

Flightfax®



Online Report of Army Aircraft Mishaps

When is an Aviation Formation at Greatest Risk?

OEF ACCIDENT TREND ANALYSIS FROM FY08-FY12

During fiscal 2012, senior Army leaders shortened deployment cycles from 12 to nine months. Based upon operational Commanders’ observations that the first and last 60-90 days of a rotation are highest risk, this change begged a significant question: Will deployed Aviation units be exposed to greater risk since two-thirds of their tour will be spent in the “high risk” zones? Few formal studies and recommendations exist to determine the validity behind this commonly held assumption.

This article will examine risk periods during a rotation to Operation Enduring Freedom (OEF), validate the field’s observations about higher risk incurred during the first and last 60-90 days, and determine if Aviation units are encountering greater risk due to shorter deployments. The U.S. Army Combat Readiness/Safety Center Aviation Directorate accomplished trend analysis by searching the Army Safety Management Information System (ASMIS) database for Class A - E (Class D and E as reported on the Army Abbreviated Aviation Accident Report [AAAR]) mishaps in OEF from 2008-2012, with 646 results returned for Active, Reserve, and National Guard Aviation units. Unfortunately, ASMIS does not codify when in a deployment cycle an accident occurs, so that information was not available to determine boots on ground for each entry and associated unit identification code (UIC). To account for the lack of data, we conducted a task force organization study on UICs in ASMIS, identified which battalion and combat aviation brigade task forces the company UICs fell under for command and control during the deployment, and finally determined the dates of deployment for each UIC in ASMIS to verify when in the parent UIC’s deployment cycle the accident occurred.

The 646 Class A-E mishaps, charted in 10-day increments, are depicted in figure 1. The left scale represents the number of mishaps; the bottom scale represents days into the deployment.

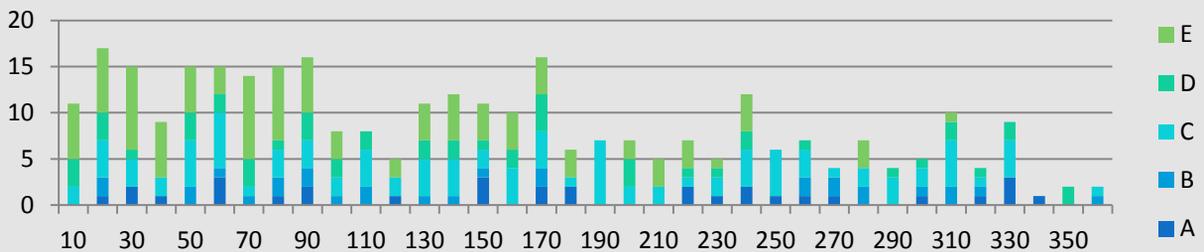


Figure 1: OEF FY 08 – 12 Class A - E Mishaps

Upon first glance, this chart appears to show that as the deployment progresses, mishaps decrease. Batching the results in 60- or 90-day increments seems to confirm that the longer an Aviation unit is deployed, fewer accidents are experienced. Figure 2 depicts 60-day batching.

