Flightfax

ARMY AVIATION RISK-MANAGEMENT INFORMATION

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War Stories, Close Calls, and Near Misses

Flightfax

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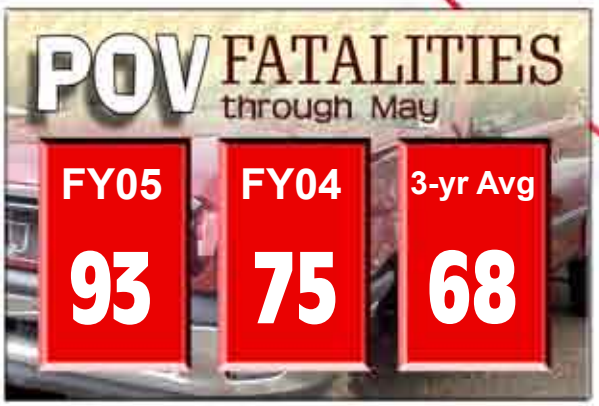

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War Stories, Close Calls, and Near Misses

Paula Allman
Flightfax Editor

Ever wonder what makes a good war story? Most combat stories come about because someone is shooting back, which is expected. But what about Soldiers who are training in a controlled environment? Not much shooting is going on then, at least with real bullets. We need to hear those stories—your close calls and near misses.

Aviators are the best storytellers! "Did you hear what happened to old 'ACE-IP' today? Boy, he was lucky…." So the story begins. Aviators often relearn the lessons of those who came before them. This experience often comes with a high level of pucker factor, solidifying these lessons for a lifetime. Sometimes these stories are in the spotlight for all to see; other times you'll only hear about them in the club when you buy your buddy a beer.

There's an old saying that there's a fine line between an "Aw SH--!" and an "Attaboy." Some days, everything goes perfect: You brush that line and come out smelling like a rose with a good war story. Then other days everything isn't quite perfect: That fine line is crossed and someone is looking to rip your lips off.

So, where is that fine line? That's a hard question to answer. It's fluid, much like mercury used in thermometers. You ever try to pick that stuff up? It's elusive. The line moves because it depends on individual experience, capability, and the conditions at the time it's approached.

That's all well and good; but if I can't define it nor get a hold of it, then what good is it, and how can I prevent crossing it? The best answer I can offer is experience. We either learn from personal experience to develop a sixth sense to know when we are approaching that magical line, or we can learn from the experience of others.

Either way, war stories, close calls, and near misses have two things in common, they're all tales of how a crew came together to handle a critical situation and lived to fly again, and they all have lessons that can be passed on. This issue of *Flightfax* is dedicated to all aircrew members who are deployed and fighting the War on Terror, and those training to go to war when called. Thank you for what you do every day for our country.

Mission First, Safety Always! ♦

—Contact the author at DSN 558-9855 (334-255-9855) or e-mail paula.allman@safetycenter.army.mil.

Close calls and near miss scenarios can take us to the next level of accident prevention. Help us help you! Go to https://crc.army.mil and tell us your story. This system is completely anonymous.

The Essence of Mentorship

CW5 Clay Pope, CW5 Ross Steadman,
CW4 Bruce Blackstone, CW4 Mark Grapin,
CW4 Bob Markert, and CW4 John Metcalf
WOSSC 05-03

As our Army transforms its warfighting equipment to meet the needs of a 21st Century battlefield, so must our Soldiers implement the tactics necessary to wage war on an asymmetrical scale. As our personnel adapt, so must the styles of leadership in those charged with commanding, influencing, and executing the battle—particularly in our aviation community.

Over the last several decades, we have experienced certain changes to the culture of Army Aviation. Many of us remember a zero-defect mentality of the not too distant past that was the natural byproduct of ever-shrinking budgets. And, some experienced heavy professional tolls for having adversely affected the accident record of a command—regardless of the mitigating factors in the chain of events leading to the accident. This tended to create aviators who were less than willing to share their knowledge and experience. As we learned *this* lesson well, we came to apply it to our individual cockpits and companies. Rarely now do we seem to gather and share lessons learned from the *"school of hard knocks"*; that is, until the mission is labeled as *high risk* or the stakes of success or failure are too high.

We are a Nation at war. One that is waged in several 360-degree theaters with no defined fronts, and none of which seems to fit the mold of what we learned early in our careers. When we add the dynamics of a digital battlefield, we have become an Army rich in real-time data, of real-time gains and losses. An axiom rooted in

Special Operations is just as true for the Army as a whole, *"The planning for the next mission begins with the debrief from the last mission."* More to the point, the luxury of ignorance of the lessons learned—even from the mission just flown—is simply one we can no longer afford.

On the larger scale of Armywide lessons learned, nothing short of a shift in our underlying culture will bear fruit from our mountains of data. The commercial airline industry has made this leap, as have the Federal Aviation Administration and National Transportation Safety Board. Each has created programs that allow crews to self-disclose inadvertent violations or close calls without fear of retribution. The caveat being the act was not a willful violation of policy, procedure, or regulation—rather, the result of an honest mistake. Our sister services have learned to refocus their aviation cultures to see beyond the potential for knee-jerk retribution for *balling up another one*. Consider how many of us have thumbed through a Navy or Air Force magazine, and wondered, *"Gosh, I wish we could be that honest and open. Aw, it'll never happen in the Army—that'd be just calling artillery in on our own position!"*

The U.S. Army Training and Doctrine Command has enabled fundamental changes in the way we train our aviators, crewmembers, maintainers, and leaders. In many places, training shifts focus from technical competence to Soldier skills. In this shift, leaders must now weigh how to teach and enhance technical skills. For the first time in nearly two generations, a graduating Initial Entry aviator may arrive in combat in as little as 14 days after completion of flight school! But deeper than doctrine, tactics and techniques, lies the challenge in developing a culture—one that underpins how we transform our Army into that which embraces each mistake as an opportunity for growth, without forsaking personal accountability. Perhaps *Hangar Flying* may be a lost art—one that has been played in countless ready rooms.

In a recent poll of standardization pilots (SPs) at the Warrant Officer Senior Staff Course, many claim they no longer see junior warrants sitting around just talking about flying—the complaint being there is simply not enough time; or worse, woe be to the pilot who shows his weaknesses and airs his mistakes to others. The fundamentals of this lost art remain: A seasoned Soldier, spinning a yarn of how they faced overwhelming odds, and tapped their deepest reservoir of knowledge and innovation to win the day. Or, how a mistake put the aircraft or mission at risk and how they recovered from that mistake. The goal in the telling of these stories wasn't to make an Army of heroes and legends. Rather, to build an Army of well-trained, well-led, and effectively mentored warriors who enjoy the support of their chain of command and their peers in the application of each lesson brought back. Perhaps the more truly valuable lessons that were taught in this *"hand-flying university"* weren't by those senior pilots who demonstrated superior airmanship, so much as those more ordinary and less-seasoned pilots who shared their pie-eyed tales of having nearly killed themselves! Surely, few would argue these lessons—mentorship at its best—to be often more valuable than any classroom teachings.

