

HOW THIS GRANT BENEFITS OTHER DEPARTMENTS

The Amesbury Fire Department responds to approximately 175 requests for mutual aid each year. Of those responses, 75-80% of the fire incident responses are to communities in New Hampshire. In fact, several neighboring New Hampshire communities have the Amesbury Fire Department responding on the first alarm to a structure fire.

Over the past several years the New Hampshire communities have changed their police communications to digital VHF. The New Hampshire fire communications have also started to change to digital VHF with complete digital coverage anticipated in three years. In order to provide seamless communications with these communities it is imperative that the Amesbury Fire Department has digital VHF capabilities. Without this technology, our New Hampshire neighbors would not have direct communications with our mobile units, portable units, or communications center.

NARRATIVE

MAYDAY, MAYDAY, MAYDAY!!!!!!

Those dreaded words that no firefighter ever wants to utter and no incident commander ever wants to hear. What happens when a firefighter needs to declare a mayday and nobody can hear him? What happens when a firefighter needs to declare a mayday but there is too much radio traffic and he is unable to break through? Every year approximately 100 firefighters lose their lives in the performance of their duties. What an additional tragedy if any of these lost lives could have been saved with the proper communication equipment.

ABOUT AMESBURY

The Town of Amesbury is a suburban Massachusetts community that borders several New Hampshire towns including Seabrook. The Town of Seabrook, New Hampshire is home to the Seabrook nuclear power plant – a critical infrastructure to a large percentage of New England and an obvious potential terrorist target. There are approximately 16,500 residents and there are 2 major interstate highways that pass through Amesbury.

The Amesbury Fire Department is technically a combination department but, in actuality, functions as a career department. There are 34 full time members who are assisted at incident scenes by the 6-member call department. Of the 2922 incidents in 2003, 1439 were related to Emergency Medical Services. The annual budget consists of 90% personnel costs and 10% operating costs.

PLAN

The Amesbury Fire Department intends to utilize the 2004 Assistance to Firefighters grant to replace existing communications infrastructure, mobile and portable equipment. The current equipment is outdated and increasingly difficult to repair. The current frequency is shared between three other fire departments AND a public works department. At the same time surrounding communities are upgrading their communications to more advanced technologies.

THE HISTORY OF THE CURRENT SYSTEM

The current communications system started as a simplex VHF system with one frequency shared by six Massachusetts and twelve New Hampshire communities. The New Hampshire communities changed to their own frequency, as did two of the Massachusetts communities. To this day, the remaining four communities still operate on the single frequency. The only system upgrade involved changing from simplex to duplex. However, the assigned transmit frequency is also utilized by the Department of Public Works for the Town of Tyngsboro, Massachusetts. Usually this does not cause much interference. But this is New England. When the snow hits, the public works departments are as busy if not busier than the fire departments.

The existing equipment is old and worn. As time passes it is increasingly difficult to find replacement parts and maintain a level of minimum function. The above mentioned

system upgrade was completed through the efforts of our own personnel using second-hand parts. The frequency of failure within the basic communications infrastructure is increasing.

Airtime is at a premium. The current system is still shared by four fire departments. The overall call volume has shown a steady increase over the years with Emergency Medical Service calls moving to the forefront. Two of the communities, including Amesbury, operate our own ambulances while the other two communities contract with a private service that then utilizes the frequency for scene communications. On the occasions when more than one department has a major incident in progress, radio communications are difficult at best and can often be confused between the two incident commanders and the communication centers.

PROPOSED SYSTEM

The proposed communications upgrade would replace the existing analog duplex infrastructure with an APCO 25 compliant digital VHF communications system. The proposed system would initially be operated in the analog mode to ensure continued interoperability with our Massachusetts neighbors. However, with the flip of a switch, the entire system can be converted to digital to allow seamless operations with our New Hampshire neighbors. As the local Massachusetts communities gradually make the change to digital technology, the need for analog communications will diminish and the ASTRO digital technology will be the standard.

To ensure the continued interoperability with all of our neighbors, all mobile and portable radios will have the dual capability of analog and ASTRO digital communications. This proposed system virtually guarantees seamless communications at a scene in any of our mutual aid communities.

FINANCIAL NEED

Although the national economy continues to rebound we need to take a closer look at the Massachusetts economy. The local economy has lagged behind the rest of the nation in terms of recovery. While the rest of the country has been declared 'out of the recession,' Massachusetts is still in the initial stages of economic recovery with higher levels of unemployment and drastic municipal budget cuts. Massachusetts has its own unique economic issues. Of primary concern is 'Proposition 2-1/2' which, for the past 20 years has limited local governments from raising taxes by more than 2-1/2 percent each year. While this was not a major problem in the booming economy of the 1990's, we are now in apposition that a 2-1/2 percent tax increase will not even maintain current levels of operation fro any local department.

Even after the tragic events of September 11, 2001, fire departments in Massachusetts have seen crippling layoffs and reductions in personnel due to decreased funding at the state and local level. Any available funds are utilized for everyday operating expenses with nothing available for capital expenditures. It is through the 2004 Assistance to Firefighters Grant Program that the Amesbury Fire Department hopes to circumvent these local economic issues.

COST BENEFIT

As technology improves and demands increase, it is obvious that digital communications will be the standard for not only northeastern Massachusetts but perhaps for all of New England. It is, without a doubt, imperative that the Amesbury Fire Department upgrades the current antiquated communications system. It seems fiscally prudent to upgrade to a system that will provide long term as well as short-term interoperability.

An analog upgrade is only a short-term solution with the potential need for full system replacement within five to ten years. An analog upgrade not only provides a long-term solution but also ensures seamless communications with our New Hampshire neighbors.

CONCLUSION

MAYDAY, MAYDAY, MAYDAY!!!!!!

Those dreaded words that no firefighter ever wants to utter and no incident commander ever wants to hear. The 2004 Assistance to Firefighter Grant Program would ensure that if, in fact, these words are uttered, they can be heard.