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# The International Helicopter Safety Symposium A Pilot's Impression

### MEET THE AUTHOR



Jim McCollough is a native of South Bend, Indiana. At the age of 18 years he joined the U.S. Army in 1966 as a helicopter pilot. Completing his active duty service with the Army, Jim was accepted into Purdue University where he graduated with a Bachelor of Science Degree in Mechanical Engineering (1974).

As a 35 year employee of Bell Helicopter, Jim has held a multitude of roles to include Experimental Flight Test Engineer, Certified Flight Instructor, Production Test Pilot and Experimental Test Pilot-Chief. He currently is a Technical Fellow reporting to the VP of Engineering. Jim resides in Arlington, Texas with his wife and three of his youngest children.

*I recently attended two events that caused me to reflect on my career as a pilot. The first was a 43rd anniversary reunion of my Army flight class. That event confirms that I'm an old pilot. The second and far more important event was the Third International Helicopter Safety Symposium (IHSS) held in Montreal, Canada.*

Our industry is committed to the goal of reducing helicopter accidents by 80% within a 10 year span (by 2016). The clock is ticking, the accident rates are coming down but there is a long way to go. People from around the world assembled in Montreal at the end of September 2009 to listen to the experts as they reported progress to date, discussed analysis of accident data and talked about what needs to be done in the future.

One speaker, Dr. Patrick Hudson, Professor, Leiden University, The Netherlands concluded that a common denominator in all the accidents analyzed is "the helicopter." Besides having a great sense of humor, Dr. Hudson is one of the

world's leading authorities on the human factor in the management of safety. The other common denominator is a pilot. About 75% of the helicopter accidents under discussion listed pilot decision making as a contributing factor.

### A Colorful Situation

Dr. Hudson talked about the pilots operating in the green, in the red and in the orange. Pilots know that when things (indicators) are in the green they are good and anything in the red is bad. When a pilot is operating in the green it means the task at hand is well within the pilot's capability to accomplish safely. The pilot's skill, training and the mission's requirements are not saturating

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## HumanAD

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# Pressure to fly in EMS—real or imagined?

By Ed MacDonald • Lead Pilot, PHI Air Medical Santa Fe • Safety Representative, NEMSPA • Chairman, Air Medical Safety Advisory Council • Co-Chair, AAMS Safety Committee

## MEET THE AUTHOR



Ed currently is the Lead Pilot with the PHI Air Medical unit in Santa Fe, New Mexico. Early in his career, he served in the US Army as a MEDEVAC (Dustoff) pilot in Vietnam with over 600 combat hours to his credit. After 20 years he retired with the rank of Major and was designated a US Army Master Aviator.

Ed has a vast background that covers all facets of medical evacuation and crash rescue; which spans the lifetime of the helicopter medical-transport industry. Of his 8,800 helicopter pilot hours, 7,000 are in EMS and MEDEVAC flight operations. Ed's industry awards include the American Eurocopter AMTC **Jim Charlson Award**, in 2007 and the AAMS **President's Award**, just to name a few. He is Chairman of the Air Medical Safety Advisory Council, Co-Chairman, AAMS Safety Committee, Past President, National EMS Pilot's Association and Safety Representative with NEMSPA (National Emergency Medical Service Pilot Association). Ed serves on the Editorial Board and is a regular contributor to the *Air Medical Journal*.

*Imagine the following as one of several scenarios that the average EMS pilot may face in their career:*

*Our "average pilot" has been building time flying tours and offshore work for several years with the goal of flying an EMS dream job someday. A major EMS operator has decided to put a new base in a beautiful lakeside community and in a sparsely populated town in the American Midwest. Our pilot is excited after being hired for this job in an idyllic little community and moves the family, then buys a nice small home in the woods. The family loves their new surrounds and begins assimilating into the new community and schools. The modern "dream life" seems to be coming true.*

