Flightfax

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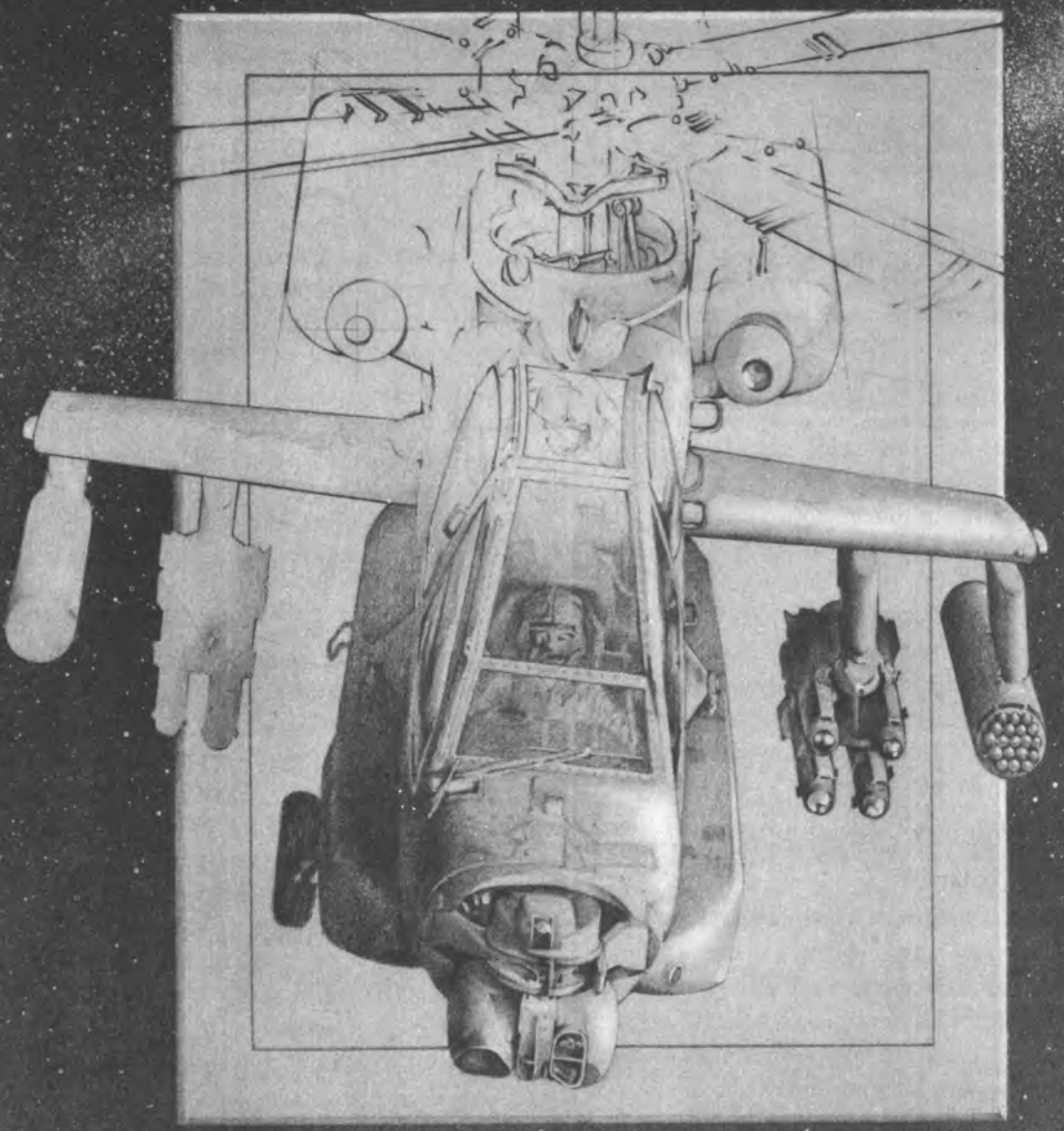
REPORT OF ARMY AIRCRAFT ACCIDENTS

Sullivan sends

Protecting the aviation force by risk management



The Army aviation safety record this fiscal year remains troublesome. There have been 24 Class A aircraft accidents resulting in 25 deaths, 16 injured, and over $90 million in costs. We still have a lot of flying to do this year. At the current rate, there is a potential to destroy 42 aircraft with untold deaths and injuries by the end of the fiscal year. This is a leadership matter for all TOE/TDA commanders...all components. *I need your help now!*

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We must exploit our leadership strengths to solve this problem. Everyone in the chain of command, not just the aviation community, must take responsibility. I want you to apply risk management principles against aviation OPTEMPO and mission demands to assess the impact of personnel turbulence and drawdown in your units. The "crawl, walk, run" training assessment is a simple but valuable tool to protect the force. This is particularly important when aviator/crew proficiency versus currency is at the margin.

Analysis shows that human error has been a factor in over 75 percent of the accidents this year. Inadequate risk management, poor flight crew coordination, and individual errors are the leading causes. Our accident record shows risk management methods have not been internalized and applied to the operational environment. We must understand where and when we are vulnerable and adjust our training activities accordingly.

