9/88

DISASTER PLANNING

We know that in an aircraft disaster, a large number of problems must be addressed quickly and efficiently in order to have a successful operation. Our actions must be geared to a sequence of activities which affords the greatest chance of survival to the greatest number of victims. Top priority is rescue of passengers. Fire control is almost always necessary to accomplish this. Other considerations are:

- Extrication and evacuation of survivors
- Fire suppression and extinguishment
- Control of any hazards which exist subsequent to fire extinguishment
- Medical triage to establish degree of injury and priority of treatment of survivors
- On scene stabilization and transfer to medical facilities for the seriously injured.
- On scene first aid and medical treatment for survivors with minor injuries.

The Miami International Airport Disaster Plan was developed to assure that necessary action is taken as rapidly and efficiently as possible. Fire Department personnel stationed on-field have the responsibility of setting the Plan in motion. This is done through several pre-assigned sector O.I.C.s who are continually trained and frequently tested to assure their familiarity with the mechanics of the Plan. These assignments are made according to riding positions on Airport fire apparatus.

The pre-assigned responsibilities are as follows:

Battalion #6 - (the ranking fire officer from Station #12) establishes initial fire fighting command post at the scene.

- Makes size-up and requests needed assistance
- Orders the Disaster Plan implemented
- Directs fire control activities
- Is responsible for victim extrication operations

Rescue #12 - establishes the Medical Sector at a safe distance upwind of the crash site.

- Makes an estimate of survivors and degree of injuries
- Calls needed medical personnel and supplies to the scene
- Provides instructions and directions for litter bearers, paramedics and medical personnel as they arrive at the scene.
- Assigns directors to other key areas as they are needed and as assistance from responding paramedics from off-field becomes available.

Engine #12 - The engine company Lieutenant has the responsibility for evacuating all ambulatory crash survivors to a safe area away from the disaster site. He utilizes fire fighters, any members of the flight crew who are not seriously injured and when possible, surviving passengers with minor injuries to assist in this operation.

In addition, the first arriving civilians are dispatched to the crash site and are utilized in this activity.

This is a very brief description of our Disaster Plan. The actual responsibilities of these Sector O.I.C.'s are much more extensive. While the Plan is quite detailed, it remains flexible enough to allow it to be adapted to a variety of different situations. For instance, triage of the non-ambulatory victims would take place at the crash site, prior to extrication and evacuation, if there was no continuing threat to their safety following fire extinguishment. If a continuing threat existed, they would be moved to a safe area prior to triage. This decision would have to be made on the scene.

In addition to the Sector O.I.C.'s mentioned here, others would be assigned from later arriving fire department paramedics and medical personnel.

9/88

AIRPORT DISASTER PLAN

Experts recommend that Airport disaster planning be directed to the handling of an aircraft incident involving the largest aircraft serving the airport on a regular basis. At Miami International Airport, this is the B-747 with a maximum passenger capacity of 490.

Each aircraft incident must be classified as to its severity as soon as possible on arrival of the fire apparatus. This is necessary in order to estimate the number and severity of injuries that can be expected, which is the basis upon which needed medical assistance will be called. Classifying the severity of the incident will be the function of the Battalion 6 (Incident Commander).

Many factors have a definite bearing on the severity of the crash. Four of the most critical are: (1) impact velocity, (2) crash configuration, (3) fire involvement, and (4) fuselage integrity. For example , a crash of high impact velocity and /or widespread fire involvement would be classified as severe. There would be very few survivors and these could be expected to have extremely serious injuries. A moderate severity crash would be one of moderate impact velocity and limited fire spread. With such an incident involving a B-747 carrying 490 passengers, we could anticipate a survivor rate of 50% (approximately 250 persons). Of these approximately 10% (25 persons) would have Priority #1 injuries (serious, immediate life-threatening). Approximately 20% (50 persons) would have Priority #2 (serious, but not immediate life threatening) injuries. The

remaining 175 persons (priority #3) would have minor injuries or possibly no injuries. These victims would be ambulatory and create a major problem for Fire Department personnel. In a low severity crash (low impact velocity and little fire involvement), the number of priority #3 victims would be very high, possibly 100%.

The moderate severity crash offers the greatest challenge to the total fire department operation and is the one to which we have directed our planning.

The first step in disaster planning is a realistic assessment of present capabilities. Deficiencies which are not obvious from a survey of available personnel and equipment can be quickly recognized during a mock disaster drill. This certainly is the best method for testing the effectiveness of any Disaster Plan.

The goal of the Plan should be to provide the highest level of performance that can resonably be expected with the personnel and equipment available. This will serve as a base from which to upgrade performance.

At Miami International Airport, our Disaster Plan is geared to the handling of aircraft accidents involving large numbers of victims. It could also (with some modification) be utilized in the event of a building collapse, train or bus accident, or any similar type incident.

Success of the Plan depends largely upon:

1. <u>CONTROL</u> through the use of trained, pre-assigned Sector

O.I.C.'s who are familiar with the objectives of the Plan. These Sector O.I.C's will provide the leadership and direction necessary to obtain maximum effectiveness from personnel assigned to their phase of the operation.

2. COORDINATION between the various Fire Department Sector O.I.C.'s and between the Fire Department Sector O.I.C's and other agencies.

3. COMMUNICATION between Fire Department personnel on the scene, Fire Department and other agencies on the scene, Fire Department and area hospitals, Fire Department personnel on the scene and Fire Alarm.