Days Since Start of Deployment OEF FY08-12

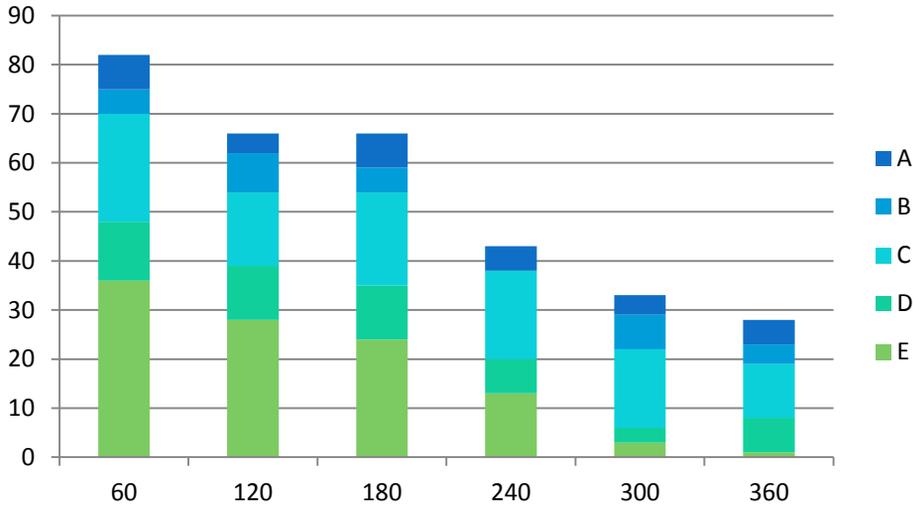


Figure 2: Class A-E Mishaps 60 Day Increments

It becomes obvious that accidents decrease as deployed time increases. However, a noticeable drop in reported Class E mishaps is evident, as highlighted in figure 3b. Currently, there is no reliable method to determine why Class E accidents drop significantly during the last 60 days of deployment, but it is possibly a strong indicator of commanders' instincts and observations about their units (to be discussed fully in a bit). For now, notice that by separating Class D and E mishaps from the data, an observed negative linear progression (less risk over time) is evident in Class A-C accidents in OEF, as depicted in figure 3a.

Class A - C Days Since Start of Deployment OEF FY08-12

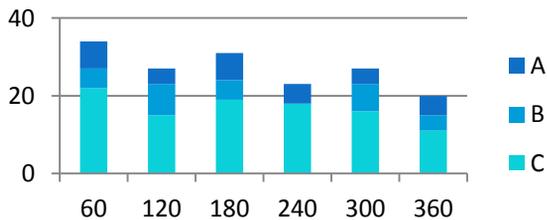


Figure 3a

Class D and E Days Since Start of Deployment OEF FY08-12

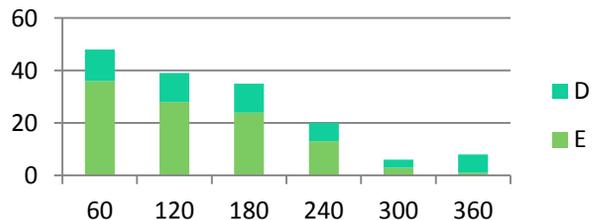


Figure 3b

How significant is the downward trend of mishaps over the period of a deployment? By assessing the number of accidents over time, it becomes evident the trend is definitely downward throughout the rotation cycle. In other words, statistical analysis of the data reveals that as time increases during deployment, mishaps decrease ($r = 0.9$), as shown in figure 4.

OEF CLASS A,B,C Days since Deployed FY08-12

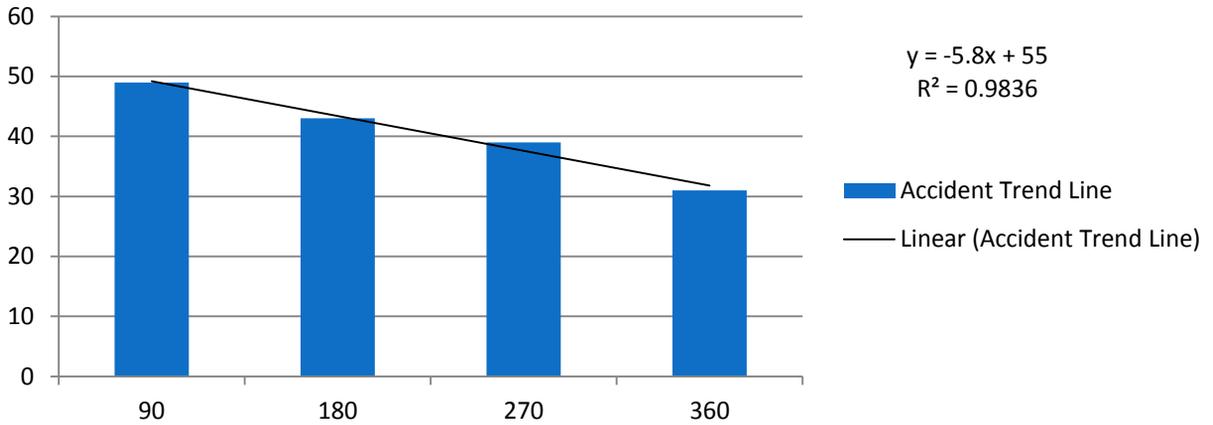


Figure 4

These findings support the belief that Aviation units are less at risk for accidents over time as they become more proficient at command and control, better understand the operating environment and enemy, and thoroughly hone the team across individual, crew, and collective task performance. Yet, there seems to be no statistical validity to the last 60-90 days being a higher risk period during a unit's deployment to OEF.