I expect risk management to be taught at all levels, including our senior leader courses, pre-command training, and the ADC (assistant division commander) training curriculum. Use the professionals available in your units. Our instructor pilots and standardization and safety personnel are top-notch folks trained to identify risks. They are essential to having a healthy aviation safety program. In the near future, we will get the crew coordination equipment into your simulators so crews can see their mistakes. Fly with your aircrews on day and night missions, understand the challenges of goggle operations, ensure a safe altitude for nap-of-the-earth training, and always build in a margin of safety.

I am directing a safety standdown day for all aviation units within 45 days after receipt of this message. Be involved and use this day to show your personal commitment to safe operations in units under your command. Here are the specific issues I want addressed:

■ **Risk management**. Get back to basics in risk management and accept no unnecessary risks unless the benefits outweigh the cost. Use the U.S. Army Safety Center (USASC) video titled "Risk Management." It is available and required viewing by aviation units during the standdown.

■ **Accident analysis**. Review recent accidents, identify high-risk individuals, look for ways to enhance unit safety, and enforce accountability. USASC has developed an excellent tool titled the "Next Accident Test." Use it in your analysis. Worldwide distribution to aviation units is ongoing, and local reproduction is authorized. In conjunction with the "Next Accident Test," company-level seminars and anonymous surveys will be used to ask the question "What is the dumbest thing you have done as an aircrewmember or aviation soldier since you have been in this unit?" The answers will surprise you. These tools can be used to discover good safety ideas and practices that can be forwarded to USASC for publication in *Flightfax*.

■ **Accident avoidance**. Commanders should analyze their operations and personnel to determine the high-risk areas that could lead to an accident. The U.S. Army Aviation Center has distributed a video titled "Eliminating the Avoidable Accident" to help commanders in this process. I want every aviator to see this video.

When I visit your unit, brief me on your safety programs and how you are applying risk management to protect the force—specifically aviation. Let's get with it—show me we have a trained and ready aviation force! ■

—Chief of Staff of the Army, General Gordon R. Sullivan

Postcrash fires: a real hazard

When the crashworthy fuel system for Army aircraft was fielded in the early 1970s, the danger of postcrash fires in potentially survivable aviation accidents decreased dramatically. A review of accident data reveals numerous cases where these fuel systems withstood severe crushing and G-forces.

With the introduction of crashworthy fuel systems, fire—once the greatest killer in survivable crash impacts—became a much less significant threat. Unfortunately, this success story has a serious drawback. Believing that a postcrash fire will not occur because the aircraft is equipped with a crashworthy fuel system has created an unwarranted sense of complacency among some commanders and crewmembers.

Unauthorized flight clothing

Some units have already received the aviation battle dress uniform (ABDU). However, development and fielding of the ABDU Nomex flight jacket is behind schedule. Confident in the capabilities of the crashworthy fuel systems, some unit commanders have assessed the risk of fire as low and authorized wearing Gortex field jackets with the ABDU.

Ironically, the Safety Center received a request for an official safety position on this issue shortly after a UH-60 accident involving an explosive postcrash fire. Four fatalities and four severe burn injuries were sustained by crewmembers and passengers in that accident.

A melted Gortex field jacket had to be torn from the body of one severely burned passenger. Fortunately in this case, the melted synthetic fabric did not contribute to his injuries because it was removed quickly and he was wearing several layers of clothing beneath it. However, wearing clothing made from 100-percent synthetic materials, such as the Gortex field jacket, does increase the potential for and severity of burn injuries should an aircraft fire occur.

Serviceable protective equipment

In that same UH-60 accident, the pilot was wearing a pair of Nomex flight gloves, but the tips of the fingers had holes in them. As a result, he suffered disabling burns to his right hand that might have been prevented had he been wearing *serviceable* Nomex gloves.

The pilot-in-command (PC) of the aircraft suffered the least serious injuries. In large part, this was due to where he was sitting in the aircraft. However, for that particular flight he had worn his Nomex flight jacket instead of stuffing it in his helmet bag as he normally did. Although his flight jacket was severely scorched on the outside, it functioned as designed and bought him some valuable time when he had difficulty releasing his restraint system and egressing the burning wreckage. Further, his *serviceable* Nomex gloves protected his hands, which allowed him to release his buckle and

force the door handle, and he had turned up his collar. The PC's most serious burns were on his unprotected face.

A review of lessons learned

Commanders have many responsibilities and sometimes leave personal safety to each individual. However, it is the commander's (and the aviation safety officer's) responsibility to insist that the regulations, rules, or do's and don'ts on personal equipment are followed. But ultimately it's each individual crewmember's and passenger's responsibility to wear protective clothing and equipment and to wear it properly.

Appropriate precautions taken *before* a flight can enhance the chances of surviving an aircraft fire. The following lessons learned from the UH-60 accident aren't new ones, but they do need repeating:

■ Wear approved, protective flight clothing and equipment, and wear it as it was designed to be worn. Don't make the mistake of not fully using *all* the safety gear that's available.

