

EMAIL MESSAGES

From Individual HEMS Pilots and
Medical Personnel

For the NTSB Helicopter
EMS Public Hearing
Docket

(All entries extracted from the
HEMS@NTSB.GOV site)

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-----Original Mess-----

From: Bjorn, Pret-----

Sent: Tuesday, F----- M

To: Trauma & Critical Care mailing list

Cc: HEMS

Subject: RE: NTSB to Issue Helicopter EMS Safety Recommendations

I'm not seeing any recommendation of even the most rudimentary triage and activation (case selection) criteria.

Preventable injuries and deaths are bad enough, I'll grant; but is no one (beyond those who pay the bills) interested that a significant number of these fatalities did not suffer time-sensitive or otherwise critical medical issues? Such is not merely a punctuation of the tragedy; it's a conspicuous symptom of an inadequately controlled and inefficient system.

Licensed air medical operations should be required to demonstrate medical necessity to an external oversight process. Such a simple amplification of accountability -- at all levels -- would save more lives than any on-board gizmo. Indeed, it would refine and enhance all aspects of the air medical system.

Pret Bjorn, RN
Bangor, ME USA

From: dorsey SALERNO - -- - -
Sent: Monday, February- -- -
To: HEMS
Cc: stepanie.matonek@ntsb.gov
Subject: Fw: Perils of helicopter rescue from Dr. Salerno

At the suggestion of Mr. Robert Sumwalt of the NTSB I am submitting my written comments re: HEMS operations in order that they become part of the Committee's official records. Thank you. Robert A. Salerno, M.D. F.A.C.S.

--- On **Thu, 2/5/09, dorsey SALERNO -** wrote:
From: dorsey SALERNO -----
Subject: Perils of helicopter rescue from Dr. Salerno
To: stephanie.matonek@ntsb.gov
Date: Thursday, February 5, 2009, 1:39 PM

Dear Mr. Sumwalt:

I am writing to comment on the NYT article of Tuesday, Feb. 3 regarding the increase in medical helicopter crashes. I speak from nearly 50 years of serving on hospital- based ambulances and being an Emergency Room Attending Surgeon in New York City hospitals (Columbia Presbyterian and Harlem Hospital) and in suburban Northern Westchester Hospital.

In most vehicular accidents the police may be the first responders. In general, police are not trained to assess the seriousness of injuries or to treat them. Ideally an EMT via ground ambulance would arrive within minutes. The EMT can quickly assure adequate airway, start an IV, stop bleeding and immobilize bones, neck and so forth. Then ground ambulance transport to the nearest ER is by far safer than helicopter transport. Clearly, if the EMT feels that time is of the essence to save a life, then the helicopter should be used. However, the family members or the lesser injured should not ride in the helicopter. This would only add to the overall flight risk.

In Vietnam the helicopter saved countless lives -- quick pickup of the wounded under enemy fire; emergency care on board and quick return to base hospital. The war scenario does not automatically transfer to urban situations.

My hope is that triaging at the scene and limiting who rides in the helicopter receive more attention than flight technology improvements or business considerations. I thank you and the NTSB for the work you are doing.

Sincerely yours,
Robert A. Salerno, M.D., F.A.C.S.

From: Mike Gartland - - -
Sent: Friday, Februar-
To: HEMS
Cc:- - -
Su- - - - - -

To Whom It May Concern:

I attended two of the four days of the Public Hearing on HEMS operations. I was very disappointed that someone from the Public Service spectrum was not invited as a witness. On the last day I had the impression, along with others in the audience that Public Service Operators do whatever they want. Although some the questions did not specifically name the Maryland State Police, most knew who they were talking about. For the record, I would like to state the following:

The Maryland State Police operates under Part 91 regulations with the exception of Search and Rescue, Law Enforcement, and Homeland Security. Our aircraft have Standard Airworthy Certificates.

Pilot training consists of Factory Ground School and approximately 30 to 40 hours of training, in the aircraft, prior to a new pilot taking his evaluation rides. These consist of an instrument evaluation, according to the standards stated in the Instrument PTS, and an evaluation, consisting of normal procedures, emergency procedures, which include an inadvertent IMC recovery, an open book test, a closed book test, a limitations test, and an extensive oral.

Recurrent training consisted of instructors flying with each pilot every quarter. Each pilot received two Instrument Proficiency Checks and an Annual Evaluation. We required each pilot to conduct a minimum of 6 VFR instrument approaches every six months and also required them obtain 6 instrument approaches, with a view limiting device, with a safety pilot. Prior to our accident, due to aircraft times (major maintenance inspections) we reduced the amount of training time. Training consisted of two IPC check rides, an Annual Evaluation, and a training session. However, if a pilot requested training for any reason, instrument or emergency procedures, they received it without hesitation. Post crash we have gone back to our original training plan.

When it comes to training, we do more than any Part 135 operator. I was the president (owner) of Freedom Air, Inc, and had several helicopters on a Part 135 Certificate. I have worked for several Part 135 Operators as a pilot, instructor

pilot, Chief Pilot and check airman. I know how much training a new pilot receives and it does not compare with the training received from the Maryland State Police. When working for a Part 135 operator my annual check ride consisted of one maneuver for training and one maneuver for the check ride. I am also aware as to how Part 135 operators write up discrepancies, on a 3 X 5 card, so the aircraft is not down.

