

CITY OF CAMBRIDGE

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EMERGENCY COMMUNICATIONS DEPARTMENT

George L. Fosque, Emergency Communications and 911 Director

Thomas F. Cahill, Chief of Emergency Operations

Mary K. Clover, Administrative Assistant

Memorandum

To: Robert W. Healy, City Manager
From: George Fosque
Re: Response to Council Order #23, January 23, 1995
Date: February 2, 1995

RECEIVED
95 FEB -7 AM 9:33
OFFICE OF THE CITY MANAGER

The attached documents are in response to Council Orders received by this office on January 27, 1995.

1. The first document responds to Henry and Judy Grunebaum's letter of December 19, 1994 regarding a call for medical assistance at 37 Gray Gardens East on December 7, 1994.
2. The second document provides an update on the installation of the new enhanced 911 emergency response system.

cc. Thomas Cahill
Deputy Chief Gerald Reardon, Fire Department
Superintendent Walter Boyle, Police Department
Deputy Superintendent Gloria Pimental, Police Department
Professional Ambulance
Mr. and Mrs. Henry Grunebaum

Call for Medical Assistance at 37 Gray Gardens East on December 7, 1994

The Complaint

Henry and Judy Grunebaum of 37 Gray Gardens East wrote a letter "To Whom it May Concern" that was mailed to many city officials on December 19, 1994 expressing concern about an emergency call to 911 "which was responded to in a slow, inefficient, and incorrect manner" (quoting the Grunebaum letter). The Grunebaum's stated that Mrs. Grunebaum had called 911 between 1:00 and 1:30 PM on December 7, 1994 to report a dislocated artificial hip and that "the ambulance had arrived at about 2:00 PM having gone to several other houses on Gray Gardens East." The Grunebaum's were very concerned that - had this been a life-threatening emergency - this slow response may have caused grave problems. The Grunebaum's also expressed concern that they had not received a reply from a follow-up telephone inquiry about this matter that had been made to this office.

Summary of Incident Facts

Our follow-up shows that:

- a. Mrs. Grunebaum called 911 and was transferred to a fire alarm operator at 12:54:34 PM on December 7, 1994.
- b. An ambulance from Professional Ambulance (the City's contracted EMS provider) arrived at the Grunebaum residence approximately 8.5 minutes after Fire Alarm finished speaking to Mrs. Grunebaum (the arrival was reported by Professional Ambulance at 1:04 PM).

Medical incidents are classified into three broad levels (A, B, and C) with the Grunebaum call being classified as a non-life-threatening Level C call which generates the dispatch of a Professional ambulance (a BLS unit).

- c. Prior to its arrival at the Grunebaum's residence, the ambulance had been dispatched in error to 2 Gray Gardens East by Professional Ambulance's dispatcher and, after being redirected by Fire Alarm at 1:02:36, again in error, to 36 (rather than 37) Gray Gardens East, found the correct location to be 37 Gray Gardens East at 1:05 PM.

- d. Mrs. Grunebaum was transported to Beth Israel Hospital at 1:35 PM after being treated and prepared for transport in her home. She arrived at this hospital at 1:49 PM.

The call was handled at Fire Alarm and at Professional Ambulance by experienced and trained personnel, all with more than 8 years of experience.

Conclusions

While personnel in the dispatched ambulance, the Professional Ambulance dispatcher, and the City fire alarm operators all worked to quickly resolve the address error (when it was determined that 2 Gray Gardens East and then 36 Gray Gardens East were incorrect addresses) the response was nonetheless delayed by approximately 4-5 minutes as a result of address designation-transposition error. This type of delay is unacceptable to Emergency Communications and the personnel involved. The Grunebaum's are to be commended for pointing out errors and being concerned that the Cambridge emergency response system be made as fool-proof as possible.

