



THE OAKLAND RADIO AMATEUR

CIVIL EMERGENCY SERVICE ("RACES")

OPERATIONS MANUAL

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By James A. Tiemstra, K6JAT, Oakland RACES Radio Officer

INTRODUCTION

The United States Congress formally established the Amateur Radio Service in the Communications Act of 1934. The Radio Amateur Civil Emergency Service (“RACES”) was established to provide for amateur radio operation for civil defense communications purposes during period of local, regional or national civil emergencies.

Oakland RACES operates in accordance with the rules and regulations promulgated by the Federal Communications Commission (the “FCC,” Title 47, Code of Federal Regulations, section 97.1 et seq.), the guidelines of the American Radio Relay League (“ARRL”), and the policies and procedures of the Oakland Fire Services Department (“OFD”) and Oakland Police Department (“OPD”). Oakland RACES supports the communications needs of the City of Oakland (the “City”) pursuant to a Letter of Understanding, dated February 22, 1994, and will be activated in the presence or threat of an emergency to the people and property of Oakland.

Oakland RACES uses both City-owned and privately-owned equipment to provide telecommunications support to official emergency management operations. Members of Oakland RACES are wholly responsible for the maintenance and security of their privately-owned equipment except to the extent such equipment becomes within the sole and exclusive use and control of the City.

Oakland RACES members meet in person once per month. The meetings generally are held the first Saturday of the month at 0900 hours local time at the Media Room of the Emergency Operations Center, Firestation No. 1, 1605 Martin Luther King, Jr. Way. RACES members also meet on-the-air for a directed net at 1930 hours local time every Thursday using the WB6NDJ repeater on the frequency of 146.88 MHz (+ offset, 77.0 Hz PL). All local amateurs are welcome and encouraged to participate.

ORGANIZATION

Volunteers responding to an emergency on behalf of Oakland RACES are divided into three categories:

RACES Members

RACES Members are individuals who hold a valid, FCC issued amateur radio operator’s license and are registered with the City as Disaster Service Workers in the Communications class pursuant to Sections 3100 et seq. of the California Government Code. Such individuals are issued unique City photo identification cards.

Mutual Aid Responders

Mutual Aid Responders are individuals who have been formally requested to assist Oakland RACES, are members of a recognized RACES organization from another jurisdiction and have in their possession acceptable amateur radio credentials and RACES identification.

Convergent Amateur Radio Volunteers

Convergent Amateur Radio Volunteers are individuals who are not previously registered members of a recognized RACES organization but have in their possession a valid, FCC issued amateur radio operator's license; complete a Loyalty Oath/Affirmation before a duly authorized City official or deputy; and register as a Disaster Service Worker in the Communications class pursuant to Sections 3100 et seq. of the California Government Code at the time of their response.

Leadership

The leadership of Oakland RACES consists of the RACES Radio Officer, the Oakland Emergency Coordinator ("EC"), the RACES Liaison Officer and such other deputies or designees identified to the City. (Addendum "A".) At least one of the foregoing RACES officials will be available to the Oakland Fire Department ("OFD") or the Oakland Police Department ("OPD") for call-out purposes 365 days a year.

WORKERS' COMPENSATION

Workers' compensation is a special kind of benefit to assist employees who are injured on the job or become ill from disease caused by the job. Benefits are set by the Legislature and spelled out in the California Labor Code. The Labor Code defines Disaster Service Workers as "employees" under certain conditions and describes their benefits.

Volunteers engaged in regularly scheduled disaster service activities, including authorized training, are covered during such activities but not while enroute to the place to report for such service or training. However, Disaster Service Workers called to duty during an emergency are covered from when they leave their home until they are able to return as long as they make no deviations for personal reasons.

Injured volunteers are to go to the nearest medical treatment facility and report their injury to their supervisor. The supervisor will provide them with the "Employee Report of Injury Form" (Form No. 5019). The supervisor will fill out Form OES RM-3 using the information on the Form 5019, and possibly interview the volunteer regarding their injury.

INCIDENT COMMAND SYSTEM

As a branch of the OFD, the Office of Emergency Services ("OES"), in an emergency, employs the National Incident Management System ("NIMS") which is based upon

the Standardized Emergency Management System (“SEMS”) and the related Incident Command System (“ICS”) for command and control of the resources responding to an incident. These resources could consist of fire or law enforcement alone, or could be composed of several agencies working in concert such as police, fire, CHP and public works. The SEMS Organization Chart and the SEMS EOC Responsibilities Chart are attached as Addendum “B”.

RACES may be incorporated under any one of three of the SEMS Sections: Operations, Planning/Intelligence or Logistics. For instance, point-to-point communications may fulfill an operational need; disaster assessment may be provided for Planning/Intelligence and EOC to EOC communications may be needed for logistic support or mutual aid. However, in a large scale emergency it may be best to require all RACES activities to report through a single Section, such as Logistics, in order to simplify the unified command structure.

ACTIVATION CONDITIONS

The City recognizes three categories of conditions which may necessitate the activation of Oakland RACES:

Regional Disasters

Regional Disasters encompass earthquakes, firestorms, extreme weather and mass-casualty incidents which are immediately observable without notification.

Local Emergencies

Local Emergencies consist of fires, minor earthquakes, terrorist attacks, civil disturbances, transportation accidents, floods and hazardous materials incidents in which an emergency or disaster notification is declared by City officials.

Public Service Events

Public Service Events include drills, public demonstrations or displays, commemorative occasions or parades, and the like for which prior planning and arrangements can be made. These are primarily Amateur Radio Emergency Services (“ARES”) activities since RACES activities are limited by FCC regulations. (The volunteer in charge of ARES activities is referred to as the Emergency Coordinator or “EC”.)

INITIATION OF RACES ACTIVATION

Self-Activation

In the event of a Regional Disaster, members of Oakland RACES will self-activate in accordance with their standard protocols by monitoring designated frequencies and awaiting further instructions. Automated or manual telephone notification systems also may be employed. Oakland RACES members will only self-deploy to predetermined staging locations.

City Activation

Local Emergencies require activation by the Office of Emergency Services (“OES”) Emergency Services Manager or designee, the incident commander or his/her designee, or the duty chief who will request that the Fire Dispatch Center (“FDC”) supervisor contact one or more of the three (3) designated RACES liaisons, comprised of the RACES Radio Officer, the EC, the RACES Liaison Officer or their designees. (Addendum “A”.)

Planned Activations

Activation for Public Service Events will occur only after consultations between the OES and ARES/RACES officials. The City will make prior arrangements on at least two (2) weeks notice to Oakland ARES/RACES of any request for the support of Public Service Events.

City agencies other than OFD, or coordinating agencies which are assisting in an emergency response in Oakland, may request activation of Oakland RACES. Such request will be made through the OFD Assistant Chief of Operations or the duty chief.

ASSIGNMENT OF RACES RESOURCES

Upon activation, the RACES Radio Officer or his/her designee will report automatically to the EOC to request assignments. All Amateur Radio volunteers who have not submitted a signed Disaster Service Worker form to the OES and wish to serve will report to the EOC, or other designated location, where they will be sworn in by an authorized official of the OFD or the OPD. All Oakland RACES members will follow the protocols established by the Incident Command System of the National Incident Management System (“NIMS”).

Activated RACES members will be assigned to report to a fire station, an incident command post, the Fire Dispatch Center (“FDC”), the Police Communications Center, the Emergency Operations Center (“EOC”) or other locations. Oakland RACES members also may be assigned to “shadow” fire, police or other emergency or elected officials.

Point-to-Point Communications

RACES members may be assigned to fixed locations such as fire stations, incident command posts, staging areas or emergency operations centers to provide direct communications for operational or logistical purposes. Although most equipment used in such assignment will most likely be available from City resources, volunteers may be requested to provide long range mobile VHF/UHF and/or HF communications equipment.

Mobile Patrols

RACES members also may be assigned to operate from private vehicles for such purposes as fire patrols during “Red Flag” fire weather conditions, flood watches or disaster assessment following a catastrophic incident. All such patrol activities will follow the protocols and procedures set forth in the Oakland RACES Fire Patrol Manual. (Addendum “C”.)

Shadows

A third type of potential assignment of RACES members is to act as a communications “shadow” for an identified emergency response officer or public official. Upon assignment to such an individual, the volunteer should identify themselves, their role and briefly describe their communications capability (e.g. – point of contact, nature of their tactical net, etc.). Shadows should be equipped with highly portable or hand held transceivers, extended antennas and carry extra batteries for extended operations.