As far as oversight is concerned, the Maryland State Police have a FAA Part 145 Repair Station. I am a Designated Pilot Examiner and receive a check ride from the FAA every year in multiple helicopters, including the Dauphin. I have no problem failing a pilot if he does not meet standards, whether it is an evaluation for the Maryland State Police or a new pilot getting a check ride for his ratings. I am an industry check airman for FAA Headquarters and I have been a DPE since 1992. I and others have been ramped checked on several occasions while operating the Maryland State Police Dauphin.

Before leaving on Friday, I asked one of the NTSB panel members why no one from the Public Service spectrum was invited to be a witness. He advised that Maryland State Police were considered as witnesses, but since the accident, we thought that it would not be appropriate and that we did not have enough time, considering all of the other witnesses. However, I noticed that another operator, which had an unfortunate accident approximately one week after the MSP accident, was part of the panel. I noticed that a number of witnesses were employed by that Part 135 operator. I also noticed that FAA personnel that were witnesses were from the FAA Region and FSDO that had oversight on that Part 135 Operator.

I lost some very good and close friends in the accident on September 27. I feel that I owe it to them to write this response. The Maryland State Police, by statistics, still have an excellent safety record.

HEMS operators do not belong under Part 135 Regulations. They need unique FAA Regulations for the missions that they do.

Would being Part 135 make us safer?

Respectfully submitted,

Michael S. Gartland
Chief Pilot
Maryland State Police
Aviation Command
410 238-5800 (Office)

From: john hartman- - - - -
Sent: Monday, Febru- - -
To: HEMS
Subject: 2 pilot program is key

The air carriers never go single pilot! Hence, they have a good safety record, but they don't rescue people out of the trees. Still, you cannot argue against the overwhelming effect of having 2 pilots unless you bring up the cost, weight limitations, or the devastating affect it will have on some operators. The issue is lives, not specific businesses, besides to thin out the industry means more flights for someone.

I've always said that the biggest problem in aviation is: **Egos and politics**. I do not mean governmental politics. I mean the lowest level of politics in small groups. This would get too psychologically deep and hard to describe without lengthy examples, so I'll launch to my point, leaving out the management levels, starting at the line pilot level.

Pilots from single pilot programs like to be single pilot, mostly, because there's no peer pressure. Their ego would explode if another pilot were there to second guess them. You want a humble pilot who's willing to accept ideas from outside sources, not the ego jockey who's right just because he is and is able to make snap quick decisions all by himself.

There are pilots that can manage very well in the single pilot environment, but you are playing with probability. If you claim that you can train a single pilot to be perfectly safe, it may be true some of the time, but there is a 100% probability of finding a pilot somewhere that can't be trained. They will always be there somewhere. You may think that a faulty pilot should be revealed with regular evaluations. But **the problem is a deep personality issue, not his ability to fly the aircraft**. This is a subtle thing that takes time to catch. A single pilot has no one watching him. When a single pilot program hires a pilot there is an orientation period. This could be 1 week, or 3 months. After the short orientation period, he's set out on his own. There's not much time spent getting to know his habits, because the aim is set to orient and fill the spot, so bad pilots get through the system.

Some of the bad habits might be: A hero mode, infallibility or overconfidence, lack of respect for limitations, resignation, substance abuse, anger, ignorance or misunderstanding of some key rule or concept, etc.

A 2 pilot program hires a pilot as a Second-In-Command. He is trained to fly with a Pilot-In-Command who is trained to fly cooperatively. This can go on from 1 year to 10 years before the SIC is promoted to PIC. Through crew mixing and PIC

recommendations for promoting SICs, the wild card pilot is inherently identified and not promoted.

The peer pressure in 2 pilot programs is a sort of "Big Brother" effect. If a PIC develops a tendency to try dangerous things, the SICs presence will certainly make him think twice before doing it. In the long run, this system forces a pilot to face his own deficiencies, whatever they are. With dual pilot programs and crew mixing, the pilot group inherently develops a standard for good and a stigma for bad.

The other fixes suggested to the board are not going to fix the bad pilot problem.

-IFR for me is more something to fall back on in bad weather, and I do use it rather than force a bad situation. IFR patient flights make more sense the longer they are. In most short patient flights, doing it IFR is not much of a time advantage over ground transport when you consider the logistics involved in doing it IFR. It involves transportation to and from the airport, and when you consider the time that all of this might take, it might have been better to go all ground initially. We carry a doctor on board the aircraft, which complicates this issue for our program, because it might be better to get the doctor there for the ground transport. For the most part, proponents for IFR patient flights don't consider the time that they may be wasting for the patient and don't consider that a ground option might be better time wise with a higher probability of reaching the destination without complications. But the ability to accept defeat and go home IFR in bad weather has value. The use of IFR approaches directly into hospitals is outside of my experience.

-Night vision goggles are what they are. You can see into the night. Towers and wires can't hide in the dark anymore. But these are training intensive and can allow you to get deeper into a corner with bad weather. A night sun is effective too.

-Programs that shop for weather don't create a new problem, they only increase the chance of finding an existing problem (the bad pilot).

-Terrain awareness technology is outside of my experience.

-A communications office can add to the "Big Brother" effect.

-Cockpit data recorders seem posthumous, but definitely hold promise for future ideas.

-Raising weather minimums is not going to fix a pilot who will bust them.

-Training was covered above. Training is second on my list after dual pilot. As for training being able to fix the HEMES problem, you can't train away a bad personality, because they are too subtle.

