ACES/RACES

Emergency Plan

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Purpose and Background

Purpose

Amateur Communications Emergency Services (ACES) and Radio Amateur Communications Civil Emergency Services (RACES) are programs administered by City of Moreno Valley Emergency Operations and Volunteer Services.

The purpose of Moreno Valley ACES/RACES, hereafter known as MV ACES/RACES, is to provide vital communications support during emergency incidents as well as during routine events and activities. Utilizing state-of-the-art technologies such as portable repeaters, packet radio, amateur television and Automatic Position Reporting System (APRS), MV ACES/RACES provides emergency communications support to the City Emergency Operations Center (EOC), serves as shadows to City personnel, supports activated shelters, reports the extent of damage during an emergency; and provides mutual aid to the County and other jurisdictions and agencies as needed.

Non-emergency support is also a critical element because it enhances preparedness and coordination as well as provides essential communications links. Non-emergency events that involve MV ACES/RACES include citywide and countywide disaster exercises; parades; safety fairs; celebrations; and training with other organizations and groups within the County such as Riverside Emergency Animal System (REARS).

Background

After recognizing the need to use amateur radio to support the nation's Civil Defense program, in 1951 the Federal Communications Commission (FCC) authorized Radio Amateur Civil Emergency Services (RACES) under the direction of the Civil Defense Program. Later, the Civil Defense Program became the Federal Emergency Management Agency (FEMA). According to FEMA, RACES can only be administered by local, county and state emergency management agencies. Their role is to provide radio communications for civil-preparedness and natural disaster emergencies only. During RACES activations, RACES operators may only communicate with amateurs operating in a RACES capacity. Tests and drills are limited to a maximum of one hour per week.

Such restrictions do not apply when operating in other capacities. Therefore, the City of Moreno Valley has added Amateur Communications Emergency Services (ACES). Using the same operators and the same frequencies, MV ACES/RACES can "switch hats" from ACES to RACES and RACES to ACES to meet the requirements of the situation as it develops. This allows for participation in weekly nets, exercises, training, and special events as needed without having to worry about the one hour per week time limit or having to only communicate with those who are operating in RACES capacity.

MV ACES/RACES Membership

Membership in MV ACES/RACES carries with it a personal commitment to public service. This commitment is extremely important in responding to and recovering from an emergency. As a City organization, MV ACES/RACES maintains a strong working relationship with Moreno Valley Amateur Radio Association (MV ARA), a privately sanctioned radio club.

To become a member of the City of Moreno Valley ACES/RACES organization, the applicant must hold a valid amateur radio license.

MV ACES/RACES members are required to:

1. Be 18 years of age;

2. Be a licensed amateur radio operator;

3. Complete a City of Moreno Valley Volunteer Application;

4. Submit to a background check provided by the City of Moreno Valley;

5. Be sworn in as a Disaster Service Worker;

6. Wear a City of Moreno Valley MV ACES/RACES ID Badge;

7. Wear a City of Moreno Valley issued uniform shirt;

8. Attend at least 6 monthly meetings per year;

9. Check into at least 2 radio nets per month (held weekly);

10. Attend periodic training; and

11. Have a desire to provide emergency service.

MV ACES/RACES Organization

Moreno Valley ACES/RACES operates under the supervision and direction of Emergency Operations and Volunteer Services. MV ACES/RACES positions include:

<u>MV ACES/RACES Emergency Manager</u>
The City of Moreno Valley Emergency Operations and Volunteer Services Program Manager performs in this role. Duties include:

- Administer the MV ACES/RACES program;
- Approve emergency activations, training and special events;
- Approve mutual aid requests for emergency activations, training and special events;
- Approve position appointments and new member applications;
- Approve all policies and procedures;
- Approve all flyers, press releases, publicity and newsletters;
- Purchase, track and maintain City-owned MV ACES/RACES equipment;
- Serve as point of contact for MV ACES/RACES to mutual aid agencies; and
- Serve as sole point of contact to City Technology Services.

<u>MV ACES/RACES Emergency Coordinator</u>
The City of Moreno Valley Emergency Operations Specialist performs in this role. Duties include:

- Process MV ACES/RACES volunteer applications and background checks;
- Issue/track uniforms and ID cards;
- Attend periodic meetings as directed;
- Compile and edit MV ACES/RACES newsletters, flyers and press releases;
- Maintain database, mailing lists and roster; and
- Maintain MV ACES/RACES information on Moreno Valley website.

<u>MV ACES/RACES Chief Officer</u>
Duties of the MV ACES/RACES Chief Officer include:

- Conduct monthly MV ACES/RACES meetings;
- Recommend and facilitate training;
- Supervise field activities;
- Participate in weekly nets, exercises, special events and activations;
- Recommend technical and operating equipment purchases and report repair needs to MV ACES/RACES Emergency Manager;
- Assure that net control station is properly utilized during emergency activations and weekly nets;
- Recommend appointments and new member applicants; and
- Provide articles to MV ACES/RACES Coordinator for newsletters.

MV ACES/RACES Deputy Chief Officer
Duties of the MV ACES/RACES Deputy Chief Officer include:

- Perform all MV ACES/RACES Chief Officer duties in his/her absence;
- Assist MV ACES/RACES Chief officer with training;
- Participate in weekly nets, special events and activations;
- Send reminder emails and provide minutes of meetings; and
- Provide articles to MV ACES/RACES Coordinator for newsletters.