A minimum of fourteen (14) fire fighters will be at the scene of an on-field aircraft accident within two (2) minutes. This response will come from Dade County Fire Department, Station #12, and will consist of two (2) crash trucks (C/F/R's), one (1) Quick Response Vehicle (QRV), one (1) engine company and one (1) rescue unit. Approximately five (5) of these fire fighters will have paramedic training. An additional fifty-six (56) Fire Department personnel will respond with the Operations (off-field) "Airport" assignment (See Section VII, page 4 for explanation of differences in response for assignments), and will be at the scene within fifteen (15) minutes. Of these, at least twelve (12) will be paramedics. All Dade County fire fighters have advanced first aid training, with most having first level EMT training as well. In most cases requiring an Airport assignment, it is the personnel aboard fire apparatus rather than the apparatus itself which will be

needed at the scene. Off-field units respond to rendezvous point(s) designated by the Airport OIC. From there, they are brought to a near-the-scene staging area. This staging area must be near enough to the crash site to allow personnel to respond on foot and remote enough to avoid cluttering the crash site with unneeded fire apparatus. The rendezvous points are equivalent to Level I staging and the "near-the-scene" location is equivalent to Level II staging.

Our plan of operation evolves as follows:

Step 1:

Control of fire or other hazardous conditions which pose a threat to survivors. This will be accomplished by the two C/F/R's, the QRV and the engine company from Station #12. Battalion #6 will direct this operation utilizing personnel and equipment from the Operations assignment as needed.

Step 2:

Establishment of the Medical Sector by Rescue #12. The Medical Sector OIC (Rescue #12 Lieutenant) notifies the Dade County Med-Com office of the estimated number and severity of injuries and requests additional medical assistance as indicated by his size-up. The Disaster Van from Station #12 will be brought to this location. All responding paramedics and fire fighting personnel not needed at the crash will report to the Manpower Sector to assist in the handlinig of the injured. One paramedic assigned to Rescue #12 will handle communications between the Medical Sector and Fire Alarm, the Command Post and area hospitals. The other paramedic will act as the Medical Sector O.I.C.'s aide.

Step 3:

Removal of the ambulatory injured from the danger area will be accomplished utilizing Fire Department personnel, personnel from other agencies (M.D.P.D., M.D.A.D., etc.), civilians and any members of the flight crew who are able to assist in this activity. A pre-assigned Sector OIC (E-12 LT) will establish a Holding Area for these victims and supervise their removal to this area. Controlling the fire and removing ambulatory survivors will present the largest immediate problem for the Fire Department. Most disaster plans seem to ignore or minimize the problem of ambulatory survivors, probably assuming they will not have serious injuries. While this may be true in most cases, removal of a large number of people to a safe area will require a considerable number of trained personnel. A maximum of three (3) fire fighters will be immediately available for this work (including the Sector OIC). Assistance from other agencies is a must. A large number of civilian employees at M.I.A. have received basic first aid instructions which include handling and moving injured persons. These employees have standing orders to report to the Medical Sector when an aircraft crash occurs. They can be utilized to assist with the removal of the ambulatory survivors and teamed with fire fighters to carry litters.

Step 4:

Primary triage of the injured at the crash site will be started as soon as off-field paramedics begin arriving. It should be noted here that triage should take place at the crash site only when all hazardous

conditions have been controlled. If a continuing threat to survivors exists subsequent to fire extinguishment, victims must be moved out of the danger area as quickly as possible, prior to any triage taking place. The determination as to where triage will be performed will have to be made at the scene. We expect a minimum of twelve (12) paramedics within fifteen (15) minutes (from the Suppression Division assignment), six (6) of these within ten (10) minutes. All these and some later arriving paramedics would probably be initially assigned to triage.

We would expect to have 50-75 non-ambulatory, Priority #1 and Priority #2 survivors at the crash site in a moderate severity crash of a fully loaded 747. It is essential that primary triage consist of surveying and classifying victims as quickly as possible, treating only those injuries which are immediately life-threatening. Any treatment (bandaging, splinting, IV's, etc.) which can be delayed, should be postponed and carried out at the Stabilization Area prior to transport. This will enable the paramedics to more quickly triage all victims. If treatment (such as splinting) of a non-life-threatening injury is necessary prior to movement of the victim to the stabilization site, this should be noted on the triage tag and carried out after all non-ambulatory victims have been triaged.

Estimating two (2) minutes per victim to perform primary triage, it will require 150 man-minutes to triage 75 victims. With the first six (6) paramedics beginning triage at +12 minutes, nine (9) victims will have been triaged after fifteen (15) minutes. With six (6) additional

paramedics on the scene at +15 minutes, a total of thirty-nine (39) victims will have been triaged after twenty (20) minutes. With another six (6) paramedics at the site at +20 minutes, primary triage of 75 non-ambulatory victims can be completed by a total of eighteen (18) paramedics in twenty-five (25) minutes. Based on these figures and the fact that a minimum of eight (8) additional paramedics will be available from Fire Department apparatus other than rescue units, the number of rescue units required can be estimated by totalling the estimated number of Priority #1 and Priority #2 victims and dividing that total by nine (9). This assumes three (3) paramedics per unit and provides one (1) paramedic for each three (3) victims. It should be remembered that there will also be a need for triage in the Ambulatory Injured Holding Area. The eight (8) paramedics not assigned to rescue units can be utilized in this area, with minor injuries being treated by EMT's 120's and personnel trained in advanced first aid. In a crash with a total of 75 Priority #1 and Priority #2 victims, nine (9) rescue units would be needed, excluding the unit serving as the Medical Sector Command Post (75 - 9 = 8.33 or 9 units). Six (6) rescue units are dispatched on a first alarm "Airport" assignment. The Medical OIC would have to call for an additional three (3) rescue units. This formula is suitable for determining the <u>minimum</u> number of rescue units required in such a situation. If additional units were available, they would, of course, be utilized.

<u>Step 5:</u>

Movement of triaged victims from the crash site to the Stabilizaiton Area will begin at approximately +20 minutes. We should have eight (8)

fire fighters (four two-man teams) available to act as litter bearers at this time. Thirty (30) fire fighters (fifteen teams) will be available at +30 minutes.