*This EMS base is about an hour's flight from the nearest trauma center and is thought by the business managers to be an ideal location for a community previously served only by another EMS vendor some twenty miles away. The community hospital is pleased to have an air medical asset so close and the minimally staffed local EMS service is pleased to have an additional asset to take some of these hospital transfers by air. The alternative had been a long drive in the middle of the night to the big city trauma or cardiac center with a sole ambulance. All seems perfect and everyone settles down to make the base successful.*

*Since the operator runs this "stand-alone" base at its own financial risk and without any public financial support; they have a big stake in its success. In the planning stages there was a little concern that the demographics wouldn't support an additional EMS asset in the region but they elected to take the risk nonetheless. It was also expected there would initially be a period of relatively low volume for the helicopter, but the operator expected that eventually the huge initial investment would pay off for the investors.*

## The Stage Is Set

The pilots and clinical staff are well trained and the base goes into service. The operator's initial prediction of low start-up volume is correct as the aircraft is only requested a few times per month. Perhaps it is because the region is not accustomed to using a helicopter or perhaps because there are several other similar services within twenty minutes and there is not enough flight volume to support the new aircraft.

The EMS or state regulations do not conduct any process similar to a Certificate of Need\* as they might for ground ambulance services. The pilots and crew are anxious to be of service and have personally invested in the base's success by moving their families and lives into the community. After a year of relatively slow volume, it appears to everyone that perhaps this base will not flourish. An operator is now faced with some tough choices. The operator may be thinking about cutting its losses but would not make any decision to close a base casually. The pilots and clinical staff have been doing yeoman work in the public relations arena but the flights still aren't coming. Everyone at the base knows that more flight volume might keep the base in business. The Operator's management team speaks *safety* loudly at every meeting but the potential for the base closing seems ominously close. At two-o'clock on a foggy Sunday morning, a flight request comes in...

Since the year 2000, the National EMS Pilots association has conducted two surveys of EMS pilots and in both cases, over twenty-percent of EMS pilots surveyed reported some form of pressure to take or continue a flight. That pressure took the form of pressure from management, both program and vendor, pressure from pilot or clinical peers, crew or internal pressure to complete the “mission”. As obvious as the potential for such pressure in a highly competitive and life-saving community is, we still have those business managers and others wanting more proof that “pressure”, in some form or other continues as a potential risk factor in EMS. My personal experience of forty-years flying patients from here to there, both military and civilian, tells me that pressure will always be there. How we deal with it has a few nice new twists.

It is readily apparent that as a result of heightened awareness and compliance with FAA advisory circulars, Industry and NTSB recommended practices as well as enlightened operator initiatives—that we can have very low EMS helicopter accident rates as we have demonstrated so far in 2009. This can occur only if we remain committed to risk mitigation techniques such as enhanced operational control, risk assessment procedures and improved technology such as night vision devices or terrain awareness systems. Most of the operators and programs have now instituted most of these processes and we will be reaping the lower accident rates as a result in coming years. This year, to date, has been an exceptionally “safe” year and really demonstrates what can be done when the industry has the will. It is also not the time to rest on our laurels. We cannot ignore the affect of pressure on our operations.

Pressure has been and will always be there to perform our invaluable service to our respective communities. Some pressure allows us to perform better and more focused. Most pressure, however, can potentially affect pilot decision making and judgment. Pilots and clinicians will always be driven, at some level, to this calling because they want to be of service to our fellows. The “rescuer” or “white knight” syndrome will always lie just under the surface in even the most rigid and conservative of systems. The rapid expansion of Helicopter EMS commercial services has added a new dimension to pressure on the pilots and crews that must be mitigated through conservative safety cultures, risk management systems, and vigilant operational control. To believe that pressures no longer exist or have been fully mitigated by safety management systems is pure folly. Pressure may be created by the business model, perception of competitive forces or self-induced by managers, pilots or crews. Pressure to fly or continue flight has actually appeared in several NTSB accident probable cause reports as contributing factors. Most operators recognize that pressures exist at many levels and in many forms. Getting the effective barriers in place to mitigate the risk of internal or external pressures on the pilots is the key. Getting some pilots to believe that *even the most experienced and hardened among us can be pressured* can be a challenge.

