific type of communication. It is therefore required that you choose the correct one for the type of communications you wish to engage in. For example, certain frequencies are set aside exclusively for intership use and may not be used for ship to coast communications. Frequencies are further classified according to the subject matter or content of the communications. For example, COMMERCIAL communications are limited to commercial operations and may be used only to discuss matters pertaining to the commercial enterprise the vessel is engaged in.

The authorized use of each of the VHF channels and the majority of the MF frequencies is given in Chapter 3. For recreational boats, most of the communications will be limited to what is known as NON-COMMERCIAL (OPERATIONAL in the MF band) communications and PUBLIC CORRESPONDENCE.

PUBLIC CORRESPONDENCE

By using the channels set aside for Public Correspondence and establishing communications through the facilities of the public coast stations, you are able to make and receive calls from any telephone on shore. You do not have to limit your messages to ship's business on these channels. For additional information, see Chapter 8. Except for distress calls, public coast stations will charge for this service.

NON-COMMERCIAL OR OPERATIONAL

These channels have been set aside to fulfill the wide scope of needs of the recreational (non-commercial) vessel. Frequencies are available for both intership and ship to shore (with limited coast stations) communications. Permissible communications on these channels are those concerning the movement of vessels, obtaining supplies and service and, in general, anything else that pertains to the needs and normal operation of the vessel. "CHIT-CHAT" is NOT permitted.

COAST GUARD

The government frequencies Channel 22A (157.1 MHz) and 2670 kHz are widely used by recreational boating operators for communicating with U.S. Coast Guard shore stations and ship stations, and with USCG Auxiliary vessels when these vessels are operating under orders. When using these channels, you must first establish communications on the appropriate calling frequency (Channel 16 or 2182 kHz).

MAKING THE CALL (General Operating Procedures)

Calling Intership

Turn your radiotelephone on and listen on the appropriate distress and calling frequency, Channel 16 or 2182 kHz, to make sure it is not being used. If it is clear, put your transmitter on the air. This is usually done by depressing the "push to talk" button on the microphone. (To hear a reply, you must release this button.)

Speak directly into the microphone in a normal tone of voice. Speak clearly and distinctly. Call the vessel with which you wish to communicate by using its name; then identify your vessel with its name and FCC assigned call sign. Do not add unnecessary words and phrases as "COME IN BOB" or "DO YOU READ ME." Limit the use of phonetics to poor transmission conditions.

This preliminary call must not exceed 30 seconds. If contact is not made,

wait at least 2 minutes before repeating the call. After this time interval, make the call in the same manner. This procedure may be repeated no more than three times. If contact is not made during this period, you must wait at least 15 minutes before making your next attempt.

Once contact is established on Channel 16 or 2182 kHz, you must switch to an appropriate working frequency for further communication. You may only use Channel 16 and 2182 kHz for calling and in emergency situations.

Since switching to a working frequency is required to carry out the actual communications, it is often helpful to monitor the working frequency you wish to use, briefly, before initiating the call on Channel 16 or 2182 kHz. This will help prevent you from interrupting other users of the channel.

All communications should be kept as brief as possible and at the end of the communications each vessel is required to give its call sign, after which, both vessels switch back to the distress and calling channel in order to reestablish the watch.

Two examples of acceptable forms for establishing communication with another vessel follow:

EXAMPLE 1

Vessel	Voice Transmission
BLUE DUCK (on Channel 16)	"MARY JANE—THIS IS—BLUE DUCK—WA 1234" (The name of the vessel being called may be said two or three times if conditions demand.)
MARY JANE (on Channel 16)	"BLUE DUCK—THIS IS—MARY JANE—WA 5678—REPLY 68" or some other proper working channel)
BLUE DUCK (on Channel 16)	"68" or "ROGER" (If unable to reply on the channel selected, an appropriate alternate should be selected.)
BLUE DUCK (on working channel)	"BLUE DUCK"
MARY JANE (on working channel)	"MARY JANE"
BLUE DUCK (on working channel)	(Continue with message and terminate communication within 3 minutes. At the end of the communication, each vessel gives its call sign.)

EXAMPLE 2—A short form most useful when both parties are familiar with it.

BLUE DUCK (on Channel 16)	"MARY JANE—BLUE DUCK—WA 1234—REPLY 68"
MARY JANE (on Channel 68)	"MARY JANE—WA 5678"
BLUE DUCK (on Channel 68)	"BLUE DUCK" (Continues message and terminates communications as indicated in EXAMPLE 1.)

Calling Ship to Coast (Other than U.S. Coast Guard)

The procedures for calling coast stations are similar to those used in making intership calls with the exception that you normally initiate the call on the assigned working frequency of the coast station.

ROUTINE RADIO CHECK

Radio checks may be initiated on Channel 16 (156.8 MHz) but should be completed by immediately shifting to a working channel.

Listen to make sure that the Distress and Calling frequency is not busy. If it is free, put your transmitter on the air and call a specific station or vessel and include the phrase "request a radio check" in your initial call. For example, "MARY JANE—THIS IS BLUE DUCK—WA 1234—REQUEST RADIO CHECK CHANNEL _____ (names working channel)—OVER." After the reply by Mary Jane, Blue Duck would then say "HOW DO YOU HEAR ME?—OVER." The proper response by Mary Jane, depending on the respective conditions, would be:

"I HEAR YOU LOUD AND CLEAR," or
"I HEAR YOU WEAK BUT CLEAR," or
"YOU ARE LOUD BUT DISTORTED," etc.

It is not permitted to call a Coast Guard Station on 2182 kHz for a radio check. This prohibition does not apply to tests conducted during investigations by FCC representatives or when qualified radio technicians are installing equipment or correcting deficiencies in the station radiotelephone equipment.

SECRECY OF COMMUNICATIONS

The Communications Act prohibits divulging interstate or foreign communications transmitted, received, or intercepted by wire or radio to anyone other than the addressee or his agent or attorney, or to persons necessarily involved in the handling of the communications, unless the sender authorizes the divulgence of the contents of the communication. Persons intercepting such communications or becoming acquainted with

them are also prohibited from divulging the contents or using the contents for the benefit of themselves or others.

Obviously, this requirement of secrecy does not apply to radio communications relating to ships in distress, nor to radio communications transmitted by amateurs or broadcasts by others for use of the general public. It does apply, however, to all other communications. These statutory secrecy provisions cover messages addressed to a specific ship station or coast station or to a person via such station.

OBSCENITY, INDECENCY, AND PROFANITY

When two or more ship stations are communicating with each other, they are talking over an extensive party line. Users should always bear this fact in mind and assume that many persons are listening. All users therefore have a compelling moral obligation to avoid offensive remarks. They also have a strict legal obligation inasmuch as it is a criminal offense for any person to transmit communications containing obscene, indecent, or profane words, language, or meaning. Whoever utters any obscene, indecent, or profane language by means of radio communication may be fined not more than $10,000 or imprisoned not more than 2 years, or both.

PROCEDURE WORDS

One way of cutting down the length of radio transmissions without loss of meaning is by the use of Procedure Words. These are individual words and short phrases which express complex thoughts in abbreviated form. They are employed in transmitting situations which frequently recur—the most obvious example, perhaps, is the word "OUT," which (when spoken at the end of a message) signifies: "THIS IS THE END OF MY TRANSMISSION TO YOU AND NO ANSWER IS REQUIRED OR EXPECTED."

Procedure words can only be successful in shortening message sending when (1) their meaning is fully understood by sender and listener and (2) they are properly used. The phrase over and out, for instance, is improper, since the two terms are contradictory.

Following is a list of procedure words and their meanings. It will take time for the novice operator to become used to this form of verbal shorthand, but effort spent in learning these few phrases will be repaid in clearer, shorter messages.

PROCEDURE WORD	MEANING
AFFIRMATIVE	You are correct, or what you have transmitted is correct.
BREAK	I separate the text from other portions of the message; or one message from one immediately following.
FIGURES	Figures or numbers follow. (Used when numbers occur in the middle of a message: "Vessel length is figures two two three feet.")
I SPELL	I shall spell the next word phonetically. (Note: Often used where a proper name or unusual word is important to a message: "Boat name is *Martha*. I spell—Mike; Alfa; Romeo; Tango; Hotel; Alfa." See phonetic alphabet inside front cover.)
NEGATIVE	No.
OUT	This is the end of my transmission to you and no answer is required or expected.
OVER	This is the end of my transmission to you and a response is necessary. Go ahead and transmit. (Note: Observe the considerable difference between "Over," used during a message exchange, and "Out," employed at the end of an exchange. "Over" should be omitted when the context of a transmission makes it clear that it is unnecessary.)
ROGER	I have received your last transmission satisfactorily.
SILENCE (said three times)	Cease all transmissions immediately. Silence will be maintained until lifted. (Note: Used to clear routine business from a channel when an emergency is in progress. In this meaning *Silence* is correctly pronounced SEE LONSS.)
SILENCE FINI	Silence is lifted. (Note: Signifies the end of the emergency and the resumption of normal traffic. Correctly pronounced SEE LONSS FEE NEE.)
THIS IS	This transmission is from the station whose name or call sign immediately follows. (Note: Normally used at the beginning of a transmission: "BLUE DUCK—THIS IS—GIMLET—WZE 3488." Sometimes omitted in transmissions between experienced operators familiar with each other's boat names.)
WAIT	I must pause a few seconds; stand by for further transmission. (Note: This is normally used when a message must be interrupted by the sender. If, for instance, one station is asked for information not instantly available, its operator might send "WAIT" while looking up the required data. In addition, WAIT may also be used to suspend the transmission of an on-the-air test. If a station announces its intention of making such a test, another station using the channel may transmit the word "WAIT." The test shall then be suspended.)

Chapter 7. Operating Procedures
(Distress, Urgency and Safety)

GENERAL

If you are in distress, you may use any means at your disposal to attract attention and obtain assistance. You are by no means limited to the use of your marine radiotelephone. Often, visual signals, including flags, flares, lights, smoke, etc., or audible signals such as your boat's horn or siren, or a whistle or megaphone, will get the attention and help you need.

For boats equipped with a marine radiotelephone, help is just a radio signal away. Two marine radio telephone channels have been set aside for use in emergencies. Channel 16 (156.8 MHz) the VHF-FM Distress, Safety and Calling frequency is the primary emergency channel in the VHF marine band. For those who have medium frequency (MF) radiotelephone also, 2182 kHz is the emergency frequency for use in that band. You are not limited to the use of these channels; you may use any other frequency channel available to you. The working frequency of the local marine operator (public telephone coast station) is a good example of a channel that is monitored.

There are other types of marine stations located ashore that are listening to Channel 16 and 2182 kHz along with the marine radio equipped vessels operating in the area. Because of this coverage, almost any kind of a call for assistance on Channel 16 (or 2182 kHz) will probably get a response. There are times, however, when the situation demands immediate attention; when you just can't tolerate delay. These are the times when you need to know how to use (or respond to) the Distress and Urgency signals and how to respond to the Safety signal.

SPOKEN EMERGENCY SIGNALS

There are three spoken emergency signals:

1. *Distress Signal: MAYDAY*
   The distress signal MAYDAY is used to indicate that a mobile station is threatened by grave and imminent danger and requests immediate assistance. MAYDAY has priority over all other communications.

2. *Urgency Signal: PAN-PAN* (Properly pronounced PAHN-PAHN) Used when the safety of the vessel or person is in jeopardy. "Man overboard" messages are sent with the Urgency signal. PAN-PAN has priority over all other communications with the exception of distress traffic.
3. *Safety Signal: SECURITY* (Pronounced SAY-CURITAY) Used for messages concerning the safety of navigation or giving important meteorological warnings.

Any message headed by one of the emergency signals (MAYDAY, PAN-PAN, or SECURITY) must be given precedence over routine communications. This means listen. Don't transmit. Be prepared to help if you can. The decision of which of these emergency signals to use is the responsibility of the person in charge of the vessel.

RADIOTELEPHONE ALARM SIGNAL

This signal consists of two audio frequency tones transmitted alternately. This signal is similar in sound to a two-tone siren used by some ambulances. When generated by automatic means, it shall be sent as continuously as practicable over a period of not less than 30 seconds nor more than 1 minute. The purpose of the signal is to attract attention of the person on watch or to actuate automatic devices giving the alarm.

The radiotelephone alarm signal is used only with the distress signal, except that it may also be used with the Urgency signal when a person has been lost overboard and the assistance of other vessels is required.

DISTRESS CALL AND MESSAGE

Sending Distress Call and Message

Transmit (in this order):

1. The Radiotelephone Alarm Signal, if proper equipment is available
2. Distress signal MAYDAY (spoken three times)
3. The words THIS IS (spoken once)
4. Name of vessel in distress (spoken three times) and call sign (spoken once)
5. The Distress Message, consisting of:
   a. Distress signal MAYDAY
   b. Name of vessel (spoken once)
   c. Position of vessel in distress by latitude and longitude or by bearing (true or magnetic, state which) and distance to a well-known landmark such as a navigational aid or small island, or in any terms which will assist a responding station in locating the

vessel in distress. Include any information on vessel movement such as course, speed and destination.

d. Nature of distress (sinking, fire, etc.)
e. Kind of assistance desired
f. Any other information which might facilitate rescue, such as:
   length or tonnage of vessel
   number of persons on board and number needing medical attention
   color hull, cabin, masts, etc.
g. The word OVER

Example: Distress Call and Message

(Send Radiotelephone Alarm Signal, if available, for at least 30 seconds but not more than 1 minute.)

"MAYDAY-MAYDAY-MAYDAY
THIS IS-BLUE DUCK-BLUE DUCK-BLUE DUCK-WA 1234
MAYDAY-BLUE DUCK
DUNGENESS LIGHT BEARS 185 DEGREES MAGNETIC-DISTANCE 2 MILES
STRUCK SUBMERGED OBJECT
NEED PUMPS-MEDICAL ASSISTANCE AND TOW
THREE ADULTS-TWO CHILDREN ABOARD
ONE PERSON COMPOUND FRACTURE OF ARM
ESTIMATE CAN REMAIN AFLOAT TWO HOURS
BLUE DUCK IS THIRTY-TWO FOOT CABIN CRUISER-BLUE HULL-WHITE DECK HOUSE
OVER"

NOTE: Repeat at intervals until answer is received. If no answer is received on the Distress frequency, repeat using any other available channel on which attention might be attracted.

ACKNOWLEDGEMENT OF DISTRESS MESSAGE

If you hear a Distress Message from a vessel and it is not answered, then YOU must answer. If you are reasonably sure that the distressed vessel is not in your vicinity, you should wait a short time for others to acknowledge.

Sending Acknowledgement of Receipt of Distress Message

Acknowledgement of receipt of a Distress Message usually includes the following:

1. Name of vessel *sending* the Distress Message (spoken three times)
2. The words THIS IS (spoken once)

3. Name of your vessel (spoken three times) and your call sign (spoken once)
4. The words RECEIVED MAYDAY (spoken once)
5. The word OVER (spoken once)

Example: Acknowledge Message

"BLUE DUCK-BLUE DUCK-BLUE DUCK-WA 1234
THIS IS-WHITE WHALE-WHITE WHALE-WHITE WHALE-WZ 4321
RECEIVED MAYDAY
OVER"

OFFER OF ASSISTANCE

After you acknowledge receipt of the distress message, allow a short interval of time for other stations to acknowledge receipt, if any are in a position to assist. When you are sure of not interfering with other distress-related communications, contact the vessel in distress and advise them what assistance you can render. Make every effort to notify the Coast Guard. The offer-of-assistance message shall be sent only with the permission of the person in charge of your vessel.