Tests reveal that it requires three (3) minutes for a team of litter bearers to move 100 yards to a victim, place the victim on a litter and return. Subsequent trips will require more time as the litter bearers become fatigued. This is extremely strenuous work and it should be remembered these fire fighters will have been involved in fire fighting, evacuation and extrication activities prior to serving as litter bearers. If only the thirty (30) fire fighters available are used for this function, each man will be required to make at least five (5) trips. This is excessive. If non-Fire Department personnel (Security, M.D.P.D., ambulance attendants, civilians, etc.) are available, the Medical Sector OIC should utilize these people to reduce the number of trips per man. If at all possible, four-man litter teams should be employed. Each team should have one person skilled in the handling and movement of injured patients. The risk of injury (sprains, strains, etc.) to personnel involved in this activity is very high. The utilization of four-man teams will greatly reduce this risk. Two-man teams should be used only if necessary due to delayed arrival of assistance. Four-man teams should be considered standard. Estimating five (5) minutes for the movement of each patient and beginning at +20 minutes, the first eight (8) victims will be at the Stabilization Area at +30 minutes. At +40 minutes, a total of thirty-eight (38) victims will have been moved; this includes all twenty-five (25) Priority #1 victims. At +55 minutes, all seventy-five

(75) non-ambulatory victims will have been moved to the Stabilization Area. Or transport (to hospitals) of these victims is anticipated. These time estimates are based on the use of two-man litter teams.

Step 6:

Secondary triage and stabilization of patients prior to transport to hospitals. Upon completion of primary triage at the crash site, paramedics will report back to the Medical Sector. A Stabilization Sector will have been established and Sector OIC assigned (by the Medical Sector OIC) to supervise activities in this area. After primary triage is conducted at the crash site, victims will be brought to the Stabilization Area by litter bearers. The Stabilization Sector OIC will instruct these personnel and supervise their activities. Two separate areas will be established, one for Priority #1 victims and one for Priority #2 victims. Medical assistance six (6) doctors and three (3) nurses should begin arriving at the Manpower Sector at about the same time the first victims arrive from the crash site (approximately +25 minutes). They will immediately begin preparing the Priority #1 victims for transport. Working in teams of two (2), it will take approximately ten (10) minutes to evaluate and prepare each patient for transport. At +25 minutes, primary triage should be completed at the crash site and approximately eighteen (18) paramedics so occupied will become available to assist at the Stabilization site. This provides a total of thirteen (13) teams attending patients in this area. It will require approximately 250 team-minutes to prepare all Priority #1 victims for transport. The first four (4) Priority #1 patients should be ready for transport at approximately +35 minutes (stabilized by

M.D./nurse teams). An additional thirteen (13) Priority #1's at +45 minutes. The remaining eight (8) Priority #1's and five (5) Priority #2's at +55 minutes. Approximately forty (40) additional minutes will be required before all the remaining Priority #2's are prepared for transport. The important point to consider here is that all Priority #1 victims should be stabilized and transported in under fifty-five (55) minutes.

Randle Eastern Ambulance informs us they can provide ten (10) ambulances within fifteen (15) minutes and a total of at least twenty (20). It should be realistic to expect fifteen (15) ambulances on the scene at +30 minutes. Therefore, ambulance transport should be available for the first thirty (30) patients including all twenty-five (25) Priority #1's as soon as required. Estimating a thirty (30) minute round-trip to the nearest hospitals, twenty (20) ambulances should prove adequate for the 75 Priority #1 and Priority #2 patients with no delay in the transport of Priority #1's and very little delay for any patients requiring emergency transport. In addition to land transport vehicles, helicopters will also be utilized for victim transport.

To assure transport on a priority basis and avoid overloading hospitals, a Transport Coordinator (or Load Master) must be assigned to supervise this activity.

This operating plan has been tested through four (4) large scale simulated aircraft disasters (*). In the first, third and fourth drills, triage was conducted at the crash site. In the second,

victims were moved to a safe area prior to triage. All four drills were quite successful, the time and personnel requirement estimated in the Disaster Plan proved to be accurate. Of course the plan is revised at least to a small degree, following each drill. This enables us to take full advantage of the lessons learned from each exercise.

* Operation "Alpha" - November 1979
  "Beta" - January 1981
  "Echo" - May 1985
  "Foxtrot" - November 1986

BOMB THREAT

Bomb threats occur frequently at Miami Internatinal Airport. While the overwhelming majority turn out to be nothing more than threats, all must be considered valid until proven otherwise.

All fire fighting personnel assigned to Miami International Airport should be familiar with the "Airside Bomb Threat procedures" on the following pages, especially those sections relating to Fire Department function.

Threats made against airborne aircraft are treated as Alert II emergencies with appropriate runway stand-by of Airport Fire Division apparatus. After the aircraft lands and is escorted to the isolation area, the normal "Aircraft Threat - Operational Procedures" are followed.

The aircraft isolation areas in which bomb searches are conducted are usually referred to as "Penalty Boxes".

There are two designated isolation areas (see map at end of this section) at M.I.A. The #2 area is used when #1 is already occupied or otherwise unusable.

AIRSIDE BOMB THREAT PROCEDURE
MIAMI INTERNATIONAL AIRPORT

(Revise copy-
Effective September 1, 1980

GENERAL

This procedure is applicable in the event a "bomb scare" or threat involving any aircraft on the ground or airborne which is scheduled to arrive at or return to this facility, or any threat to airport facilities at M.I.A. It establishes procedure necessary to cope with the problem, including necessary safeguards, with minimal disruption of normal operations.

THREAT EVALUATION

Bomb threats generally can be classified in three categories:

1. Specific threats involving an aircraft or group of aircraft.
2. Specific threats involving a building structure or structures.
3. General threat with no specifics given.

