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other quality electronic products
engineered by Genave for general
use at moderate prices

Aviation:

- ALPHA/600**
All Transistor Nav/Com
- BETA/5000**
TSO'd ATC Transponder
- SIGMA/1500**
Digital ADF
- DELTA/303**
Marker Beacon Receiver

Marine:

- Marine Master-25W/A**
25 watt Marine R/T
- Marine Master I**
Handheld Marine R/T
- Marine Mate-100**
25 watt Marine R/T
- GSB-1000**
10 channel, 60 watt, SSB R/T

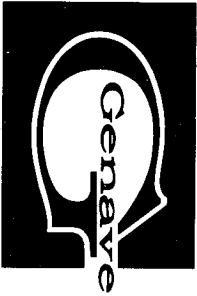
Amateur:

- GT-X-2**
2-meter FM
pushbutton channeling
- GT-X-10S**
2-meter FM
10 watt, low cost
- GT-X-200**
2-meter FM
Independent T/R Selection
- GT-X-600**
6-meter FM
Independent T/R Selection

Landmobile:

- Mobiline**
10 watt, low cost, 2-way
VHF high band Transceiver
- Mobiline I**
25 watt, 2-way
VHF high band Transceiver
- Mobiline II**
25 watt, high performance receiver
2-way, VHF high band transceiver
- Mobiline III**
35 watt, 2-way
VHF low band transceiver

MANUFACTURED IN THE UNITED STATES



GENERAL AVIATION ELECTRONICS, INC.

4141 Kingman Drive, Indianapolis, Indiana 46226

AREA (317) 546-1111

TECH PUB. NO. 0820021A

Specifications subject to change without notice.

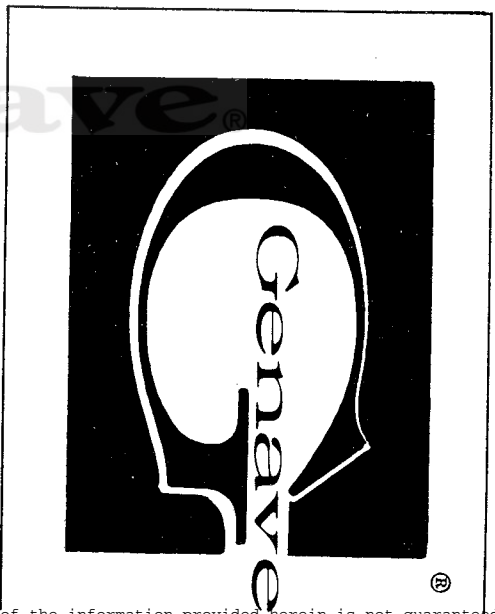
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Printed in U.S.A. 1976

**OWNERS
MANUAL**

CONGRATULATIONS!

You now own one of the finest pieces of electronics equipment available for marine use. Genave Marine/Master-202 is the end product of research, design and engineering by the marine division of General Aviation Electronics, Inc. (Genave)—space age innovators in electronic equipment for general aviation and the marine industries.



MARINE / MASTER - 202

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Price
\$2.00

Tech. Pub. No. 0820021

Warranty

General Aviation Electronics, Inc., warrants this product to be free from material defects for a period of 90 days from the date of purchase.

Our obligation under this warranty is to replace any parts (except service items such as bulbs, fuses, etc.) which upon our examination appear to us to be defective in materials or workmanship, with any labor charges involved at the cost of the owner, provided the unit is delivered to the Factory within the specified time period.

The owner may elect to have the unit repaired at an authorized Genave dealer, in which case Genave will replace only those defective parts returned shipping pre-paid to the Factory, and will not be responsible in any way for payment of any labor or other charges incurred therein.

This warranty does not apply to defects, malfunction, or breakage due to improper installation or to the servicing thereof by other than an authorized Genave dealer, or due to abuse, misuse, tampering, submersion in water or willful destruction of the unit.

The Company offers no other guarantees or warranties expressed or implied.

Your Marine/Master-202 was under strict quality control during its fabrication and was thoroughly checked by skilled technicians prior to shipment. With reasonable care and handling it will provide years of satisfactory operation.

Marine/Master-202 comes ready to be installed and does not require installation by a licensed FCC technician. The Marine/Master-202 was designed with the installation simplicity which makes it a "natural" for do-it-yourself installation.



