

**NATIONAL TRANSPORTATION SAFETY BOARD  
OFFICE OF AVIATION SAFETY  
WASHINGTON, D.C. 20594**

**ISSUES ON  
EMERGENCY MEDICAL SERVICES (EMS)  
HELICOPTER OPERATION SAFETY  
FEBRUARY 3 – 6, 2009**

**PUBLIC HEARING EXHIBIT LIST**

- 1A Order of Hearing
- 1B Notice of Designation of Chairman of Board of Inquiry
- 1C Designation of Hearing Officer
- 1D Designation of Parties to Hearing
- 1E Notice of Hearing
- 1F Public Hearing Exhibit List
- 1G Public Hearing Witness List
  
- 2A National Transportation Safety Board Special Investigation Report (2006);  
Emergency Medical Services Operations
- 2B National Transportation Safety Board Recommendation Letter to Federal Aviation  
Administration on EMS Operations, Recommendations A-06-12, A-06-13, A-06-14,  
A-06-15
- 2C Federal Aviation Administration Letter of May 30, 2006 in Response to Safety  
Recommendations A-06-12 through -15
- 2D National Transportation Safety Board Letter of April 3, 2007 to Federal Aviation  
Administration Regarding Safety Recommendations A-06-12 through -15
- 2E National Transportation Safety Board Safety Recommendation Letter Concerning  
Safety Recommendations A-07-111 and -112
- 2F Federal Aviation Administration Letter of March 10, 2008 Concerning Safety  
Recommendations A-07-111 and -112
- 2G National Transportation Safety Board Letter of November 25, 2008 to Federal  
Aviation Administration Concerning Safety Recommendations A-07-111 and -112
- 2H National Transportation Safety Board Special Study (1988); Commercial Emergency  
Medical Service Helicopter Operations
  
- 3A Ira Blumen presentation, Accidents and Accident Rates
- 3B Improved Data Collection Needed for Effective Oversight of Air Ambulance  
Industry
- 3C Sylvain Seguin presentation, Canadian Helicopter Industry Overview
- 3D Matthew Zuccaro presentation

- 4A National Academy of Sciences Report Emergency Medical Services: At the Crossroads
- 4B Medicare Benefit Policy Manual Chapter 10 – Ambulance Services
- 4C AAMS, HAI, AMOA Statement to the National Transportation Safety Board
- 4D ADAMS Depiction of Air Medical Base Nationwide Distribution
  
- 5A Injury Mortality Following the Loss of Air Medical Support for Rural Inter-hospital Transport
- 5B Air versus Ground Transport of Major Trauma Patients to a Tertiary Trauma Centre: A Province Wide Comparison using TRISS Analysis
- 5C Assessment of Air Medical Coverage
- 5D HEMS Outcomes December 18, 2008
- 5E Medically Appropriate use of Helicopter EMS
- 5F Patient First Air Medical Alliances
- 5G Pre-hospital EC Air Medical Article1
- 5H Final NASEMSO NTSB Hearing Exhibit Cover Statement
- 5I Bledsoe Journal of Trauma
- 5J Air and Space Smithsonian, Commentary: Thank You for Not Flying
- 5K Houston, We Have a Problem
- 5L Clarifying State and Federal Oversight of Helicopter Medical Transport, paper by Thomas Judge, CareFlight of Maine
- 5M North Carolina Draft Legislation
- 5N North Carolina Draft Legislation Explanation
- 5O North Carolina MedCenter Air Comments re ADA
- 5P ACEP Statement on EMS Helicopter Safety
- 5Q FAA Helicopter Shopping Letter
- 5R MedTrans v North Carolina Judgment
- 5S Hawaii CON DOT Opinion
- 5T Rove v New Hampshire
- 5U Competition in Healthcare and CON
- 5V ATA v Cuomo
- 5W AAMS Response to the “White Paper” Published on the Website of the National Association of State EMS Officials
- 5X AMSAC Recommended Practice on Competition
  
