

**AMATEUR RADIO EMERGENCY
COMMUNICATIONS PLAN
for
THE SEA RANCH**



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THE SEA RANCH, CALIFORNIA

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Amateur Radio Emergency Communications Plan for The Sea Ranch

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AMATEUR RADIO EMERGENCY COMMUNICATIONS PLAN FOR THE SEA RANCH

THE SEA RANCH AMATEUR RADIO EMERGENCY SERVICE (TSR ARES)

a part of

THE SEA RANCH AMATEUR RADIO AUXILIARY (TSRARA)

1.0 Introduction

Members of The Sea Ranch Amateur Radio Auxiliary (TSRARA) who are FCC-licensed Radio Amateurs may be called upon to furnish backup communications services for local agencies in the event of any emergency or disaster wherein regular communication systems are disrupted or overloaded. They may also be called upon whenever they can provide communications services which are more efficient than those normally available to those agencies or officials responding to an emergency.

FCC licensed members of TSRARA who have registered their capabilities and their equipment for volunteer public service work are a part of the Amateur Radio Emergency Service (ARES). Thus, as members of The Sea Ranch Amateur Radio Emergency Service (TSRARES), they fulfill their part in a long tradition of organized emergency communications provided by Amateur Radio operators.

1.1 Scope

1.1.1 This document is intended to provide information to Sea Ranch officials and local agencies about enlisting the aid of local Amateur Radio operators in helping with emergency communications. It is especially intended as a one-volume source-book for those Amateur operators who help to provide those communications.

1.1.2 While this Plan is specifically designed for the Sea Ranch, it is intended that the resource of Amateur Radio operators not be confined to the Sea Ranch alone. The guidance provided herein will help TSRARES members to be of service to surrounding communities as well.

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- 1.1.3 The Plan is written chronologically beginning with the ways in which the notification of Amateur Radio operators takes place. This is followed by operating procedures to be used during the emergency, record keeping, and follow-up after the emergency.
- 1.1.4 FCC rules and regulations apply to the operation of a two-way radio in the Amateur service, and therefore apply to the Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) organizations.
- 1.1.5 This document shall compliment the Sea Ranch Disaster Plan. In the event of conflicts between this Plan and the Sea Ranch Disaster Plan, the latest revision of the latter shall take precedence.
- 1.1.6 Every identified licensed Radio Amateur living full or part time on the Sea Ranch will be provided with a copy of this document.

1.2 Purpose

- 1.2.1 This document will establish a generalized emergency operating plan for Amateur Radio operators responding to an emergency. It also is intended to help local officials and agencies to understand the kinds of assistance Amateur Radio operators can provide.
- 1.2.2 This Plan serves as a guide providing Amateur Radio operators with an efficient way to render their primary responsibilities in emergency service which is to furnish communications in the event of any disaster concerning the following:
 - Safety of life
 - Preservation of property
 - Alleviation of human suffering and need
 - Any disaster endangering the public
 - Acts of sabotage
 - Testing and drills

2.0 Emergency Procedures

In all cases emergency procedures need to be tailored to the specific emergency event being covered. It is understood that any given event may require some elements of each of the scenarios illustrated herein. However, for purposes of this document, emergency events will be classified in only two Scenarios, namely: Local (2.1) and Global (2.2). Actual operating procedures and aids are provided in the appendices to this document.

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- 2.1 The Local Scenario:** A Local Scenario is defined as a Multi-Casualty Incident (MCI), fire, Tsunami, or other catastrophe affecting primarily the Sea Ranch or a local area within the Sea Ranch. Under this scenario many who are living in the area may not be aware of an emergency situation, however, assistance would be available quickly because mobilization and travel time would be minimal. It is assumed that normal communications services (telephones) are operating.
- 2.1.1 Initiating Amateur Radio Services: Amateur radio services shall be initiated by request of an official of a public service agency such as C.D.F., C.H.P., the Sheriff, the County Office of Emergency Services (OES), the local Incident Commander, the Sea Ranch Fire Department, or a responsible official of the Sea Ranch Association. Information needed in the request includes (but may not be limited to):
- Nature of the emergency
 - Location of the emergency
 - Kind of services required
 - Approximate number of radio amateurs required (or TBD)
 - Where are the radio amateurs to report?
 - When are they to report (if this is an Alert)?
 - Specifically to whom are they to report?
- It is understood that some of the preceding information will be determined in conversation while the request is being made.
- 2.1.2 Method for Contacting Local Radio Amateurs: Agencies or officials may initiate local Amateur Radio emergency services via telephone (see Appendix C for names and telephone numbers), in person, or on the air by contacting those who are monitoring any of the local repeaters (see Appendix A for list of local repeaters.)
- 2.1.3 The Operation: The Sea Ranch repeater [on 147.945 MHz(-)] shall be used to coordinate all amateur radio operations on the Sea Ranch and usually will have assigned a Net Control Station. The Net will be operated in a professional and disciplined manner at all times. (Radio operators should consult Appendix A for appropriate Operating Procedures and Operating Aids.)
- 2.2 The Global Scenario:** A Global Scenario is defined as a disaster affecting large areas of population and may affect the capability of local government to render aid such as in a Level 2 or 3 Emergency as defined by the State of California. Examples are earthquake, major flood, or forest fire. Such an event will usually be self-evident to those in the area and usually will disable or so overload the telephone and other communications systems that the Amateur Radio Emergency Service must be self-activating.

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2.2.1 Method for Initiating Amateur Radio Services: In the event of a "global" emergency, radio operators who are able shall call into the Anchor Bay Repeater on 147.825 MHz ([-] 103.5 PL), or the Sea Ranch repeater on 147.945 MHz(-) and stand by for assignment.