I am not saying that the observations and instincts of Commanders and those who have deployed is incorrect. I have been in that seat, and have seen firsthand complacency and "get-home-itis" growing within my formation during the final months of a deployment. Instead, based on our hands-on and operational experience, we believe the significant drop in Class E incidents seen in figure 3b is not an actual decrease, but indicative of a lack of accident reporting and tracking. Complacency on the part of ASOs or perhaps command climate or unit safety culture could be to blame, but confirming either assumption will require more study.

Statistics in the aggregate can be misleading. The decreasing accident trend line seen in figure 4 gives the appearance the decrease is completely linear. Now that the clear point that Aviation units experience fewer accidents the longer they are deployed is made, let's look at Class A-C accidents in 10-day increments (figure 5).

A, B, C Days Since Deployed FY08-12 in 10 Day Increments

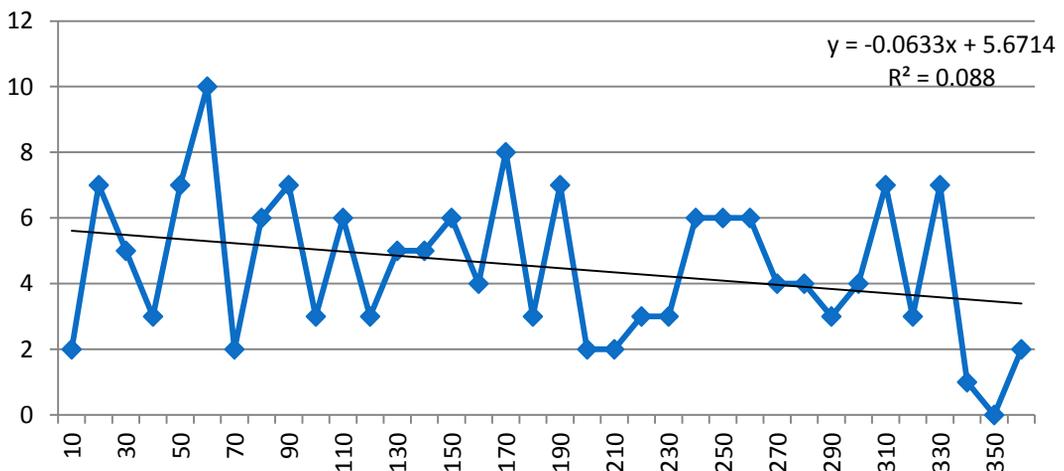


Figure 5

Continued on next page



Developing a Culture

CW5 Steve C. Dunn

Directorate of Evaluation and Standardization

U.S. Army Aviation Center of Excellence

Fort Rucker, Alabama

Nonstandard Branch Chief

Merriam-Webster defines culture as an integrated pattern of human knowledge, belief, or behavior that has been transmitted or passed on to succeeding generations. It can be further defined as shared attitudes, values, goals, and practices that characterize an institution or an organization. Looking at Army Aviation as a whole, it can be considered one large organization comprised of smaller communities titled as Attack, Assault, Cargo, Scout and Fixed-Wing. Through numerous hours flown and training events these communities have passed on practices, attitudes, and a base knowledge that fits the true definition of a culture.

When Army Aviation was in its infancy, the passing of culture was easy due to the limited amount of airframes in the inventory. For those “seasoned” aviators that have been around for more than a day, training in more than one airframe was normal and easy since Bell helicopters were the mainstay at Ft. Rucker. Standardization took minimal effort and supporting training manuals didn’t require a doctorate to produce. As airframes advanced and aircraft systems advanced, so did the culture that supported each community. Checklists turned into books, training manuals increased in size, and computer programs became the primary means of flight planning and training. It took a monumental effort on the part of Aviation Directorates (DES, DOTD, DOS, etc.) to standardize practices from the Army level down to the individual aviator.

