



NTSB National Transportation Safety Board

Federal Most Wanted Transportation Safety Improvements

**Require Cockpit Image
Recorders**

NTSB **MOST WANTED**

Transportation Safety Improvements

Cockpit Image Recorder Policy Update

- Recent FAA Response
- FAA NPRM



NTSB MOST WANTED

Transportation Safety Improvements

Cockpit Image Recorder Policy

- ICAO Recommended Practice



Recorder Activity

- Helicopter image recorder activity
- Flight Safety Foundation program
- Development of Low Cost Recorder



Require Cockpit Image Recorders

Proposed Safety Board Action

- Retain red designation: Unacceptable response

Timeliness Designation

Red





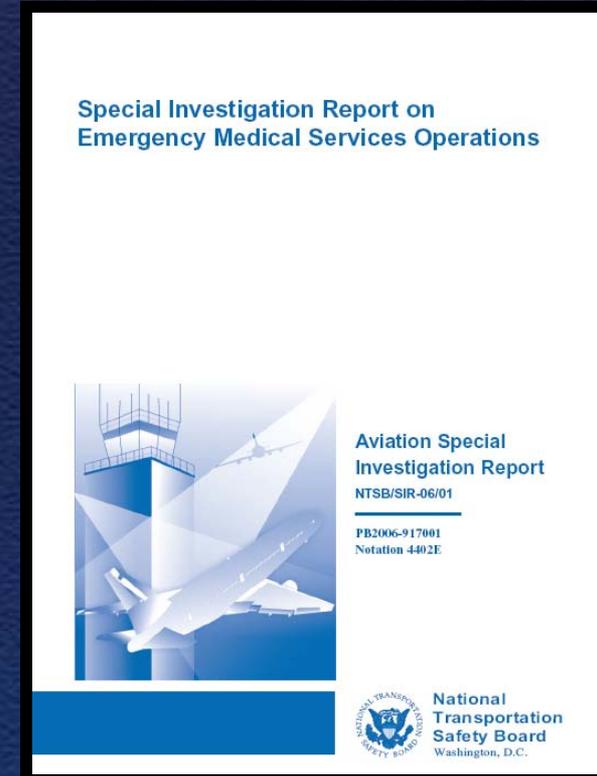
NTSB National Transportation Safety Board

Federal Most Wanted Transportation Safety Improvements

**Improve Safety of Emergency
Medical Services Flights**

NTSB Special Investigation Report

- Adopted Jan. 25, 2006
- EMS provides an important service
- Pressures; challenging environment
- Four recommendations issued to the Federal Aviation Administration
- Additional actions taken by NTSB in 2009.



CY 2008: 29 fatalities in HEMS Accidents



La Crosse, Wisconsin

Huntsville, Texas



Aurora, Illinois



S. Padre Island, Texas



District Heights, Maryland



**Flagstaff, Arizona
(Midair Collision)**



NTSB Public Hearing on HEMS Safety

February 3 – 6, 2009

- 41 expert witnesses
- Topics Covered:
 - *Business Models*
 - *Safety Equipment: TAWS, Flight Recorders, NVGs*
 - *Training*
 - *Flight Operations*
 - *FAA and Industry Oversight*
- **21 additional recommendations to:**
FAA, Public Operations, CMS, and FICEMS



Operations Without Patients Onboard

*Require operators to conduct all EMS flights with medical personnel on board in accordance with commercial flight regulations. **A-06-12***

FAA Actions:

- Issued OpsSpec A021 in November 2008 for weather
- All HEMS operators in compliance
- No flight & duty time limitations
- Status: **Open – Unacceptable Response**



Risk Evaluation

*Require EMS operators to develop and implement flight risk evaluation programs. **A-06-13***

FAA Actions:

- Issued Notice N8000.301
- Incorporated Notice into FAA Order 8900.1
- FAA initiating rulemaking, but little progress
- Status: **Open-Unacceptable Response**