Note: If the Sea Ranch or other repeaters are inoperable, simplex operation on the repeater's output frequencies shall be initiated and used until such time when the repeater can be reactivated. (This may necessitate the use of one or more relay stations; please refer to Appendix A.) Simplex frequencies as well as other useful repeater frequencies are given in Appendix A.

2.2.2 Assigned Locations: The following are the locations to which radio operators will be assigned as the need exists:

· **Command Posts**

South Fire Station and/or
North Fire Station

· **Staging Areas**

Del Mar Center
Knipp Stengel Barn
Sea Ranch Lodge

· **Message Center**

Location TBD

· **Sea Ranch Association Ofce. Bldg.**

2.2.3 Other Assignments: Assignments other than those listed in 2.2.2 may be requested by the Incident Commander or agency in charge. A Net Control Station (NCS) shall be activated which is a separate entity from the assignments in 2.2.2. In addition to the Net Control, a separate station to handle liaison with the County Emergency Operations Center (EOC) and nearby communities may also be required. Assignments in the area of the South Fire Station may be combined depending on the availability of radio operators.

2.2.4 Purpose of the Net: The net is formed to provide communications for those who are in charge of emergency services. It does not initiate emergency traffic except as ordered by those in charge.

2.2.5 Net Control: Any local ARES member may act as Net Control and shall activate the Net according to the procedures in Appendix A. The Net shall be operated in a professional, efficient, and disciplined manner at all times.

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2.2.6 Location of Net Control Station: The Net Control Station may be located anywhere in or near the area being served, with the provision that it be able to send and receive messages to all parts of that area while under emergency power. It need not be located near the Incident Command Post (ICP), however, it is normally important to have an Amateur Radio operator located at the ICP. It is suggested that (if possible) the Net Control Station be located in an area conducive to calm and orderly operations.

2.2.7 Duties of the Net Control: The Net Control shall perform the following functions:

- Call the Emergency Net to order.
- Establish communication with the Incident Commander (IC).
- Provide IC with the status of Amateur Radio services.
- With the IC, evaluate the seriousness of the emergency.
- Determine assignment priorities, and make assignments.
- Decide how many radio operators should be activated.
- Establish liaison with neighboring communities as required and aid in providing communications to and from those areas.
- Establish liaison with the Radio Amateur Civil Emergency Service (RACES) and County Emergency Operations Center (EOC) as required and if they are activated.
- Keep message traffic moving at maximum efficiency.
- Schedule relief radio operators as required.
- Maintain net radio log (see Appendix E.)

2.2.8 Heresay Information: The Net shall not be the source of heresay information. The Net Control must base his/her judgment on as much solid and substantiated information as possible, such as that originated by the officials in charge.

2.2.9 Relief of Radio Operators: Provision shall be made for changing the Net Control operator and other radio operators well before fatigue occurs. The hand-off of these duties shall include the briefing of the replacement operators on the status of the operation or task.

2.3 Radio Operators: This paragraph defines some of the ways in which volunteer Amateur Radio operators can be of service during an emergency, be it a "local" or a "global" incident.

2.3.1 It should be recognized that Amateur Radio operators offer their help during emergencies because they are communicators trained to be of service. During an emergency some of the operators will be unable to answer the call for help because they are handling property damage or injury problems of their own.

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- 2.4 Preparedness:** To be of maximum service to the community during any emergency situation many local Amateur Radio operators participate in the weekly Emergency Communications Net and in periodic emergency communications drills. Many have portable radio equipment which can be operated on emergency power should that become necessary.
- 2.4.1 Repeaters: As an aid to providing emergency communications the Sea Ranch Amateur Radio Auxiliary (TSRARA) maintains a radio repeater near the south end of the Sea Ranch. In addition there are four other local repeaters that will be used in an emergency: These are located at Pt. Reyes, Bodega Head, Anchor Bay, and Pt. Arena.
- 2.4.2 Communications Coverage: Continuous communications coverage in mountainous areas such as ours is difficult at best. However, with the use of the repeaters in 2.4.1 and relay stations as appropriate, communications coverage is possible between Bodega Bay in the south to Manchester in the north.
- 2.4.3 Links to County Emergency Operations Center and Howard Forest: Two of the repeaters in 2.4.1 have ultra-high frequency (UHF) radio links into the Santa Rosa area, and one will have a similar link into the Willits - Ukiah area. In this way direct communication with the Sonoma County Emergency Operations Center (EOC) and with Howard Forest in Mendocino County is possible and has already been demonstrated. High frequency (HF) communications links have also been used to provide emergency communications with the EOC and with Howard Forest.
- 2.4.5 Services provided by Amateur Radio operators: There are numerous tasks to which Amateur Radio operators may be assigned. These include (but may not be limited to) the following:
- ◇ General Communications - Amateur Radio operators are trained communicators and will be able to handle general communications to and from many locations. (During an emergency they do not normally originate communications themselves but do so at the request of the officials managing the incident.)
 - ◇ Shadows - To accompany officials that need to stay in touch with the Incident Command Post (ICP) or with other agencies or locations. (See Appendix D for definition and details.)
 - ◇ Logistics - To communicate logistical needs for all manner of materials used during an emergency. For example, the logistical communications for Red Cross-operated shelters are normally handled by Amateur Radio operators thus removing this burden from official communications channels.

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- ◇ Observation - To visually monitor locations that officials need to have knowledge of such as roadway traffic, flood levels, bridge conditions, etc.
- ◇ Damage Assessment - Adding a radio operator to the damage assessment teams may save hours in relaying information to the ICP and in helping with on the spot problem solving. (Some Sea Ranch amateurs have had damage assessment training.)
- ◇ Courier - To accompany the movement of medicine, blood, food or other vital materials whose location must be known at all times.
- ◇ Escort - To help guide out-of-area assistance teams into the disaster area with minimum delay.
- ◇ Health and Welfare - In virtually every sizeable emergency, Amateur Radio operators have handled a great many health and welfare messages. (The only caution is that because of limited communications facilities and operators, health and welfare messages will not be accepted until all emergency traffic has cleared.)

