



“Fire Prevention Conference 2005”

Keflavik , Iceland

April 8th, 2005

“Aircraft Incidents -
The Fire Service's and Rescue Teams Approach”

' The Top Ten Problems Of Air Crash & Airport Emergency Incident Management'



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THE RISK IS REAL

- IT CAN HAPPEN *ANYTIME OR ANYWHERE*.....



ARE YOU **REALLY**
PREPARED FOR THIS ?



AIRCRAFT EMERGENCIES



AIRCRAFT FIRES



AIRCRAFT CRASHES



HANGER & TERMINAL FIRES



AIRPORT FUEL FARM FIRES



CONFINED SPACE RESCUE



HIGH ANGLE RESCUE



TRANSPORTATION ACCIDENTS



HAZARDOUS MATERIAL INCIDENTS



BOMB THREATS / TERRORISM



WATER RESCUE



• HIGH POPULATION AREAS





MULTI -AGENCY LIASION


PRIMARY REASONS

•ADDRESS OPERATIONAL & TACTICAL PROBLEMS RELATED TO AREAS AROUND THE AIRPORT FACILITY & ITS FLIGHT PATH

•BETTER PLAN FOR ANY COMPLICATIONS THAT MAY AFFECT OPERATIONS DURING AN AIRCRAFT CRASH



PROBLEMS



- LACK OF PLANNING
- LACK OF TRAINING
- LACK OF COMMUNICATION
- LACK OF COORDINATION
- LACK OF RESOURCES

TEN MOST COMMON PROBLEM AREAS

• INITIAL APPARATUS RESPONSE REQUIREMENTS	• RESCUE & CASUALTY HANDLING REQUIREMENTS
• AIRPORT FAMILIARIZATION & ACCESS	• SPECIAL APPARATUS & EQUIPMENT
• STAGING & ACCESS	• FIREFIGHTER TRAINING
• COMMAND, CONTROL & COMMUNICATIONS	• AIRCRAFT INCIDENT PLANNING
• WATER & FOAM SUPPLY	• AIRPORT FACILITIES EMERGENCY PLANNING

REMEMBER!!

***“FAILING TO PLAN
IS
PLANNING TO FAIL”***

**INITIAL APPARATUS
RESPONSE
REQUIREMENTS**

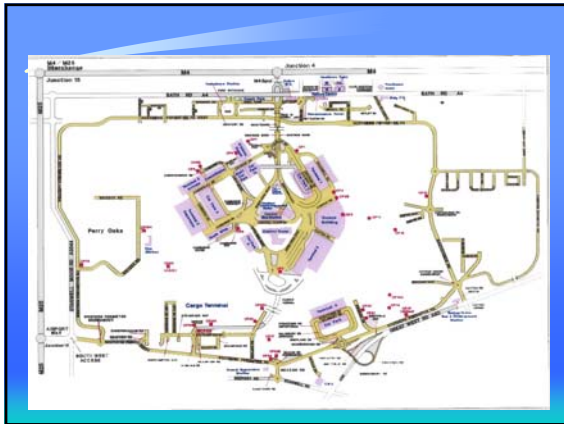
**INITIAL APPARATUS RESPONSE
REQUIREMENTS**

- WHAT IS THE NATURE OF
AIRCRAFT EMERGENCY ?**









AIRPORT FAMILIARIZATION & ACCESS
MUST BE KNOWN BEFOREHAND

- RUNWAYS & TAXIWAYS
- AIRFIELD ACCESS POINTS
- PERIMETER ROADS
- AIRFIELD SIGNS & LIGHTING



AIRPORT FAMILIARIZATION





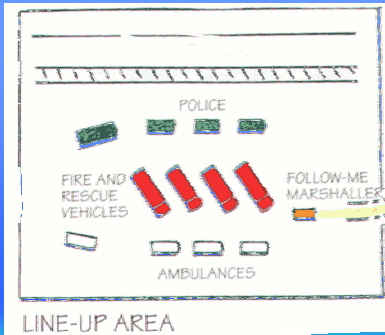


ACCESS TO ACCIDENT SITE



ACCESS ROAD TO KOREAN AIR 747 CRASH SITE, STANSTED, U.K.