Perhaps the more truly valuable lessons that were taught in this "hand-flying university" weren't by those senior pilots who demonstrated superior airmanship, so much as those more ordinary and less-seasoned pilots who shared their pie-eyed tales of having nearly killed themselves! Surely, few would argue these lessons—mentorship at its best—to be often more valuable than any classroom teachings.

We have all seen the diagram showing for every catastrophic accident, we actually experience hundreds of near misses. While engine history and flight data recorders help us to more accurately report genuine mishaps, it is that huge body of experience of *the one that almost got away from us* that now deserves our focus. While databases are developed

Mistakes must be seen as learning opportunities to be shared, and not cause for swift ridicule in an environment spring-loaded to the guillotine position.

that may be used to capture, warehouse, and refine such data, we must first sow the seeds of a culture that welcomes such sharing.

■ **Mentorship is a tool that can be immediately employed**. Whether it's a platoon sergeant passing along to a new mechanic how an avoidable maintenance error cost the use of an aircraft for a mission; or a pilot sharing with another how a sloppy instrument scan caused a go-around in poor weather with low fuel. There are countless Internet Web sites for the posting of lessons learned. Mentorship transcends the stroke of a key or the click of a mouse, and requires a Soldier's touch in how another Soldier was affected. It demands we have the comfort in our own flight suits to candidly discuss shortcomings or a lack of knowledge with mentors, leaders, friends, and other pilots-in-command (PCs).

■ **Commanders at all levels must be willing to set aside time to make the after-action review (AAR) process a genuine one**. AARs must be open to the participation of each member of the mission, and conducted in a retribution-safe environment—regardless of how candid or animated they may become.

■ **Our days should be flexible enough to enable *"SP's time"* as a sort of re-institutionalization of the time-honored ritual of aircrews convening in a ready room**. In addition, *"Mechanic's time"* would see maintenance teams gathered around a workbench, or hovering over a tool chest or test stand.

■ **PCs must set an atmosphere that tolerates mistakes, but not incompetence**. They must set the tone that acknowledges the potential for human error is inherent in aviation; yet our policies, SOPs—and even *Hangar Flying*—give us the tools with which to operate safely. As PCs, each must remember that if you're unwilling to *tolerate* a mistake, you had better never *make* a mistake.

■ **Each member of the team must understand they have a stake in their SOP and every doctrinal reference cited in it, and each bears the responsibility to suggest improvements**. Each must also be willing to ask a more experienced member (or even a respected source outside their team) how better to perform a procedure within the framework of the published requirement.

■ **Each organization within the Army must see the warfighter as the customer of everything they produce—be it munitions, manuals, or meals**. Each warfighter must come to know that each member of, or contractor to, the service is there to support them.

■ **Most importantly, personal accountability is a constant in our commitment to one another**. Mistakes must be seen as learning opportunities to be shared, and not cause for swift ridicule in an environment spring-loaded to the guillotine position.

In the 1970s and '80s, we benefited from the experience of a large pool of Vietnam veterans sharing tactics, techniques and procedures honed in combat. With the recent experience gained during Operations Enduring Freedom and Iraqi Freedom, we have a fresh window of opportunity to pass along these lessons to our newest members. And, while no article in a magazine can hope to change the culture of an Army, perhaps these few paragraphs may be seen as a first step in exploring how better to embrace our errors and learn from our close calls—in closing with a challenge for more candor in sharing the tale of a near miss, and taking ownership for transforming our Army Aviation culture. ♦

—This article was written by CW5 Pope, CW5 Steadman, CW4 Blackstone, CW4 Grapin (team leader), CW4 Markert, and CW4 Metcalf as a class project while attending Warrant Officer Senior Staff Course 05-03 at Fort Rucker, AL.

Don't Carry the Load Alone

CW2 Brian Fields
TNARNG

As a former Naval Aviator, I gleaned many lessons from the Navy's safety magazine* Approach*. Lessons learned from other's mistakes are often some of the best lessons in our profession. Now as an Army Aviator, I'm glad to see more of the "war stories" are making the pages of* Flightfax*. With that in mind, I will spill my guts and share a story in the hope that some lessons are learned from my mistakes.

My National Guard detachment of UH-60Q medical evacuation helicopters were on a yearlong deployment in support of the 6th RTB stationed at Eglin AFB. I was the first-up crew for the last mission of our last rotation in Florida. The mission was to support the Rangers on their island assault and it required us to reposition to Santa Rosa Island near sunset and stay overnight.

The weather began to close in at the camp, a short 15-minute flight from the island. The command proceeded with the movement and we repositioned. We completed our preflight checks and as we prepared for takeoff, I noticed the weather had deteriorated below visual flight rules (VFR) conditions. I certainly didn't want to be the one to cancel the mission and end our deployment under those circumstances, so I decided to take off, stay at the field, and see what the weather conditions were.

After takeoff, the weather

was no more than a 500-foot ceiling with 1 to 2 miles visibility. I could have gotten a special VFR clearance, but I didn't really feel comfortable with that. I called approach and asked for the weather at Hulbert Field, located on the coast and just a few clicks down the shore from our destination. It was a 2,000-foot ceiling with 5 miles visibility. The already pre-positioned Rangers gave the "it looks beautiful here," weather report from their location.

My mind raced and I asked for a ground-controlled approach (GCA) to runway 18. There was one and the approach controller gladly offered it to me. I had a comfortable feeling that we could break out as the weather minimums were well below the reported weather. The controller gave us a squawk, our first heading and an altitude, and I put the approach plates down and started to backup my copilot at the controls. Just a few seconds after he initiated the climb, we were in the goo. It was solid all the way up to and including our altitude.

After a couple of turns and a slight delay from air traffic control (ATC), our controller came back with some bad news. The GCA final controller wasn't on duty today because it was Saturday. I asked about the instrument landing system (ILS), but it wasn't available due to a military exercise over the Gulf. The seat cushion felt a little bit closer to me at this time. What about tactical air navigation (TACAN)? The controller said he could definitely give me a TACAN approach. I quickly flipped through the approach plates to the appropriate page and watched as my copilot responded to the controller's new heading. Radar vectors to a TACAN approach—not as easy, but still with weather minimums well below the reported.

Being a good pilot, I quickly switched the frequency and pushed the numerous buttons required by the Q model to bring the TACAN to life. The needle didn't respond. I double- and triple-checked. Everything looked right. Then I heard the controller in a very apologetic tone tell me that the TACAN was down. I now had full insertion of the seat cushion!

Thoughts ran quickly through my mind as to my options. I asked about Eglin AFB. Weather was about 1,500 and 2. Was ILS available? It was. "I'll take it" was my response. At this point the mission was out of my mind—finding a place to land was paramount. The controller was feeling bad about the position I was in. I glanced at the approach plate, set it up for my copilot, and told the controller that we were a helicopter and didn't need the 20-some odd mile final that the approach called for. He obliged and turned us to final in an expeditious manner.

Once on final, I got that funny feeling again in my gut. The needles didn't look right and I thought for sure we were above glide path. No, it couldn't be, you just haven't done many of these recently and the controller wouldn't have done that, I thought. I asked my copilot and he confirmed that everything looked fine.