2.5 Record Keeping: The Net Control and such other operators as she/he may designate shall keep a log of the emergency operation, including at least the starting and ending times of each assignment, and a summary of the substantive messages, events, and actions. Written messages shall be filed with the log book of the originating station. (See Appendix A and E.)

2.6 Follow-Up Critique: A Critique, called by the local Emergency Comm. Unit Leader (UL) shall be held as soon as practical after the emergency or simulated (practice) emergency with all Amateur Radio operator participants invited. The purpose of this critique is not to fault each other's operating techniques, but to help everyone to become more proficient in working together.

2.5.1 The Emergency Comm. Unit Leader (UL) or his/her designee shall make a written report for all emergency and simulated (practice) emergency operations as soon as possible after the event. The report shall be based on the logs and recollections of the participants. At a minimum, the report shall be sent to the District Emergency Coordinator (DEC), the county Radio Officer (RO), the Section Emergency Coordinator (SEC), and the American Radio Relay League (ARRL).

Operating Procedures and References for Radio Operators

1.0 Repeater Usage - Protocol

- 1.1 The following presents the operating procedures to be used when communicating through a repeater.
 - 1.1.1 Use no more power than that necessary to reliably utilize the repeater. (Some "white noise" is acceptable; conserve your power source, and reduce interference.)
 - 1.1.2 Speak clearly — do not key or unkey microphone at the same time you begin or finish talking or listeners may miss part of your transmission.
 - 1.1.3 Identify your station once every ten minutes and at the beginning and end of a QSO. It is not necessary to give your call sign on every transmission. When tactical call signs are being used, your station (FCC) call sign need be given only once per ten minutes.
 - 1.1.4 If the repeater has a courtesy tone, wait until you hear it before transmitting. This will allow other stations time to break-in with possible emergency traffic. (It also allows the repeater to reset.) If no courtesy tone, wait 2 to 3 seconds before transmitting.
 - 1.1.5 If you hear a jammer, ignore him. Don't acknowledge his presence at all. If the jammer thinks he has no audience, he will probably stop transmitting.
 - 1.1.6 Observe repeater priorities, namely:
 - a. Emergency and priority traffic
 - b. System test and maintenance by control operator
 - c. Public service (such as health and welfare messages.)
 - 1.1.7 Do not transmit anything that should be "private." Always remember that others are listening.
 - 1.1.8 Do your best to be friendly, professional, and courteous.
 - 1.1.9 Keep transmissions short and to the point. Long transmissions waste time, emergency power, and may prevent other emergency traffic from being heard. (They also give a bad impression to anyone who may be listening.)

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- 2.0 The Long-Term Zero (LiTZ):** The Long-Term Zero has proved to be a very effective way to get attention when one has emergency traffic. Upon key-up announce your call sign then hold the zero (0) button on your keypad down for three seconds (approx.) Follow this with the words, "I have emergency traffic."
- 3.0 THE NET CONTROL STATION:** The Net Control Station shall establish and then control the Net in an orderly, efficient, and professional manner. This will be a directed Net, meaning that you as Net Control are in charge and all stations must get permission from you before calling. (Note: If the repeater is inoperative, use simplex operation on the repeater frequency.) The Net Control will immediately begin the Net Log (Appendix E).
- 3.1 Net Control Scenario:** One of the first orders of business is to find out who is available for assignment, and to make sure that all necessary location assignments are filled.
- 3.1.1 The Net is called to order using the LiTZ (para 2.0 above). The following script is suggested:

◇ *"Calling all stations, calling all stations: This is a directed net of the Amateur Radio Emergency Service. This is (your call sign), net control. My name is (state your name.) Will all stations having emergency traffic report in now with their call signs only.*

After allowing ample time, contact each station individually and record their emergency traffic.

◇ *Then, "Will all those standing by to help with emergency communications please call-in now — callsign only".*

Acknowledge any stations who may call in. Write the call signs of all reporting stations in the station log (shown later). If you are operating simplex (because the repeater is inoperative) you will likely have stations reporting that they hear someone that you cannot receive. In this event have them relay the information you want. Individually call each station that has called into the net to ascertain their current location as follows:

◇ *"(Their call sign) please give me your location and let me know if you are standing-by for assignment. "*

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- 3.1.2 Emergency Traffic: Anyone having emergency traffic shall be given first priority. Health and welfare traffic shall not be handled until all emergency traffic has cleared, or unless frequencies and modes are available that do not interfere with the movement of emergency traffic. (In a major emergency, it is likely that at least two days will elapse before you are able to handle health and welfare traffic.)
- 3.1.3 Health and Welfare Traffic: Health and welfare traffic must not be taken until all emergency traffic has cleared and the frequencies and operators are available to handle it.
- 3.1.4 Making and Recording Assignments: Operators awaiting assignment should be sent to the required locations starting with the Incident Command Post (ICP) and then prioritized to as many other locations as possible depending on the availability of operators. All operators shall check-in with net control when they leave for assignment and again when they arrive at their assigned location. These times shall be recorded in the Net Log by the Net Control.
- 3.1.4.1 In a "Global Incident" (see para. 2.2 of Plan), the following locations shall be assigned radio operators as required by the officials in charge:
- South Fire Station (possible Command Post)
 - North Fire Station (possible Command Post or Message Center)
 - The Del Mar Center (North Staging Area)
 - Knipp Stengel Barn (Central Staging Area) Sea Ranch Lodge (South Staging Area)
 - Sea Ranch Association (Sea Ranch Government)
- The Net Control shall encourage the use of tactical call signs for the above (and all other) locations.
- 3.1.4.2 When practical make assignments in pairs (if there are sufficient operators) keeping in mind the need to relieve operators if the incident continues on and operators become fatigued.
- 3.1.5 Roll Call: It is important to call the roll at least once per hour, unless all stations that have checked into the net have been active. (Also, it is helpful to give a brief operations status report from time to time to indicate how participants relate to the emergency.)

