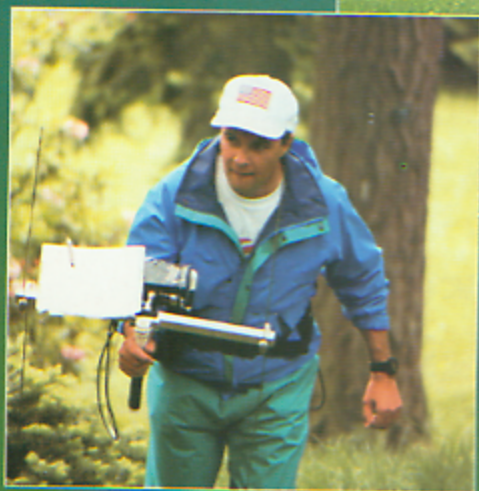
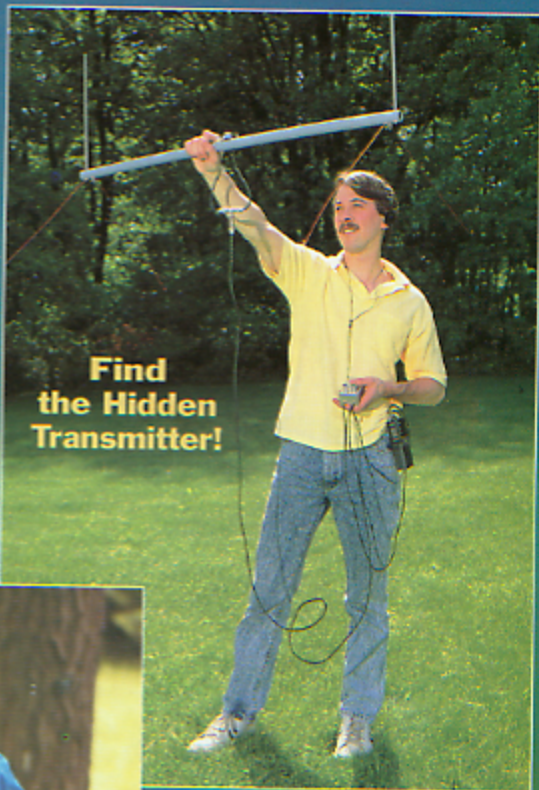


# QST



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devoted entirely to Amateur Radio



## ARES: Santa Cruz Case Study

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Are you one of those amateurs who asks, "Why should ham radio be needed during disasters? Don't government agencies and the Red Cross have their own radio systems?" They do, but the agencies mandated to provide emergency services can't justify the equipment and manpower required to meet every situation. Following a major disaster, surviving communication resources are usually immediately overwhelmed. The Amateur Radio Emergency Service (ARES) was conceived by the ARRL to provide an organized pool of operators and equipment for supplemental communications in these circumstances. About 35,000 US hams belong to ARES. Not only is the organization comprised solely of unpaid volunteers, the volunteers themselves supply most of the communications gear they use.

### How One Community Prepares

The Santa Cruz ARES unit isn't just a paper tiger, it's a viable group prepared to serve whenever needed. ARES members attend regularly scheduled on-the-air and classroom training sessions. They cross-train to serve in multiple positions. A comprehensive, locally oriented reference manual is issued to each member.

This preparation has paid off. Area amateur operations have received national recognition. Although we live in an idyllic setting, we've experienced more than our share of major disasters. Local ARES members have served with distinction during floods, forest fires, landslides and the October 17, 1989, Loma Prieta earthquake—centered here in Santa Cruz County. At the time, the latter event was reportedly the most costly natural disaster ever to strike the US.

Santa Cruz Emergency Coordinator Rich Hanset, KI6EH, says, "We always stress that we're communicators. We don't declare emergencies or direct emergency operations. We're there to serve. We become an integral part of the overall response to disaster, not an autonomous organization." He points with pride to the esteem with which the local ARES unit is regarded by governmental and Red Cross officials. Amateur Radio is an essential element of the state-approved county disaster operations plan.

### A Dedicated System

The resources provided by the served agencies are further proof of their confidence in the abilities of the ARES unit. A fully equipped Amateur Radio room is part of the County Emergency Operations Center. A



Dan Quan, N6WIB, operates at the Santa Cruz EOC. (photo courtesy of KB6KN)

three-position console contains HF, VHF and UHF voice resources, and VHF/UHF packet radio. For several hours following the devastating 1989 earthquake, this facility provided the only link between the county and key area locations. The California Office of Emergency Services and the Federal Emergency Management Agency (FEMA) were apprised of the local situation within minutes of the emergency.

In 1990, a surplus Central Fire District van was acquired by the county and converted to a mobile amateur communications center. Fully equipped with HF, VHF, UHF and packet radio, it can be rapidly deployed to a disaster site. Further flexibility is provided by two portable 2-meter repeaters, purchased recently by the county. They can be moved to areas that present special communications problems because of mountainous terrain. Several years ago, 2-meter base stations were installed by Dominican Hospital, Santa Cruz Community Hospital, Watsonville Community Hospital and the Red Cross.

Rich quickly points out that "having dedicated equipment allows us to react promptly and effectively. No time is wasted because we can be immediately operational."

Following the 1989 earthquake, telephone service was disrupted and the entire county was without power. Many medical, government, business and broadcast radio facilities were knocked out—many were off the air for hours. Hams had all key locations in the county-wide amateur net fully opera-

tional in less than 30 minutes.

These resources are integrated through two 2-meter repeaters owned by the Santa Cruz County ARC. Those repeaters, in Santa Cruz and Watsonville, are complemented by 2-meter and UHF repeaters in the San Lorenzo Valley north county region. County-wide coverage is achieved.

### The Key Element is People

The greatest resource is hams committed to emergency service. Radio amateurs have operating skills and equipment resources not available from any other source. Allen Handforth, KC6VJL, is the training officer for the local ARES unit. He points out that "amateurs have a special obligation for public service. The spectrum we use belongs to the public." Proof of the conditional nature of this privilege can be found at the beginning of the Amateur Radio regulations. FCC rule 97.1(a) states that a fundamental purpose of the Amateur Radio Service is "recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications."

### ARES: TOPEKA CASE STUDY

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Since 1926, the Kaw Valley ARC has served the area with emergency communications. We maintain club station W0CET in the radio room at the Topeka Red Cross Chapter. We also operate from the Emergency Operations Center (EOC) in the basement of the Shawnee County Courthouse in downtown Topeka. From this location, we call ARES nets and pass traffic to the sheriff's office across the hall. We have a complete station with all HF bands, 2 meters and packet. We also have a 2-meter VHF station set up next to the radar operator in the National Weather Service office.

"AM COM 1," the club's first communications van, served the community for emergency communications since 1979 (see

### Support ARES

To join ARES as a club or individual, veteran or new ham, contact your Section Manager—listed on page 8 of this issue. By joining 35,000 other ARES members, you'll get more out of ham radio and have fun while helping your peers provide a substantial resource to your community.