Sending Offer-of-Assistance Message

The Offer-of-Assistance Message usually includes the following:

1. Name of the distressed vessel (spoken once)
2. The words THIS IS (spoken once)
3. Name of the calling vessel (spoken once)
4. The word OVER (spoken once)
5. (On hearing an acknowledgement, ending with the word OVER from the distressed vessel, continue with your offer of assistance message.)
6. Name of calling vessel and radio call sign (spoken once)
7. The word OVER (spoken once)

Example: Offer of Assistance

To be sent after a short interval of time, but long enough to be sure that further transmissions will not cause harmful interference and long enough to work out relative position and time to reach the distressed vessel:

"BLUE DUCK-THIS IS-WHITE WHALE-OVER
(on hearing the word OVER from BLUE DUCK, continue)
I AM PROCEEDING TOWARD YOU FROM TEN MILES WESTWARD EXPECT TO ARRIVE IN ONE HOUR

COAST GUARD HAS BEEN NOTIFIED INCLUDING YOUR NEED FOR DOCTOR
I HAVE ONE INCH PORTABLE PUMP
PLEASE ADVISE IF MY ASSISTANCE IS NOT NEEDED
WHITE WHALE-WZ 4321-OVER"

HELICOPTER EVACUATION

Helicopter evacuation is a hazardous operation both for the patient and the helo crew. IT SHOULD ONLY BE USED AS A LAST RESORT TO PREVENT DEATH OR PERMANENT INJURY.

Preparing for the Helicopter's Arrival:

1. Provide continuous radio guard on Channel 16 (156.8 Mhz), 2182 kHz, or other specified voice frequency.
2. Clear a suitable hoist area, preferably on the stern. Secure loose gear, awnings, and antenna wires. Trice up any running rigging and booms.
3. If the hoist is at night, light the pickup area as well as possible. Also shine a light on any obstructions in the area so that the pilot will be aware of them. DO NOT SHINE ANY LIGHTS ON THE HELICOPTER BECAUSE THEY WILL BLIND THE PILOT. Do NOT fire signal flares after the helicopter pilot says he has the vessel in sight and is making an approach to it.
4. The noise of the helicopter will make it impossible to hear another person's voice. Arrange a set of hand signals among the crew who will assist.

Hoist Operations

1. IMPORTANT: Move the patient as close as possible to the hoist area.
2. Tag the patient to indicate what, if any, medication was given.
3. If the injury permits, put the patient in a life jacket.
4. Change course to permit the ship to ride as easily as possible with the wind preferably on the port bow. Try to choose a course to keep any stack gases clear of the hoist area.
5. Reduce speed to reduce the ship's motion but maintain steerageway.
6. When all the above are done, signal the helo that you are ready for the hoist. Signal the pilot with a "Come on" with your arm, if you do not have radio contact.
7. If a trail line is dropped by the helo, use it to guide the basket or

litter to the deck; keep the line clear at all times. The line will not cause static shock.

8. Allow the basket or stretcher to touch the deck to avoid static electric shock.
9. If a litter is required, it will be necessary to move the patient to it as quickly as possible. If it is necessary to take the litter away from the hoist point, unhook the hoist cable and keep it free for the helo to haul in. Do NOT secure the cable to the vessel or attempt to move the stretcher without unhooking it.
10. When the patient is strapped in the litter, signal the helo to lower the cable. Allow the hook to touch the deck before handling it in order to avoid static shock. Hook up the litter and signal for the hoist (thumbs up). Steady the stretcher from swinging or turning.
11. If a basket is used, place the patient, wearing a life jacket, in the basket. When the patient is in, his hands clear of the sides, signal for the hoist (thumbs up).
12. If a trail line is attached, use it to steady the basket or stretcher. Do not attach the line to any part of the vessel.

U.S. COAST GUARD NATIONAL VHF-FM DISTRESS SYSTEM

The Coast Guard Distress System provides complete coast and river coverage. A vessel in distress or needing assistance can reach the Coast Guard on the distress frequency Channel 16 (156.8 MHz). If you are not in immediate danger, you will be shifted to the working frequency Channel 22A (157.1 MHz) for further communications. This keeps the distress channel open for other emergency calls.

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
ALABAMA	Spanish Fort	30°40′	87°54′	Group Mobile
ALASKA	Mary Island	55°05′	130°10′	Base Ketchikan
	Sukkwan Island	55°06′	132°46′	Base Ketchikan
	Gravina Island	55°22′	131°48′	Base Ketchikan
	Cape Decision	56°00′	134°08′	Base Ketchikan
	Zarembo Island	56°21′	132°52′	Base Ketchikan
	Mud Bay	57°09′	135°39′	Station Sitka
	Cape Fanshaw	57°12′	133°28′	District Juneau
	Althorp Peak	58°05′	136°24′	District Juneau
	Mt. Robert Barron	38°14′	134°50′	District Juneau
	Federal Building	58°19′	134°25′	District Juneau
	Yakutat	59°31′	139°46′	District Juneau
	Sitkinak Dome	56°33′	154°10′	Station Kodiak
	Narrow Cape	57°26′	152°25′	Station Kodiak
	Pillar Mountain	57°47′	152°27′	Station Kodiak
	Cape Gull	58°09′	154°09′	Station Kodiak
	Tuklung Mountain	58°51′	159°27′	Station Kodiak
	Diamond Ridge	59°42′	151°34′	Station Kodiak
	Rugged Island	59°51′	149°23′	Station Kodiak
	Site Summit	61°15′	149°32′	Station Kodiak

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	West Montague	59°49′	147°53′	VTS Valdez
	Pigot Point	60°03′	146°42′	VTS Valdez
	Cape Yakataga	60°04′	142°25′	VTS Valdez
	Cape Hinchinbrook	60°15′	146°39′	VTS Valdez
	Boswell Bay	60°25′	146°08′	VTS Valdez
	Johnstone Point	60°29′	146°36′	VTS Valdez
	Naked Island	60°38′	147°20′	VTS Valdez
	Valdez	61°04′	142°25′	VTS Valdez
	Potato Point	61°15′	146°39′	VTS Valdez
CALIFORNIA	San Clemente Island	32°52′	118°27′	Group San Diego
	Point Loma	32°42′	117°15′	Group San Diego
	San Pedro Hill	33°45′	118°20′	Group San Diego
	Laguna Peak	34°07′	119°04′	Channel Island Harbor Station
	Tranquillon Mountain	34°35′	120°33′	Channel Island Harbor Station
	Cambria	35°30′	121°03′	Group Monterey
	Point Sur	36°18′	121°54	Group Monterey
	Mt. Umunhum	37°36′	121°54′	Group Monterey
	Mt. Diablo	37°54′	121°55′	Group San Francisco

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Jenner	38°29′	123°11′	Group San Francisco
	Point Cabrillo	39°20′	123°49′	Ft. Bragg Coast Guard
	Cahto Peak	39°41′	123°34′	Group Humboldt Bay
	Trinidad Head	41°03′	124°09′	Group Humboldt Bay
	Point St. George	41°47′	124°15′	Group Humboldt Bay
CONNECTICUT	New Haven	41°19′	72°10′	Group New Haven
	Milford	41°13′	72°01′	Group New Haven
	South Glastonbury	41°45′	72°50′	Group New Haven
	Waterford	41°19′	72°10′	Group New Haven
DELAWARE	Indian River Inlet	38°36′	75°04′	Group Cape May
	Delaware Memorial Bridge	39°41′	75°31′	Base Gloucester City
	Rehoboth Beach	38°37′	75°04′	Group Cape May
FLORIDA	Hines	29°43′	83°14′	Group St. Petersburg
	Crystal River	28°57′	82°42′	Group St. Petersburg
	Tarpon Springs	28°11′	82°45′	Group St. Petersburg
	Seminole	27°50′	82°45′	Group St. Petersburg
	Venice	27°06′	82°22′	Group St. Petersburg
	Pine Island	26°36′	82°07′	Group St. Petersburg
	Naples	26°03′	81°42′	Group St. Petersburg

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Sugar Loaf Key	24°39′	81°32′	Group Key West
	Everglades City	25°51′	81°23′	Group St. Petersburg
	Marathon	24°42′	81°05′	Group Key West
	Islamorada	24°57′	80°34′	Group Key West
	Perrine	25°37′	80°23′	Group Miami
	Miami Beach	25°49′	80°07′	Group Miami
	Delray Beach	26°25′	80°05′	Group Miami
	Jupiter	26°56′	80°07′	Group Miami
	Fort Pierce	27°32′	80°22′	Group Miami
	Cape Kennedy	28°30′	80°34′	Group Mayport
	Flagler Beach	29°28′	81°08′	Group Mayport
	Jacksonville Beach	30°20′	81°25′	Group Mayport
	St. Marks	30°10′	84°12′	Station Panama City
	Cape San Blas	29°14′	85°21′	Station Panama City
	Panama City	30°11′	85°47′	Station Panama City
	Fort Walton	30°23′	86°48′	Group Mobile
GEORGIA	Jekyll Island	31°01′	81°25′	Group Mayport
	Tybee Island	32°01′	80°50′	Group Charleston
GUAM	Nimitz Hill	13°26′	144°42′E	Guam Station
HAWAII	Kokee, Kauai	22°08′	159°39′	Honolulu Station

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Mt. Kaala, Oahu	21°31′	158°09′	Honolulu Station
	Mt. Haleakala, Maui	20°42′	156°15′	Honolulu Station
	Kulani, Hawaii	19°30′	155°18′	Honolulu Station
LOUISIANA	Cameron	29°48′	93°18′	Group Galveston
	Pecan Island	29°41′	92°30′	Group Galveston
	Southbend	29°36′	91°32′	Group Grand Isle
	Leeville	29°13′	90°13′	Group Grand Isle
	Chalmette	29°57′	89°57′	Group New Orleans
	Plaquemine Point	30°18′	91°12′	Group New Orleans
	Venice	29°16′	89°21′	Group New Orleans
MAINE	Mt. Agamenticus	43°13′	70°42′	Group Portland
	Mt. Independence	43°45′	70°19′	Group Portland
	Brunswick	43°57′	69°58′	Group Portland
	Owls Head	44°06′	69°03′	Station Rockland
	Mt. Cadillac	44°21′	68°13′	Group Southwest Harbor
	West Quoddy Head	44°49′	66°58′	Station Jonesport
	Rockland	44°06′	69°06′	Station Rockland
	Jonesport	44°39′	67°35′	Station Jonesport
	Portland	43°39′	70°15′	Group Portland
	Southwest Harbor	44°16′	68°19′	Group Southwest Harbor

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Boothbay Harbor	43°50′	69°38′	Station Boothbay Harbor
	Portsmouth	43°04′	70°42′	Station Portsmouth Harbor
MARYLAND	Annapolis	39°01′	76°29′	Group Baltimore
	Catonsville	39°15′	76°45′	Group Baltimore
	Crisfield	37°59′	75°50′	Group Eastern Shore
	North East	39°35′	75°55′	Group Baltimore
	Ocean City	38°20′	75°05′	Group Eastern Shore
MASSACHUSETTS	Nobska Point	41°31′	70°39′	Group Woods Hole
	Nantucket	41°16′	70°10′	Group Woods Hole
	Provincetown	42°03′	70°11′	Group Woods Hole
	Boston	42°21′	71°03′	Group Boston
	Plum Island	42°48′	70°48′	Station Merrimack River
	Eastern Point	42°34′	70°39′	Group Boston
	Merrimack River	42°49′	70°52′	Station Merrimack River
	Gloucester	42°35′	70°41′	Station Gloucester
	Point Allerton	42°18′	70°55′	Station Point Allerton
	Scituate	42°12′	70°43′	Station Scituate
	Cape Cod Canal	41°46′	70°30′	Station Cape Cod Canal
	Chatham	41°40′	69°57′	Station Chatham
	Menemsha	41°21′	70°46′	Station Menemsha

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Brant Point	41°17′	70°05′	Station Brant Point
	Woods Hole	41°31′	70°40′	Group Woods Hole
MISSISSIPPI	Gulfport	30°24′	89°07′	Group Mobile
	Pascagoula	30°21′	88°32′	Group Mobile
NEW JERSEY	Sandy Hook	40°28′	74°02′	Group Sandy Hook
	Manasquan Inlet	40°06′	74°02′	Group Sandy Hook
	Shark River	40°00′	74°00′	Group Sandy Hook
	Barnegat	39°45′	74°06′	Group Sandy Hook
	Atlantic City	39°20′	74°25′	Group Cape May
	Fortescue	39°15′	75°10′	Group Cape May
	Cape May	38°57′	74°58′	Group Cape May
	Bristol Bridge	40°05′	74°45′	Base Gloucester City
	Gloucester City	39°53′	75°15′	Base Gloucester City
NEW YORK	Mt. Beacon	41°25′	73°55′	Group Governor's Island
	Block Island	41°21′	72°30′	Station Block Island
	Montauk	41°04′	71°53′	Group Shinnecock
	Eatons Neck	40°57′	73°24′	Group New Haven
	Shinnecock Hills	40°51′	72°30′	Group Shinnecock
	Governor's Island	40°41′	74°01′	Group Governor's Island
	Fire Island	40°40′	73°12′	Group Atlantic Beach

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
NORTH CAROLINA	Cape Hatteras	35°15′	75°32′	Group Cape Hatteras
	Elizabeth City	36°21′	76°13′	Group Cape Hatteras
	Fort Macon	34°41′	76°40′	Group Fort Macon
	Oregon Inlet	35°48′	75°32′	Group Cape Hatteras
	Buxton	35°14′	75°32′	Group Cape Hatteras
	Carolina Beach	34°03′	77°55′	Group Fort Macon
	Cedar Island	34°57′	76°17′	Group Fort Macon
	Croatan	34°48′	76°57′	Group Fort Macon
	Engelhart	35°28′	76°02′	Group Cape Hatteras
	Hobucken	35°15′	76°36′	Group Fort Macon
	Hollyridge	34°31′	77°32′	Group Fort Macon
	Edenton	36°06′	76°46′	Group Cape Hatteras
	Midway	36°05′	75°45′	Group Cape Hatteras
OREGON	Rocky Prairie	42°12′	124°20′	Group North Bend
	Cape Blanco	42°50′	124°33′	Group North Bend
	Seven Devils	43°17′	124°22′	Group North Bend
	Heceta Head	44°08′	124°07′	Group North Bend
	Yaquina Head	44°40′	124°03′	Group North Bend
	Cape Meares	45°29′	123°58′	Group Astoria
	Sky Line	45°34′	122°47′	Group Portland

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Rainier	46°02′	122°55′	Group Portland
PUERTO RICO	El Yunque	18°18′	65°47′	Greater Antilles Section
	Cerro de Punta	18°15′	66°35′	Greater Antilles Section
	Monte del Estado	18°09′	66°55′	Greater Antilles Section
RHODE ISLAND	Newport Bridge	41°30′	71°20′	Group Woods Hole
	Castle Hill	41°28′	71°21′	Station Castle Hill
	Point Judith	41°22′	71°29′	Station Point Judith
SOUTH CAROLINA	Parris Island	32°18′	80°41′	Group Charleston
	Mount Pleasant	32°47′	79°50′	Group Charleston
	South Island	33°09′	79°12′	Group Charleston
	Myrtle Beach	33°42′	78°52′	Group Charleston
TEXAS	Port Isabel	26°04′	97°09′	Group Corpus Christi
	Port Mansfield	26°33′	97°26′	Group Corpus Christi
	Robstown	27°39′	97°34′	Group Corpus Christi
	Port O'Connor	28°26′	96°26′	Group Corpus Christi
	Freeport	28°59′	95°19′	Group Galveston
	Galveston	29°20′	94°47′	Group Galveston
	Morgan Point	29°41′	94°59′	Group Galveston
	Houston	29°44′	95°16′	Port Security Station Houston