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- 3.2 Procedures at Assigned Locations:** It is important that Amateur Radio operators immediately introduce themselves to the official in charge of the location to which they have been assigned. While Radio Amateurs can be of service in many ways, their primary assignment is radio communications. Therefore, it is important that the official in charge know with whom the radios are linked and that all messages must be understandable, and all formal messages signed by the originator.
- 3.2.1 Along with the official in charge, a determination should be made if the radio should be located in the operator's car (which usually has an antenna installed) or if it should be located somewhere else in the facility. Check to be sure that communication can take place from the location chosen.
- 3.2.2 Note that antennas have been installed at the Association Office, the North and South Fire Stations, and in the Knipp Stengel Barn.
- 3.2.3 Tactical call signs such as "Net Control," "Del Mar," or "ICP," rather than call signs shall be used unless the Net Control directs otherwise. (The FCC call sign shall be given once per ten minutes.)
- 3.2.4 Health and welfare messages must not be taken at the assigned locations until all emergency traffic has cleared AND the frequencies and operators are available to handle them. When that time comes, be sure to use the radiogram format given in Appendix E.
- 3.3 NTS Emergency Traffic Format:** Formal messages shall utilize the National Traffic System's (NTS) Radiogram format (in Appendix E). The Net Control Station shall record the passing of messages in the Net Log (also shown in Appendix E.)
- 3.3.1 NTS Format Defined: The NTS format is recognized and understood across the country and is the format of choice for formal emergency traffic. The following will serve as a brief explanation. Please refer to the message form in Appendix E.

Message number — assigned sequentially or uniquely by originating station
Date when message is sent
Precedence: Emergency, Priority, Routine (defined below)
Handling Instructions (Hx) - Usually omitted
Station of origin (call sign)
Check (number of words / groups in text only)
Place of origin
Time filed (optional with originating station)
Date (should agree with date of "time filed")

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- 3.3.2 A station log (page E1-2) shall be kept which records the messages handled by your station, both formal and informal. (Station Log shown later.)
- 3.3.3 Precedence: There are three precedences used in traffic handling, namely: Emergency, Priority, and Routine.
- 3.3.3.1 Emergency: Any message having life and death urgency to any person, or group of persons, which is transmitted by amateur radio in the absence of regular commercial facilities. This includes requests for supplies, materials, or instructions vital to relief of stricken populace in emergency times.
- 3.3.3.2 Priority: Important messages having specific time limit. Press dispatches and other emergency related traffic not of the utmost urgency. Notification of death or injury in a disaster area, personal or official. Messages relating to the health or welfare of someone in the disaster area.
- 3.3.3.3 Routine: Most traffic in normal times is in this category. It is unlikely that this kind of traffic will be handled under emergency conditions, however, should there be any, it should be handled last or not at all when circuits are busy with emergency or priority message
- 3.3.4 ARRL Standard Messages: The following list of standard messages created by the American Radio Relay League (ARRL) will save time in relaying health and welfare information. Check to ascertain that the receiving station has the same list that you do before using them!

ARL1	Everyone safe here, please don't worry.
ARL2	Coming home as soon as possible.
ARL3	Am in _____ hospital. Receiving excellent care and recovering fine.
ARL4	Only slight property damage here. Do not be concerned about disaster reports.
ARL5	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
ARL6	Will contact you as soon as possible.
ARL7	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
ARL8	Need additional _____ mobile or portable equipment for immediate emergency use.
ARL9	Additional _____ radio operators needed to assist with emergency at this location.

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- ARL10 Please contact _____. Advise to standby and provide further emergency information, instructions or assistance.
- ARL11 Establish Amateur Radio Emergency communications with _____ on _____ MHz.
- ARL12 Anxious to hear from you. No word in some time. Please contact me as soon as possible.
- ARL13 Medical emergency situation exists here.
- ARL14 Situation here becoming critical. Losses and damage from _____ increasing.
- ARL15 Please advise your condition and what help is needed.
- ARL16 Property damage very severe in this area.
- ARL17 REACT communications services also available. Establish REACT communication with _____ on channel _____. .
- ARL18 Please contact me as soon as possible at _____.
- ARL19 Request health and welfare report on _____. (State name, address, and telephone number.)
- ARL20 Temporarily stranded. Will need some assistance. Please contact me at _____.
- ARL21 Search and Rescue assistance is needed by local authorities here. Advise availability.
- ARL22 Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
- ARL23 Report at once the accessibility and best way to reach your location.
- ARL 24 Evacuation of residents from this area urgently needed. Advise plans for help.
- ARL25 Furnish as soon as possible the weather conditions at your location.
- ARL26 Help and care for evacuation of sick and injured from this location needed at once.

Note that emergency/priority messages originating from official sources must carry the signature of the originating official.

- 4.0 Useful Frequency Information:** The following tabulated frequency information is presented as an operating aid. Simplex frequencies (Para. 4.3) should be used for communication that need not be transmitted through the repeater, These frequencies are assigned by the Net Control. If PL tones are required assume that Sonoma county repeaters use 88.5 Hz; and Mendocino, 103.5 Hz (most follow this convention).