There are now several operators who have excellent systems in place to relieve pressures imposed from whatever sources it may occur. A combination of a comprehensive risk management matrix and conservative enhanced operational control (EOC) seems to be effective by placing another barrier (Reason’s Swiss Cheese Model) between a pilot and potential bad decision leading to an accident. As much as pilots do not like to admit to feeling pressure, we all can fall prey to it when we least expect it.

The National EMS Pilots Association has proposed and developed an initiative designed to emphasize the existence of pressure in our EMS Aviation environment and provide some tools to deal with it. This initiative has been supported by all of the air medical professional organizations. The **NO Pressure Initiative** will be formally introduced at the Air Medical Transport Conference in October 2009.

The Initiative is designed to compliment, not replace, many other risk mitigation tools currently being utilized by operators and pilots today such as Night Vision Devices, Terrain Awareness Systems, Risk Assessment Tools and

Enhanced Operational Control. The No Pressure Initiative will address two aspects of the issue. One, to raise awareness and attention to the issue and two, propose a three step process to address pressure—whether it is internal or external. The Initiative addresses organizational safety culture, use of risk assessment tools, and, a relatively new concept—the Enroute Decision Point (EDP). The attached poster defines the initiative.

Pressure can come from many sources, self-inflicted, peers, managers, and the environment—to include competition—real or imagined. Awareness followed by action is what this initiative proposes to the EMS aviation community and the National EMS Pilot Association is proud to lead the way.

*\* Certificate of Need (CON) is a process whereby an entity wishing to operate an ambulance service makes application to its local Regional EMS Council (REMSCO) for a determination of public need, prior to the government regulatory agency responsible grants a certificate of operating authority*

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# Heliprops

Helicopter Professional Pilots Safety Program


The HELIPROPS HUMAN A.D. is published by the Training Academy, Bell Helicopter Textron Incorporated, and is distributed free of charge to helicopter operators, owners, flight department managers, mechanics and pilots. The contents do not necessarily reflect official policy and unless stated, should not be construed as regulations or directives.

The primary objective of the HELIPROPS program and the HUMAN A.D. is to help reduce human error related accidents. This newsletter stresses professionalism, safety and good aeronautical decision-making.

Letters with constructive comments and suggestions are invited. Correspondents should provide name, address and telephone number to:

Bell Helicopter Textron Inc.  
John Williams, HELIPROPS Manager  
P.O. Box 482, Fort Worth, Texas 76101  
817.280.3688, fax 817.278.3688  
or the Comment/Feedback link at: [www.heliprops.com](http://www.heliprops.com)

RELEASE STATEMENT: For photos or written submissions, please include a brief statement releasing your material to Bell Helicopter for use in the Human AD newsletter.

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# Accounts from our Readers

## A Teachable Moment

By E.B. "Mac" Clover



*I recently became aware of your publication and found it to be both interesting and informative. As a training manager for an aircraft engine repair and overhaul company, I am always looking for articles and viewpoints that advance our knowledge and understanding of the aviation industry, particularly if it can be done using a bit of humor along the way. To that end, I thought your readers might be interested in a "teachable moment" regarding the reason procedures are written and why they ought to be followed, with respect to an event that happened to me many years ago while serving as a crew chief on a UH-1H helicopter.*

### What's Your Story?

If you have an account that you would like to share with other HumanAD readers, please send them to:

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I served in the US Army from 1973 to 1993 and during the early 80's, was assigned to an Air Cavalry troop at Fort Ord, near Monterey, California. My aircraft, a UH-1H, was one of our newer aircraft assigned to the unit and a favorite to be flown by the pilots of the troop, evidently because of that "new car" smell still emanating from the interior of the aircraft. Two pilots in particular, Warrant Officer One (WO1) Johnny Smith and WO1 Bill Gordon (not their real names), seemed to me at least, always choosing to fly my aircraft.

