Number 17 **September 2012**

Flightfax®

Online Report of Army Aircraft Mishaps

"Telling people what to do to be safe is not as effective as helping them understand the basic limitations that affect all humans." - Craig Geis

To date in fiscal year 2012, 95 percent of the Class A accidents have been attributed to human error. The percentage keeps increasing this year, so perhaps parroting a percentage once again this month is ineffective. Perhaps a better way of effectively communicating this trend is by stating that our aircraft are not failing us – we are failing our aircraft. And we are failing ourselves.

In an effort to assist Aviation leaders and Aviators, Flightfax, including this edition, has this year focused five editions with human factors lead articles. As Mr. Geis points out "Why We Do What We Do" beginning on page 2, we are not attempting to tell you how to prevent accidents, since you already know how to do that. The resources we have been providing are intended to help our readers understand *how* human performance errors occur.

CW5 Papesca takes the approach of understanding *how* and *why* aviators have decided in some instances to fly a potentially unhealthy aircraft to the nearest Forward Operating Base when faced with a land as soon as possible situation. He goes on to cover how our Aviators perceive the situation when they make those decisions, and their personal assessment of the risk, and sometimes their erroneous assessment of probability of success. Naturally, hindsight is 20/20, so it is relatively easy to assess one of these decisions as "wrong" when the results are catastrophic. Understanding that we are all actually creatures of habit, CW5 Papesca reminds us of the "habits" (standards) that can be life-saving when our limbic system kicks in and executes immediate action.

Something Old, Something New. With that, this month's edition of Flightfax marks 40 years! During the week of 22-28 Sept 1972, the first Flightfax replaced the "Weekly Summary." It was then "designed for easier readability, Flightfax will carry the same mishap data as the old Weekly Summary, along with the facts about the week's flight activities …will further the cause of flight safety." Today, as a monthly newsletter, the original Flightfax intent has not changed. While Flightfax may fall into the "something old, something new" category, we certainly aim to keep it "something relevant." If you have any suggestions on how to keep it relevant for you, give us a shout.


PRELIMINARY ARMY AIRCRAFT MISHAP DATA
USAAAVS FLIGHTFAX
weekly summary
SOMETHING OLD, SOMETHING NEW

Happy Birthday Flightfax!

Until next month, fly safe!
LTC Christopher Prather USACR/SC Aviation Director
email: christopher.prather@us.army.mil

Introduction to the Science of Human Factors: Why We Do What We Do

By Craig Geis

"It rarely matters what we tell an adult to do, it only matters what that person perceives the situation to be at that final moment when they make a decision, their personal assessment of risk, the probability of success, and the consequences of failure."-Craig E. Geis

Part One

This is the first of a four part series of articles. Throughout the series I am not going to tell you what to do to prevent accidents. You already know that. What I am going to do is help you better understand the science of human factors which simply stated is the study of the human capabilities and limitations that give rise to human performance errors.

The brain is fundamentally a lazy piece of meat – or a very efficient computer; depends on your perspective. Although the brain is always active to some degree, it doesn't waste energy. This is why there is a striking lack of imagination in most people's visualization of a beautiful sunset. It's an iconic image we are all familiar with, so the brain simply reactivates old memories of this sort of scene. Think of a sunset and you get an instant recall. But if you imagine something that you have never actually seen, like a sunset on the planet Pluto, the possibilities for creative thinking become much greater because the brain can no longer rely on connections shaped by past experience and it must think and imagine. Our brain wiring and our behavior are shaped by past experiences.

It doesn't matter if you fly a plane, drive a car, answer phones, or raise a family; the principles are exactly the same. If you follow this series of articles you will begin to look at human behavior in a whole new way.

You have all read enough articles on human factors to realize the general approach has been to "tell" people what to do in order to be safe and not succumb to human error. We are human, we are fallible, and we will make mistakes. What we need to understand is ***why*** we make them and then we can better choose ***what to do*** about it.

