EPHRATA FIRE DEPARTMENT
2004 FIRE ACT GRANT NARRATIVE

The Ephrata Fire Department is applying for grant funds in the Operations and Firefighter Safety Program area.

The City of Ephrata, population 6,808, is a community of 10.1-square-miles, located in rural Central Washington State in what is known as the Columbia Basin. Our community sits in a valley surrounded by hills, agricultural industry and barren land. Ephrata is the county seat, a tourist destination, and the second largest city & economic center in Grant County.

The east-to-west running Burlington Northern & Santa Fe railway divides Ephrata. This Class 1 rail corridor is the major line between Seattle and the eastern US coast. Twenty-two freight trains and two interstate AmTrak passenger trains travel through town daily. Ephrata is also home to the Grant County Public Utility District, which operates two hydroelectric dams on the Columbia River. Together, Priest Rapids Dam (rated capacity of 955,600 kilowatts) and Wanapum Dam (rated capacity of 1,038,000 kilowatts) make up one of the nation's largest hydropower developments. From the control center in Ephrata, Grant County PUD sells and dispatches 63.5 percent of the power from each dam to critical metropolitan cities such as Seattle and Spokane, as well as 10 other purchasers of electrical power on the west coast. Grant County PUD also manages and provides fiber optic Internet, television and telephone services to area homes and businesses. Approximately 15,000 rural households in Grant County have access to fiber optic services.

In order to fulfill our mission of "Service Above Self", the Ephrata Fire Department, an ISO Class 5 department, embraces and utilizes the talents of 25 volunteers and 1 career Fire Chief. Our department provides fire suppression, rescue and first-response basic emergency medical services. Total call volume for 2003 was 451. Mutual aid agreements with Grant County Fire Districts 3, 7 & 13, along with the close working relationships we foster with these agencies, assure dependable response to the most severe emergencies.

I. PROJECT DESCRIPTION

After an extensive risk assessment, the Ephrata Fire Department is seeking $102,730 to improve the safety of our Firefighters and their ability to locate victims and coordinate tactical efforts. We are seeking funding for four categories:

1) **Portable Radios:** Two-way radios are a critical component of personal protective equipment. Unfortunately, our radio equipment is sub-standard. Our current inventory of eight analog portable radios of varying age, brands and models without interchangeable accessories, is nearing the end of its dependable service life. The 15 funded radios will meet the FCC's APCO-25 interoperability standards, ensuring effective, efficient, and reliable intra-agency and inter-agency communications now and in the future. Portable radios will be mounted in their chargers in the cabs of our two primary engines and our ladder truck and be available for 100% of our riding positions. The new radio equipment will help our department meet or exceed NFPA standards 1710, 1221 and 1561. This part of the project will bring the Ephrata Fire Department into statutory compliance with Washington Industrial Safety and Health

Act (WISHA) "Safety Standards for Firefighters", Washington Administrative Code (WAC) Chapter 296-305-05001.

2) **Mobile Radios:** Radio communication with Apparatus Operators has been impossible due to the absence of pump panel-mounted mobile radios. Apparatus Operators are typically relayed orders via hand signals or via a Firefighter conveying the information personally. In-cab verbal communications between personnel are difficult to understand due to diesel engine noise. These deficiencies have affected Firefighter and citizen safety. We will purchase 2 new mobile radios with both cab mounted- and pump panel-mounted controls, and a total of 18 earmuff-type headsets to help eliminate background noise experienced by Apparatus Operators while operating the pump, and to improve in-cab communications between all riding positions. For each primary engine, one headset and a remote radio control will be mounted at the pump panel; two headsets and the main radio control will be mounted in the cab; and four headsets for intercom only will be installed for rear-cab riding positions. The four remaining new headsets will be installed for our rear-cab riding positions on our ladder truck to upgrade its existing radio/intercom equipment. This will improve communication between the Officer, Apparatus Operator and rear riding positions while responding to an incident; coordinating tactics on scene; communicating with local and regional agencies; and improve overall incident safety. This new equipment will outfit 100% of our riding positions on our two primary engines and our ladder truck.

3) **SCBA Voice Synthesizers & SCBA-Integrated Radio Microphones:** Although our 25 updated SCBA meet NFPA 1981 (2002 ed.) standards, the ability for Firefighters to have their verbal interpersonal messages understood, or transmit understandable radio messages while SCBA facemasks are donned, is nearly impossible. To eliminate this problem, we will purchase 25 SCBA face piece voice synthesizers to improve interpersonal verbal communications, and 25 SCBA face piece-integrated microphones, compatible with our new portable radios, for improved radio transmissions. Voice synthesizers and SCBA face piece-integrated microphones will greatly improve coordination of fire tactics and also ensure dependable, long-term communications capabilities between Firefighters, Rapid Intervention Teams (RIT), and Incident Commanders. This part of the project will bring the Ephrata Fire Department into statutory compliance with OSHA's Respiratory Protection Standard (29 CFR 1910.134), requiring "At least two employees must enter and remain in visual or voice contact with one another at all times", as well as WAC 296-305-05001, subsections 8, 10(c), 10(d), and 15, regarding Firefighter communications. 100% of our SCBA will be outfitted with this equipment.