STAGING & ESCORT



STAGING & ESCORT

WHO WILL PROVIDE ESCORT?

• **MUST BE DETERMINED BEFORE ACCIDENT HAPPENS**

- POLICE
- MAINTENANCE CREWS
- "FOLLOW ME" TRUCK
- OPS PERSONNEL



STAGING & ESCORT
SAFETY ON AOA

- SINGLE FILE
- WARNING LIGHTS ON
- DO NOT STRAY
- WATCH LIGHTING
- NO "FREELANCING"
- STAY ON HARD SURFACE
- NO RUSH - SAFETY FIRST!



COMMAND, CONTROL & COMMUNICATIONS

COMMAND, CONTROL & COMMUNICATIONS

WHO IS IN CHARGE?

THIS IS THE *MOST IMPORTANT* ASPECT OF AIRCRAFT ACCIDENT MANAGEMENT



***“ KNOW WHAT YOU KNOW,
AND KNOW WHAT YOU
DON'T KNOW ”***

GENERAL GEORGE S. PATTON JR.. (1889-1945)



COMMAND & CONTROL

- DEFINE ROLES & RESPONSIBILITIES
- INITIATE THE *INCIDENT COMMAND SYSTEM*
- USE A *“UNIFIED COMMAND STRUCTURE”*
- COMMAND POST READILY IDENTIFIED
- *“KEY PLAYERS”* EASILY IDENTIFIED

AIRCRAFT ACCIDENT RESPONSE AGENCIES

- Local and Mutual Aid Fire Departments
 - Airport Fire Department
 - Police
 - Emergency Medical Service
- FAA, CAA, or Similar National Agency
 - Coroner or Medical Examiners Office
- Regional and State Emergency Planning Officers
- Health Department Emergency Planning Groups
 - Environmental Agency
 - Airport Operations Management
 - Airport Terminals Management
 - Airline Companies Representatives

COMMAND & CONTROL

USE A "UNIFIED COMMAND STRUCTURE"

- UNDER A UNIFIED COMMAND, THE SENIOR OFFICIALS FROM THE AGENCIES MEET AND WORK TOGETHER AT ONE LOCATION, DEVELOPING A MAJOR STRATEGY AND PREPARING A SINGLE PLAN OF ACTION THAT ENSURES AN INTEGRATED OPERATION THAT WILL MAXIMIZE THE USE OF ALL ASSIGNED RESOURCES



- EACH DEPARTMENT OR AGENCY WILL MAINTAIN CONTROL OVER ITS OWN PERSONNEL. THE DEPARTMENTS ACT AS ONE ORGANIZATION, AND ARE MANAGED AS SUCH. INCIDENTS ARE DIRECTED FROM ONE COMMAND POST

COMMUNICATIONS



WATER & FOAM SUPPLY

WATER & FOAM SUPPLY

WHERE DO I GET IT, AND WHERE DO I NEED IT ?



AIRFIELD HYDRANTS





WATER SUPPLY

OFF AIRPORT EMERGENCY
WATER RESOURCES

- BUILDING FIRE PROTECTION SYSTEMS
- NATURAL RESOURCES
- SWIMMING POOLS

WATER SUPPLY

• TO LAY HOSE OR NOT TO LAY HOSE?

A photograph of a fire truck at an emergency scene. A red fire truck is on the right, with a long hose extending from it towards a large, dark, damaged structure on the left. The ground is covered in snow or ice. The sky is overcast.