All threats, other than those too general to justify reaction, shall be considered valid until proven otherwise. Notification, responsibility, search, evacuation and reporting shall be performed in compliance with the following procedures. Consideration will be given to the evaluation of the airline, tenant or occupant involved as to the need for a search; however, under all circumstances, the Fire Commander may overrule a decision to eliminate or limit a search.

AIRCRAFT THREATS

Notifications:

When a threat is received or otherwise initiated, the person, airline or agency receiving the call will immediately notify the F.A.A. Control Tower (526-2785) and the Airport Police Office (871-7373). Before making any notification, the Police Department will check with the Control Tower to assure their having knowledge of the threat. The Police District Officer will then notify M.D.A.D. Operations (871-7358), Fire, the airline and F.B.I.

SUCCESSION OF RESPONSIBILITY

While airborne and until parked at the designated search location, the aircraft pilot in command shall be the individual responsible. At the parked aircraft position, the following shall be the succession of responsibility:

1. Fire Commander
2. Airport Police Division
3. Airline Representative
5. M.D.A.D. Operations

Additionally, full cooperation is to be extended by all agencies to the following in conjunction with the performance of their responsibility concerning the safeguard of personnel or property:

1. U.S. Post Office

2. Cargo and Express Handling Companies

AIRCRAFT PLACEMENT

The Airport Division Fire Chief or his designated representative, referred to in this procedure as the Fire Commander, will determine if the affected aircraft is to be moved to the designated aircraft search area, if action to appropriately position it has not already been taken.

SEARCH PROCEDURE

Arriving or Returning Aircraft

Evacuation & Baggage/Cargo Handling Upon arrival at the aircraft isolation location, the passengers and crew shall be expeditiously unloaded using airstairs, self-contained stairs, (or at pilot/ airline discretion, emergency chutes, if circumstances so dictate) and loaded into buses for transport to a safe area, preferably the Airport Terminal Building. Baggage will be unloaded onto bag trains and transported to Building #1043 for inspection and release. Cleared baggage shall be transported to the relocated aircraft or the Terminal Building as appropriate.

Aircraft at Gate Position - Parked Aircraft

Baggage on-Board the Aircraft

Baggage will be removed from and transported to Building #1043 by airline personnel as directed. All baggage to be checked by Metro

Dade Police Explosive Detection Canine Team. Any suspect baggage will be checked by the Metro Dade Police Dept. Bomb Squad.

Baggage Not On-Board Aircraft

Baggage not in the possession of the airline at the time of the threat will be searched by the Metro Dade Police Dept. Explosive Detection Canine Team, in the baggage make-up area as it is checked in, unless directed by the Fire Commander that baggage is to be relocated to Building #1043 due to the nature of the threat or conditions existing at the time.

Baggage in the possesion of the airline at the time of the threat will be transported to Building #1043 and checked by the Metro Dade Police Explosive Detection Canine Team.

DUTIES AND RESPONSIBILITIES

Airport Fire Division

1. In cooperation with M.D.P.D. Airline and M.D.A.D. Operations, determine location required for inspection of aircraft and baggage.
2. Direct the required number and types of emergency fire equipment to the scene and stand-by until emergency is cleared by M.D.P.D.
3. Deploy Fire-Rescue equipment at the scene for coverage until the emergency is completed.

Metro Dade Police Department

1. Coordinate with senior airline representatives and Fire

Commander regarding conduct and search.

2. Assume full responsibility for and activate search of aircraft, baggage and cargo, utilizing M.D.P.D. Explosive Detection Canine Team.
3. In coordination with Fire Commander, take additional action necessary to assure that inspection is carried out in a safe and orderly manner.
4. Ensure that M.D.P.D. Bomb Squad is notified, responds and conducts search if suspicious object is found.

Airline

1. Confer with Fire Commander and M.D.P.D., O.I.C. regarding positioning of aircraft and inspection requirements.
2. Move aircraft to designated inspection area. Assist in search by opening all inspection plates and other concealment areas. Shut down air conditioning units in aircraft prior to arrival of canine unit (s).
3. Direct removal of passengers, baggage and cargo from aircraft and transportation to established locations. Request all hand luggage be removed from aircraft by exiting passengers and crew.
4. Make arrangements for necessary number and types of ground handling equipment to off-load and transport passengers, baggage and cargo.
5. Coordinate search of baggage and cargo with Metro Dade Police Department.
6. Coordinate search of aircraft with Metro Police Department.

7. Upon completion of search and release of aircraft and baggage, transport same as required to resume normal operation. If international arrival flight, transport baggage to Customs.
8. Remove aircraft and ground handling equipment from inspection area.

Metro Dade Aviation Department - Airside Operations

Upon determination that inspection will be made of the aircraft, baggage, etc., remote from the Terminal, the Ramp Control supervisor shall:

1. Dispatch Ramp Unit to open Building #1043.
2. Dispatch additional Ramp Unit to search area.
3. Allow no buses or ramp equipment to proceed to or leave designated aircraft search area without radio contact with F.A.A. Tower or M.D.A.D. Security or Operations escort.
4. After baggage search, coordinate escort with ramp cars. Allow no vehicles to proceed from Building #1403 without clearance through Operations for radio escort.
5. Secure Building #1043.