■ DX unserviceable gloves and flight suits. If your protective clothing is frayed or torn, it can't provide the maximum protection you will need should a fire occur.

■ Do not wear synthetic fabrics as underwear or as an outer garment during flight. Whether you're a crewmember or passenger, wearing unauthorized flight items is an unnecessary risk.

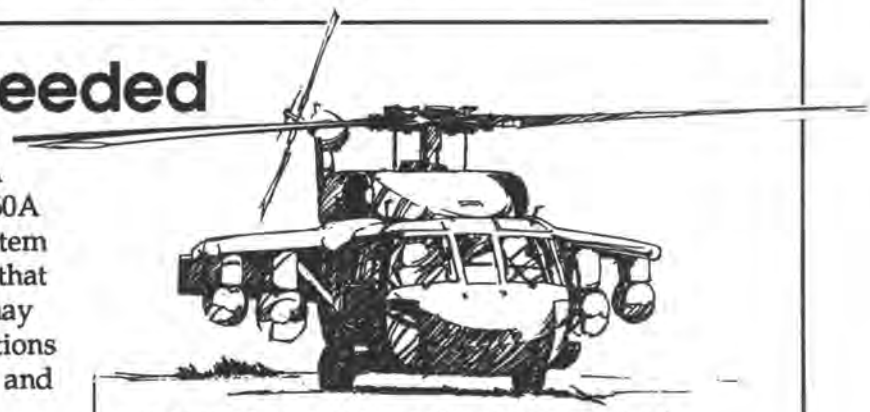
■ Take passenger briefings and emergency egress training seriously. Knowing what to do should an in-flight emergency occur and where the exits are located can eliminate confusion and save precious seconds as you scramble to get out of a burning aircraft.

The UH-60 accident was not an exception to the rule; in-flight and postcrash fires occur more often than one might think. From 1 January 1988 through 12 May 1993, 67 Class A aviation accidents have involved fires. In those 67 accidents, 50 crewmembers and/or passengers sustained burn injuries.

These numbers should correct the misperception that crashworthy fuel systems eliminate all fires. Postcrash fires remain a real hazard; therefore, all crewmembers and passengers need to ensure their protective clothing and equipment is serviceable and worn so that it can afford the protection it was designed to provide. ■

—MAJ Henry S. Morgan, Jr., Executive Officer

ESSS information needed



During the investigation of a Class A aviation accident involving a UH-60A with the external store support system (ESSS) installed, an issue surfaced that indicates lateral center of gravity problems may occur when asymmetrical fuel loading conditions exist. An extensive effort is underway to find and correct the problems with the system.

The Army Safety Center requests that units report **all** UH-60 ESSS-related incidents for inclusion in the safety data base. Submit these incidents through the preliminary report of aircraft mishap (PRAM) system even if the mission was completed safely. ■

—MAJ Henry S. Morgan, Jr., Executive Officer

Aviators needed

The U.S. Army Aeromedical Research Laboratory (USAARL) at Fort Rucker, AL, needs aviator volunteers to participate in several research studies. Many of these studies will require a 2-week commitment. And participants will be able to acquire either simulator or aircraft time, depending on the study.

Temporary duty funds and travel funds will be provided by USAARL on a case-by-case basis. Anyone interested in participating in the research should contact Mr. Larry Woodrum, DSN 558-6834, commercial 205-255-6834. ■

Risk management: a good investment

The risk management process is designed to help soldiers at all levels identify and minimize hazards. Effectively applying the risk management process and principles improves the odds of completing the mission successfully.

Risk management isn't an obstacle or paperwork drill that must be overcome before the mission can begin. If it is viewed in that light, hazards will not be identified and mission risk assessments will be poorly done or not done at all. And the results can be costly, even deadly.

Failure to apply risk management

The following examples illustrate what can happen when aircrews fail to manage risks and apply risk management principles. If the aircrews in these examples had identified and assessed the hazards and then made appropriate risk decisions, perhaps these tragic accidents could have been avoided.

MH-6

Mission: Unauthorized flight

Synopsis: While on the second leg of a cross-country flight, the single pilot—flying night unaided in marginal weather conditions—struck several trees in steep, upsloping terrain. The aircraft was destroyed, and the pilot was killed.

Hazards:

- Pilot was frustrated over a unit status report
- Flying single pilot
- Flying in forecast severe turbulent weather, including snow showers
- Aircraft was not equipped for weather conditions

Risk management failures:

- Pilot failed/chose not to assess hazards
- Pilot made poor risk decision to fly
- Pilot chose not to follow regulatory and command guidance

UH-60

Mission: Day VMC training to conduct a commander's evaluation of a new pilot

Synopsis: After taking the controls from the pilot during a poor instrument landing system approach, the IP landed and taxied the aircraft toward the hangar. While executing a right turn to parking, the aircraft's main rotor and tail boom impacted the corner of the hangar. The aircraft rolled onto its left side. The tail boom and tail rotor were severed, and all four rotor blades separated from the aircraft.