Address designation error, while extremely rare, is an error that we combat or minimize by a variety of standard operating procedures and techniques. The following is a list of procedures we currently follow - as well as procedures we plan to follow - that should reduce the type of error experienced in the Grunebaum incident.

- a. having one dispatcher work in tandem with another (workload permitting) so that each monitors and checks the other's work and listens to the others radio and telephone conversations. In this case, cross-checking occurred at Fire Alarm when workload permitted, but only after several minutes had already elapsed. The Professional Ambulance dispatcher was working alone.
- b. having persons repeat and confirm - over the telephone and the radio - the address of the incident. In this case, our over-the-radio and over-the-telephone protocols worked properly (e.g., between fire alarm and the Professional Ambulance dispatcher) but failed to stop the initial dispatch error.
- c. following additional procedures in the case of life-threatening emergencies. In this case, had the call come in as a possible heart attack or other Level A emergency we would have immediately dispatched Engine 8 and Fire Rescue directly from Fire Alarm in addition to alerting the Professional Ambulance dispatcher to send an Advanced Life Support (ALS) unit. Engine

8 is less than 300 yards from the Grunebaum residence and would have been alerted by the fire alarm operator who actually took Mrs. Grunebaum's call.

We use multiple alerting systems in the case of fire dispatch that are designed to stop any address discrepancies (e.g., first the incident location is broadcast over our redundant citywide in-station intercom alerting system and then rebroadcast over the 800 Mhz radio fire dispatch channel) and at least two different dispatch offices independently dispatch to the emergency (both Emergency Communications and Professional Ambulance). Both procedures minimize the impact of an error by any one person.

- d. acquiring technology that will assist in precisely identifying caller locations. Enhanced 911 telephone technology that will automatically display the address of Cambridge callers is planned for installation in early 1996. This technology would have been a big help in the Grunebaum case.
- e. selecting personnel who excel in remembering, repeating, and pronouncing addresses (and other information) correctly and clearly. We have recently acquired a dispatcher testing system that, among other components, tests for accuracy and speed in repeating number groups, transcribing addresses correctly from taped actual calls of poor audio quality, etc. We intend to use this system in the selection and screening of all future candidates for dispatcher positions.
- f. supervising and training personnel to be vigilant about dispatch-related errors. Fire Alarm prides itself in striving for a "zero-defect" work environment. In 1994 a probationary period fire alarm operator resigned partially because of an address-transposition error tendency (which was caught and corrected by our internal systems).

We are also soliciting suggestions from Emergency Communications employees as to other ways to reduce these types of errors.

As to the Grunebaum's concern that their follow-up request was not addressed properly, we can only state that follow-up phone calls were made to Mrs. Grunebaum by both Mr. Thomas Cahill of Emergency Communications and Deputy Fire Chief Gerald Reardon (who supervises the Professional Ambulance contract). After not being able to reach Mrs.

Grunebaum directly on the phone - and being unwilling to leave a message - Deputy Chief Reardon reached Mrs. Grunebaum in early January and spoke to her for over 45 minutes. She appeared understanding of the event and appreciative that the City was responding to her very real concerns.

We also regret any confusion or delay in our response or in the responses of other city officials. I would be pleased to meet with the Grunebaum's to discuss this matter and to review any of their concerns.

Update on 911 Emergency Communications Project

General Summary

The Emergency Communications, Police, and Fire Departments are well on the way to establishing a citywide Combined 911 Center with better-trained personnel and modern technology including an Enhanced 911 telephone system and a new Computer-Aided Dispatch system. The purpose of the new Center is to speed the response of emergency units; better coordinate the City's handling of - and response to - 911 calls; upgrade the quality of call answering and dispatching services provided both to callers and to police patrol and fire suppression personnel; operate more cost-effectively in one combined location than in two separate locations; and better manage the introduction and use of new computer, radio and telephone technology.