I know I shouldn't fly under certain weather conditions; I know not to talk on a cell phone and drive; I know I should use the maintenance manual when I work on an aircraft. I don't need someone to tell me that. Observable fact shows that this approach is not reducing or eliminating accidents and incidents. In fact every organizational safety program in one way or another "tells us what to do and what not to do." The recommendations are all good and come from years of lessons learned the hard way. But ***why*** isn't this working? Here's why:

Decisions come from the processes that go on in our brain, which we'll liken to a house.

In the basement we have the brain stem, which controls basic instincts such as reflexes, instinctive survival, and self-preservation. It controls those instinctive reactions indispensible to the preservation of life. It is also called the primitive or lizard brain. It operates on an unconscious level.

The main floor of the 'house' is the mid-brain, also known as the limbic system or our center of emotions. The limbic system operates by signaling the release of hormones and neurotransmitters in response to threats, and is also interconnected with the pleasure center which plays a major role in learning and the continuation of successful behavior patterns. The limbic system is tightly connected to the third brain and also operates on an unconscious level. It only takes 80 - milliseconds (instantaneous) for the limbic system to detect a threat, perform

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an assessment, and begin releasing stress hormones.

The upstairs is our cerebral cortex or thinking brain. It has many functions but the most important function occurs in the front part of the brain called the prefrontal cortex. In terms of human factors this area of the brain is involved in the process of acquiring knowledge by the use of reasoning, intuition, or perception and in the expression of personality and appropriate behavior. The signals that reach the limbic system in 80 milliseconds don't reach the prefrontal cortex for 250 milliseconds. This means the body responds before we are even consciously aware of what the threat is. This is an important concept to remember because in later articles we will look at what happens in an emergency situation when we are caught unprepared.

For example when we are unexpectedly startled by someone, the limbic system immediately reacts by releasing hormones to increase your heart rate, and your muscles react to provide defensive action before you even see who it is. Approximately 170 milliseconds later your prefrontal cortex (thinking brain) gets the signal and makes a determination as to whether the person is an actual threat. If the signals could reach both areas of the brain simultaneously and the individual was not a threat, then you would not be startled. The activity of the prefrontal cortex (thinking brain) is slow and energy intensive. The limbic system is fast and has evolved for immediate action.

We said earlier that our brain wiring and our behavior is shaped by past experiences. Wiring takes place from learning. Connections within the nervous system are made and our actions, behavior, and decisions are unconsciously guided to what has worked for us in the past. We are all actually creatures of habit.

Our behavior is then guided by both conscious and unconscious processes. Unconscious actions are generally the result of well established habit patterns that have been ingrained through repetition. Once these highly practiced procedures become automatic (vs. controlled) it results in an absence of conscious mental effort which is usually the desirable outcome of training. The advantage is that it allows for the fast, smooth execution of a task. It also frees up attention resources and working memory (thinking brain) so we can focus on more important or situationally critical things.

The disadvantage is that we have no conscious control of accuracy and timing and our behavior is often led or mislead by cues.

If you drive home the same way from work every day do you think about the turns you make? Are you really aware of all the buildings you pass, other cars, how many lights you stop at? Do you really think about performing routine tasks on a daily basis? No, that's the unconscious brain working for you. Life would be too complex if the brain had to consciously think about everything. With practice even extremely complex skills are turned into unconscious processes. Aerobatic pilots or high performance athletes executing very complex tasks don't think about them. In fact when they do, thinking interferes with the finely established habit patterns.

The unconscious brain doesn't have to look at everything to process it. It works quickly on a need-to-know basis. It scans quickly for key information and fills in what it need from what is stored in Long Term Memory. It is fast and efficient.

In the articles to follow we will look at different individual human factor principles. Please feel free to send comments or suggestions for future topics.

