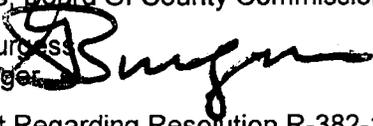


Memorandum



Date: July 15, 2010

To: Honorable Chairman Dennis C. Moss
And Members, Board Of County Commissioners

From: George M. Burgess
County Manager 

Subject: Status Report Regarding Resolution R-382-10

HPSI

Agenda Item No. 7(B)

On April 6, 2010, the Board of County Commissioners passed Resolution 382-10 directing the Mayor or designee to collaborate with affected parties to develop and submit a plan to improve communications amongst fire rescue agencies in Miami-Dade County. This report provides a status on actions taken thus far to accomplish the goals set forth in the resolution.

Each of the Fire Chief's of the six fire rescue services in Miami-Dade County participate as members of the Fire Officers Association of Miami-Dade (FOAM-D). This organization is intended to provide a forum to bring all agencies together, discuss common issues, and develop recommendations to improve fire rescue services in Miami-Dade County. The Fire Chiefs met to discuss the current status of mutual aid in Miami-Dade County and develop recommendations for improvement. All agreed that they should pursue the concept of "Enhanced Mutual Aid" whereby target areas could be identified and when needed, closest unit response could be implemented. Additionally, the members agreed that there will be short-term as well as more long-term solutions that will need to be explored further. The Fire Chiefs directed the Communications Sub-Committee to explore options and make recommendations.

On May 11, 2010, Miami-Dade Fire Rescue's Communications Division Chief Lindsey Plummer organized a meeting of the Communications Sub-Committee to discuss the elements of R-382-10 and to develop a strategy to accomplish the goals. Representatives from the following agencies attended:

- Hialeah Fire Rescue
- Key Biscayne Fire Rescue
- Miami Beach Police & Fire
- Miami Dade Fire Rescue
- Miami Fire Rescue

As a starting point the sub-committee reviewed the current mutual aid agreement first implemented in 1956 (Attachment A) and again ratified on September 16, 2004, by all the fire chiefs in Miami-Dade County (Attachment B). While this agreement currently provides for the ability of any agency to request or deliver mutual aid, the agreement would need to be updated to reflect the provisions of Enhanced Mutual Aid.

Analysis of the Current Infrastructure

The cities of Miami (who also provide Fire communications for the Village of Key Biscayne), Hialeah, Coral Gables, and Miami Beach as well as Miami Dade Fire Rescue each have their own independent communication systems. All utilize computer aided dispatch (CAD) but MDFR is the only agency that utilizes automatic vehicle locating (AVL) technology to dispatch the closest available unit. Additionally, MDFR employs a GPS-based mapping system which assists in guiding fire rescue resources as rapidly as possible to the scene of any emergency.

Review & Assessment of the Current Systems

There are seven (7) Public Safety Access Points (PSAP's) in Miami-Dade County that are designed to receive 911 calls and route the call and related information to the appropriate agency(s). Each of the PSAP's are interconnected via dedicated 911 telephony circuits provided by AT&T.

There are two (2) types of radio systems within Miami-Dade County utilized by the six (6) fire rescue agencies (UHF and 800MHz) and of the 800 MHz systems all are Motorola based with the exception of Coral Gables Fire Rescue that utilizes a Harris system (formally M/A-COM). Currently, the ability for the departments to communicate with each other is limited. Agencies must utilize the Florida Interoperability Network (FIN) which creates a radio "patch" allowing multiple systems to communicate. This is not simply an "on/off" process and is often times difficult to perform in a short period of time.

The County is also in the process of implementing a 700 MHz narrowband radio system for voice communications that was acquired as a result of a federal grant awarded to the County in 2008. This system will initially be deployed to serve Miami-Dade law enforcement to provide an alternate communications band to the 800 MHz system currently used by law enforcement. As the system expands, Miami-Dade Fire will be able to make use of the 700 MHz band for additional communications.

The County has also acquired an IP based network control backbone to connect radio systems regardless of manufacturer as part of the County's 800 MHz Radio Communications Modernization Project. This system employs end-to-end digital packet switched IP technology and Public Safety P25 protocols. Because users are not locked into one vendor the County and other agencies owning their own radio systems, will be able to leverage the existing investment in legacy infrastructure and improve interoperability across systems.