-Egos and politics are still a factor in how a program is run, but the basic problem is the line pilot personality.

John Hartman, PIC
Cleveland Metro Life Flight
EraMED

From: Jimmy Poulson- - - -
Sent: Saturday, Febru-- - -
To: HEMS
Subject: HEMES suggestion from a 31 yr pilot

Dear Sirs:

The mandate of the additional equipment may be good for the pilot that has already gotten into a bad situation, however the object should be to not get into that situation to begin with.

The judgement call to take a flight that is "just" within minimums may or may not be trained in to some extent. The only way I can see giving the pilot the additional margin is to increase weather minimums to a point that the pilot has room for error or changing weather conditions. For example 1500' and 7 miles at night(or higher) Maybe even a "No less than 4 degree temp/dew point spread. I know it seems a little high. But that is where the margin of error or changing weather conditions comes in.

In addition harsh penalties for violating the minimums for both the pilot and more so for the operator. There are companies that put pressure (undocumentable) on the pilots to accept a flight (flight numbers game), or crew pressures. These are not so easy for a new pilot to overcome. Therefore harsh penalties for the pilot as well as the operator. It should be on the order of \$100,000 for the operators and 30 day suspension and re-train for the pilots.

Prevention not recovery is the first issue.

I have learned a few things in 31 years as a helicopter pilot (21,000 hrs in 13 models of helicopters)

NOT getting into a situation requiring the use of the latest equipment and all of my skills to **not die**, is my first choice.

Thanks and good luck with your efforts to improve our safety.

Jimmy Poulson ,Com cert -----

From: Robert Cross - -- - - - --
Sent: Friday, Februa-
To: HEMS
Subject: Helicopter EMS Safety (ARFF firefighter's View)
Importance: High

Dear Board members - Thank you for the opportunity to comment on the very important topic of Helicopter Safety EMS. As both a professional airport fire officer and an instructor, I have seen some problem areas. I will attempt to highlight these and suggest some possible solutions. We are very fortunate to have central Pennsylvania covered by a very good HEMS flight program. They provide an outreach program to orient emergency responders to their program and what the needs are to safely land a helicopter at a scene (rather than a fixed location established helipad). I know of two recent events where landing zone personnel have directed the aircraft into an unsafe landing zone. My understanding is that these near misses occurred at night. On the first, the landing zone officer said the landing zone was safe; but there was a crane inside the LZ (it was reported that the LZ officer was not even on scene to confirm that all was safe). Quick action by the flight crew avoided a potential disaster. The second incident was similar, in that this involved an unlit cell tower in the LZ area. There was an LZ officer on scene. Once again quick action by the pilot averted an accident. In my experience, training for aircraft accidents is not a high priority for most hospitals, volunteer and career fire departments. The opinion out there seems to be that it can't or won't happen here. That's unfortunate, good training can make the difference between a making a bad situation worse or being able to mitigate a situation rapidly and efficiently. I point to the example of the crash of United 232 at Sioux City, IA. Proper training played a major role in the outcome of this accident.

Problem - Landing zone safety:

Poor understanding by responders of "what is a safe landing zone?
Little or no training by responders in the basics of aircraft rescue fire fighting.

Unlit cell towers which could be near potential landing zones.

Solutions - Landing zone safety:

Flight programs should provide adequate safety training. This should be done by both flight personnel and ARFF trained personnel. This to assure a good understanding about safe landing zones and to provide training on what to do if something goes wrong.
All cell towers should be lit regardless of height.

Problem - Hospital helipad safety:

There appears to be a lack of respect for the potential for accidents and incidents at most hospitals.

Solutions - Hospital helipad safety:

Assure that all flight personnel, mechanics and security (or safety) personnel receive training (in house or other sources) in how to respond to accidents and incidents.

Offer the same training to responders having jurisdiction or providing mutual aid).

Problem - Air traffic congestion near hospitals (not under control by air traffic controllers).

Solution - Establish a CTAF for HEMS to use.

Thank you for your consideration,

Captain Robert Cross
Aircraft Rescue Fire Fighting
Williamsport Regional Airport
700 Airport Rd.
Montoursville, Pa. 17754
(570)368 - 2444

From: Don Morgan -- - - - -
Sent: Tuesday, Feb-
To: HEMS
Subject: Helicopter EMS

Sir,

First off, thank you for addressing the HEMS safety issue. I have been involved in Search and Rescue for the last 8 years, 3 of those years as Commander of Davis County Sheriff Search & Rescue. As commander I was directly in charge of over 125 different SAR operations. Obviously helicopters were involved in many of those operations. We have 3 different organizations that we can call upon for assistance when helicopters are needed, they are Air Med (University Hospital), Life Flight (IHC Hospitals), and the Department of Public Safety also has helicopters that we can utilize. All three of these organizations are top notch, the pilots and medical crews are highly trained and professional, they are the best.

It is my understanding that you are looking to determine what additional training and guidelines could be implemented to make the industry safer, I would suggest that you also look at those agencies that are requesting the helicopters in the first place. If there were standardized guidelines for the use of helicopters that could also greatly reduce the number of accidents. My primary concern is that over the last few years whether it be law enforcement, fire, or SAR these agencies are requesting the assistance of helicopters for convenience sake and not because the victim or patient requires a helicopter evac. In the recent past I have seen several incidents where a helicopter was used because it would be "easier" or "quicker" and there was no consideration given to the increased risk to the victim or to the crew.