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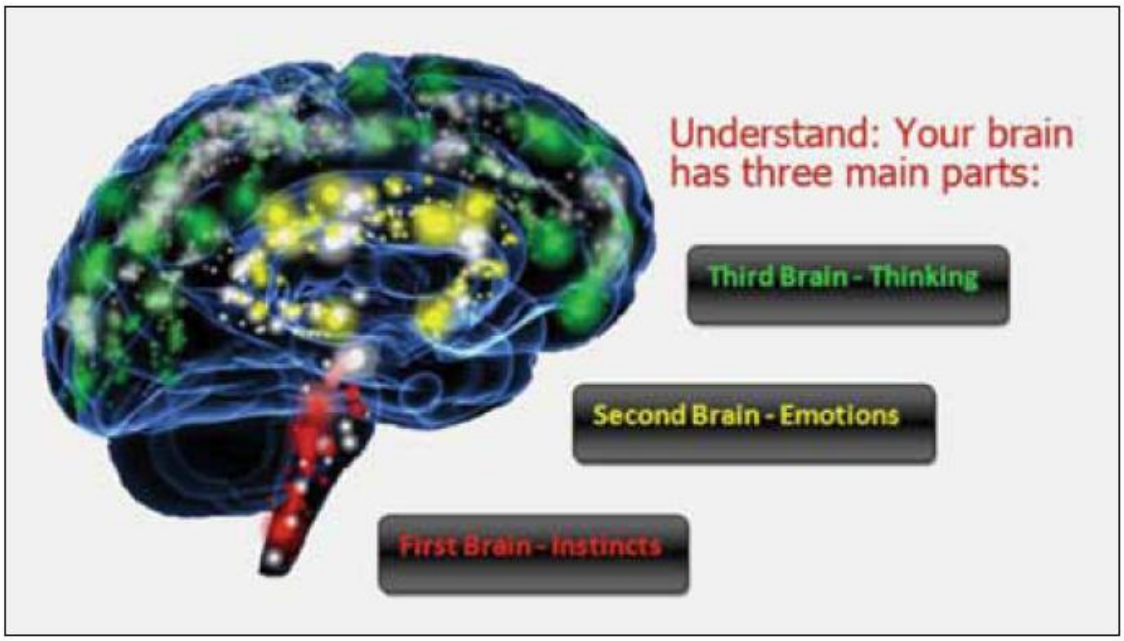
Key Points to remember:

1. Human Factors pertain to everyone regardless of our job or duties.
2. Telling people what to do to be safe is not as effective as helping them understand the basic limitations that affect all humans.
3. Past experience, success and failure, wire the connections in the brain and allow us to make most decisions smoothly and unconsciously.
4. The brain can be divided into three basic components: instincts, emotions, and thinking.
5. The unconscious, emotional part of the brain doesn't have to think to process information. It works fast on a need-to-know basis, and scans quickly for key information, then fills in the rest based on past experience. It is highly efficient.
6. The conscious, upper level of the brain is slow and methodical but is an excellent problem solver if time is available. It requires input from the emotional center to make sound decisions.
7. Most of our responses to situations occur before the thinking brain even knows what's going on and has a chance to "weigh in."
8. The key human factor limitation is that we do not monitor unconscious behavior and if a current situation is slightly different from previous times, our behavior may not be appropriate for the situation.

Craig Geis is Co-Founder of California Training Institute and formerly Geis-Alvarado Associates. He provides instruction for clients worldwide on the subject of Human Factors Threat & Error Management. Mr. Geis was a U.S. Army career pilot, developed the military's Team Resource Management training program to address human error and is a former instructor for the U.S. Military Academy at West Point, Embry Riddle Aeronautical University, University of Maryland, and University of San Francisco. Craig is a Certified Force Science Analyst, and in instructor for CA Police Officers Standards & training. He holds an MA in Psychology from Austin Peay State University, a BA in Management from C.W. Pst College in New York, and an MBA in Management from Georgia Southern College. Additional references and articles are available on the CTI web site at www.CTI-home.com. Phone (707) 968-5109 or email CraigGeis@CTI-home.com



Land As Soon as.....

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During combat operations conducted over the last 12 years aviators have had to make critical mission decisions when posed with aircraft emergencies in hostile areas just as they have done in previous conflicts. All Army aircraft checklists contain emergency procedures which prescribe landing in the event of an emergency based on the "urgency of the emergency" or "survival of the occupants" as the determining factor when deciding to land as soon as practicable or possible. Unfortunately there have been instances where aviators have decided to try and continue to fly a potentially unhealthy aircraft to the nearest Forward operating Base (FOB) when faced with a land as soon as practicable or land as possible situation resulting in a catastrophic loss in terms of personnel and equipment. Choosing to fly an aircraft for longer than the operating procedures intended may be the only answer in some instances but not the answer for all situations when faced with an emergency.

