

ARES/RACES

**AMATEUR RADIO EMERGENCY COMMUNICATIONS
DURING DISASTERS**

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District Emergency Coordinator, SCCo ARES

Chief Radio Officer, SCCo RACES

County Coordinator, SCCo ACS

Section Emergency Coordinator,

Santa Clara Valley Section ARES

**(Monterey, San Benito, San Mateo, Santa Clara,
Santa Cruz Counties)**

ARES/RACES/ACS

Amateur Radio Emergency Service

Part of the American Radio Relay League

Founded in 1914

Provides training and organizational structure

Focus is on public service communications

Radio Amateur Civil Emergency Service

Provides communications for local government

Must be activated by local government

Responders serve as unpaid government employees

Over 400 amateur radio operators available in SCCo

Auxiliary Communications Service

Created by State of CA after watching RACES at work

Coordinates ALL volunteer communications groups

Facilitates utilization of telephone, television, other

telecommunications experts during times of emergency

ARES/RACES

in Santa Clara County

- **THE TERM USED FOR THE PRIMARY *AUXILIARY COMMUNICATIONS SERVICE* IN SANTA CLARA COUNTY**
- **COVERED BY THE STATE MUTUAL AID SYSTEM**
- **CHIEF RACES RADIO OFFICER IS THE MUTUAL AID COORDINATOR FOR AUXILIARY COMMUNICATIONS SERVICE (INCLUDING CAP, REACT, AND OTHERS)**
- **ABOUT 400 AMATEUR RADIO LICENSEES ARE REGISTERED AS COUNTY DISASTER SERVICE WORKERS**
- **WHEN ACTIVATED, THEY SERVE AS UNPAID GOVERNMENT WORKERS**
- **ORGANIZATION IN SANTA CLARA COUNTY:**
 - **SMALL COUNTY ARES/RACES STAFF**
 - **CITY RADIO OFFICERS AND CITY ARES/RACES MEMBERS ARE MAJORITY OF RESPONDERS**

ARES/RACES CAPABILITIES

- **EACH RACES RESPONDER CAN ACT AS AN INDEPENDENT RADIO STATION**
- **LOCAL COMMUNICATIONS PERFORMED VIA HAND HELD AND MOBILE RADIOS**
- **USE OF ROBUST LINKED REPEATER FACILITIES PERMIT COUNTY-WIDE RADIO COVERAGE**
- **CAPABLE OF VOICE, DATA, AND VIDEO TRANSMISSIONS**
- **LONG-DISTANCE COMMUNICATIONS VIA SHORT-WAVE**

ARES/RACES ASSIGNMENTS

FIELD OBSERVERS – Rapid assessment of emergency situations from hams throughout the cities and county

SHADOWS - to supply communications support for personnel in the field

NET CONTROL OPERATORS: Provide management of communications nets when high levels of traffic are expected

OES COMMUNICATIONS SUPPORT - to supplement overloaded radio systems and to free OES personnel for other duties

BACKUP COMMUNICATIONS – When telephones are out of service or overloaded

INTERCONNECTION OF AGENCIES – connect agencies to field stations and to OES

DATA COMMUNICATIONS - Transmission of sensitive information from computer to computer via data radio communications

INTEGRATION AND TRAINING

- **Capabilities alone are not valuable**
- **Each city has a Radio Officer**
- **Each city has a training program for city responders**
- **County has a training program for mutual aid communicators**
- **Close cooperation with city and county OES**
- **Participation in training exercises**
- **Weekly radio nets to maintain readiness**
- **Quarterly county-wide drills**

SCC_o ARES/RACES TRAINING PROGRAM

- **MONTHLY TRAINING CLASSES ARE OFFERED BY SANTA CLARA COUNTY OES ARES/RACES (SEE WEBSITE FOR SCHEDULE)**
- **COUNTY-WIDE COMMUNICATIONS DRILLS HELD QUARTERLY
DRILLS INCLUDE VOICE AND PACKET (COMPUTER TO COMPUTER VIA AMATEUR RADIO) COMMUNICATIONS BETWEEN CITY EOCs AND SCC_o EOC**
- **CITY EVENTS (E.G. FOURTH OF JULY FIREWORKS) ARE CONDUCTED AS RACES MUTUAL AID TRAINING EVENTS TO HELP TRAIN RESPONDERS IN RACES PROCEDURES**
- **WEEKLY COMMUNICATIONS NETS ARE HELD, WITH MANY HAMS PARTICIPATING:
SPECS NET (NORTH COUNTY) – 125-150 CHECK IN
SVECS NET (CENTRAL/SOUTH COUNTY) – 100 CHECK IN**