Metro Dade Aviation Department - Ramp Control

The airfield Supervisor, upon being notified of a bomb threat involving an airborne aircraft, will perform the following:

1. Advise all ramp cars by radio to stand-by for all instructions.

2. Contact the Operations Division of airlines concerned and ascertain if escort is needed for movement of ground handling equipment. If escort is needed, dispatch ramp car.
3. If appropriate, moblize M.D.A.D. buses. In coordination with airline, establish location to which Passengers are to be transported.
4. If necessary, order ramp vehicles to the North gate to escort supplementary buses to the aircraft search area.
5. Upon the aircraft reaching the designated search area, all passengers will be off-loaded onto buses under the control of the airline representatives, for transport (under escort) to the designated location in the Termianal. Baggage will be off-loaded and transported to building #1043 where it will be searched.
6. Inform Office of Assistant Director of Operations.
7. Assist Metro Dade Police Department and Fire Department at scene as required.
8. If aircraft is an international arrival, Customs will be notified. Passengers will be transported under escort to the base of Concourse E for entry into immigrations, Public Health and Customs.
9. When the Fire Commander has confirmed the the aircraft under search has been cleared, initiate movement of the aircraft from the inspection area.
10. Direct ramp cars to escort all ground handling equipment buses, etc., back to the Terminal.

STRUCTURE /FACILITY THREATS

Notification

Whenever a threat is received involving a structure or facility the person receiving the threat should IMMEDIATELY notify the Airport District Police Office (871-7373). The Police Officer receiving the call will then make the following notifications:

1. Airport Fire Commander - (871-7070)
2. F.A.A. Traffic Control Tower - (526-2785)
3. Tennant/Occupant
4. M.D.A.D. Landside Operations - (871-7447)
5. M.D.P. Bomb Squad (called only by Canine Unit, as needed).

D.C.A.D. Landside Operations will then notify:

1. M.D.A.D. Terminal Operations Office (871-7415)
2. M.D.A.D. Airside Operations - (871-7358)
3. Public Service Coordinator, M.D.A.D. - (871-7017)
4. U.S. Alcohol, Tabacco, Firearms Agency - (536-4368)

SUCESSION OF RESPONSIBILITY AND SEARCH PROCEDURES

1. Senior M.D.P.D. Officer

   A. In cooperation with the Dade County Aviation Department establish need for evacuation

of area to be isolated.

B. Coordinates searh activities in all instances. If no explosion has occured and a real device is located, the senior officer remains in command until arrival of M.D.P.D. Bomb Squad.

2. M.D.P.D. Bomb Squad

Upon arrival at scene, takes over command of the scene from other M.D.P.D. elements who will assist the squad wherever possible. M.D.P.D. Bomb Squad is normally called to the scene only in the event of an explosion or a suspected device is found.

3. M.D.A.D. Operations

Assists M.D.P.D. by providing personnel and equipment in carrying out area evacuation, area isolation and other necessary tasks.

4. Fire Department

Stands by with emergency units and equipment until areas secured.

SEARCH AND EVACUATION PROCEDURES

Search - Terminal

General Area

If a threat is received regarding an explosive device which does not specify a particular office or point in the Terminal or other structure, a general public area search will be initiated. The Terminal Operations detection teams will be

utilized to check for an explosive device, primarily in public lockers, while the M.D.P.D. Canine Team(s) will check rest rooms and waste receptacles and unmanned ticket counters. All personnel should be alert for suspicious objects and report same to M.D.P.D. if found.

Specific Location

If a threat is received for a specific location within the Terminal Building or other structure, an immediate search will be conducted as determined by M.D.P.D. using the Explosive Detection Canine Unit. If the Canine Unit is not immediately available, the Terminal Operations detection team will survey that location, pending the arrival of the Canine Team(s). If an object is detected of a suspicious nature, it must be left isolated and undisturbed until arrival of the Canine Team or Bomb Squad.

Suspicious Item

If a Terminal Operations detection team finds a suspicious item which indicates a possible explosive device, it should be isolated, and the M.D.P.D. Canine Team will be used to confirm or refute the finding. If confirmed, notify the Bomb Squad.

Explosive Device

If an actual device is found, the area around the object will be secured and evacuated by M.D.P.D. pending arrival of the

Bomb Squad. UNDER NO CIRCUMSTANCES is any actual explosive device or suspicious item to be moved or an attempt made to remove the item by anyone other than a merber of the M.D.P.D. Bomb Squad.

Evacuation Procedures - Main Terminal Building

Terminal Lobby

If a live bomb is found or reason to believe a live device is present in the Terminal Lobby, a decision will be made by M.D.P.D to evacuate/not evacuate. If the decision is made to evacuate, areas to be evacuated will be those directly adjacent to, above and below the suspect area as well as related sidewalks and driveways. A bomb removal route will be selected, cleared and cordoned off, in order to provide easy access from the site to the removal vehicle.

Terminal Concourses

Passengers in the concourses will be directed to return to the Terminal Lobby and the concourse sealed off for search procedures. Employees in lower and upper levels will use appropriate exits to the Lobby or ramp areas. Here too, a bomb removal route will be selected, cleared and cordoned off. Should an explosion occur before evacuation can take place and normal routes to the Terminal Lobby are blocked, uninjured passengers and other personnel still in the concourse will be evacuated via stairways to lower doors then via the ramp to the lobby. Injured persons will be removed

via stairways to the A.O.A. into emergency vehicles and the to medical facilities. This evacuation will be under supervision of the M.D.P.D., assisted by on scene Fire-Rescue, Security and Operations personnel.

Aircraft at Loading Gates

At the direction of the Fire Commander, D.C.A.D. Airside Operations, in coordination with airlines having aircraft located at gates in the vicinity of a suspected explosive device, will evaluate conditions and take appropriate action to relocate aircraft, associated fuel trucks, etc., to secure locations. This will be contingent upon the location of the bomb and the time element involved if sufficient warning is given.

Search and Evacuation Procedures - Other Structures

Search

The ranking representative of an affected office building, hanger or any other structure, will consult with the Senior M.D.P.D. officer to determine if and how an evacuation will take place. The M.D.P.D. will assist in the evacuation and will provide crowd control and cordoning off of the affected structure.

