



# Flightfax<sup>®</sup>

Online Report of Army Aircraft Mishaps

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**Last month we brought back and launched Flightfax on line with the intent of** getting more accident information out to the field in a timely manner. Accidents that occurred in late April and in May serve to highlight two issues that we are facing which need to be corrected. The first involves the mission approval process. The mission approval process as described in AR 95-1 is meant to mitigate risk through a three step process: initial mission approval, mission briefing and final mission approval. Inside of that framework are the requirements to train and designate personnel to carry out the process. Ideally, units will establish and maintain training for briefers and approvers as well as air mission commanders. Furthermore, the commander should designate in memorandum format who is approved to do what so that there is no question as to who can brief and approve missions and who can serve as an air mission commander. The documents should then be placed in the unit's reading file for all to see.

What must be avoided is the temptation to skip steps in the mission approval process or to remove the intended rigor of the process by turning it into a check the block drill before you go fly. An example of the appropriate level of rigor is a mission briefing officer (MBO) who conducts a face to face with each PIC or AMC to determine if he or she is fully prepared by going over the details of the mission along with all of the supporting information (flight routes, com. cards, risk assessment, weather, PPC, SPINS, etc) in order to go out and execute the flight safely. This type of rigor applied to the mission approval process as opposed to checking the block will truly assist the unit in mitigating risk.

The second issue that was brought to light out of recent accidents is maintaining discipline. For Aviation, there is discipline involved in planning for a mission as well as discipline to be maintained while in the cockpit. Both in and out of aircraft, we are governed by standards that dictate the appropriate way of doing business on a daily basis. "Follow the rules and you'll be OK" is a prudent way of conducting aviation business. If you choose not to follow the rules, you assume the risk involved. So if we choose not to prepare a PPC prior to the flight or if we choose to fly below published altitude restrictions, as examples, we assume the risk. What's not always understood is that we have rules and procedures for a reason. PPCs and altitude restrictions are examples of tools and procedures that were put into place to aid us in the conduct of a

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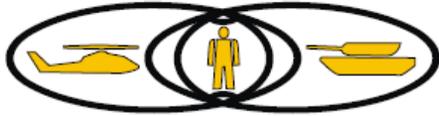
mission and to keep us out of trouble. Nine times out of ten they originated due to a mistake in the past. Following those rules is a big part of maintaining good discipline in a unit. If you have a problem with a rule, talk to your leadership. It might be time for a change or modification for allowances to meet operational demands. Otherwise, take the disciplined and professional approach in planning and executing aviation operations.

As a part of last month's issue we opened up the idea of developing an on line tool for aviation hazard reporting. Our sister services and the commercial airline industry already use online systems for hazard reporting under the name of the Aviation Safety Action Program (ASAP). The safety center is currently preparing to conduct a test of an ASAP system for use by Army Aviation. The intent is to give aircrews, maintainers, fuel handlers, flight operations personnel, air traffic controllers...etc the opportunity to identify a hazard that they feel needs to be addressed. Reporting a hazard can be accomplished either anonymously or by name via SMART phone, a computer with internet connectivity or by filling out a few lines as part of the mission debrief sheet. Once a hazard is identified, the BN Safety Officer will track and work the hazard until complete. More to follow as we begin testing this system for possible use within Army Aviation, but we look forward to any feedback or ideas that you might have so drop us a note or give us a call.



# Major Accident Review (MAR)

RMIS Case # 20101220001



U.S. ARMY COMBAT READINESS/SAFETY CENTER

While flying NVGs along a dark coast line, the aircrew encountered severe weather. The aircraft descended from 400' AWL, accelerated to 112 knots ground speed and turned towards open water. Eight seconds after beginning the turn, the aircraft disappeared from radar and impacted the water. Debris was found in the water by search and rescue personnel.