In the past few years all of the agencies have upgraded their communication systems therefore the sub-committee agreed that a phased approach would be the best course of action with the least financial impact towards achieving the end result of providing closest unit response. Elements of the three phases include:

Phase I - (Completed in 90 days)

- Update the 2004 mutual aid agreement to include language specific to "Enhanced Mutual Aid" identifying closest unit response in key areas.
- Link the radio systems of all fire rescue agencies in Miami-Dade County through a hardwire patch of communication consoles. Projected cost: \$15,000 with no recurring costs to any of the agencies.

Phase II - (Projected 1-3 year process)

- Obtain grant funding (possibly through the Assistance to Firefighters Grant) to expand communications capabilities through the purchase of "Dual Band" UHF/800 MHz handheld radios allowing unit officers to easily communicate with fire and law enforcement counterparts currently on the 800 MHz frequencies. This will allow MDFR the ability to have other municipalities frequencies in our radios.

- Purchase the necessary software to expand the current area of coverage for each system, enhance infrastructure, and increase the ease of interoperability between all public safety agencies.
- Interoperability among Fire services will be further improved by connecting directly to the IP control network while leveraging the existing investment in legacy infrastructure and improve interoperability across systems.

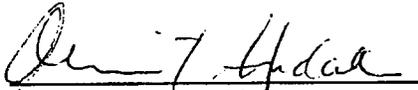
Phase III - (Projected 5-10 year process)

- Implement a standards-based shared system such as a joint CAD that allows all resources to be viewed through AVL and increase the ability to access the closest resource for a particular incident.

Phase I can be implemented with minimal cost and would provide for a hardwire link that would replace the proposed remote console links. At the MDFR Fire Alarm Office, a permanent patch will be established on the Motorola MCC 5500 consoles linking each city dispatch to the others at all times. Currently, MDFR shares radio sites with each of the municipalities and this is where the systems will connect. This link will be done without any radio frequency links and in the event of a problem or malfunction, each user on the system will be able to disconnect at their console. Within each agency's radio communication channel bank a full time patch to an Interoperability Talk Group channel would be identified. Once operational this system would allow a unit from one fire department to communicate with a unit(s) from another department without the need of dispatcher involvement by simply changing channels.

This process has begun with the initiation of Phase I and will continue for many years. The Fire Chiefs of all of the participating agencies have embraced the concept of "enhanced mutual aid" and have directed their communications personnel to accomplish the goals set forth. In this age of all hazards risks, interoperability, especially amongst fire rescue agencies is critical.

Attachments


Assistant County Manager

As Amended May 31, 1956

OPERATIONAL PLAN FOR DADE COUNTY FIRE SERVICE
MUTUAL AID ORGANIZATION

ARTICLE I. PURPOSE

- A. To provide more efficient fire protection for all of Dade County.
- B. To establish procedures for the Dade County Fire Service to be followed in the event of war or peacetime disasters or emergencies.
- C. To establish uniform operations and practices in all the Fire Services of Dade County.

ARTICLE II. MEMBERSHIP

- A. Membership shall be composed of political subdivisions of Dade County which have organized Fire Departments equipped with acceptable Fire Fighting apparatus meeting minimum requirements of the National Board of Fire Underwriters.
- B. Application for membership shall be voluntary.
- C. Membership in the Mutual Aid organization may be terminated by any member upon the expiration of thirty (30) days written notice of such termination of membership.
- D. Members may be expelled from the Mutual Aid organization for cause upon recommendation of 75% of the members of the Board of Governors and approval of such expulsion by the Legislative Bodies of 75% of the Membership of record.

ARTICLE III. REQUESTING AID

- A. Members may request aid when disaster or emergency exists within their corporate limits which cannot be controlled by the fire-fighting apparatus and man-power available within their corporate limits.
- B. The disaster or emergency and need for aid must be clear and immediate.
- C. The request for aid must be made by the Fire Chief or Acting Fire Chief or authorized subordinate of the political subdivision in which the disaster or emergency exists.
- D. Aid may be requested directly of another member, in which case the Mutual Aid Fire Dispatcher shall be immediately notified of the request and response at the earliest opportunity.

Operational Plan for Dade County Fire Service Mutual Aid Organization
As Amended May 31, 1956

- E. Aid may be requested through the Mutual Aid Fire Dispatcher stating the type or types and number of each type of apparatus required, in which case the Mutual Aid Fire Dispatcher shall dispatch the closest apparatus of the type or types requested, and immediately notify the Chiefs of all Fire Departments from which apparatus was dispatched.