These two warrant officers and I flew many, many, missions together – mostly in the local flying area – but also in places like Fort Irwin, CA, Las Vegas, NV, and Boise, ID. In fact, we thought of this aircraft as our own personal flying jeep – to be taken out and flown pretty much when and where we wanted. Many stories on this may find its way into a book someday!

It was blistering hot summer day at Fort Irwin, CA, a desert training area which at the time was not as built up as it would later become. So it appeared to be somewhat of a "ghost town" in some of the training areas. Our mission during this two-week field exercise was to place scouts on the high terrain so that they could observe the "enemy" below and radio back to the Tactical Operations Center (TOC) their observations. So as not to allow the enemy an opportunity to determine where our scouts were located, we repositioned them quite often during this exercise. Additionally, we had to resupply them with C-rations, water, batteries, etc.

There were lots of opportunities to practice Nap of the Earth (NOE) and Night Vision Goggle (NVG) missions in a desert environment, as well as just flying – cargo doors pinned back, wind-in-the-face, and scarf-in-the-breeze – fun! And since we were at Fort Irwin, the unit leadership wanted to make the most of the time spent there, so we had many other training events planned; in particular, firing all the weapons assigned to individuals (M16's rifles and .38 caliber revolvers) and crew-served weapons (M60, M60D's [aircraft-mounted version of the M60] and .50 caliber machine guns). And now is the time where the "teachable moment" became dangerously obvious; and later on, darkly humorous as I recall.

We had just dropped off the last group of people who were allowed to fire the M60D's from a flying aircraft. The firing range was designed for aircraft live-fire training, so we allowed as many of the unit's personnel, who would otherwise never fire a machine gun from a flying helicopter, the opportunity to do so in a controlled environment. At some point during the flight back to our base camp, WO Gordon realized, that he had loaded his .38 revolver with ammunition with the intent of firing it on the pistol range, but never in fact, got out of the aircraft to walk over to the firing line where the pistols were being fired.

Evidently at that moment during the return flight, WO Gordon realized that he had made a seriously flawed safety decision with regard to an unauthorized loaded weapon aboard the aircraft, and indeed, was about to compound that bad decision with another one. WO Gordon, occupying the right side seat of the aircraft, was determined to unload the weapon and throw the bullets out of the moving aircraft; as no live ammo is to be taken off of the range, either in the weapon itself or on your person. We had strict (or so we thought) safety procedures for conducting live-fire exercises, and he did not want to be on the receiving end of a "tirade" from the unit's Safety Officer for disregarding a common-sense procedure.

The pistol was in his holster which was strapped to the left side of his flight vest. It had a nylon lanyard attached to the trigger guard to prevent it from being inadvertently lost should it fall out of the holster. And on top of all that, there was the seat belt shoulder harness straps and lap belt across his body.

As WO Gordon wriggled around the restricting vest, shoulder straps, seat belt, and tangled lanyard in an attempt to un-holster the pistol to unload it, he managed to get the pistol out of the holster and had the barrel pointing toward the open side window when a loud "BANG" resonated throughout the aircraft cabin. At that moment, the sound was something that I did not recognize as being a "normal" helicopter noise. And since I was not seated in the crew chief seat that I would have normally occupied, I only saw a vague and fitting arm movement from WO Gordon.

As I went forward to see what the matter was, I noticed the pistol in his hand

and him “sporting” a strange facial expression as he turned to look at me over his left shoulder. “My gun went off,” he said over the intercom system. “Did you hit anything?” I said. “I don’t know, maybe,” he replied. The lanyard had become tangled around the trigger of the pistol. This pistol was a double-action revolver, meaning that one can pull the hammer back to the cocked position and fire or one can merely squeeze the trigger and fire.

As it turned out, WO Gordon had stretched the lanyard enough trying to get some slack so that he could unload it and had inadvertently stretched it around the trigger with enough tension to pull the trigger and fire the pistol. At that point WO Smith decided we better land to check out the aircraft to see if everything was okay.