New airframes such as the UH-72 Light Utility Helicopter (LUH) have also added to the complex effort of standardization. As the first commercial off-the shelf aircraft procured by the Army, the LUH has introduced a whole new realm of standardization issues for both the Active and Guard components. Units have faced many challenges in the fielding of the Lakota, especially in the training area. Initial aircraft fielding was done without traditional Aircrew Training Manuals (ATM), Performance Planning, or the -10s that other aircraft were delivered with in the past. Due to the lack of these materials, the trend has been to revert back to what was done with other airframes, or cultures.

What these units need to understand is that even though the UH-72 is a civilian aircraft, it was purchased for Army use and will be operated under Army regulations. ATM’s have been written, performance planning has been developed, and the Rotorcraft Flight Manual (RFM) will suffice as the traditional -10. If anything else is needed for fielding, training, or qualification, it is incumbent on the unit to request support through the proper channels rather than develop these items on their own.

As with the other airframes, or “cultures”, tools such as PPC, tabular data, or weight

Continued on next page

and balance are the responsibility of Aviation and Missile Command (AMCOM) not individual aviators. At no point with other airframes has it been acceptable to use “home made” products for Army use and the UH-72 is no exception. Submitting an “Operational Needs Statement” (ONS) to the supporting Project Manager (PM) is the first avenue to getting support for anything needed for a unit to accomplish its mission.

The LUH community has been lucky in the sense that there has only been one Class-A accident since the Army purchased it. The trend in the UH-72 community is that many aviators want to label themselves as “the first”. The first to do a medevac mission, the first to accomplish a paradrop mission, or the first to accomplish sling load operations are all notable feats and were accomplished under approved methods. The first to develop an Ipad application, the first to develop tabular data, or the first to develop a PPC program are not notable and will do nothing but hurt the community and endanger lives as these items are passed around or bought. Being the first to destroy an airframe because an Iphone application was wrong is not the notoriety the Lakota culture wants to grow from.

The UH-72 is a very unique aircraft and should be treated as such. Although it was bought to replace UH-1’s, OH-58’s, and UH-60’s, it is in no way similar to these aircraft other than the rotor system and tail rotor. By embracing it as a new yet different aircraft, we as Army Aviators can help its integration to the fleet and at some point in time will see it as its own “culture”.

The Federal Aviation Administration (FAA) now offers fatigue management tools applicable to helicopter pilots and maintainers online at www.mxfatigue.com. The FAA website and YouTube also host a new cautionary video – Grounded.

Army aviation video worth checking out - Recon: Game Changer. Viewers get an inside look into the latest technology in Army Aviation, including the Apache Block III (AH-64E) and manned-unmanned teaming. Go to <http://www.pentagonchannel.mil/recon/>

Search: Game Changer (June 4, 2012)

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



U.S. ARMY COMBAT READINESS/SAFETY CENTER

One minute after takeoff, the aircraft leveled off at approximately 100 feet AGL at 75 KIAS and began an un-commanded descent. The aircraft failed to respond to commands from the crew, continued its descent striking the ground two kilometers south of the runway.

Mission: RSTA

Hazards

- Suspected slipping clutch, resulting in loss of thrust

Results

- Unmanned aircraft destroyed

Controls

- Conduct an in-depth materiel analysis to confirm the suspected failure
- Identify the root cause of the clutch failure

UA-MQ-1C 124 Ag 11 July 12

An MQ-1C was launched on a reconnaissance, surveillance, target and acquisition (RSTA) mission. The unmanned aircraft (UA) began its takeoff roll by lowering its flaps, applying takeoff power and releasing its brakes. Steering commands were automatically made to maintain runway centerline as the MQ-1C accelerated to rotation and lift off. Once airborne, the flight controls switched to flight mode; landing gear and flaps were retracted and the aircraft continued a climbing profile while navigating to a preset location. Approximately one minute after takeoff, the MQ-1C stopped climbing and leveled off at approximately 103 feet above ground level (AGL) at 75 knots indicated airspeed (KIAS). The MQ-1C then began an un-commanded descent. During the descent, it began pitching up and down, porpoise-like. The operators commanded the engine to 100 percent. The engine was producing less than 50 percent for two seconds after being commanded to 100 percent before it responded. During this time period, the engine RPM dropped from 4,000 to 2,611. The MQ-1C rolled slightly left following the preprogrammed Automatic Takeoff and Landing System (ATLS) route. During the turn, the operator selected the "ATLS Abort" command. The MQ-1C did not respond to the command because ATLS takeoff logic does not allow operator (knobs) control until the MQ-1C reaches 300 feet AGL. The vehicle continued to descend until impacting the ground approximately two kilometers south of the runway.