One incident in the last 30 days was fire had a snowshoer that had fallen and seperated their shoulder. This person was less than 1/4 mile from where the vehicles could drive to. The victim was in no immediate danger whatsoever. It was a simple case of putting him in a litter and taking it out either by snowmobile or by a crew carrying it. Because the responding fire agency did not have a suitable litter for a snow evac they called for a medical evac, even though the patient was adamant that he did not need a helicopter. The patient was flown the 1/4 mile to a parking lot and unloaded.

On another incident, a hiker was flown out with a sprained ankle, once again out of convenience because the fire agency did not want to hike and it would be much faster just to "shuttle" the victim out to a parking lot.

I have also seen what I will call "pilot shopping". On a recent event a vehicle had rolled down an embankment in a canyon, there was a possibility that a victim had been ejected

and was somewhere on the hill. The debris field was approximately 20 yards wide and 60 yards long down the steep hill. There were approximately 20 personnel searching the debris path. The lead agency asked for a helicopter to hover over the area to put light on area, the first helicopter could not hover because of the tightness of the canyon walls and the wind coming down the canyon. That helicopter was released and another was called to perform the same mission that the first one denied. This put the crew and the ground teams in danger.

While our agency has made a strong commitment to evaluate how we use helicopters I believe guidelines from the NTSB could also be useful. Many agencies are abusing this tool, probably 70% of the time that a helicopter is used in our county the patient does require medical attention, they are just shuttled to parking lot. This is a waste of a resource and puts equipment and personnel in danger needlessly. This is why it is important for guidelines to be developed for those that request helicopter assistance. Once again let me emphasize the utmost respect and admiration I have for the flight crews, fire and SAR need to learn how to use them properly.

Sincerely,
Don Morgan

-----Original Message-----

From: Marc Williams -----
Sent: Thursday, March 05, 2009 9:20 AM
To: HEMS
Subject: Reference HEMS - NTSB Hearings

I am the lead pilot for a small midwest HEMS company and I'd like to make a first hand comment with regard to HEMS safety. I flew helicopters in Vietnam of which over 800 were in combat. The accident rate was terrible. I lost my roommate due to night disorientation. The military has since gone to NVGs. Why not HEMS? Other than getting shot at, the HEMS missions are remarkable the same as the military. You protect the military pilots and crew, but not the civilian?

Please allow me:

Point #1 Pilot's don't hit what they can see. Of almost all of the night HEMS accidents, the pilot couldn't see the ground or object that they hit.

Point #2 If all of the above pilots had NVGs, you wouldn't be having these hearings. Most, if not all of the accidents, could have been prevented if the pilot could see at night.

Point #3 Small HEMS companies will not voluntarily implement an NVG program unless they are forced to. They always seem to find the money for other "necessary" things.

Point #4 The new "highest obstacle" rule is a useless effort to solve the accident problem. Rules that increase pilot work load, without tangible results, are counter productive.

Please have the courage to seriously address these issues. The life you save may be mine.

Thank you,

----- Williams R/W CFI CFII

From: Keith Hendricks- - -- -
Sent: Wednesday, Mar- - -
To: HEMS
Subject: HEMS safety

My name is Keith Hendricks RN, CFRN, LP. I am a flight nurse with San Antonio AirLIFE, San Antonio, TX. We are a non-profit program established in 1991. We are a SPIFR program, CAMTS accredited, twin engine Bell 430 with the following safety items on our multiple aircraft: auto pilot, enhanced ground proximity warning system, traffic collision avoidance system, XM satellite weather data, multi-function display with weather overlay, moving map and obstacles, satellite position tracking, color weather radar and we are implementing NVG's. We operate all legs with medcrew on board part 135. Our pilots are current and proficient in IFR and we utilize this platform frequently during missions. Crew resource management is an expectation and is fully implemented in our program.

While our program has made a commitment to safety with these items, many competitors in our region have not, yet, the reimbursement is the same. I believe programs which do not utilize the numerous safety advancements available should receive lower reimbursement for flights. The increased reimbursements have lead to an explosion in the growth of for-profit models which will fly inappropriate patients not truly requiring air medical transport.

*I believe SPIFR should be required on a regionalized basis where the platform is appropriate due to weather conditions.

*Enhanced ground proximity/TAWS should be required.

*Traffic collision avoidance system should be required.

*NVG's should be required.

*Part 135 on all legs with medcrew on board should be required.

*CAMTS accreditation.

There is no silver bullet to fix the safety issues in HEMS, but these safety measures should be implemented by all programs which wish to provide this valuable resource to the public.

Sincerely,
Keith Hendricks

-----Original Message-----

From:-----

Sent: Tuesday, March 03, 20-----

To: HEMS

Subject: HEMS Crewmember PPE

Reference the ongoing HEMS review one rather indisious issue I have not seen addressed is the extent to which required personal protective equipment worn by HEMS crews, such as helmets, nomex clothing (aramid fiber, i.e. like putting on a plastic bag), high top leather boots etc. can promote heat related fatigue and problems during operations in warm to hot operating environments. Even though most EMS helicopters are air conditioned they area still like working in a greenhouse due to their small size, many windows, high outside air leaks, and the inefficiency of air conditioning units in such aircraft.