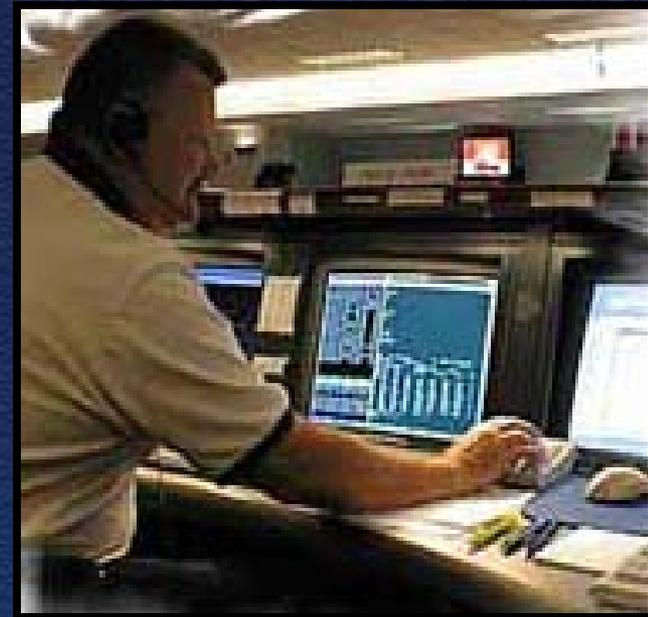


Flight Dispatch

*Require formalized flight following and dispatch procedures including up-to-date weather. **A-06-14***

FAA Actions:

- May 2008: Published AC 120-96
- Operational Control Centers
- Status: **Open-Acceptable**



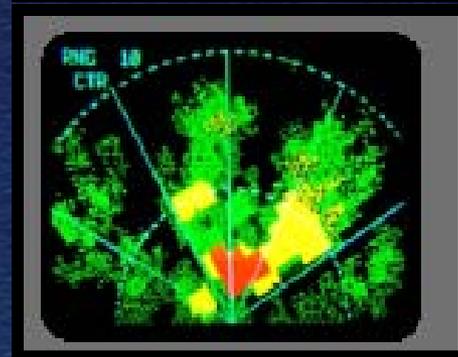
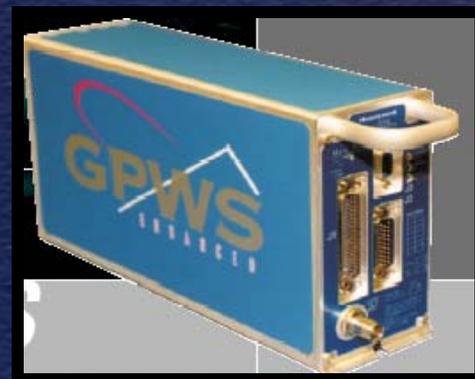
Terrain Awareness Warning Systems

Require EMS operators to install TAWS.

A-06-15

FAA Actions:

- March 2008 – Standards developed
- TSO released December 2008
- FAA initiated rulemaking process, but little progress has been made
- Status: **Open- Unacceptable Response**



Improve Safety of Emergency Medical Services Flights

Proposed Safety Board Action

- Maintain issue area on Most Wanted List
- Assign red classification: Unacceptable responses, progressing slowly