STANDARD EMERGENCY OPERATIONS PROCEDURE

The basic structure of any emergency communications response to an activation is the communications net. Communications nets provide the structure and discipline necessary to facilitate the flow of large traffic volumes among a number a radio stations using a limited number of frequencies. Most emergency communications nets will be “directed” or “controlled” nets on a single frequency where a Net Control Station (“NCS”) will determine who will use the frequency at any given time. All stations on frequency are required to follow the NCS’ instructions, keep transmissions brief and to the point, and advise the NCS when arriving on or leaving the frequency. There are three common types of nets employed during an activation.

Resource Net

At the outset of an activation a RACES member will assume the duties of the Resource Net Control station (“RNC”). The RNC will establish a directed net on the WB6NDJ two meter repeater, i.e. – 146.88 MHz output, standard negative offset with a PL of 77.0 Hz, or simplex on the repeater output if the repeater is inoperable, in accordance with Oakland ARES/RACES agreement with VHF Repeaters, Inc. The purpose of the Resources Net is to coordinate the allocation of amateur radio operators and stations for specific communications needs.

The RNC will establish a list of available operators, stations and their capabilities for assignment to such communications duties and locations as are established by the City. All amateur radio operators volunteering for RACES operations must check in to the Resources Net and follow the instructions of the RNC. Stations should not request situation or incident update information from the RNC.

For the most RACES activations, a Resource Net will operate continually to manage RACES communications resources for the duration of the incident. The resource net may include secondary stations acting as liaisons to other resource nets providing mutual aid from more distant locations. In general, all traffic requesting information relating to assignments, shifts, operator relief, communications logistics, driving directions or the like will be handled by the Resource Net.

Tactical Nets

During an activation, RACES will establish one or more tactical nets cover

specific “front line” communications needs as requested by the City (e.g. – fire or police dispatch, disaster assessment, health and welfare inquiries, “shadows” for emergency or public officials, CORE communications and amateur television).

Each tactical net will be a directed net under the control of a Tactical Net Control station (“TNC”) operating under a unique tactical call sign. The TNC will accept all check-ins from stations directed to it by the RNC and such stations will follow the TNC’s instructions. In Oakland, Tactical Nets may be established on the frequency of 147.585 MHz simplex (“TAC 1”); 146.565 MHz simplex (“TAC 2”) and such other frequencies as are established by the RACES Radio Officer, the EC, the EOC Station Manager or their designee.

Command Net

During the course of a RACES activation, the 70 cm repeater, WB6NDJ, i.e. - 442.400 MHz, standard positive offset with a PL of 77.0 Hz, or simplex on the repeater output if the repeater is inoperable, will be employed as a “Command Net”. The purpose of the Command Net is to allow RACES leadership to communicate with each other to resolve amateur radio command and control problems or communicate with the leadership in other jurisdictions.

Typically, the Command Net will operate as an “open” net in which leadership officials may use the frequency on a “first come, first served” basis for station to station communication without the intervention of a NCS. Transmissions should remain brief and allow breaks for incident related traffic. However, the frequency is controlled as to non-command stations which may enter the frequency and pass appropriate traffic only if recognized by a command. Station.

In unusual or widespread emergencies, one or more directed Command Nets may be established by the RACES Radio Officer, the EC, the EOC Station Manager or their designee.

Acting as NCS

In an activation, any ARES/RACES member may be required to assume the duties of the NCS until relieved by the RACES Radio Officer, the EC or their designee. Remember that, before assuming NCS duties, such volunteer should insure the safety of their family and home then monitor the two meter side of the WB6NDJ repeater. If no RACES Officer, EC or assistant EC Comes on frequency as the NCS in what the operator believes is a reasonable length of time, and the volunteer has a sufficiently strong signal and backup power, they should assume the duties of the acting NCS by doing the following:

1. Establish a Resource Net by announcing that the frequency is under control by the RNC for the purposes of a RACES activation and that a directed net is in operation for the purpose of organizing and coordinating the assignment of volunteer communications personnel, equipment and administrative support.
2. Create a log to record the date and time of each event/transmission; the call sign, first name, phone number, station capabilities and availability for assignment of each

station on frequency; the origin and destination of all message traffic the purpose and frequencies of any other nets operating during the incident; and any other information or instructions that might be relevant to volunteer communications responders.

3. Request the check-in of all stations on frequency, compile a list of available resources and request that all amateurs stand by for possible assignment.
4. Seek instructions and information from the RACES Radio Officer, EC, EOC Station Manager or their designee.
5. Distribute assignments to stations as instructed.
6. Make frequent announcements on the Resource Net of the need for volunteers for open staffing requirements.
7. Maintain net discipline by keeping a clear frequency and operating a direct net. Keep all stations on frequency until otherwise assigned and accept non-resources or emergency related traffic only as time and conditions warrant.
8. Remain as RNC until properly relieved.

A number of RNC operating aids, including a sample log sheet and announcement script, are attached as Addendum "D".

Operating in a Tactical Net

When first tuning into a controlled frequency, all stations should listen only to observe and determine how the net is being run. If no stations are transmitting, operators should assume that the net is strictly a directed net and check in with the NCS by transmitting "Net Control, this is [call sign]." Operators should then wait for acknowledgement from the NCS before continuing with any traffic. All transmissions during the net should be directed to or from the NCS. If operators wish to contact another station directly, they may request permission for a "contact" from the NCS which may be authorized on the same or an alternative frequency. Of course, once a station has checked in with the NCS, it may not leave the frequency without notification to and acknowledgment from the NCS.

Each station has received an assignment will be provided with an unique tactical call sign by the RNC or TNC. This allows the NCS to identify and call a specific location or communication point without regard as to what operator may be at the radio at any particular time. Therefore, stations will be routinely called by their tactical call sign only and should listen carefully for that identifier. Although all stations should use their tactical call signs to identify their transmissions, this is no substitute for proper FCC identification which requires transmission of the FCC issued amateur radio call sign once every ten (10) minutes and at the end of every series of transmissions.

All operators should attempt to arrive at their assigned operating point ten to

twenty minutes before the beginning of their shift in order to get set up and briefed before the start of the shift. The operator being relieved should inform their relief on every thing they need to know to do the job. For instance, the briefing should include the purpose of the station; the general situation and what changes are expected; any pending activity or traffic; the frequencies in use; the tactical call signs and locations of stations on frequency; any other radio, telephone, power or antenna information; and the location of toilets, water, food, etc.

Handling Messages or Traffic on a Net

All operators should endeavor to keep the net frequency available for interruption for urgent communications. In order to do so, all operators should keep transmissions short and to the point, avoid unnecessary transmissions, limit to two (2) the number of times another station is called without reply (except in an emergency) and leave a space between transmissions to allow another station to break in with priority traffic. To interrupt a net, stations should key briefly to identify by tactical or FCC call sign, or use “break” for priority traffic or “break, break” for emergency traffic. Operators should use “contact” to signal to the TNC that they wish to call a station that is on frequency. Above all, operators should acknowledge all transmissions made to their station or it will be assumed that no communication was established.

All messages and traffic should have an origin and a destination or the communication is useless. This can be likened to a postal address and return address, and should contain sufficient information for the message to be routed, e.g. – name, phone number, title or function. If an operator is requested to get help for a problem, the operator should try to work with the requesting party in order to determine who can best handle the problem and then direct the traffic accordingly rather than sending an open ended request to the TNC or elsewhere.

To originate a message or traffic, an operator should write down the entire message, then read it back verbatim to the author for approval. The operator should agree with the author on the exact working of what constitutes the message and its priority. As noted above, the traffic should be addressed to a specific location and contain the signature (i.e. – name and title) of the author.

To pass a message or traffic by voice, the message should be read to the receiving stations slowly, in logical phrases of about four to five words, with a pause and release of the PTT key to await the word “GO” from the receiving station before beginning the next phrase. If necessary, the receiving station should request any repeats or “fills”, which the sending station should repeat again exactly as read the first time. At the conclusion of the message, the receiving station should read it back to the sender to resolve any discrepancies. The receiving station should then acknowledge that the traffic has been “copied” and await further traffic.