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- 4.1 Contacting Sonoma County Emergency Operations Center (EOC):** Contact with County EOC can be accomplished through the repeater on 146.670(-) 88.5 PL (K6HSJ Bodega Head). A backup repeater is located on 145.170(-) 88.5 PL (K6GEV, Pt. Reyes). Sonoma County EOC is also available on HF on 3.915 MHz. SSB.
- 4.2 Local Repeater Information and Frequencies:**

Pt. Arena	146.610 MHz [(-) 88.5 Hz PL] N6MIV
Anchor Bay	147.825 MHz [(-) 103.5 Hz PL] WA6HGH; (Ask control op for emergency autopatch.)
The Sea Ranch	147.945 MHz (-) WA6RWM, Autopatch: Local only - ON=751, OFF=750 Packet: 145.050 MHz, CRANCH WA6RWM-6
Pt. Reyes	(ARES/RACES) 145.170 MHz [(-) 88.5Hz PL] K6GEV Linked to Sonoma Mtn. @146.910 MHz
Pacifica	146.925 MHz [(-) 114.8 PL] WA6TOW;

How to use Pt. Reyes' Emergency Autopatch

You must have 88.5 PL enabled to trigger the autopatch.

- 1) Key transmitter, give call sign and the words "North Coast." Hold down transmit key.
- 2) Press the keys 116* and release the transmit key and check for morse R.
- 3) Key your transmitter and enter the desired emergency slot number (see next page). Don't rush or hold keys down. Release transmit key when done. Call will be placed.
- 4) Tell the other party they are using Amateur Radio and to use the word over when they want you to start talking.
- 5) When finished, tell other party to hang up.
- 6) With the transmit key on, press the * (star) key.
- 7) Key transmitter and give your call sign.

Emergency slot numbers for Pt. Reyes repeater:

Sonoma Sheriff - 911*	Good Sam Club - 926*
Sonoma CDF - 912*	Fam Motorcoach - 927*
Sonoma CHP - 913*	Mendocino CDF - 931*
Marin Sheriff - 921*	Mendocino CHP - 932*
Marin CDF - 922*	AAA Road Service - 923*

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4.3 Local Simplex Frequencies:

- 4.3.1 The following two frequencies have been selected by TSRARES (and the Anchor Bay ARC) as our clear channel simplex frequencies.

147.570 MHz 147.585 MHz

Note: Also use 146.520 MHz (simplex national calling frequency) to alert other amateur operators in the area who may not be familiar with local repeater frequencies. (This frequency may already be occupied during a wide-area emergency.)

- 4.3.2 Simplex frequencies can be used for communication across the Sea Ranch and beyond.

4.4 Other Frequencies of Interest:

Sonoma RACES HF	3.915 MHz
Sonoma RACES North Coast HF	7.245
Amateur National Emergency	145.695
Sonoma County Sheriff.....	453.725, 453.400
Sonoma CHP base to car.....	42.120
Sonoma CHP car to base.....	42.660
Sea Ranch Security (links to Sheriff).....	461.025
CDF Dispatch Green	154.310
CDF Local 3 & 4.....	151.460
CDF Orange 1	154.175
Fire Tactical Orange 2.....	154.205
Fire Tactical Orange 3.....	153.770
Fire Tactical Orange 4.....	154.445
Fire Tactical White 2.....	154.265
Fire Tactical 6	151.325
Ambulance Blue 1 (car to car)	155.100
Ambulance/Hosp. Blue 2/Control 9.....	155.265
Ambulance to Hosp./RCMS	155.355
CALCORD (Fire, Amb., Sheriff, C.G.).....	156.075

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Sea Ranch Water Co. & Facilities	461.650
Aircraft Landing at TSR.....	122.900
Coast Guard Distress.....	156.800
Mendocino CDF Dispatch	151.385
Mendocino Fire Tactical	153.950
South Coast Fire Dept.	153.890
Mendocino County Sheriff.....	154.775
Mendocino CHP base to car.....	42.720
Mendocino CHP.....	42.560
Calif. Dept. Fish & Game	151.415
Calif State Parks Dept.....	44.640
Sonoma County Regional Parks.....	45.480
Cal Trans	47.020
Cal Trans	47.200
PG&E (Primary).....	158.205, 158.190

5.0 Status Boards — Keeping Track of Assignments

5.1 Status Board Description: The status board, suggested by Section Emergency Coordinator (SEC) Dale Westerterp, WB6TMS, is a necessary operating aid and should be used whenever many locations and operators are involved because:

- All locations are shown at a glance.
- All operators, standing by, assigned, or to be assigned as relief are accounted for.
- Officials can visually see the size of the communications support.
- Public information officers appreciate overview.

- 5.1.1 Obtain a bulletin board (or use a wall) and place 3" x 5" cards (or Post- it Notes) with call signs of everyone reporting into the Net for assignment along one side of the board.
- 5.1.2 Line the location cards across the top; level if activated and tilted if not.
- 5.1.3 As radio operators are assigned, place operator cards under the location to which they are assigned. Tilt right side of card up until operator arrives at location, then level the card.
- 5.1.4 Upon request for shadows, set up another area similar to location status areas.

Appendix A: Amateur Radio Emergency Communications Plan

- 5.1.5 Upon release from duty, tilt card right side down until operator signs off duty or is reassigned.
- 5.1.6 Place next relief operator cards under active assigned cards and below the location card to which they are to report.

5.2 Details of Status Board Cards: While there are many ways to create a Status Board, the following suggestions have worked in the past.

- 5.2.1 Location Cards: Location cards spell out the location and may give the appropriate abbreviation as well. For example:



- 5.2.2 Shadow Cards: Shadow cards have the word SHADOW in the upper left corner and centered below give the title and name of the person to be shadowed.

- 5.2.3 Operator Cards: Each operator is identified on the front of the card by call sign and first name. On the back side of the card more info relevant to that operator may be placed if needed.