Standards organizations covering HEMS require this equipment, and I have no problem with it most of the time, excepting when ambient temperatures and/or humidity makes wearing the items very uncomfortable, distracting, and more fatiguing than not wearing it. I believe under such conditions this equipment contributes to less than optimal crew member decision making and believe crewmembers so affected should have the option of wearing what clothing and equipment tht is necessary to allow them to maintain their physical well-being. At present, in most HEMS operations, that is not a choice.

The military, from which the statistics are drawn to validate wearing this equipment, have provisos for its use in warm to hot environments - so too, should the HEMS community; especially considering the military have high physical standards compared to that of HEMS personnel who are not in such efficient physical shape with the ability to better shed heat build up.

If a survey were conducted concerning this issue I believe the results will validate what I have mentioned above.

Thank you.

Respectfully,
CMC

From: James Whitman-----

Sent: Saturday, Februa-----

To: HEMS

Subject: Helicopter EMS OperationsTo whom it may concern:

I have been flying EMS helicopters since 1984. With the increase of accidents in the EMS industry it reminds me of the mid-1980's when there was a terrible number of crashes. Since then we have seen the accident rate subside and then over the last two years it has begun to increase once again and I believe that it is largely because we have had a new generation of pilots enter the work force and the lessons learned in the 1980's have been forgotten.. The decline of the accident rate after the mid-1980s was largely due to a change in the staffing requirements of each helicopter base. Prior to the mid to late 1980 the standard was 3 pilots assigned to each helicopter. After that was raised to 4 pilots per helicopter, the rate declined because the pilots no longer were chronically fatigued and had an opportunity for a quality of life away from their work.

As of late, there has been a relative shortage of pilots at many bases and what is listed as a 4 pilot compliment of pilots per helicopter in reality usually ends up being a 3 pilot staffing per helicopter for long periods of time. While the companies provide overtime pay and attempt to provide coverage by sending other pilots to cover the extra shifts, the end result equates to the problems of the 1980's chronic fatigue, judgment errors and pilots cutting corners to get by. The technology of today is definitely better than the 1980's to include better weather reporting to include Doppler radar sites readily available, Internet weather sites, the HEMS Weather Tool, GPS navigation, etc. but while I appreciate the new technology that has been developed over the last 20 years, it was not the technology that cause the accident rate to decline in the late 1980's but increased staffing and a more rested pilot with better quality of life.

Weather Minimums: It seems to me that if standard VFR minimums are generally 1000 foot ceiling and 3 statute miles, when the ceilings are lower, the visibility should **not** also be lowered for helicopter flight but increased (800 ft. & 4 miles). At one place I worked, they called this a "sliding scale" where when the ceiling came down, the visibility requirements went up. Also when the ceilings go above 1000 feet, then visibility requirements can go down for VFR operations. For Example:

Ceiling/Vis.

1500/1

1200/2

1000/3

800/4

700/5

The benefit of this kind of weather formula is that when the ceiling decreases, the increased visibility provides enough forward visibility to avoid obstacles and observe deteriorating weather well in advance of encountering Inadvertent IMC.

In summary, it is my belief that a large part of the accident rate is due to a new generation of EMS pilots who have not learned the lessons of the past and due to under staffing, pilots are making judgment errors and taking short cuts due to chronic fatigue. Also I believe weather minimums should be arranged on the "sliding scale," that when the ceilings decrease, the required visibility for helicopter flight should increase.

Thanks you for your time and interest.

Sincerely,
James P. Whitman
EMS-----
Com----- -

From: Steve Ogletree- - - -
Sent: Monday, March - -
To: HEMS
Subject: Rebuttal Questions

Mr. Chairman,

I have a few rebuttal questions in general and also for some of the panel members from the February HEMS hearings and present those below:

General Question:

Why are HEMS operators not required to have 2 qualified flight crewmembers in the cockpit during all phases of flight? It is plainly stated in **14 CFR 135.99(b)** about a requirement for those aircraft with 10 or more seats. This is obviously written with fixed-winged aircraft in mind as I know of no HEMS equipment with 10 or more seats. Should there be a provision here for HEMS types of operations?

Panel 10

Kent Gibbons

Mr. Gibbons stated he had an inspection goal of 10% of all inspections were to be during night flight operations.

Q: Given that the data presented with his panel, exhibit 12B, indicates that in the past 5 years, night time accidents account for 75% of all fatal accidents, shouldn't there be a much larger goal of inspections during night operations?

Panel 11

Dennis Pratte

During his testimony, Mr. Pratte stated that the FAA "does not need a regulation to make it a requirement."

Q: If this is the case, how is a requirement enforced? What enforcement actions are available to ensure compliance?

Mr. Chairman, this concludes my rebuttal questions.

Please do not hesitate to contact me if you have any questions for me.

Thank you,

Stephen E. Ogletree

Dearborn, MI 48128

From: Redaeroav@aol.com- - -
Sent: Thursday, January 15- - -
To: HEMS
Subject: HEMS Problem

1. The wx system is not sufficient for HEMS flight planning. The system is designed for En route (above 3000 AGL) and Terminal. Dependable wx is not available for most HEMS flight profiles. NIGHT VFR requires accurate wx reports.

a. Require (Funded Mandate) all Hospital Helicopter Facilities to have airport standard AWOS/ASOS systems if not within 10 miles of aviation wx reporting station.

b. Require (Funded Mandate) rural communities that expect/plan for HEMS support to have AWOS/ASOS system if not within 10 miles of aviation reporting station.

c. Restrict night VFR hospital transfers to emergency only (life or Limb). Most transfers can wait for day VFR (a non-medical opinion).