Specifications:

GENERAL:

Front Panel Size:

6 1/2" x 2 1/2"

Over-all Dimensions:

9" deep x 6 1/2" wide x 2 1/2" high

Number of Transistors:

12 all silicon transistors; 7 diodes, 6 FETs, 3 integrated circuits

Power Supply:

12 VDC System, negative ground

Current Drain:

Receive .09 amps
Transmit: High 5.0 amps
Low 1.7 amps

Frequency Range:

156 to 162 MHz

Number of Channels:

20 (includes Weather Monitor, 6, 16. Remaining channels factory installed at nominal charge each)

Weight:

5 lbs. (approx.)

RECEIVE:

less than 1 microvolt for 20 db quieting

Sensitivity:

More than 70 db

Image:

More than 70 db

Spurious:

±10 KHZ

Selectivity:

Dual conversion, superheterodyne, crystal controlled

Receiver Circuit:

5 watts at less than 15% distortion
More than 5 KHZ

Audio Output:

0.5 microvolt max.

Modulation Acceptance:

0.5 microvolt max.

Squelch Threshold:

0.5 microvolt max.

TRANSMIT:

Frequency Range:

156 to 162 MHz

Power Output:

25 watts, Nom

Output Impedance:

Matches standard VHF-FM marine antennas

156 to 162 MHz
25 watts, Nom
Matches standard VHF-FM marine antennas

ANTENNA INSTALLATION

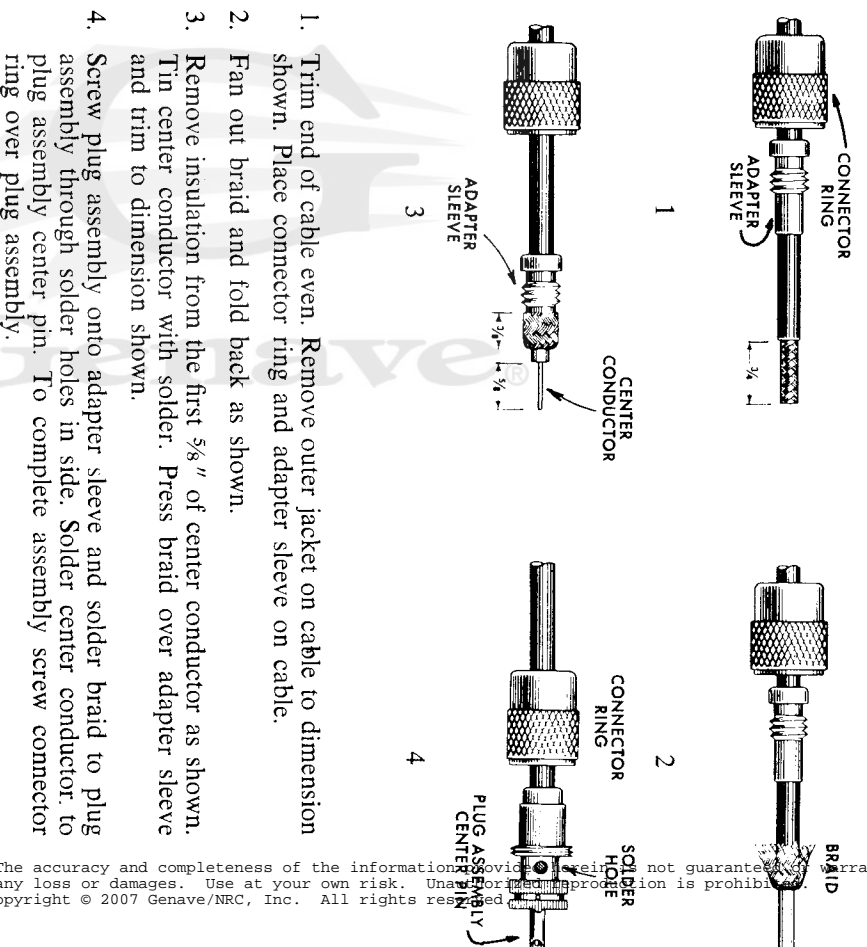
The Marine/Gain-50 and the Marine/Gain-100 antennas are designed for operation with the Marine/Master-202. Both of these antennas can be mounted on either a vertical or a horizontal surface. A few considerations to make when planning the antenna location are as follows:

- A. Antenna height is very important. The higher the antenna is installed, the greater the range.
- B. Do not mount the antenna too near a source of electrical noise (ship's engine, electrical motors, etc.) or in the radiation path of the ship's radar antenna.
- C. For maximum performance, try to prevent excessive antenna cable lengths.
 - To install the antenna proceed as follows:
 - Mount the antenna to the selected surface using bolts or screws.
 - Route the antenna cable to the Marine/Master-202. If it is necessary to route the antenna cable through hull sides, decks, or bulkheads, and still maintain a waterproof seal use a waterproof bulkhead fitting as illustrated on the next page. These fittings are available from your local marine supplier.
 - Secure the antenna cable with heavy staples or tacks. Be careful not to kink or pull the coaxial cable around corners or sharp edges. It is more desirable to have some "extra" cable than not enough.
 - Install coaxial antenna connector (See illustration on next page) and connect securely to the coaxial receptacle at the rear of the Marine/Master-202
5. Your Marine/Master-202 is now ready to operate.

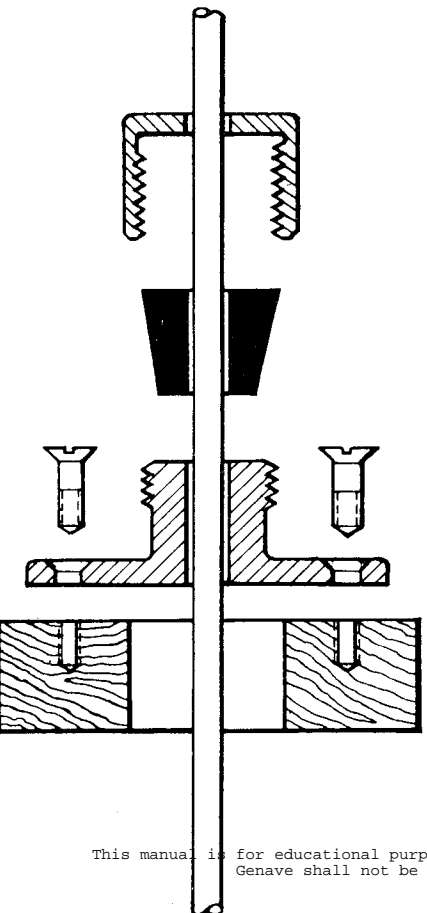
EXTERNAL SPEAKER

Your Marine/Master-202 is wired so that it may be operated with an external speaker. The external speaker should be equipped with a standard 1/4" phone plug. Use an 8 ohm, 1 1/2 watt speaker. To operate the remote speaker, insert the phone plug into the phone jack located on the rear panel of the Marine/Master-202.

COAXIAL ANTENNA CONNECTOR ASSEMBLY



WATERPROOF BULKHEAD FITTING



MOUNTING LOCK INSTALLATION

The mounting lock can be used to secure the unit to the mounting bracket when the unit is mounted in a desk-top, bulkhead, overhead, or under-panel configuration. The mounting lock can be used when the unit is secured through either the top or bottom mounting holes of the mounting bracket, however the bottom mounting position will assist to conceal the heads of the screws used to mount the bracket to the mounting surface. To install the mounting lock proceed as follows:

1. Remove the mounting screws and nylon washer from the side of the unit mounting bracket to which the mounting lock is to be attached.
2. Position the mounting lock so that the hole in the lock and the locking tab are aligned with the holes in the mounting bracket.
3. Secure the mounting lock to the unit using one of the hex head mounting screws supplied. Be sure that the screw passes through the correct hole in the mounting bracket (See Figure 1).

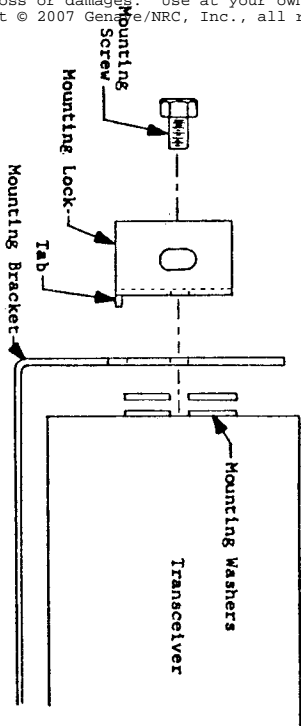


Figure 1
LOCKING BRACKET INSTALLATION

4. Attach padlock through the holes in side of mounting lock. Latch padlock to prevent removal of unit from mounting bracket (See Figure 2).