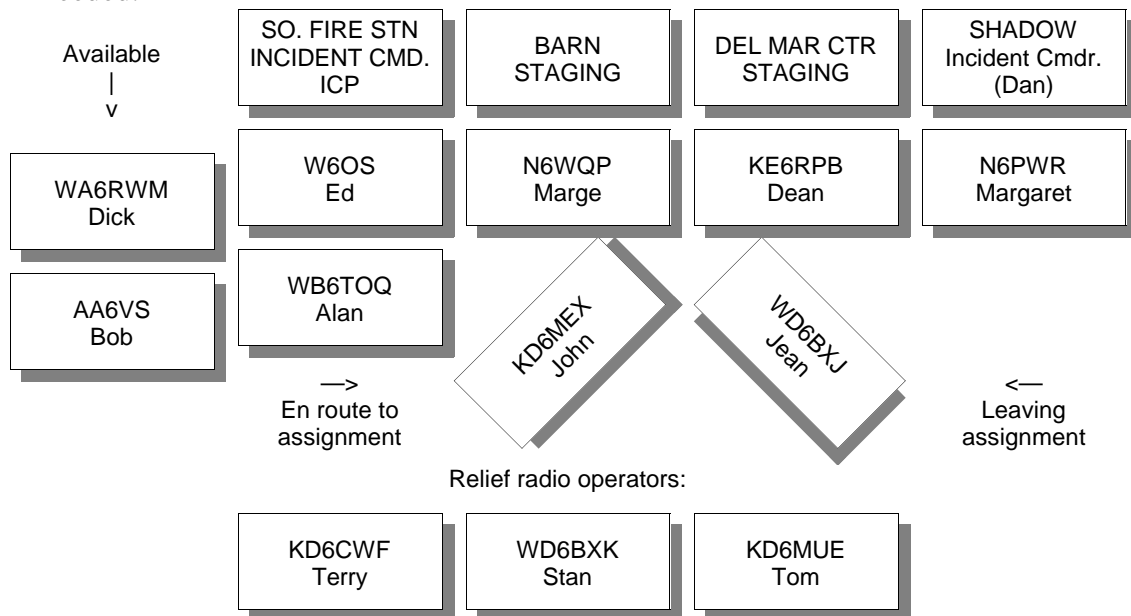


Figure 2: The status board shows at a glance the location and status of all radio operators and critical locations.

Appendix B: Amateur Radio Emergency Communications Plan

1.0 Emergency Equipment for Radio Amateurs (a partial listing):

The following are suggestions that will prove useful when you organize the equipment that you plan to use in emergency service.

2- Meter Band Transceiver and Headphones (HT).	This may be a mobile rig or a handy talkie. Headphones are recommended.
Antenna	An efficient portable or mobile antenna is essential. Antennas are installed at both fire fire stations and the barn.
Spare Batteries	There is a scenaro in which we would be cut-off from power for as long as two weeks. Acquire spare batteries!
Chargers	When we are without PG&E power, it will be necessary to recharge from your car battery, or 115 VAC generators.
Cables and adaptors	A 3 to 6 foot length of flexible coax and adaptor to connect your transceiver to the male UHF connector (PL-259) on fire station and barn antennas (VERY IMPORTANT!)
Instruction books	Do you remember how to program the functions in your rig? Bring your instructions.
Scanner	If you own a battery-operated scanner it would help you to be aware of other agencies' activities.
Food, Medicine, Personal Comfort	If the assignment is lengthy you should Personal Comfort take with you your personal medicine, food, sleeping bag, etc. otherwise you could be a liability rather than a helper.

Also: Copy of your Amateur license (the law requires it), maps, log sheets, Radiograms, paper, pencils, flashlight, a copy of this Emergency Plan, etc.

**The Sea Ranch Amateur Radio Emergency Service
and
Area Radio Amateurs**

1.0 HOW TO ACTIVATE THE SEA RANCH AMATEUR RADIO EMERGENCY SERVICE (TSR ARES):

TSRARES members may be activated by an official call to any of the names on the list below, or the TSR Emergency Team list of full time Sea Ranchers. In the event of an emergency in which telephones are inoperative, Amateur Radio operators have been asked to report into the Sea Ranch Repeater on 147.495(-) Mhz, or the Gualala repeater on 147.825 Mhz (-) MHz, 103.5 Hz PL. In this manner they will soon be in contact with the Incident Commander (IC).

When requesting aid please be prepared to provide the following information :

- Nature of the emergency
- Location of the emergency
- Kind of services required
- Approximate number of radio operators required (or TBD)
- Where are the radio operators to report?
- When are they to report (if this is an alert)?
- Specifically to whom are they to report?

List: (Includes name and call sign)

Bob Sears (UL)	AA6VS (Please call Bob or Tom first. If no answer, go down the list.)
Tom Ingersoll (Asst. UL)	KD6MUE
Margie Rosholt	N6WQP
Dick Gray	WA6RWM
Alan McPherson	WB6TOQ
Jerry Gonce	KD6CWE
Ed Hall	W6OS

Appendix C: Amateur Radio Emergency Communications Plan

2.0 Lists of Amateur Radio Operators:

The following lists of the Amateur Radio operators located in our area are provided as an operating aid. Listing all Amateurs known to be in the coastal area from the Navarro River in the north to Bodega Bay in the south acknowledges the fact that we all must help each other in order to provide adequate communications during a global emergency.

It is also possible that an Amateur Radio operator from outside our coastal area may be renting property here at the time of an emergency, and may volunteer to help. If such an operator should be utilized, please realize that a part of the Sea Ranch Disaster Plan is to help individuals to leave the area in a timely manner, if necessary.

The lists are alphabetized by name and by call sign. Sea Ranch Amateurs in the list can be identified by an asterisk next to their names.