Findings:

- The UA experienced a loss of thrust, most likely caused by a slipping clutch.
- Operators routinely exceeding duty day limitations.
- The One System Ground Control Station voice recording capability was not set up.

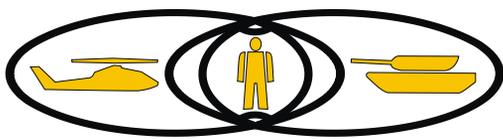
Recommendations:

- Perform additional materiel testing of the failed components to identify the root cause of the failure.
- Evaluate and appropriately adjust fighter management policies and personnel utilization.

All information contained in this report is for accident prevention use only.

Do not disseminate outside DOD without prior approval from the USACRC.

Access the full preliminary report on the CRC RMIS under Accident Overview Preliminary Accident Report
<https://rmis.army.mil/rmis/asmis.main1> AKO Password and RMIS Permission required



During a launch and recovery mission, the IO instructed the AO to go to a holding location. The AO input the wrong location for the holding procedure. The elevation of the programmed location was higher than the flight altitude of the unmanned aircraft (UA). The UA was destroyed when it flew into the side of a mountain.

Mission: Standardization Flight Evaluation

Hazards

- Improperly responding to in-flight hazardous conditions
- Violating safe operating procedures
- Inadequate crew coordination

Results

- Unmanned Aircraft System (UAS) destroyed

Controls

- Ensure all UAS personnel are trained to identify and respond to in-flight hazards
- Reinforce Instructor Operator (IO) oversight responsibilities with all IO's
- Ensure appropriate UAS personnel receive crew coordination training
- Use available tools to identify known points in local airspace

UA-RQ-7B, Fort Huachuca, AZ, 6 Feb 12

After the RQ-7B was launched to complete a standardization flight evaluation, the crew contacted tower requesting an approach to the local runway. After completing the approach and the wave-off, the IO instructed the AO to proceed to a pre-designated holding area. The AO selected Point Nav by clicking the wrong holding area location on the moving map. He selected an area southeast of the appropriate holding location in mountainous terrain. Shortly thereafter, a yellow Terrain Clearance Warning displayed on the AOs computer monitor accompanied by the audio warning. The warning is activated when a UA comes within 3 kilometers of elevated terrain and is less than 500 feet AGL. Eight seconds later, a red Terrain Clearance Warning displayed on the computer monitor accompanied by the audio warning. The red Terrain Clearance warning is activated when an UA comes within 3 kilometers of elevated terrain and is less than 300 feet AGL. The warning will continue until the UA is no longer within 3 kilometers of elevated terrain and is 500 feet above ground. When the IO looked up to instruct the AO on the AV-TALS Recovery procedure, he realized the altitude of the UA was approximately 5400 MSL – lower than he had directed. The UA was 1000 ft MSL lower than the IO had intended and it was flying in the wrong location. The IO tried to prompt the UA to climb without effect. The UA was unable to clear the terrain, crashed and was destroyed.

Findings:

- The AO did not appropriately respond to an in-flight hazardous condition by properly modifying the flight plan.
- The IO did not include the computer warning panel in his scan, failing to respond to a yellow and red “Terrain Clearance Warning” accompanied by an audio warning during the last two minutes of flight.
- The crew failed to properly coordinate and communicate during critical phases of flight.

Recommendations:

- Consider local area orientation training for all UAS operators and requiring overlays clearly depicting the planned holding areas.
- Reinforce proper scanning techniques.
- Ensure all UAS personnel receive required Crew Coordination Training.

All information contained in this report is for accident prevention use only.
Do not disseminate outside DOD without prior approval from the USACRC.