2. The "HEADS DOWN TASK" continue to increase with technology and Operator requirements (En route Reports) often putting the VFR Pilot Heads Down operating multiple Radio's and Multiple GPS Systems. Keeping in mind these aircraft operate routinely at 500 AGL in most cases without ATC support or Auto Pilot. I'd say this is the number one cause of VMC CFIT and Mid Air. Normal company reports are required every 15 minutes En Route, complex commercial radio's often requiring *repeater tower surfing* causing heads down for extended periods. I might even suggest I-IMC LOC may be a result of heads down VFR flight.

a. Crew Members should be responsible for Administrative Communications on Non Aviation Radio's. I would even suggest a FCC wavier for Cell communication for these Admin functions. Most HEMS operations openly use cell phones when the Commercial radio is not functioning and I support cell phone use in Helicopters.

b. Crew Members should be able to enter GPS Coordinates of scene and Hospital facilities at the PIC direction, (Remote entry capable system) the VFR HEMS Pilot should be able to keep his head outside as and monitor flight related data as much as possible. This alone will reduce Heads Down by over 75%. Often the dispatch gives a general Vector/Range or general GPS location, these are almost always updated en route requiring the PIC to go heads down and punch in the coordinates.

c. Sector (High density helicopter operations) Helicopter GUARD Frequencies should be established where Helicopter Pilots in general can monitor and communicate without having one frequency over burdened (123.025 is standard).

3. And finally the number one problem is the declining role of the PILOT IN COMMAND as the Command Authority at HEMS Part 135 Operations. Today the HEMS Base Pilot is viewed as "Lower than Whale Poop" by the industry. Bases are NOT supervised and the Pilot is assumed subordinate to Medical in almost every case. In a dispute the Pilot is often "Voted off the Island" if not accepted by the Medical Staff. (A No Go decision by PIC's is viewed as incompetency or lack of skill by Medical Staff).

a. The HEMS Base Pilot in Command (Duty Pilot) should be identified as the Base Supervisor for ALL activities at the Base.

b. The FAA should Identify the Medical Crew as Required Crew members with regulatory responsibilities Certified (Certificated) by the FAA as Flight Medical Crew.

c. The Pilot in Command should be responsible for the supervision of his/her Crew to insure they comply with their assigned duties.

d. No Go decisions by the PIC should NOT be questioned during that duty period. No Go Decision Review should only be conducted by the Chief Pilot or the POI. Questioning a Pilots No Go Decision by anyone within the Company except the CP should be grounds for termination. (Questioning NO GO Decisions is the most serious safety breach in an HEMS Operation).

e. FAA should Organize a HEMS Center where all HEMS Part 135 Operations are Managed with POI and PAI sole task is HEMS Management. HEMS GOM's should be Standardized into no more than (3) working models Light, Medium and Heavy with Medium and Heavy IFR Programs.

f. A review of all Light aircraft used in HEMS to determine if their capabilities and Safety Margin meet the requirements of the GOM. All HEMS aircraft should have sufficient EXCESS power, payload and safe operating characteristics to serve as HEMS platforms. Routine operations at max available power and or max gross weight should not be acceptable as an HEMS platform. Special or Superior Pilot skill should never be a factor for safe Routine Operations.

Thanks,

R. E. Davis

Certificate:----- --
256-527-0- - - -----

I was employed by Air Evac Lifeteam and operated at the Batesville, Ms (AE61) and Muscle Shoals, Al (AE16) bases. The Aircraft I operated for AEL (N90AE and N109AE) were both involved in recent accidents.

I am absolutely certain that Pilot Authority is a major factor in HEMS accidents. The Captain is always in conflict with his Authority:Responsibility ratio. Pilots (PIC) is always responsible but is only the authority part time while on duty. The PIC must be in charge of the base and the Part 135 Operation during his tour.

GO Decisions are rarely challenged, but NO GO decisions if challenged can and do cause permanent damage to the decision making process. Pilots learn from bad Go Decisions and adjust to that lesson, pilots also learn from NO GO decisions, if pressured, questioned or teased about these decisions he is more likely to make a bad GO decision. Bad NO GO decisions are more desirable than bad GO decisions. Again the Authority:Responsibility ratio is out of CG. Also keep in mind that most HEMS bases are single pilot operations so little or no pilot collaboration or support is available to the Pilot.

From: John St. John- - -- - - -
Sent: Monday, Janu- - - - -
To: HEMS
Subject: Helicopter safety

Sir;

As a Helicopter Pilot in the Air Medical Field I am concerned with the direction the Air Medical Providers, as the saying goes "the fox is in the hen house". There are so many issues concerning profits over safety a few of these are aircraft being used for this service these operators are using aircraft not suited for this Mission the single engine helicopter should not be in this type of service. these smaller aircraft place the patient inside the aircraft near the Pilot this is a serious distraction. All EMS aircraft should be have the Patient in the rear or back away from the Pilot. Only Twin engine aircraft should be used also equipped with full auto pilot and if the program is flying instrument conditions IFR there should be Two Pilots (no single Pilot IFR). most safety issues are due to money not safety.