Note: Sea Ranch Amateur Radio Operators are supplied with a list of all local licensed operators. The list is omitted in the Web version of this document.

FIELD OPERATIONS GUIDE**ICS****SHADOW PROCEDURES****SHADOW:**

The shadow is to assist, with communications, a management, supervisory, or specially assigned person for an agency or organization. These persons may include, but are not limited to government (city, state, federal) or relief organizations, such as the Red Cross, Salvation Army, etc.

- a. Obtain briefing from Radio Operations Officer, Watch Officer or Net Control Stations. Determine:
 1. Location of assignment and name of person.
 2. Frequencies in use.
 3. Net or check in point for that person.
- b. Be prepared to provide hand held radio capability.
- c. Have transferrable mobile radio and antenna ready for installing into the assigned person's vehicle.
 1. Mobile radio with power plug for lighter.
 2. Mag mount antenna.
- d. Be prepared to accompany the person in the travels they are required to perform in their duties.
- e. Be fully acquainted with the standard ARRL message form and procedures. Be capable of accurately using them in third party messages.
- f. Have the ability to be self-supporting with regards to food, drink, and equipment.
- g. Establish and maintain contact with your net control station and/or supervisor. Set check-in times.
- h. Check all equipment, hand held radio, batteries, antennas, mobile radio, power cord, antennas, writing supplies/forms.
- i. Be dressed for the weather conditions to be expected for the next several hours, or during assignment. Any uniform (vest, caps, shirts, etc.) should be worn for easy identification.
- j. Introduce yourself to the person, explain your duties, capabilities, and any limitation before starting. Encourage with the person the understanding and agreement that your role and responsibility is to keep him/her in contact with his/her organization.
- k. Keep a record of messages to and from that person.
- l. Give that person room to function in his/her position.
- m. **DO NOT OFFER** your opinion or advice unless asked.
- n. **NEVER** attempt to upstage that person.
- o. Be helpful and courteous. **DO NOT** be a hinderance.
- p. Prepare for a replacement shadow before needed.
- q. Brief your relief operator.
- r. Report in after assignment. Contact supervisor for debriefing.
- s. Fill out your critique report.
- t. Report out of service.

ARES/RACES OPERATIONS ICS/FOG**SHADOW 03/93**

Appendix E: Amateur Radio Emergency Communications Plan

1.0 Forms Useful in Emergency Work

- 1.1 Three of the forms that will be useful in emergency work are reproduced in this Appendix. They are the Emergency Radio Log, The Amateur Radio Disaster Welfare Message and Radiogram, and the Disaster Service Worker Registration. You may wish to make copies of these forms for future use.
- 1.1.1 The Emergency Radio Log: A log must be kept by the Net Control or his/her designee which shows the starting and stopping time of all of the operators on duty, the formal messages handled along with the time they were handled, and all other communications incidents deemed important (along with the time they happened.) The form shown is suggested; however, there are many others that would be equally useful. (Please see Appendix A para. 3.1.3 and 3.2.)
- 1.1.2 The Disaster Welfare Message and the Radiogram: These are both formal messages and as such need to be recorded. The forms shown are the standard National Traffic System (NTS) format for these two kinds of message. Use of these formats ensures that they will be understood and transmitted by the NTS, therefore, it is important to use them. (Please see Appendix A para. 3.2.1.)
- 1.1.3 Disaster Service Worker Registration: If ever you are asked to perform disaster service work outside of those areas where you are already registered in the Radio Amateur Civil Emergency Service (RACES), the enclosed form should be used as temporary registration and should be presented to the Incident Commander or his designee.

AMATEUR RADIO DISASTER WELFARE MESSAGE

NUMBER	PRECEDENCE W	HX	STATION OF ORIGIN	CHECK ARL	PLACE OF ORIGIN	TIME FILED	DATE
--------	------------------------	----	-------------------	---------------------	-----------------	------------	------

TO

MESSAGE RECEIPT OR DELIVERY INFORMATION	
OPERATOR AND STATION _____	
SENT TO _____	
DELIVERED TO _____	
DATE _____	TIME _____

Telephone Number

(CIRCLE NOT MORE THAN TWO STANDARD TEXTS FROM LIST BELOW)

- ARL ONE Everyone safe here. Please don't worry.
- ARL TWO Coming home as soon as possible.
- ARL THREE Am in _____ hospital. Receiving excellent care and recovering fine.
- ARL FOUR Only slight property damage here. Do not be concerned about disaster reports.
- ARL FIVE Am moving to new location. Send no further mail or communications. Will inform you of new address when relocated.
- ARL SIX Will contact you as soon as possible.
- ARL SIXTY FOUR Arrived safely at _____

TIME	DATE	TELEPHONE	SIGNATURE
------	------	-----------	-----------

THE AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

VIA AMATEUR RADIO

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
--------	------------	----	-------------------	-------	-----------------	------------	------

TO

MESSAGE RECEIPT OR DELIVERY INFORMATION	
OPERATOR AND STATION _____	
SENT TO _____	
DELIVERED TO _____	
DATE _____	TIME _____

Telephone Number

REC'D	FROM	DATE	TIME	SENT	TO	DATE	TIME
--------------	------	------	------	-------------	----	------	------

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING. NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM A.R.R.L. HEADQUARTERS, 223 MAIN STREET, NEWINGTON, CONN. 06111

THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHERS OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATIONS AMONG AMATEUR OPERATORS TO THAT END. THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

