RESOLUTION No. 8-250799

Adopted on

DEC 1 0 1979

BE IT RESOLVED, by the Council of The City of San Diego as follows:

That the Mayor is hereby requested to communicate with the Board of Supervisors of San Diego County concerning the serious deficiencies identified with the County-owned UHF emergency medical services communication system as described in City Manager Report No. 79-654 dated October 8, 1979, which is attached hereto as Exhibit A, and further, requesting the County to immediately initiate a comprehensive study of said. system.

JOHN W. WITT, City Attorney APPROVED:

Chief Deputy City Attorney

SHS:rc:502.6

11/27/79

Or. Dept.: PS&S Committee



DATE ISSUED: October 8, 1979

REPORT NO. 79-654

ATTENTION:

Public Services and Safety Committee

Agenda of October 10, 1979

SUBJECT:

Paramedic Communications Systems

SUMMARY

<u>Issue</u> - Should the Council approve the acquisition of equipment to activate a new paramedic dispatch frequency and request the County to initiate a comprehensive study of the County-owned emergency medical services communication system?

Manager's Recommendation - Direct the City Manager to proceed with activation of a new paramedic dispatch frequency and request the Mayor to communicate with the Board of Supervisors concerning the need for a comprehensive study of the UHF emergency medical services communication system.

Other Recommendations - None.

Fiscal Impact - The total cost to acquire, install, and activate a new paramedic dispatch network is approximately \$100,000. Fiscal 1980 costs will be \$26,000, the funds for which would be provided by deferring CIP No. 37-138, "Mount Soledad Radio Combiner System."

BACKGROUND

On July 9, 1979, the Council directed the City Manager to prepare a report describing the communication systems used by the paramedics and further discussing present and future expenditures related to the development of these systems.

SYSTEMS DESCRIPTION

The City's paramedics utilize two separate radio networks. The first is a City-owned VHF dispatch system; the second is a County-owned UHF emergency medical services communication system.

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VHF Dispatch System

In order to implement the paramedic program by February 1, 1979, paramedic dispatching has been done by sharing a frequency with the General Services Department. Because of the existing conflicting and congesting General Services radio traffic, the Communications and Electrical Division has been actively pursuing FCC approval to secure another channel for paramedic dispatching. While FCC approval is expected shortly, activation of a new frequency will require acquisition of a number of remote transmitter/receiver base stations, satellite receivers, and ancillary equipment, plus installation costs. The purchase and installation of this system is estimated to cost \$100,000 and is planned for inclusion in the proposed FY 1981 CIP.

However, the near-term frequency congestion between the General Services Department uses and paramedic dispatch is projected to be serious enough to warrant activation of a new paramedic frequency as soon as possible.

In order to dc this without increasing the Fiscal 1980 budget, it is proposed that a portion of the equipment previously acquired and installed for activation of a new Fire operational frequency be "borrowed." The Fire operational system will be implemented in a limited area with the remaining equipment. It is planned to initially set up the Fire system in the northern part of the city where the need is greatest. The paramedic system also will be supplemented by new equipment to be acquired by using the funds available through the deferral of CIP No. 37-138, "Mount Soledad Radio Combiner System."

The FY 1981 CIP expenditures would then be used to restore the "borrowed" Fire communications equipment and the deferred "Soledad Radio Combiner System" CIP project.

UHF Paramedic/Hospital Communications System

The Federal Communications Commission has established a block of ten UHF frequencies exclusively for advanced life support emergency medical communications. Several years ago the County of San Diego, using federal grant funds, established a countywide EMS communications network utilizing these FCC-authorized EMS frequencies. This network consists of a wide variety of transmitters, receivers, consoles, and patient-monitoring equipment for each hospital designated as a base station for paramedic field medical control. A countywide network is vital in an EMS system in which various paramedic agencies utilize the same base station hospitals for field medical control. The City of San Diego, by equipping its paramedics with sophisticated field paramedic radios (Advanced Portable Coronary Observation Radios or APCORS), was able to participate in the grantfunded County system, which saved the City substantial time and money.

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 Medical communications, including biotelemetry, are not authorized by the FCC on our existing City-owned VHF frequencies, nor can our City-owned equipment transmit and receive on new medical frequencies without giving up the ability to broadcast existing City-owned, non-medical radio traffic.

UHF System Deficiencies

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The City's Communications and Electrical Division has conducted a series of extensive radio coverage surveys which have identified certain geographical areas in the city where the field paramedic UHF radio transmissions cannot be received at the designated hospitals due to intervening land masses. The City Council recently approved the purchase of six satellite UHF receivers to correct this problem after the Board of Supervisors cut funds for this purpose from the proposed County FY 1980 budget.

A separate but related system deficiency has just been identified by the most recent radio coverage survey. This is the opposite of the problem cited above and is where the field paramedic unit cannot receive the base hospital radio transmissions. One transmitter is urgently needed to provide coverage to the La Jolla area, and other governmental agencies are being contacted to borrow equipment to provide coverage when the La Jolla paramedic unit is activated. The total number of additional remote transmitters that will be needed has not yet been determined. At the most, seven additional UHF transmitters and ancillary equipment may ultimately be required, at an estimated total hardware cost of \$30,000. It is hoped that the County will acquire and install this equipment.

Long-range Problems

Several of the busier base station hospitals have found that the paramedic radio consoles acquired by the County are not designed to effectively handle more than one paramedic incident at the same time. As a result, physicians and nurses are sometimes forced to use undesirable operational practices such as "stacking" calls or directing the paramedics to contact other, more distant base station hospitals. This problem is compounded by the fixed assignment of UHF frequencies to individual hospitals instead of a more efficient system of frequency use, such as real time assignment of UHF channels dependent upon need.

The current and projected seriousness of this problem cannot be determined without an extensive study. Such a study should analyze existing and anticipated equipment and design deficiencies, including projected paramedic/hospital radio traffic loads in future years. Alternative solutions and funding sources should be identified and analyzed, including the feasibility of establishing a regionalized EMS Communications Coordination Center (such as exists in Orange County) which would allocate frequencies to paramedics

and hospitals for each emergency, thereby maximizing the use of available frequencies and avoiding serious conflicts and confusion in communications.

It should again be noted that the County is jurisdictionally responsible for this system, and their concurrence and cooperation would be required if this approach is to be taken. Initial suggestions from City staff to County staff that such a study be pursued by the County have not been favorably received. It is therefore suggested that the Mayor be requested to communicate directly with the Board of Supervisors on the need for a study of the EMS Communications System.

Respectfully submitted,

COLEMAN CONRAD

Deputy City Manager

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	and adopted by the Council of The City of San Diego on			DEC 1 0 1979 ,	
by the following vote:				•	
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	AUTHENTICATED BY:	•		Ä	
		Mayor of	PETE WILSON Mayor of The City of San Diego, California.		
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	Office	Office of the City Clerk, San Diego, California			
	Resolution Number	50799	Adopted	DEC 1 0 1979	