WATER SUPPLY

•MAY HAVE TO COVER LONG DISTANCES







WATER RESOURCE OFFICER

- PRIMARY DUTY - GET WATER !!
- ASSURE A CONTINUOUS WATER SUPPLY
- SUPERVISES WATER RELAY IF IMPLEMENTED
- PROVIDE A BACK - UP WATER SUPPLY

FOAM RESUPPLY

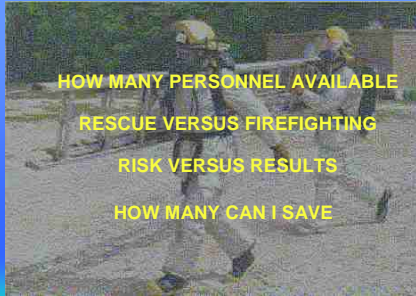
FOAM RESUPPLY



RESCUE & CASUALTY HANDLING

AIRCRAFT RESCUE OPERATIONS

WHAT ARE YOUR CAPABILITIES?



HOW MANY PERSONNEL AVAILABLE

RESCUE VERSUS FIREFIGHTING

RISK VERSUS RESULTS

HOW MANY CAN I SAVE












PATIENT HANDLING
AIR EVACUATION OF INJURED


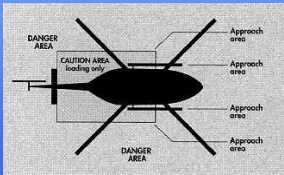


PATIENT HANDLING
HELICOPTER LANDING ZONE



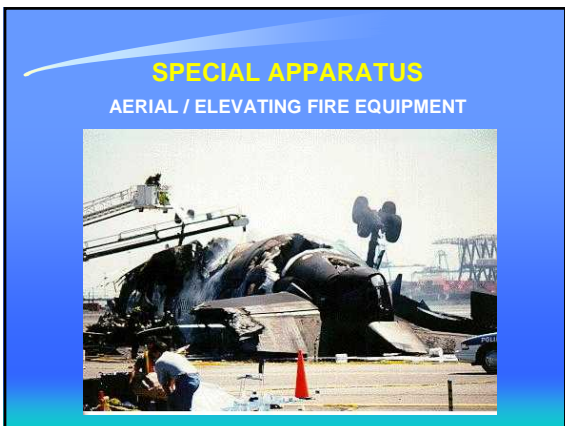
LANDING ZONE FIRE PROTECTION PLANNING

PATIENT HANDLING
HELICOPTER LANDING ZONE

SPECIALIZED APPARATUS & EQUIPMENT

- ## SPECIAL APPARATUS & EQUIPMENT
- WHAT DO YOU HAVE ?
 - WHAT DO YOU NEED ?
 - WHO HAS IT ?
 - HOW DO YOU GET IT ?
 - HOW LONG TILL IT CAN GET THERE ?