Finding a landing spot was no problem, so WO Smith put us down. After following the shut down procedures (now we decided to follow procedures?) and allowing the rotor blades to coast to a stop we climbed out of the aircraft to inspect it for any damage.

One would think that a hole in the main rotor blade would have made some sort of noise that perhaps could be heard while flying. If he was purposely trying to hit the main rotor blade of a flying helicopter at the exact point where two imaginary lines would intersect the span and chord-wise dimensions of the blade, he could not have done it.

But there it was for anyone to see. We definitely did not want anyone to notice the damage. WO Gordon had managed to hit the middle of the blade – an ugly gash of torn metal skin and aluminum honeycomb material – concave on the bottom from the bullet’s entry point and protruding, triangular-shaped shards of metal like black shark’s teeth protruding from the upper surface of the blade.

I’ve never since had a feeling of absolute power over a person that I enjoyed at that exact moment with WO Gordon. He was in a position to be blackmailed by me quite easily (and he knew it) if had I wanted to do such a thing. He knew his position was not a good one and that his Officer Efficiency Report (OER) would reflect a bone-

headed decision like this if the news got out.

After looking back on the situation many years, I suppose I should have said something to the unit leaders. But I shared a certain amount of responsibility for the situation, as well as a feeling of loyalty and camaraderie with the pilots with whom I trusted my life on so many training missions.

So now we had to get the aircraft back to base camp; repair the blade without any of the chain of command knowing about it and complete the remaining time on this field exercise with some confidence that a suitable repair had been made to the blade. A replacement blade was out of the question without confessing how that hole got in there.

We always had on board the aircraft my General Aircraft Mechanic’s toolbox and some small, common consumable items such as tape, oil sample straws and bottles. Yessss!, 100-mile-per-hour tape – duct tape to non-aviation types – and it’ll fix most anything! So we commenced to pound down the protruding shards with a soft-faced hammer to at least get some semblance of a flat surface. Next came a few feet of 100-mile-per-hour tape wrapped chord-wise around the blade. Thirty minutes later, having satisfied ourselves that our tape-job would hold until we got back to base camp, we lifted off.

The short flight back to base camp went without any further excitement and we purposely landed well away from the Tactical Operations Center. After shutdown, I mentioned to WO Gordon that I would walk over to the maintenance platoon to see my friend who was the sergeant in charge of the aircraft structural repair section of the maintenance platoon. I explained to the sergeant the events that had occurred and asked him what he could do to fix the blade, while insisting he keep everything hush-hush, as a case of beer would find its way to him after the job was done and we were back at Fort Ord.

After a few sniggles, tee-hees, and downright belly laughs, he told me “don’t sweat it” and off he went to get the items needed to repair the blade. It’s nice to have friends one can count on – especially friends who know what

they’re doing.

The sergeant and I walked back to the aircraft and after peeling off the tape, he took a cursory look at the damage and asked me what all the fuss was about? He had done a number of previous blade repairs in his career, so this was small stuff on his scale of importance.

While he was working on the blade, I kept a lookout for anyone who appeared to be interested in what was happening on my aircraft. No one was, so the repair was accomplished in less than an hour. It looked damn good too!

One could tell that the skin was no longer a continuous, unbroken slab of sheet metal, but more like a rough patch or spot – not as smooth as the original surface – but smooth enough not to affect the flying characteristics of the blade. A coat of matte-black spray paint to finish off the patch and we were back on the good side of life.

We cheated death once again! What’s the teachable moment of this story you may be asking? PROCEDURES! Procedures are written for a reason; and many are a result of preventing or minimizing the negative effects of bone-headed decisions, not paying attention to details or the ever popular, “that only happens to the other guy” or “it’s not going to happen to me,” mentality.

Had we followed procedures, we could have prevented this incident from occurring. We were lucky on so many levels; the fact that no one was killed or injured and that there was minimal damage to an expensive piece of government equipment. It proved to be a powerful learning experience and something that I have not forgotten.