Thankyou, John St. John
ATP Helicopter

From: DANIEL UHL- - -- ---- -
Sent: Thursday, Ja- - -- -
To: HEMS
Subject: Safety

Make the FAA enforce the night VFR rule that states enough ground lights to maintain reference with the surface. In the greater southwest, following the rules that are currently written, it is impossible to fly VFR at night legally. Example, Roswell, New Mexico to Albuquerque, New Mexico - Show Low, AZ to Phoenix, actually Phoenix to Show Low is worse.

If the FAA does not get out and fly some of these routes in helicopters at helicopter altitudes they will never know. I have flown both these routes numerous times and half or more of each leg is primary control of aircraft by instruments not visual clues outside the aircraft. Another fun one is fly out of Ruidoso to the east after sun down.

Good luck on changing the good ole boy way of doing things

-----Original Message-----

From: Michael J. Todd -----

Sent: Sunday, January 18, 2009 11:29 AM

To: HEMS

Subject: HEMS Suggestion

I think the NTSB needs to look long and hard at the saturation of medical helicopters.

Look to Arizona, Florida and Atlanta as examples.

Companies can't make any money with the amount of helicopters in these areas. As a result they penny pinch, and make decisions based on money and not what is right. Competition can be healthy, but no company is winning the battle.

I also think the NTSB should look very closely at Air Methods. Aaron Todd and others have optioned millions of dollars worth of stock, yet publicly have stated that Night Vision goggles are expensive, and they hadn't gotten them because they didn't want to pay as much for them as others have on the "secondary market". The problem with companies like Air Methods is that its all about money for the stock holders and not about doing what needs to be done. Sure their stock is high ... they put nothing back into the company. All profits are sucked out for stock options and expansion but nothing is spent to improve the safety conditions of what they currently have.

Millions of dollars in stock options could buy a lot of safety equipment.

-----Original Message-----

From: Darrin Wargacki -----

Sent: Wednesday, January 23, 2008

To: HEMS

Subject: Safety of Helicopter Emergency Medical Services (HEMS) Operations

Ms. Ward,

My name is Darrin W. Wargacki and I was an FAA Aviation Safety Inspector at the Baton Rouge FSDO from September 2006 to May 2007 assigned as the assistant POI for PHI. At the time I was specifically hired under a planned build-up of inspectors to cover HEMS operations. This program was never completed or seen to maturity. I investigated an S76 accident that occurred in October 2006 involving a PHI aircraft. I was terminated from the FAA primarily for advocating stronger oversight of EMS (and all rotary-wing) pilot training and operations, specifically PHI. The stated reason for my termination is that PHI had banned me from all of their facilities and wished that I was no longer overseeing their certificate.

I believe that I can provide SME testimony on helicopter, specifically EMS, training and operations safety shortcomings. Could you please pass my information on to the members of the Board charged with this meeting. I am currently the Program Manager and Technical Pilot (CT7 & CF34) for GE Aviation's Flight Operations support.

Very Respectfully,

Darrin W. Wargacki

From: Jason Dykstra - - -- --
Sent: Monday, Janua- - - -
To: HEMS
Subject: HEMS Operations

To whom it may concern,

I understand there is an HEMS conference coming up in February. One recommendation I have in your effort to understand safety issues is that a pilot survey be issued. Many pilots feel as though they are not able to get their word in about what they feel would be useful when it comes to increasing safety in the HEMS arena. It gets clouded by the many companies who attend these meetings since they have other motives in mind, such as the cost of such safety recommendations and the bottom line. HEMS pilots don't concern themselves with the bottom line of the company and are fully interested in increasing safety if they were just listened to. Who better to know what could help in that effort than those on the front lines? No one but the pilot. Many of those in management within these companies have very little flying experience if any at all. Many are just medical personnel with no practical HEMS or aviation experience. I think you will be surprised to see some of the responses you get back from such a survey.

One thing I hope that is discussed in the conference, and more emphasis placed on, is Crew Resource Management(CRM) and Aviation Decision Making(ADM). It is my opinion that flight schools do not stress or teach CRM and ADM adequately. Many of these recent accidents could have been prevented had just one hazardous link to the chain of events been broken. Pilots need to be better trained to identify these links and thought processes that lead to continued flight into terrain and Inadvertent IMC. More emphasis needs to be placed on training for Inadvertent IMC and general IFR flying in helicopters. Many pilots that fly at VFR bases get vary basic IFR training and flight time for IIMC training. Even those at IFR bases as well. Companies meet just the minimums for the FARs for training. This is for currency. That doesn't mean the pilot is proficient or comfortable in IIMC procedures. Many pilots will tell you they would like to practice more IFR and IIMC than they do currently. Why don't companies spend more time training? Simple. It costs money. Money they don't want to spend unless they are forced to do so.

I only hope that these positive recommendations as made by the NTSB will be accepted with open arms by not just the industry but also the FAA in which a timely implementation is prudent. In an effort to increase safety, perhaps some Government funding to help put these initiatives in place should be considered? Either way we can't sit around at a table every year talking about what we are going to do to increase safety. It's time to act and implement safety recommendations now.

Thank you for your time,

Jason Dykstra
Concerned EMS Pilot

From: Marc Durocher - - -
Sent: Monday, Januar- - -
To: HEMS
Subject: NTSB meeting on HEMS

To the NTSB board,

I am a HEMS pilot. I have been flying helicopters for 17 years. My father has been flying helicopters for 39 years. I have been flying HEMS for 5 years. I have watched the industry closely for these 5 years. My opinion on the subject is as follows. In short: I believe that **mandating 2 pilots will have tremendous impact** on the type of accidents that are occurring. It is not a popular recommendation because of the financial affects, but I think it is the **BEST single thing** that can be done. After this is implemented, the nation's fleet will dwindle because of costs and there will be an adequate supply of pilots/NVG's/Aircraft etc. This change would stop the absurd "HEMS sprawl" and bring "oversight" right into the cockpit.