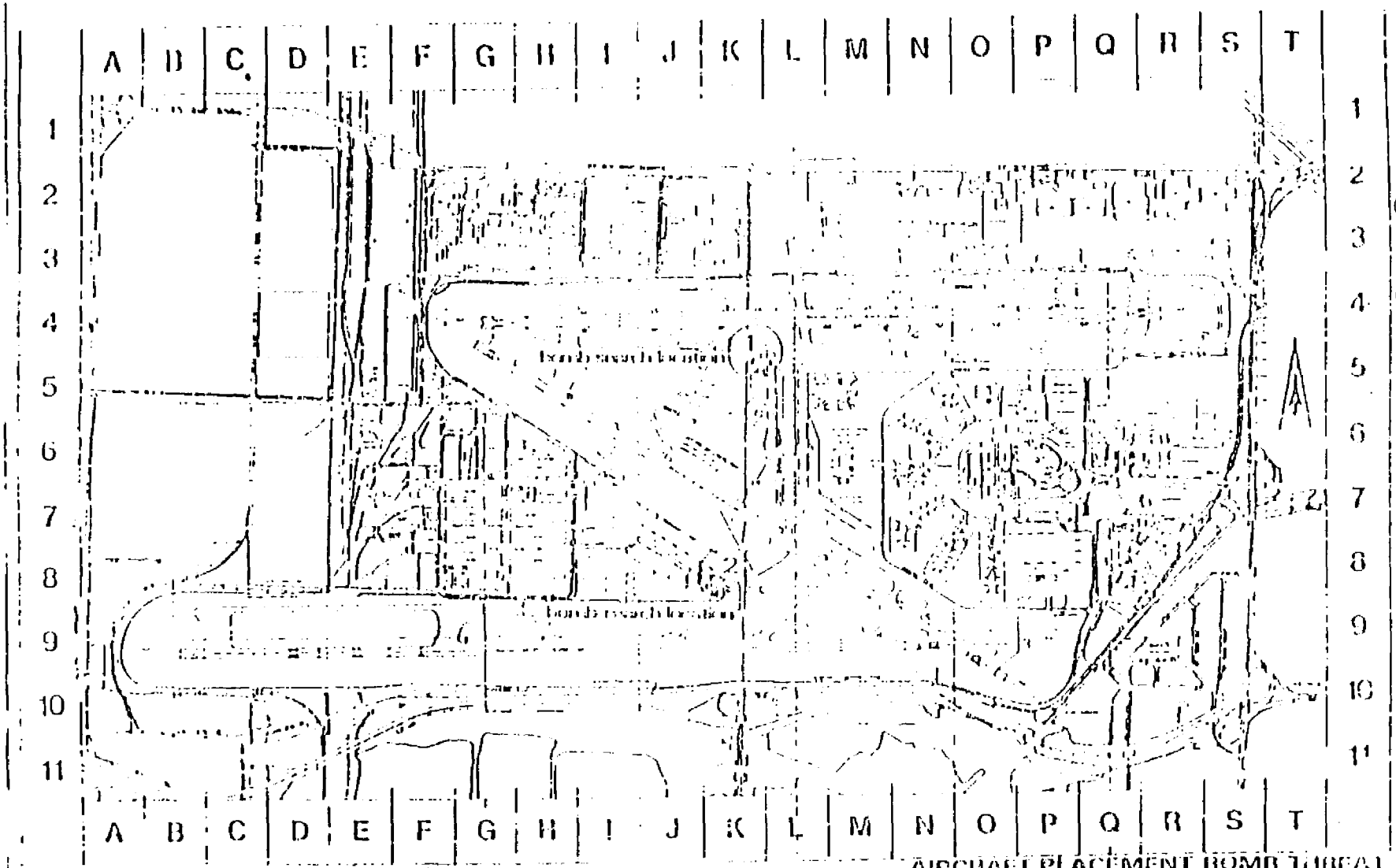
Evacuation

If a building is evacuated, personnel will be moved to a safe

location at least 100 yards from the "bomb" site, under control of M.D.P. The tenant/occupant has the responsibility of searching the affected structure under supervision of the M.D.P.D. and with the stand-by assistance of the Fire Department personnel.

Reports

Metro Dade Police and Fire Department will submit a full report of any bomb threats to the Assistant Director of Operations, Dade County Aviation Department. Additionally, Terminal airside and Landside Operations personnel will submit reports of their activities and observations through the Operations Supervisor to the Assistant Director of Operations. Reports will be consolidated and maintained in the office of the Assistant Director of Operations, M.D.A.D.. All such reports will be submitted as soon as possible but in no case later than 24 hours following the incident.



MIAMI INTERNATIONAL AIRPORT
METRO DADE AVIATION DEPARTMENT

AIRCRAFT PLACEMENT BOMB THREAT
AUGUST 1990

EXHIBIT 10.3.B

AIRPORT DIVISION HURRICANE PROCEDURES

The Airport Fire Division must comply with hurricane standard operating procedures as they apply to the Aviation Department as well as guidlines established under Fire Department Administrative Order No. 6-82.

The standard operating procedures as they apply to the Airport Fire Division are as follows: Each shift commander shall review with all personnel Administrative Order No. 6-82 as well as this memorandum, with attachments, to insure each man is familiar with his individual responsibilities, pre-hurricane and post-hurricane.

HURRICANE WATCH: Possible dangerous conditions within 24 to 48 hours. Personnel on-duty will conduct an inspection tour of M.D.A.D. and tenant lease properties, making note of all loose material or hazards which must be secured or removed for hurricane preparedness. The tenant or occupant is to be advised of his obligation to make necessary corrections and the Maintenance Division is to be copied on hazards noted. Medical supplies are to be inventoried and ordered as needed (station Standard).