Hazards:

- Pilot was unprepared for checkride; he was not familiar with aircraft procedures, systems, and limitations
- Inadequate facilities (no taxiway markings and no ground-handling equipment)
- IP was frustrated over pilot's poor performance
- Because of cockpit climate, IP was having to function in single-pilot mode
- Aircraft was taxied too close to hangar

Risk management failures:

- IP failed to identify and assess ground taxiing hazards—probably due to frustration over pilot's extremely poor performance
- Poor risk decision to assign aircraft to a location with inadequate facilities

C-12

Mission: VIP transport

Synopsis: While performing a nonradar approach, the crew became disoriented. As a result, they descended sooner than they should have and impacted a mountain. Eight people were killed.

Hazards:

- Mountain-flying region
- Crew tension between PC and pilot (pilot was late for takeoff; PC was pilot's rater)
- Both crewmembers were flying without a current APART
- Poor attitude toward safety

Risk management failures:

- Command did not enforce regulatory requirements; control options were ignored
- PC failed to recognize the in-flight hazards

that resulted from the poor crew coordination conditions

■ Command made a poor risk decision when it either failed or elected not to maintain safe flying attitudes in pilots

UH-60

Mission: Night, service, administrative, VIP transport

Synopsis: While on short final, aircraft experienced an uncontrolled right turn and descended. The crew could not recover the aircraft, and fuel tanks ruptured on impact. Suspect a lateral center of gravity problem related to asymmetric fuel flow from auxiliary fuel tanks and passenger seating arrangement. Four fatalities, three major injuries, and one minor injury resulted.

Hazards:

■ Inadequate fuel management information available to the crew

Risk management failures:

■ Pending completion of investigation, external stores support system design remains suspect

UH-1

Mission: Day VMC formation flight training

Synopsis: Flight of two UH-1s was conducting low-level formation flight training. The aircraft were in an unauthorized flight formation (abeam and parallel). The PC on the controls in the left seat of Chalk 2 did not maintain aircraft separation when Chalk 1 initiated a slight left turn to follow terrain. The air mission commander (AMC) in the right seat of Chalk 2 was videotaping the mission rather than clearing aircraft. The AMC and video equipment restricted the Chalk 2 PC's view of Chalk 1. The aircraft collided and descended into trees. Five crewmembers were fatally injured, and two received minor injuries.

Hazards:

■ Unbriefed use of video recording equipment

■ Pilot in a Chalk 2 crew position was using recording equipment instead of providing aircraft separation

■ PC on the controls of Chalk 2 used an unauthorized, unbriefed formation

■ PC on the controls of Chalk 2 was on the opposite side from Chalk 1 and because of the right-seat pilot's actions could not see Chalk 1

Risk management failures:

■ Chalk 2 PC failed to identify and assess the hazard of flying abeam and parallel to Chalk 1

■ AMC did not include an assessment of the risks associated with using video recording equipment to film the formation flight training

■ AMC failed to enforce proper formations for training (supervision error)

Make an investment

Take the time to learn all you can about risk management; it's a good defense against preventable accidents. Risk management isn't hard to learn—just five basic steps in the process and four basic principles. Once you understand the concept, practice applying risk management both on and off duty. The more you practice using it, the more second nature it will become. Investing your time in learning risk management will yield a good return. As shown in the examples, failure to make the investment and failure to apply risk management to all missions, even the routine ones, could cost you your life. ■

POC: LTC Michael Lenhart, Systems Management Division, DSN 558-4402/3857, commercial 205-255-4402/3857

New safety videos available

The following safety videos have been distributed to visual information libraries throughout the Army. You may obtain a copy by asking your local audiovisual library for—

■ **Eliminating the Avoidable Accident** (TVT 46-145, PIN 710219). In this roundtable discussion video, MG John D. Robinson, Commander of the U.S. Army Aviation Center and Fort Rucker, is joined by other leaders within the aviation community to discuss the causes of many Army aviation accidents. Drawing from their own personal experiences, leaders discuss specific incidents and accidents and make recommendations on how the accidents could have been avoided.

■ **Army Safety Leadership on Risk Management** (TVT 20-1012, PIN 710271). In this video, BG R. Dennis Kerr, Director of Army Safety, and CSM(D) Samuel R. Reynolds, Sergeant Major of the Army Safety Center, discuss the basics of risk management and how they apply to today's smaller Army. This video is designed to help commanders understand what risk management is and how to use it to make their commands safer. The video also shows how accidents can happen when risk management is not used. ■

Information based on preliminary reports of aircraft accidents

Utility

UH-1 Class C

H series - During NOE flight, aircraft unexpectedly pitched down and descended. PC applied power and aft left cyclic to stop descent into trees but was unable to prevent aircraft from striking pine tree. Aircraft continued flight, but pedals were stuck in fixed-pitch setting. PC elected to fly to airfield and performed a run-on landing with no further damage. Postflight inspection revealed broken chin bubbles, severed pedal linkage between pedals on right-side tail rotor, broken battery compartment door, bent battery compartment frame and wipers and guards, and dented nose.