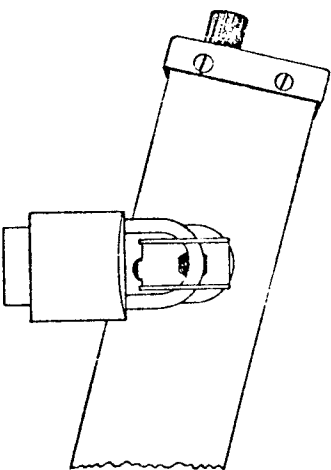


Figure 2
MOUNTING LOCK

COMMISSION FIELD ENGINEERING OFFICES

Addresses of Commission Field Engineering Offices are listed below. All communications with Field Offices should be addressed to the Engineer in Charge, Federal Communications Commission.

Answers to specific licensing questions can be answered by the Engineer in Charge at any Federal Communications Commission Field Engineering Office. The locations of these offices are given here for your convenience.

ALABAMA, MOBILE 366020 439 U.S. Courthouse & Custom House	MARYLAND, BALTIMORE 21201 819 Federal Bldg. 31 Hopkins Plaza
ALASKA, ANCHORAGE 99501 54 U.S. Post Office and Courthouse Bldg. Box 644	MASSACHUSETTS, BOSTON 02109 1600 Custom House
CALIFORNIA, LOS ANGELES 90012 U.S. Courthouse, Rm. 1758 312 North Spring St.	MICHIGAN, DETROIT 48226 1054 New Federal Building
CALIFORNIA, SAN DIEGO 92101 Folk Theatre Bldg. 1245-7th Avenue	MINNESOTA, ST. PAUL 55101 691 Federal Bldg. & U.S. Courthouse 4th & Robert St.
CALIFORNIA, SAN FRANCISCO 94111 323-A Custom House 555 Battery Street	MISSOURI, KANSAS CITY 64106 1703 Federal Building 601 East 12th Street
CALIFORNIA, SAN PEDRO 90731 300 So. Ferry St., Rm. 2525, PO Box 3009 Terminal Island	NEW YORK, BUFFALO 14203 328 Federal Building
COLORADO, DENVER 80202 504 New Custom House 19th between California & Stout Sts.	NEW YORK, NEW YORK 10014 748 Federal Building 641 Washington Street
DISTRICT OF COLUMBIA, WASH. 20554 Room 216 1919 M St., N.W.	OREGON, PORTLAND 97204 314 Multnomah Bldg. 319 S.W. Pine St.
FLORIDA, MIAMI 33130 51 S.W. First Ave., Rm. 919	PENNSYLVANIA, PHILADELPHIA 19106 11425 James A. Byrne Fed. Courthouse 601 Market St.
FLORIDA, TAMPA 33602 738 Federal Office Bldg. 500 Zack Street	PUERTO RICO, SAN JUAN 00903 322-324 Federal Bldg. PO Box 2987
GEORGIA, ATLANTA 30303 1602 Gas Light Tower 235 Peachtree Street, N.E.	TEXAS, BEAUMONT 77701 323 Federal Building 300 Willow Street
GEORGIA, SAVANNAH 31402 238 Post Office Bldg., PO Box 8004	TEXAS, DALLAS 75202 Federal Courthouse & Off. Bldg. 1100 Commerce St., Rm. 13E7
HAWAII, HONOLULU 96808 502 Federal Building, PO Box 1021	TEXAS, HOUSTON, 77002 New Federal Office Building 515 Rusk Avenue Rm. 5636
ILLINOIS, CHICAGO 60604 1782 Everett McKinley Dirksen Bldg. 219 S. Dearborn Street	VIRGINIA, NORFOLK 23502 Military Circle 870 N. Military Highway
LOUISIANA, NEW ORLEANS 70130 829 Federal Office Building 600 South Street	WASHINGTON, SEATTLE 98104 8012 Federal Office Building 1st Avenue and Marlon

Federal Communications Commission

Form Approved GAO No. B-180277 (R0204)

FEDERAL COMMUNICATIONS COMMISSION

Form Approved

GAO No. B-180277 (R0204)

APPLICATION FOR SHIP RADIOTELEPHONE AND/OR RADIONAVIGATION STATION LICENSE

Form 502, September 1975. Application for ship radiotelephone and/or radionavigation station license. Includes sections for applicant information, ship details, and certification.