COUNTY DIASTER SERVICE WORKER REGISTRATION

S. S. NUMBER

DATE ENROLLED		FIRST NAME			MIDDLE NAME		LAST NAME											
HOME ADDRESS							PHONE											
CITY					STATE		ZIP CODE											
EMPLOYED BY							PHONE											
BUSINESS ADDRESS					CITY		STATE			ZIP								
DATE OF BIRTH		PLACE OF BIRTH		CITIZEN YES NO	NATURALIZED		DATE AND PLACE											
AGE	SEX	HEIGHT	COLOR HAIR	COLOR EYES		VETERAN YES NO	MILITARY STATUS											
SKILLS					VOLUNTEER TIME - DAY		M	T	W	TH	F	SA	SU					
							EVENING											
							NIGHT											
CLASS OF DISASTER WORKER					SERVICE ASSIGNED													
EQUIPMENT ISSUED			CARD ISSUED		CRIMINAL RECORD			BACKGROUND										

Sonoma Op Area <b style="font-size: 2em;">ACS Message Form	1. TO: _____ (Name and Position) 2. SUBJECT: _____ 3. PRECEDENCE: Emergency Priority Welfare Routine	4. TIME/DATE: _____ 5. MESSAGE #: _____ Tx Rx 6. OPERATOR'S INITIALS/CALL: _____
M _____ E _____ S _____ S _____ A _____ G _____ E _____		
FROM:	7. NAME/TITLE: _____	8. LOCATION: _____
R _____ E _____ P _____ L _____ Y _____		
9. REPLY FROM (Name/Position/Location): _____		10. DATE: _____

ACS Assignment Form

Incident Name: _____ **Date of Call:** _____ **Time:** _____
Dispatcher's Name: _____
Reporting Time/Date: _____ **Reporting Location:** _____
Incident Number (if any): _____ **Request/Mission # (if any):** _____
Route Information: _____
En route Frequency/PL: _____
Incident Frequency/PL: _____
Report to (Unit Leader/Supervisor): _____ **Shift Ends:** _____
Tactical Call: _____
Assignment Title/Description: (Radio Operator, EOC Staff, Net Control, Shadow, etc.) _____

Day/Date/Time Left: _____ **Beginning Mileage:** _____
Day/Date/Time Returned: _____ **Ending Mileage:** _____
Notes: _____

Appendix F: Amateur Radio Emergency Communications Plan

1.0 Emergency Telephone Numbers:

- 1.1 Not all emergencies in which Amateur Radio Operators give aid are large emergencies. Sometimes a driver needs help along the highway, or the power is out and one needs to call PG&E, or obtain gasoline.
- 1.2 The following list of telephone numbers has been assembled during many emergencies and is presented here as an operating aid.

Appendix F: Emergency Telephone Numbers For Sonoma Co. North Coast and Mendocino Co. South Coastal Areas

911 Calls:

<p><u>What to Report:</u></p> <p>Caller's Name:</p> <p>Location:</p> <p>Situation:</p> <p>Injuries? Number, Extent</p> <p>Fire?</p> <p>Traffic Blocked?</p> <p>Need Assistance?</p> <p>Weather Conditions:</p> <p>Stay on line until 911 operator is finished asking you questions.</p>

Highway Patrol	911
Sheriff	911
Ambulance	911
TSR Security (urgent)	785-2701
RCMS (Medical Services)	884-4005
Coast Guard:	
Noyo Bay	964-6111
Bodega Bay	875-3596
Department of Emergency Services (DES)	
Mendocino Co.	459-7469
Sonoma Co.	527-1152
Schools:	
Arena Elementary	882-2131
Fort Ross School.....	847-3390
Horicon.....	886-5322
Manchester Elem.	882-2374
PA Little School	882-2213
PA District Office.....	882-2803
PA High.....	882-2134
Reservation School.....	785-2662
So. Coast High.....	882-2307
CAL-TRANS:	
Hwy Condx.....	1(800)427-7623
Ft. Bragg Maint. Stn.	964-4652
Ft. Ross Maint. Stn.	847-3239
Manchester/Pt. Arena	882-2113
Red Cross:	
Mendocino (Ukiah).....	463-0112
Santa Rosa	577-7600
Fire (other than emergency 911)	
Howard Forest	459-5407
TSR CDF	785-2335
Pt. Arena CDF	882-2151

Utilities:

PG&E	882-2010 (local)
Emerg. Service.....	1(800)743-5000
Outage Info	1(800)743-5002
Phone	611
GTE (from outside).....	1(800) 829-6116 or 611

Water:

P.A.	882-2323
Gualala.....	884-3579
TSR.....	785-2411

Grocery Stores:

Anchor Bay	884-4245
Cazadero	632-5287
Ft. Ross	847-3414
Gillmores	882-2080
Gualala Super.	884-1205
Ocean Cove.....	847-3422
Pt. Arena	882-2280
S & B Market.....	882-2805
Stewart's Pt.	785-2406
Surf Super.....	884-4184

Pharmacies:

Gualala.....	884-4107
Pt. Arena	882-3025

Gasoline and/or Diesel:

Anchor Bay	884-1520
Gual. Chevron.....	884-3567
Gual. Union 76	884-3025
Pt. Arena Garage.....	882-2079
Stewarts Point Store.....	785-2406

KWAN-FM..... 884-1000

State Parks:

District Office	865-2391
Ft. Ross	847-3286
Ocean/Weather Info.....	847-3222
Salt Point	847-3221

County Parks:

Gualala Point	785-2377
Gual Pt. Visitors Ctr.	785-9974
Stillwater Park	847-3245

Amateur Radio:

ARRL, ACS, ARES and RACES:

Anchor Bay Comm. Center	884-4911
SM: John Wallack.....	W6TLK
SEC: Dale Westerterp	WB6TMS
DEC (Mdo): Steve Alvarado	KB6TIU
RO (Son): Kelly Cureton	KD6CJQ
UL (Mdo. So. Coast): Tom Craig	KF6FEC
UL (Son. Coast): Bob Sears.....	AA6VS