During combat operations the perceived or actual enemy threat is always an important factor in determining where to land an aircraft when faced with an emergency, but not the only factor. One could argue the entire combat area of operations is a hostile environment and aircraft should never be landed anywhere outside the "wire" unless the aircraft will not continue to fly. The results of this philosophy have simply not always proven to be successful and the actual answer is somewhat more complex.

All aircraft operating procedures allow for the pilot to determine suitability and determine ***where*** to land as well as determining ***when*** to land, as soon as possible or practicable. Words contained in the procedure allude to the urgency of the emergency such as "without delay" and "survival of the occupants" and should not be disregarded due to the actual or perceived enemy threat. The intent of all emergency procedures is to protect the aircraft and personnel from harm and apply whether in combat or not. The fact of the matter is the decision to place an aircraft in a potentially hostile situation may be less dangerous to the aircrew and aircraft than continuing flight when landing is prescribed. Prioritizing a perceived or real enemy threat over an actual emergency in the aircraft may not be the most conservative answer when faced with a life threatening situation. Generally with today's combat configuration of combat teams there is usually always a "wingman" which gives aircrews greater options when determining when and where to land in the event an emergency does occur. In these instances there should be little or no deviation from the prescribed emergency procedure for fear of reprisal from enemy threat.

During the Mission Approval/Briefing process Air Mission Commanders, Mission Approval Authorities and Mission Briefers should mitigate risk by including specific intent to aircrews when aircraft emergency situations are encountered. Risk approval authorities must be aware

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of the risk involved to their personnel and equipment when aircrews continue flight during an emergency which specifies for an aircraft to land at the "nearest" suitable area as soon as practicable or possible .

Downed aircraft procedures are an important part of unit standard operating procedures (SOPs) and aircrews should have confidence in their unit's ability to safely recover the aircraft and personnel in case of an emergency. The unit procedures must be followed in combat whether downed by the enemy or an emergency in which further flight is inadvisable. Although the threat of hostile forces is always a factor, the overriding factor in order to protect the aircraft and personnel onboard must be to execute the procedures prescribed in the operator's manual.

Although some aircrews have rolled the dice and survived by extending the time taken to execute an emergency procedure, many have not. The ones who risk the aircraft and the lives of those onboard and return to a FOB are lucky and we will never know the statistics of all those that make it versus those who don't. The only statistic we can measure is the number of aircraft losses and injuries or death to personnel.

Adherence to prescribed emergency procedures in aircraft operator's manuals is a fundamental skill. This skill is taught with great emphasis at the USAACE and continued in the CAB's through the ATM and operators manual in order for pilots to react timely and instinctively to protect aircraft and personnel during emergencies. Recent accident investigations have shown that aircrews are not following prescribed procedures resulting in aircraft losses and injury or death to personnel. Although the threat of hostile forces is always a factor in combat operations, Pilots in Command (PCs) must adhere to prescribed procedures in order to protect the aircraft and personnel onboard during all missions, whether in combat or not.

--CW5 Louis Papesca, SCOUT /ATTACK Branch Chief, may be contacted at (334) 255-1579, DSN 558.

UAS Class A – C Mishap Table

	FY 11 UAS Mishaps					FY 12 UAS Mishaps			
	Class A Mishaps	Class B Mishaps	Class C Mishaps	Total		Class A Mishaps	Class B Mishaps	Class C Mishaps	Total
MQ-1	2		1	3	W/GE	4	1		5
MQ-5	3		1	4	Hunter	1		2	3
RQ-7	1	14	38	53	Shadow		5	19	24
RQ-11					Raven			1	1
MAV			3	3					
YMQ-18						1			1
SUAV			1	1	SUAV			5	5
Aerostat	6	9		15	Aerostat	1	4		5
Total Year	12	23	44	79	Year to Date	7	10	27	44

As of 13 Sep 12

Mishap Review: AH-64D Security Mission

Following completion of an attack weapons team security mission, chalk 1 attempted a return to target type maneuver as a demonstration for the supported ground unit. The aircraft developed a high rate of descent until ground impact. The crash resulted in serious injuries to one crewmember and destruction of the aircraft.