H series - While aircraft was hovering, internal N2 drive system failed, resulting in engine and main rotor overspeed. Crew immediately landed aircraft and performed normal shutdown.

H series - While performing engine response check during maintenance test flight, N2 and engine oil pressure gauges fluctuated. Pilot descended to 5-foot hover, and smoke and flames were seen coming from engine tailpipe. Pilot lowered collective to land, and aircraft experienced several engine compressor stalls.

UH-60 Class B

A series - Unforecast winds probably in excess of 45 knots hit aircraft while it was sitting parked on ramp. Damage to anti-flaps discovered the following day. Suspect additional damage to spindles and hub. 9328

UH-60 Class C

A series - As crew was landing to rescue stranded backpackers, blowing snow diminished visibility. Crew allowed blade tip caps to contact tree branches.

A series - During VMC approach to dirt soccer field, pilot encountered dust cloud and lowered collective at about 10 feet AGL. Aircraft landed hard and bounced once. When aircraft came back down, tail wheel strut collapsed, causing sheet metal damage to tail boom.

L series - During NVG approach to desert floor, aircrew misinterpreted terrain relief because of restricted visibility (zero illumination and external wing tanks). Aircraft came to rest on the bank of a wadi in 8-degree nose-up and 27-degree right roll.

L series - After landing to ship, crew shut down engines normally. Ship turned as aircraft rotor blades were winding down, and gust of wind caused blades to windmill, damaging spindle assembly and anti-flap restrainers.

Attack

AH-1 Class B

S series - While at 1,500 feet MSL and 100 knots, aircraft flew into and cut six 46,000-volt high-line power cables. Crew continued flight for about 8 miles following wire strike and executed running landing at air station. 9329

AH-1 Class C

F series - During confined area takeoff, PC failed to ensure proper obstacle clearance and allowed aircraft to strike tree. Postflight inspection revealed damage to both main rotor blades.

F series - During hot refueling operation, crew discovered 90-degree gearbox fairing access door was open. Crew shut down aircraft to close access door and found fluid level in gearbox was ¼-inch below preflight level. Further inspection revealed fluid was dripping out of gearbox fairing and also on bottom side of tail cone and tail boom rivets. Maintenance replaced 90-degree gearbox seal.

F series - During cruise flight, crew noticed engine oil hot light and saw temperature rapidly rise to 125°. While crew was searching for landing area, transmission oil temperature began rising and transmission oil temperature light came on. Crew completed landing without further incident. Suspect oil cooler fan failure.

S series - While firing first pair of rockets during

Class A Accidents through May

	Month	Class A Flight Accidents		Army Military Fatalities	
		FY92	FY93	FY92	FY93
1st Qtr	October	1	6	0	2
	November	3	2	4	6
	December	1	1	0	0
2d Qtr	January	3	1	0	0
	February	1	5	0	8
	March	4	1	2	5
3d Qtr	April	1	6*	0	0
	May	1	2	1	1
	June	2		2	
4th Qtr	July	2		1	
	August	1		0	
	September	2		0	
	Total	22	24	10	22

*Two accidents previously reported as Class As have been downgraded

aerial gunnery training, torque spiked to 70 PSI with a low of 35 PSI. Before returning to OGE hover torque, IP instructed pilot to return master arm to standby and wing stores armed switch to off. Because aircraft was over impact area and rough terrain, nearest suitable landing area was at rearm pad. IP completed landing without further incident.

AH-64 Class A

A series - While at stagefield with IP in front seat and rated student pilot in rear seat in bag using PNVS, IP observed thunderstorm, took aircraft controls, put aircraft on ground, and told pilot to lock tail wheel. As aircraft came to stop, microburst hit aircraft and rolled it onto its right side. Main rotor blades disintegrated, tail boom separated from aircraft, and Hellfire training missiles and launchers separated from aircraft. Pilot shut down engines and exited aircraft unassisted. One fatality. 9330

AH-64 Class B

A series - During night currency training mission, aircraft drifted rearward and main rotor blades struck oak tree. Crew executed controlled landing to field. Left main and tail struts and four main rotor blades were destroyed. No injuries. 9331

AH-64 Class C

A series - At about 3 to 4 knots during takeoff roll, 30mm gun barrel made uncommanded depression and dug into runway 6 to 8 inches. Crew landed aircraft and shut it down. Postflight inspection revealed gun mount was partially severed from airframe and hydraulic lines were torn. No injuries.

A series - When crew advanced power levers to fly, No. 1 engine accelerated to maximum power with flames from exhaust suppressor. Crew noted No. 1 engine Np at 120 percent and shut down aircraft. Inspection revealed HMU failure.

A series - While two aircraft were taxiing to parking at civilian airport, first aircraft stopped and reduced to idle. As crew of second aircraft was trying to lock tail wheel, they taxied too close to first aircraft and rotor blades made contact. Pilot of second aircraft backed aircraft up about 20 feet after contact. Crews shut down both aircraft without further damage. Inspection revealed damage to two main rotor blades on one aircraft and damage to one main rotor blade on other aircraft.