Simple messages might not require the same level of formality and are subject to operator judgment such as a message to “inform the Chief that Captain Baker has arrived on the scene.” However, a station should maintain in its unit log an indication of all traffic passed no matter how trivial. Similarly, allowing non-amateurs to pass third party traffic by speaking directly over ham radio at times may be more efficient than other forms of message traffic.

Operators should simply insure that such traffic conforms to third party rules and does not unduly disrupt net operations. A number of operating aids for traffic handling, including sample Unit Logs and message forms, are attached as Addendum "E".

All operators should be aware that many people may be listening to their transmissions. Individual victim or patient names should be avoided unless specifically authorized. All communications should be clear, professional and should pertain only to the incident or event activities.

Deactivation

All ARES/RACES operators will remain on duty until deactivated by notification from a NCS as directed by the RACES Radio Officer, the EC, the EOC Station Manager or their designee. At such time, all stations will be requested to check in to the Resource Net for release. Operators will be advised on where to deposit all written message traffic and unit logs. In addition, operators will return all City equipment as well as replace and secure all radio station equipment. Upon conclusion of the deactivation, all NCS' will stand down and announce that all previously occupied frequencies are returned to normal uses.

RACES MANAGEMENT RESPONSIBILITIES

A description of the OFD/RACES Organization Chart is attached hereto as Addendum "F".

Responsibilities of RACES Radio Officer

Under the direct supervision of the OFSA incident Logistics Chief/Communications Officer, the RACES Radio Officer or designee will:

- Obtain a situation briefing from the Communications Officer or their designee.
- Maintain an up-to-date roster of available radio operators.
- Keep track of emergency/disaster assignments needed and/or given.
- Designate a RNC and TNCs, as needed.
- Get regular status reports from the field supervisor and brief the Operations Officer, as appropriate.
- Determine and establish appropriate communications systems; resolve radio traffic issues
- Prepare an action plan for the first 12-hour operational period, including specification of relief personnel, supplies and resources needed.

- Determine processes for deactivation of amateur radio operators within 72 hours after deactivation.
- Schedule and facilitate a debriefing of amateur radio operators within 72 hours after deactivation.
- Produce an after action report within ten (10) days after any activation, a copy of which will be submitted to OFD Communications

Responsibilities of the EOC Station Manager

Under the direct supervision of the RACES Radio Officer, the EOC Station Manager will:

- Call out available amateur radio operators according to the needs determined by the RACES Radio Officer.
- Oversee the RNC and the TNCs.
- Assign amateur radio operators to specific posts, frequencies, responsibilities, etc.
- Determine logistical support (supplies, materials and equipment) needed.
- Report logistical needs to the RACES Radio Officer.
- Oversee the deactivation process, as directed by the RACES Radio Officer.
- Participate in the debriefing of amateur radio operators.
- Direct all radio-related problems, concerns or issues to the RACES Radio Officer.
- Direct all problems with police or fire department personnel by radio to the RACES Radio Officer.

Responsibilities of the RNC

Under the direct supervision of the EOC Station Manager, the RNC will:

- Determine locations to be staffed.
- Determine staffing requirements for each location.
- Determine appropriate shift lengths.

- Create initial staffing worksheet.
- Determine any special requirements (e.g. – mobiles, handhelds, bands used, foul weather gear, etc.).
- Keep locations advised of staffing progress via appropriate tactical nets.
- Accept changes in staffing requirements and make adjustments to worksheets and volunteer announcements.
- Regularly review staffing progress with the shift supervisor or EOC Station Manager.

Responsibilities of TNCs

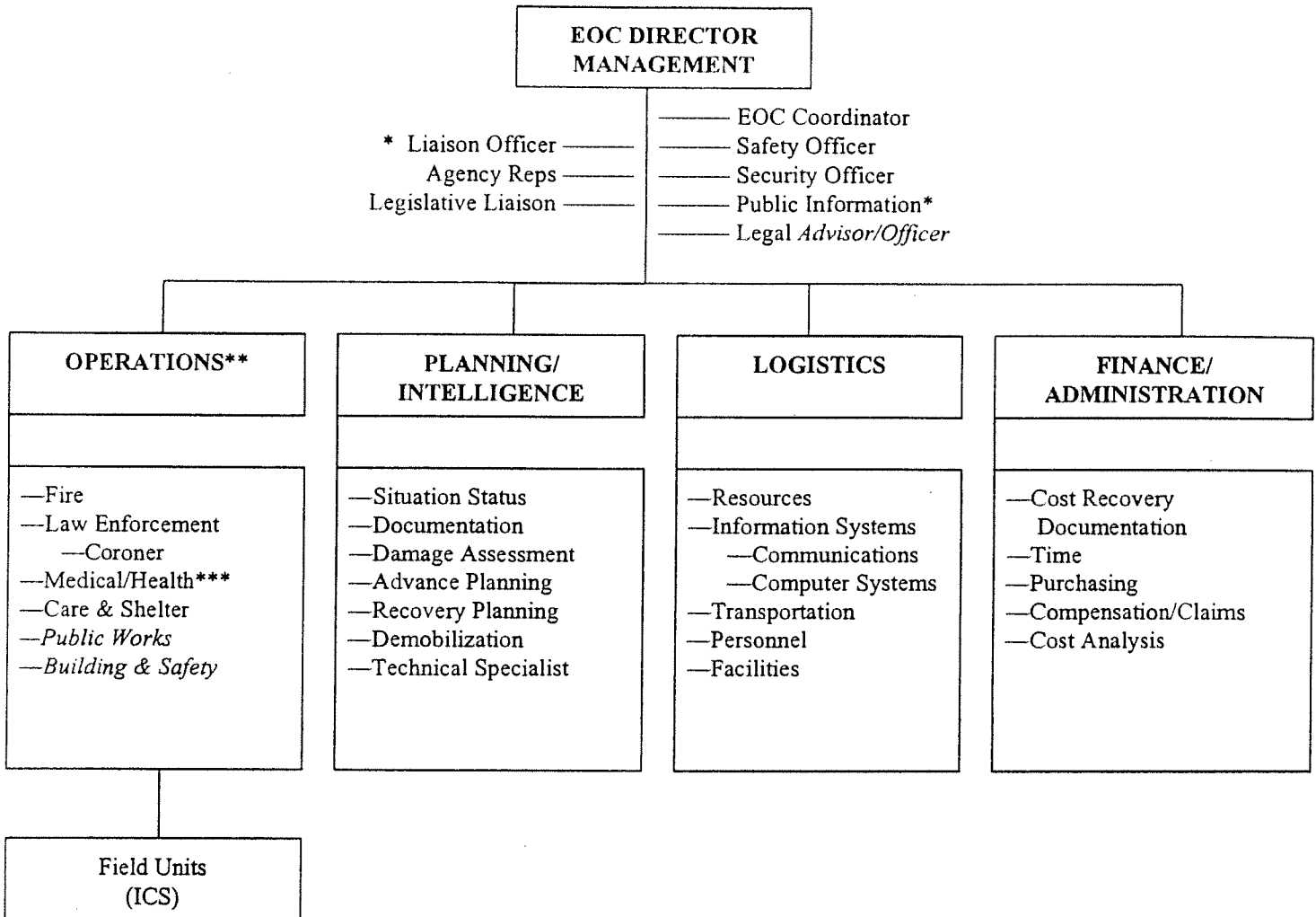
Under the direct supervision of the EOC Station Manager, the TNCs will:

- Start a log noting the date, time and activity undertaken or traffic handled.
- Compile a list of all amateurs who have checked in on frequency by tactical call sign, amateur radio call sign and first name.
- Maintain net discipline and a clear frequency for net operations.
- Participate in the deactivation process, as directed by the EOC Station Manager.
- Participate in the debriefing of amateur radio operators.
- Direct all radio-related problems, concerns or issues to the EOC Station Manager.
- Direct all problems with police or fire department personnel by radio to the EOC Station Manager.