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Sabine	29°43′	93°52′	Group Galveston
VIRGINIA	Cape Henry	36°56′	76°00′	Group Hampton Roads
	Chincoteague	37°55′	75°23′	Group Eastern Shore
	Alexandria	38°46′	77°12′	Group Baltimore
	Cobbs Creek	37°31′	75°32′	Group Hampton Roads
	Newport News	37°13′	76°24′	Group Hampton Roads
	Oakgrove	38°08′	76°36′	Group Baltimore
	Parramore Beach	37°43′	75°37′	Group Eastern Shore
	Portsmouth	36°51′	76°21′	Group Hampton Roads
	Richmond	37°31′	77°32′	Group Hampton Roads
U.S. VIRGIN ISLANDS	Crown Mountain, St. Thomas	18°22′	64°59′	Greater Antilles Section
	Signal Hill, St. Thomas	18°08′	64°56′	Greater Antilles Section
	Blue Mountain, St. Croix	17°46′	64°48′	Greater Antilles Section
WASHINGTON	The Dalles	45°43′	121°06′	Group Portland
	Jump Off Joe Mountain	46°06′	119°08′	Group Portland
	Cape Disappointment	46°16′	124°03′	Group Astoria
	Pacific Beach	47°12′	124°12′	Group Astoria
	Willapa Bay	47°44′	124°04′	Group Astoria
	James Island	47°54′	124°38′	Group Port Angeles

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Bahokus Peak	48°21′	124°39′	Group Port Angeles
	Mt. Constitution	48°40′	122°50′	Group Seattle
	KING-TV Tower	47°37′	122°20′	Group Seattle
	Gold Mountain	47°32′	122°47′	Group Seattle
LAKE SUPERIOR	Grand Marais, MN	47°46′	90°20′	Group Duluth
	Bayfield, WI	46°49′	90°50′	Group Duluth
	Duluth, MN	46°47′	92°07′	Group Duluth
	Portage, MI	47°22′	88°10′	Group Duluth
	Grand Marais, MI	46°35′	85°59′	Group Sault Ste. Marie
	Marquette, MI	46°34′	87°23′	Group Sault Ste. Marie
LAKE MICHIGAN	Escanaba, MI	45°44′	87°03′	Group Sault Ste. Marie
	Beaver Island, MI	45°34′	85°34′	Group Sault Ste. Marie
	Sturgeon Bay, WI	44°54′	87°22′	Group Milwaukee
	Two Rivers, WI	44°08′	87°33′	Group Milwaukee
	Milwaukee, WI	43°06′	87°53′	Group Milwaukee
	Chicago, IL	41°53′	87°37′	Group Milwaukee
	Muskegon, MI	42°54′	86°12′	Group Muskegon
	Ludington, MI	44°01′	86°30′	Group Muskegon
	Frankfort, MI	44°38′	86°14′	Group Muskegon
LAKE HURON	Port Huron, MI	43°00′	82°25′	Group Detroit

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Port Austin, MI	44°01′	83°00′	Group Detroit
	Alpena, MI	44°51′	83°25′	Group Detroit
	Sault Ste. Marie, MI	46°26′	84°23′	Group Sault Ste. Marie
	Goetzville, MI	46°03′	84°05′	Group Sault Ste. Marie
LAKE ERIE	Ashtabula, OH	41°54′	80°47′	Group Buffalo
	Dunkirk, NY	42°25′	79°15′	Group Buffalo
	Toledo, OH	41°40′	83°22′	Group Detroit
	Detroit, MI	42°21′	82°59′	Group Detroit
	Cleveland, OH	41°30′	81°41′	Group Detroit
LAKE ONTARIO	Thirty Mile Point, NY	43°20′	78°29′	Group Buffalo
	Rochester, NY	43°17′	77°37′	Group Buffalo
	Oswego, NY	43°27′	76°31′	Group Buffalo
	Alexandria Bay, NY	44°18′	75°59′	Group Buffalo
HUDSON RIVER	Mt. Mansfield, VT	44°40′	73°05′	Light Station Burlington
	Albany, NY	42°37′	73°45′	MSO Albany
	Saugerties, NY	42°08′	74°02′	Light Station Saugerties
MISSISSIPPI RIVER	Hastings, MN	44°43′	92°50′	Group Upper Mississippi River
	Lacrosse, MN	43°51′	91°10′	Group Upper Mississippi River

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Dubuque, IA	42°24′	90°34′	Group Upper Mississippi River
	Orion, IL	41°18′	90°22′	Group Upper Mississippi River
	Niota, IL	40°36′	91°16′	Group Upper Mississippi River
	St. Louis, MO	38°37′	90°11′	Group Upper Mississippi River
	Bald Knob, IL	37°33′	89°20′	Group Upper Mississippi River
	Caruthersville, MO	36°19′	89°17′	Group Lower Mississippi River
	Memphis, TN	35°08′	90°02′	Group Lower Mississippi River
	Helena, AR	34°31′	90°35′	Group Lower Mississippi River
	Greenville, MS	33°23′	91°04′	Group Lower Mississippi River
	Vicksburg, MS	32°23′	90°52′	Group Lower Mississippi River

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
	Vick, LA	31°12′	92°04′	Group Lower Mississippi River
MONONGAHELA RIVER	Morgantown, WV	39°37′	79°57′	Group Ohio River
KANAWHA RIVER	Coal Mountain, WV	38°23′	81°57′	Group Ohio River
OHIO RIVER	Pittsburgh, PA	40°27′	79°57′	Group Ohio River
	Wheeling, WV	40°05′	80°42′	Group Ohio River
	Parkersburg, WV	39°20′	81°33′	Group Ohio River
	West Portsmouth, OH	38°43′	83°04′	Group Ohio River
	Cincinnati, OH	39°08′	84°33′	Group Ohio River
	Madison, IN	38°44′	85°24′	Group Ohio River
	Charleston, IN	38°16′	85°45′	Group Ohio River
	Henderson, KY	37°51′	87°34′	Group Ohio River
ILLINOIS RIVER	Lockport, IL	41°34′	88°01′	Group Upper Mississippi River
	Peoria, IL	40°39′	89°31′	Group Upper Mississippi River
	Pittsfield, IL	39°36′	90°50′	Group Upper Mississippi River
	Pere Marquette, IL	38°59′	90°30′	Group Upper Mississippi River

to contact the Coast Guard in (State)	(Location)	(Latitude)	(Longitude)	call "Coast Guard"
TENNESSEE RIVER	Knoxville, TN	36°00′	83°57′	Group Tennessee River
	Signal Mountain, TN	35°08′	85°19′	Group Tennessee River
	Athens, AL	34°49′	86°56′	Group Tennessee River
	Yellow Creek, MS	34°57′	88°13′	Group Tennessee River
CUMBERLAND RIVER	Carthage, TN	36°18′	87°57′	Group Tennessee River
	Nashville, TN	36°15′	86°54′	Group Tennessee River
	Model, TN	36°36′	87°58′	Group Tennessee River
ARKANSAS RIVER	Poteau, OK	35°04′	94°04′	Group Lower Mississippi River
	Mt. Nebo, AR	35°13′	93°15′	Group Lower Mississippi River
MISSOURI RIVER	Omaha, NE	41°19′	95°58′	Group Missouri River
	St. Joseph, MO	39°44′	94°47′	Group Missouri River
	Marshall, MO	39°07′	93°15′	Group Missouri River
	Gasconade, MO	38°39′	91°32′	Group Missouri River

Chapter 8. Public Coast Stations

GENERAL

By utilizing the services of Public Coast Stations, ships may make and receive telephone calls to and from any telephone with access to the nationwide telephone network, including telephones overseas and on other ships and aircraft. In effect, these coast stations extend the talking range of ship telephones almost without limit.

There are three kinds of Public Coast Stations, each operating in different frequency bands to provide for telephone service over a wide range of situations:

VHF-FM Service	(Public Local Service Coast Stations) distances from 20-50 miles
Medium Frequency Service	(Public Regional Coast Stations) range varies widely, according to conditions—anywhere from 100 to over 1,000 miles
High Frequency Service	(Public High Seas Coast Stations) long range service—can provide coverage anywhere in the world

REGISTRATION WITH YOUR PUBLIC COAST STATION

It is important for the vessel owner who plans on using the public radiotelephone service to register with the operator for the public coast station through which you plan to operate.

Some stations have a program to improve maritime call-handling. This program, known as the Marine Identification Numbering Plan (or MIN), enables boaters to provide a 10-digit number on each call. This 10-digit number replaces lengthy billing information which the boater would be required to furnish.

Public coast stations are supported by charges made in accordance with tariffs filed with regulatory authorities. If a ship is not registered with the Public Coast Station, billing information must be passed to the coast station operator each time a call is made, with consequent expenditure of time and effort. Registration may also serve to establish the procedures under which a coast station will call the ship in completing land-originated calls. Ship stations equipped for Ringer Service must register in order to obtain as-

signment of a radiotelephone or ringer number. Should you encounter any problems, contact your local telephone company business office and request assistance in registering your vessel.

PROCEDURES FOR PLACING AND RECEIVING TELEPHONE CALLS VIA PUBLIC COAST STATIONS

Making Ship-To-Shore Calls

Use the VHF-FM Service (up to 20 to 40 miles) in preference to the Medium Frequency or High Frequency Services, if within range.

1. Select the public correspondence channel assigned to the desired shore station (see Chapter 8). Do not call on Channel 16 or on 2182 kHz except in an emergency.
2. Listen to determine if the working channel of the desired coast station is busy. A busy condition is evidenced by hearing speech, signaling tones, or a busy signal.
3. If the channel is busy, wait until it clears or switch to an alternate channel if available.
4. If the channel is not busy, press the push-to-talk button and say: (Name of the coast station) THIS IS (your call sign once). Release the button. This initial call should be brief and, if spoken distinctly, should last no more than five or six seconds. Don't be too brief, however. Many Public Coast Stations require this call to be at least two or three seconds in duration before the "Call Lamp" lights at the Operator's position.
5. Listen for a reply. If none is heard, repeat call after an interval of two minutes.
6. When the coast station operator answers, say:

   THIS IS—(Name of vessel, call sign, and ship's telephone or billing number if assigned), PLACING A CALL TO (city, telephone number desired). Inform operator of type of billing desired (e.g., Ship paid calls, collect call, credit card call or third number charge call).

   If billing information for your vessel has not been registered, the operator will ask for additional identification for billing purposes. At completion of call say:

   Name of vessel—Call sign—OUT.

Receiving Shore-to-Ship Calls

To receive public coast station calls, a receiver must be in operation on the proper channel. When calling on VHF-FM frequencies, coast stations will call on Channel 16 unless you have Ringer Service, in which case the

shore station will dial your number on a working channel. When calling on medium frequencies, the preferred channel is the working channel of the coast station. Some coast stations operating on channels in the 2 MHz band routinely call on a working channel, but will call on 2182 kHz when requested to do so by the calling party. If you are expecting calls on medium frequencies and are not planning to monitor the working channel, you should tell prospective calling parties to so advise the Marine Operator. Note: A guard must be maintained on the distress, safety and calling channel; therefore a second channel receiver capability is essential if a guard is to be maintained on a coast station working channel.

Ringer Service, of course, requires a second receiver, since monitoring of the working channel would be essential. It is illegal to send dial pulses over Channel 16 or 2182 kHz.

Making Ship-to-Ship Calls Through a Coast Station

Although contacts between ships are normally made directly, ship-to-ship calls can be made by going through your coast station, using the same procedure as you do for the ship-to-shore calls.

How to Place a Shore-to-Ship Call

The basic procedure that the telephone subscriber should follow in placing a telephone call to a ship station from his home or office is found in the first few pages of most Telephone Directories. These instructions generally consist of dialing "0" (Zero) for the Operator, and asking for "the marine operator."

It is further necessary to know the name of the vessel being called (not the owner's name) and the approximate location so that the Marine Operator may judge which coast station to place the call through.

More specific information about the vessel is often useful, such as the channel generally monitored for receiving calls, the ringer number (if applicable), and the coast station through which calls can generally be received.

Remember that the ship station generally operates using push-to-talk techniques, so that it is impossible for you to break in while the ship station is being received.

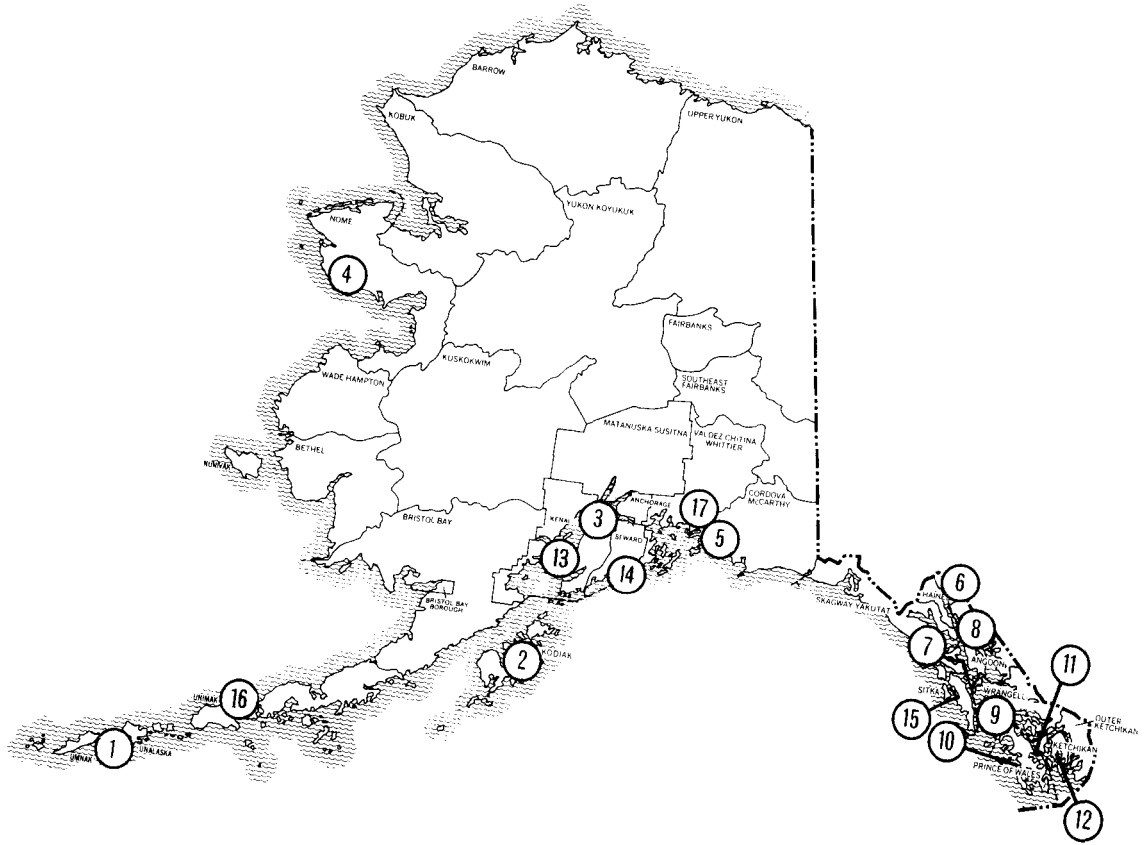
VHF-FM SERVICE (PUBLIC LOCAL SERVICE COAST STATIONS)

VHF-FM service offers reliable operation with good transmission quality over relatively short distances up to 20-50 miles. Locations of VHF-FM coast stations operating in the continental United States are shown in the following tables. Continuing activity in new station construction makes this or any similar information subject to frequent corrections. Channels 24, 25, 26, 27, 28, 84, 85, 86 and 87 are available for assignment to public

coast stations in the United States. Channels 26 and 28 are used in more areas than any others.