ARTICLE IV. MOVE-UP OF APPARATUS

When the amount of available apparatus within a Fire Zone of Dade County is reduced because of response of apparatus from that zone on Mutual Aid calls, suitable and adequate apparatus shall be moved-up from other zones to bring the available apparatus back to the established minimum, providing that, in all cases, the distribution of available apparatus and man power shall be such as to provide the most efficient protection to all of Dade County.

ARTICLE V. COMMUNICATIONS

Dade County Mutual Aid Fire Dispatchers shall have authority to dispatch the Fire apparatus and personnel of any members of the Mutual Aid Organization to the aid of any other member of said Organization, or order move-up as provided in Article IV, subject to the following provisions:

1. The request for Mutual Aid shall be made by the Chief or Acting Chief or authorized subordinate of the political subdivision in which the emergency exists.
2. The move-up shall be ordered by the Chairman or Vice Chairman of the Board of Governors of the Dade County Mutual Aid Organization, or their authorized agent or subordinate.

Operational Plan for Dade County Fire Service Mutual Aid Organization
As Amended May 31, 1956

3. The Chief or Acting Chief of the Fire Department from which apparatus is dispatched shall be immediately notified by the Dispatcher of the action taken and conditions existing at the emergency.

ARTICLE VI. ADMINISTRATION

A. The operation of the Mutual Aid Plan shall be supervised by the Board of Governors.

1. The Board of Governors shall consist of a representative from each participating member and a chairman and vice-chairman elected therefrom.

2. The Executive Committee will consist of five (5) members of the Board of Governors to administer the Operational Plan. The Executive Committee will be elected within thirty (30) days after the organizational meeting of the Mutual Aid Plan and annually during the same month thereafter. The actions of the Executive Committee shall be subject to the approval of a majority of the Board of Governors.

3. The Chairman of the Board of Governors shall be a member of the Executive Committee and serve as its Chairman.

ARTICLE VII. LEGALITY

Nothing in this plan shall conflict with any laws, rules or regulations of any of the laws of the State of Florida or of the United States of America, and if any portion of this Plan should conflict with such laws, rules or regulations, then only that portion shall be invalid and the validity of the remainder of this Plan shall not be affected thereby.

FIRE OFFICERS' ASSOCIATION OF MIAMI-DADE

Serving our Citizens and Visitors

September 16, 2004



City of Coral Gables Fire Rescue
2815 Salzedo Street
Coral Gables, FL 33134
Richard P. Cook, Fire Chief

LETTER OF AGREEMENT FOR MUTUAL AID

City of Hialeah Fire Rescue
83 East 5 Street
Hialeah, FL 33010
Ono Drozd, III, Fire Chief

At the last two Board of Directors' meetings, the Mutual Aid Agreement was discussed. The consensus of the Directors was that the Operational Plan for Dade County Fire Service Mutual Aid Organization as amended on May 31, 1956, will remain in effect.

City of Miami Fire Rescue
444 NW 2 Avenue
Miami, FL 33130
William Bryson, Fire Chief

The Board further agreed that the plan will be reviewed on an annual basis. Any recommendations for changes will be forwarded to the Board of Directors from the Mutual Aid Sub-Committee.

The signatures below indicate agreement of the current Directors.

City of Miami Beach Fire Rescue
2300 Pinetree Drive
Miami Beach, FL 33140
Floyd Jordan, Fire Chief

Chief Herminio Lorenzo
Miami-Dade Fire Rescue

Chief Wm. "Shorty" Bryson
City of Miami Fire Rescue

Homestead Air Reserve Base
Fire Department
42nd SPTG/CEF
29050 Coral Sea Blvd.
Box 68
Homestead, FL 33039
Jake Greer, Fire Chief

Chief Richard Cook
City of Coral Gables Fire Rescue

Chief Ono Drozd, III
City of Hialeah Fire Rescue

Miami-Dade Fire Rescue
9300 NW 42 Street
Miami, FL 33178
Herminio Lorenzo, Fire Chief

Chief John C. Gilbert
Village of Key Biscayne Fire Rescue

Chief Floyd Jordan
City of Miami Beach Fire Rescue

Village of Key Biscayne Fire Rescue
560 Crandon Blvd.
Key Biscayne, FL 33149
John C. Gilbert, Fire Chief

Chief Jacob Greer
Homestead Air Reserve Base Fire Department