

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
"Los Angeles County: Ahead of the Curve"

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: MARS (MILITARY AUXILIARY RADIO SYSTEM)

DATE OF IMPLEMENTATION/ADOPTION: DECEMBER 17, 2012
 (Must have been implemented at least one year - on or before June 30, 2013)

PROJECT STATUS: Ongoing One-time only

HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT? Yes No

EXECUTIVE SUMMARY: Describe the project in 15 lines or less using Arial 12 point font. Summarize the problem, solution, and benefits of the project in a clear and direct manner.

1 The Los Angeles County Sheriff's Department is the first public safety agency in the
 2 nation to become a licensed member of the Military Auxiliary Radio System (MARS).
 3 MARS is a United States Department of Defense sponsored program, separately
 4 managed and operated by the United States Army, Navy-Marine Corps, and Air Force.
 5 MARS has a long history of providing worldwide auxiliary emergency communications
 6 during times of need. One thing all disasters and terrorist attacks have in common is
 7 they are frequently followed by a loss of communication with the outside world. The
 8 intensity and widespread area of devastation of these emergencies often causes
 9 organizations' fallback plans to fail. Utilizing High Frequency radios that do not require
 10 standard infrastructure, MARS provides emergency voice and encrypted data
 11 communication stations to relay critical requests and incident status from command and
 12 control to military, federal, state, and public safety agencies across the country. MARS
 13 integrates the cross-communication of messages using various modes of
 14 communication to optimize communications during incidents.
 15

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) = TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$	\$	\$	<input checked="" type="checkbox"/>

ANNUAL = 12 MONTHS ONLY

SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS Los Angeles County Sheriff's Department 1277 N. Eastern Ave Los Angeles, CA 90063	TELEPHONE NUMBER (323) 881-8002
PROGRAM MANAGER'S NAME John P. Gannon, Lieutenant	TELEPHONE NUMBER (323) 881-8002 EMAIL JPGannon@lasd.org
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE <small>(PLEASE CALL (213) 893-0322 IF YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME)</small> Director Glen Joe 	DATE 07/15/2014 TELEPHONE NUMBER (323) 526-5205 EMAIL GCJoe@lasd.org
DEPARTMENT HEAD'S NAME AND SIGNATURE John L. Scott, Sheriff 	DATE 07/15/2014 TELEPHONE NUMBER (323) 526-5000

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: MARS (MILITARY AUXILIARY RADIO SYSTEM)

1st FACT SHEET – LIMITED TO 3 PAGES ONLY: Describe the **Challenge, Solution, and Benefits** of the project.

Challenge:

Making split-second decisions in harrowing circumstances, first responders often find themselves in the eye of the storm. It's the nature of the job; a job that requires considerable personal danger and risk. Voice communications keep them connected, informed and safe. It is their most powerful weapon. The ability for first responders to communicate quickly and reliably protects lives and property. Anything less is a risk that no community can afford.

One of the most important issues of dealing with any disaster is to quickly assess and disseminate information to the Incident Command Post. In the first hours following an emergency, rapid and reliable communications, sent and received, saves lives and property. To accomplish this, an adequate and functioning communication system is needed. Without an emergency fallback communications system, dealing with even the smallest calamity can become an insurmountable task. Reliable communications, whether or not there is existing infrastructure, is vital when handling emergency responses and it is critical to a successful outcome.

Public Safety agencies continue to rely upon standard telephone systems for their everyday communications needs. In order to provide this service, telecommunications carriers use copper wire and fiber optic cables from their central offices to their customers' locations. The 'last mile' of this process can either be above ground or underground. We have all seen graphic photos of collapsed bridges, broken telephone poles and uprooted trees after an earthquake. When this happens, that last mile of connectivity can be abruptly cut off and utilities and power will be lost. In the case of cell phone providers, the cell towers receive calls which are then routed to local offices. If these cell sites are damaged or destroyed, service can be even less reliable than regular telephones. Loss of power is another cause for failure. In the case of past hurricanes and earthquakes, power has been interrupted for several days, and even up to several weeks.

Satellite communications is a primary fallback system for many public safety agencies. Unfortunately, satellite service will become congested during emergencies. Primary microwave systems can become inoperative because dish antennas can be knocked out of alignment. Everyday communications systems will most likely experience some form of failure.