- 6A Fairfax County Fire and Rescue Department EMS Manual – Air Medical Transport Protocol
- 6B NEMSPA Pamphlet Preparing a Landing Zone
- 6C Mayo Clinic Triage Guideline for Hospital-to-Hospital Transfers
- 6D Mayo Clinic Autolaunch Guideline
- 6E Mayo Clinic Triage Helicopter Selection Guideline
- 6F Mayo Clinic Transport Team Selection Guideline
- 6G Mayo Clinic Utilization Review Process
- 6H State of New York Department of Health Adult Major Trauma Protocol
- 6I AMPA, Principles and Direction of Air Medical Transport

- Chapter 3: Indications for Air Medical Transport: Practical Applications
- 6J AMPA, Principles and Direction of Air Medical Transport Chapter 7: Considerations in Vehicle Selection for Patient Transport
- 6K Use of Autolaunch Method of Dispatching a Helicopter
- 6L Commission on Accreditation of Medical Transport Systems (CAMTS) Accreditation Standards 7th Edition 2006 07.00.00 Management and Administration Section
- 6M Guidelines for Air Medical Dispatch
- 6N CDC Guidelines for Field Triage of Injured Patients
- 6O CDC Field Triage of Injured Patients Decision Tree Poster
- 7A Federal Aviation Administration Advisory Circular 120-96: Integration of Operations Control Centers into Helicopter Emergency Medical Services Operations
- 7B Commission on Accreditation of Medical Transport Systems (CAMTS) Accreditation Standards 7th Edition 2006 06.00.00 Communications Section
- 7C NAACS CFC Course Outline
- 7D NAACS White Paper: The Changing Role of Air Medical Communication Specialists
- 7E CareFlite: Communications in the Metroplex
- 7F CareFlite: 11<sup>th</sup> North Texas Air Medical Operators Group Safety Meeting
- 7G CareFlite: Part 121 Dispatcher Syllabus
- 7H CareFlite: Flight Dispatch Policies and Procedures
- 7I Careflite: Flight Dispatch Process Flowcharts
- 7J Careflite: North Texas EMS Operator's Letter of Agreement for Weather Turndown
- 7K Careflite: North Central Texas Trauma Regional Advisory Council Triage Guidelines
- 7L Careflite: North Central Texas Trauma Regional Advisory Council Hospital Bypass Protocol
- 7M (blank)
- 7N Federal Aviation Administration: Notice N8000.333 Helicopter Emergency Medical Services (HEMS) Use of the Aviation Digital Data Service (ADDS) Experimental HEMS Tool
- 8A ERA Helicopter CVR Recommendations
- 8B ERA Helicopter FDR Recommendations
- 8C Technical Standard Order TSO-194, Helicopter Terrain Awareness and Warning System (HTAWS)
- 8D Technical Standard Order TSO-C164, Night Vision Goggles
- 8E Federal Aviation Administration Order 8900.1, Vol 4, Ch 7, Sec 4, Night Vision Imaging Systems
- 8F Federal Aviation Administration (AIR-130) White Paper – Flight Recorder Rules and Activities Related to Helicopter Emergency Medical Services
- 8G Federal Aviation Administration Avionics Systems Branch (AIR-130) Synthetic Vision Position Paper

- 8H Federal Aviation Administration White Paper – Night Vision Imaging Systems (NVIS)/Night Vision Goggle (NVG)
- 8I Federal Aviation Administration White Paper – Non-Required Safety Enhancing Equipment (NORSEE)
- 8J Federal Aviation Administration Notice N8000.349 – Night Vision Imaging Systems
- 8K Honeywell Submission – Helicopter EMS Safety Solutions
- 8L Bell Training Academy Submission – EMS Safety Solutions
- 8M Submission from Max-Viz, Inc. – Enhanced Vision Systems: Capabilities and Comparisons with TAWS and NVG Technology
- 8N Submission from Honeywell – Honeywell HTAWS Simulation Video
- 8O Small Aircraft Flight Recorder Safety Recommendations - January 2009
- 8P Submission from National EMS Pilot Association (NEMSPA) – HEMS NVG Utilization Survey Summary
- 8Q Submission from National EMS Pilot Association (NEMSPA) – HEMS NVG Utilization Survey
- 8R FSF Press Release re HEMS Research Endowment to Encourage HEMS FOQA
  