ADDENDUM “A”

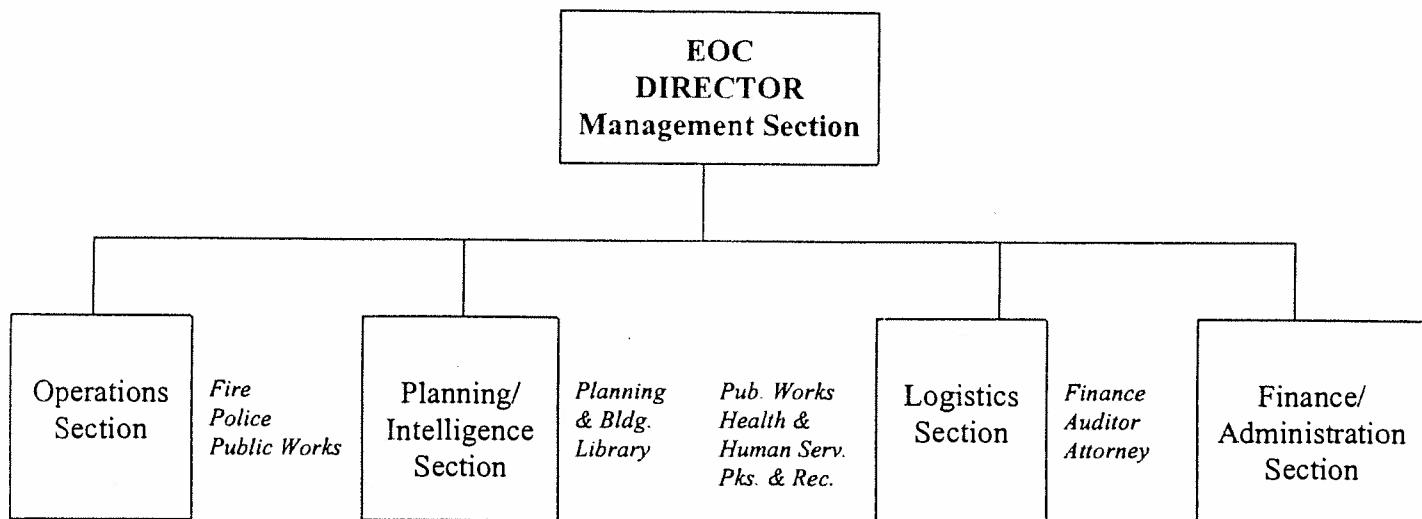
ADDENDUM “B”

SEMS ORGANIZATION CHART (CPG-27/62)



**May be organized as a section or branch.
 **If all elements are activated, a deputy will be appointed to provide a manageable span of control.
 ***Normally coordinated by County, but a local coordinator may be designated if needed.
 ****Contract service/liaison position. (Identify contract services in your organization.)*

SEMS EOC RESPONSIBILITIES CHART (SEMS-4/5)



Responsibilities:

EOC Director (Management Section)

Responsible for overall emergency management policy and coordination through the joint efforts of governmental agencies and private organizations. The EOC Director will either activate appropriate sections or perform their functions as needed.

Operations Section

Responsible for coordinating all jurisdictional operations in support of the emergency response through implementation of the City's EOC Action Plan.

Planning/Intelligence Section

Responsible for collecting, evaluating and disseminating information; developing the City's EOC Action Plan in coordination with other sections; initiating and preparation of the City's After-Action Report and maintaining documentation.

Logistics Section

Responsible for providing communications, facilities, services, personnel, equipment, supplies and materials.

Finance/Administration Section

Responsible for financial and administrative activities.

ADDENDUM “C”

OAKLAND RACES FIRE PATROL MANUAL

INTRODUCTION

Mission Statement

The Oakland Radio Amateur Civil Emergency Service's (RACES) mission is to assist in municipal efforts to mitigate and respond to earthquakes, fires, hazardous materials incidents, civil disturbances and other emergencies in the City of Oakland.

Purpose

At the request of the Oakland Fire Department, RACES will supplement regular Fire Department patrol activities by activating volunteer patrols. These patrols provide the Fire Department with additional "eyes and ears" in designated patrol areas during critical fire conditions. This manual will delineate the role of a volunteer RACES fire patrol member. It is intended to serve as a comprehensive guide for volunteers who participate in fire patrol activities.

Background

National

No community has sufficient resources to cope with all large-scale emergencies. For this reason the United States Congress formally established the Amateur Radio Services in the Communication Act of 1934. Title 47, Code of Federal Regulations, Section 97.161 establishes the Radio Amateur Civil Emergency Services (RACES) to provide for amateur radio operation for civil defense communications purposes during periods of local, regional or national civil emergencies.

Local

A Letter of Understanding (LOU) between the City of Oakland (the "City") and the Oakland Amateur Radio Emergency Service/Radio Amateur Civil Emergency Service ("ARES/RACES") has been established to support local area government officials with communication services during emergency conditions. Oakland RACES members meet in person once per month. The meetings are generally held the first Saturday of the month at 9:00 a.m. at the Media Room of the Emergency Operations Center, Firestation No. 1, 1605 Martin Luther King, Jr. Way. RACES members also meet on the air for a directed net at 7:30 p.m. each Thursday on the WB6NDJ repeater at 146.88 MHZ (+, 77.0 PL). All local amateurs are invited to attend any meeting session.

PREPARATION

RACES Registration

All volunteers who are involved in fire patrol activities must be registered with RACES and must be registered with the City as Disaster Service Workers. Registration can normally be completed at the monthly RACES meetings of, if necessary, before the commencement of any patrol.

Indemnity

All registered volunteers are indemnified by the City of Oakland (per the LOU between the City and Oakland ARES/RACES) and covered by worker's compensation while traveling to and from the patrol and while engaged in patrol activities.

Identification

Registered RACES volunteers will be identified by identification cards provided by the City. In accordance with the LOU between the City and Oakland ARES/RACES, identification cards will identify the volunteers as a Disaster Service Worker. Identification cards remain the property of the City and shall be carried at all times during patrol activities.

Equipment

All RACES members should endeavor to maintain their equipment in such a manner as to allow for a rapid, mobile deployment. For fire patrol duty, volunteers are responsible for the following:

- City of Oakland RACES identification card (must be presented upon demand to any authorized City representative or agents and agents from other law enforcement agencies).
- Amateur radio equipment and spare batteries
- Clipboard, paper and writing devices.
- ARES/RACES Instant Trainer.
- Patrol area maps and log sheets.
- Vehicle safety and drivability: fuel, water, oil, lights, tires, etc.
- Vehicle identification (magnetic or windshield).
- Drinking water
- Proof of valid auto insurance.

Oakland Fire Department Equipment

Upon reporting to fire stations #1 and/or #25, the primary and secondary stations, the Oakland Fire Department will provide the following:

- One Fire Department-owned Thomas Guide maps per patrol team.
- Two 800 MHz hand held radios to monitor the Fire Dispatch Center. (These radios are for reception only; RACES personnel are not authorized to transmit under any circumstances.)
- Sufficient backup batteries for the 800 MHz radios to last through the duration of the patrols.

MOBILIZATION

Fire patrols will be activated pursuant to the procedures for activation under the LOU between the City of Oakland and Oakland ARES/RACES. The Oakland Fire Department will declare a RACES activation and request amateur radio patrols at any time that critical fire emergency conditions pose an extraordinary threat to life or property. Fire patrols will be initiated by notification of a designated RACES liaison via the Fire Department dispatch supervisor or at the direction of the Office of Emergency Services in preparation for critical fire conditions on high hazard days, holidays or special events.

Notification of Volunteers

Volunteers may be notified of an emergency by the Fire Department's automated telephone notification system or other authorized procedures. All volunteers should make certain that the RACES liaison has current contact information on record. When an emergency notification is received, volunteers should monitor the WB6NDJ repeater (146.88 MHz, + offset, 77.0 PL) for information, activation or assignment.

GENERAL INFORMATION

Appearance and Conduct

Although contact with the public should be limited, it is expected that conduct and appearance of RACES patrol members will be professional, courteous and cooperative.

Contact with Public

At no time shall a volunteer make contact with an individual engaged in a hazardous activity. Further, no patrol member may quote laws, policies, procedures, fire causes or any confidential items to the general public. Any questions regarding the above or any aspect of the Fire Services Agency operations should be immediately referred to Net Control.

Shifts

The schedule and duration of all patrol shifts will be determined prior to the activation of patrol teams. Shift durations will be limited to a maximum of 4 -6 hours. Net Control will limit all assignments, whenever possible, so as not to exceed the six-hour limit.

Shifts should be scheduled to allow the relieving operators sufficient time to get briefed by those who are going off duty. The briefings will include, though not be limited to:

- Review of patrol route.
- Specific areas of concern along the route.
- Use/status of city-owned equipment.
- Occurrences, incidents reported or noted.