Following nine months of planning, designing and bidding, construction is scheduled to begin in April on 6000 square feet of space that will be the City Emergency Communications Center. The Emergency Communications Center will be located at 489 Broadway near Harvard Square. It is anticipated that construction will be completed by the Fall of this year. After construction, the Emergency Communications Department will equip the site with new radio, console, telephone and CAD computer equipment; and merge 911 call answering, police dispatching, and fire/EMS dispatching in one facility under the Emergency Communications Department's leadership. This will require the transfer of 911 call answering and police dispatch functions - as well as Police Dispatcher personnel - from the fourth floor of police headquarters to the new combined Emergency Communications Center.

Negotiations are underway with employee unions over the impact of the merger. Specifically, Local 195, which represents both Police Dispatchers and Fire Alarm Operators, has been presented with a detailed plan for transferring Police Dispatchers into the Emergency Communications Department (after construction of the Emergency Communications Center) and making the transition as efficient and smooth as possible.

Highlights of this plan include the creation of a common title for all dispatchers with unified pay, benefits, and work schedule; selection of Communications Supervisors; cross training in specialty skills; and professional certification to national standards.

In addition, the Police Officer's Association has been advised of the planned merger and the City's desire to eventually transfer the six remaining sworn Police Officers now working in Police Communications to other duties. Negotiations will soon begin over this issue as the City and the Association discuss how to professionalize Emergency Communications, insure officer safety, and meet the needs of the police department for the highest quality dispatch service.

Installation of Enhanced 911 telephone equipment is not expected in the City until early 1996. The Statewide Emergency Telecommunications Board and its contractor NYNEX are currently installing E911 phone equipment in small clusters of adjoining municipalities throughout the state. Less than 50% of the 250+ sites within the state have been completed with the remaining 50% scheduled for later 1995 and early 1996. Cambridge plans to turn on our new E911 phone equipment after the combined center is fully operational.

Specific Tasks for Emergency Communications

- Finish construction of the Emergency Communications Center and install basic radio and telephone console equipment.
- Develop written Standard Operating Procedures with assistance from the Police and Fire Departments.
- Select and train Communications Supervisors.
- Develop a formal recruitment, testing, screening, and pre-service training program for newly hired Emergency Telecommunications Dispatchers.
- Merge police into fire/EMS dispatching.
- Cross-train existing personnel.
- Network public safety buildings for high-speed data communications.
- Activate new Enhanced 911 telephone service after planning, equipment installation, public education, and dispatcher training.
- Make special provisions in equipment, procedures, and databases for servicing the emergency needs of disabled residents.
- Continue the upgrading of the police radio system.
- Acquire and install a new Computer-Aided Dispatch system.

- Assist the Fire and Police Departments in the automation of their filing and records management systems.
- Make sure the city's planned GIS and network computer systems serve the needs of the public safety departments.



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EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

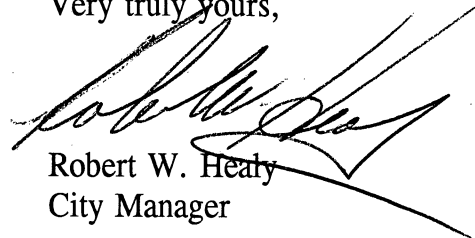
RICHARD C. ROSSI
Deputy City Manager

February 13, 1995

To The Honorable, The City Council:

With reference to Awaiting Report Item No. 22, regarding the status of the installation of Enhanced 911 as well as a response to a 911 call, please find attached a report from George Fosque, Emergency Communications and 911 Director.

Very truly yours,



Robert W. Healy
City Manager

RWH/mev
attachment

Consent Agenda # 2 *S-56*

Response to Awaiting Report Item Number
Twenty-Two regarding the response to a
911 call and the status of the installation
of Enhanced 911.

*for original order see
Order # 23 of 1/23/95*

In City Council,

February 13, 1995

*Referred to Public
Safety on motion of
Councillor Sullivan
2/14/95. Copy sent to Public
Safety Committee*