Cargo

CH-47 Class B

D series - During routine IFR training flight at 6,000 feet AGL, lightning struck main rotor heads and blades. 9332

CH-47 Class C

D series - While being vectored for ground control approach, aircraft entered area of precipitation that contained hail. Crew requested vectors to clear severe weather. Aircraft was again vectored into precipitation that contained hail. Crew initiated turn out of precipitation and after obtaining VFR flight conditions, completed landing. Just as aircraft landed, hail storm struck airfield and engulfed aircraft. When storm passed, crew taxied to parking and completed normal shutdown. Postflight inspection revealed moderate hail damage to aircraft.

D series - During IFR flight on radar vectors for descent to final approach at Army airfield, IP turned advanced flight control system (AFCS) off just before entering IMC. Aircraft entered IMC, pitched up, and yawed right. Pilot's attitude indicator was discolored, causing IP increased reaction time to regain control. Wind caused by out-of-trim condition tore ramp upper cargo door away at its mounting points before IP could regain control of aircraft. Flight engineer was thrown under internally-loaded vehicle, injuring his leg, and passenger was struck on head by loose oil can. IP regained control after encountering VMC and completed precautionary landing without further incident.

Observation

OH-6 Class C

H series - Crew attempted to start aircraft with main rotor blade tied down.

OH-58 Class B

D series - At 30- to 35-foot AGL hover while firing Hellfire missiles, aircraft experienced compressor stall. Crew reduced collective, and aircraft began to yaw left. Aircraft continued to yaw left about 360°, and crew entered autorotation from about 20 feet AGL. Aircraft landed hard on uneven terrain and rolled over on its side. 9333

OH-58 Class C

A series - After landing to field site, pilot repositioned aircraft to park tactically. During shutdown, observer on ground advised pilot that main rotor might have struck tree limb. Postflight inspection confirmed tree strike.

A series - Pilot initiated engine start sequence by pressing starter switch, and TOT rose above 800°C and began stabilizing. As secondary fuel engaged, TOT began rapid rise. Pilot closed throttle at about 900°C and held starter down. TOT rose to 1,000°C. Pilot held starter until TOT was below 400°C and completed shutdown without further incident.

A series - PC and pilot confirmed outside air temperature at 0° before start, which required minimum of 13 percent N1 before opening throttle to flight idle position. PC and pilot discussed minimum criteria for temperature and reviewed start procedures. Pilot started clock and depressed starter. PC remarked that start might be hot because fuel boost light started flashing—sometimes an indication of a low battery. When minimum 13 percent N1 stabilized and was confirmed by PC, pilot opened throttle to flight idle. Turbine outlet temperature (TOT) increased rapidly. As TOT approached 900°, PC advised pilot to shut down engine. PC saw TOT reach 1,000° for about 2.5 seconds before pilot could get throttle detent depressed and retard throttle to full off position. Starter continued to engage until TOT was below 200°.

A series - While in cruise flight about 1 mile from destination airport, engine failed due to fuel exhaustion. Pilot executed autorotation to center di-

vider of four-lane highway. Rotor decayed below 225 RPM, causing damage to tail boom and transmission.

A series - During NOE flight while on tactical training mission, aircraft crossed ridge and PC initiated descent to follow terrain. When PC applied power to arrest descent, aircraft did not respond rapidly enough and main and tail rotor struck tree. PC continued flight for another 100 meters and landed aircraft in open field.

C series - Aircraft lost power and descended into trees. Crewmembers proceeded on foot until they were located by rescue personnel. Minor injuries.

C series - PC was flying into wind when wind suddenly shifted to left side of aircraft, causing sudden right yaw. PC applied left pedal but yaw continued. Simultaneously, PC applied more power and left pedal and increased airspeed. Aerial observer saw torque reach 116 to 118 percent and informed pilot. Pilot looked inside, verified overtorque, and performed precautionary landing without further incident.

D series - During OGE hover checks at 65 feet AGL, aircraft developed tail rotor and airframe vibrations. Crew landed aircraft and completed shutdown. Inspection revealed that counterweight support of white tail rotor blade had failed, subsequently striking red tail rotor blade and then red main rotor blade.

Fixed wing

C-12 Class C

F series - Aircraft was on routine mission at 29,000 feet and 180 knots. No unusual weather activity showed on aircraft radar. Aircraft was in light rain when both sides of airframe were struck by lightning. As pilot made immediate descent to return to home station, aircraft was again struck by lightning. Crew completed landing without further incident or damage.

Messages

■ Safety-of-flight technical message concerning one-time visual inspection of T700-GE-701C engine fuel hose assembly on all AH-64A, MH-60K, and UH-60L aircraft equipped with -701C engines (AH-64-93-03/UH-60-93-01, 082100Z Apr 93).