Vertical text on the left side of the form, possibly a page number or reference.

- A. USE TYPEWRITER OR PRINT IN INK. B. Enclose fee with application. C. No oral or written examination is required. D. ALIEN PILOTS should submit FCC Form 755 in lieu of this form.

Reason for application section with checkboxes for New Permit, Name Change, etc.

Applicant information section with fields for name, address, and phone number.

Personal information section including date of birth, place of birth, and citizenship.

APPLICANT'S CERTIFICATION: I certify that I am the above named applicant, that the facts stated in the foregoing application and all exhibits attached thereto, are true of my own knowledge...

Physical and health information section with checkboxes for various conditions.

Signature and date section with a handwritten signature and the date 4/1/76.

SHIP RADIOTELEPHONE RULE REMINDERS

1. Post Station License. Section 83.102
2. Have Operator License Available. Section 83.165.
3. Listen on Channel 16 (156.8 MHz). Section 83.244
4. Use Channel 16 (156.8 MHz) for Calling, Distress, Urgency or Safety only. Sections 83.233, 83.353, and 83.366.
5. Listen Before Transmitting. Avoid Interference With Distress or Other Communications In Progress. Section 83.181.
6. When You Hear MAYDAY—Listen. Don't Talk Unless You Can Help. Section 83.176, 83.235, 83.236, 83.238, 83.239, 83.240, 83.241, and 83.242.
7. No Ragchewing. Sections 83.178 and 83.358
8. Talk 3 Wait 10. Section 38.366(g)
9. Give Your Call Sign. Section 83.364
10. Keep A Log. Section 83.368
11. Answer Violation Notices. Section 83.601
12. Use of Indecent Language Or Profanity On The Air Is A Criminal Offense.
13. FALSE OR FRAUDULENT DISTRESS SIGNALS ARE PROHIBITED.

IF YOU ARE IN DISTRESS

1. SEND radiotelephone alarm signal, if possible, to attract attention of other ships.
2. SAY slowly and distinctly on the distress frequency, Channel 16 (156.8 MHz):
 - a. MAYDAY, MAYDAY, MAYDAY
 - b. THIS IS (Call Sign, Repeated 3 Times)
 - c. GIVE the name of your ship.
 - d. GIVE your geographical position.
 - e. TELL the nature of the distress.
 - f. EXPLAIN what kind of assistance you need.
3. GIVE any information that will help you to be rescued. (For example, color of ship, type of ship, length of ship, etc.)
4. REPEAT distress call and distress message at intervals until you get an answer.
5. TRY any other available frequency to get help, if you get no answer to your distress call sent on Channel 16 (156.8 MHz).
6. GIVE priority to DISTRESS, URGENCY, AND SAFETY messages in that order.

ADDITIONAL INFORMATION

Marine/Master-202 gives you 20 "working" area channels. At any time you can determine the number and frequency of additional channels needed and return the unit to the factory with the necessary information and obtain factory installed frequencies at a cost that is most nominal. If, however, the unit cannot be spared or taken out of operation for any period of time, your authorized Genave dealer can provide you with the necessary crystals. Installation of these crystals must, however, be performed by an FCC Licensed 1st or 2nd Class Radiotelephone or Radiotelegraph Technician, and signed off in your Marine/Master-202 log book.

Two charts are included in this manual to aid you in determining which additional channels you may want to order. The first chart is the Numerical Listing of Marine/Master-202 Channels on page 17. The second chart is the Marine/Master-202 Channel Recommendation chart on page 18. When you make your selection be sure to compare these charts with the facilities available in the area in which you operate your ship.