History of flight

The accident aircraft was a AH-64D operating as part of a two-ship attack weapons team (AWT). The team was designated to conduct a recon /security mission in support of coalition forces. The mission area encompassed mountainous terrain with MSL altitudes at 9000 – 10,000 feet. Brief sheets and risk assessments were completed the day prior to the mission with the overall risk calculated as LOW. The weather forecast called for clear skies, 5000 meters visibility with mist, and light winds out of the east. Temperature was -15C.

The AWT crews reported for duty at 0700L, received their weather and completed their team brief. Preflights and crew briefs were conducted at 0930L. At 1040 the flight of two AH-64D aircraft departed but returned to base after encountering poor weather conditions. Following improvements in the weather, the AWT again departed at 1255L. The AWT provided mission support for nearly four hours before forecast weather at their home station required a RTB. Prior to breaking station, the ground element requested a low fly-over at their outpost as a morale booster. Lead acknowledged the request and briefed his wingman of his intent to do a low pass followed by a hard climb and nose over as they departed the AO.

The PC initiated the maneuver with a 40 degree nose pitch-up at 105 KTAS and an altitude below 50 feet AGL. The aircraft climbed to approximately 350’ AGL, slowed to 22 KTAS at the apex of the maneuver while rolling into a steep left bank to accomplish the course reversal. Near the completion of the pitch-back maneuver, the aircraft impacted the ground in a nearly level attitude with 80 knots forward groundspeed. During the crash sequence the aircraft slid approximately 30’ became airborne again, lost its tail rotor, then rotated about the mast for 3 to 4 rotations before coming to rest in an upright position. One crewmember sustained serious injuries and the aircraft was destroyed.

Crewmember experience

The PC, sitting in the back seat, had more than 2100 hours total flight time, with 2000 in the AH-64D (1100 as a PC/MP) and 1600 hours combat time. The PI, flying in the front seat, had 700 hours total time, 650 hours in the AH-64D and 500 hours combat time.

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Commentary

The accident board determined the crew lost situational awareness with their operating environment (9000' MSL) and failed to take into account aircraft performance data for the conditions. The maneuver was initiated at an insufficient AGL altitude to safely recover due to temperature, density altitude, available power, and aircraft gross weight. All these factors contributed to the failure to recover from the descent. Additionally, the crew failed to coordinate and adhere to combat maneuvering standards prior to executing the maneuver.

Manned Aircraft Class A – C Mishap Table

	Month	FY 11 Class A Mishaps	FY 11 Class B Mishaps	FY 11 Class C Mishaps	FY 11 Army Fatalities		FY 12 Class A Mishaps	FY 12 Class B Mishaps	FY 12 Class C Mishaps	FY 12 Army Fatalities
1st Qtr	October	0	1	4			2	2	6	1
	November	0	2	14			1	0	13	0
	December	2	1	5	4		2	2	6	4
2nd Qtr	January	0	1	8			2	0	11	0
	February	1	1	2			2	1	6	0
	March	2	1	7			1	2	11	0
3rd Qtr	April	2	1	12			2	1	5	4
	May	2	1	5	1		1	0	3	0
	June	3	1	4	2		1	0	2	0
4th Qtr	July	1	3	14	2		4	3	10	1
	August	2	2	10	2		2	5	6	0
	September	0	0	8	0				1	
	Total for Year	15	15	93	11	Year to Date	20	16	80	10

As of 17 Sep 12

September 17, 1908 – The first fatality involving powered flight occurred as a biplane piloted by Orville Wright fell from a height of 75 feet, killing Army Lt. Thomas E. Selfridge, his 26 year-old passenger. A crowd of nearly 2,000 spectators at Fort Myer, Virginia, observed the crash of the plane which was being tested for possible military use. Wright himself was seriously injured.