HURRICANE WARNING: Winds of up to 74 m.p.h. (64 knots) can be expected within 12 to 24 hours. Wood cutting blades shall be placed on our K-12 ring saws and each vehicle subject to response off-field is to be equipped with a saw. Each vehicle is to be equipped with at least 50-feet of 3/4" rope.

Fire station shutters will be secured. Those windows which do not have shutters will be reported to Maintenance so they can provide protection for same (this includes Stations #12, #25 and Chief's Office).

Loose debris must be picked up or secured, drill pit area must be checked to insure security, 55-gallon drums (if empty) must be filled with water, foam drums in the storage lot must be properly checked , spare and support vehicles are to be moved inside or provision made to store them in the Maintenance Garage.

Auxiliary generators must be positioned to provide power, lighting and ventilation for the Watch Office in the event of auxiliary power failure.

All apparatus and specialized equipment fuel tanks are to be filled and serviced as well as auxiliary fuel tanks. When vehicles are topped off with fuel, they are to have the ignition systems water proofed at the same time. Maintenance will provide this service at the M.D.A.D. gas station.

All hand lights and emergency lighting are to be tested and spare batteries for hand lights are to be kept on hand.

Secure Building #1043. Provide for food and water for on-duty personnel and plan for sleeping additional personnel should the need arise. Overtime personnel shall make provisions for their own eating and personal requirements.

AID STATIONS

The Airport Terminal building serves as a shelter area during hurricanes. However, it is not normally designated as such to the general public during initial notification of shelter locations. This procedure is followed because it is impossible to determine in advance how much space will be required to meet the needs of stranded travelers. Any remaining space of course, will be made available to alleviate overcrowding in other shelters.

In an effort to provide the best emergency medical coverage possible under these conditions, it has been deemed necessary to set up two (2) Aid Stations at the Terminal. Each Aid Station is to be manned by two (2) Fire Department E.M.S. trained personnel. Minimum qualifications must be at least one (1) state-registered Paramedic II with department protocols. The other may be a state-registered EMT I. At least one of the personnel assigned must be Spanish-speaking in order to effectively communicate with the Latin community members.

The locations to be utilized for these Aid Stations, are:

No. 1 at the Northwest Airline VIP Lounge, Concourse G, and

No. 2 at the Eastern Airlines VIP Lounge, Concourse D.

Two (2) supply boxes have been developed for each Aid Station. One box is the large military type which is intended to stay at the Aid Station. The other is a medical/triage type which can be carried by a paramedic when it is necessary to respond away from the Aid Station.

These four (4) boxes are stored on the Disaster Van.

Each large box contains a copy of the hurricane preparedness S.O.P. and an inventory list of supplies required to set up the Aid Stations. The inventory also indicates where supplies not already pre-packed in the boxes are available. Additional supplies, if needed, will be available at Station #12.

After the emergency period has passed, those personnel assigned to the Aid Stations must see that all supplies, equipment, reports, etc., which were used at the Aid Stations are returned to Station #12 prior to their release from duty.

MANNING

For hurricane operations, the following minimum manning table has been established:

Battalion Commander:	1 Captain/1 Fire Fighter (Aide)
QRV #8:	1 Lieutenant/1 Fire Fighter
Rescue #12:	1 Lieutenant/2 Fire Fighters
Engine #12:	1 Lieutenant/3 Fire Fighters
Foam #4:	3 Personnel
Foam #5:	3 Personnel
Aid Station #1:	2 Personnel (1 Lieutenant/1 Fire Fighter)
Aid Station #2:	2 Personnel (1 Lieutenant/1 Fire Fighter)

This constitutes a 20-man minimum. No one is to ride alone during the emergency period. On-duty personnel are to be augmented by overtime personnel as needed.

Airport Fire Division staff assignments for hurricane duty are as follows:

Division #6 and Training Offier - M.D.A.D. Command Post, Fourth Floor Conference Room, Airport Terminal.

A.P. Staff #1, A.P. Staff #2, A.P. Inspectors #1 and #2 - Station #12. Staff personnel assigned to Station #12 will be assigned to apparatus and count towards the minimum manning requirements.

Each Battalion Commander shall compile a list of personnel who are desirous of volunteering for hurricane duty. These lists are kept with the Commander's copy of his hurricane preparedness memo to assist with an expeditious call-back of supplemental personnel.

Any overtime personnel necessary to augment the on-duty force should be called in when gale winds of 60 m.p.h. or more are expected within two (2) hours.

Work to set up the Aid Stations should begin approximately four (4) hours in advance of forecast gale winds of 60 m.p.h. and be manned upon Civil Defense announcement of shelter areas.

GENERAL INFORMATION
AIRCRAFT FIRE FIGHTING

(A) Protective Clothing:

Our aluminized gear and hoods are primarily effective for radiant heat protection and are in no way to be confused with entry gear. Repeat: Our gear is strictly proximity-type and not designed for fire entry. Use of the hoods in no way precludes the need for self contained breathing apparatus. We are highly susceptible to flash fires and their inherent hazards, thus the S.C.B.A protects us in flash fire situations as well as smokey and toxic atmospheres.

(B) Required Water Quantity Based Upon Foam Concentrate:

F.A.R. 139 requirement for water quantity and discharge rate for apparatus is determined by aircraft fuselage length and width. The water quantity is based upon two separate foam concentrates (AFFF or Protein Foam) and theoretically provides the capability to extinguish 90% of the "practical critical area" in one minute or less with enough reserve to maintain control of the rescue area after extinguishment. "Practical critical area" = "The area around the fuselage".

(C) Major Considerations:

1. Water: Judgement of the Driver-Operator is extremely important to the overall operation due to our temporarily limited water supply, i.e., until a supply line can be layed into them. An assessment of the location and magnitude of the fire area must be made and

personal observation of progress being made is going to determine the need to use single or double barrel turret operation.