Timeliness Designation

Red



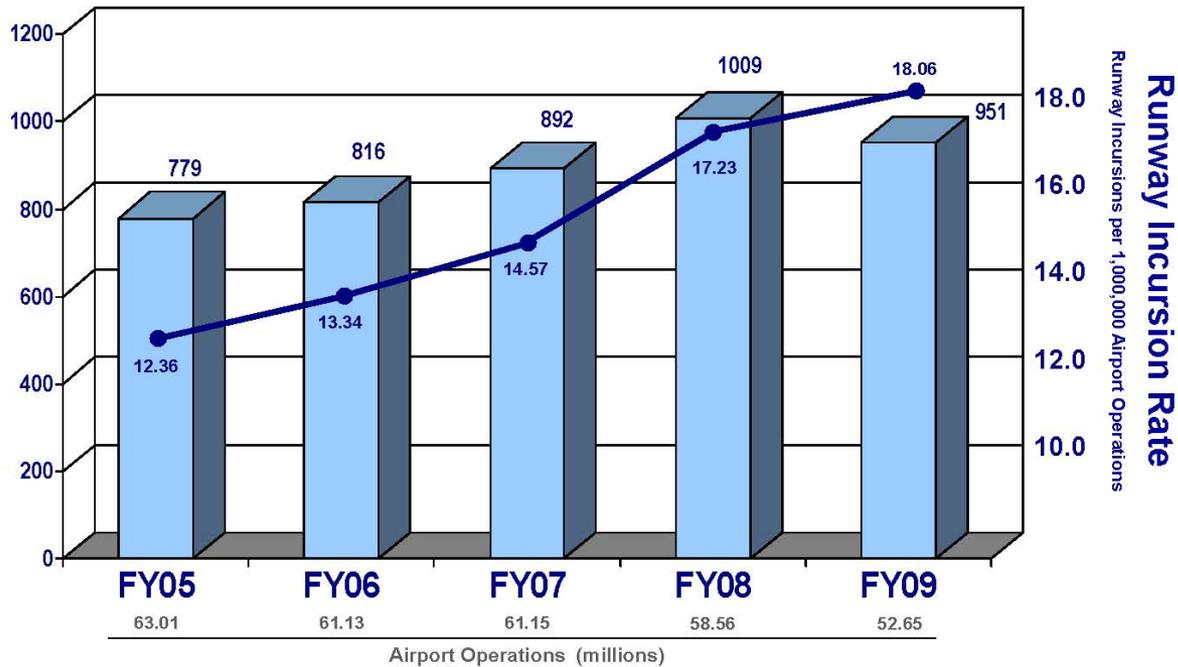


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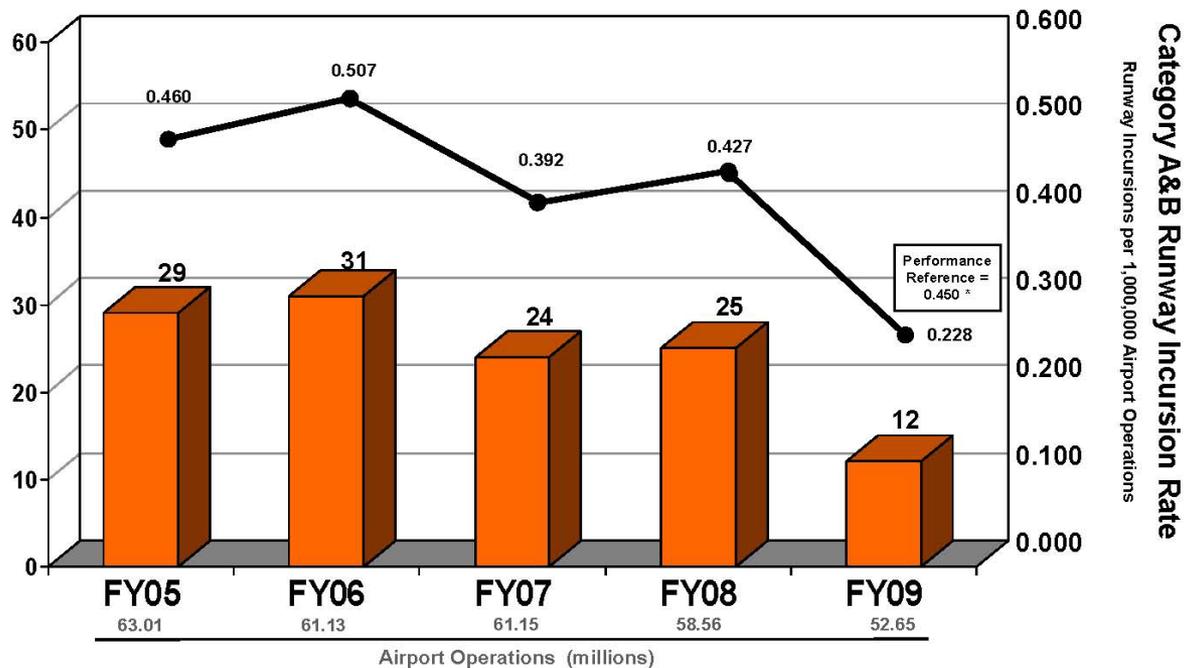
Federal Most Wanted Transportation Safety Improvements

Improve Runway Safety

All Categories of Runway Incursions



Category A&B Runway Incursions



Safety Improvements Wanted

Require a ground movement safety system that will prevent incursions and provide a direct warning to flight crews. **A-00-66**

Status: **Open – Unacceptable Response**



NTSB MOST WANTED

Transportation Safety Improvements

Final Approach Runway Occupancy Signal



Runway Status Lights



Enhanced Airport Lighting Program



Safety Improvements Wanted

- Require all runways crossings be authorized only by a specific clearance. **A-00-67**

Status: Open – Acceptable Response

- Require runway crossing clearances be issued only after a previous runway has been crossed. **A-00-68**

Status: Open – Acceptable Response



Safety Improvements Wanted

Require that all 14 *Code of Federal Regulations* Part 91 K, 121, and 135 operators install on their aircraft cockpit moving map displays or an automatic system that alerts pilots when a takeoff is attempted on a taxiway or a runway other than the one intended. **A-07-45**

Status: **Open – Acceptable Response**



NTSB **MOST WANTED**

Transportation Safety Improvements



American Airlines
Kingston, Jamaica
December 22, 2009



Safety Improvements Wanted

Require landing distance assessment with an adequate safety margin for every landing.

A-07-57

Status: **Open – Unacceptable Response**



Proposed Safety Board Action

Improve Runway Safety

- Remove “Urgent” designation in Safety Recommendation A-07-57
- Keep issue area on Most Wanted List
- Change to yellow designation: acceptable response, progressing slowly

Timeliness Designation

Yellow