OH-58D Five Year Accident Trend Review

During the last five Fiscal Years, there have been 25 OH-58D Class A mishaps resulting in 19 fatalities. Additionally, there have been 6 recorded Class B and 75 Class C mishaps. A review of the mishaps reveals the following:

-18 (72%) of the 25 Class A mishaps were caused by human error. 7 (28%) had materiel failure as causal factors. Class B's consisted of 3 human error and 3 materiel failures. There were 75 reported Class C mishap with 62 (82%) human error, 10 materiel (13%), 2 bird strikes and 1 not reported.

Leading accident events (Class A)

- **Power management/Target fixation**. There were seven accidents associated with the aircraft running out of power for the conditions/maneuver being performed or appropriate power was applied too late to be effective. Two fatalities resulted from a mishap attributed to target fixation.
- **MTF autorotation check.** There were four mishaps resulting in four fatalities during maintenance test flights while conducting autorotation rotor rpm checks. In three cases the MP failed to properly perform the power recovery by not ensuring the throttle was at 100% prior to initiating recovery. In one instance, the MP failed to recognize a FADEC failure during the recovery. There was an additional MTF Class A resulting from an engine failure at altitude where the aircraft landed hard.
- **FADEC Failure.** Three mishaps (not including the MTF cited above) occurred as a result of a FADEC failure. There were three fatalities associated with these mishaps. Two mishaps occurred when the crew failed to follow the emergency procedure resulting in loss of engine control. In the other mishap, it was suspected the FADEC failure occurred while low level and resulted in a low power situation over trees.
- **Wire/tower strike.** Two wire strike mishaps and one tower strike resulted in six fatalities. Loss of situational awareness to known hazards, failure to scan and detect hazards to the flight path were contributors to the mishaps. One wire strike and one tower strike occurred under low illumination NVG flight.
- **NVG Mid-air.** One NVG mid-air collision resulting in four fatalities occurred during this time period. Failure to maintain airspace surveillance and obstacle avoidance were contributors to this mishap.
- **Additional.** Additionally, there were two drive-shaft failures; one engine failure; one hydraulic failure; one dust landing gone bad; and one electrical fire that resulted from aircrew baggage being stored in the electrical compartment which resulted in electrical arcing and a fire.

	OH-58D CLASS A – C Mishaps			
FY	Class A	Class B	Class C	Fatal
2008	5	3	19	2
2009	9	2	18	4
2010	4	0	11	4
2011	5	1	16	5
2012*	2	0	11	4
Total	25	6	75	19

* Year to date

This Flight is Boring…*Let's Spice It Up!* February 2005 Flightfax

Sure, many of our missions get a little monotonous and some seem downright boring. Go ahead, have a great time and perform some wild maneuvers…take the aircraft to its limits. The events surrounding a recent accident illustrate this alarming trend and reveal a lack of aircrew coordination and pre-mission planning.

Although this type of thinking may sound crazy to many of you, some of our aircrews are not only thinking this way but are actually following through and putting these thoughts into practice. Recent months have shown a trend of aircrews performing *unnecessary flight maneuvers*. This is the technical term for what is commonly called "hot dogging." We are not addressing bona fide evasive maneuvers to deal with hostile fire or evade potential threats. These maneuvers are not necessary and are far outside the flight tasks included in our aircrew training manuals.

The flight, consisting of two UH-60As, was flying at 115 KIAS and 50 to 60 feet AGL when the pilot in command (PC) of Chalk 2 unexpectedly initiated an aggressive 50 to 60 degree uncoordinated, decelerating left turn to look at some sand dunes to break up the monotony of a boring flight. The aircraft turned approximately 270 degrees and decelerated to 0 KIAS in 5 to 10 seconds. This maneuver resulted in a high bank angle and rapid deceleration, causing the aircraft to descend vertically and impact the ground. Both the PC and the pilot (PI) had over 2,000 flight hours each. There was no hostile fire or any other form of threat. The aircraft was severely damaged and the crew and passengers sustained minor injuries.