Access the full preliminary report on the CRC RMIS under Accident Overview Preliminary Accident Report
<https://rmis.army.mil/rmis/asmsis.main1> AKO Password and RMIS Permission required

Fixed-wing Five Year Accident Trend Review

During the last five fiscal years (FY08 – 12), there were seven recorded fixed-wing Class A mishaps resulting in three fatalities. Five mishaps occurred during the day with two at night. Two were in OIF and one in OEF. Additionally, there were three Class B and 31 Class C mishaps. A review of the mishaps reveals the following:

- Three (43%) of the seven Class A mishaps were caused by human error. Two (28%) had materiel failure as causal and two were unknown/not yet reported. Class B's consisted of one human error and two materiel failures. Of the thirty-one reported Class C mishaps, 11 (63%) were human error, three materiel failures (10%), and 15 environmental cause factors (lightning, hail, bird, etc).

Leading accident events (Class A)

- **Human error.** (1) During aircraft taxi after landing, the accident aircraft struck two OH-58 aircraft resulting in damage. (2) Aircraft landed hard with an excessive vertical rate of descent which caused the airplane to bounce off the landing surface. (3) Aircraft contacted the runway with the landing gear in the stowed position during a demonstrated emergency procedure resulting in Class A damage.
- **Materiel failure.** There were two materiel failure mishaps resulting in three fatalities. (4) During the landing phase of a simulated #2 engine failure, a malfunction in the #1 propeller governor caused a left yaw excursion resulting in aircraft departing the runway with subsequent damage to the outboard section of the left wing and damage to the #2 propeller assembly. (5) While returning from a recon mission at night, the aircraft departed controlled flight and initiated a near vertical descent from 25,000 feet MSL and impacted terrain resulting in fatal injuries to all three crewmembers and a destroyed aircraft. Materiel failure suspected.
- **Additional.** (6) Crew reported loss of engine power during go-around for engine out training. Aircraft descended to ground impact. Class A damage reported. Cause of power loss not reported. (7) Crew was conducting an RL progression training flight when they experienced a cockpit warning indication/report for a left main landing gear anomaly. They initiated emergency procedures and the landing gear collapsed upon touchdown. Aircraft experienced extensive damage to the left wing and spar. Cause not yet reported.

FW Flight Mishap Rate FY08 – 12

The flight mishap rate for fixed-wing aircraft was 1.16 Class A mishaps per 100,000 hours flown. The rotary-wing aircraft mishap rate for the same time period was 1.57. FY03 – 07 had a FW rate of 0.16 and a RW rate of 2.68.

Fixed-wing CLASS A – C Mishaps																
FY	Class A (7)					Fatal	Class B (3)					Class C (31)				
	C-12	C-23	C-26	UC35	EO5C		C-12	C-23	C-26	UC35	EO5C	C-12	C-23	C-26	UC35	EO5C
2008	2						1					2				1
2009												7	1			2
2010	3					3	1			1		5				1
2011												5		1		
2012	1				1							5				1
Total	6				1		2			1		24	1	1	4	1

Class A – C Mishap Tables

Manned Aircraft Class A – C Mishap Table

as of 11 Feb 13

	Month	FY 12					FY 13			
		Class A Mishaps	Class B Mishaps	Class C Mishaps	Fatalities		Class A Mishaps	Class B Mishaps	Class C Mishaps	Fatalities
1 st Qtr	October	2	2	6	1		1		5	
	November	0	1	13	0			1	4	
	December	2	2	6	4		2			
2 nd Qtr	January	2	0	11	0				5	
	February	2	1	6	0					
	March	1	2	11	0					
3 rd Qtr	April	2	1	6	4					
	May	1	0	4	0					
	June	1	0	2	0					
4 th Qtr	July	4	3	9	1					
	August	2	5	5	0					
	September	2	0	2	2					
	Total for Year	21	17	81	12	Year to Date	3	1	14	0

UAS Class A – C Mishap Table

as of 11 Feb 13

	FY 12 UAS Mishaps					FY 13 UAS Mishaps			
	Class A Mishaps	Class B Mishaps	Class C Mishaps	Total		Class A Mishaps	Class B Mishaps	Class C Mishaps	Total
MQ-1	5	1		6	W/GE	2			2
MQ-5	1		2	3	Hunter	1		3	4
RQ-7		5	20	25	Shadow		1	5	6
RQ-11			1	1	Raven				
RQ-20			4		Puma			3	3
YMQ-18	1			1					
SUAV			1	5	SUAV				
Aerostat	2	5		7	Aerostat				
Total for Year	9	11	28	48	Year to Date	3	1	11	15

Blast From The Past

Articles from the archives of past Flightfax issues

What makes a good aviation safety program? September 1992 Flightfax

As the Director of Army Safety, I've done a lot of traveling during the past few months. And whether I'm talking with students at a pre-command course or with brigade and division commanders and sergeants major in the field, I'm asked the same basic question, "What makes a good aviation safety program?"