In addition, in some localities ships are permitted to make telephone calls through local VHF-FM base stations operating in the land mobile radio telephone service. In these instances, a different license authorization as well as different transmitting equipment is required. Contact the FCC for information in this regard.

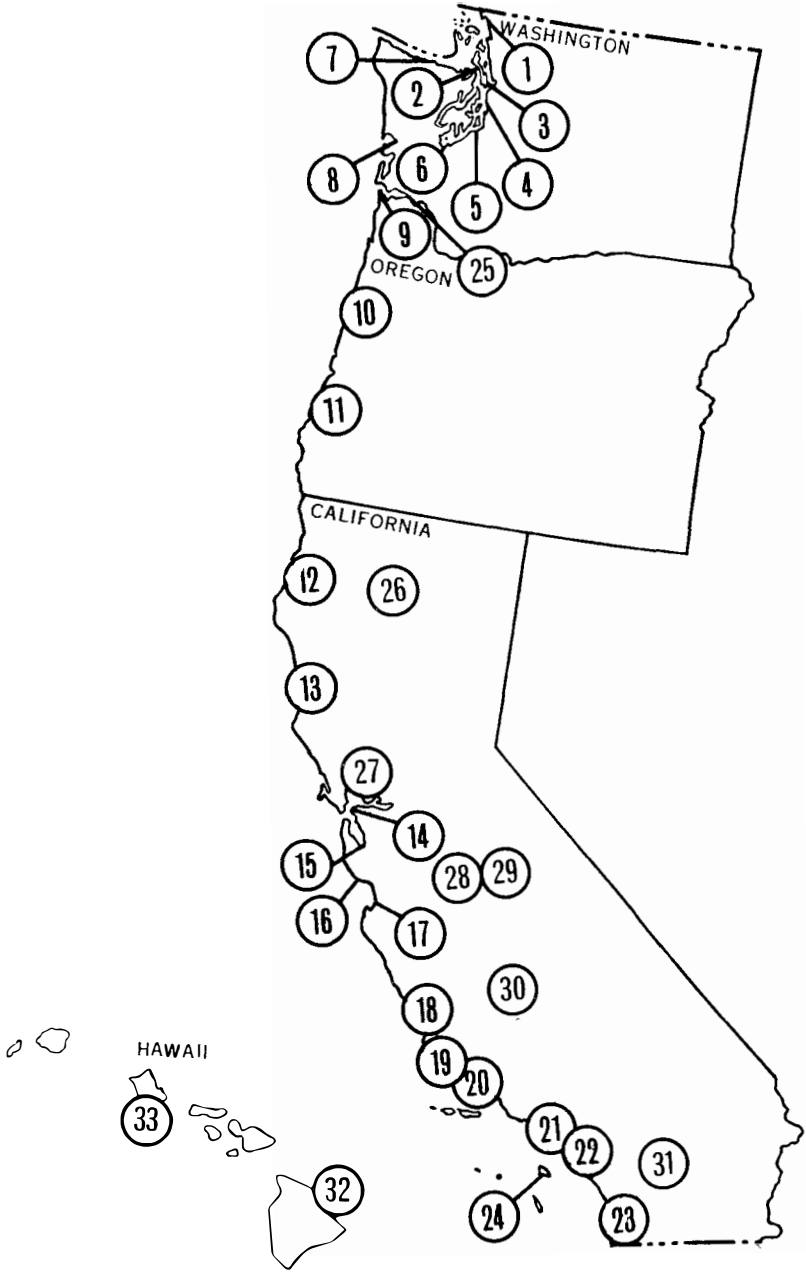
VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—ALASKA



VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—ALASKA

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
WAB 902	Unalaska, AK	(1)	28	Alascom	Unalaska Marine Operator
WSX 78	Kodiak, AK	(2)	26	Alascom	Kodiak Marine Operator
WSX 87	Nikishka, AK	(3)	28	Alascom	Nikishka Marine Operator
WSX 73	Nome, AK	(4)	26	Alascom	Nome Marine Operator
WSX 77	Boswell Bay, AK	(5)	26	Alascom	Boswell Bay Marine Operator
WRN 40	Lena Point, AK	(6)	28	Alascom	Lena Point Marine Operator
WAB 975	Cape Spencer, AK	(7)	26	Alascom	Cape Spencer Marine Operator
WAB 976	Juneau, AK	(8)	26	Alascom	Juneau South Marine Operator
WRN 42	Duncan Canal, AK	(9)	28	Alascom	Petersburg Marine Operator
WAB 956	Craig, AK	(10)	28	Alascom	Craig Marine Operator
WAB 960	Ratz Mountain, AK	(11)	26	Alascom	Ratz Mountain Marine Operator
WRN 41	Ketchikan, AK	(12)	28	Alascom	Ketchikan Marine Operator
WAB 903	Diamond Ridge, AK	(13)	26	Alascom	Diamond Ridge Marine Operator
WAB 900	Seward, AK	(14)	28	Alascom	Seward Marine Operator
WRN 43	Sitka, AK	(15)	28	Alascom	Sitka Marine Operator
WSX 74	Cold Bay, AK	(16)	26	Alascom	Cold Bay Marine Operator
WAB 901	Valdez, AK	(17)	28	Alascom	Valdez Marine Operator

VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—PACIFIC COAST

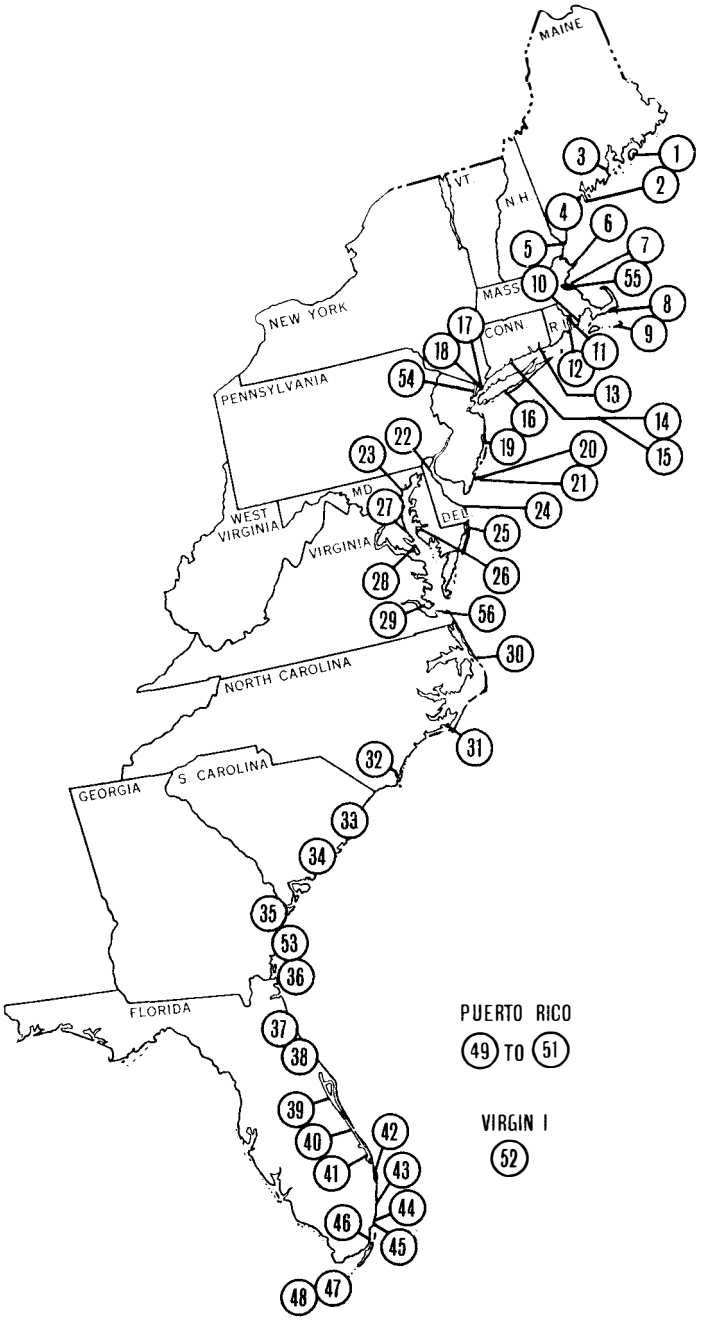


VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—PACIFIC COAST

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				WASHINGTON	
KOH 840	Bellingham, WA	(1)	28 & 85	Pacific Northwest Bell Telephone Co	Bellingham Marine Operator
WXY 956	Camano Island, WA	(2)	24	General Telephone Co of the Northwest	(Call sign only)
WHU 300	Freeland, WA	(3)	87	Whidbey Telephone Co	(Call sign only)
KOH 630	Seattle, WA	(4)	25 & 26	Pacific Northwest Bell Telephone Co	Seattle Marine Operator
KOH 627	Tacoma, WA	(5)	28	Pacific Northwest Bell Telephone Co	Tacoma Marine Operator
WXF 646	Tumwater, WA	(6)	85	Pacific Northwest Bell Telephone Co	Olympia Marine Operator
KOH 841	Port Angeles, WA	(7)	25	Pacific Northwest Bell Telephone Co	Port Angeles Marine Operator
KQU 597	Cosmopolis, WA	(8)	28	AARO Communications Inc	(Call sign only)
				OREGON	
KBA 333	Rainier, OR	(25)	28	Pacific Northwest Bell Telephone Co	Rainier Marine Operator
KOF 209	Astoria, OR	(9)	24 & 26	Pacific Northwest Bell Telephone Co	Astoria Marine Operator
KZV 784	Newport, OR	(10)	28	Pacific Northwest Bell Telephone Co	Newport Marine Operator
KTJ	North Bend, OR	(11)	25	General Telephone Co of the NW Inc	Coos Bay Marine Operator
				CALIFORNIA	
KQU 594	Kneeland, CA	(12)	26	Pacific Telephone & Telegraph Co	Eureka Marine Operator
KUF 732	Redding, CA	(26)	28	Radio Electronic Products Corp	Redding Marine Operator
KQU 591	Caspar, CA	(13)	28	Pacific Telephone & Telegraph Co	Ft Bragg Marine Operator
KMH 828	Oakland, CA	(14)	84, 26, 87	Pacific Telephone and Telegraph Co	San Francisco Marine Operator
KGW 464	Vacaville, CA	(27)	27, 28, 86	Pacific Telephone & Telegraph Co	Stockton Marine Operator
WHU 639	Milpitas, CA	(15)	24	Mobile Radio Systems Inc	(Call sign only)
KUZ 408	Santa Cruz, CA	(16)	27	General Telephone Co of CA	Santa Cruz Marine Operator
KTR 860	Salinas, CA	(17)	16	Salinas Valley Radio Telephone Co	Monterey Bay Marine Operator
KTD 573	Fresno, CA	(28)	26	Fresno Mobile Radio Inc	(Call sign only)
KUF 607	Fresno, CA	(29)	24	Fresno Mobile Radio Inc	(Call sign only)

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
KLU 727	San Luis Obispo, CA	(18)	26	R C S Inc	(Call sign only)
WHH 396	Lompoc, CA	(19)	28	R C S Inc	(Call sign only)
KUF 739	Santa Ynez, CA	(20)	25 & 86	General Telephone Co of California	Santa Barbara Marine Operator
KUF 563	Bakersfield, CA	(30)	28	Kidds Communications Inc	(Call sign only)
KUF 847	San Pedro, CA	(21)	27, 85, 87	Radiocall Corp	Redondo Marine Operator
KUF 726	Santiago Peak, CA	(22)	84	Dana Point Marine Telephone Co	Dana Point Marine Operator
KPB 685	Palomar Mountain, CA	(31)	25	GENCOM Inc	(Call sign only)
KMB 393	Avalon, CA	(23)	24 & 26	Pacific Telephone & Telegraph Co	San Pedro Marine Operator
KMB 394	San Diego, CA	(24)	28 & 86	Pacific Telephone & Telegraph Co	San Diego Marine Operator
				HAWAII	
KYY 242	Pahoa, HI	(32)	28	Windward Marine Communications	(Call sign only)
KGW 423	Honolulu, HI	(33)	27	Radiocall Corp	(Call sign only)

VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—ATLANTIC COAST



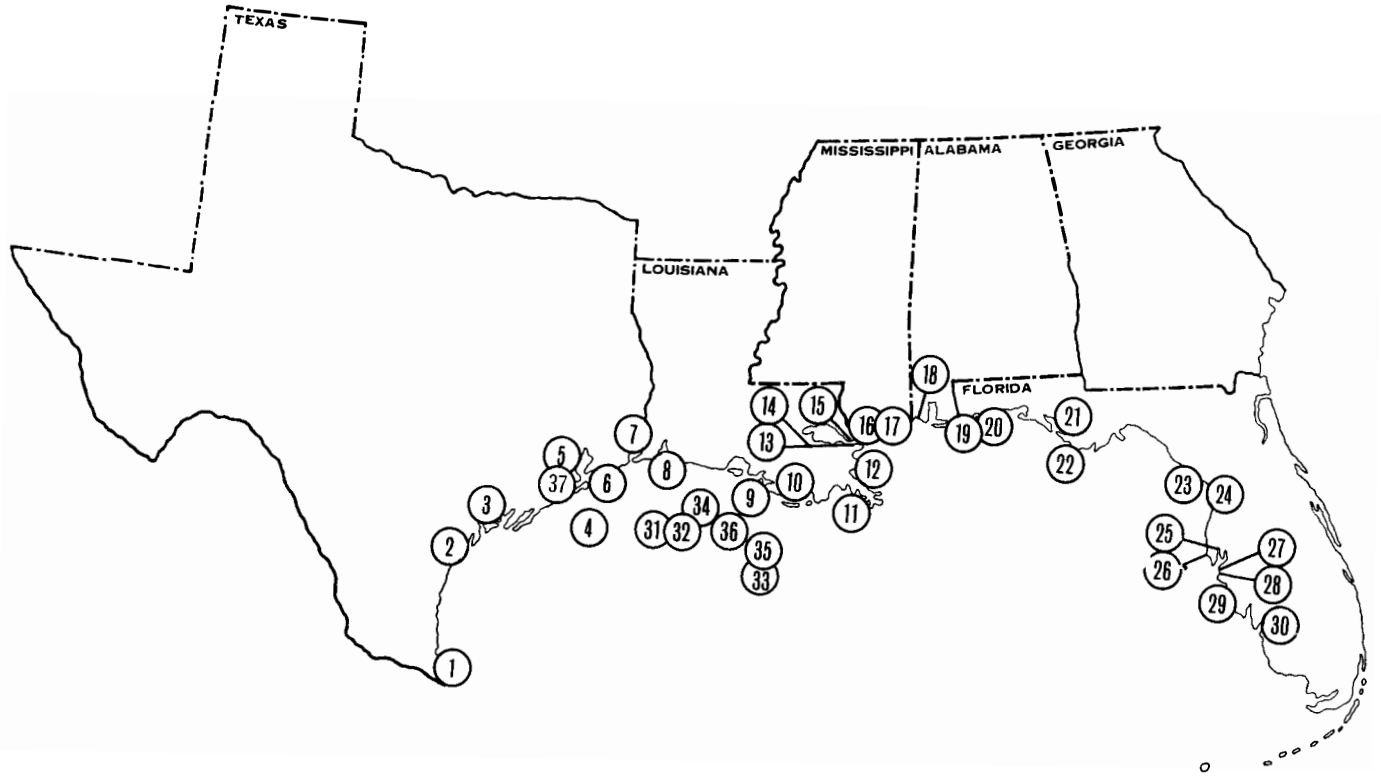
VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—ATLANTIC COAST