We continued the approach. Only a few seconds had lapsed and I couldn't get it out of my mind that something wasn't right. I cross-referenced our position on the global positioning system and found we were just a few clicks from the airport and still at about 2,500 feet. I called the controller to ask where we were and he confirmed my worst fear. We were well above glide slope and only an autorotation would get us to the approach end.

The controller apologized for the lack of a lower altitude with the early turn-in. This time he would get it right, I thought. However, as we tooled downwind and I admired how well my copilot seemed to be adjusting to the actual instrument conditions, the unspeakable happened. As I looked straight ahead while backing up my copilot with a good instrument scan, I caught a glimpse of the fire

light illuminate. "You've got to be (expletive deleted) me!" I yelled. I scanned the upper console to see the auxiliary power unit (APU) fire light illuminated. But the APU wasn't on. I asked my copilot to turn the aircraft left and then right, and asked the crew chief and medic to use the bubble windows and look for signs of fire. No such luck, however, as we were in the clouds.

In my mind I read the front-page headlines in the next day's paper: "Helicopter Crashes as Pilot Fails to Use Fire-Extinguishing Equipment!" It was possible that the APU compartment was on fire without it on. What if there were a fuel leak and it ignited due to a spark? I made the decision to fire the bottles and announced it to the crew. I pulled the T-Handle and manipulated the switch to the main position. No response. Reserve. No response. Not even a sound as if the bottles fired.

I took the controls, told the controller of my dilemma and asked for an immediate turn to final. Was I declaring an emergency? I thought about it. I had never declared one before. Yes, I am! I'll do whatever it takes to get me to the ground as soon as possible. This time the controller put me right on glide slope but now well to the right. So far the needles weren't registering. I didn't care at this point. There was nothing going to make me wave off this approach. I put a sharp correction in and reversed it as I saw the needles center up. We broke out at about 800 to 900 feet AGL and found, what appeared to be, every fire truck on Eglin AFB at the end of the runway. I turned to the left and without even asking, the medic confirmed we were not on fire. As I began my descent, the No. 1 and No. 2 fire light illuminated and at that point reinforced the fact that it had to be some kind of indication problem.

We completed a normal shutdown and found there was a leak above the upper console and during our flight in the goo, water had collected and run down the power control lever linkages and had dripped onto the solenoid for the fire detection test switch, shorting the circuit and illuminating the lights. We also found the directional control valve was bad and failed to move, which in turn did not allow the fire bottle to blow. Had there been a real fire, we would have been—for lack of a better word—toast.

What lessons did I learn from this? First, training is training and the attitude of doing whatever is necessary to get the mission done can be just as deadly as "get-home'itis." I was probably too focused on doing whatever was necessary to get the mission done that I wasn't properly looking at the risks involved.

Second, I was very confident in my instrument skills, but never asked how my crew felt about the situation. This was a major change of mission profile and I never asked my crew how they felt. As a matter of fact, in the one hour flight or so, with all the decisions that had to be made, I never asked the crew for advice. In an open discussion about it later, I found out that they all had confidence in what I was doing, but that changed quickly after we had a hard time getting an approach. I really kicked myself in the rear for not including them in the decisions.

Finally, I learned to not trust the word of ATC as the gospel until I knew we had a viable plan. Our system for checking NOTAMs and accurate and timely weather briefs was almost nonexistent where we were. ATC was my best source but I trusted them too explicitly and should have asked the questions seeing that it was a Saturday and I was on a military reservation. The fact that the range control wasn't open should have been a good clue.

Don't push a bad situation when it comes to weather, don't dominate the cockpit, and don't be scared to call it quits. ♦

—CW2 Brian Fields is a member of N Troop, 4/278th ACR, Tennessee Army National Guard and is currently deployed to Iraq. He was formerly a Navy Seahawk pilot. He may be contacted at brian.e.fields@us.army.mil.

Our Descent Into Hell

CW3 Theo Galzerano
ALARNG

I was deployed to Kuwait during Operation Iraqi Freedom in 2003 when hostilities just began. Our aviation intermediate maintenance (AVIM) company was telephonically notified at noon one day and ordered to duty the next morning at 0800. I was told to pack for 2 years. Holy sh—!, I thought, even the 82nd doesn't go this quick! It was real. Our descent into hell began from there.

The Composite Risk Management process was used "on the fly" from then on. Our Vietnam veteran safety officer was the unit's father with his gentle but poignant talks about "this is your brother and sister" and survival in a combat zone. We prepared the best we could with our elephant of a unit—equipment heavy and experience shy.

After arrival in theater, I was ordered to supervise a team of 20 CH-47 mechanics to work under the 1109th AVCRAD, Connecticut ARNG, at Camp Arifjan, Kuwait. After being told we had no work there, an abrupt policy shift caused my team to be the lead CH-47 phase maintenance effort in Kuwait. I quickly realized my largest hurdle was to oversee these 20 young men through their night maintenance

mission and other duties without injury. I held myself personally responsible to their families for this.

Danger lurked at every turn. We endured hazardous living conditions, unbearable heat, and filth and disease. Performing nighttime aircraft maintenance in a hostile environment was no piece of cake either. We had poor lighting, noise hazards, theft of equipment by another unit, discipline issues, and psychological deterioration due to "the no end in sight" duration of the mission. My largest worry was that one of my men would fall off the top of a Chinook during night maintenance. I would walk around the base, as if to catch someone if they fell. These guys were heroes in their efforts of returning battle-damaged airframes to service in record time. The debris of live grenades and spent shell casings littered these aircraft. It was a mess.

On one occasion, we received word that a member of our platoon had been killed in Balad, Iraq, and a sergeant had had both arms blown off in a Black Hawk tire explosion. I had to tell my boys. They were silent as they dug out photos of their friends. I vowed to prevent this from happening to my team. I had the best maintenance NCOIC I ever met in 23 years of service. He epitomizes the image of an aircraft maintenance supervisor. I gave him one directive: Keep them alive! If he would do that, then I would support his decisions. And I did.