**Mission: Multi-ship Counterdrug Operation**

**Hazards**

- Severe weather cells
- Overwater flight
- Limited planning & guidance
- Limited recent NVG experience
- Overconfidence

**Results**

- Six fatalities
- Aircraft destroyed

**Controls**

- Assess pilot proficiency during crew selection
- Conduct thorough mission planning
- Maintain situational awareness at all times
- Adjust to changing conditions
- Update weather before and during flight

The aircraft departed the airfield under NVGs in a light rain, intercepted the nearby coastline flying an off-shore route following the coastline at 300' to 400' AWL and 90 – 100 KIAS. The planned route of flight followed the coastline and passed through an area with little or no cultural lighting. A company OH-58A was on the same flight route two or three minutes ahead of the accident aircraft and radioed to the crew of the accident aircraft a comment that the weather was getting worse. The crew of the accident aircraft acknowledged the radio call. Air Traffic Control (ATC) then warned the crew they were overtaking the OH-58A, and asked if they could see the traffic at their two or three o'clock position. The flight crew did not respond to ATC. Radar indicated the aircraft descended from 400' AWL, accelerated to 112 knots ground speed and turned left towards open water. Approximately 8 seconds after beginning the left turn, the aircraft disappeared from radar contact and soon after, impacted the water with significant force. Aircraft debris was found in the water by search and rescue personnel. Weather radar indicated a significant storm cell in the vicinity of the crash site at the time of the crash.

## Findings:

- Crew failed to maintain aircraft orientation
- PC did not follow applicable regulations
- Leadership failed to perform adequate pre-mission planning and risk management

## Recommendations:

- Focus continuation training on gaining and maintaining NVG instrument proficiency
- Accurately assess crew currency and proficiency prior to flight
- Establish procedures for use of low altitude bug during flight
- Conduct refresher training on crew selection and mission approval procedures with all leaders and mission briefers
- Conduct training on mission planning requirements with all aircrews
- Enforce mission briefing process IAW AR 95-1

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/asms.main1> AKO Password and RMIS Permission required

# Selected Aircraft Mishap Briefs

Information based on Preliminary reports of aircraft mishaps reported in May 2011.

## Utility helicopters

### **UH-60**



- A series. Crew experienced engine over-torque and rotor RPM over-speed. Post landing inspection revealed #2 engine high-side failure. (Class B)

- L series. During approach to landing aircraft rotorwash caused a civilian to fall resulting in a broken arm. (Class C)

## Attack helicopters

### **AH-64D**



- During multi-ship combat mission aircraft crashed with one fatality. CMI team dispatched. (Class A)

## Observation helicopters

### **OH-58D**



- Np overspeed to 121% occurred during FADEC training. (Class C)

## Cargo helicopters

### **CH-47**



- D series. On shutdown main rotor blade contacted the fuselage. (Class B)

### **MH-47**

- G series. During aerial refueling training main rotor blade contacted refueling line. Aircraft landed with damage. (Class A)

## Fixed Wing

### **C-12V**



- During collision avoidance maneuver engine parameters were exceeded. (Class C)

## Unmanned Aircraft Systems

### **RQ-7B**



- System initiated uncommanded full throttle upon landing and came to rest off the runway. (Class C)

- System experienced a generator/engine failure approximately 20 minutes into flight. Recovery chute was activated and system was recovered with damage. (Class C)

### **RQ-11B**



- Signal and visual contact with the UAV were lost. Not recovered. (Class C)

## Aerostat



- Tether broke during winds. Payload damaged. (Class B)



U.S. ARMY COMBAT READINESS/SAFETY CENTER

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If you have comments, input, or contributions you would like to make, feel free to contact the Air Task Force, U.S. Army Combat Readiness/Safety Center at com (334) 255-3530; dsn 558

# Class A - C Mishap Tables

FY 11 Manned Aircraft Class A – C Mishap Table										
Month	FY 10				Year to Date	FY 11				
	Class A Mishaps	Class B Mishaps	Class C Mishaps	Army Fatalities		Class A Mishaps	Class B Mishaps	Class C Mishaps	Army Fatalities	
1 <sup>st</sup> Qtr	October	4	1	3	1		1		3	
	November	1		5	2		1	1	12	
	December		1	4			2	1	4	4
2 <sup>nd</sup> Qtr	January		2	3					7	
	February	2	2	9	5			2	2	
	March	2		4			2	1	4	
3 <sup>rd</sup> Qtr	April	2	1	5	1		2		8	
	May	1	2	2	1		2	1	*	1
	June	6		5	1		2		*	2
4 <sup>th</sup> Qtr	July	1	2	4						
	August	2	2	5						
	September	2	1	5	5					
Total for Year		23	14	54	16	Year to Date	12	6	40	7