MV ACES/RACES Technical Officer
Duties of the MV ACES/RACES Technical Officer include:

- Perform all MV ACES/RACES Deputy Chief Officer duties in his/her absence;
- Assure technical equipment is in working order;
- Make recommendations for technical equipment to MV ACES/RACES Chief Officer;
- Assist MV ACES/RACES Chief officer with training;
- Participate in weekly nets, exercises special events and activations; and
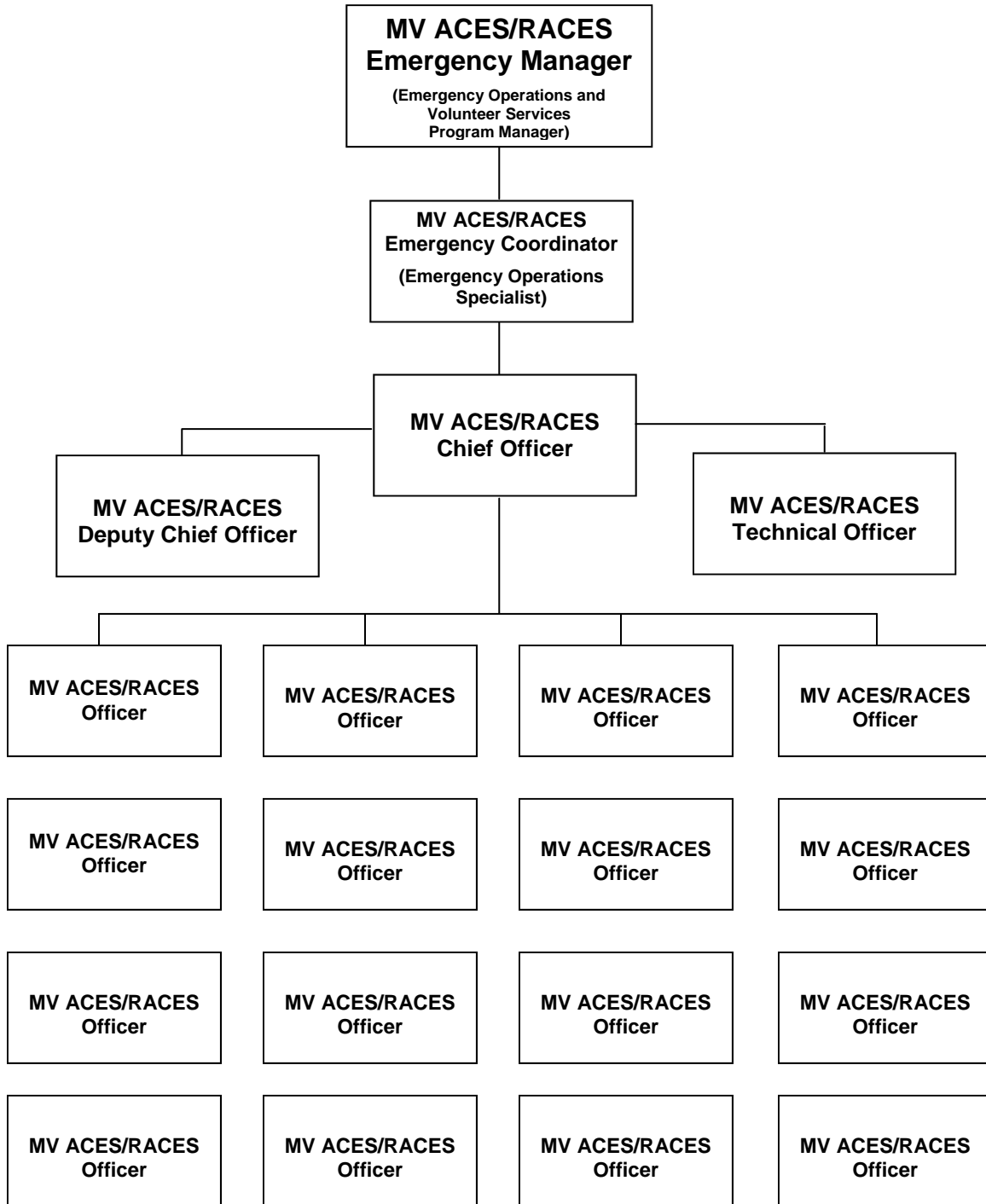- Provide articles to MV ACES/RACES Coordinator for newsletters.

MV ACES/RACES Officer
Duties of the MV ACES/RACES Officer include:

- Participate in weekly nets;
- Participate in training and exercises;
- Participate in special events;
- Participate in emergency activations; and
- Provide input for newsletter articles.

Organization Chart

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                    ┌─────────────────────────┐
                    │    MV ACES/RACES        │
                    │   Emergency Manager     │
                    │ (Emergency Operations and│
                    │   Volunteer Services    │
                    │   Program Manager)      │
                    └─────────────────────────┘
                                 │
                    ┌─────────────────────────┐
                    │    MV ACES/RACES        │
                    │  Emergency Coordinator  │
                    │ (Emergency Operations   │
                    │      Specialist)        │
                    └─────────────────────────┘
                                 │
                    ┌─────────────────────────┐
                    │    MV ACES/RACES        │
                    │     Chief Officer       │
                    └─────────────────────────┘
        ┌────────────────────┼────────────────────┐
┌──────────────────┐         │         ┌──────────────────┐
│   MV ACES/RACES  │         │         │   MV ACES/RACES  │
│ Deputy Chief Officer│       │         │ Technical Officer│
└──────────────────┘         │         └──────────────────┘
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MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer
MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer
MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer
MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer	MV ACES/RACES Officer

Uniform/ID

The City of Moreno Valley Emergency Operations and Volunteer Services Program will issue each MV ACES/RACES member a white uniform shirt, t-shirt, baseball cap and ID card to wear during emergency activations, mutual aid requests, special events and training. These items remain the property of the City of Moreno Valley and must be returned upon the resignation or is no longer a MV ACES/RACES member.

The following uniform will be worn during all emergency activations, disaster exercises, City events, mutual aid requests, mutual aid training exercises:

- White City-issued uniform shirt. Shirt is worn tucked in;

- Black or dark blue work trousers or slacks (no jeans);

- Black belt;

- Dark shoes or boots;

- City-issued baseball cap (optional); and

- City-issued badge.