EPILOGUE: The sergeant who fixed the blade got his case of beer. Warrant Officers Gordon and Smith still flew my aircraft and I was still the crew chief for another thirteen months at Fort Ord. During that time, no other pilots performing a pre-flight inspection on the aircraft ever asked me about the patch on the blade. After my assignment at Fort Ord, I received reassignment orders for the Second Armored Cavalry Regiment, stationed at Feucht Army Airfield in Nuremberg, Germany. I never served as a crew chief again.

# A Pilot's Impression Continued . . .

the pilot's ability to perform. When a pilot is operating in the red the situation is outside the pilot's ability to manage and the result is likely to be an accident. The interesting situation we need to consider is when a pilot is operating in the orange. An orange situation is when something occurs that reduces the pilot's ability to perform in the green. The message is that three oranges equal a red.

What constitutes an orange situation? Orange is a green with some other circumstance that reduces the pilot's ability to perform or to make good decisions. A landing in a field may be a green during daylight but is automatically orange at night due to reduced visual cues. A routine task moves to orange when the pilot is fatigued. Pressure to perform, whether self-induced or external pressure, greatly reduced a pilot's ability to make good piloting decisions. The list of orange factors is long and familiar to all of us.

Flying a helicopter poses risks that are not present in many other occupations. However, risks by themselves are not dangerous if risk management techniques are applied to mitigate the risks to an acceptable level and to define unacceptable risks. These techniques are well understood and are part of any Safety Management System but risk management starts with the pilot.

We all know the saying, "There are old pilots and there are bold pilots but there are no old-bold pilots." This is not quite true, sometimes us old guys were just plain lucky. I've had more than one time in my life where I made a series of decisions that left me in a position with no good options and I'm still alive.

I tried to fly over Soledad pass north of Los Angeles once. My route crossed many power lines; sometimes with several power lines side-by-side. The clouds were about 200-300' AGL (above ground level) as I began

my northbound climb up a valley that led to the summit. Initially, the clouds rose at the same rate as the valley floor so I flew along very slowly marking the power lines off as I crossed them at the towers. I almost made it.

According to my altimeter I was within 200 feet of the summit when the clouds and ground came together. I turned around and backtracked until I saw a small field and landed. I did a quick map recon and noticed that a railroad crossed the pass at a lower elevation than the highway pass I had initially selected. I turned east, picked up the railroad and resumed my climb. Everything was going great until the railroad disappeared into a tunnel.

## A Good Deal

The ceiling was even lower than it had been at the summit. I eventually backtracked south and landed next to a restaurant parking lot. An older gentleman owned the restaurant who turned out to be a former naval aviator in World War II. He heard me fly over the first time and said a prayer for me; knowing what I was likely to run into farther-up the pass. "I thought you were the Sheriff's helicopter at first," he said. "Go ahead and park it here and I'll make a deal with you. Stay on this pad until the weather clears and I'll give you a free cup of coffee until it does." An hour or so later, after several great cups of coffee and some great flying stories, the fog lifted and I resumed my flight back to Ft. Worth.

So why did I end up in this multiple orange situation? I had received a weather briefing that said the ceiling in the pass was likely to drop to zero. The weather east of LA was IFR and Soledad Pass looked like the best way out of the Los Angeles Basin. My thought process went something like this: If I could get thru Soledad Pass the weather all the

way to El Paso was good. I suspected I was getting another "doomsday forecast" from the weather guy. My experience indicated that almost always the weather briefers were very conservative in their forecast.

My inclination flying a helicopter was to go take a look for myself. There is a difference in minimum weather to fly a fixed wing up the pass and the weather minimums for a helicopter. A lightly loaded helicopter doesn't need much room to turn around. Although I had never flown this exact route before I had studied the map and knew about the multiple power lines crossing the pass. The visibility under the ceiling was pretty good, at least a mile or more. All I had to do to be legal was to stay clear of the clouds.