Leaders want to know how to improve or increase safety awareness in their organizations. Unfortunately, safety cannot be issued like fuel or ammo; it evolves through command leadership, designated safety personnel, proper risk management, training, and a well-defined aviation accident prevention plan. Safety awareness involves many elements and is like morale – it's caught from the environment. Looking into those units that have successful programs, I have found that they all focus on these five important areas.

1. Command leadership. Of a commander's many policy letters and memos, none is more important than his safety philosophy statement. The objective of safety is to help units protect warfighting capability through accident prevention. And the degree of importance the commander places on safety will determine the priority it gets throughout the unit. The commander's safety philosophy must represent his style of leadership and must be written in his own words and backed by action.

Command involvement is paramount to a successful safety program, and safety must be integrated into every aspect of a unit's activities. Preventing an aircraft accident only to lose some crewmember in a POV accident just doesn't accomplish the Army's mission. Cheerleading from the sidelines is not enough; leadership at this position demands personal involvement. Mission briefings, after action reviews, and flight line visits are important. Being involved in drivers' training is another vital command action. And commanders should review safety statistics at every command and staff meeting, not just at monthly or quarterly safety meetings.

Quality leadership is a 24-hour-a-day process. Commanders can use a variety of leadership techniques, but the following command actions are key to success:

- Establish performance criteria
- Ensure all personnel are aware of the performance criteria
- Ensure training is conducted to standard
- Ensure operations are by the book
- Take immediate and effective action against deviations from established performance criteria

2. Designated safety personnel. The commander is the safety officer and needs to know what safety inspections, training, and reports are required. But a commander cannot do it alone. He must have a designated full-time aviation safety officer (ASO), who should be a

Continued on next page

seasoned warrant officer who has the warfighting credentials to serve as a pilot-in-command in the unit. A good safety NCO is also critical. Additionally, every other NCO right on up to the command sergeant major must be involved in safety. They also have a shared responsibility in helping to protect the force, and without their leadership, senseless accidents will continue.

The advice of the ASO and safety NCO can be just as important as that of the flight surgeon or chaplain. Thus, designated safety personnel must fully understand their responsibilities and receive the necessary training to help ensure competency in their positions. Additionally, safety personnel cannot be effective if they are buried under a rock. They need access to and visibility with the commander to reinforce the importance of safety in the unit's mission.

3. Risk management. Risk management should be the cornerstone of any safety program. This five-step cyclic process – identify hazards, assess the hazards, make a risk decision, implement controls, and supervise – can be easily integrated into the decision-making process. Used in a positive command climate, risk management can become a mindset that governs all unit missions and activities.

In addition to setting the example by properly applying risk management principles, commanders must ensure that every unit member has a solid understanding of risk management and can apply the principles effectively. Safety is about preventing accidents, and if practiced by the command and every soldier in the unit, risk management will enhance the mission and help prevent accidents.

But we're missing the boat on risk-management training. Most senior leaders are using risk management properly, but it's the young officers and NCOs who must apply risk-management principles in the cockpits, on the flight lines, and in the maintenance hangars daily. At the Army Safety Center, we're working with TRADOC to integrate risk management into the schoolhouse and our training management doctrine so that we can teach the specifics right down to platoon and squad level.

4. Training. A successful safety program goes back to the basic two-part safety equation: the individual and the leader. Soldiers must be trained to established standards and held responsible for their technical and tactical competence and knowledge of regulations. They must be trained to effectively identify hazards and manage risks, and they must have the self-discipline to consistently perform tasks to standard. And leaders must be ready, willing, and able to enforce standards. For anything less than by-the-book performance, leaders must make on-the-spot corrections and require that soldiers receive remedial training if necessary.