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: MARS (MILITARY AUXILIARY RADIO SYSTEM)

Solution:

Power and communications companies have planned for adverse events, but the intensity and large area of devastation can make these plans useless. Adequate information is necessary to make informed decisions; however, equally important is an effective means to communicate those decisions. The Los Angeles County Sheriff's Department assists first responders with making command and control possible. The Sheriff's Department is now a licensed (AAN9CSD) member of the Military Auxiliary Radio System (MARS). The objective is to not let the absence of a working communications infrastructure become the biggest problem when it's needed most.

MARS is designed to provide voice and data communications when no infrastructure exists. It allows County of Los Angeles public safety agencies to relay voice and data messages with local, state and federal agencies during catastrophic communications failures. MARS provides an additional means for users with a national security and emergency preparedness mission to communicate when landline and cellular communications are unavailable. MARS members use existing High Frequency (HF) radio resources to coordinate and transmit messages to perform critical functions.

MARS has a long history of providing worldwide auxiliary emergency communications during times of need. The combined three-service MARS programs (Army, Air Force, and Navy-Marine Corps) volunteer force of over 5,000 dedicated radio operators provide the backbone of the MARS program. MARS now has an increased role in providing emergency communications between local public safety agencies and Federal /State agencies.

In November, 2013, MARS planned and executed a national exercise with its DOD partners, numerous active duty and reserve component units as well as some 15 state emergency operations centers. This exercise simulated a widespread communications outage affecting landline telephone, cellphones, and the internet. The 48-hour evaluated exercise was designed to stress the MARS volunteers' ability to handle and respond to message traffic. There were 350 participating Army MARS members who were joined by another 140 MARS members from the Air Force and Navy-Marine Corps MARS. The volunteers logged more than 5,500 hours of on air support to handle message traffic. MARS operators have participated in real-world disasters such as Hurricane Sandy where Army MARS Region 2 relayed high priority messages from hard-hit areas along the coast to other parts of the country.

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: MARS (MILITARY AUXILIARY RADIO SYSTEM)

LINKAGE TO THE COUNTY STRATEGIC PLAN (DETAIL IS REQUIRED FOR COUNTY DEPARTMENTS):

When communications fail, the performance measurement is zero. Any means which enable communications to be re-established is a quantifiable boost to performance and an invaluable resource to first responders. Becoming a member of MARS is a significant boost to the LASD's communications reliability, especially during times of disasters.

Benefits:

MARS uses High Frequencies (HF) that can only be used by MARS members which reduce the likelihood that radio frequencies will become congested or interfered with. To connect to MARS, LASD uses Barrett HF radios. These radios use the latest Automatic Link Establishment (ALE) technology to connect to public safety and satellite communications systems.

Two LASD Sergeants have completed the MARS training manual and are liaisons between MARS and LASD. They participate approximately three times a week in radio testing and have active roles in various exercises.

Compared with satellite telephony, the most common alternative technology for last resort communications is HF radio. Once the initial investment in equipment is made, there are no “per call” costs or ongoing monthly service plans. The LASD's HF radio equipment is built tough to withstand extreme weather conditions.

Linkage To The County Strategic Plan:

Utilizing MARS during catastrophic communications failure supports the County's Strategic Plan, Goal 5, Public Safety, by increasing interoperability and disaster recovery services for emergency communications systems within the County of Los Angeles. It also supports the County Values, Responsiveness section, “We take the action needed in a timely manner.”

HF radio will probably never replace fixed and mobile telephony as the first option for public safety users, but for agencies needing fallback and remote area communications, it is an extremely viable and cost effective tool.

Quality and Productivity Commission
28th Annual Productivity and Quality Awards Program
“Los Angeles County: Ahead of the Curve”

2014 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12 point font):

NAME OF PROJECT: MARS (MILITARY AUXILIARY RADIO SYSTEM)

COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFIT): If you are claiming cost benefits, include a calculation on this page. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation.

Cost Avoidance: Costs that are eliminated or not incurred as a result of program outcomes.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes.

Revenue: Increases in existing revenue streams or new revenue sources to the County as a result of program outcomes.

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$	\$	\$	<input checked="" type="checkbox"/>

ANNUAL= 12 MONTHS ONLY