ASSIGNMENTS

Tactical Net Control Station

At least one volunteer will be directed by the RACES liaison to assume Net Control duties at Fire Station #1. Net Control will operate the primary station from the Fire Dispatch Center during patrol activities and will use the tactical identification of "Net Control." This operator will conduct a directed net on a tactical simplex frequency and maintain contact with patrols and stations with assigned duties. Net Control will direct all traffic and communicate information to and from the Fire Dispatch Center.

Patrol Log

Net Control is responsible for maintaining a patrol log. It is used to document activities of patrol members on duty, areas patrolled and radio traffic for the Fire Dispatch Center, if any. Documentation should include the time of a contact, a general status report of conditions in the patrol area and any other pertinent information. Net Control is responsible for maintaining a list of all stations and volunteers participating in fire patrol activities.

Resource Net Control Station

One volunteer will be assigned to Resource Net Control duties. This operator will conduct a directed net on the WB6NDJ two meter repeater and coordinate the assignment of volunteers. The Resource Net Control operator will use the tactical identification of "Resource Net Control" and conduct the net for such periods of time that resources are needed according to the RACES liaison.

Secondary Fire Station

Volunteers will be assigned to duty at Fire Station #25 and as designated by Net Control. These individuals will serve as the RACES contact for the company officer and will act as a Net Control, when necessary. Operators at the secondary stations will use the tactical identification of "Radio x," with "x" being the number of the station (e.g. – Fire Station #25 will be "Radio 25"). Operators should remember that they are visitors to the fire from which they are operating. Not only is the station a place of business for the Fire Department, it is also a home for on-duty personnel.

Commencing Operations

Upon arrival at an assigned fire station, the first volunteer will immediately notify company officer that he/she is present and available to support fire patrol operations and will present the officer with his/her City issued RACES identification. When the radios are operational, the operators should notify Net Control and await additional instructions.

Completing Operations

Operators are responsible for leaving the station in an orderly condition when concluding operations.

Mobile Patrols

Oakland RACES will endeavor to field a minimum of three patrol teams during any activation. Each patrol team will consist of at least two volunteers assigned to patrol a route in a designated sector of the hill area. One volunteer will be responsible for driving. The other volunteer(s) will be responsible for navigation, observation and radio operation. All volunteers are expected to be thoroughly familiar with the patrol routes. The primary purpose of a mobile patrol is to provide additional "eyes and ears" for the Oakland Fire Department so the Department can receive early notification of a fire or fire hazard in the patrol area.

Each fire department in Alameda County utilizes a standard four-digit identification system. The first two digits in the series identify the city or county agency. The second two digits/letters in the series identify the function or type of apparatus. The first two digits of all Oakland Fire Department functions or vehicles is "25." RACES mobile patrols will use the tactical signs 25A1, 25A2 and 25A3, corresponding to the number of their patrol sector. Net Control has the authority to designate tactical call signs 25A4 through 25A9, as needed, to accommodate additional amateur radio patrols.

A mobile patrol will operate in a sector assigned by Net Control. All volunteers are expected to be familiar with the patrol routes in their assigned sector. Each patrol shift shall commence and terminate at Fire Station #25 or other designed locations. Operators will travel in private vehicles while on patrol.

Bathroom facilities are available at the primary and secondary stations. While on patrol all vehicles are to remain on designated roadways and drivers are expected to obey all traffic regulations. Traveling onto private, closed or restricted area is prohibited.

Routine Reports

A mobile patrol will report when requested by Net Control. The patrol will identify itself with its tactical call sign and provide its current location and an overall status of its patrol area.

Reporting Hazardous Incidents

In accordance with the Uniform Fire Code, a “fire hazard” is “any thing or act which increases or may cause an increase of the hazard or menace of fire to a greater degree than customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fires; or which may obstruct, delay, hinder or interfere with the operations of the fire department or the egress of occupants in the event of a fire.”

When a fire or other hazardous condition is observed, the patrol must immediately report the occurrence to Net Control. The patrol’s current location, the nature of the incident and location of the incident will be relayed to Net Control. The patrol will then await further instructions from Net Control on what actions to take.

Reference Points

When patrols make their reports to “Net Control, they should endeavor to use standard points of reference. Whenever possible, the patrols will refer to the nearest coordinates from the Thomas Guide map book (e.g. “Page 10,D2”). For added clarity, the patrols should refer to well know sites, (e.g. Knowland Zoo, Lake Chabot, Merritt Campus, Skyline Horse Stables, Claremont Hotel, etc.)

Hazardous Conditions

Hazardous conditions include,, but are not limited to:

- Fire or smoke conditions, no matter how small.
- Fireworks.
- Open flame devices (e.g. road flare).
- Blocked streets or fire trails.
- Blocked hydrants (5 feet clearance is required on all hydrants).
- Large piles of combustible debris.

- Downed power lines.
- Open fire hydrants.
- Any other hazardous conditions not listed above.

Field Information Log

Patrol teams will use a field information log (sample attached) to document any vehicle, individual or group activity or other occurrence of note in the patrol area.

PATROL SECTORS

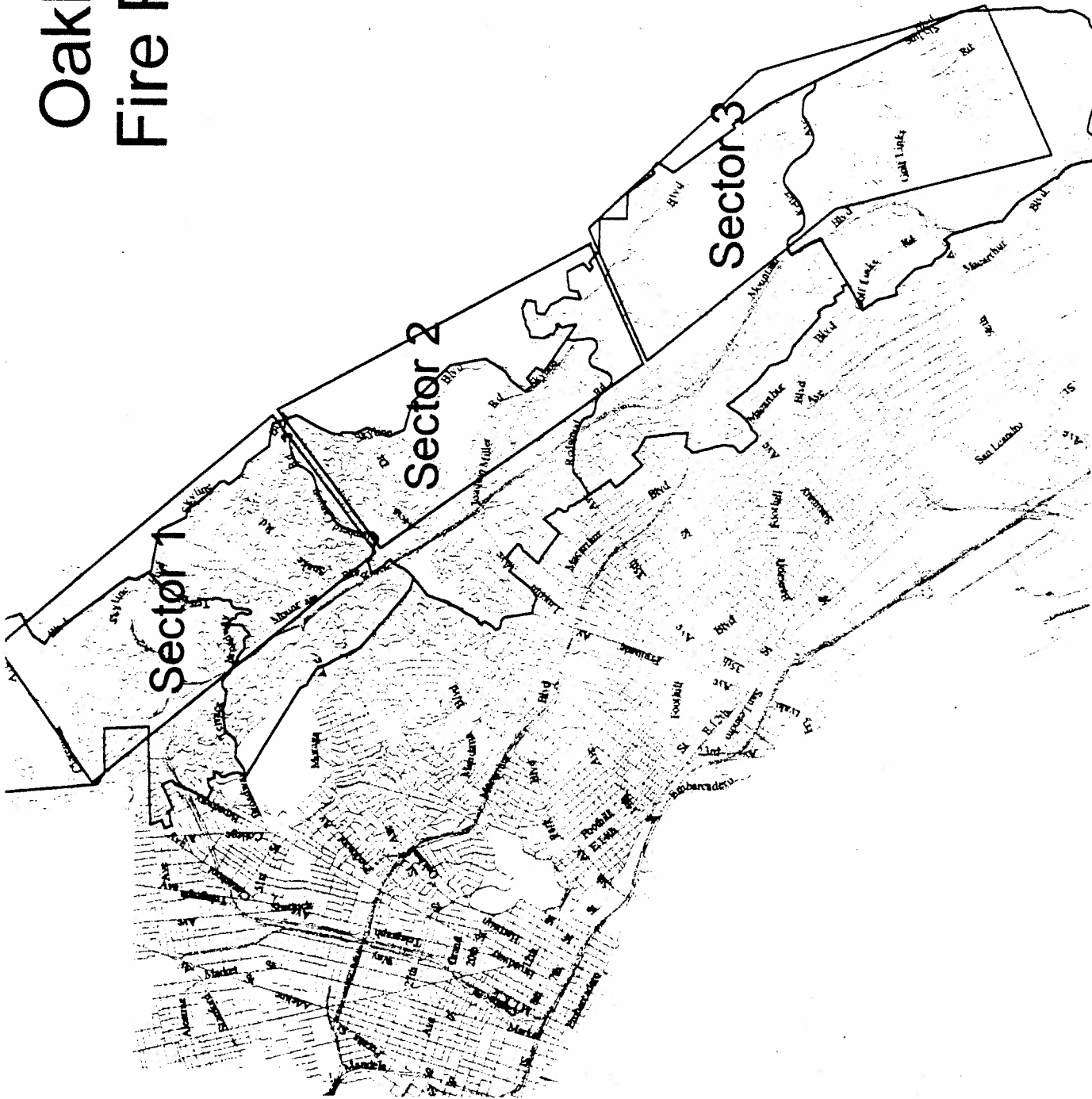
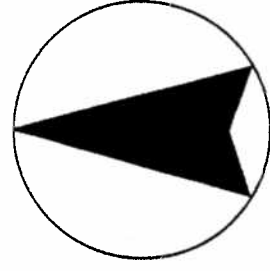
The overall patrol area includes all of the Oakland hills area as shown on the following map of the City of Oakland. The patrol area is divided into three sectors numbered 1 - 3 from north to south, which will correspond with the designated tactical call signs of the patrol teams (i.e.- 25A1 - 25A3). The patrol teams are expected to use routes within the general guidelines that follow to maximize their ability to observe their patrol sector. (The following maps are for informational purposes only; patrol teams will use Thomas Guide maps while on patrol. See Oakland Fire Services Agency Equipment, above.)