The following uniform will be worn during all MV ACES/RACES meetings, MV EOC Exercise Design meetings, Field Day events and safety fairs:

- City-issued t-shirt. Can be tucked in with belt or worn out (no belt required);

- Black or dark blue work trousers, slacks, jeans (no holes), or shorts;

- Dark shoes, boots, or tennis shoes (can wear white tennis shoes with shorts);

- City-issued baseball cap (optional); and

- City-issued ID badge.

Outer garments:

- May be solid dark blue or black in color;

- City-issued patches shall be affixed as follows:

  o MV Patch sewn on left shoulder; and

  o RACES patch sewn on right shoulder.

- Be sure to affix the City-issued ID badge to the outer garment.

Recommended Equipment

In addition to your City-issued uniform shirt and ID badge, it is recommended that MV ACES/RACES members carry with them the following equipment:

- Radio license
- 2 meter and/or 440 HT
- 2 meter and/or 440 magnetic mount antenna
- Spare batteries
- Headphones
- Extra coax
- Power supply and adapters
- Toolbox:
    - Pliers
    - Screwdrivers
    - Socket wrenches
    - Electricians tape
    - Soldering iron and solder
    - Power cord connectors
    - Antenna connection adapters
- Thomas Bros map book
- Roster, message forms, log books, pen, paper, etc.
- Personal gear (short-term)
    - First aid kit
    - Flashlight with batteries
    - Snacks and drinks
    - Medicine
    - Prescription glasses
    - Sunglasses
- Personal gear (long-term)
    - Foul weather gear
    - Three day supply of food, water and clothes
    - Utensils
    - First aid kit
    - Sleeping bag
    - Emergency Blanket
    - Toilet articles
    - Alarm clock
    - Flashlight with batteries
    - Waterproof matches and candles
    - Medicine
    - Prescription glasses
    - Sunglasses
    - Money

MV ACES/RACES Emergency Activations

Emergency Activations – During emergency activations, you may be asked to work in 12 hour shifts that coincide with the 12 hour operational period set by the incident commander. Follow the National Incident Management System (NIMS) guidelines by using "clear text" during all emergency transmissions. Do not use acronyms such as "QSL" etc.

Emergency Activation Levels:

1. <u>Emergency Alert (ACES/RACES Level)</u> – MV ACES/RACES personnel place themselves in an alert status whenever they become aware of a developing situation that may lead to activation within the next 12 to 24 hour period.

2. <u>Emergency Stand-By (ACES/RACES Level)</u> – A standby status is a notice of impending MV ACES/RACES activation. Personnel are encouraged to ready themselves by assuring that they have sufficient fuel and have loaded recommended gear into their car. Use this opportunity to test equipment to assure they are in working order.

3. <u>Emergency Call-Out (RACES Level)</u> – The MV ACES/RACES Emergency Manager (Emergency Operations and Volunteer Services Program Manager or designee) will notify the MV ACES/RACES Chief Officer to initiate the emergency call-out. The MV ACES/RACES Chief Officer or designee will announce the activation on the 2 meter frequency (146.655(-) PL 103.5) every ten minutes for a period of time. Members who are not automatically monitoring the 2 meter frequency will be notified by telephone. Personnel will be responsible for advising the Net Control of their availability over the next 24 hours as well as the status of their equipment. During EOC activations, MV ACES/RACES will be asked to provide at least (1) person to staff the EOC Communications Unit position and liaison between field MV ACES/RACES personnel.

Emergency Positions – During emergency activations, MV ACES/RACES operators may be asked to staff the following positions:

1. <u>Net Control Operator</u> – Monitor and control communications on their assigned frequency; may be required to run a separate net on a secondary frequency; and maintain logs of radio traffic and assignments. Any MV ACES/RACES Officer may initiate Net Control until such a time that a more qualified operator becomes available.

2. <u>MV ACES/RACES EOC Communications Unit Operator</u> – Manage all MV ACES/RACES operations; maintain logs; provide written copies to EOC as needed; perform as the main point of contact for MV ACES/RACES; liaison with other agencies; and provide the EOC Manager with an after action report

detailing: (1) MV ACES/RACES involvement; (2) personnel who participated; (3) any incidents that may present a liability or reflect poorly on the City; (4) any injuries of personnel; and (5) suggestions for areas of improvement.

3. Field Command Post Operators – Provide back up emergency communications support to the incident command post or other locations as required; and maintain logs of radio traffic and assignments.

4. MV ACES/RACES Communications Trailer Operators – Several operators may be requested to staff the mobile communications trailer. Operators provide field support to the EOC; serve as MV ACES/RACES incident command post; and maintain logs of radio traffic and assignments.

5. Shelter Radio Operators – Provide emergency communications between the shelter and EOC; report any requests for assistance and logistics support requests to MV ACES/RACES EOC Communications Unit Operator; and maintain logs of radio traffic and assignments.

6. Shadow Operator – Shadow an assigned person; provide communications support; and maintain logs of radio traffic and assignments.

7. CERT Communications – Provide emergency communications between CERT teams and the CERT incident command post; and maintain logs of radio traffic and assignments.

8. Mutual Aid – Respond to mutual aid requests as directed by MV ACES/RACES Emergency Manager (Emergency Operations and Volunteer Services Program Manager or designee); provide emergency communications; and maintain logs of radio traffic and assignments.

MV ACES/RACES Emergency Checklists

EOC Checklist

☐ Check in with EOC Security.

☐ Sign-in and report to assigned position.

☐ Wear assigned vest.

☐ Verify equipment is operating properly.

☐ Manage field and EOC operations.

☐ Perform as main point of contact between field personnel and EOC.

☐ Periodically report MV ACES/RACES status to EOC Communications Unit Leader for inclusion in the Logistics Situation Report.

☐ Brief field personal on EOC Action Plan.

☐ Provide information for inclusion in the EOC After Action Report.