4) **Thermal Imager:** Volunteers provide the majority of our department's manpower and the membership of surrounding mutual aid agencies. Response times may be extended and arrival at the scene spread over a varying period of time. A thermal imaging camera will assist our limited manpower by increasing their ability to perform size-up, locate and rescue civilian victims, and rescue Firefighters involved in Mayday situations. Firefighters will also be able to more readily identify areas of overwhelming fire activity, which they should avoid.

   Our ability to locate victims in other emergencies will also be greatly enhanced by a thermal imaging camera. Ephrata has a tremendous amount of outdoor activity areas, including the steep inclined, sagebrush-covered, 2,000-foot-tall Beasley Hills, which are popular for walking and hiking enthusiasts year-round. Beasley Hills have limited access for motor vehicles. Ephrata is also blessed with over 10 miles of developed walking trails to promote outdoor activity. Some of these trails lead into undeveloped areas covered with dense vegetation.

Again, vehicle access is limited. Locating lost or injured victims at either of these highly used areas, especially victims obscured or hidden by vegetation will be improved through the use of thermal imaging.

These same non-fire incident use benefits also apply to locating victims of motor vehicle crashes who may be ejected away from the primary incident scene; train accidents; structural collapse; natural & human-caused disasters; and incidents involving weapons of mass destruction.

II. BUDGET ESTIMATES

Funding from the Assistance to Firefighters Grant program will help purchase:

- 15 portable radios ($37,740.00)
- 25 SCBA face piece-integrated microphones ($26,825.00)
- 25 SCBA voice synthesizers ($6,500.00)
- 2 mobile radios ($3,536.00)
- 18 radio/intercom headsets ($16,146.00)
- 1 thermal imaging camera ($11,983.00)

Timeline

The new equipment will be integrated into our department's operation using the following timeline:

- Call for vendor bids and bid selection: Time of funding approval + 45 days
- Receipt of equipment: Time of bid selection + 30 days
- Installation of equipment onto apparatus: Receipt of equipment + 2 days
- Training for all personnel on use of equipment & full integration into department operations: Receipt of equipment + 30 days
- Product and process evaluation: Continual with post-use critiques

III. BENEFITS

Despite our fleet of very good apparatus, SCBA and basic Firefighter equipment, we still lack adequate staffing and communications equipment to safely accomplish, in a timely manner, all required functions at most structure fires. The funding we seek to support this project will allow expedient, efficient and safer fire ground operations by fewer people. This permits other Firefighters to be tasked to perform additional critical functions.

Based on our department's risk assessment, as well as the findings and recommendations listed in the USFA Technical Report "Improving Firefighter Communications", we believe the desired portable radios, although higher priced, offer the greatest benefit when weighing in Firefighter safety features and functionality.

IV. FINANCIAL NEED

In 1999, Initiative 695 was passed by Washington State voters and eliminated the state's motor vehicle excise tax. Passenger vehicles in Washington State are now assessed a flat $30-per-year registration fee, replacing the previous tax of 2.2 – 2.5% of a passenger vehicle's value. The passage of I-695 has resulted in the loss of $1.5-billion in annual state tax revenues. The 20% ($280-million) of those revenues which local governments previously shared is now gone and has resulted in a huge financial impact on all Washington municipalities. In FY 2003, the total operating budget for our fire department was just over $400,000.00; in FY 2004, the operating

budget has been reduced to $273,000.00. The City's reserve fund is also dramatically reduced to only $200,000.00, and requests to supplement other City department operating budgets out of the reserve fund preclude our requests for this important safety equipment.

Future Funding

The following alternatives may be considered to offset the impact of Initiative 695, which limits the collection of property taxes to 101% of the previous year plus new construction:

- ***Lid Lift*** – This would lift the 101% lid as imposed by I-747, as well as the 106% lid as previously imposed by State Law. It would allow a fire district to collect up to the full $1.50 as authorized by statute.

- ***Excess Levy*** – This could be done for a set amount in excess of the normal property tax collection limitations. As currently in State Law, an excess levy can only be collected in one year.

- ***Emergency Medical Services Levy*** – This can be used to fund emergency medical services up to a maximum of 50 cents per $1,000 of assessed valuation. This funding is over and above normal property taxes collected for the fire district.

- ***Service Benefit Charge*** – This can be used to fund up to 60% of the fire district's operating budget. Property tax collection is reduced to $1.00 per $1,000 of assessed valuation with up to an approximate amount of an additional $1.50 available via the service benefit charge. This make the benefit charge, if approved, capable of collecting up to an amount approximating $2.50 per $1,000 of assessed valuation.

- ***Bond Issue*** – This can be used for capital purchases only. The amount of the bond can be three-quarters of 1% of the assessed valuation of the district. There are many legal requirements regarding bonding, including the fact that a bond of less than $5-million allows the district to utilize bond interest as an addition to the district's general fund, whereas a bond issue in excess of $5-million stipulates that bond interest be used to payoff the bond debt.

- ***Grants*** – These funds can be utilized for fire fighting equipment, programs, training and other items of essential need in the fire service.

We appreciate FEMA investing in this very important project.