Oakland RACES Fire Patrol Sectors

Date Plotted: May 7, 1997

Legend:

- Fire Assessment Districts
- Streets



Sector 1

Sector #1 of the patrol area is the north Oakland hills from Berkeley border to Shepard Canyon Road, as shown on the following map. In general, patrol teams should use Claremont Avenue and Snake Road as their principle east-west routes on the north and south borders of Sector 1, respectively. They should use Grizzly Peak-Skyline Boulevard and Mountain Boulevard-Moraga Avenue as their principal north-south routes on the east and west borders of the patrol sector, respectively.

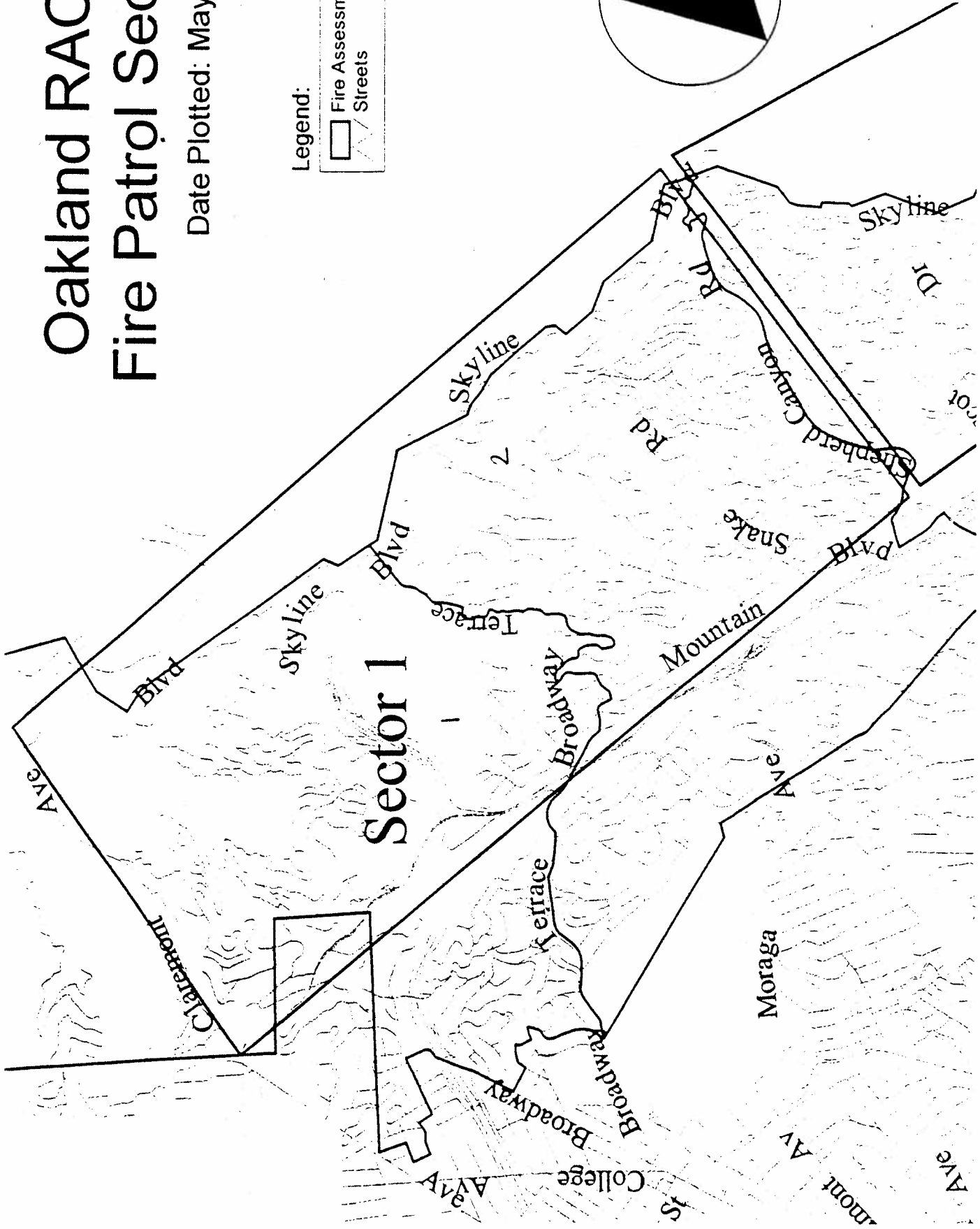
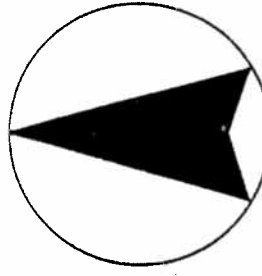
Oakland RACES

Fire Patrol Sector 1

Date Plotted: May 30, 1997

Legend:

- Fire Assessment Districts
- ▨ Streets



2 Miles



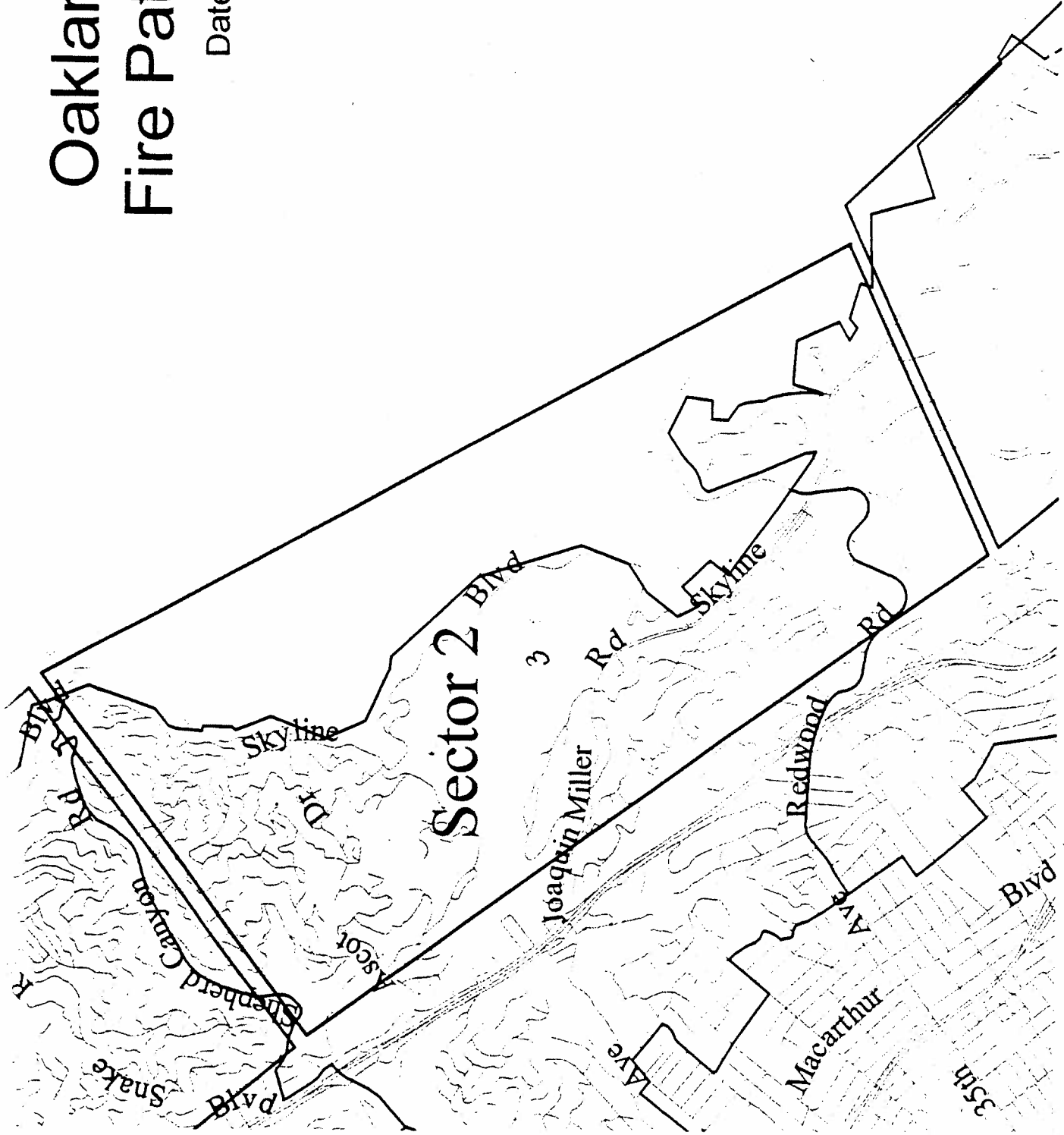
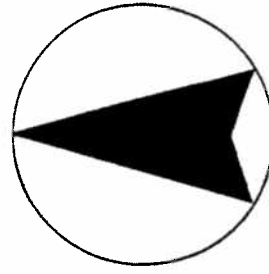
Sector 2