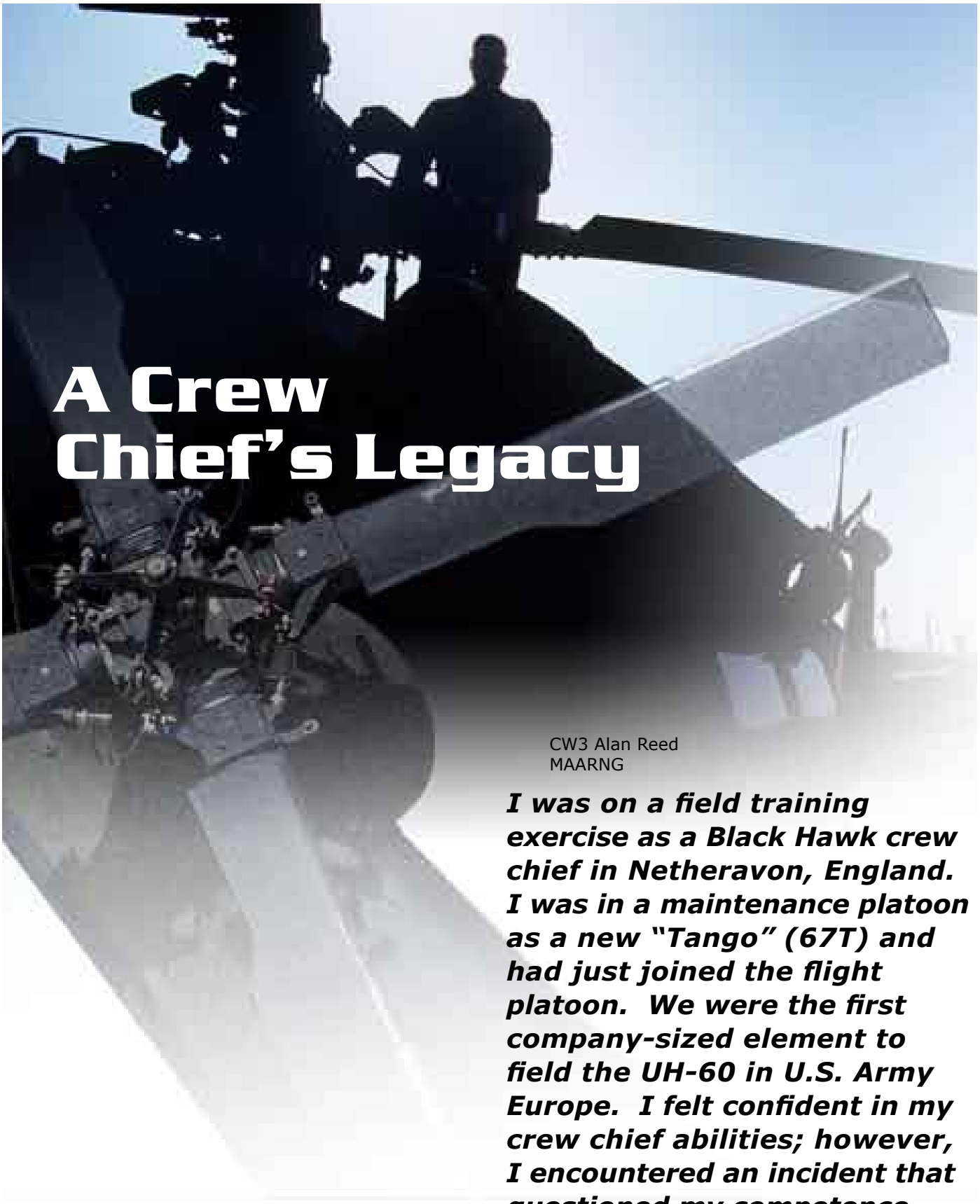
When an accident occurs, it happens lightning quick. I was walking at night with one of my NCOs in a parking area to turn off an accessory buzzer in another unit's 2½-ton truck when he cut me off, saying "I got it!" Suddenly he disappeared right in front of me. I heard a thud and froze in place, looking for him. I realized he had fallen into an exposed concrete culvert, landing on his chest, and was immobile. I helped him out. As he rolled to his back, it was clear he was going into shock and had difficulty breathing. I checked him for compound fractures and made sure his airway was clear, reassuring him all along. I knew I had to do something fast. I flagged one of my men and told him to get an ambulance NOW. He did. My NCO recovered in the hospital and returned to us weeks later, bruised but okay. These days he's fighting numbness and dangerous blood clotting resulting from his injury.

My safety officer became ill and was evacuated to the States. He was diagnosed with lung cancer and died before our return home. Our "father" and friend was gone. We will always miss him. Not only was he a true friend, but an accomplished aviator and attorney, a friend to all.

Many of our Soldiers received minor injuries or became ill, some with heart problems or other issues. I personally had a mysterious respiratory illness that progressed into chronic bronchitis and fever, which never was explained by medical authorities there or here in Alabama.

Our efforts were small but significant. These great guys left an indelible impression on me. In life you can choose to watch history or help make it, like our team. Think about it. My lessons learned are to trust your instincts, remain clean, and work smart. Always keep your head on a swivel. Even so, disaster will strike. When people say "The Army will," remember, WE ARE THE ARMY. We make it happen. There is no magical Army that does anything for you. Keep your weapons, ammo, water, and food readily available and guarded. Finally and most importantly, take care of your Soldiers. ♦

—CW3 Galzerano is a member of the Alabama Army National Guard, AASF #2, Birmingham, AL. He wrote this article while attending Aviation Officer Safety Course 05-003 at Ft. Rucker, AL.



A Crew Chief's Legacy

CW3 Alan Reed
MAARNG

I was on a field training exercise as a Black Hawk crew chief in Netheravon, England. I was in a maintenance platoon as a new "Tango" (67T) and had just joined the flight platoon. We were the first company-sized element to field the UH-60 in U.S. Army Europe. I felt confident in my crew chief abilities; however, I encountered an incident that questioned my competence—one I will never forget.

As most Black Hawk crew chiefs know, one of the required aircraft inspections consists of taking oil samples from the intermediate and tail rotor gearboxes and getting them to a lab to conduct an analysis of wear and particles therein. We also take a sample of the auxiliary power unit (APU) oil.

One evening after a flight across the dark countryside, we landed on the dark, grassy flight line without incident. Oil samples were due upon landing after our night vision goggle flight. I had a headache and was tired, but knew I had the next day to rest up, so I pushed on with taking the samples with a flashlight after the pilots departed for their hooch.

Typically, this process doesn't take more than 20 or 30 minutes. However, as Murphy would have it, I discovered the sump was a bit low while taking the APU oil sample. I took care of it immediately and filled the sump using a funnel borrowed from another crew chief. The red plastic funnel was attached to a 10-inch tube with a 3-inch flared end at the opposite end of the funnel. As the flared end of the tube disappeared into the dark, oil-filled sump, I innocently poured the oil into the funnel and then pulled the entire assembly out, only to discover that the flared end didn't come out with the tube!

Crap! I frantically took my flashlight and pointed it into the dark sump. With my tired eyes now wide open, I saw the missing piece floating in the oil! This assembly was actually three pieces, not two!

I spent the next hour trying to fish the piece out with my fingers to no avail. Frustrated and worried about how I was going to get this thing out, I retired to my bunk and collapsed. I'd attempt this feat again first thing in the morning.

I woke up and immediately headed back to my aircraft to continue my "fishing" expedition. Luckily my aircraft wasn't scheduled to fly, so I had time to try a number of ways to retrieve the broken plastic. As a "wannabe" true member of the flight platoon, I was worried about the impact this incident would have on my future as a crew chief. I worried for several hours while I tried every possible tactic and special tool to get the funnel piece out. Embarrassed and defeated, I broke down and told my squad leader of my dilemma.

Through the unsuccessful efforts of my squad leader and platoon sergeant to fish the darned piece of plastic out, the first sergeant recognized we needed assistance from the "Brits." The APU had to be pulled out of the helicopter and drained. We spent the next 2 days waiting for the Brits to secure a wrecker with an arm long enough to lift the APU from its compartment, tip it upside down, and drain the oil and subsequent piece of plastic.