Wait a second; we're good at this…

Interviews conducted in the course of this investigation revealed the existence of an attitude that aggressive maneuvering is not only acceptable, but also preferable due to the combat environment. Several interviewees expressed admiration for the skill with which the pilots of the accident aircraft "flew the aircraft as it was meant to be flown," or took the aircraft past the "cushiony limits." Conversely, there were opinions critical of Vietnam-era pilots for flying too conservatively, as though every flight were an instrument flight or flying back home.

The investigation board determined this attitude toward overly aggressive flying stems from flight practices used by cavalier pilots widely acknowledged as the most experienced and capable in the unit. In general, reactions from interviewees ranged from tacit approval of aggressive flight to open admiration for it. The battalion standardization pilot (SP) had counseled the company SP (acting as the PI in the accident aircraft) on at least one occasion for his attitude regarding aggressive flying. The company commander, widely described as the best company commander in the battalion and perhaps the task force, seems to have been unaware of the degree to which this attitude was ingrained in some of the company's crewmembers. The unit platoon leaders seemed aware of the aggressive flying, but because of their inexperience, in comparison to pilots who were flying aggressively, they failed to recognize it as inappropriate.

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Think about it…

Think about what this crew did. Is this what aircrews are trained to do? Is it OK because the unit is in combat? Let's look at two lessons we can learn from this accident: the importance of aircrew coordination and pre-mission planning.

Aircrew coordination

The PC took the controls just prior to initiating the left turn that resulted in the accident without clearly alerting the crew of his maneuver. Performing evasive maneuvers is often a necessity, but every effort should be made by the pilot flying the aircraft to communicate his intentions before or during the maneuver. During interviews following the accident, none of the other crewmembers were entirely clear about why they were turning. During the turn, G forces and wind coming in the right door of the aircraft interfered with the intercommunications system (ICS) to the degree that none of the other crewmembers were clear about what the PC was trying to communicate over the ICS, though all agreed it was something about power. There was so much wind coming in the right cockpit door that the PI said his ICS microphone was rendered useless.

Since the rest of the crew did not understand the degree of or purpose for the maneuver, effective aircrew coordination was impossible. Adding to the confusion, one of the crew chiefs thought the PI was the PC of the accident aircraft. A review of flight records revealed that none of the crewmembers had received mandatory aircrew coordination refresher training. Receipt of the required training is no guarantee that the accident could have been prevented; however, it does indicate the unit placed insufficient emphasis on aircrew coordination.

Pre-mission planning

Aviation operations require extreme situational awareness and a full understanding of how to effectively employ your crew and aircraft. Pre-mission planning sets the conditions for a successful mission. Is your unit, more importantly your aircrew, really dedicating enough time and effort to pre-mission planning? Have you and your crew studied the expected threat? Do you know your aircraft's limitations given the expected environmental conditions (PPC)? Remember, you and your crew should be well prepared for the majority of missions you are required to perform. The crews must study the expected threat, known man-made hazards to flight, unit standard operating procedures, operational rules and requirements, and become intimately familiar with their areas of operation. Complete knowledge of these subjects, coupled with a clear and executable mission statement, constitutes satisfactory pre-mission planning. By identifying the accidental hazards (man-made hazards including wires, towers, etc., and environmental conditions) and the tactical risk (expected threat and operational requirements), proper pre-mission planning allows crews to implement Composite Risk Management (For more information on Composite Risk Management, see the DASAF's Corner in the December 2004 issue of Flightfax, as well as MAJ Ron Jackson's article in January 2005.)

So what does aircrew coordination and pre-mission planning have to do with aggressive flying?

Simply put, aircrew coordination and pre-mission planning injects discipline and flexibility

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into our aviation operations. When you and your crew properly coordinate your actions and conduct detailed planning, you will see there is no time or need to perform "hot dog" maneuvers but you will be ready to respond to threats as the situation dictates. If you don't believe this, talk to the "old" guys in your unit and ask them about successful missions where things went well even when the weather didn't cooperate or the threat didn't work as planned. The common denominators will always be aircrew coordination and pre-mission planning.