Perimeter fires nor immediately endangering the aircraft or personnel may need to be temporaily ignored until evacuation is completed in order to conserve water and agent. This helps ensure the reserve capability necessary to maintain integrity of the fuselage and adequate rescue paths. Handlines must be a major consideration as part of this task.

2. AFFF Agent carried on Foam #4 and Foam #5 is sufficient for approximately two tanks of water. AFFF is mixed with water at a proportion of 6% (6 gallons of concentrate to 94 gallons of water). Each 6 gallons of AFFF concentrate then produces 100 gallons of foam solution after proportioning. 410 gallons of concentrate will produce 6833 gallons of solution. Two tanks of water equals 6340 gallons. Approximately 190 gallons of AFFF concentrate is required for each full tank of water .

6 gallons AFFF concentrate + 94 gallons of water = 100 gallons of foam solution.

190 gallons AFFF concentrate + 2980 gallons of water = 3170 gallons of foam solution. (1 tank)

410 gallons AFFF concentration + 6423 gallons of water = 6833 gallons of foam solution. (2.15 tanks)

3. Approach: Whenever possible, our approach should be from upwind in

order to use the wind to our advantage when applying agent and utilizing the advantage of wind assistance against ensuing convected heat and smoke. When this is not possible or practical, extreme care must be taken due to the high probability of obscured vision. Depending on the type (severity) of the incident, there may be many passengers evacuating the aircraft and a good probability of some who may have been thrown clear of the primary wreckage site. The prime consideration in spotting your unit is to insure your ability to protect the fuselage and evacuation routes from flame impingement. Consideration must further be given to utilizing the booster line to secure evacuation routes and reach those areas difficult to effectively control with the turrets.

4. Entry: When it is necessary for us to assist in providing evacuation openings from the aircraft, the prime sequence to consider is (in order of performance):

    1. - Main entry doors
    2. - Emergency exit doors
    3. - Cutting openings in the fuselage

5. Evacuation: Thought must be given to what will most probably be happening inside the aircraft in preparation to evacuate. Care must be taken not to spot units immediately adjacent to main exit doors from which evacuation may take place, so we will not inadvertenly block or deflect evacuation chutes. We could expect the use of over-the-wing exits as well. We must be prepared to

assist people off evacuation chutes and direct them to a safe place. A back-up booster line should be pulled whenever possible to protect the integrity of these evacuation chutes and escape routes.

LEGAL LIABILITIES

Although we are considered authorities within our field by virture of our training and recognized C/F/R status, we are still bound by some legal liabilities concerning our actions.

The actions we take must be considered prudent and resonable. What does this really mean? First, we must understand the definitions.

1. Prudence: The ability to govern and discipline oneself by the use of reason, skill and good judgement in the use of resources. The use of caution or circumspection (limits or boundaries) as to danger or risk.

2. Prudent: Showing prudence - marked by wisdom or judiciousness (characterized by sound judgement) - marked by circumspection.

3. Reasonable: Not extreme or excessive - possessing sound judgement.

Bottom line being, we must exercise good judgement in all actions that we take on the emergency scene.

Example: After fire fighting activities are under control, we discover some seriously injured but alive victims trapped under a large piece of wreckage broken loose from the aircraft. We are physically (manually)

PRESERVATION OF THE SCENE

Even though our primary function is rescue, control and extinguishment on the scene of the aircraft incident, we also have an inherent responsibility to preserve the accident scene for the F.A.A and N.T.S.B.

This includes attempting to identify where specific victims were found, leaving wreckage which is scattered, where it lies and in general, leaving the scene as close to being as we found it as we can. Certainly this does not preclude us from moving something to extricate victims (DOA's exspected) or when necessary for final extinguishment or to secure a hazard. We do need to try and identify how something we moved was originally found. Pictures and video tapes (when possible) are a great aid, sketches are helpful also.

To help fulfill our responsibilities of scene preservation, we will need the assistance of Police, Ramp personnel and others.

AIRCRAFT FAMILIARIZATION

Ninety-five percent of the scheduled passengers passing through Miami Internation Airport between Spetember 1979 and June 1984 traveled on one of these eleven types of aircraft:

Air Bus - A-300

Boeing - B-727, B-737, B-747

British Aircraft Corporation - BAC-111, Concord

Douglas - DC-8, DC-9, DC-10

Lockeed - L-1011

Martin - M-404

Students should study the following diagrams and information concerning these aircraft and become familiar with:

A. Passanger capacity

B. Exit locations (normal and emergency)

C. Entry procedures (normal and emergency)

D. Fuel cell locations and quantities

E. Battery locations and disconnect procedures

F. Fuel shut-off procedures

Additional related information can be found on I.F.S.T.A. #206, pages 180 - 193 and 218-224.

unable to lift the wreckage to remove and treat them.

If we were able to muster up a crane, tow truck or trucks, or perhaps a forlift and made every effort to properly secure, by chain or cable, the wreckage to lift it off the victim and it slipped and contributed to the severity of injury, our action would surely be preceived to be prudent and reasonable. Of course, we have to consider initialy the severity of injuries, related hazards and potential time constraints.

In the same circumstances, if we hooked up a chain to the wreckage and tried to pull it off the victim, this would be neither prudent nor resonable and would surely open us to potential legal liabilities.

Again, bottom line is a good assessment of the situation. And available resources, time constraints regarding availability of these resources, potential additional associated hazards and then a prudent and resonable decision made on which course of action to take.

Another example is the incident involving an extrication from a DC-6 in Los Angeles. A K-12 saw being used ignited gasoline fumes due to hot metal sparks and severely burned and killed several firefighters. If a stream of cooling water from a booster line, accompanied by a couple of 1 1/2" back-up lines had been utilized this would have certainly been more prudent and reasonable and the catastrophy may have been prevented.