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				MAINE	
KVF 856	Southwest Harbor, ME	(1)	28	Sea-Jay Corp	(Call sign only)
KQU 620	Camden, ME	(3)	26 & 84	Sea-Jay Corp	(Call sign only)
KTD 590	Cape Elizabeth, ME	(4)	24 & 28	Portland Marine Radio Inc	Portland Marine Operator
WHU 759	South Harpswell, ME	(2)	86	Coastal Marine Telephone Inc	(Call sign only)
				NEW HAMPSHIRE	
KQU 555	New Castle, NH	(5)	28	COMEX Inc	Portsmouth Marine Operator
				MASSACHUSETTS	
WHU 742	Boston, MA	(55)	85	Murray Cohen	(Call sign only)
KYP 881	Gloucester, MA	(6)	25	Niagara Communications Inc	Gloucester Marine Operator
KCD 817	Quincy, MA	(7)	26 & 27	New England Telephone & Telegraph Co	Boston Marine Operator
KQU 634	South Yarmouth, MA	(8)	28 & 84	Niagara Communications Inc	Hyannis Marine Operator
KIZ 309	Nantucket, MA	(9)	27, 85, 86	Niagara Communications Inc	Nantucket Marine Operator
KJC 737	Fairhaven, MA	(10)	24, 26, 87	Great Eastern Communication Co	New Bedford Marine Operator
				RHODE ISLAND	
KXS 281	Narragansett, RI	(12)	84 & 85	Niagara Communications Inc	Narragansett Marine Operator
KTR 948	Providence, RI	(11)	27 & 28	Niagara Communications Inc	Providence Marine Operator
				CONNECTICUT	
KWB 437	Groton, CT	(13)	25, 26, 86	Great Eastern Communications Co	New London Marine Operator
KLU 787	Monroe, CT	(14)	24	Liberty Communications	Bridgeport Marine Operator
KLU 785	Stratford, CT	(15)	27	Great Eastern Communications Co	Bridgeport Marine Operator
				NEW YORK	
KZN 548	Bay Shore, NY	(16)	85	New York Telephone Co	Bay Shore Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
KEA 693	New York, NY	(17)	25 & 26	New York Telephone Co	New York Marine Operator
WHU 638	New York, NY	(18)	86	MATS	(Call sign only)
WHU 738	Staten Island, NY	(54)	28	Niagara Communications Inc	(Call sign only)
				NEW JERSEY	
KGW 292	Bayville, NJ	(19)	27	New Jersey Bell Telephone Co	Tom's River Marine Operator
WHU 641	Atlantic City, NJ	(20)	87	Radio Telephone Service Inc	(Call sign only)
KGW 378	Sea Isle City, NJ	(21)	26	New Jersey Bell Telephone Co	Atlantic City Marine Operator
				DELAWARE	
KVF 855	Lewes, DE	(24)	27	The Diamond State Telephone Co	Lewes Marine Operator
KVR 460	Odessa, DE	(22)	28	The Diamond State Telephone Co	Wilmington Marine Operator
				MARYLAND	
KGD 518	Bodkin Point, MD	(23)	25 & 26	The C & P Telephone Co of MD	Baltimore Marine Operator
KSK 223	West Ocean City, MD	(25)	26	The C & P Telephone Co of MD	Ocean City Marine Operator
KRS 907	Cambridge, MD	(26)	28	The C & P Telephone Co of MD	Cambridge Marine Operator
KSK 209	Prince Frederick, MD	(27)	27	Radio Communications Inc	Prince Frederick Marine Operator
KAQ 383	Ridge, MD	(28)	26	The C & P Telephone Co of MD	Point Lookout Marine Operator
				VIRGINIA	
KIC 631	Hampton, VA	(29)	25, 26, 27, 84	The C & P Telephone Co/VA	Norfolk Marine Operator
WHU 746	Norfolk, VA	(56)	85	Niagara Communications Inc	(Call sign only)
				NORTH CAROLINA	
KMD 258	Nags Head, NC	(30)	26	Marine Telephone Co Inc	(Call sign only)
KRS 910	Morehead City, NC	(31)	16	Marine Telephone Co Inc	Morehead City Marine Operator
KFT 301	Wilmington, NC	(32)	26	Marine Telephone Co Inc	(Call sign only)
				SOUTH CAROLINA	
KUF 730	Georgetown, SC	(33)	24	Marine Telephone Co Inc	(Call sign only)

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
KFT 303	Charleston, SC	(34)	26	Marine Telephone Co Inc	Charleston Marine Operator
				GEORGIA	
KTD 477	Savannah, GA	(35)	27 & 28	Marine Telephone Co Inc	(Call sign only)
KXC 710	Jekyll Island, GA	(53)	24	Marine Telephone Co Inc	(Call sign only)
				FLORIDA	
KPB 689	Fernandina Beach, FL	(36)	25	Marine Telephone Co Inc	(Call sign only)
WQZ 354	Marineland, FL	(37)	27	Marine Telephone Co Inc	(Call sign only)
KWS 605	Daytona Beach, FL	(38)	28	Marine Telephone Co Inc	(Call sign only)
KTR 945	Cocoa, FL	(39)	26	Marine Telephone Co Inc	(Call sign only)
KVY 628	Vero Beach, FL	(40)	27	Marine Telephone Co Inc	(Call sign only)
KYQ 841	Stuart, FL	(41)	26	Marine Telephone Co Inc	St Lucie Marine Operator
KGW 294	West Palm Beach, FL	(42)	28 & 85	Marine Telephone Co Inc	Palm Beach Marine Operator
KEW 823	Ft Lauderdale, FL	(43)	26 & 84	Marine Telephone Co Inc	(Call sign only)
KSK 279	Miami, FL	(45)	24 & 25	Southern Bell Telephone & Telegraph Co	Miami Marine Operator
WHU 319	Miami Beach, FL	(44)	85	Marine Telephone Co Inc	Miami Beach Marine Operator
KLU 791	Homestead, FL	(46)	27 & 28	Marine Telephone Co Inc	Homestead Marine Operator
KSK 210	Marathon, FL	(47)	24	Marine Telephone Co of Marathon Inc	(Call sign only)
KQU 411	Key West, FL	(48)	26 & 84	Marine Telephone Co Inc	Key West Marine Operator
				PUERTO RICO	
WHU 645	Luquillo, PR	(49)	86	Radiotelephone Communicators of PR Inc	(Call sign only)
WHU 243	Maricao, PR	(50)	27	Radiotelephone Communicators of PR Inc	(Call sign only)
WCT	Santurce, PR	(51)	26	All America Cables and Radio Inc	(Call sign only)
				VIRGIN ISLANDS	
WAH	St Thomas, VI	(52)	24, 25, 28, 84	Global Communications Corp	Virgin Islands Radio

VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—GULF COAST

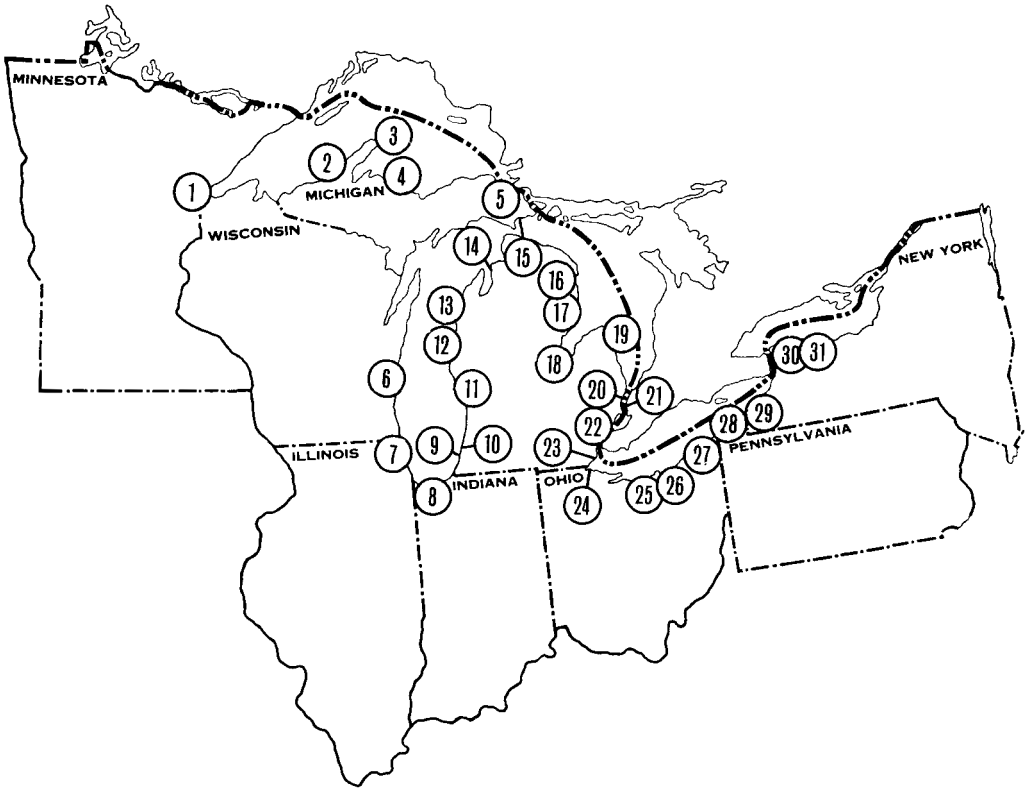


VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—GULF COAST

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
			TEXAS		
KLG 376	South Padre Island, TX	(1)	26	Mobilfone Service Inc	Brownsville Marine Operator
KWB 424	Corpus Christi, TX	(2)	26 & 28	Mobilfone Service Inc	(Call sign only)
KGW 295	Port Lavaca, TX	(3)	26 & 85	Texas Marine Radiotelephone Corp	Port Lavaca Marine Operator
KKD 742	La Marque, TX	(4)	24 & 28	Southwestern Bell Telephone Co	Galveston Marine Operator
KKD 739	La Porte, TX	(5)	26	Southwestern Bell Telephone Co	Houston Marine Operator
WHG 892	High Island, TX	(6)	85	COM/NAV Marine Inc	(Call sign only)
WHU 631	High Island, TX	(37)	86	Gulf Coast Electronics	(Call sign only)
KKD 741	Port Arthur, TX	(7)	26 & 27	Southwestern Bell Telephone Co	Port Arthur Marine Operator
			LOUISIANA		
KQU 437	Cameron, LA	(8)	24	Cameron Telephone Co	Cameron Marine Operator
KKD 732	Morgan City, LA	(9)	24 & 26	South Central Bell Telephone Co	Morgan City Marine Operator
KSK 317	Cocodrie, LA	(10)	27	Microcom Inc.	(Call sign only)
KJC 784	Venice, LA	(11)	24, 27, 28, 86	South Central Bell Telephone Co	Venice Marine Operator
KSK 305	Hopedale, LA	(12)	85	South Central Bell Telephone Co	Hopedale Marine Operator
KKD 736	New Orleans, LA	(13)	24, 26, 27, 87	South Central Bell Telephone Co	New Orleans Marine Operator
WHG 974	New Orleans, LA	(14)	16	Southern Yacht Club	(Call sign only)
KUZ 557	Slidell, LA	(15)	84	South Central Bell Telephone Co	Slidell Marine Operator
			MISSISSIPPI		
KKM 650	Gulfport, MS	(16)	28	South Central Bell Telephone Co	Gulfport Marine Operator
KLU 775	Pascagoula, MS	(17)	27	Answer Iowa Inc	Pascagoula Marine Operator
			ALABAMA		
WLO	Coden, AL	(18)	25 & 26	Mobile Marine Radio Inc	WLO "Coden"

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				FLORIDA	
KII 294	Pensacola, FL	(19)	26	Southern Bell Telephone and Telegraph Co	Pensacola Marine Operator
KWB 455	Fort Walton, FL	(20)	28	Radio & Electronic Service Co Inc	(Call sign only)
KII 295	Panama City, FL	(21)	26	Southern Bell Telephone and Telegraph Co	Panama City Marine Operator
KSK 339	Apalachicola, FL	(22)	28	St Joseph Telephone and Telegraph Co	(Call sign only)
KUZ 556	Cedar Key, FL	(23)	16	Gulf Coast Comm Inc	Cedar Key Marine Operator
KWB 447	Crystal River, FL	(24)	28	United Telephone Co of Florida	(Call sign only)
KWB 426	Tampa, FL	(25)	26	General Telephone Co of Florida	(Call sign only)
KUZ 385	Clearwater, FL	(26)	24 & 26	General Telephone Co of Florida	(Call sign only)
WHU 653	Memphis, FL	(27)	25 & 86	Marine Telephone Co Inc	(Call sign only)
KUZ 383	Palmetto, FL	(28)	25 & 27	James C Pope	(Call sign only)
KTD 563	Venice, FL	(29)	28	Airsignal International Inc	(Call sign only)
KYH 550	North Fort Myers, FL	(30)	26	Marine Telephone Co Inc	Fort Myers Marine Operator
				GULF OF MEXICO	
WHG 845	Offshore	(31)	85	Offshore Telephone Co	(Call sign only)
WHG 955	Offshore	(32)	26	Offshore Telephone Co	(Call sign only)
WHG 956	Offshore	(33)	25	Offshore Telephone Co	(Call sign only)
WHG 957	Offshore	(34)	27	Offshore Telephone Co	(Call sign only)
WHG 958	Offshore	(35)	86	Offshore Telephone Co	(Call sign only)
KEB 611	Offshore	(36)	84	Offshore Telephone Co	(Call sign only)

VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—GREAT LAKES

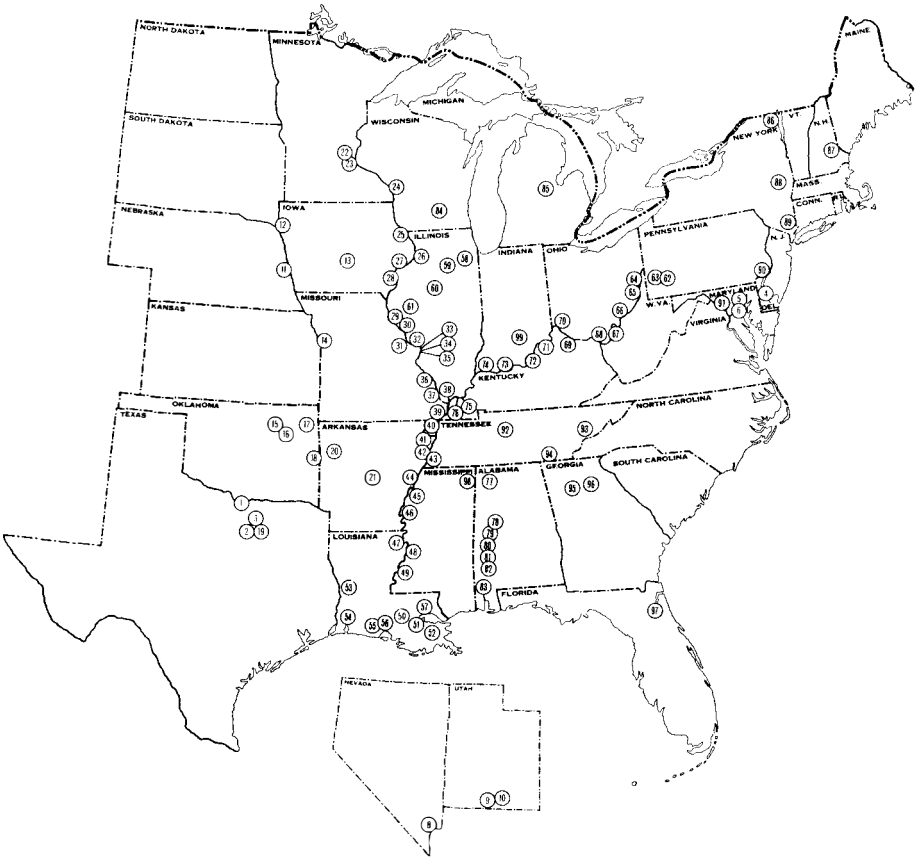


VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—GREAT LAKES

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
			MINNESOTA		
KVY 601	Duluth, MN	(1)	84 & 87	Lorain Electronics Corp	Duluth Marine Operator
			MICHIGAN		
KIL 922	Ontonagon, MI	(2)	84 & 86	Lorain Electronics Corp	(Call sign only)
KVY 602	Copper Harbor, MI	(3)	86 & 87	Lorain Electronics Corp	Copper Harbor Marine Operator
KZN 587	Marquette, MI	(4)	28	Range Corp	(Call sign only)
WLC	Sault Ste Marie, MI	(5)	26	Central Radio Telegraph Co	Soo Marine Operator
KIL 924	Stevensville, MI	(9)	85 & 86	Lorain Electronics Corp	(Call sign only)
KSK 283	Saint Joseph, MI	(10)	24	Harbor Communications Inc	(Call sign only)
KQU 546	Muskegon Heights, MI	(11)	26	Waldo I Wilson	(Call sign only)
KZT 262	Ludington, MI	(12)	25	Nicholas D Swan	(Call sign only)
WQA 787	Frankfort, MI	(13)	28	Nicholas D Swan	Frankfort Marine Operator
WLC	Charlevoix, MI	(14)	26	Central Radio Telegraph Co	Charlevoix Marine Operator
KIL 923	Hessel, MI	(15)	84 & 86	Lorain Electronics Corp	(Call sign only)
KIL 925	Spruce, MI	(16)	84 & 87	Lorain Electronics Corp	(Call sign only)
WLC	Tawas City, MI	(17)	26	Central Radio Telegraph Co	Tawas City Marine Operator
KUF 718	Bay City, MI	(18)	28	Advanced Answering Service	(Call sign only)
KIL 926	Harbor Beach, MI	(19)	86 & 87	Lorain Electronics Corp	(Call sign only)
KAD 836	Marysville, MI	(20)	25	Michigan Bell Telephone Co	Port Huron Marine Operator
KIL 927	Saint Clair, MI	(21)	84 & 86	Lorain Electronics Corp	(Call sign only)
KQB 666	Detroit, MI	(22)	26	Michigan Bell Telephone Co	Detroit Marine Operator
KAD 806	Monroe, MI	(23)	25	Toledo Marine Telephone	Toledo Marine Operator
			OHIO		
KIL 928	Oregon, OH	(24)	84 & 87	Lorain Electronics Corp	(Call sign only)
WMI	South Amherst, OH	(25)	26	Lorain Electronics Corp	Lorain Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
KQU 440	Cleveland, OH	(26)	86 & 87	Lorain Electronics Corp	(Call sign only)
WXY 934	Ashtabula, OH	(27)	28	Professional Communications Inc	(Call sign only)
				INDIANA	
KQU 578	Portage, IN	(8)	28	Burns Harbor Radio	(Call sign only)
				ILLINOIS	
KTD 564	Waukegan, IL	(7)	84	Illinois Bell Telephone Co	(Call sign only)
				WISCONSIN	
KVY 605	Port Washington, WI	(6)	85 &87	Lorain Electronics Corp	Port Washington Marine Operator
				PENNSYLVANIA	
KLU 745	Erie, PA	(28)	25	Professional Communications Inc	(Call sign only)
				NEW YORK	
KIL 929	Ripley, NY	(29)	84 & 86	Lorain Electronics Corp	(Call sign only)
WBL	Martinsville, NY	(30)	26 & 28	Robert W Schober	Buffalo Marine Operator
KLU 788	Rochester, NY	(31)	25	Tel-Page Corp	Rochester channel 25

VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—INLAND WATERS



VHF-FM PUBLIC LOCAL SERVICE COAST STATIONS—INLAND WATERS

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				NEVADA	
WXZ 523	Boulder Peak, NV	(8)	26	Gweeduc Corp	(Call sign only)
				UTAH	
WXZ 347	Lake Powell, UT	(9)	16	Jeannine Hunt	Lake Powell Marine Operator
WXZ 328	Navajo Mt Trading Post	(10)	26	Navajo Communications Co Inc	(Call sign only)
				NEBRASKA	
KTD 514	Omaha, NE	(11)	26	Mobile Communications Inc	(Call sign only)
				OKLAHOMA	
KTR 853	Ketchum, OK	(17)	27	Carlos V Langston	(Call sign only)
KFL 352	Tulsa, OK	(16)	26	Mobilfone Service Inc	(Call sign only)
KQU 545	Westport, OK	(15)	28	Mobilfone Service Inc	(Call sign only)
KQU 583	Arkoma, OK	(18)	28	Mobilfone Service Inc	Fort Smith Marine Operator
				TEXAS	
WHU 247	Pottsboro, TX	(1)	24	Texoma Recreational Marine Assn	(Call sign only)
WHU 229	Fort Worth, TX	(2)	27	American Marine	(Call sign only)
WHF 988	Lewisville, TX	(3)	26	Recreational Marine Assn	(Call sign only)
WHU 643	Rowlett, TX	(19)	24	Hubbard Recreational Marine Assn	(Call sign only)
				MINNESOTA	
KFQ 902	Hasting, MN	(23)	28	Marine Radio Inc	Minneapolis-St. Paul Marine Operator
KFQ 902	Saint Paul, MN	(22)	26	Marine Radio Inc	Minneapolis-St. Paul Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				WISCONSIN	
KWB 425	Lacrosse, WI	(24)	26	Marine Radio Inc	LaCrosse Marine Operator
WQZ 410	Madison, WI	(84)	28	Answer Madison Telephone Secretaries Inc	(Call sign only)
				MISSOURI	
KFT 310	Kansas City, MO	(14)	24 & 26	Mobile Radio Communications Inc	(Call sign only)
WGK	Warrenton, MO	(31)	84	St Louis Radio Ltd	(Call sign only)
KGW 379	Perryville, MO	(36)	86	COM/NAV Marine Inc	Perryville Marine Operator
KRS 908	Cape Girardeau, MO	(37)	24	Withers Communications Co	(Call sign only)
WRD 660	New Madrid, MO	(39)	25	COM/NAV Marine Inc	(Call sign only)
WHD 840	Caruthersville, MO	(40)	26	W J G Telephone Co Inc	(Call sign only)
				ARKANSAS	
KFL 353	Blue Mountain, AR	(20)	26	Mobilfone Service Inc	(Call sign only)
KFT 281	Little Rock, AR	(21)	26	Otis L Hale	(Call sign only)
KGW 348	Blytheville, AR	(41)	28	Southwestern Bell Telephone Co	Blytheville Marine Operator
WHU 642	Wilson, AR	(42)	85	W J G Inc	Wilson Marine Operator
KSK 385	Helena, AR	(44)	27 & 28	W J G Inc	Helena Marine Operator
				MISSISSIPPI	
KTD 467	Hillhouse, MS	(45)	24 & 86	W J G Telephone Co Inc	(Call sign only)
KFT 286	Greenville, MS	(46)	26 & 84	COM/NAV Marine Inc	(Call sign only)
KFT 302	Vicksburg, MS	(48)	24 & 28	COM/NAV Marine Inc	Vicksburg Marine Operator
KFT 287	Natchez, MS	(49)	26 & 27	COM/NAV Marine Inc	Natchez Marine Operator
WHF 928	Iuka, MS	(98)	86	Alvin W Pyle	(Call sign only)
				MICHIGAN	
WLC	Rogers City, MI	(85)	26 & 28	Central Radio Telegraph Co	Rogers City Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
			IOWA		
WHF 926	Sioux City, IA	(12)	28	Answer Iowa Inc	(Call sign only)
WQZ 339	Des Moines, IA	(13)	28	Answer Iowa Inc	(Call sign only)
KFT 292	Asbury, IA	(25)	26	Marine Radio Inc	Dubuque Marine Operator
WHH 391	Clinton, IA	(26)	28	Answer Iowa Inc	(Call sign only)
KFT 290	Davenport, IA	(27)	26	Answer Iowa Inc	(Call sign only)
			ILLINOIS		
KZQ 435	Keithsburg, IL	(28)	27	Lee County Marine Inc	(Call sign only)
KGW 405	Fowler, IL	(29)	26	Illinois Bell Telephone Co	Quincy Marine Operator
WGK	Pittsfield, IL	(30)	24 & 25	St Louis Radio Ltd	WGK "Pittsfield"
WGK	Grafton, IL	(32)	27, 28, 85, 86	St Louis Radio Ltd	WGK "Grafton"
WGK	Granite City, IL	(33)	24, 25, 84	St Louis Radio Ltd	WGK "Granite City"
WHD 871	Dry Hill, IL	(34)	84 & 85	St Louis Radio Ltd	(Call sign only)
KZS 894	Topeka, IL	(35)	24	St Louis Radio Ltd	(Call sign only)
KGW 320	Cairo, IL	(38)	27 & 28	Illinois Bell Telephone Co	Cairo Marine Operator
KQU 582	Elwood, IL	(58)	28	Illinois Bell Telephone Co	Joliet Marine Operator
KGW 318	Ottawa, IL	(59)	26	Illinois Bell Telephone Co	Ottawa Marine Operator
KFT 288	Peoria, IL	(60)	28	Houser Communications Inc	(Call sign only)
KGW 322	Beardstown, IL	(61)	26	Illinois Bell Telephone Co	Beardstown Marine Operator
			LOUISIANA		
KXS 239	Lake Providence, LA	(47)	25	Radio Telephone of Louisiana Inc	Lake Providence Marine Operator
KKM 648	Baton Rouge, LA	(50)	27 & 86	South Central Bell Telephone Co	Baton Rouge Marine Operator
KZA 917	Convent, LA	(51)	25	South Central Bell Telephone Co	Convent Marine Operator
KTR 929	Hammond, LA	(57)	85	South Central Bell Telephone Co	Ponxhatoula Marine Operator
KQU 584	Larose, LA	(52)	84	LaFourche Telephone Co Inc	(Call sign only)
KSK 316	Leeville, LA	(53)	85	LaFourche Telephone Co Inc	(Call sign only)
KKD 735	Lake Charles, LA	(54)	28 & 84	South Central Bell Telephone Co	Lake Charles Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
KGN	Delcambre, LA	(56)	28 & 85	Delcambre Telephone Co Inc	Delcambre Marine Operator
KKM 649	Erath, LA	(55)	25, 86, 87	South Central Bell Telephone Co	Erath Marine Operator
				PENNSYLVANIA	
WHU 651	Philadelphia, PA	(90)	85	Radio Dispatch Co	(Call sign only)
KLU 836	Freedom, PA	(62)	26	Lorain Electronics Corp	Pittsburgh Marine Operator
WHG 964	North Huntingdon, PA	(63)	26 & 27	Lorain Electronics Corp	Pittsburgh Marine Operator
				OHIO	
KGW 301	Mingo Junction, OH	(64)	28	Ohio Bell Telephone Co	Steubenville Marine Operator
KUZ 571	Marietta, OH	(66)	28	Ship to Shore Telephone Co	(Call sign only)
KGW 317	Ironton, OH	(68)	28	Ohio Bell Telephone Co	Ironton Marine Operator
KJC 732	Cincinnati, OH	(70)	28	Cincinnati Bell Inc	Cincinnati Marine Operator
				WEST VIRGINIA	
KJC 806	Moundsville, WV	(65)	26	Mobile Telephone Serv of Wheeling WV Inc	(Call sign only)
KEW 837	Point Pleasant, WV	(67)	24 & 26	COM/NAV Marine Inc	Point Pleasant Marine Operator
				KENTUCKY	
KYU 675	Maysville, KY	(69)	26	Ship to Shore Telephone Co	(Call sign only)
WFN	Milton, KY	(71)	25	Amcom Inc	(Call sign only)
WXY 958	Hickman, KY	(75)	86	W J G Inc	Hickman Marine Operator
KFT 289	Paducah, KY	(76)	26 & 84	COM/NAV Marine Inc	Paducah Marine Operator
				INDIANA	
WFN	Jeffersonville, IN	(72)	24 & 26	Amcom Inc	(Call sign only)
KGW 321	Tell City, IN	(73)	28	Indiana Bell Telephone Co Inc	Tell City Marine Operator
KGW 329	Evansville, IN	(74)	26	Indiana Bell Telephone Co Inc	Evansville Marine Operator
KVF 852	Bloomington, IN	(99)	27	Marine Radiotelephony Co Inc	(Call sign only)

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				TENNESSEE	
WJG	Memphis, TN	(43)	25, 26, 87	W J G Inc	Memphis Marine Operator
KLG 281	Nashville, TN	(92)	26	Telpage of Nashville Inc	(Call sign only)
KQU 618	Signal Mountain, TN	(94)	26	Answering Service and Doctor's Exchange	(Call sign only)
KQU 377	Walland, TN	(93)	26	Southeast Mobilphone Inc	(Call sign only)
				ALABAMA	
KYQ 861	Muscle Shoals, AL	(77)	26	Alvin W Pyle	Tuscumbia Marine Operator
WLO	Tuscaloosa, AL	(78)	27	Mobile Marine Radio Inc	WLO "Tuscaloosa"
WLO	Demopolis, AL	(79)	84	Mobile Marine Radio Inc	WLO "Demopolis"
WLO	Myrtlewood, AL	(80)	26 & 28	Mobile Marine Radio Inc	WLO "Myrtlewood"
WLO	Grove Hill, AL	(81)	28 & 86	Mobile Marine Radio Inc	WLO "Grove Hill"
WLO	Calvert, AL	(82)	24 & 85	Mobile Marine Radio Inc	WLO "Calvert"
WLO	Mobile, AL	(83)	28 & 87	Mobile Marine Radio Inc	WLO "Mobile"
				NEW HAMPSHIRE	
KTA 456	Sanbornton, NH	(87)	25	Comex Inc	Winnipesaukee Marine Operator
				NEW YORK	
KGW 417	West Beekmantown, NY	(86)	28	New York Telephone Co	Plattsburgh Marine Operator
KFL 993	Schenectady, NY	(88)	26	Tri City Telephone Co Inc	(Call sign only)
KLG 325	Fishkill, NY	(89)	27	Tri City Telephone Co Inc	(Call sign only)
				MARYLAND	
WHU 734	Baltimore, MD	(5)	24	Niagara Communications Inc	(Call sign only)
WHU 802	Harwood, MD	(6)	87	Murray Cohen	(Call sign only)
KTA 453	Bethesda, MD	(91)	28	Radio Communications Inc	Washington Marine Operator

CALL SIGN	SERVICE AREA	MAP NO.	VHF CHANNEL	LICENSEE	MARINE OPERATOR IDENTIFICATION
				DELAWARE	
WHU 720	Dover, DE	(4)	84	Niagara Communications Inc	(Call sign only)
				GEORGIA	
KUZ 552	Gainesville, GA	(96)	24, 25, 26	Autophone Inc	Lanier Marine Operator
WHU 649	Marietta, GA	(95)	27	William Garrett Driskell	(Call sign only)
				FLORIDA	
KUF 731	Orange Mills, FL	(97)	25	Marine Telephone Co Inc	(Call sign only)

MEDIUM FREQUENCY SERVICE (PUBLIC REGIONAL COAST STATIONS)

The Medium Frequency Service operates over considerably greater distance ranges than VHF-FM, but ranges vary widely with time of day and a variety of other circumstances. Distances in excess of 1,000 miles are possible at certain times, but may be limited to less than 100 miles at other times.