Marc Durocher
Missoula MT

From: Gerald Splitt- ---
Sent: Tuesday, Jan-- -- --
To: HEMS
Cc: Gerald Splitt
Subject: Air Medical NTSB hearing comments

Salutations NTSB hearing members:

It is comforting to see that the NTSB is taking a serious look at the HEMS industry. Our safety record as an industry it not one to be proud of.

I am the Program Coordinator for Geisinger Life Flight, a hospital based and supported program that operates six SPIFR helicopters in central and eastern Pennsylvania. Our Aviation partner is Era Med, LLC

My goal is to get right to the point, in my opinion our industry is at a cross road. If no intervention is taken by the NTSB & then the FAA, the unacceptable accident/incident rate will probably continue.

I propose the following for discussion and consideration to the group:

1. A standardized training program across the industry that includes instrument training, recovery, currency and proficiency that is the same curriculum for all HEMS operators. I propose having all the stakeholders develop these along with the NTSB & FAA. You may even consider having HEMS follow a different set of rules, close to 135, but tailored to HEMS, such as a part 136.
2. A minimum level of entry regarding the class of aircraft permitted to do HEMS in the US. That platform being a SPIFR or dual pilot in a DPIFR helicopter.

Rationale: Look at the airline industry. Minimum class of aircraft is used and in this case, two pilots. We don't see the airlines flying passenger's around in a minimally equipped un aided aircraft. The airlines have the luxury of flying from one airport to another. HEMS pilots are today flying as a single aviator from hospitals and airports into the dark remote locations every day in this county, day and night.

I would tend to believe most pilots if they had the choice, would choose another pilot or an autopilot to operate in this environment.

There has been a proliferation of aircraft operating in the HEMS environment the last number of years.

Most this growth has been the independent provider model. This model is driven by the several of the major HEMS vendors & other independent 135 operators. This model has a different mission than the traditional, hospital based/sponsored model. A community service in a hospital model versus a revenue stream for the independent model sponsor. When an independent doesn't make projected revenue margins, in many cases operations shift or cease.

To illustrate this point, review the class and type of aircraft being utilized in the market from traditional programs versus independent's as a whole

3. Terrain avoidance technology: I don't understand why the fixed wing operator's were required, but the rotor wing not? A very useful piece of equipment. This recommendation needs to be made a requirement on all HEMS aircraft
4. IFR: Encourage use of the current instrument system. Develop and support GPS approaches into sending and receiving hospitals. All trauma and tertiary care facilities should have an instrument approach into them if they do not have an airport within a defined distance (which you can decide on)
5. Encourage predesignated LZ's for scene operations
6. 360 degree reflectivity on all cell phone towers that are not lit.
7. Institute at the state level a CON process for new programs
8. Increased physician input/ oversight from a utilization standpoint. (Case in point, MSP . 50% discharge rate within 24hrs.)

Will there be less HEMS aircraft. Yes

Will the ones flying be safer Yes

Will this save lives and prevent further accidents/incidents. Yes

Some of these agenda items may be viewed as a radical change. The point is change is needed to turn this disturbing trend around

Understandably all of these items could not happen overnight, but we have to start somewhere.

One way of moving this along is higher minimums for VFR/unaided aircraft. Make these minimums substantially higher than IFR aircraft that have IFR captains flying them. This change will allow the market to adjust. The program's and operators that want to continue to operate HEMS will upgrade the programs and equipment.

Our industry needs to be held to a higher standard than the airlines. When a passenger purchases a ticket for an airline flight, they: have a choice in their provider We are placing patients, (passenger's) in helicopter's that in many cases can't say no or are in a life altering stressful situation with themselves or a loved one. We are then in these incidents/accidents causing them further harm, along with highly trained medical teams and pilots.

We need to do something, or the public will lose confidence in our industry. I am interested in participating at any level.

Respectfully submitted
Jerry Splitt, RN EMT-P, CMTE
Program Coordinator
Life Flight
Geisinger Health System
(570) 271-6217

From: BRUCE BESSETTE - - - -
Sent: Friday, January 30,--
To: HEMS; Randall Stone
Subject: EMS Hearings

Dear Chair:

My name is Bruce Bessette and I am a former FAA Safety Inspector who tried to stop which I felt was a very dangerous helicopter operator. The management at the Scottsdale FAA Flight Standards District Office interfered with my investigation. The office eventually took me off the case when my evidence became more and more overwhelming against the operator. They forced me to close the investigation by sending a letter claiming that I did not find any violations of the FARs. Because of the knowingly false letter I was ordered to send, I was forced to file a whistleblower claim with the Office of Special Counsel. Case # MA-02-1555. As a result of the report the FAA retaliated against me and eventually removed me from federal service. I later learned later that had I shut down the operator, it would have had an effect on the pay grade of the inspectors in the office. I feel that the big problem with the lack of FAA oversight has to do with the pay grades of some inspectors and supervisors than any perceived collaboration with dangerous operators.

Please feel free to contact me if you would like to read the report or discuss my observations with this situation.

Bruce Bessette