As mentioned previously, all ship radiotelephone stations are required by law to maintain a station log. A logbook designed especially for the Marine/Master-202 is available from Genave. This logbook is arranged in such a manner that "paper-work time" can be reduced to a minimum. To obtain your copy of the Marine/Master-202 Logbook fill out the enclosed card and mail it along with the proper fee to: Genave, Inc., 4141 Kingman Drive, Indianapolis, Indiana 46226.

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NUMERICAL LISTING OF VHF MARINE RADIOTELEPHONE CHANNELS

CHANNEL	FREQUENCY (MHz)	XMIT COAST	AUTHORIZED TRAFFIC	POINTS OF COMMUNICATION
1	156.050	160.650	International Only	Ship/Shore
2	156.100	160.700	International Only	Ship/Shore
3	156.150	160.750	International Only	Ship/Shore
4	156.200	160.800	International Only	Ship/Shore
5	156.250	160.850	International Only	Ship/Shore
6	156.300	160.900	INTERNET-SHIP SAFETY	Ship/Shore
7	156.350	160.950	International Only	Ship/Shore
7A	156.400	161.000	Commercial	Ship/Shore
8	156.450	161.050	Commercial, Non-Commercial	Ship/Shore
9	156.500	161.100	Commercial	Ship/Shore
10	156.550	161.150	Commercial	Ship/Shore
11	156.600	161.200	Port Operations, USCG	Ship/Shore
12	156.650	161.250	Port Operations, USCG	Ship/Shore
13	156.700	161.300	Canals, Locks, Pilots	Ship/Shore
14	156.750	161.350	Port Operations, USCG	Ship/Shore
15	156.800	161.400	Environmental, Hydrographic	Ship/Shore
16	156.850	161.450	DISTRESS, SAFETY & CALLING	Ship/Shore
17	156.900	161.500	Restricted, State Control	Ship/Shore
18A	156.950	161.550	International Only	Ship/Shore
19A	157.000	161.600	Commercial	Ship/Shore
20	157.050	161.650	Port Operations	Ship/Shore
21	157.100	161.700	International Only	Ship/Shore
21CG	157.150	161.750	Restricted, USCG	Ship/Shore
22	157.200	161.800	International Only	Ship/Shore
22A(CG)	157.250	161.850	Communications, USCG	Ship/Shore
23	157.300	161.900	International Only	Ship/Shore
23CG	157.350	161.950	Restricted, USCG	Ship/Shore
24	157.400	162.000	Public Correspondence	Ship/Shore
25	157.450	162.050	Public Correspondence	Ship/Shore
26	157.500	162.100	Public Correspondence	Ship/Shore
27	157.550	162.150	Public Correspondence	Ship/Shore
28	157.600	162.200	Public Correspondence	Ship/Shore
29	157.650	162.250	Public Correspondence	Ship/Shore
30	157.700	162.300	Public Correspondence	Ship/Shore
31	157.750	162.350	Public Correspondence	Ship/Shore
32	157.800	162.400	Public Correspondence	Ship/Shore
33	157.850	162.450	Public Correspondence	Ship/Shore
34	157.900	162.500	Public Correspondence	Ship/Shore
35	157.950	162.550	Public Correspondence	Ship/Shore
36	158.000	162.600	Public Correspondence	Ship/Shore
37	158.050	162.650	Public Correspondence	Ship/Shore
38	158.100	162.700	Public Correspondence	Ship/Shore