Sector #2 of the patrol area is the central Oakland hills from Montclair to Skyline High School (as shown on the following map). In general, patrol teams should use Shepard Canyon Road and Redwood Road as their principle east-west routes on the north and south borders of Sector 2, respectively. They should use Skyline Boulevard and Joaquin Miller Road as their principle north-south routes. Note that the development next to and across Skyline Boulevard from Skyline High School are within Sector 2.

Oakland RACES Fire Patrol Sector 2

Date Plotted: May 30, 1997

Legend:



2 Miles



Sector 3

Sector #3 of the patrol area is the south Oakland hills from Skyline High School to the San Leandro border (as shown on the following map). In general, patrol teams should use Keller Avenue and Golf Links Road s their principle east-west routes, and use Skyline Boulevard and Campus Drive as their principle north-south routes. Care should be taken to include Sun Valley Road off of Grass Valley Road in the patrol route in order to view the last valley to the south.

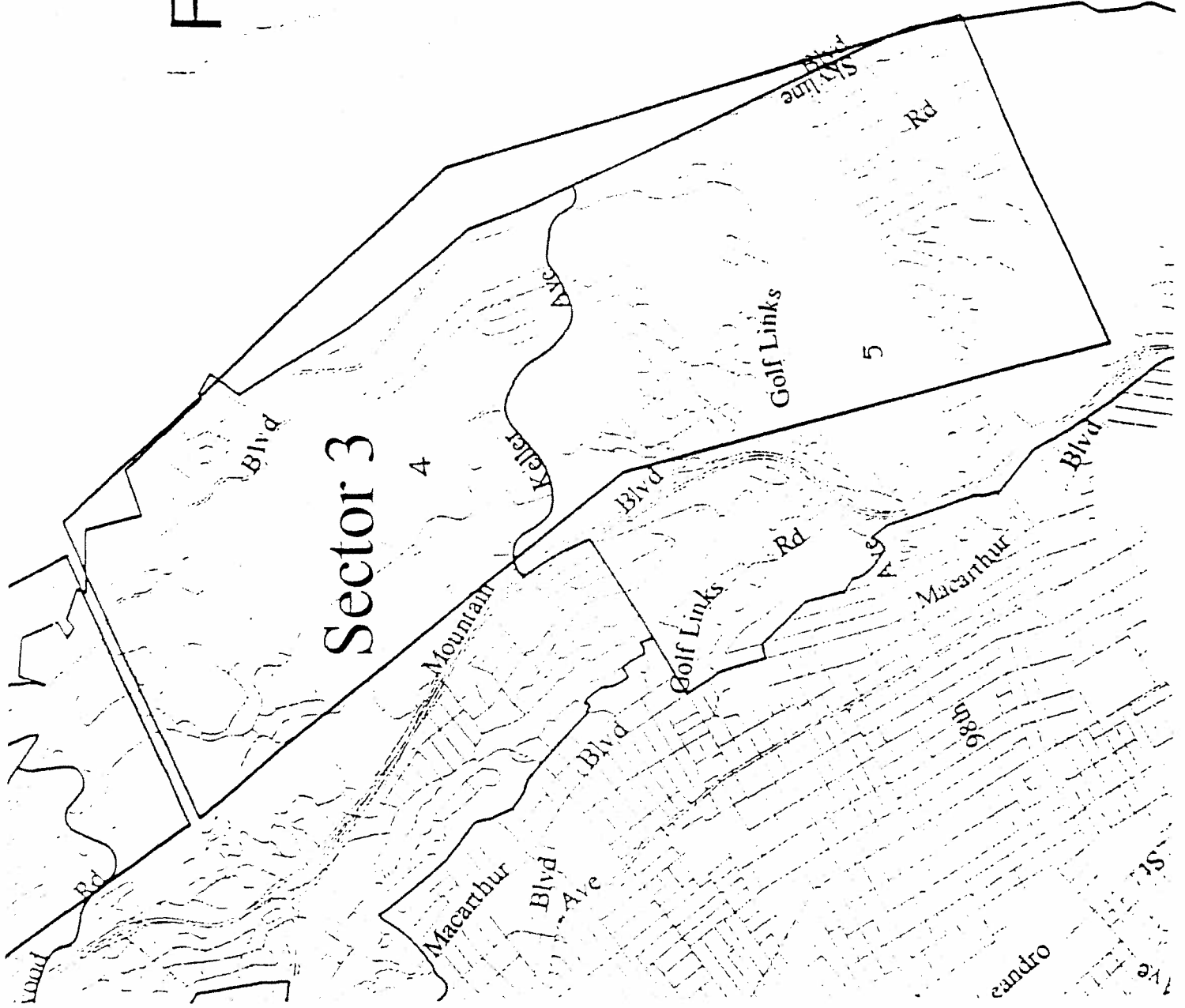
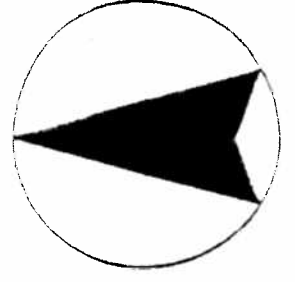
Oakland RACES

Fire Patrol Sector 3

Date Plotted: May 30, 1997

Legend:

- Fire Assessment Districts
- Streets



Fixed Observers

When a sufficient number of volunteers are available, volunteers may be assigned to observation points in the hills to look for smoke or flames. The tactical identification for a fixed observer will be issued from the same series as a mobile patrol, using 25A4 – 25A9, as noted above (see “Mobile Patrols”).

DEMOBILIZATION PROCEDURES

All fire patrol operators will remain on duty until they are deactivated by Net Control. Deactivation procedures will include:

- Return to fire station from which they were assigned.
- Report deactivation status to company officer.
- Complete all patrol logs.
- Verify contents and legibility.
- Place log in an Inter-Office Mail envelop addressed to: OFD/OES (RACES). OES staff will be responsible for creating summary patrol reports and will distribute those reports to the appropriate sources.
- Return all FSA equipment.
- Replace and secure all radio station equipment.

RADIO PROCEDURES

Joining the Net

All stations should listen only when they first tune into a Net Control frequency. If no stations are transmitting, operators may check in with Net Control by transmitting “Net Control, this is [call sign].” Operators will wait for acknowledgment from Net Control before continuing with a message.

Leaving the Net

Once an operator has checked in with net control, she/he may not leave the frequency without notification of and acknowledgement from Net Control.