Public Regional Coast stations operate on frequencies in the 2 MHz band along the sea coasts and Gulf of Mexico. Stations serving the Great Lakes and the Mississippi River valley also operate on frequencies in the high-frequency bands. The table below shows the public regional coast stations operating in the United States. The frequencies listed are those of the single sideband carrier. The upper sideband is utilized. Ships equipped with SSB equipment should employ the reduced carrier mode when communicating with public coast stations.

Public Regional Coast Stations

(Note: A number of these stations have applied for permission to discontinue operation.)

Call Sign	City	State	Frequencies (shown in kHz) (all stations equipped for 2182 kHz) Coast	Ship
WLO	Mobile	AL	2572	2430
KLH*	San Francisco	CA	2506	2406
			2450	2003
KOU*	San Pedro	CA	2566	2009
			2598	2206
			2522	2126
			2466	2382
KOE*	Eureka	CA	2502	2406
			2450	2003
WDR*	Miami	FL	2514	2118
			2490	2031.5
			2442	2406
WFA	Tampa	FL	2550	2158
			2466	2009
WNJ*	Jacksonville	FL	2566	2390
KBP	Kahuku	HI	2530	2134
WGK	St. Louis	MO	2086	2086
			2782	2782
			4410.1	4410.1
			6212.4	6212.4
			8737.5	8737.5
			17291.8	17291.8

Call Sign	City	State	Frequencies (shown in kHz) (all stations equipped for 2182 kHz) Coast	Ship
WFN	Jeffersonville	IN	2782	2782
			4115.7	4115.7
			6518.8	6518.8
			8725.1	8725.1
			13103.9	13103.9
			17291.8	17291.8
WAK*	New Orleans	LA	2598	2206
			2482	2382
KGN	Delcambre	LA	2506	2458
WOU*	Boston	MA	2506	2406
			2450	2366
			2566	2390
WLC	Rogers City	MI	2514	2118
			2550	2158
			2582	2206
			4369.8	4075.4
WAQ*	Ocean Gate	NJ	2558	2166
WOX*	Sag Harbor	NY	2598	2198
			2522	2126
WBL	Buffalo	NY	2514	2118
			2550	2158
			2582	2206
			4415.8	4415.8
			4428.6	4428.6
			8783.2	8783.2
WCM	Withamsville (also Pittsburgh, PA)	OH	2086	2086
			2782	2782
			4063	4063
			6515	6515
			8213	8213
			12333.1	12333.1
			16518.9	16518.9
KFX*	Astoria	OR	2598	2206
			2442	2009
KTJ	Coos Bay	OR	2566	2031.5
WCT	San Juan	PR	2530	2134
WJO*	Charleson	SC	2566	2390
KQP*	Galveston	TX	2530	2134
			2450	2366
KCC*	Corpus Christi	TX	2538	2142
WAH	St. Thomas	VI	2506	2009
KOW*	Seattle	WA	2522	2126
			2442	2430

Call Sign	City	State	Frequencies (shown in kHz) (all stations equipped for 2182 kHz) Coast	Ship
WMH	Baltimore	MD	2400	2400
WMI	Lorain	OH	4382.2	4382.2
			4410.1	4410.1
			8796.4	8796.4
WJG	Memphis	TN	2086	2086
			2782	2782
			4087.8	4087.8
			6209.3	6209.3
			8201.2	8201.2
			12333.1	12333.1
			16518.9	16518.9
WGG-56	Ketchikan	AK	2397	2237
WDU-29	Sitka	AK	2312	2134
WGG-58	Juneau	AK	2400	2240
WDU-26	Cordova	AK	2397	2237
WDU-23	Kodiak	AK	2309	2131
WGG-53	Cold Bay	AK	2312	2134
WKR	Nome	AK	2400	2240

*Bell System prior to January 1, 1984

HIGH FREQUENCY SERVICE (PUBLIC HIGH SEAS COAST STATIONS)

A High Seas Service using high frequencies provides long-range radiotelephone communications with suitably equipped vessels throughout the world. Service is provided via four coast stations within the United States coastal areas. These stations operate on various radio channels in the 4 through 23 MHz bands and are equipped for single sideband operation.

Single sideband propagation on the radio channels assigned to this service differs with the time of day, season, and vessel location. A good rule of thumb is to use the frequency on which you best hear the coast station. Vessel operators contemplating use of this service may obtain information concerning choice of channels for given locations, time, and season by placing a call or writing to the station operations manager. The addresses, telephone numbers, and operating frequencies are:

Coast Station WLO—Alabama

Address:

Mobile Marine Radio, Inc.
7700 Rinla Avenue
Mobile, Alabama 36619

Dial "O". Ask for Mobile, Alabama Marine Operator or Dial Direct

(205) 666-2998 High Seas

(205) 666-3555 Coastal Harbor

Ship-to-shore calls are accepted at any time. There is no need to wait for traffic list broadcasts before making incoming calls.

Coast Station	Channel Designation	Coast Station Transmit (Carrier)	Ship Station Transmit (Carrier)
WLO	—	2572.0	2430.0
Mobile	405	4369.8	4075.4*
Alabama	414	4397.7	4103.3*
	419	4413.2	4118.8*
	824	8790.2	8266.3*
	829	8805.7	8281.8*
	830	8808.8	8284.9*
	1212	13134.9	12364.1*
	1226	13178.3	12407.5*
	1641	17356.9	16584.0*
	2237	22707.6	22111.6*

Traffic lists go out every hour on the hour. Weather broadcasts at 0600, 1200, and 1800 (local time) daily. National Weather Service weather and oceanographic charts are broadcast over WLO's radiofacsimile service on 6852 kHz, 9157 kHz, and 11145 kHz. Write WLO at the address above for the broadcast schedule. Radiofacsimile service for transmission of material other than the standard weather information is available to both United States and foreign facsimile equipped customers to or from a vessel or a facsimile facility. Radioteletype and radiotelegram service is also available. Contact WLO for more information.

*On Channels so marked it is not necessary to book calls by first calling into WLO on CW or Marine Telex.

Coast Station KMI—California

Address:

AT&T
Station KMI
P.O. Box 8
Inverness, California 94937

Ship-to-shore calls are accepted at any time. There is no need to wait for traffic list broadcasts before making incoming calls.

Shore-to-ship calls in the contiguous United States are booked by dialing our High Seas operator toll free on 1-800-SEA-CALL. The caller pays only for the actual shore-to-ship call itself.

Coast Station	Channel Designation	Coast Station Transmit (Carrier)	Ship Station Transmit (Carrier)
KMI Point Reyes California	417	4407.0	4112.6
	416	4403.9	4109.5
	401	4357.4	4063.0
	822	8784.0	8260.1
	809	8743.7	8219.8
	804	8728.2	8204.3
	1229	13187.6	12416.8
	1203	13107.0	12336.2
	1202	13103.9	12333.1
	1201	13100.8	12330.0
	1624	17304.2	16531.3
	1603	17239.1	16466.2
	1602	17236.0	16463.1
	2236	22704.5	22108.5
	2228	22679.7	22083.7
	2223	22664.2	22068.2
	2214	22636.3	22040.3

Channels: 401, 804, 822, 1201, 1229, and 1602

GMT	TRFC	Weather
0000	×	•
0300	×	
0600	×	•
0900	×	
1200	×	
1500	×	•
1800	×	
2100	×	

Channels: 416, 809, 1202, 1203, 1603, and 2214

GMT	TRFC	Weather
0100	×	
0400	×	
0700	×	
1000	×	
1300	×	•
1600	×	
1900	×	•
2200	×	

Coast Station contact telephone number: (415) 669-1055 (Call Collect)

• Broadcasts of National Weather Service Information. All stations will omit traffic lists (TRFC) and weather broadcasts on busy channels.

Coast Station WOO—New Jersey

Address:

AT&T
Station WOO
P.O. Box 558, Beach Avenue
Manahawkin, N.J. 08050

Ship-to-shore calls are accepted at any time. There is no need to wait for traffic list broadcasts before making incoming calls.

Shore-to-ship calls in the contiguous United States are booked by dialing our High Seas operator toll free on 1-800-SEA-CALL. The caller pays only for the actual shore-to-ship call itself.

Coast Station	Channel Designation	Coast Station Transmit (Carrier)	Ship Station Transmit (Carrier)
WOO **Manahawkin** **New Jersey**	422	4422.5	4128.1
	416	4403.9	4109.5
	411	4388.4	4094.0
	410	4385.3	4090.9
	826	8796.4	8272.5
	815	8762.3	8238.4
	811	8749.9	8226.0
	808	8740.6	8216.7
	1228	13184.5	12413.7
	1211	13131.8	12361.0
	1210	13128.7	12357.9
	1203	13107.0	12336.2
	1631	17325.9	16553.0
	1626	17310.4	16537.5
	1620	17291.8	16518.9
	1605	17245.3	16472.4
	2210	22623.9	22027.9
	2205	22608.4	22012.4
	2201	22596.0	22000.0
	2236	22704.5	22108.5

Channels: 410, 826, 1210, 1631, 2205

GMT	TRFC	Weather
0000	×	
0400	×	
0800	×	
1200	×	•
1600	×	
2000	×	•

Channels: 411, 815, 1211, 1605, 2210

GMT	TRFC	Weather
0100	×	
0500	×	
0900	×	
1300	×	•
1700	×	
2100	×	•

Channels: 416, 808, 1228, 1620, 2201

GMT	TRFC	Weather
0200	×	
0600	×	
1000	×	
1400	×	•
1800	×	
2200	×	•

Channels: 422, 811, 1203, 1626, 2236

GMT	TRFC	Weather
0300	×	
0700	×	
1100	×	
1500	×	•
1900	×	
2300	×	•

Coast Station contact telephone number: (609) 597-2201 (Call Collect)

• Broadcasts of National Weather Service Information. All stations will omit traffic lists (TRFC) and weather broadcasts on busy channels.

Coast Station WOM—Florida

Address:

AT&T
Station WOM
1350 N.W. 40th Avenue
Fort Lauderdale, FL 33313

Ship-to-shore calls are accepted at any time. There is no need to wait for traffic list broadcasts before making incoming calls.

Shore-to-ship calls in the contiguous United States are booked by dialing our High Seas operator toll free on 1-800-SEA-CALL. The caller pays only for the actual shore-to-ship call itself.

Coast Station	Channel Designation	Coast Station Transmit (Carrier)	Ship Station Transmit (Carrier)
WOM	423	4425.6	4131.2
	417	4407.0	4112.6
Ft. Lauderdale	412	4391.5	4097.1
Florida	403	4363.6	4069.2
	825	8793.3	8269.4
	810	8746.8	8222.9
	805	8731.3	8207.4
	802	8722.0	8198.1
	814	8759.2	8235.3
	831	8811.9	8288.0
	1215	13144.2	12373.4
	1209	13125.6	12354.8
	1208	13122.5	12351.7
	1206	13116.3	12345.5
	1223	13169.0	12398.2
	1230	13190.7	12419.9
	1616	17279.4	16506.5
	1611	17263.9	16491.0
	1610	17260.8	16487.9
	1609	17257.7	16484.8
	1601	17232.9	16460.0
	2222	22661.1	22065.1
	2216	22642.5	22046.5
	2215	22639.4	22043.4

Channels: 403, 802, 1206, 1601, and 2215

GMT	TRFC	Weather
0030	×	
0430	×	
0830	×	
1230	×	•
1630	×	
2030	×	

Channels: 412, 805, 1208, 1609, and 2216

GMT	TRFC	Weather
0130	×	
0530	×	
0930	×	
1330	×	•
1730	×	
2130	×	

Channels: 417, 810, 1209, 1610, and 2222

GMT	TRFC	Weather
0230	×	
0630	×	
1030	×	
1430	×	
1830	×	
2230	×	•

Channels: 423, 825, 1215, and 1611

GMT	TRFC	Weather
0330	×	
0730	×	
1130	×	
1530	×	
1930	×	
2330	×	•

Coast Station contact telephone number: (305) 587-0910 (Call Collect)

• Broadcasts of National Weather Service Information. All stations will omit traffic lists (TRFC) and weather broadcasts on busy channels.

Chapter 9. Limited Coast Stations

The term *limited coast station* includes coast stations which are there to serve the operational and business needs of vessels, but are not open to public correspondence. Many, such as those operated by a harbor master coordinating the movement of vessels within a confined area, or a station at yacht clubs having docking facilities, marina operators, ship chandlers, boatels, harbor masters, dock-side restaurants, marine police, and marine radio service shops are among those who maintain and operate limited coast stations as a part of their regular operations. No charge is made for the communications service, which is incidental to their business.

HOW TO USE THE SERVICES OF LIMITED COAST STATIONS

Vessels should call limited coast stations on the limited coast station's working channel. All limited coast stations have Channel 16 plus one or more working channels. Limited coast stations, on the other hand, will call boats on Channel 16; therefore, you do not need to monitor the working channel even if you are expecting a call.

As a general rule, limited coast stations operate only during their normal working hours. The calling procedure to use is the same as you would use to call another vessel (see Chapter 6), except that you should initiate the call on the coast station's working channel. Be sure to give them plenty of time to answer your call as operating the radio is secondary to the operator's normal tasks. Many of these stations monitor Channel 16 as well as their working channels. If you don't know their assigned working channel, or if they don't appear to be listening to their working channel, call on Channel 16.

Chapter 10. FCC Rules for Recreational Boaters

Subpart CC—How To Use Your VHF Marine Radio

Source: 45 FR 49935, July 21, 1983, unless otherwise noted

GENERAL

§83.1001 (VHF Marine Rule 1) Who are these rules for?