39	158.150	162.750	Public Correspondence	Ship/Shore
40	158.200	162.800	Public Correspondence	Ship/Shore
41	158.250	162.850	Public Correspondence	Ship/Shore
42	158.300	162.900	Public Correspondence	Ship/Shore
43	158.350	162.950	Public Correspondence	Ship/Shore
44	158.400	163.000	Public Correspondence	Ship/Shore
45	158.450	163.050	Public Correspondence	Ship/Shore
46	158.500	163.100	Public Correspondence	Ship/Shore
47	158.550	163.150	Public Correspondence	Ship/Shore
48	158.600	163.200	Public Correspondence	Ship/Shore
49	158.650	163.250	Public Correspondence	Ship/Shore
50	158.700	163.300	Public Correspondence	Ship/Shore
51	158.750	163.350	Public Correspondence	Ship/Shore
52	158.800	163.400	Public Correspondence	Ship/Shore
53	158.850	163.450	Public Correspondence	Ship/Shore
54	158.900	163.500	Public Correspondence	Ship/Shore
55	158.950	163.550	Public Correspondence	Ship/Shore
56	159.000	163.600	Public Correspondence	Ship/Shore
57	159.050	163.650	Public Correspondence	Ship/Shore
58	159.100	163.700	Public Correspondence	Ship/Shore
59	159.150	163.750	Public Correspondence	Ship/Shore
60	159.200	163.800	Public Correspondence	Ship/Shore
61	159.250	163.850	Public Correspondence	Ship/Shore
62	159.300	163.900	Public Correspondence	Ship/Shore
63	159.350	163.950	Public Correspondence	Ship/Shore
64	159.400	164.000	Public Correspondence	Ship/Shore
65	159.450	164.050	Public Correspondence	Ship/Shore
66	159.500	164.100	Public Correspondence	Ship/Shore
67	159.550	164.150	Public Correspondence	Ship/Shore
68	159.600	164.200	Public Correspondence	Ship/Shore
69	159.650	164.250	Public Correspondence	Ship/Shore
70	159.700	164.300	Public Correspondence	Ship/Shore
71	159.750	164.350	Public Correspondence	Ship/Shore
72	159.800	164.400	Public Correspondence	Ship/Shore
73	159.850	164.450	Public Correspondence	Ship/Shore
74	159.900	164.500	Public Correspondence	Ship/Shore
75	159.950	164.550	Public Correspondence	Ship/Shore
76	160.000	164.600	Public Correspondence	Ship/Shore
77	160.050	164.650	Public Correspondence	Ship/Shore
78	160.100	164.700	Public Correspondence	Ship/Shore
79A	160.150	164.750	Public Correspondence	Ship/Shore
80A	160.200	164.800	Public Correspondence	Ship/Shore
81	160.250	164.850	Public Correspondence	Ship/Shore
82	160.300	164.900	Public Correspondence	Ship/Shore
83CG	160.350	164.950	Public Correspondence	Ship/Shore
84	160.400	165.000	Public Correspondence	Ship/Shore
85	160.450	165.050	Public Correspondence	Ship/Shore
86	160.500	165.100	Public Correspondence	Ship/Shore
87	160.550	165.150	Public Correspondence	Ship/Shore
88A	160.600	165.200	Public Correspondence	Ship/Shore
WX1	162.400	163.275	Weather Broadcasts	Selected Coastal Stations
WX2	162.400	163.275	Weather Broadcasts	Selected Coastal Stations
WX3	162.400	163.275	Weather Broadcasts	Selected Coastal Stations