I had get home-itis. I had been on the west coast for a lengthy time demonstrating this helicopter and I wanted to get home. The aircraft had some other activities planned for it at home and there was another job waiting for me. If I could get to El Paso or farther that day, I could complete the flight home on the following day. It was January and the days were short so there was no time to spare if I was going to complete this ferry flight in 2 days.

## "I Dodged a Bullet"

I had a high skill and experience level. I was good and I knew it. At this time I was in my early 40's, with around 6000-7000 hours of helicopter time. Additionally, I had a helicopter Airline Transport Pilot rating (IFR experienced) and lots of hours in the model I was flying. Although I had never flown low-level up this particular valley I had flown helicopters in just about every state in the U.S., in all kinds of weather conditions as well as in many other countries on 5 continents. It is my observation that, in general, pilots have a high degree of self confidence

as it goes with the territory. It is unusual to meet a helicopter pilot that considers himself to be below average although by definition half of us are. Those of us that are really good believe the rules are established for pilots that are slightly below average so we sometimes believe its okay to fly close to the limits.

I “dodged a bullet” in Soledad Pass that day. It seems like 999 times out of a thousand when a pilot does something really dumb, he gets away with it. The other time the pilot doesn’t and we all stand around and say “I can’t believe he got killed doing something that dumb, he was a really good pilot.”

Several years later another pilot that was working a test program at Alamosa, CO. related the following story to me. A single engine airplane landed to re-fuel. The pilot was heading eastbound. The route out of the San Luis Valley to the east is through La Veta Pass, which is about 40 miles east of Alamosa and a little over 10,000 feet MSL. As frequently happens in the morning the cloud base was lower than the pass.

The man who operated the Alamosa Fixed Base Operation (FBO) was yet another WW II vintage naval aviator with many years flying experience in the San Luis Valley. He recommended that the pilot wait for an hour to give the clouds time to lift. The pilot thought it would be okay and said he’d go ahead and take-off to have a look. As the pilot was preparing to get in his plane the old pilot walked up to him and pointed toward the pass. “You see that light colored spot just below the cloud deck out there? About four or five years ago a guy took off in weather just like this. I can’t remember his name but he hit right there.”

This really made me think about my flight up toward Soledad Pass. What was so important that I needed to go up there despite several warning-signs

that told me it was not a good idea? Nobody around that part of California knew me. If I hit the cumulus granite or caught a wire, who would even remember in a few years? The answer is only my family. A fatal accident would have made a big difference to my wife and children.

This wasn’t the only dumb thing I’ve ever done in my flying career but it was one of the dumbest. We’ve all done things that in hindsight we could have done differently, most of the time we get away with it, sometimes the odds catch up.

## Closing the Generation Gap

One speaker at the Symposium told a story about a young pilot talking with an older pilot. The young pilot wanted to know how the older pilot had managed to have such a long accident-free flying career. The old pilot said “good judgment.” The young pilot wanted to know how one develops good judgment and the older pilot replied “experience.” Still curious the young pilot asked how one gets experience and the old pilot said “bad judgment.” This may be true but it’s not a very good way to learn. We shouldn’t have to make every mistake in the book to learn to avoid bad situations.

There are several good reasons to reduce the helicopter accident rate. Accidents are expensive, they cause the cost of insurance to be high, they reduce public confidence in our industry, etc, etc, but as a pilot, the most important reason to avoid accidents that I can think of is that I don’t want to become a statistic. I don’t want to give anybody a reason to say “I can’t remember his name but he hit right there”.

There are many, many factors that can contribute to an accident. But when 70-75% of the accident analyses identify pilot decision making as a contributing factor it means every pilot has an opportunity to make a difference. Think about some of the interesting days in your flying career. What were the events and risks that moved you from operating in the green into the orange range?

There are many safety strategies that may be employed but the most important one is in your head. As pilots we need to recognize risks that will have an effect on our margin of safety. Risks are additive. Three oranges equal a red. We can use this simple equation to make better risk-mitigation decisions to avoid those “unacceptable risk.”