Net Control Checklist (cont. on next page)
(See Appendix B Emergency Net Control Script)

☐ Determine how many Net Control personnel you will need and recall staff.

☐ Test equipment.

☐ Establish Net Control (remember to use "clear text"—no acronyms).

☐ Your tactical call sign is **Moreno Valley Emergency Net Control.**

☐ Take roll call. It is important to conduct hourly roll calls during emergency activations.

☐ Assign tactical call signs. Use these during all transmissions. At the end of transmissions, assure that stations use their actual call as well.

☐ Remind operators to assess the damage as they report to assignments.

☐ Remember to identify the net and its purpose at regular intervals.

☐ Prioritize tactical traffic. It may be necessary to temporarily hold all traffic except for emergency traffic.

  ▪ Routine Traffic (e.g. "We need lunch for 25 within three hours.")

  ▪ Priority Traffic (e.g. "Intersection at Cactus and Perris is closed.")

- Emergency Traffic (e.g. "We have a 25 year old male who has major burns at this location.")
- ☐ Acknowledge all stations calling and get back to them in a logical manner.
- ☐ Do not pass confidential information over the net.
- ☐ Maintain logs of radio traffic and assignments.
- ☐ Check out of the net before leaving.

Field Checklist

- ☐ Check in with Moreno Valley Emergency Net Control.
- ☐ Give your location and ETA to your assignment.
- ☐ Request a tactical call sign. Use this during all transmissions. Be sure to end your transmissions with your actual call sign.
- ☐ Use "clear text" during all emergency activations (no acronyms).
- ☐ Do not pass confidential information over the net.
- ☐ Check in with Moreno Valley Emergency Net Control during scheduled Emergency Nets e.g. every hour.
- ☐ Notify Net Control when you will be away from your post.
- ☐ DO NOT talk to media. Refer media to the incident commander or EOC Public Information Officer (PIO).
- ☐ Maintain logs of radio traffic and assignments.
- ☐ Check out of the net before leaving.

Message Handling

Message Priorities

The Net Control Station must be able to properly prioritize messages. The priorities are:

1. "Emergency Traffic" – When there is immediate danger to health or safety that may be resolved by quick action as a result of radio contact. Never interrupt an ongoing communication by using "break" unless your traffic is "life-threatening". An example would be, "We have a 25 year old male who has major burns at this location."

2. "Priority Traffic" – When there is an urgent situation with no immediate health or safety threat, which may be resolved by appropriate action as a result of a radio contact. An example would be, "The intersection at Cactus and Perris is now closed. Please take an alternate route until further notice."

3. "Routine Traffic" – Normal traffic. An example would be, "We need lunch for 25 people within three hours."

Message Congestion

During an emergency, it is easy for the Net Control Operator to become overwhelmed with traffic. When this happens, it is important for the Net Control Operator to restore order as soon as possible. Congestion may be relieved by temporarily shutting down all traffic except for "Emergency Traffic." Direct stations to "stand by" with "Routine Traffic" until further notice. A typical "stand by" message may be:

"This is Moreno Valley Emergency Net Control. All stations are requested to stand by until further notice unless you have Emergency Traffic."

Message Content

Messages content should include "Who, What, When, Where and How." Incomplete messages should be questioned.

For example, "We need more food," could have many meanings.

A more appropriate message would be, "The Moreno Valley City Manager is requesting 25 lunches and drinks to be delivered to 14177 Frederick Street at 1:00 p.m. today."

Message Tips

Remember to speak calmly, slowly and clearly.

Training Requirements

MV ACES/RACES volunteers are encouraged to participate in weekly nets, EOC exercises and the annual Field Day event. These topics are discussed later.

Required Training

The following training is required training for all MV ACES/RACES volunteers and shall be completed within one year of placement into the MV ACES/RACES program. All courses are offered by Moreno Valley Emergency Operations Training Center and are free to MV ACES/RACES volunteers. To register, call 951.413.3800.

- Trailer training course (2 hours) – for those authorized to drive the trailer
- Moreno Valley Emergency Net Control training (with basic on-air Net Control practice)
- Emergency Operations 1 - (4 hour course) includes:
    - Introduction to Incident Command System (ICS);
    - ICS for Singles Resources;
    - National Incident Management System (NIMS); and
    - Standardized Emergency Management System (SEMS)

Suggested Training

The following training is suggested training for all MV ACES/RACES volunteers. All courses are offered by Moreno Valley Emergency Operations Training Center and are free to MV ACES/RACES volunteers. To register, call 951.413.3800.

- CPR and First Aid
- Community Emergency Response Team (CERT)

Advanced Training

The following training is advanced training offered through ARRL. For more information about these and other ARRL courses, log on to: www.arrl.org/cce/courses.html.

- EC-001 Level 1 Amateur Radio Emergency Communications
- EC-002 Level 2 Amateur Radio Emergency Communications
- EC-003 Level 3 Amateur Radio Emergency Communications
- EC-004 Antenna Modeling
- EC-005 HF Digital Communications
- EC-006 Radio Frequency Interference
- EC-008 VHF/UHF – Life Beyond the Repeater
- EC-009 Antenna Design and Construction

Weekly Net

Moreno Valley ACES/RACES members are expected to participate in a weekly net a minimum of 2 times per month. The weekly net is called Moreno Valley Amateur Radio Association (MV ARA) Net and is held every Tuesday. It is jointly-held, with both MV ARA and MV ACES/RACES participating.

The news line begins at 7:30 p.m. and the net begins at 8:00 p.m.

The purpose of the net is to exercise communication capabilities in the event of an emergency and to provide a weekly forum to exchange information and news.

You may check in on the 2 meter or 440 frequencies. They are:

> 146.655(-) PL 103.5
> 449.300 (-) PL 103.5

The net begins with a regular roll call. When the first suffix of your call sign is called, you may check in and announce whether or not you have any traffic for the net. Visiting stations are welcome to participate in the weekly net.