MARINE/MASTER-202 CHANNEL RECOMMENDATION CHART INSTRUCTIONS

Your Marine/Master-202 automatically includes 3 channels. These channels are: Channel 6 (Inter-Ship Safety), Channel 16 (Distress, Safety and Calling), and WX (Weather Service). All channels other than 6, 16, and WX which are in your Marine/Master-202 are called "working" channels.

In the event you wish to have additional channels installed in your Marine/Master-202, utilize the following steps to determine which channels are recommended:

- Determine the total number of working channels that you will have in your Marine/Master-202 after you have installed the new channels.
- Count any old working channels that are presently in your Marine/Master-202, if any.
- Don't include in your count channels 6, 16, or WX.
- Add to this count the number of new working channels which you desire to install. This number determines the Total Number of Working Channels.
- If your ship is a recreational vessel locate the Total Number of Working Channels in column "A".
- If your ship is a commercial vessel locate the Total Number of Working Channels in column "B".
- Proceed down the column titled "Total Number of Working Channels" for your vessel and read across at each "x" for description of communications recommended and the channel designation.
- Where more than one channel designation is listed, select the channel used in your boating area.

TOTAL NUMBER OF WORKING CHANNELS	RECREATIONAL VESSELS		COMMERCIAL VESSELS		TYPE OF COMMUNICATION	CHANNEL DESIGNATION
	A	B	A	B		
1	x				PORT OPERATIONS	22 A
2	x				PORT OPERATIONS	22 A
3	x				PORT OPERATIONS	22 A
4	x				PORT OPERATIONS	22 A
5	x				PORT OPERATIONS	22 A
6	x	x	x	x	PORT OPERATIONS	22 A
7	x				PORT OPERATIONS	22 A
7A	x				PORT OPERATIONS	22 A
8	x				PORT OPERATIONS	22 A
9	x				PORT OPERATIONS	22 A
10	x				PORT OPERATIONS	22 A
11	x				PORT OPERATIONS	22 A
12	x				PORT OPERATIONS	22 A
13	x				PORT OPERATIONS	22 A
14	x				PORT OPERATIONS	22 A
15	x				PORT OPERATIONS	22 A
16	x	x	x	x	PORT OPERATIONS	22 A
17	x				PORT OPERATIONS	22 A
18	x				PORT OPERATIONS	22 A
19	x				PORT OPERATIONS	22 A
20	x				PORT OPERATIONS	22 A
21	x				PORT OPERATIONS	22 A
22	x				PORT OPERATIONS	22 A
23	x				PORT OPERATIONS	22 A
24	x				PORT OPERATIONS	22 A
25	x				PORT OPERATIONS	22 A
26	x				PORT OPERATIONS	22 A
27	x				PORT OPERATIONS	22 A
28	x				PORT OPERATIONS	22 A
29	x				PORT OPERATIONS	22 A
30	x				PORT OPERATIONS	22 A
31	x				PORT OPERATIONS	22 A
32	x				PORT OPERATIONS	22 A
33	x				PORT OPERATIONS	22 A
34	x				PORT OPERATIONS	22 A
35	x				PORT OPERATIONS	22 A
36	x				PORT OPERATIONS	22 A
37	x				PORT OPERATIONS	22 A
38	x				PORT OPERATIONS	22 A
39	x				PORT OPERATIONS	22 A
40	x				PORT OPERATIONS	22 A
41	x				PORT OPERATIONS	22 A
42	x				PORT OPERATIONS	22 A
43	x				PORT OPERATIONS	22 A
44	x				PORT OPERATIONS	22 A
45	x				PORT OPERATIONS	22 A
46	x				PORT OPERATIONS	22 A
47	x				PORT OPERATIONS	22 A
48	x				PORT OPERATIONS	22 A
49	x				PORT OPERATIONS	22 A
50	x				PORT OPERATIONS	22 A
51	x				PORT OPERATIONS	22 A
52	x				PORT OPERATIONS	22 A
53	x				PORT OPERATIONS	22 A
54	x				PORT OPERATIONS	22 A
55	x				PORT OPERATIONS	22 A
56	x				PORT OPERATIONS	22 A
57	x				PORT OPERATIONS	22 A
58	x				PORT OPERATIONS	22 A
59	x				PORT OPERATIONS	22 A
60	x				PORT OPERATIONS	22 A
61	x				PORT OPERATIONS	22 A
62	x				PORT OPERATIONS	22 A
63	x				PORT OPERATIONS	22 A
64	x				PORT OPERATIONS	22 A
65	x				PORT OPERATIONS	22 A
66	x				PORT OPERATIONS	22 A
67	x				PORT OPERATIONS	22 A
68	x				PORT OPERATIONS	22 A
69	x				PORT OPERATIONS	22 A
70	x				PORT OPERATIONS	22 A
71	x				PORT OPERATIONS	22 A
72	x				PORT OPERATIONS	22 A
73	x				PORT OPERATIONS	22 A
74	x				PORT OPERATIONS	22 A
75	x				PORT OPERATIONS	22 A
76	x				PORT OPERATIONS	22 A
77	x				PORT OPERATIONS	22 A
78	x				PORT OPERATIONS	22 A
79A	x				PORT OPERATIONS	22 A
80A	x				PORT OPERATIONS	22 A
81	x				PORT OPERATIONS	22 A
82	x				PORT OPERATIONS	22 A
83CG	x				PORT OPERATIONS	22 A
84	x				PORT OPERATIONS	22 A
85	x				PORT OPERATIONS	22 A
86	x				PORT OPERATIONS	22 A
87	x				PORT OPERATIONS	22 A
88A	x				PORT OPERATIONS	22 A
WX1	x				PORT OPERATIONS	22 A
WX2	x				PORT OPERATIONS	22 A
WX3	x				PORT OPERATIONS	22 A

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