Agency: Commerce, Community and Economic Development

Grants to Named Recipients (AS 37.05.316)

Grant Recipient: American Red Cross of Alaska **Federal Tax ID:** 92-0022414

Project Title: **Project Type:** Information Systems and Technology

American Red Cross of Alaska - Disaster Response Communication Module

State Funding Requested: $300,000 **House District:** Statewide (1-40)
Future Funding May Be Requested

Brief Project Description:

Self-contained disaster response communciation and computing mobile module.

Funding Plan:

Total Project Cost:	$390,000
Funding Already Secured:	($90,000)
FY2013 State Funding Request:	($300,000)
Project Deficit:	$0

Funding Details:

There is no funding history for this project.

Detailed Project Description and Justification:

In Alaska, when a major incident occurs, like and earthquake or a major forest fire, it can often times disturgb if not completely destroy the communication infastructure of the surrounding area. Establishing headquareters close tot eh disaster site has many advantages, but this can only be done if communication and computing resources can be delivered timely and with a high level of reliability. One resource that helps ensure that crucial communication and other technology lines remain open and functioning during a disaster is the MSCC, or mobile disaster response communication module.

Because the American Red Cross of Alaska provides critical support to communities impacted by disaster, often times in the most remote locations of our state, this in an invaluable piece of equipment. Red Cross also works in conjunction with community partner to prepare for and train local volunteers in immediate response and disaster preparedness and prevention. This asset would be incorporated into these communities trainings. Red Cross is also the only non-profit agency in the state of Alaska that provides full spectrum disaster preparendess and response to all communities based upon request.

Contact Name: Jeff Turner
Contact Number: 907-465-6588

For use by Co-chair Staff Only:

$300,000 Approved
3:17 PM 5/2/2012

Project Timeline:

Once funding is obtain the timeline will be as follows:

August 2012 Design and Engineering plans finalized
October 2012 Module construction begins
January 2013 Module construction completed
February 2013 Asset delivered
March 2013 Key Leadership volunteers and staff trained on use & operation module
May-July 2013 Community Volunteers trained on use and operation of module

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

American Red Cross of Alaska

Grant Recipient Contact Information:

Name:	Michelle Houlihan
Title:	Chief Executive Officer
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	Anchorage, Alaska 99501
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Has this project been through a public review process at the local level and is it a community priority? ☐ Yes ☒ No

For use by Co-chair Staff Only:

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Introduction

In Alaska, when a major incident occurs, like an earthquake or a major forest fire, it can often times disturb if not completely destroy the communication infrastructure of the surrounding area. Establishing headquarters close to the disaster site has many advantages, but this can only be done if communication and computing resources can be delivered timely and with a high level of reliability. One resource that helps ensure that crucial communication and other technology lines remain open and functioning during a disaster is the MSCC.

This is an example of an MSCC which is currently utilized by the American Red Cross of Central Texas

Considerations for Satellite Communications

Satellite is the near-universal choice for the broadband communications "backhaul" link to these vehicles since it is rapidly deployable, available anywhere with a clear view of the southern sky, and completely independent of the local telecom infrastructure. These systems are typically based on VSAT (Very Small Aperture Terminal, a two way broadband wireless link) satellite data services. There are some limitations in areas where the southern horizon may be blocked by mountains. Just North of the Alaska range for example has limited coverage for VSAT. (Please note however the other functions of a MSCC could still be utilized and helpful in the response.)

Throughout Alaska there are literally thousands of locations that operate daily on VSAT services. Most are of permanent nature like health clinics, schools and some are seasonal like fishing lodges or fish processing plants. Others are very short term in nature like the support for exploration or Iditarod support.

Mobile Satellite Communications Centers (MSCCs) are designed to move to a crisis site, deploy quickly, and provide a communications infrastructure for on-site personnel for the duration of an incident. Additionally, numerous federal grants and programs are being offered that can assist with the purchase of a MSCC interoperable emergency response mobile communications infrastructure.

Another example of a MSCC

Why a VSAT equipped MSCC for Red Cross of Alaska?

The areas of response for the ARC of Alaska stretch tens of thousands of miles. Many of these locations can only be accessed by air and are may or may not have communication infrastructure solid enough to with stand a large scale disaster. It is critical for American Red Cross to fulfill its role of responding to the needs of those impacted by disasters even in these most remote areas of our state. To do this effectively and efficiently, better utilizing donor contributions, we need to have reliable communications that allow us to be self sufficient within an impacted community or region.

MSCC vehicles are best suited to rapid-response deployments where voice, video and data communications are needed to support 1-20 users (bandwidth of 1-5 Mbps for all data). These units are best for situations where rapid deployment is essential and expected use period is up to 48 hours (semi-permanent command posts should be deployed for longer-use situations.) A basic MSCC needs to be fitted with a satellite WAN (Wide Area Network) communications system; LAN (Local Area Network) communications gear that may include phones, LMR (Land Mobile Radio) units, laptop PCs, and video or digital still cameras; and power generators to run the equipment at the deployment site. The satellite WAN link is typically built around an “auto-acquisition” antenna mounted to the roof of the vehicle and equipped with servomotors that allow it to automatically point itself at its assigned satellite and activate the network link.

Costs

Initial Program Start Up- $300,000

For budgetary purposes, depending on configuration, a MSCC capable of being transported via air, water or roads (including vehicle and communications gear) can cost approximately $300,000 to build. This would include some design and project management efforts. There are many companies that could provide a turnkey, all in one, solution for ARC Alaska. This would also include the cost to train staff and volunteers on the unit statewide as well as two practice deployments to remote locations.

Annual Sponsorship Support-$40,000

For ongoing use, monthly communications service charges (for VSAT service) would approximately total $15,000 annually(depending on necessary bandwidth) can be expected in addition to vehicle fuel, maintenance and operations expenses. Annually these units need maintenance and testing. An annual budget of $25,000 for preventative maintenance and testing, staff and volunteer annual training and management will be necessary.