

Dangerous Goods Emergency Response



10/23/2008

# **OBJECTIVES**

- To provide an overview of the various Emergency Response Requirements .
- Review of the <u>ICAO</u> Emergency Response Requirements
- Review of the ICAO (Red Book) Contents
- Review of the Emergency Response Guide
  (Yellow Book )
- Emergency Response Information which should be contained in an Air Operator's Operations Manual
- Airport Authority Emergency Response Requirements.

# ICAO Emergency Response Requirements

• Is referenced in the ICAO Technical Instructions.





#### ICAO Requirement

•7;4.1 Information to the Pilot-in-Command

"The operator of an aircraft in which dangerous goods are to be carried must provide the pilot-incommand...information concerning dangerous good that are to be carried as cargo."





#### **ICAO** Requirements

• 7;4.3 Information to be Provided by the Pilot-in-Command in Case of In-Flight Emergency

"If an in-flight emergency occurs, the pilot-incommand must...inform the appropriate air traffic services unit, for the information of aerodrome authorities, of any dangerous goods carried as cargo..."

#### **ICAO** Requirements

• 7;4.2 Information to be Provided to Employees

"An operator must provide such information in the operations manual and/or other appropriate manuals as will enable flight crews and other employees to carry out their responsibilities with regard to the transport of dangerous goods. This information must include instructions as to the action to be taken in the event of emergencies..."





Transport Transports Canada Canada

## **ICAO** Requirements

Transports Canada

Transport

• 7;4.8 Emergency Response Information

"The operator must ensure that for consignments for which dangerous goods transport document is required...appropriate information is immediately available at all times for use in emergency response to accidents and incidents involving dangerous goods in air transport. The information must be available to the pilotin-command and must be provided in the Company Operations Manual. How Can an Air Operator Provide the Required Information

Where does he find the information.



## Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods – ICAO Red Book

 Was developed to provide guidance to States and operators for developing procedures and polices for dealing with dangerous goods emergencies incidents on board aircraft





Transport Transports Canada Canada

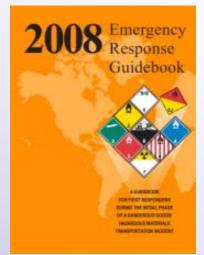
#### ICAO Red Book Contents

- General information on the factors that may need to be considered when dealing with any DG incidents
- Guidance, in the form of checklists, for both flight crew and cabin crew
- Dangerous Goods List, both alphabetically and by UN Number, the list identifies an appropriate emergency response drill for each item and a chart gives details of the drill and identifies other relative safety manners
- Requires the Air Operator to list Emergency Procedures in the Company Operations Manual



## Emergency Response Guidebook 2008

- Is a guidebook for first responders
- Used during initial phase of Dangerous Goods/Hazardous Materials Incident

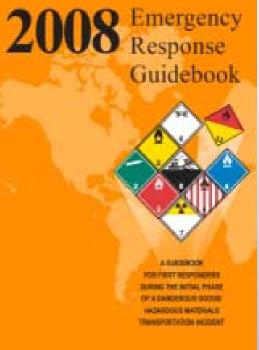


- Contains contact #'s for State Dangerous Goods
  Authorities
- Is available in Spanish ;English and French.



## Emergency Response Guidebook 2008

- Most commonly used emergency response reference material in both in aircraft and cargo warehouse facilities
- Meets requirements of ICAO.





## Emergency Response Guidebook 2008

- Yellow Bordered Pages Index list dangerous goods are listed in numerical order by UN number;
- Blue Bordered Pages Index list, dangerous goods are listed in alphabetical order
- Orange Bordered Pages Most important section, all safety recommendations are provided
- Green Bordered Pages Table of initial isolation and protective action distances



## Company Operations Manual Dangerous Goods Chapter

Should contain the following information :



## MANUAL

- Who the Company Dangerous Goods coordinator is and what his responsibilities are.
- He should develop ,maintain and promulgate appropriate procedures to react to a Emergency situation
- He should be the contact person to advise employees how to secure and remove damaged and/or leaking packages
- He should develop and maintain appropriate procedures to be used during an emergency and ensure the staff are trained

# Ops Manual Information on board the aircraft

- Dangerous Goods Coordinator should be immediately notified.
- Dangerous goods being loaded or loaded into the aircraft should be inspected for damage
- If damage apparent the air operator must remove the package or contact an Agency approved for its removal.
- The operator must insure that after decontainmenation the remainder of the consignment ,the aircraft or other packages are not contaminated.

## **Infectious Substances**

- Procedures must be established for employees to deal with the damaged or leaking package.
- If the response is contracted to a SPECIALIST the air operator must ensure that the third party is trained.
- The method handling of the DG by the should be described under this heading.
- If the Company "does not " transport Infectious materials the embargo should be listed here..

## **Radioactive Material**

- Procedures should be listed for handling and dealing with damaged Radioactive Materials.
- The location of a radiation monitoring devise should be clear.
- If response is contracted to a third party ;the cargo handling procedures should be inserted here.
- The Companies embargos should be listed here.

# Emergency Procedures for Flight Crew

Emergency Procedures for Flight crew can be found in the current ICAO Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods.

THE RED BOOK

# Emergency Procedures for Ground Handling and Acceptance Staff

 Emergency Procedures for Passenger and Baggage Handling ,Company Stores Warehouse and Cargo Acceptance staff can be found in the 2008 Emergency Response Guide. Dangerous Goods Emergency and Information Telephone Number

- The State Emergency Response # should be here.
- The number for 24 hour Emergency Response Information call ;;; 123456
- For 24 hour Emergency Information call :::

# COMPANY EMERGENCY EXAMPLE CHECKLIST

- Step 1 Evacuate and Secure the area
- Step 2 Identify the Dangerous Goods
- Step 3 Notify the Dangerous Goods Coordinator
- Step 4 If injuries call an ambulance
- Step 5 Call the nearest Fire or Police Department
- Step 7 Call the State Authorities
- Step 8 Notify the Airport Authority if emergency is at the airport.

## TRAINING

• The above success to Emergency Response will work if the Air Operator provides significant and specific training to all Employees Effected.

Why Emergency Response in the the Operators Manual



# 

## Airport Emergency Response Procedures

- Airport Authorities are responsible for Emergency Response at each individual airport
- Not all Airports will have the same procedures, but all will have written procedures in place
- Emergency response personnel may be employees of the Airport Authority or contracted agencies who have the appropriate level of training and knowledge to deal with the Emergency.
- Protocols are made available to all first response personnel
- Trained personnel are available 24 hours a day ;and 7 days a week
- A call out list is available to ensure that all agencies requiring the information are notified i.e. : Police and Fire Departments ; State Authorities ;State DG authorities



## Transportation of Dangerous Goods Accidental Release and Reporting

- A person who handles...or transports dangerous goods by aircraft...must do so in accordance with the ICAO Technical Instructions.
- Some states may require an Accidental Release and Imminent Accidental Release Report to state authorities.



#### **Report Requirements**

• Immediate reporting:

In the event of an accidental release of dangerous goods from a means of containment, a person who has possession of the dangerous goods at the time of the accidental release must make an immediate report of the accidental release...





#### Follow Up Requirements

Some states may require a follow up report. Canadian Regulations require a **30 day** follow-up report



## SUMMARY

- ICAO requires emergency response information be made available to ground employees and air crew
- The ICAO Red Book outline Emergency Procedures on Board the Aircraft
- The Emergency Response Guidebook is for First Responders on the ground
- An Air Operators manual must include Emergency Response procedures.
- Reporting DG incidents and accidents is required



# Discussion/Questions