As of 10 Jun 11 \*Note: 4 class C incidents pending input into RMIS

FY 11 UAS Class A – C Mishap Table									
	FY 10 UAS Mishaps				Year to Date	FY 11 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	1		1	2
MQ-5	3			3	Hunter	3		1	4
RQ-7		14	21	35	Shadow		7	10	17
RQ-11					Raven			1	1
RQ-16A			1		T- Hawk			3	3
MQ-18A	1								
SUAV								1	1
Aerostat		2	2	4		5	6		11
Total Year	6	16	25	46	Year to Date	9	13	17	39

As of 10 Jun 11

# Blast From The Past

articles from the archives of past Flightfax issues

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## Wartime safety (From 12 June 1986 Flightfax)

Safety professionals report that in spite of today's emphasis on safety by the Army's top leadership, there is still a perception among some young Army leaders that safety is something you have to consider in peacetime missions, but in wartime, safety becomes a luxury. If that is true and if it is also true that when things get tough the first things to go are the luxuries-then when war comes, we can no longer afford safety. The question really is, "can we afford not to consider safety during wartime?"

One military officer who recognized the importance of safety in aviation operations was General William H. Tunner, who was responsible for the India-China airlift in the last year of World War II. In an article published in *Flying Safety* in April 1986, Dr. Richard W. Huling, an Air Force historian, tells about General Tunner's experiences during one of the first attempts to supply an army by air.

The airlift had been in existence for about 2 years when General Tunner took command in 1944. It had been reluctantly called into existence by a ground-oriented command because a deadly combination of Japanese and geography made moving supplies over the Burma Road all but impossible. Those supplies were crucial because they meant the Chinese forces in Western China could continue to keep 2 million Japanese troops tied down and out of action against U.S. forces in the Pacific.

The same treacherous geography that plagued ground troops was also a problem for pilots who were trying to keep the Chinese supplied. The high peaks and jungles of the Himalayas weren't the only problems, however. In his book, *Over the Hump*, General Tunner describes what he found when he arrived in India in the summer of 1944.

"Here, in a strange land far from home, on the fringes of a mysterious backward

civilization, were all the conditions that bring hazardous flight: Fog, heavy rains, thunderstorms, dust storms, high mountains, a necessity for oxygen, heavy loads, sluggish planes, faulty or no radio aids, hostile natives, jungles, and one-way airfield set in mountainous terrain at high altitude."

In January of 1944, the accident rate for the airlift was *1.97 per 1000 flying hours*. Every 200 trips over the Hump cost one airplane; for every 100 tons of supplies flown into China, 3 Americans died. Most of the accidents were total losses. Aircraft either hit mountain peaks or were lost in the jungle, and the few crewmembers that were able to parachute simply vanished and were never seen again.

General Tunner soon found that all efforts had been directed toward increasing tonnage the airlift could transport, but as tonnage gradually increased, so did the mishap rate. Safety had been ignored. Night flying had been introduced, although radio communication and navigational facilities were nonexistent except at the terminals. Weather was virtually ignored and many planes flew in violation of standard Air Corps specifications.

General Tunner issued a challenge: increase tonnage *and* lower the accident rate. Even today, in peacetime, some people will tell you that you have to choose between the mission and safety, yet General Tunner's command managed to meet both of those seemingly contradictory actions in a wartime environment.

What did they do? The safety program they instituted consisted of the basics, still being used in safety today, and distilled into four main points:

- \* Analysis of existing flight and maintenance procedures and practices.
- \* Statistical investigation and analysis of accidents.
- \* Recommendations for the correction of faults revealed in the foregoing analyses.

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\* Prompt action and follow-up on that action.

General Tunner and his staff also investigated pilot training and made up for any gaps before sending them over the Hump. They began to take weather and communications seriously, attacking conditions such as icing and turbulence, and becoming more familiar with navigational equipment and how to best deal with its absence.

Another major area was pilot discipline. General Tunner was very specific about the importance of using the checklist. Exact procedures, from starting the engines to cutting them off at destination, were emphasized.

“Briefing and debriefing proved to be of the greatest importance. Briefing involved not only a thorough preparation of the pilot for the route he was to take, but a check to make certain that the crew was competent to make the proposed flight safely. Debriefing would show up incompetent flight procedures, indicating the necessity for corrective action and additional training. Debriefing also provided our best weather reports.”