For training purposes, MV ACES/RACES members are encouraged to rotate the net control station operator position. This gives each member net control experience that could be utilized during an emergency situation.

For script information, please see Appendix A – Weekly Net Script.

Moreno Valley Amateur Field Day

MV ACES/RACES volunteers are encouraged to participate in the annual Field Day, which is sponsored by Amateur Radio Relay League (ARRL) and is a national exercise where ham radio operators practice their skills establishing emergency communications. It is designed to test ham radio operator's ability to set up and operate portable stations under emergency conditions such as loss of electricity. The general public is encouraged to attend.

Objective

The objective of Field Day is to make contact with as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands).

Location/Time

Each year, MV ACES/RACES volunteers activate for 24 hours on the last full weekend in June from 11:00 a.m. Saturday until 11:00 a.m. Sunday. The event is typically held at Moreno Valley Community Park, located on the corner of Cottonwood and Frederick Streets in Moreno Valley.

Points

ARRL scores Field Day participation based on the total number QSO points times the power multiplier corresponding to the highest power level under which any contact was made during the Field Day period plus bonus points. This information is based on rules for the year 2006 and is subject to change.

QSO points are given for:

1. Phone contacts;
2. CW contacts; and
3. Digital contacts.

Bonus points are given for:

1. 100% emergency power;
2. Media publicity;
3. Public location;
4. Public information table;
5. Natural power QSO's;
6. Non-traditional mode: ATV;
7. Non-traditional mode: APRS;
8. Site visit by an elected official;
9. Site visit by an agency official;
10. GOTA bonus;
11. Web submission; and
12. Youth participation.

Exercises and Special Events

To keep skills current, MV ACES/RACES volunteers are expected to participate in various City and County exercises and special events throughout the year. All such exercises and events will be approved and authorized by the MV ACES/RACES Emergency Manager (Emergency Operations and Volunteer Services Program Manager).

These include:

1. Citywide and Countywide disaster exercises;
2. Riverside Emergency Animal System (REARS) exercises;
3. Hospital and School exercises;
4. Red Cross exercises;
5. City parades, marathons, festivals, safety fairs and celebrations;
6. Mutual aid exercises;
7. Mutual aid special events; and
8. Other events and exercises as determined.

Planning Meetings

The sponsors of such events will organize several planning meetings.   The MV ACES/RACES Chief Officer or Deputy Chief Officer is required to attend such planning meetings. If not available, it is their responsibility to assign someone from the general membership to attend on their behalf.

Appendix A
Weekly Net Script

(Use DTMF 2580 to turn on Emergency Net tone for repeaters)

(Open the weekly net)

"QST, QST, QST. Welcome to the Moreno Valley Amateur Radio Association and Moreno Valley ACES/RACES Net for Tuesday, **(date)**. This is a directed net that serves the Moreno Valley area and meets each Tuesday evening at this time. "

"The purpose of this net is to exercise local net communications capabilities in the event of an emergency and to provide a weekly forum for club members and visitors to exchange information concerning club activities and amateur radio interest in general."

"Your net control station is **(name and call sign)**. I will stand by for any emergency or priority traffic."

"Are there any stations having official news bulletins or announcements for the net?"

"I will now proceed with the regular roll call. Please check in when I announce the first letter in the suffix of your call sign. Also indicate whether or not you have any traffic for the net." **(call out the following)**
"ABC   DEF   GHI   JKL   MNO   PQR   STU   VWX   YZ"

"At this time, I wish to say good evening to those who may be listening and unable to check in, including those that may be waiting for their licenses."

"Are there any closing comments for the net?"

(Optional) "Next weeks net control will be **(name and call sign)**"
"Hearing no further comments, the Moreno Valley Amateur Radio Association and Moreno Valley ACES/RACES Net is now closed at **(time)** local time. 73's to all and have a great week. **(call sign)**."
(Use DTMF 0852 to turn off Emergency Net tone for repeaters)

Appendix B
Emergency Net Script

(Use DTMF 2580 to turn on Emergency Net tone for repeaters)

(Open the Emergency Net) **Remember clear text only—no acronyms

"Attention all stations. Attention all stations.   Attention all stations.   This is ____*(call sign)____*, calling the Moreno Valley Emergency Net"

"This is NOT A DRILL, repeat this is NOT A DRILL. Moreno Valley ACES/RACES has been activated for response."

"There has been ____*(state the emergency/disaster)____*. All Moreno Valley ACES/RACES personnel are requested to check into the Net. By order of the Moreno Valley Emergency Operations, this repeater is restricted to communications pertaining to the current emergency ONLY."

"This is a Directed Net. Net operations will be conducted using strict emergency procedures.

1. All stations are to standby until called by Net Control.
2. Any station wishing to contact another station on the net must obtain permission from the Net Control prior to establishing contact.
3. Any station checking into the net must notify Net Control before leaving the Net.
4. All stations, which check into the net, will be required to respond to acknowledgement of bulletins, announcements or other communications, as requested.
5. During Roll Call, check in using your call sign only."

"Net Control Station for this net is ____*(call sign)____*. Tactical Call Sign is: **Moreno Valley Emergency Net Control.**

"If you need to interrupt the Net: for emergency traffic, say "Emergency", and your call sign: for priority traffic say "Priority", and your call sign; for routine traffic, say "Routine", and your call sign."

"This is Moreno Valley Net Emergency Control proceeding with Emergency Roll Call. All Moreno Valley ACES/RACES personnel are requested to check in. Please check in when I announce the first letter in the suffix of your call sign." **(*Call out the following*)** ****as they check in, give them an assignment if you have one for them. You may assign a tactical call sign at this time. If not, instruct them to stand by and monitor the net for further instructions.**
"ABC   DEF   GHI   JKL   MNO   PQR   STU   VWX   YZ"

"Emergency Roll Call shall be performed every *(list time e.g. 30 or 60 minutes)*. All Moreno Valley ACES/RACES personnel are requested to check in during Emergency Roll Calls."