Aviators in units with good safety programs receive individual training to increase capabilities in basic tasks while minimizing limitation in accomplishing required aircrew training manual tasks. And aviators in these units demonstrate a high degree of professionalism and accept responsibility for policing their own.

Units with good safety programs also carefully plan flight missions and select crews. Crew coordination training is part of every mission. And instructor pilots and instrument flight examiners enforce the safety and standardization program and coordinate for immediate and effective action to be taken against violators of flight discipline. NCOs in these units are trained to perform maintenance operations by the book and require that their mechanics perform to standard, ensuring aircraft are mission ready.

5. Accident prevention plan. Units must have a clearly defined aviation accident prevention plan that formally established the safety program within the unit. That plan should outline personnel responsibilities and provide implementation instructions, goals, and methods the command will use to monitor the success of the safety program. The plan should be based on the philosophy that accident prevention is an inherent function of the commander's yearly training guidance.

The accident prevention plan should require at least monthly aviation safety meetings where current safety issues and lessons learned can be discussed among unit members. A requirement for a semiannual aircraft accident prevention survey should also be included. The commander can use information obtained from the survey to determine the effectiveness of the accident prevention plan. And it's also a good idea to include rewards for good results – such as a day off for no accidents for 90 days.

Following one of my recent briefings to students at the pre-command course at Fort Leavenworth, a student wrote on his critique sheet: "Sending the Commander or anyone from the Army's Safety Center all the way to Kansas was a complete waste of his time and mine! If we do not know all we need to know about safety by now – we are in trouble!" Let me assure you, that young leader is in trouble if he thinks he knows all he needs to know about safety. Last year we killed 372 soldiers. We had 49 Class A aviation accidents and severely damaged about 1,500 ground vehicles. Total accident costs for FY 91 exceeded \$500 million. Since we don't budget for these kinds of losses – who's in trouble?

As a former aviation brigade commander and as the Director of Army Safety, I can tell you I do not know all the safety answers today. But I really believe that protecting the force requires command involvement, leadership by designated safety personnel and every NCO in the unit, proper risk management, training, and a well-defined accident prevention plan. These are the key elements to a good aviation safety program. Safety is awareness; being safety conscious will not impede training or readiness, it will enhance it.

Our units that train to standard and put safety in the mission-essential task list business are defining programs that can result in no memorial services or major accidents. We are fortunate to have many organizations that fall into this elite category. Our challenge is for our brigades and divisions to follow this fine example in protecting the force.

- Brig. Gen. Dennis Kerr, U.S. Army, retired, was Director of Army Safety from December 1991 – February 1994 when he wrote this article.

Selected Aircraft Mishap Briefs

Information based on Preliminary reports of aircraft mishaps reported in January 2013.

Utility helicopters

UH-60 

-A Series. Aircraft contacted the ground during an APART autorotation with resultant damage to the tail wheel and stabilator. (Class C)

-L Series. Main rotor blade was damaged by a loose panel entering the rotor system on takeoff. (Class C)

LUH-72A

-Aircraft experienced engine overtemp during start. (Class C)

Observation Helicopters

OH-58D 

- Left-side engine panel separated from the aircraft while in flight. Post-flight inspection revealed associated damage to a main rotor blade. (Class C)

Cargo helicopters

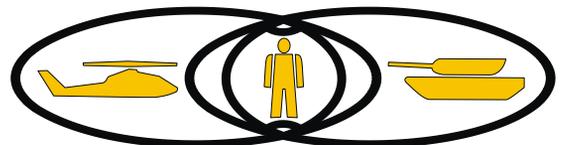
CH-47 

-F series. Aircraft experienced a loss of the tongue ramp during cruise flight. (Class C)

The real pro...

Knows what rules are made for and respects them. The real pro follows them to the letter every time, knowing that his or her own safety and that of a considerable number of other people are dependent on standard by-the-book procedures.

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



U.S. ARMY COMBAT READINESS/SAFETY CENTER

Report of Army aircraft mishaps published by the U.S. Army Combat Readiness/Safety Center, Fort Rucker, AL 36322-5363. DSN 558-2660. Information is for accident prevention purposes only. Specifically prohibited for use for punitive purposes or matters of liability, litigation, or competition.