

Date: June 5, 1990
From: Wayne Thalls, KB6KN
To: SCCARC Board
Subject: Summary of UCSC Study of Ham Operator Response to the '89 Quake

One of the mistakes some of us had made in our planning prior to the October 17, 1989 earthquake was to assume that in a serious disaster situation everyone who could would be there to help. Our local experience proved otherwise.

During the eight days of amateur radio operations, we used approximately 400 volunteers. Most of these operators came from out of the area. Some came from as far away as southern California, Oregon, and Nevada. Most were our neighbors from Monterey and Santa Clara Counties. If those counties had suffered significant damage, what would we have done?

Of the locals who did volunteer, some worked extremely long hours and multiple shifts during the first few days following the disaster. Another of our major problems was the need for more managers of the ARES/RACES operations. This was also a problem, in varying degrees, in other key roles in the operations, when people were asked to participate. One of the first decisions made at that time was to attempt to learn more about the volunteer response, so that we might be better prepared for the next event. Our experience was unlike that previously encountered by amateurs. By sharing our experience and knowledge, we could contribute to the preparedness of other amateur groups. We arranged with the Sociology Department at UCSC to perform an objective professional study of individual actions and viewpoints.

Diana Dull, a Masters candidate at the University, agreed to undertake the project. She was presented with a rather broad outline of the hoped for scope of the study.

With an estimated 600 hams residing in our County---

What could be done to better inform and prepare the "average" ham? We recognized that most are never going to affiliate with ARES, and probably not with the Club either.

How could we help hams to be better prepared to cope with the personal challenges faced when they are victims of a major disaster?

How could we make training more effective among those committed to serving?

Why were some hams available, and some were not?

Why were some that were supposedly in a "state-of-readiness" unavailable?

Why were we able to get so many volunteers from adjacent counties?

Some of those who were among the outstanding performers were new and inexperienced hams. They had never before participated in any kind of emergency operation. What is the explanation?

At the outset we agreed that the study would be based on 40 interviews conducted over a 3-4 month period. The study would include ARES members, other club members, and outside hams. In all 88 operators were called, resulting in 50, rather than 40, final interviews. We also agreed that all interviews would be strictly confidential, and that no reference would be made to individuals by name, in the final report. Furthermore it was agreed that all interview notes and recordings would remain in the possession of Ms. Dull, and that they would not be made

available to anyone else. The report is based upon the following percentage of operators by affiliation.

ARES & SCCARC member	52% *
SCCARC member	28%
Outside hams	10% **
* Represented 68% of Jan '90 ARES roster	
** 80% of these were out-of-county ARES	

Because a significant number of amateurs refused to participate in the study, this fact was considered relevant and is included. Refusals included those who did not respond to repeated messages on their answering machines. Some declined to participate, directly.

Actual interviews	57%
Unsuccessful contacts	22%
Passive refusals	14%
Actual refusals	7%

I am extremely pleased with the final report prepared by Ms. Dull. She has done an excellent job. For those who expected simple clear-cut answers on what to do next, the report will be a challenge. There are several important things to be learned from this document.

1. There is no correlation between those who declined to participate in the study and those who chose not to volunteer.
2. Several interviewees quit ARES after the quake, even though they had volunteered some form of radio service during the quake efforts. On the other hand, others joined for the first time.
3. A notable number of study participants had vastly underestimated the severity of the quake.
4. The hams, like the rest of the populace, were not uniformly affected. Perceptions of the situation may have convinced some that they probably were not needed.
5. There was no correlation between personal losses and volunteering. Some, who volunteered, experienced damage at home and work. Only two respondents reported they did not volunteer because of property damage.
6. Fear does not appear to have been a factor in keeping volunteers away.
7. There appears to be a notable number of people with ex-military and/or emergency backgrounds among the local amateur populace. This would lend weight to the hypothesis that there might be a "volunteer type". In fact, there were also a sizeable number of people with this same background among the non-volunteers.
8. Most people were impressed by the lack of panic. Post-quake actions were largely based upon logic with sensible priorities. Many hams, like others, were quick to provide assistance to neighbors and relatives---even though they did not volunteer as radio operators. This experience agrees with much of the professional literature on post-impact emergency actions. One study shows that within 30 minutes of a major disaster, such as an earthquake, up to 75% of the healthy survivors are engaged in efficient rescue and helping behaviors.
9. Other studies have shown that those who provide emergency aid are typically individuals whose pre-disaster role performance includes similar types of helping behaviors. (In other words, those who do not volunteer for club activities and public service events are unlikely to volunteer in the midst of a disaster.)
10. Many, who did not volunteer but did listen to the ARES net, commented on the fact that it was running smoothly the whole time they monitored (i.e.. for several days). This may, ironically, have convinced some that their services were not needed. Some were hesitant to volunteer because they doubted their own abilities.
11. Some, who experienced insignificant damage, expressed little curiosity about what was happening. They

did not leave home to explore---or even monitor the two-meter net.

Of those who opted not to volunteer, the following reasons were cited, in order of frequency.

1. Needs of family and/or home rated as higher priority
2. Out-of-town at time of quake
3. Not active in radio at the current time
4. Property damage
5. Sickness
6. Job conflict
7. Didn't feel skill level was adequate to volunteer.

CONCLUSIONS

ARES has already undertaken steps to address some of these issues. The largest problem of all should concern us all, as responsible license holders.

HOW CAN WE CONVINC AMATEURS THAT THERE ARE SOME RESPONSIBILITIES ASSOCIATED WITH THEIR RIGHT TO USE THE AIRWAVES?

This study points out one factor, which appears to have considerable weight in determining whether hams offer their services. This is their philosophy concerning the role ham radio plays in their lives. There is a decided split between those who view it as purely an entertaining hobby and those who consider it a hobby with a "built-in-commitment" to public service and emergency efforts.

We see this difference manifested every time we seek someone to serve on a club committee, or to accept an office. It also is apparent whenever we seek help in providing communications for public-service events such as marathons. At one pole are those who were extremely critical of the hams who spent long hours on post-quake duties. Then there are those volunteers who can see no logical reason for anyone to "shirk their duty". Most have attitudes which lie somewhere between these extremes. These views on volunteerism are probably little different than among the populace at large.

Ham radio is the only hobby, I know of, which relies solely upon the use of a limited national resource for continued existence. As long as the ARRL must rely chiefly on the argument of public-service performance in defending our spectrum, we need to "educate" our fellow hams that they do have a responsibility unlike that of ordinary citizens. That license is a privilege, not a right.