The Black Hawk was down for 3 days, but my first sergeant told me that accidents happen and he was glad I reported it quickly. We learned a lot about the APU and other maintenance "tools" in this process. This was the first time an APU was removed from a Black Hawk in a field environment. Most importantly both our armies benefited from this incident as well; a bond was formed that can only come from adversity. ♦

—CW3 Reed is currently a battalion aviation safety officer (ASO) for HHC, 3-126th Aviation, Massachusetts ARNG. He was a Specialist 4 with the 48th Aviation Company at Nelligen Barracks, FRG, when this incident occurred. CW3 Reed wrote this article as a class project while attending ASO Course 05-003.

Wait It Out

CW2 Terry G. Weber
C Co., 3/229th

We were about to leave a forward operating base (FOB) in Afghanistan. We had been there for more than 3 weeks and were ready to leave for Bagram Airbase. The time was 1700, and the weather was about to get worse in another hour and drop below our minimum requirements. We left as a flight of three, two AH-64s and one UH-60, with the AH-64s taking lead.

This mission was to support ground troops and would take only 15 minutes. Before we could take off, a dust storm kicked up. However, visibility was still 3 miles and the ceiling was around 800 feet AGL.

We took off and headed to the ground troops. Once we got to the mountains the visibility and ceiling decreased, but the flight felt comfortable so we continued on to the site. We picked up the ground troops and relayed back to base that they were fine and en route to the base.

As we headed for Bagram Airbase, the weather was the same but the lead aircraft crew felt uncomfortable. Instead of heading back to base, I decided to change chalks and pick up lead duties. The rest of the flight agreed, and I took over lead. I proceeded down the mountain pass to pick up our route home.

By this time the weather had dropped to about ½-mile visibility and the ceiling was 700 feet AGL. The UH-60 crew felt fine with going on, but the AH-64 crew did not like the fact that the weather was deteriorating. I stayed on the map and told my copilot to turn to specific headings to get us out of the weather. Everything would be fine after our flight crossed over this one mountain and we picked up the low ground.

I told my backseater to climb over the mountain, which was 10,400 feet mean sea level (MSL). The weather hadn't changed and it looked like everything was fine, so I looked out to help him clear obstacles. Without warning, I noticed we were going very slowly, but I thought my perception was skewed because of the visibility.

We had only 500 feet to go, but I still had a nagging feeling that we were going too slow. I then looked inside, and my backseater said we couldn't make it over the mountain. He was right. We were at about 40 knots, 10,000 feet MSL, 98 percent torque, and our rotor was drooping.

I called the other chalks and told them we could not make it and must turn around. We lost the ground once we turned around, but fortunately we had Chalks 2 and 3 in sight. We were in a valley, so we lowered the collective until we finally broke out of the clouds. The flight decided to return to the FOB until the weather blew over. However, we suddenly noticed another AH-64 and UH-60 flying toward us. We had to make another turn in the valley to avoid them.

We finally made it back and debriefed. We discovered the crew that was replacing us at the FOB also had gone through the pass to support the ground troops. The lesson learned here is to always make the most conservative decision; in this case, we should have waited out the weather and left safely the next day. ♦

—CW2 Weber wrote this article while attending the Aviation Safety Officer Course 04-004 at Ft. Rucker, AL. He may be contacted at terry.g.weber@us.army.mil.

Preflight Pragmatism

CW3 Mark Mestre
B Company, 2/2 Aviation Regiment

Our unit was on a 9-day field exercise to familiarize the new pilots with air assault planning and execution. The field exercise incorporated 2 days of air assault multi-ship missions, followed by a night vision goggle (NVG) multi-ship mission. The flight crews were not battle-rostered since our unit had a deficiency of available pilots in command (PCs). Each PC maintained his own aircraft as well as his crew chiefs, with pilots (PIs) rotating from one aircraft to the next. This allowed new pilots to experience a wide range of experience by flying with more than one PC during the exercise.

We were trained and prepared for dusty conditions at the landing zone (LZ) and there were numerous landings in daylight and night conditions to verify the suitability of the proposed site for the field exercise. The day before the exercise, a snowstorm blanketed the entire LZ with 6 to 9 inches of snow. By the time we arrived at the site, the snow had formed a hard layer eliminating the dusty conditions; however, we were not prepared for the snow conditions at the site. The thing we were most concerned with was whiteout. The aircraft blew a considerable amount of snow around at a hover. It became imperative during hovering operations that flight crews expedited their maneuvering to reduce the amount of blowing snow.

On the fifth day of the exercise, we conducted a four-ship air assault in daylight conditions. The mission

was briefed and rehearsed; formations were thoroughly discussed to include closing speeds to form up in flight since the conditions at the field site would not allow for the aircraft to take off as a flight. For this flight, a new WO1 was assigned as my PI. He had 240 hours total time and this was his first tour. I was assigned Chalk 2 on this mission. During the mission briefing, the new W01 insisted on briefing our assigned topics. Despite his inexperience, I let him brief and thought it was a good learning experience for him. His motivation was good, but it was clear he had difficulty briefing items he should already be familiar with.

After preflight, I conducted an aircrew brief. As we were getting ready to go, I once again briefed our calls to the lead aircraft and explained how we would depart the LZ since we weren't parked in chalk order. During the preflight, we noticed spools of concertina wire were stacked up 40 feet from our 2 o'clock position. This was right in the middle of our intended hovering path out of parking and over-flight of the wire would be unavoidable.

As we brought the engine power control levers to fly, I noticed the wire was swaying, but not moving. I explained to the PI that I would take off and establish our position in the formation. He became quite upset with this and insisted he was capable of doing so. I told him that I understood he could do it, but I would do this myself because of the wire. My reasoning was that if the wire should be blown over or cause damage, I wanted to be the one on the controls when or if that occurred.

We took off without incident and linked up with the lead aircraft as briefed. After linkup was complete, I transferred the flight controls to the PI and allowed him to fly the aircraft for the remainder of the mission. I noticed he had difficulty keeping the aircraft's position stable as well as maintaining our briefed rotor separation. I explained that since we were Chalk 2, all of our movements were compounded rearward through the flight and if he felt he was over his head to let me know. On the postflight brief, I pointed out that it was my option to take off and linkup with the flight. I also mentioned his difficulty in keeping up with the lead aircraft. He became argumentative and defensive over this. I just told him to review the multi-ship tasks and be more careful the next time he flew formation flight.

On day seven of the exercise, the unit began preparations for the NVG multi-ship mission. Again, the mission was briefed and formations discussed. I was assigned as trail for this mission and was again assigned the WO1 that I had flown with on the previous air assault. I was asked to be the backup air mission commander (AMC) for the flight since I was the senior PC in the flight.

After our preflight, I briefed the crew again and requested we show up a little earlier to the aircraft to give ourselves a little more time to get ready because this mission would also be a live-fire mission. After going through the cockpit checks, I took a few minutes to explain to my PI that, in my opinion, we were about to do the most dangerous thing that any aviator can do—multi-ship, NVG, air assault mission into a confined LZ with five aircraft.

He instantly disagreed with me and proceeded to explain that "in his experience" I shouldn't be so concerned about flying a night multi-ship mission. Since I was the most experienced pilot, my plan was to take off and close on the formation before giving the controls to the PI. He immediately became angry with me and once again insisted he was quite capable of doing these tasks. I explained that I trusted him, but wanted him to see how closure under goggles looked so he could learn. He could then fly the entire flight himself.