■ Safety-of-flight technical message concerning one-time visual inspection of T700-GE-701C engine fuel hose assembly for additional serial numbers on all AH-64A, MK-60K, and UH-60L aircraft equipped with -701C engines (AH-64-93-04/UH-60-93-02, 161842Z Apr 93).

■ Safety-of-flight technical message concerning one-time inspection of cyclic control tube for possible interference with lower electrical clamp in the center post area of all OH-58A/C aircraft (OH-58-93-01, 251530Z Mar 93).

■ Aviation safety action maintenance mandatory message concerning all aircraft equipped with sked litter systems (GEN-93-ASAM-07, 101523Z May 93).

■ Aviation safety action informational message concerning status of the new DA Pam 738-751: Functional Users Manual for the Army Maintenance Management System—Aviation (TAMMS-A) (GEN-93-ASAM-08, 201620Z May 93).

■ Aviation safety action informational message concerning secure voice FM KY-58 radio mount on all UH-1 series aircraft (UH-1-93-ASAM-02, 192008Z Apr 93).

■ Aviation safety action maintenance mandatory message concerning one-time inspection to determine compliance with system modification work orders (MWOs) on all H-60 series aircraft (UH-60-93-ASAM-09, 251715Z Mar 93).

■ Aviation safety action maintenance mandatory message concerning one-time inspection and recurring inspection/cleaning of the external stores support system (ESSS) valves and pneumatic lines on all UH-60A, EH-60A, and UH-60L aircraft (UH-60-93-ASAM-10, 012000Z Apr 93).

■ Aviation safety action maintenance mandatory message concerning inspection and replacement of ARA crew restraint, buckle/crotch assemblies on all H-60 Black Hawk helicopters (UH-60-93-ASAM-11, 081915Z Mar 93).

■ Aviation safety action operational message concerning abrupt change in main rotor track/vibrations on all H-60 (EH/UH/MH) series aircraft (UH-60-93-ASAM-12, 271725Z Apr 93).

■ Aviation safety action maintenance mandatory message concerning one-time inspection of the hose assembly, P/N 209-060-668-236-12, on all AH-1E and AH-1F aircraft modified by MWO 55-1520-236-50-12 (AH-1-93-ASAM-02, 201950Z May 93).

■ Aviation safety action informational message concerning maintenance information for T55-L-712 engines on all CH-47 and MH-47 series aircraft (CH-47-93-ASAM-04, 201730Z Apr 93).

■ Aviation safety action operational message concerning advance notification regarding the operation of the electric flight instrumentation system (EFIS) and other operational issues on all RC-12N aircraft (C-12-93-ASAM-01, 181320Z May 93).

■ Aviation safety action maintenance mandatory message concerning one-time and recurring inspection of the emergency manual canopy jettison system on all OV-1D/RV-1D aircraft (OV-1-93-ASAM-01, 281529Z Apr 93).

For more information on selected accident briefs, call DSN 558-3262, commercial 205-255-3262.

U.S. ARMY SAFETY CENTER

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Take care of your own aircrew and aircraft first!

■ While conducting support missions during a training exercise, a UH-1 aircrew witnessed the crash of a CH-47D and decided to land to render assistance. The aircrew located an area close to the crash site, but they did not perform a low recon of the confined area. While attempting to land, the aircraft's main rotor blades struck a tree. The crew was unaware of the tree strike but realized the confined area was too small and repositioned to another area. Postflight inspection revealed aircraft damage cost of almost $34,000.

■ During an NVG refresher training flight, air traffic control (ATC) flight following requested a UH-60 crew recon coordinates for a possible downed aircraft. The recon revealed nothing. But during hot refueling at home station, ATC requested the crew recon another set of coordinates. As the aircraft neared the coordinates, the crew heard an emergency locator transmitter beacon over the radio and saw what appeared to be emergency vehicles. Without establishing visual contact with known wire obstacles in the area, the PC decided to make an approach to the site to determine if this was the downed aircraft. Shortly after the PC initiated a descent, the aircraft struck a guy wire from a power line support tower. Although the crew sustained only minor injuries, the aircraft damage cost exceeded $430,800.

Understandably, both of these crews wanted to provide assistance to the crews of the downed aircraft and emergency personnel. Unfortunately, they let their sense of urgency cause them to expose their own aircraft and everyone on board to unnecessary hazards. The lesson to be learned from these two accidents is that you can't do the downed crew a bit of good if you become part of the accident data yourself.

Following established procedures in all situations is your best protection against becoming a statistic too. Even a strong desire to help in emergency situations does not warrant taking unnecessary chances. Kick in your risk management skills. Identify and assess the hazards before deciding to proceed. Slow the pace down for a moment, and take sufficient time to ensure the safety of your crew and aircraft first! ■

—SFC John Mark Morthole, Aviation Branch, DSN 558-3262, commercial 205-255-3262

"The Next Accident Assessment"

If you knew who in your unit was going to cause the next accident, you could implement control measures to prevent that person from hurting himself or another soldier or damaging costly equipment. Unfortunately, there aren't any crystal balls for looking into the future, but there is a device to help you determine who's going to have the next accident in your unit.