"Moreno Valley Emergency Net Control will be terminating at this time. The next Moreno Valley Net Control will be at _____*(time)*_____. Thank you for your commitment to emergency communications. I will now close the Net and return the repeater back to general amateur use."

(Use DTMF 0852 to turn off Emergency Net tone for repeaters)

Appendix C
Riverside County Frequencies

(In alphabetical order)

Air Force Village West

Primary simplex	146.595 MHz
Secondary simplex	146.580 MHz

Anza

K6JM repeater	145.340(-)PL 107.2
WA6HYQ repeater	*223.880(-)PL 110.9

*The 223.880 repeater is primarily a means for cross-county and county-state communication. If possible, tactical traffic will be handled on the other frequencies.

Corona City

Primary (W6CPD)	147.225 (+) PL156.7
Secondary simplex	146.350 MHz

Coachella Valley

Repeaters

Cactus City	NR6P	146.025(+)PL 107.2
Chuckwalla	KF6BM	145.380(-)PL 162.2
Palm Springs Tram	W6DRA	145.480(-)PL 107.2
Indio Hill	N6ODI	223.840(-)PL 156.7
Marriot Hotel	KJ6J	224.920(-)PL 156.7
Portable	W6CDF	448.320(-)PL162.2

Hemet City

N7OD repeater	145.420(-)PL 88.5
W6HEM repeater	224.120(-)PL 110.9
EOC Team1, Field Team 1	146.450(S)
EOC Team 2, Field Team 2	145.700(S)
EOC Team 3, Field Team 3	147.480(S)
EOC Team 4, Field Teams 4	146.565(S)
Hospital Teams 1 & 2	146.480(S)

Jurupa

Simplex	146.445 MHz
Simplex	223.460 MHz

Moreno Valley City

Primary Repeater	146.655 (-)PL 103.5
Secondary Repeater	449.300 (-)PL 103.5
Secondary Simplex	145.560
Packet KC6FJC	145.050

Mountain

Primary Simplex	146.500
Primary Repeater	146.895(-)PL118.8
Secondary Simplex	147.450
Secondary Simplex	147.500
Secondary N7OD	145.420(-)PL 88.5

Palo Verde

W6CDF repeater	147.090(-)PL 123.0
K6TQM repeater	147.360(+)PL 107.2

Pass

W6CDF repeater	147.915(-)PL 123.0
Primary Simplex	145.800
Secondary Simplex	147.800

Riverside City RACES

2-M repeater, W6TJ	*146.880(-)PL 146.2
Hospital simplex	147.585 MHz
Simplex	147.510 MHz

*During all activations, the resource net will be on 146.880 (-) repeaters

Riverside County Emergency Operations Center (EOC)

<u>Primary EOC (Riverside)</u>

2-M repeater	147.915(-)PL 123.0
Rim Forest 70cm repeater	*445.020(-)PL 107.2
Rim Forest 1.25M repeater	*224.26(-)PL110.9
Rim Forest 6M repeater	*52.98(-)103.5
Santa Rosa Mountain 1.25M repeater	**223.880(-)PL 110.9
Packet	145.070 MHz
HF daytime, 0900-1800	7295 KHz
HF evening, 1800-0900	3945 KHz

* These repeaters are linked

**The 223.880 repeater is a means for cross-county and county-state communication. If possible, tactical traffic will be handled on the other frequencies.

<u>Back Up EOC (Indio)</u>

W6DRA repeater	145.480(-)PL 107.2
NR6P repeater	146.025(+)PL 107.2
KJ6J repeater	224.920(-)PL 156.7
W6CDF repeater	445.020(-)PL 186.2
HF daytime, 0900-1800	7295 KHz
HF evening, 1800-0900	3945 KHz

Riverside County Perris Emergency Command Center (ECC)

Rim Forest 70cm repeater	445.020(-)PL 107.2
Santa Rosa Mountain 1.25M repeater	*223.880(-)PL 110.9
HF daytime, 0900-1800	7295 KHz
HF evening, 1800-0900	3945 KHz

*The 223.880 repeater is primarily a means for cross-county and county-state communication. If possible, tactical traffic will be handled on the other frequencies.

Southwest

W6GTR repeater	146.805(-)PL 100.0
W6CDF repeater	445.300(-)PL 127.3
Simplex	146.550
Simplex	446.000

Sun City

Simplex	*146.580
Simplex	223.500
Simplex	446.000
Hospital simplex	147.585
Packet	145.070
RTTY	7.088

*All stations monitor 146.580 for events. Assignment of additional frequencies and modes will be made as needed by EC net control.

Appendix D
National Weather Service Weather Radio Frequencies

Call Sign	Site Name	Site Location	Frequency	Power
WNG584	Avalon	Catalina Island	162.525	100
WXL89	Bakersfield	Shirley Peak	162.55	100
KDX54	Big Rock Ridge	N. San Francisco Bay	162.5	100
KIG78	Coachella	Cactus City	162.4	100
WNG712	Coachella / Spanish	Riverside county	162.525	100
WNG655	Contra Costa County	Mt. Diablo	162.425	100
WNG595	Conway Summit	Bridgeport	162.525	300
WNG659	El Paso Mtns.	Ridgecrest	162.425	300
KEC82	Eureka	Mt. Pierce	162.4	300
KIH62	Fresno	Bear Mtn.	162.4	300
WWF67	Grass Valley	Wolf Mtn.	162.4	100
KWO37	Los Angeles	Mt. Lukens	162.55	300
KEC49	Monterey	Mt. Umunhum	162.55	300
WWF64	Monterey Marine	Mt. Umunhum	162.45	300
KIH30	Point Arena	Cold Springs Peak	162.55	1000
WXL88	Redding	South Fork Mtn.	162.55	100
KEC57	Sacramento	Jackson Butte	162.55	330
KEC62	San Diego	Mt. Woodson	162.4	100
WNG637	San Diego Marine	Mount Soledad	162.425	100
KHB49	San Francisco	Mt. Pise	162.4	330
KIH31	San Luis Obispo	Cuesta Peak	162.55	500
WNG592	San Simeon	Hearst Castle	162.525	100
WWG21	Santa Ana	Beeks Place	162.45	100
KIH34	Santa Barbara	Broadcast Peak	162.4	330
WWF62	Santa Barbara Marine	Broadcast Peak	162.475	100
WNG720	Ukiah	Laughin Range	162.525	300
WXM66	Victorville	San Bernadino	162.5	100
KAD94	Yosemite	Turtleback Dome	162.45	85
WXL87	Yuma	Black Mtn.	162.55	100