At take off, I positioned the aircraft over the taxiway and took off, climbing and accelerating to our linkup

speed with the formation (we took off with one minute separation between takeoffs). Before I reached our linkup speed, the AMC called and asked if I would turn on my HF radio to monitor the events and be prepared to make calls for the flight in case he was unable to make the calls himself. Use of the HF radio had not been briefed, and the unit had not been trained on its use, but I had received HF training in my previous unit, so it wasn't any problem for me to do so.

I transferred the flight controls to my PI and announced that I would be focused inside the aircraft to get the HF radio tuned-up and ready. I reminded him to watch his rate of closure with the flight, positioned his ICS selector so he could make our beacon call, and started on the HF radio.

I looked up every 10 seconds or so to monitor his progress. I asked him if he could see Chalk 4 and he replied that he could. I again mentioned that he watch his rate of closure on the formation. I continued working with the HF radio and again looked up but this time looked at our airspeed. He had accelerated to 110 knots (our briefing closing speed was 80 knots). I told him to watch his airspeed and he replied that he was and that he had intentionally accelerated to 110 knots. I looked up and told him to watch his rate of closure on Chalk 4 again and to slow down, to which he replied, "Roger."

As I was finishing up with the HF radio, my attention was drawn to my chin bubble, where I saw what looked like the slime light. I quickly looked up and saw we were less than one rotor disc away and 30 feet higher than Chalk 4. I immediately announced that I had the controls and began to decelerate and turn the aircraft away from Chalk 4. We were above Chalk 4 before our deceleration brought us under the formation speed. I then positioned the aircraft in its proper place within the formation. The remainder of the flight proceeded without incident. Unfortunately, the WO1 was argumentative and defensive again on postflight when I mentioned how close we came to having a midair collision with Chalk 4. Had I not looked up when I did, the outcome of the flight might have been very different!

As I was finishing up with the HF radio, my attention was drawn to my chin bubble, where I saw what looked like the slime light. I quickly looked up and saw we were less than one rotor disc away and 30 feet higher than Chalk 4.

Lesson learned

If you fly with another pilot, regardless of his or her experience level, make sure it is understood that each pilot has veto authority over the flight. If your aeronautical cohort is unwilling to recognize yours, it's best to find a new partner. Remember, as a pilot, you are only as good as the decision you make right now—and the decisions you make are only as good as the options they provide. ♦

Editor's note: These matters are further complicated when they involve two rated pilots, each of whom has drawn different conclusions from a given set of facts. Because all pilots will eventually share the cockpit with another pilot, it is important to consider how best to resolve differences in aeronautical decision-making PRIOR to every flight.

—CW3 Mestre is a UH-60 PC for B Company, 2/2 Aviation Regiment, Korea. He may be contacted at DSN 732-5524 (317-340-3309) or e-mail mark.mestre@us.army.mil.

Stick to the Plan

Anonymous

Several years ago, I was a staff aviator at an air show. It was an undesirable weekend mission, so the junior pilot in command (PC) and the staff aviator drew the mission. The fly-in and static display went fine. I answered all the typical questions, got the typical sunburn on my head and face, and told the typical kid to take his dripping candy apple out of the crew chief's communications station.

The weekend was finally over, and the 3-day mission was almost at an end. It was now time to work on the egress from the crowded airfield. The air show director asked if we could put on a demonstration as the Air Force had. We declined. Then the director said he could push our aircraft out ahead of the myriad of other planes if we would go around the pattern once or twice. The PC asked the crew's opinion. The crew chief (CE) and I both told the PC that we had some reservations, but we would go along with the crew. When I asked if we were briefed for flying patterns, he said we would not be doing anything different than what we normally do at an airport, so it was okay.

Since we were all ready to get home, we agreed to do it. Plus, we wanted to show off to the civilians at the show! We couldn't let the Air Force get the best of the Army! The first problem arose in getting the Black Hawk past the fixed-wing aircraft in parking. So what did we do? We pushed our aircraft out to the apron, fired it up, and took off.

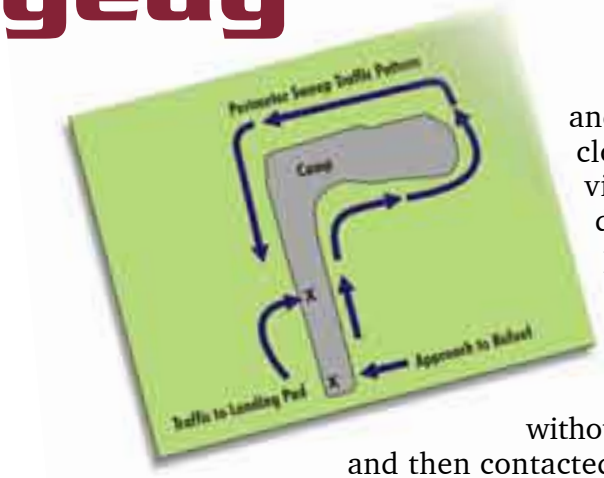
We did a couple of patterns including a hover demonstration, roll-on, and a landing to the sod. Woohoo! We really stuck that landing! We then went on our merry way and returned to station. All was well until 2 weeks later when the town was so happy and proud of our air show demonstration that they sent my commander a copy of the local newspaper describing our "acrobatic air show demonstration."

So there I was … in the colonel's office, getting my butt chewed! Our crew deserved the punishment because we never should have agreed to perform anything different than what was briefed. We easily could have wrecked our aircraft and injured or killed hundreds of spectators or ourselves! We were just lucky—stick to the plan! ♦

--The author's name was withheld by request. If you would like to publish a story anonymously in *Flightfax*, please call Ms. Paula Allman, Managing Editor, at DSN 558-9855 (334-255-9855) or e-mail paula.allman@safetycenter.army.mil.

Almost a TOA (transfer of authority) Tragedy

MAJ Steve Fritz
VAARNG



I was a division staff officer on flight status. That meant I was low priority when it came to flight time. However as our deployment was winding down, the line pilots allowed staff pukes, like me, to climb into the cockpit. My first flight with an instructor pilot (IP) was an area orientation flight that included some night unaided training.

As we headed back to base, we completed a perimeter sweep of the compound per the unit SOP. The base was shaped like an upside down L (see diagram above) with the refuel point at the very end of the long part of the L. The traffic pattern around the base ran counterclockwise so once we completed the perimeter sweep, we rounded the long end of the L and continued our turn into hot gas. By the time we rolled into hot gas, it was completely dark.

We completed our pre-refuel procedures; e.g., doors and windows closed, visors down, and position lights steady. We refueled without incident and then contacted tower for takeoff from hot refuel to the landing pad. We took off and immediately turned right 90 degrees towards the flight line landing pad. We climbed to traffic pattern altitude and began flying at about 50 knots to about half up the L before we had to turn right 90 degrees about midway up the length of the L to the landing pad.

In the distance at the top of the L, we could see an OH-58D position lights flashing and heading our way. It appeared we had plenty of room to turn towards the landing pad before the OH-58D got close. I knew from the call to ATC that the other aircraft was from one of the incoming units completing their orientation flights.