Transmission During the Net

All transmission during a net should be directed to or from Net Control. If operators wish to contact another station directly, they may request permission for a “contract” from Net Control.

Station Identification

Each station will be provided with a unique tactical call sign for use while engaged in fire patrol activities. Standard FCC Requirements always apply during a fire patrol. Each station should transmit its amateur call sign once every ten minutes and at the end of all transmitting activities.

Message Content

Radio operators should remember that many people may be listening to their transmissions. All communications should be clear, professional and should pertain only to the patrol activities.

Frequency Plan

146.880 MHz

(-) offset, 77.0 Hz PL, WB6NDJ, VHF Repeaters, Inc. Resource net frequency for recruitment and deployment of operators and patrol teams.

147.585 MHz

(s) simplex – Oakland ARES/RACES tactical frequency #1. Tactical frequency for all patrol traffic to net control

146.565 MHz

(s) simplex – Oakland ARES/RACES tactical frequency #2. Tactical frequency available for traffic between patrol teams and secondary stations (e.g. – Radio 25)

442.400 MHz

(+) offset, 77.0 Hz PL, WB6NDJ, VHF Repeaters, Inc. or 446.500 MHz simplex. Command frequency between primary and secondary stations, Net Control, RACES Radio and the Oakland Emergency Coordinator.

ADDENDUM “D”

OAKLAND RACES RESOURCE NET PREAMBLE

QST, QST, QST. This is [**callsign**], [**handle**], Resource Net Control station for an Oakland RACES activation. The primary purpose of this net is to organize and coordinate the assignment of volunteer communications personnel, equipment and other administrative support for RACES activities.

Volunteers available for RACES communications duty should check in first with Resources Net Control. Resource Net Control has current information on the manpower and equipment requirements for current operations. This net is on the frequency pair of the WB6NDJ repeater, through authorization of VHF Repeaters, Incorporated, on an output frequency of 146.88 MHz, negative offset with a PL of 77 Hz. This is a RACES controlled operation, a clear frequency is appreciated.

The Resource Net is directed by Net Control. Please check in by complete callsign stated in standard phonetics. Do not request situation or incident update information. Resource Net Control will provide situation reports in regularly scheduled broadcasts or as frequently as practical.

Upon checking in, Resource Net Control will give you information regarding the location and anticipated length of assignment, the personal equipment requirements and any other information you need before reporting to a site.

For stations with traffic, enter the net at any time by transmitting your callsign. Use "break" for priority traffic and "break, break" for emergency traffic. Use "contact" if you wish to call a station that has checked into the net. Otherwise, all stations please standby unless called by Net Control.

All stations available for assignment should check in at this time by transmitting their complete callsign stated phonetically.

OAKLAND RACES FIRE PATROL DEPLOYMENTS

RACES FIRE PATROL RESOURCES NET

_____, PRIMARY NET CONTROL

_____, ALTERNATE NET CONTROL

PATROL SHIFT	OES NET CTRL & FDC RELAY	STATION 25 OPERATOR	PATROL 25A01	PATROL 25A02	PATROL 25A03
(11) Hrs -- Hrs Patrols brief at #25	(3)	(2)	(2)	(2)	(2)
(11) Hrs -- Hrs Patrols brief at #25	(3)	(2)	(2)	(2)	(2)

Hours RACES DEACTIVATION

SUPPORT NET CONTROL LOG

Call	Availability		Mobility				Capabilities				Resources		Assign				
	Date	Shift	Fix	Auto	Bike	Ped	Other	Fix	Mobl	Port	HT	Bands	Power	Pers	Fd/Shltr	On	Offlist
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
Comments:																	

ADDENDUM “E”

DISASTER COMMUNICATIONS

FOR COMMUNICATIONS OPERATOR USE ONLY

MESSAGE
NUMBER

RECEIVED FROM _____ DATE _____

LOCATION _____ TIME _____

DAY, HR, MIN
(24 HR. LOCAL)

SENT/DELV'D TO _____ DATE _____

LOCATION _____ TIME _____

FOR MESSAGE
CENTER USE

(LOCATION)

OPERATOR _____ LOCATION _____

(ENTERED BY)

(CIRCLE ONE)

MESSAGE

② EMERGENCY
*Life
Threatening*

URGENT
*Property
Threatening*

ROUTINE
All Others

③ DATE _____
MM/DD/YY

④ TIME _____
24 Hour Clock

TO

(CHECK ONE)

TAKE ACTION

FYI

FROM

⑤ LOCATION _____ ⑧ LOCATION _____

⑥ TITLE _____ ⑨ TITLE _____

⑦ NAME _____ ⑩ NAME _____

BE BRIEF

— TEXT —

USE BALL POINT PEN ONLY

⑪ _____

⑫ _____

⑬ _____

⑭ _____

⑮ _____

⑯ _____

⑰ _____

⑱ _____

AMATEUR FIRE PATROL
FIELD INFORMATION SHEET

Net Control Operator: _____ Date: _____

Patrol Operator: _____ Time: _____

Location: _____

ACTIVITY OR CONDITION

Identifying Information: _____ _____
Type of Activity: _____ _____
Comments: _____ _____

VEHICLE DESCRIPTION

Make: _____	Model: _____
Year: _____	License #: _____
Color: _____	No. of Occupants: _____
Comments: _____ _____	

INDIVIDUAL DESCRIPTIONS

Sex _____	Height _____	Weight _____
Hair Color _____	Eye Color _____	Age _____
Other Identifying Information: _____ _____		
Comments: _____ _____		

RADIO AMATEUR CIVIL EMERGENCY SERVICE

SITUATION REPORT FLASH MESSAGE FORM DATE: _____ TIME: _____

FROM: _____ TO: _____
 (check boxes if known leave blank if unknown/use figures in "*" spaces)

SYSTEMS	NORMAL*		IMPAIRED		DISABLED	
	"A"		"B"		"C"	
1. Telephones	[]	[]	[]	[]	[]	[]
2. Radio Communications	[]	[]	[]	[]	[]	[]
3. Electricity	[]	[]	[]	[]	[]	[]
4. Water & Sewer	[]	[]	[]	[]	[]	[]
5. Gas	[]	[]	[]	[]	[]	[]
6. Streets & Highways	[]	[]	[]	[]	[]	[]
7. Law Enforcement	[]	[]	[]	[]	[]	[]
8. Fire & Rescue	[]	[]	[]	[]	[]	[]
9. Emerg Med Services	[]	[]	[]	[]	[]	[]

CASUALTIES	NONE		LIGHT*		MODERATE		HEAVY	
	"A"		"B"	"#"	"C"	"#"	"D"	"#"
10. Fatalities	[]	[]	[]	_____	[]	_____	[]	_____
11. Injuries	[]	[]	[]	_____	[]	_____	[]	_____
12. Shelterless	[]	[]	[]	_____	[]	_____	[]	_____

DAMAGE

13. Govt. Bldgs.	[]	[]	_____	[]	_____	[]	_____
14. Hospitals	[]	[]	_____	[]	_____	[]	_____
15. Schools	[]	[]	_____	[]	_____	[]	_____
16. Residences	[]	[]	_____	[]	_____	[]	_____
17. Commercial Bldgs.	[]	[]	_____	[]	_____	[]	_____
18. Industrial Bldgs.	[]	[]	_____	[]	_____	[]	_____

ONGOING INCIDENTS

19. Fires	[]	[]	_____	[]	_____	[]	_____
20. HAZMAT	[]	[]	_____	[]	_____	[]	_____
21. Flooding	[]	[]	_____	[]	_____	[]	_____
22. Civil Disorder	[]	[]	_____	[]	_____	[]	_____
23. Landslides	[]	[]	_____	[]	_____	[]	_____
24. _____	[]	[]	_____	[]	_____	[]	_____

*DEFINITIONS KEY

Systems: "A" NORMAL-----operating as though nothing had happened
 "B" IMPAIRED-----impacted, but can meet the most urgent demands
 "C" DISABLED-----unable to meet urgent demands

Casualties, Damage & Ongoing Incidents:
 "B" LIGHT-----can be handled by normal activities
 "C" MODERATE----can be handled by available emergency resources
 "D" HEAVY-----beyond handling by available resources

 (to be filled out by RACES Operator only)

STATION FROM: _____ STATION TO: _____

TX/RX TIME: _____ OPERATOR: _____

ADDENDUM “F”

OFD/RACES ORGANIZATION CHART