# Awards & Recognitions



## BELL HELICOPTER AWARD PROGRAMS

Many Bell pilots and operators have requested information on what type of Bell Helicopter wings and safety awards are available to them. There are two ways to obtain recognition for pilots who fly Bell helicopters. The first recognition is a Pilot Safety Award issued on the basis of safe flying hours in Bells. The second is a wings award based on the pilot's flight hours in Bell helicopters. It is possible for a pilot to obtain both awards.

### Bell Flight Time Wings Award

The second recognition is for a pilot's flight time in Bell Helicopters. The Bell Training Academy issues this Certificate of Achievement and a Wings Lapel Pin in the following flight time hours:

- 1,000 hrs.** plain wings pin + certificate
- 5,000 hrs.** 5,000 hr. wings pin + certificate
- 10,000 hrs.** 10,000 hr. wings pin + certificate
- 15,000 hrs.** 15,000 hr. wings + certificate
- 20,000 hrs.** 20,000 hr. wings + certificate

**Example:** If a person had 6,500 hours in Bells he would receive a 5,000 hour pin, although the certificate would read 6,500 hours. Their next opportunity for a higher hour level pin would be at the 10,000 hour level.

For the hour level recognition to be awarded, the pilot (or company) must provide the following: Name of pilot as they would like it printed on a certificate, a verified flight time in Bells by either the Chief Pilot or a Company Administrative Official. In the case of an individual pilot making the request, a signed copy of the page in the pilot's log book that verifies the hour level for the wings requested.

Mail or email the information (including copy of documentation) to John Williams at: [jwilliams2@bellhelicopter.textron.com](mailto:jwilliams2@bellhelicopter.textron.com). Bell Helicopter Textron Inc., John Williams, HELIPROPS Manager, P.O. Box 482, Fort Worth, Texas 76101 USA

### Pilot Safety Award

Recognizing an individual pilot for flying safely is far too rare. Most pilots only hear of mistakes made by another pilot in an accident. Bell provides a Pilot Safety Award certificate for hours flown without an accident in a Bell helicopter. This can be achieved in either military or commercial aircraft. The award is given in thousand hour increments to recognize those pilots with a proven commitment and history of safe flying. To apply for this recognition certificate, please send a request letter from the chief pilot, CEO, military commander, or other individual who can confirm how many accident-free flight hours you have flown in Bell helicopters. If you are an individual pilot/owner, you can write the statement yourself. Let us know how you would like the name to appear on the certificate. If you want to include a military rank, you need to indicate that.

The award is maintained through the Bell's Flight Safety Department within Bell Engineering; Lee Roskop ([Idroskop@bellhelicopter.textron.com](mailto:Idroskop@bellhelicopter.textron.com)) is the Bell point of contact. His mailing address is: Bell Helicopter Textron Inc., Attn: Lee Roskop, Dept. 81, Group 60, P.O. Box 482, Fort Worth, TX 76101 USA

The pilot's name and safe flight hours are posted on Bell's Flight Safety web page [www.heliprops.com](http://www.heliprops.com). Follow the link to the Heliprops Pilot Safety Award Program.

## Significant Achievements



Wayne Noonan (L) receives a Certificate of Recognition from Bell Training Academy Director, Trey Wade (R) on his retirement after an illustrious helicopter career. Wayne served two tours in Vietnam (1967-68 and 1970-71) as a Chinook pilot. He retires after 25 years from the Bonneville Power Administration as its Chief Pilot having flown over 19,000 hours in helicopters and 11,000 hours in Bells. He is recognized as a pioneer in developing the techniques of stringing high tension wires on power lines with helicopters. Wayne was a regular student customer at the Bell Training Academy for 24 years.



Receiving a Bell Flight Time Award for 1,500 hours flown in Bell Helicopters is Captain Felipe Perez (center) ASESAs pilot in Mexico City. Making the presentation is Bell Customer Support Area Manager is Barry ZumMallen (left) with Ing. Herman Garcia Lopez, Director of Operations for ASESAs.

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