Conclusions

It is your responsibility to prepare yourself and your crew for missions. This preparation includes a clear understanding of crew duties and responsibilities as described in aircrew coordination standards and proper pre-mission planning. Yes, combat operations are different from peacetime training missions but no SP, IP, PI, or any other crewmember has the right to endanger property or lives by disregarding aircrew coordination or ignoring pre-mission planning requirements.

-- February 2005 Flightfax, then MAJ Steven Van Riper, Chief of Attack/Scout Branch, Accident Investigation Division, U.S. Army Combat Readiness Center

NOTICE: Change to Flightfax Subscription Procedures

Some changes have occurred in subscribing to the Flightfax newsletter. Up to this point subscriptions were manually entered into contact lists and Flightfax was manually emailed out to you from a member of the Aviation Directorate. A new program has been installed allowing automatic mailing lists to be generated as well as distribution of new issues. An automatic unsubscribe feature is also incorporated.

Subscribers will sign up on the Aviation Directorate website (https://safety.army.mil/atf/) to receive Flightfax each month by email. You must sign in using your CAC/PIV. Your AKO email address will be automatically entered when you select the subscribe button. An email acknowledging your subscription with the latest Flightfax issue attached will be sent to your AKO email address.

AKO email address is the standard. For those individuals without CAC access and/or an AKO email address (sister services, other agencies, etc) the manual contact lists will still be available. Those case-by-case individuals must contact the Aviation Directorate to be subscribed.

Transition glitches. For those individuals who subscribed prior to 6 Sept 2012, you are under the old contacts subscription process. Please re-subscribe under the new system. You have not been dis-enrolled but you may receive two newsletters. Reply to the first mailing stating you are receiving two copies and you will be manually deleted from the old contacts list. Thanks ahead of time for your patience.

Subscribe to Flightfax via the Aviation Directorate Website: https://safety.army.mil/atf/

Selected Aircraft Mishap Briefs

Information based on Preliminary reports of aircraft mishaps reported in August 2012.

Utility helicopters

UH-60 

-A Series. Aircraft experienced violent shaking in flight. Post-flight inspection revealed yellow main rotor blade had disintegrated in flight. (Class B)

MH-60 

-M Series. The right-hand stabilator wing contacted the tail rotor during engine run-up for maintenance. (Class B)

-M series. Tail rotor made contact with a hangar during ground taxi to park at a municipal airport. Both T/R paddles sustained damage as well as the exterior hangar. (Class B)

-K Series. Aircraft sustained main rotor blade damage as the result of contact with the C-130 aerial refuel drogue. All 4 tip caps and one blade required replacement. (Class C)

Attack helicopters

AH-64D 

-During take-off, No.2 engine anti-ice valve failed with subsequent power loss. Crew conducted an emergency landing to an unimproved area during which the right front landing gear, airframe, and weapons pylon sustained damage. (Class B)

Observation helicopters

OH-58C 

-C Series. Crew was conducting Basic War-fighter Skills training when the aircraft contacted the ground, left skid-first. The main rotor system subsequently made ground contact resulting in structural damage and damage to the main and tail rotor systems. (Class C)

MH-6M 

-Aircraft experienced an over-torque condition (116.7%/1.1 sec) during a training simulation. (Class C)

Cargo helicopters

CH-47 

-D series. During dust landing training, aircraft contacted terrain and rolled on its side. (Class A)

-D series. Aircraft landed hard during an exfil under NVGs. Aircraft came to rest on its left side. (Class A)

-D series. Slingload was inadvertently jettisoned as crew was in the process of decoupling the “BARO-HOLD” system during descent. Load was recovered. (Class C)

MH-47G 

-Crew reportedly experienced aircraft vibrations and flight control anomalies during flight training. Post flight inspection revealed damage to the aft RED and YELLOW blades. (Class C)

If you have comments, input, or contributions to Flightfax, feel free to contact the Aviation Directorate, U.S. Army Combat Readiness/Safety Center at com (334) 255-3530; DSN 558

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