The IP was on the controls and I was sitting in the right seat looking towards the landing pad scanning to clear the aircraft for the impending right turn. Suddenly the aircraft banked hard right and dropped altitude. The IP asked, "Did you see that?" as he recovered to level flight and made our approach to the pad. I replied, "What the hell was it?" He said that it was an OH–58D completely blacked-out and he didn't see it until it was right over the top of us. We landed and then ground taxied to our parking pad.

So how did this near miss happen? First of all, the traffic pattern had converging traffic from the hot refuel point to the flight line landing pad. The aircraft that was blacked-out was under goggles, so there was aided and unaided traffic in the pattern. What about ATC, why didn't they deconflict the aircraft? We found out later that the two OH-58Ds were both on a goggle orientation flying together. The first aircraft remained under goggles while they completed the perimeter sweep at the end of their mission, while the other aircraft de-goggled. So when they made radio calls to tower, they made them as a flight and the first aided aircraft got well ahead of the unaided wingman. Finally, after completing refuel, we failed to turn our position lights on flash so the pilots in the other aircraft said we blended in with the ground vehicle lights along the road that paralleled the traffic pattern. ♦

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Applying CRM to the Skies Over Baghdad

Brett Blount
U.S. Army Combat Readiness Center

Composite Risk Management (CRM) expands traditional risk management to assess all situations—tactical or non-tactical, garrison or field—that expose our Soldiers and civilians to risk. For instance, the CRM process can help us identify hazards that exist both at work or while engaged in an off-duty activity. In Operation Iraqi Freedom, it is also a real-world tool that allows leadership to focus on accidental hazards as well as the enemy threat, thereby reducing loss and promoting readiness. The essence of CRM in a combat zone is knowing when to shift our attention from mitigating the enemy threat to focusing on an existing accidental hazard, thereby examining all risks holistically. The following is an example of how we can preserve our combat power by applying CRM when both tactical threats and accidental hazards threaten our aircrews' lives.

A high volume of aviation assets operate continuously over Baghdad. Multi-National Division-Baghdad (MND-B) controls that airspace, 1,000 feet AGL and below. Aircraft sharing this limited airspace include Army and Air Force helicopters, fixed-wing aircraft, and unmanned aerial vehicles (UAV), plus commercial aviation and private contractors. Aircraft deconfliction and flight-following procedures in this combat area are in effect; however, informal near-miss reports provide some evidence that failure to follow established procedures create the potential for a midair collision. In fact, aviators interviewed in theater are as concerned about midair collisions as they are about enemy contact.

The Baghdad area hosts a busy civilian airfield and many helicopter landing areas. Baghdad International Airport (BIAP) borders the southwest perimeter of the city of Baghdad and has a relatively sophisticated air traffic control program. Run by Iraqi nationals and assisted by the Federal Aviation Administration and the U.S. Air Force, BIAP tower controls all traffic using the airport's runways. Aircraft operations to and from several other landing areas within the MND-B area offer the greatest aircraft deconfliction challenges.

Several systems allowing aircrews to communicate with and therefore avoid each other exist in this area. One method that enhances aircraft deconfliction is Baghdad Radio. This airspace information center promotes situational awareness by providing traffic advisories 24 hours a day to participating pilots. Baghdad Radio provides updates that positively influence aviation combat operations, such as changes to restricted operating zones (ROZ) and recent enemy man portable anti-aircraft defense (MANPAD) activity. At one of the helicopter landing areas, air traffic services (ATS) personnel facilitate aircrew communications by operating a tower, providing positive control to aircraft operating within its boundaries. For deconfliction purposes, aircrews operating to and from another Baghdad helicopter pad broadcast their position and intentions on a discrete radio frequency assigned to that particular landing area, commonly referred to as a common traffic advisory frequency. Baghdad Radio is also available to aircrews when conducting flight operations from other landing areas that have no control tower or dedicated radio frequency.

Aircrews benefit from many flight procedures that facilitate safe aircraft separation. One procedure assigns different altitudes to aircraft conducting dissimilar combat missions. For example, missions flown to provide convoy protection have a lower hard deck and ceiling than aircraft flying personnel transport missions. Another procedure takes place during mission briefings when aviators learn the time and location (ROZ) of UAV operations, allowing them to stay clear of the difficult-to-see unmanned vehicles. Even with these flight, communications and avoidance procedures in place, aircrews still experience near-miss episodes while conducting operations in the congested airspace over Baghdad. This situation illustrates how the accidental hazard of a midair collision can be of greater concern to aircrews than even the threat of hostile contact.

Flight procedures mean nothing when some aircrews refuse to follow them. Many reports submitted by ATS

personnel contain instances of aircrew refusal to comply with established deconfliction procedures. Reports from ATS personnel working at the towered helicopter landing area include aircraft landing without ever having contacted the tower or even Baghdad Radio. Failure to report the aircraft's position and pilot's intentions create a mid-air hazard to other participating aircraft. Other reports involve aircrew noncompliance with hard deck altitudes established to provide aircraft separation. Granted, there are situations when observance of assigned altitudes, or deviation from the proper altitude, is the result of possible enemy contact. For example, aircraft working low over the city providing convoy cover and other force protection duties may have to avoid enemy contact by climbing to a higher altitude, thus impinging on airspace protected for other missions. A near-miss episode under these conditions is perhaps an unavoidable eventuality of combat; however, aircrews refusing to follow established communications and deconfliction procedures developed for a contingency-based environment pose an unacceptable risk to other aircraft. A midair caused by failure to follow procedures, especially procedures that do not expose aircrews to greater enemy threat, is a ***preventable*** accident.

Aircrews must focus on many tasks and procedures during even normal flight operations. Not surprisingly, an Army Aviator's workload increases greatly when enemy threat becomes a major focus of a mission. In the vicinity of Baghdad, aircrews must now assess both the enemy threat (small arms fire, MANPADs) and the accidental hazard of potential midair collisions to create a composite risk level for each mission. Aviators successfully create and employ tactics, techniques and procedures (TTPs) to mitigate the threat of an adaptive and determined enemy. Although the enemy is by no means eliminated, these successful TTPs allow aircrews to consider both the tactical threat ***and*** accidental hazards ***holistically***, assessing all risks all the time. This Composite Risk Management process can assist our aviation leadership in developing a composite, and therefore more comprehensive, risk level for each mission.

The burden to prevent catastrophic midair collisions must not rest on the shoulders of aircrews alone. The responsibility to apply the Composite Risk Management process to the midair accidental hazard must include elements outside the aircraft, such as the Army's ATS personnel who have the responsibility to develop the procedures that aircrews use to operate efficiently in the airspace (below 3,000 feet) over Iraq. Any improvement of the existing airspace structure should enhance aircraft deconfliction efforts without restricting the effectiveness of aviation combat power. To properly assess the situation and determine proper courses of action, a theater ATS unit hosted an Army airspace command and control plan (A2C2) working group at LSA Anaconda. The agenda of the working group included:

- Area (Iraq) ATS overview.
- An overview of Phoenix Radio (future theater-wide airspace information center).
- Baghdad Radio procedures.
- Conduct an analysis of the theater A2C2 plan.
- Develop solutions.