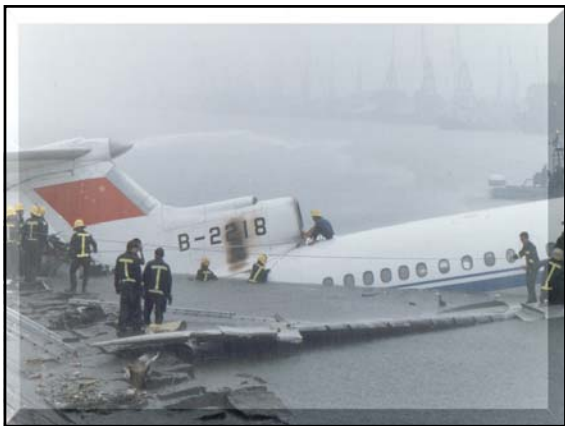


SPECIAL APPARATUS
OVERHAUL & RECOVERY EQUIPMENT



SPECIAL APPARATUS
COLLAPSE RESCUE EQUIPMENT





SPECIAL APPARATUS
OTHER TYPES OF MOBILE APPARATUS

- HEAVY RESCUE VEHICLES
- HAZ-MAT VEHICLES
- COMMAND & CONTROL VEHICLES
- REHAB VEHICLES
- SCBA RESERVING VEHICLES

SPECIAL EQUIPMENT
LIGHTING EQUIPMENT

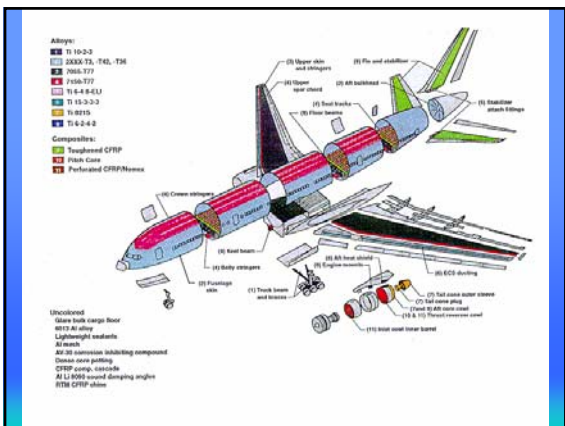


SPECIAL EQUIPMENT
SHELTERING EQUIPMENT









SPECIAL EQUIPMENT
BIO - HAZARD EQUIPMENT



FIRE FIGHTER TRAINING

FIRE FIGHTER TRAINING




FIRE FIGHTER TRAINING
AIRCRAFT FAMILIARIZATION



FIRE FIGHTER TRAINING
AIRPORT FIRE VEHICLES FAMILIARIZATION



FIRE FIGHTER TRAINING
AIRCRAFT FIRE FIGHTING PRINCIPLES

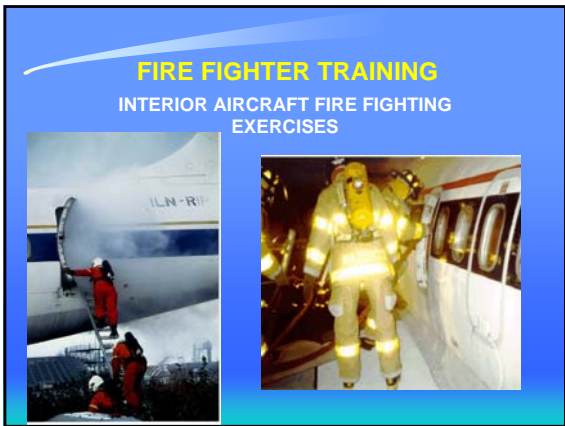















AIRCRAFT INCIDENT PLANNING
PRE - PLAN FOR **ANY** EVENT



AIRCRAFT INCIDENT PLANNING
DISASTER DRILLS



FIRE FIGHTER TRAINING
MUTUAL DEPARTMENTAL FIRE FIGHTING EXERCISES







AIRCRAFT INCIDENT PLANNING
THE POST EXERCISE CRITIQUE

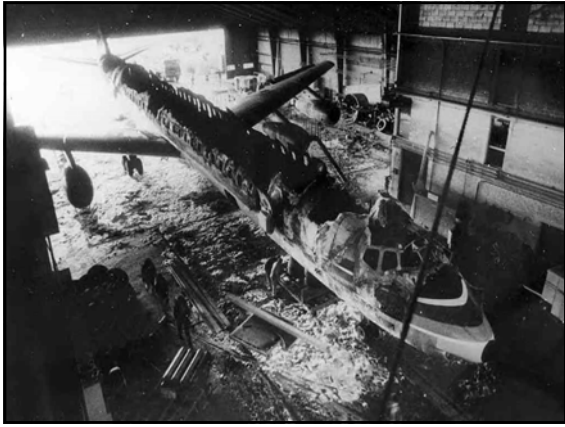
- DID YOU LEARN FROM YOUR MISTAKES ?
- DID YOU WORK TO CORRECT YOUR MISTAKES ?
- DID OTHERS WORK TO CORRECT THEIR MISTAKES ?
- DID YOU LEARN FROM EACH OTHER ?
- ARE YOU RELIEVED YOU REALIZED YOUR DEFICIENCIES NOW - BEFORE **'THE BIG ONE'**?

POST - EXERCISE CRITIQUES
ARE ALL THE AGENCIES PROACTIVE?



**AIRPORT FACILITIES
EMERGENCY
PLANNING**









**- INTER- AGENCY
LIASION
- PRE-PLANNING
- TRAINING**