- 9A Federal Aviation Administration Advisory Circular 00-64:Air Medical Resource Management
- 9B (blank)
- 9C Federal Aviation Administration Proposed Helo NVG OpsSpec
- 9D AIM Helideck Guidance
- 9E (blank)
- 9F HBAT 0602 HEMS LOC & CFIT
- 9G IAFP Statement on HEMS Safety from James Riley
- 9H InFO 07015 Flight Risk Tool
- 9I Federal Aviation Administration Notice N8000.293-HEMS Ops
- 9J Federal Aviation Administration Notice N8000-317 Part 142 Training
- 9K OpsSpecAO21 HEMS Ops
- 9L Email Statement regarding Weather Minimums from S. Lewis
- 9M Flight Safety Inadvertent IMC Course
- 9N Flight Safety Bell 412 Syllabus
- 9O Flight Safety Bell 430 Course Syllabus
- 9P Flight Safety EMS Recurrent Syllabus
  
- 10A Amendments to 7<sup>th</sup> Edition Accreditation Standards Proposed by the Commission on Accreditation of Medical Transport Systems
- 10B CAMTS Presentation
- 10C CAMTS Mission Statement and Goals
- 10D LifeFlight of Maine and the LifeFlight Foundation Organization Structure and Ongoing Aviation Infrastructure Projects
- 10E History of LifeFlight of Maine and the LifeFlight Foundation
- 10F Air Methods Corporation Section H-Safety Program
- 10G Air Methods Organization Chart
- 10H CAMTS Standards

- 10 I LifeFlight of Maine – Annual Integrated Risk and Safety Management System (IRSM) Activity Plan July 1, 2008 to June 30, 2009: Aviation Safety Network
- 10J Air Methods Corporation Safety Manual: Chapter 1 - Administration/Safety Organization and Responsibility
- 10K Air Methods Corporation Safety Manual: Chapter 2 - Accident Prevention Program
- 10L Air Methods Corporation Safety Manual: Chapter 6 - Accident, Incident, Damage, Malfunction, Operations Report (AIDMOR)
  
- 11A Federal Aviation Administration Advisory Circular 120-92
- 11B IHST SMS Toolkit
  
- 12A Part 135 Subpart F Duty Hours Regulation
- 12B Federal Aviation Administration HEMS Safety Data & Review
- 12C Federal Aviation Administration Denver Org Chart
- 12D Federal Aviation Administration Notice N1800.56J Nat Work Program
- 12E Federal Aviation Administration AFS-1 Memo Large HEMS
- 12F Federal Aviation Administration Notice N8000-307 Special HEMS Inspect
- 12G Federal Aviation Administration Notice N8000-318 Public Use HEMS
- 12H Federal Aviation Administration Notice N8900-16 Ops Control
- 12I Federal Aviation Administration Notice N8900.49 HEMS Work Program
- 12J PowerPoint on FAA SEP
- 12K Federal Aviation Administration HEMS Accident Trends
- 12L Federal Aviation Administration Order 8900-1 Excerpts – Public Aircraft
- 12M Federal Aviation Administration Notice 8900.63 - Validation of HEMS Safety Initiatives
- 12N Federal Aviation Administration Advisory Circular 00-1.1 Government Aircraft Operations
- 12O National Transportation Safety Board Response to Federal Aviation Administration on EMS Recommendations, dated January 23, 2009
- 12P Federal Aviation Administration Notice N8900.56 – 135 HEMS Safety Enhancements
- 12Q Federal Aviation Administration Notice N8900.57 – 135 Helo Training and Manual Revisions