MUTUAL AID COMMUNICATOR PROGRAM

- **CITIES NOMINATE HAMS THEY CONSIDER SUFFICIENTLY TRAINED, EXPERIENCED, AND MATURE TO BE SENT TO OTHER CITIES DURING EMERGENCIES**
- **SCCO OES SIGNS MACS AS SCCO DSW WORKERS, PERFORMS BACKGROUND CHECKS, AND TRAINS RESPONDERS**
- **MACS ARE SENT TO CITIES WHOSE RACES COMMUNICATIONS TASKS EXCEED CITY RACES STAFFING CAPABILITIES**
- **MACS ATTEND MONTHLY CLASSES ON ADVANCED EMERGENCY COMMUNICATIONS (30-50 ATTENDEES AT EACH CLASS)**
- **MACS RESPOND TO TRAINING EXERCISES DESIGNED TO REPRESENT REALISTIC EMERGENCY SCENARIOS**
- **THERE ARE PRESENTLY 105 MACS ACTIVE IN THE PROGRAM**

CONCLUDING REMARKS

- **ARES/RACES OFFERS ROBUST, DISTRIBUTED COMMUNICATIONS CAPABILITY TO THE CITY AND COUNTY OFFICES OF EMERGENCY SERVICES**
- **THIS ALL-VOLUNTEER TEAM IS READY TO FULFILL EMERGENCY COMMUNICATIONS SERVICES WHENEVER AND WHEREVER NEEDED**
- **ARES/RACES MEMBERS ARE BEING TRAINED AS ADVANCED EMERGENCY COMMUNICATION TEAMS AVAILABLE TO CITIES IN TIMES OF EMERGENCY**
- **ARES/RACES OFFERS VERY RAPID ASSESSMENT OF THE IMPACT OF EARTHQUAKES AND OTHER DISASTERS**

HOW DO I GET INVOLVED?

WHAT IF:

- I AM NOT YET A HAM
- I JUST GOT MY LICENSE
- I AM PART OF A GROUP THAT HAS DONE NO EMERGENCY COMMUNICATIONS

I AM NOT YET A HAM

- STUDY CAN BE DONE ON-LINE
- BOOK AVAILABLE – “NOW YOU’RE TALKING”
- ONE-DAY “CRAM CLASSES” ARE AVAILABLE
- TESTS ARE GIVEN LOCALLY ON A FREQUENT BASIS

JUST GOT MY LICENSE

- ATTEND A “NOW YOU GOT YOUR LICENSE” CLASS
- TAKE EMERGENCY COMMUNICATIONS CLASSES PRESENTED BY SANTA CLARA COUNTY ARES/RACES
- REVIEW INFORMATION FOUND ON SANTA CLARA COUNTY ARES/RACES WEB SITE: <https://www.scc-ares-races.org>
- JOIN A LOCAL CITY ARES/RACES GROUP

MY GROUP WANTS TO DO EMERGENCY COMMUNICATIONS

- **FORM AN AMATEUR RADIO EMERGENCY SERVICE (ARES) GROUP**
- **FOLLOW THE PROCEDURES OUTLINED IN THE AMATEUR RADIO RELAY LEAGUE (ARRL) MANUAL NAMED “ECMANUAL”, AND FOUND ON THE ARRL.ORG WEBSITE (TYPE “ECMANUAL” INTO THE WINDOW “WEBSITE SEARCH”. REVIEW CHAPTER 4**
- **ELECT AN EC; SEND YOUR NOMINATION TO YOUR SECTION EMERGENCY COORDINATOR FOR APPROVAL**
- **ATTEND THE VARIOUS TRAINING CLASSES AND EVENTS OFFERED BY SANTA CLARA COUNTY OES ARES/RACES TO GAIN EXPERIENCE**
- **PRACTICE EMERGENCY COMMUNICATIONS ACTIVITIES WITHIN YOUR ARES GROUP**
- **ARRANGE FOR DISASTER SERVICE WORKER REGISTRATION BY ANY CITY OR COUNTY AGENCY TO WHOM YOU EXPECT TO OFFER SERVICES DURING EMERGENCIES**