These rules are for recreational boaters who have put VHF (*V*ery *H*igh *F*requency) marine radios on their boats. A VHF marine radio is a two-way radio for boaters. VHF marine radios operate on channels in the very high frequency band between 156 and 162 MHz.

§83.1002 (VHF Marine Rule 2) What do these rules tell me?

Rules 3 through 9 tell you how to get a license for your radio. Rules 10 through 22 tell you how to operate your radio.

HOW TO GET A LICENSE

§83.1003 (VHF Marine Rule 3) Do I need a license?

You must have both a ship station license and at least a restricted radiotelephone operators permit (RP) before you use your radio.

§83.1004 (VHF Marine Rule 4) How do I apply for my license and for my RP?

(a) Use FCC Form 506[1] to apply for a ship station license. The license term is for five years. You may not transfer this license to another person or boat.

(b) Use FCC form 753 to apply for an RP. You must be at least 14 years old. There is no test required. The RP is issued for your lifetime.

§83.1005 (VHF Marine Rule 5) May I operate my marine radio while my applications are being processed?

(a) You may operate your marine radio after you have mailed your applications to the FCC, if—

(1) You fill out a temporary operating authority application (FCC Form 506-A), and

[1]FCC Form 506 is a new application form that replaced FCC Form 502 beginning April 1, 1979.

(2) You *keep* this form with your station records. The completed form *is* your temporary operating authority.

(b) This temporary operating authority is valid for 60 days after you mail your applications to the FCC.

§83.1006 (VHF Marine Rule 6) How do I make changes during my license term?

(a) The following table tells you what you must do for changes during your license term:

If you change your mailing address, *you must* tell the FCC in writing.
If you change your name, *you must* tell the FCC in writing.
If you are a corporation and the ownership or control of the corporation changes, *you must* apply for a new ship station license.
If you add or replace a transmitter which operates in the same frequency band, *you must* (no action required).
If you add a transmitter which operates in a new frequency band, *you must* apply for modification of your ship station license.

(b) Send your written notice of change to FCC, P.O. Box 1040, Gettysburg, PA 17352.

(c) Use FCC Form 506 to modify your ship station license.

§83.1007 (VHF Marine Rule 7) How do I renew my license?

(a) Use FCC Form 405-B to renew your license. The FCC will send you this form about 4 to 8 weeks before your license expires. If you do not receive this form, you may use FCC Form 506 to renew your license.

(b) If you send in your renewal form before your license expires, you may continue to operate under that license until the FCC acts on your application. You do not need a temporary permit, but you should keep a copy of the application you send the FCC.

(c) You must stop transmitting as soon as your license expires, unless you have already sent your renewal application to the FCC.

(d) If you did not send in your renewal application to the FCC before your license expired, you must stop transmitting until you receive your new license. However, if in DISTRESS, YOU MAY USE YOUR RADIO.

§83.1008 (VHF Marine Rule 8) What do I do if I lose my license or RP?

(a) If you lose your license, you must request a duplicate from the FCC, Gettysburg, PA 17325. Your request must include your name, your address and your station call sign.

(b) If you lose your RP, you must request a duplicate from the FCC. Use FCC Form 753 to request a duplicate RP.

§83.1009 (VHF Marine Rule 9) What must I do if I sell my boat?

If you sell your boat, you must send your ship license to the FCC, Gettysburg, PA 17325 for cancellation. You cannot transfer your ship station license to another person or boat.

HOW TO OPERATE YOUR RADIO

§83.1010 (VHF Marine Rule 10) What type equipment must I have?

(a) Your radio must be type accepted by the FCC. You can tell a type accepted radio by the type acceptance label on the radio. You may look at a list of type accepted radios at any FCC field office or at FCC headquarters.

(b) The power output of your radio must not be more than 25 watts. You must also be able to lower the power of your radio to one watt or less.

(c) Your radio must be able to transmit on channel 16, channel 6 and at least one other channel.

§83.1011 (VHF Marine Rule 11) May I install and service my marine radio by myself?

(a) You may install your radio in your boat by yourself. However;

(b) All repairs or adjustments to your radio must be made by, or under the supervision of, a first or second class commercial operator.

§83.1012 (VHF Marine Rule 12) What channels may I use?

(a) Each channel is used only for certain types of messages. You must choose a channel which is available for the type of message you want to send. Except where noted, channels are available for both ship-to-ship and ship-to-coast messages.

(b) The channels listed in the table below are the only channels you may use, even if your radio has more channels available.

Type of message	Channel(s) available
Distress, safety and calling—Use this channel to get the attention of another station (calling) or in emergencies (distress and safety).	16
Internship safety—Use this channel for ship-to-ship safety messages, and for search and rescue messages with ships and aircraft of the Coast Guard.	6
Coast Guard Liaison—Use this channel to talk to the Coast Guard. (But first make contact on channel 16.)	22
Noncommercial—Working channels for recreational boats. Messages must be about the needs of the vessel. Typical uses include: fishing reports; rendezvous; scheduling repairs; and berthing information. Use channels 70 and 72 only for ship-to-ship messages.	9, 68, 69, 70, 71, 72, 78

Type of message	Channel(s) available
Commercial—Working channels for working vessels only. Messages must be about business or needs of the vessel. Use channels 8, 67 and 88 only for ship-to-ship messages.	7, 8, 9, 10, 11, 18, 19, 67, 79, 80, [1]88
Public Correspondence (marine operator)—Use these channels to call the marine operator at a public coast station, you can make and receive calls from telephones on shore. Except for distress calls, public coast stations usually charge for this service.	24, 25, 26, 27, 28, 84, 85, 86, 87, [2]88
Port Operations—These channels are used in directing the movement of ships in or near ports, locks or waterways. Messages must be about the operational handling, movement and safety of ships. In certain major ports channels 11, 12 and 14 are being used for the Vessel Traffic Service systems being developed by the Coast Guard and are not available for general port operations messages. Use channel 20 only for ship-to-coast messages.	[1]5, 12, 14, 20, 65, 66, 73, 74
Navigational—(also known as the bridge-to-bridge channel). This channel is available to all ships. Messages must be about navigation; for example, passing or meeting other vessels. You must keep your messages short. Your power must not be more than one watt. This is also the main working channel at most locks and bridges.	13
State Control—This channel may be used to talk to ships and coast stations operated by State or local governments. Messages must be about State regulation and control of boating activities.	17
Weather—On these channels you may receive weather broadcasts of the National Oceanic and Atmospheric Administration. These channels are only for receiving. You cannot transmit on them.	WX-1 (162.550 MHz) WX-2 (162.400 MHz) WX-3 (162.475 MHz)

[1]Not available in the Great Lakes and St. Lawrence Seaway.
[2]For use in Great Lakes and St. Lawrence Seaway only.
[3]Available only in Houston and New Orleans areas.
[45 FR 49935, July 28, 1980; 45 FR 57722, Aug. 29, 1980]

§83.1013 (VHF Marine Rule 13) How do I operate my marine radio?

(a) *Maintain your watch.* Whenever your radio is turned on (and not being used for messages), keep it tuned to Channel 16.

(b) *Power.* Try one watt first if the station being called is within a few miles. If no answer, you may switch to higher power.

(c) *Calling coast stations.* Call a coast station on its assigned channel. You may use channel 16 when you do not know the assigned channel.

(d) *Calling other boats or ships.* Call other boats or ships on Channel 16. You may call on ship-to-ship channels when you know that the boat is listening on both a ship-to-ship channel and Channel 16. (NOTE: To do this, the boat has to have two separate receivers.)

(e) *Limits on calling.* You must not call the same station for more than 30 seconds at a time. If you do not get a reply, wait at least two minutes before calling again. After three calling periods wait at least 15 minutes before calling again.

(f) *Change channels.* After contacting another station on Channel 16, change immediately to a channel which is available for the type of message you want to send (See Rule 12).

(g) *Station Identification.* Identify your station by your FCC call sign at the beginning and end of each message. Identify in English.

§83.1014 (VHF Marine Rule 14) What communications are prohibited?

You Must *Not* Transmit—

(a) False distress or emergency messages;

(b) Messages containing obscene, indecent or profane words or meaning;

(c) General calls, signals or messages, except in an emergency or if you are testing your radio, (these are messages not addressed to a particular station); or

(d) When your boat is on land (for example, while the boat is on a trailer).

§83.1015 (VHF Marine Rule 15) Do I have to keep a radio log?

You do not have to keep a radio log.

§83. 1016 (VHF Marine Rule 16) Do I need a copy of the FCC's rules?

(a) You do not need to keep a copy of the FCC rules. However, you are responsible for compliance with the FCC rules.

(b) Both these VHF marine rules and Volume IV are available from the Superintendent of Documents, Government Printing Office.

§83.1017 (VHF Marine Rule 17) Do I have to make my ship station available for inspection?

Your station and your station records (station license and operator license or RP) must be shown when requested by an authorized FCC representative.

§83.1018 (VHF Marine Rule 18) What happens if I violate these rules?

(a) If it appears to the FCC that you have violated the Communications Act or these rules, the FCC may send you a written notice of the apparent violation.

(b) If the violation notice covers a technical radio standard, you must stop using your radio. You must not use your radio until you have had all the technical problems fixed. You may have to have tests conducted. You may have to report the results of those tests to the FCC. Test results must be signed by the commercial operator who conducted that test.

(c) If the FCC finds that you have willfully or repeatedly violated the Communications Act or these rules, your license may be revoked and you may be fined or sent to prison.

OPERATING PROCEDURES

§83.1019 (VHF Marine Rule 19) How do I call another boat?

Speak directly into microphone in a normal tone of voice—speak clearly—distinctly.

(a) Make sure your radio is on.

(b) Select Channel 16 (156.8 MHz) and listen to make sure it is not being used.

(c) Press the microphone button and call the boat you wish to call. Say:

"_____."

(Name of boat being called)

This is _____."

(Your boat's name and call sign)

(d) Once contact is made on Channel 16, you must switch to a ship-to-ship channel (see Rule 12).

(e) After communications are completed, each ship must give its call sign and switch to Channel 16.

§83.1020 (VHF Marine Rule 20) How do I place a call through a public coast station?

Speak directly into microphone in a normal tone of voice—speak clearly—distinctly.

(a) Make sure your radio is on.

(b) Select correct channel for the public coast station, and listen to make sure it is not being used.

(c) Press microphone button and say:

"_____."

(Name of coast station)

This is _____."

(Your call sign)

(d) When coast station operator answers say:

"This is _____
(Name of boat call sign and billing number if assigned)
Placing a call to _____."
(City, telephone number desired)
Inform operator of type of billing desired.

(e) After completion of call say:

"_____ out."
(Name of boat, call sign)

EMERGENCY OPERATING REQUIREMENTS

§83.1021 (VHF Marine Rule 21) What are marine emergency signals?

(a) The three spoken international emergency signals are:

(1) *Mayday*—The distress signal MAYDAY is used to indicate that a station is threatened by grave and imminent danger and requests immediate assistance. MAYDAY has priority over all other messages.

(2) *Pan Pan*—The urgency signal PAN is used when the safety of the vessel or person is in jeopardy.

(3) *Security*—The safety signal SECURITY is used for messages about the safety of navigation or important weather warnings.

(b) You must give any message beginning with one of these signals priority over routine messages.

§83.1022 (VHF Marine Rule 22) What is the marine distress procedure?

Marine Distress Communications Form

Speak Slowly—Clearly—Calmly.

(a) Make sure your radio is on.

(b) Select *VHF Channel 16* (156.8 MHz).

(c) Press microphone button and say: "Mayday—Mayday—Mayday."

(d) Say:

"This is _____."
(Your boat name/call sign repeated three times)

(e) Say:

"Mayday _____."
(Your boat name)

(f) Tell where you are: (What navigational aids or landmarks are near.)

(g) State the nature of your distress.

(h) Give number of persons aboard and conditions of any injured.

(i) Estimate present seaworthiness of your boat.

(j) Briefly describe your boat:

(Length in feet) _____
(Type) _____
(Color in Hull) _____

(k) Say: "I will be listening on *Channel 16.*"
(l) End Message by saying:
"This (Your boat name and call sign) _____
_____ over."
(m) Release microphone button and listen: Someone should answer. If they do not, repeat call, beginning at Item No. 3 above.

Emergency Tear-out Sheet

DISTRESS COMMUNICATIONS FORM

Instructions: Complete this form now (except for items 6 through 9) and post near your radiotelephone.

Speak SLOWLY — CLEARLY — CALMLY

1. Make sure your radiotelephone is on.
2. Select either *VHF Channel 16* (156.8 MHz) or *2182* kHz.
3. Press microphone button and say: "MAYDAY—MAYDAY—MAYDAY."
4. Say: "THIS IS _____ (your boat name), _____ (your boat name), _____ (your boat name) _____ (your call letters)."
5. Say: "MAYDAY: _____ (your boat name)."
6. TELL WHERE YOU ARE (What navigational aids or landmarks are near?).
7. STATE THE NATURE OF YOUR DISTRESS.
8. GIVE NUMBER OF ADULTS AND CHILDREN ABOARD, AND CONDITIONS OF ANY INJURED.
9. ESTIMATE PRESENT SEAWORTHINESS OF YOUR BOAT.
10. BRIEFLY DESCRIBE YOUR BOAT:

    _____ (State Registration No.); _____ (Length) FEET;

    _____ (Draft) FEET; _____ (Type); _____ (Color) HULL; _____ (Color) TRIM;

    _____ (Number) MASTS; _____ (Type; Horsepower) POWER; _____ (Construction Material).

    _____
    Anything else you think will help rescuers to find you.

11. Say: "I WILL BE LISTENING ON *CHANNEL 16/2182*."
    Cross out channel no. or frequency that does not apply)
12. End Message by saying: "THIS IS _____ (your boat name and call sign). OVER."
13. Release microphone button and listen: Someone should answer. IF THEY DO NOT, REPEAT CALL, BEGINNING AT ITEM 3. If there is still no answer, switch to another channel and begin again.

VESSEL INFORMATION DATA SHEET

When requesting assistance from the Coast Guard, you may be asked to furnish the following details. This list should, therefore, be filled out as completely as possible and posted alongside your transmitter with the *Distress Communications Form.*

1. Identification

Boat name: _____

Station call sign: _____

State reg. no. or documentation no.: _____

2. Description of Vessel Requiring Assistance

Sail: ____, Power: Inboard ____, Outboard ____, I/O ____

Type of vessel: (Ketch, sloop, sedan or express cruiser, row boat, etc.)

_____. Manufacturer or class _____

Boat Length _____. Draft _____. Home Port _____

Hull Markings (color trim, etc.) _____

3. Survival Gear Aboard

Personal Flotation Devices _____
Flares _____
Flashlight _____
Raft _____
Dinghy or Tender _____
Anchor _____
Spotlight _____
Auxiliary power _____
Horn _____

4. Electronic Equipment

Radiotelephone(s) VHF MF HF
Channels/Frequencies available
VHF Channel 22A _____
MF—2670 kHz _____
Radar _____
Depth Finder _____
Loran _____
Direction Finder _____
EPIRB (121.5/243 MHz) _____
EPIRB (156.8/156.75 MHz) _____

5. Vessel Owner/Operator

Name _____ Telephone Number _____

Address _____

Is Owner/Operator an experienced sailor? Yes No

6. Miscellaneous

Be prepared to describe the local weather conditions, depth of water, etc.