It isn't a guarantee against all accidents; but it's a reliable instrument developed by the Army Safety Center that will help predict accident probability. "The Next Accident Assessment" can help commanders, leaders, and individuals identify risk-generating factors. Every aviator, every crew chief, every maintainer has these risk-generating factors. Some have more than others. And those with the most are the ones who are most susceptible to human-error accidents.

"The Next Accident Assessment" is a short test that is based on the top five causes of human-error accidents in both ground and aviation over the last 10 years: self-discipline, leadership, training, standards, and support. Actually, there are two parts to the test: a commanders/leaders assessment of personnel they rate and an assessment for individuals to complete on themselves.

The assessments appear on the last two pages of this issue. Tear them out, reproduce them, and keep a copy for future use.

These assessments evaluate the risk of an individual or unit causing the next accident. They're not cure-alls. But using the information obtained from the assessments, necessary measures to help prevent accidents and ensure safer operations can be developed. ■

Accident Risk Assessment of Personnel Rated by Commanders/Leaders

KEEP FOR YOUR RECORDS

Risk Factors (From Next-Accident Test)	Points	Names of Rated Personnel					
1. Self-discipline (dependability)—soldiers know and are trained to std, but don't follow std. a. Counseled for poor performance (3 times last 12 mos, or more than 4 times last 24 mos).	8						
b. Had at-fault accidents/citations (2-4 last 12 mos or 5 or more last 24 mos).	8						
c. Abused alcohol/drugs (last 12 mos) or referred to community mental health (last 24 mos).	8						
d. Had judicial/nonjudicial punishment (last 24 mos).	8						
e. GT score 90 or less (enlisted only).	8						
f. Male under age 25.	8						
2. Leadership (enforcement of std)—leaders not ready, willing, or able to supervise and enforce performance to std. a. Insufficient knowledge/experience (each subordinate leader who fits this example).	6						
b. Tolerates below-standard performance (each subordinate leader who fits this example).	12						
3. Training (job skills and knowledge)—soldiers lack training to perform tasks to std. a. MOS SDT (SQT) score less than 70.	9						
b. Not proficient in assigned tasks outside MOS (has not received OJT, school, unit, or task training).	9						
4. Standards—soldiers performing task for which task-condition-standard or procedures— a. Do not exist (example: two vehicles operating in opposite directions on test track run into each other because there is no std on track direction).	4						
b. Are not clear/practical (example: TM shows soldier changing 195-pound tire by himself).	4						
5. Support—soldiers not receiving support needed to perform task to std. a. Personnel (not full crew, wrong MOS, not trained to std).	2						
b. Equipment (TA-50, weapons, transportation, safety).	2						
c. Supplies (ammo, fuel, food, water, parts, clothing, publications).	2						
d. Services/facilities (maintenance, medical, personal svcs, storage).	2						
Points: 0-20 / 21-30 / 31+ **Risk: Low (L) / Medium (M) / High (H)**	**Each Person's**	**Points**					
		Risk					

Individual Accident Risk Assessment

KEEP FOR YOUR RECORDS

Risk Factors (From Next-Accident Test)	Points	Names of Rated Personnel					
1. Self-discipline (dependability)—you know and are trained to std, but don't follow std. a. Counseled for poor performance (3 times last 12 mos, or more than 4 times last 24 mos).	8						
b. Had at-fault accidents/citations (2-4 last 12 mos or 5 or more last 24 mos).	8						
c. Abused alcohol/drugs (last 12 mos) or referred to community mental health (last 24 mos).	8						
d. Had judicial/nonjudicial punishment (last 24 mos).	8						
e. GT score 90 or less (enlisted only).	8						
f. Male under age 25.	8						
2. Leadership (enforcement of std)—your immediate supervisor is not ready, willing, or able to supervise and enforce performance to std. a. Supervisor does not have sufficient knowledge/experience.	6						
b. Supervisor tolerates below-standard performance.	12						
3. Training (job skills and knowledge)—you have not received training to perform tasks to std. a. MOS SDT (SQT) score less than 70.	9						
b. Not proficient in assigned tasks outside MOS (have not received OJT, school, unit, or task training).	9						
4. Standards—you perform tasks for which task-condition-standard or procedures— a. Do not exist (example: two vehicles operating in opposite directions on test track run into each other because there is no std on track direction).	4						
b. Are not clear/practical (example: TM shows soldier changing 195-pound tire by himself).	4						
5. Support—you do not receive support needed to perform task to std. a. Personnel (not full crew, wrong MOS, not trained to std).	2						
b. Equipment (TA-50, weapons, transportation, safety).	2						
c. Supplies (ammo, fuel, food, water, parts, clothing, publications).	2						
d. Services/facilities (maintenance, medical, personal svcs, storage).	2						
Points: 0-20 / 21-30 / 31+ — Risk: Low (L) / Medium (M) / High (H)	**Each Person's Points**						
	Each Person's Risk						

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