

Emergency Transport Safety Air and Ground Comparison - 2008



camts

- Formerly the Commission on Accreditation of Air Medical Services (CAAMS).
- Incorporated in PA in 1990.
- Available for medical transport services that provide rotorwing, fixed wing and ground interfacility (ALS-BLS ground services can be included if part of an air or ground interfacility system)

Mission Statement and Goals

- CAMTS is a peer review organization that promotes quality patient care in the safest possible transport environment through a voluntary accreditation process.
- Goals:
 - Provide an organized forum for participants to improve their services.
 - Assist services in achieving accreditation through information sharing and education programs.
 - Provide a voluntary and objective mechanism for evaluating compliance with accreditation standards.
 - Maintain recognition and currency of the Accreditation Standards.

1980s - ACCIDENTS *NO Air Medical STANDARDS*



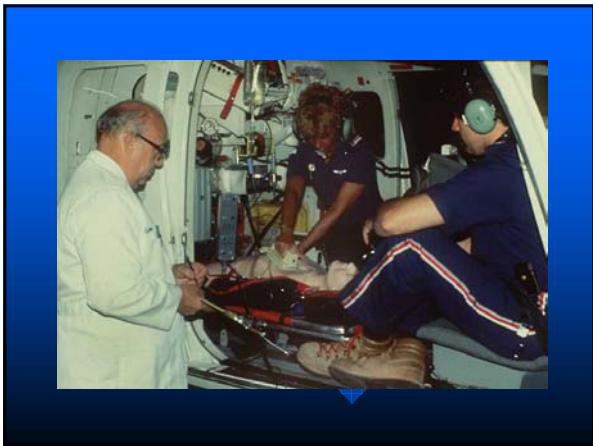
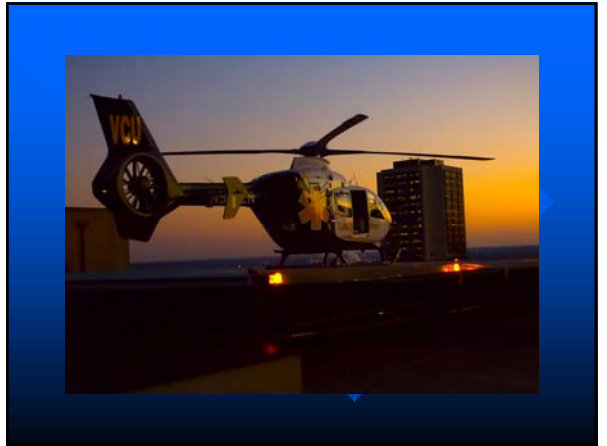
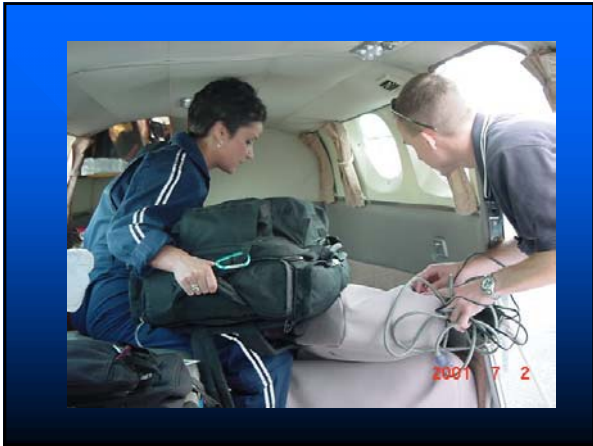
Air Medical Systems Develop

In 1978 there were less than 10 hospital based helicopter services.

- By 1990, there were approximately 200 air medical services in the U.S.
- In 2008, there are well over 300 services with more than 750 helicopters with many types of business structures – fewer hospital managed-more independent service seen today.

EMS Helicopters in 1981










How do we know about these crashes?

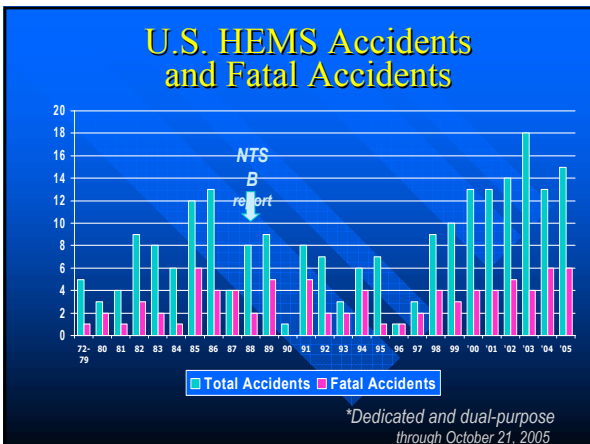
- www.NTSB.gov
 - Preliminary report
 - Date/Aircraft/Operator/Location
 - Narrative
 - Complete description with interviews
 - Probable Cause
 - Cause of the accident with contributing factors

NTSB Report, 1988*



- 59 HEMS accidents
 - 47 patient missions
 - 12 "other"
- Accident rates
 - 12.34/100,000 flight hours
 - *Nearly double other Part 135*
- Fatal Accident rates
 - 5.4/100,000 flight hours
 - *Nearly 3.5 times other Part 135*

*Safety Study -- Commercial Emergency



Changes in Rotorwing EMS Operations over the past 10 years

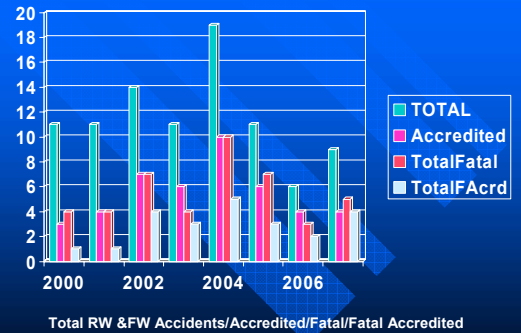
- Hospital-based programs not as common as privately owned – vendor owned businesses.
- Rapid Growth - In 1991 there were approximately 225 helicopters dedicated to EMS – today there are more than 750.

Increase in Accidents Since 1998

- According to Blumen (2002)

- 1980 -1987 54 accidents or 7.7 per year
- 1988-1997 4.9 per year
- 1998 – present 77 accidents – steady rise each year since 1998

Since 1998 – 54 of the 77 accidents occurred in VFR certified a/c – 23 in IFR certified a/c



NTSB Recommendations - 2006



- Adopt A System Safety Culture
- Use of IFR, TAWS and night vision goggles
- A Procedure Weighted Risk Avoidance Program
- Review Weather Minimums
- Improve Education on Weather Com / Dispatchers

“Safe is not Equivalent to Risk Free”
U.S. Supreme Court - 1972



Since 1978, it is reported that over 1,600 lives have been lost in ground ambulance crashes

- July 20, 2007, a volunteer ambulance with five crewmembers and two patients aboard collides with a tractor-trailer rig in rural Antwerp, Ohio killing all but one - 3 volunteer crewmembers and an elderly husband and wife.

- The 3 crewmembers that perished left behind 7 young children and one spouse on dialysis. *This is the single worst crash in the history of civilian ambulance service in the United States.*



How will we impact change?

- We need to know what the issues are with real data collected on a consistent basis.
- Then we can trend probable causes and address the high risk issues and...
- Develop recommendations to mitigate risks:
 - Culture, policies and practices
 - Technology and design for safer vehicles



CAMTS Website

- www.camts.org
 - Order Standards and “Best Practices”
 - Download standards & Policy Manual
 - Complete application on-line
- Office – 864 287-4177
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