Source: http://www.nws.noaa.gov

Appendix E
FCC Rules

[Code of Federal Regulations]
[Title 47, Volume 5]
[Revised as of October 1, 2006]
From the U.S. Government Printing Office via GPO Access
[CITE: 47CFR97.407]

[Page 599-600]

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION (CONTINUED)
PART 97_AMATEUR RADIO SERVICE--Table of Contents
Subpart E - Providing Emergency Communications

Sec. 97.407 Radio amateur civil emergency service.

(a) No station may transmit in RACES unless it is an FCC-licensed primary, club, or military recreation station and it is certified by a civil defense organization as registered with that organization, or it is an FCC-licensed RACES station. No person may be the control operator of a RACES station, or may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.

(b) The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates the invoking of the President's War Emergency Powers under the provisions of Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, RACES stations and amateur stations participating in RACES may only transmit on the following frequency segments:

(1) The 1800-1825 kHz, 1975-2000 kHz, 3.50-3.55 MHz, 3.93-3.98 MHz, 3.984-4.000 MHz, 7.079-7.125 MHz, 7.245-7.255 MHz, 10.10-10.15 MHz, 14.047-14.053 MHz, 14.22-14.23 MHz, 14.331-14.350 MHz, 21.047-21.053 MHz, 21.228-21.267 MHz, 28.55-28.75 MHz, 29.237-29.273 MHz, 29.45-29.65 MHz, 50.35-50.75 MHz, 52-54 MHz, 144.50-145.71 MHz, 146-148 MHz, 2390-2450 MHz segments;

(2) The 1.25 m, 70 cm and 23 cm bands; and   (3) The channels at 3.997 MHz and 53.30 MHz may be used in emergency areas when required to

make initial contact with a military unit and for communications with
military stations on matters requiring coordination.

(c) A RACES station may only communicate with:

(1) Another RACES station;

(2) An amateur station registered with a civil defense organization;

(3) A United States Government station authorized by the responsible
agency to communicate with RACES stations;

(4) A station in a service regulated by the FCC whenever such
communication is authorized by the FCC.

(d) An amateur station registered with a civil defense organization may only
communicate with:

(1) A RACES station licensed to the civil defense organization with which the
amateur station is registered;

(2) The following stations upon authorization of the responsible civil defense
official for the organization with which the amateur station is registered:

(i) A RACES station licensed to another civil defense organization;

(ii) An amateur station registered with the same or another civil defense
organization;

(iii) A United States Government station authorized by the responsible
agency to communicate with RACES stations; and

(iv) A station in a service regulated by the FCC whenever such
communication is authorized by the FCC.

(e) All communications transmitted in RACES must be specifically authorized by the
civil defense organization for the area served. Only civil defense communications
of the following types may be transmitted:

(1) Messages concerning impending or actual conditions jeopardizing the
public safety, or affecting the national defense or security during periods of
local, regional, or national civil emergencies;

(2) Messages directly concerning the immediate safety of life of individuals,
the immediate protection of property, maintenance of law and order,

alleviation of human suffering and need, and the combating of armed attack or sabotage;

(3) Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and

(4) Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organization served. Such drills and tests may not exceed a total time of 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State, Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.

[54 FR 25857, June 20, 1989, as amended at 65 FR 6550, Feb. 10, 2000]

Appendix F

Net Control Log Form

Date:				Net Operator:	
Time In:		Time Out:		Tactical Call:	Call Sign:
Incident Name and Type:					

			Net Traffic		
CK	Time	Tactical	Call	Traffic (locations, observations, details, etc)	
X	Place "X" here for initial check-in on net				

Page _____ of _____ pages

Appendix G
Station Log Form

Date:		Operator:	
Time In:	**Time Out:**	**Tactical Call:**	**Call Sign:**

Incident Name and Type:

Time	Tactical	Call	Comments (traffic, assignments, etc)

Page _____ of _____ pages

Appendix H
EOC Message Form

HIGH PRIORITY ☐ (please check)	Date: / /		Time: ☐ AM ☐ PM
Taken By:	To (Use Only If Caller States):		
From:	Phone:		
Address:	Nearest Cross Street:		Referred to 911: ☐ Yes ☐ No
Message:			
Response/Action Taken: (When Complete Return To Message Center)			
Signature:	Date: / /		Time: ☐ AM ☐ PM

MESSAGE # [ ]	**MESSAGE CENTER USE ONLY**	

PLANNING SECTION		**OPERATIONS SECTION**		**LOGISTICS SECTION**	
Planning Section Chief		**Operations Section Chief**		**Logistics Section Chief**	
Message Center		**Fire & Rescue Branch**		Communications/Info Unit	
Situation Assessment		Hazmat		Facilities Coordination Unit	
Advanced Planning		Search & Rescue		Personnel Unit	
Documentation/Recovery		**Law Enforcement Branch**		Supply/Procurement Unit	
EOC Operator		Coroner		Transportation Unit	
MANAGEMENT SECTION		Evacuation		**FINANCE SECTION**	
EOC Director		**Public Wrks & Util Branch**		**Finance Section Chief**	
City Attorney		Construction/Engineering Unit		Time Keeping Unit	
EOC Manager		Maintenance Ops Unit		Comp/Claims Unit	
Liaison Officer		Damage Assessment Unit		Cost Recovery Unit	
Public Information Officer		**Community Services Branch**		Purchasing Unit	
Safety Officer		Medical & Health Unit			
		Care & Shelter Unit			
		Animal Services Unit			