Did all of this work? In August of 1944 (just before General Tunner’s arrival), 23,000 tons were airlifted over the Hump to China. The accident rate hovered around 2.0 per 1,000 flying hours. In January 1945 with close to 40,000 tons airlifted, the accident rate dropped to .301. By July 1945, total tonnage jumped to 71,042 with an accident rate of .239. During August 1945, the last big month of the airlift, 20 planes were lost during 135,000 flying hours; bring the accident rate down to .154 per 1,000 flying hours. General Tunner makes the statistics come to life by looking at them another way:

“If the high accident rate of 1943 and early 1944 had continued, along with the great increase in tonnage delivered and hours flown,

America would have lost not 20 planes that month, but 292, with a loss of life that would have shocked the world.”

Thirteen years after World War II ended, Army aviation was still in its infancy. That year, 1958, was the first that Army wide aircraft accident data was collected and those numbers are also shocking. There were 54.3 accidents per 100,000 flying hours. But by the first half of FY 85, the Army had cut its class A-C rate to 9.80. The Class A-C rate for the first half of FY 86 was 9.22. These reductions have been achieved while Army aviation mission profiles have become increasingly demanding and overall inherent risks have risen.

Many of the stratagems used to achieve these reductions are the same as those used by General Tunner in 1944: analysis of flight and maintenance procedures and practices, statistical investigation and analysis of accidents, recommendations for corrections of faults revealed in the analyses, prompt action and follow-up on that action, improved training emphasis on pilot discipline, and thorough mission briefing.

We have seen vast improvements in Army accident rates, but what would these rates have been like under wartime conditions? In Vietnam, aviators flew in conditions not unlike those on the India-China border, and again losses were high. By the end of 1968, Department of Defense reported 2,228 aircraft had been lost through enemy action, but during the same period, 2,540 aircraft were lost through accidents. Can we afford the luxury of a safety program during wartime? History tells us we can’t afford not to have one. Safety has to be part of the mission, in wartime and in peacetime. We simply can’t get the job done without it.

**-Portions of this article on the India-China airlift were taken from the article by Richard W. Huling, Ph.D., AFISC Historian.**

# Preliminary Loss Reports (PLR)

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**ARMY PRELIMINARY LOSS REPORT 11083**

## AH-64D CRASH CLAIMS ONE SOLDIER'S LIFE

A 4<sup>th</sup> Combat Aviation Brigade Soldier was killed in an AH-64D crash that occurred on 26 May 2011 at approximately 1100 local. The 28-year-old CW2 co-pilot was flying in the aircraft in support of combat operations when contact was lost. After a short time of searching, the crashed aircraft was located in a wadi. The two pilots were evacuated to a medical facility where the CW2 was pronounced dead and the CW5 was treated for injuries sustained during the crash. A Centralized Accident Investigation (CAI) team from the US Army Combat Readiness/Safety Center is investigating. [Local News and Video](#)

This is the [5<sup>th</sup>](#) Class A **Aviation** fatality in FY11 compared to **10** for the same time frame in FY10. This PLR does not identify specific root causes of this incident as the investigation is ongoing. Further details will be available at a later date on RMIS (RMIS Login Required).

Preliminary Loss Reports (PLR) are *For Official Use Only* and are to provide leaders with awareness of Army loss as we experience it and to point out potential trends that affect our combat readiness.

**Our Army depends on you to use these PLRs to help Soldiers understand the impact of decisions made on and off duty.**

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**ARMY PRELIMINARY LOSS REPORT 11086**

## OH-58D CRASH CLAIMS TWO SOLDIERS' LIVES

Two US Forces – AFGH/South Soldiers were killed in an OH-58D crash that occurred on 5 June 2011 at approximately 1100 local in Afghanistan. The pilots (35-year-old CW2 and 31-year-old CW3) were flying in support of combat aviation operations when the helicopter crashed. The two pilots were evacuated to a medical facility where they were both pronounced dead. A Centralized Accident Investigation (CAI) team from the US Army Combat Readiness/Safety Center is investigating.

These are the [6<sup>th</sup>](#) and [7<sup>th</sup>](#) Class A **Aviation** fatalities in FY11 compared to **10** for the same time frame in FY10. This PLR does not identify specific root causes of this incident as the investigation is ongoing. Further details will be available at a later date on RMIS (RMIS Login Required).

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