Appendix I
Glossary of Terms

2 Meters	An FCC assigned amateur radio band covering 144-148 MHz.
ACES	Amateur Communications Emergency Services
APRS	Automatic Packet Position Reporting System
ARRL	Amateur Radio Relay League
ATV	Amateur Television. Known as fast scan television.
BCI	Broadcast radio interference
Beam Antenna	A directional antenna. A beam antenna must be rotated to provide coverage in different directions.
Control Operator	An amateur operator designated by the licensee of a station to be responsible for the transmissions of an amateur station.
CQ	Calling any station
CERT	Community Emergency Response Team
DOT	Department of Transportation
DTMF	Dual Tone Multiple Frequency. The tone signaling system commonly known as Touch Tone.
Duplexer	A device that allows a dual-band radio to use a single dual-band antenna.
EOC	Emergency Operations Center
EOF	End of File
EOM	End of Transmission
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
Fill	Part of a message that was not properly received and must be retransmitted.
Half-Wave Dipole	A basic antenna used by radio amateurs. It consists of a length of wire or tubing, opened and fed at the center. The entire antenna is ½ wavelengths long at the desired operating frequency.
HT	A small portable transceiver capable of being hand-held.

IC	Incident Commander. The official in overall command of the incident.
ICP	Incident Command Post
ICS	Incident Command System. A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Input	Refers to the receiver frequency.
JIC	Joint Information Center. A single location for Public Information Officers to disseminate joint information.
MV ACES/RACES	Moreno Valley Amateur Civil Emergency Services/Radio Amateur Civil Emergency Services. MV ACES/RACES is a City program.
MV ARA	Moreno Valley Amateur Radio Association.
NCS	Net Control Station
Net	A coordinated use of a frequency by an organized group to achieve a goal.
Net Control Operator	A person who directs and controls all radio activity during a net operation.
NIMS	National Incident Management System. A nationally required system similar to SEMS that includes the use of the Incident Command System (ICS), management by objectives, muli-agency coordination, resource management, mutual aid coordination, communication and information management, preparedness and ongoing maintenance.
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather System
Offset	This is the difference between the transmitting and receiving frequencies of a transceiver.
Omni directional	Refers to a non-directional antenna radiation pattern.
Output	The transmitting frequency or power of a radio.
Packet Radio	A digital communications system using computer terminals transmitting via amateur radio stations.

|	
PIO	Public Information Officer
Polarization	Refers to the orientation of radiation from an antenna.
RACES	Radio Amateur Civil Emergency Services
REARS	Riverside Emergency Animal Rescue System
Relay	Transmit this traffic to other stations or transmit for other stations.
Relay Station	A station that serves as an intermediate receiving and transmitting location.
Repeater	A station that receives transmissions from a mobile, portable, or fixed station and re-broadcasts them for extended range.
SEMS	Standardized Emergency Management System. A system required by California Government Code for managing response to emergencies in California. SEMS requires that responders utilize the Incident Command System (ICS) during field response.
Simplex Operation	Refers to radio operations where both transmitter and receiver operate on the same frequency.
Squelch Tail	The noise heard in a receiver after the received signal disappears.
Tactical Call Sign	An identifier assigned to a station operating on a tactical net based upon its location or function where specific operators are subject to change from time to time. Tactical call signs are the preferred means for identifying the various components of a net operating under fast-moving circumstances.
Third Party Traffic	Messages originated by or addressed to someone other than the originating amateur station.
Yagi Antenna	The most popular type of amateur directional (beam) antenna. It has one driven element and one or more additional elements.

Appendix J
International Q Signals

QRA	What is the name of your station?
QRG	What's my exact frequency?
QRH	Does my frequency vary?
QRI	How is my tone? (1-3)
QRK	What is my signal intelligibility? (1-5)
QRL	Are you busy?
QRM	Is my transmission being interfered with?
QRN	Are you troubled by static?
QRO	Shall I increase transmitter power?
QRP	Shall I decrease transmitter power?
QRQ	Shall I send faster?
QRS	Shall I send slower?
QRT	Shall I stop sending?
QRU	Have you anything for me? (answer in negative)
QRV	Are you ready?
QRW	Shall I tell _____ you're calling him?
QRX	When will you call again?
QRZ	Who is calling me?
QSA	What is my signal strength? (1-5)
QSB	Are my signals fading?
QSD	Is my keying defective?
QSG	Shall I repeat the last message sent?
QSK	Can you work break-in?
QSL	Can you acknowledge receipt?
QSM	Shall I repeat the last message sent?
QSO	Can you communicate with _____direct?
QSP	Will you relay to_____?
QST	Calling all radio amateurs (Ham Radio Q Signal)

Appendix K
International Telecommunications Union Phonetic Alphabet

A   Alpha

B   Bravo

C   Charlie

D   Delta

E   Echo

F   Foxtrot

G   Golf

H   Hotel

I   India

J   Juliet

K   Kilo

L   Lima

M   Mike

N   November

O   Oscar

P   Papa

Q   Quebec

R   Romeo

S   Sierra

T   Tango

U   Uniform

V   Victor

W   Whiskey

X   X-ray

Y   Yankee

Z   Zulu
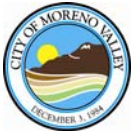
Appendix L - US Amateur Radio Bands by ARRL
You are welcome to download and print out the chart for your personal use. (Per ARRL)