To ensure all users had a voice in the process, the A2C2 working group invited representatives from many areas of aviation and airspace managers, to include an Infantry division G3 air, an aviation brigade executive officer, an MNC-I C3 air and plans representative, a tactical ATS expert from ATSCOM, an aviation safety representative from the U.S. Army Combat Readiness Center, and several aviation safety, standardization, and tactical operations officers currently involved in theater flight operations.

The results of the working group were encouraging. The A2C2 working group agreed that aircrews must comply with reasonable rules applied to a fluid, combat environment. Army Aviation leadership must employ sound airspace management techniques to mitigate the existing midair potential. One solution offered by the working group involved the implementation of a theater airspace plan (Phoenix Radio). This plan offers a flexible, combat compatible corridor system that provides aircraft separation procedures appropriate for this phase of Operation Iraqi Freedom.

Another part of an eventual fix requires airspace management leadership to collect TTPs used by ATS personnel in theater that facilitate safe and efficient flight operations. A formal, written version of the acceptable TTPs could then become a part of the Annex O (A2C2 Plan) of the MNC-I operations order. Other efforts to promote airspace deconfliction involved the "see-and-be-seen" aspect of nighttime tactical aircraft lighting during the en route phase of a mission. Of course, these efforts mean nothing if aircrews do not understand the potentially fatal consequences of neglecting established procedures. When aircrews operate in an environment where the composite risk level is high, adherence to these procedures will prevent loss and therefore preserve combat power.

Aircrews contend with both an aggressive enemy and the prospect of a midair collision when operating in the congested skies over Baghdad. ATS personnel, along with other aviation specialists, understood this and applied the concepts of CRM to the problem. This process developed solutions that will enhance already established procedures to preserve our aviation assets. Do your part to promote readiness: follow the communications and flight procedures created for operations in a combat environment. ♦

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Accident Briefs

Information based on preliminary reports of aircraft accidents

AH-64

A Model

■ **Class A**: The crew was conducting nap-of-the-earth (NOE) training on an approved route when the aircraft struck several strands of high-tension wires extending over a major river. The aircraft crashed in the river and both crewmembers received fatal injuries.

D Model

■ **Class E**: During brownout training, the crew performed eight VMC approaches, one of which was a tail low landing. Upon postflight inspection, the crew noticed the tail wheel strut had collapsed and the stabilator had a dent in the aft center portion where it had contacted the tail wheel. The crew did not experience any hard landings and an NDI was conducted with no damage detected. The aircraft was repaired and returned to service. *Late report*.

CH-47

D Model

■ **Class A**: The aircraft experienced a single engine failure, in which the crew had to conduct an emergency landing. The aircraft incurred extensive damage from the hard landing.

■ **Class D**: As the PC made a right-hand turn during a four-wheel taxi, the crew felt and heard a loud bang. The PC stopped the aircraft and set the brakes as crewmembers stepped out to investigate. The crewmembers discovered that the forward left inboard tire had blown a 10-foot long and 2-foot deep section of rim along its outer circumference. The rest of the rim was still in place and the tire was not damaged. The crew terminated the mission and returned to base.

■ **Class E**: Approximately 9 minutes into flight, the PC informed the crew that he heard an unusual noise originating from the forward transmission pylon. The CE investigated the area and found evidence of abnormal vibrations on the No. 1 flight control hydraulic pump return line. The FE, monitoring the maintenance panel, noted the hydraulic pressure from the No. 1 system dropped from 2,900 PSI to 2,500 PSI. The PC initiated an approach to land in a large open field. During the approach, the hydraulic pump failed, allowing hydraulic fluid to drain into the troop commander's seat compartment. The aircraft landed without further incident. Maintenance replaced the hydraulic pump. *Late report*.

MI-17

D Model

■ **Class B**: The crew reported dual engine failure during flight and executed an autorotation into an adjacent field. The tail boom separated due to the hard landing.

OH-58

C Model

■ **Class C**: While conducting a 180-degree autorotation with turn, the Nr momentarily attained 113 percent (as read from sensitive digital NR gauge). The aircraft landed without further incident.

DI Model

■ **Class E**: While on final approach at 60 KIAS and 50 feet AGL, the crew observed a hot battery caution light. The crew conducted an emergency landing at the local airport without any further damage or injury. The battery was replaced and the aircraft was released for flight. *Late report*.

DR Model

■ **Class C**: The aircraft experienced an overtorque condition during a power recovery from an autorotation demonstration.

■ **Class E**: The hot battery No. 1 caution light illuminated on short final to airfield. The aircrew turned the battery switch off. Shortly thereafter, the hot battery No. 1 caution light illuminated again and would not extinguish. The aircraft was immediately flown to a parking area and emergency shutdown procedures were conducted IAW the -10. The maintenance test pilot suspects the hot battery was caused by successive aircraft battery starts over a short period of time. The aircraft was released for flight. *Late report*.

UH-60

A Model

■ **Class D**: The IP was conducting readiness level progressive training in the traffic pattern at the local airport. The aircraft was on short final approach for a run-on landing when the CE noticed a "Y"-shaped crack in the lower one-third of the pilot-side windshield. The aircraft landed, taxied to the ramp, and was shut down. Inspection revealed a small, BB-size impact had occurred in the center of the crack. Damage was most likely caused by a small pebble on the runway that had ricocheted into the windshield by the rotor system. A runway inspection was conducted by local airport authorities with negative results. The windshield was replaced and the aircraft was returned to service.

■ **Class E**: While in flight, the crew chief attempted to place an ammunition belt into a machine gun and the feed tray separated from the weapon. A break occurred at the hinge where the feed tray is attached to the machine gun. *Late report*.

L Model

■ **Class E**: During final approach with full fuel (16,100 lbs.) and flying approximately 20 KIAS, the aircraft was Chalk 3 in a flight of three, slingloading an HMMWV (5,200 lbs.), when the aircraft encountered a situation where power demanded exceeded power available. This caused the aircraft to descend below intended altitude and the crew jettisoned the load from approximately 30 feet. The load impacted the ground and suffered significant damage. The aircraft experienced no damage after the load was jettisoned, and returned to controlled flight, landing about 100 yards away. The crew suffered no injuries and performed a standard aircraft shutdown. *Late report*.

C-12

T Model

■ **Class E**: During cruise flight at FL280 and OAT of -36 degrees Celsius, a loud bang was heard in front of the left-seat pilot. The crew noticed the left windshield had crystallized for no apparent reason. The crew began an immediate descent and donned the crew masks with 100 percent oxygen. The PI declared an emergency and requested direct destination and priority handling at the destination airfield. Cabin pressurization was reduced to zero PSID and descended to 7,000 feet MSL. The PC in the right seat landed the aircraft without further incident, and then taxied to parking and shut down. The windshield was replaced and aircraft was returned to service. *Late report*.

RC-12

H Model

■ **Class E**: The aircraft was 10 feet from leveling out at FL250 when the inner pane of the left-side windshield shattered. The windshield heat was turned on at FL100 as per the operator's manual. The pilot's defrost vent was closed. The crew descended the aircraft to FL220 and 4.0 PSID cabin pressure, and then continued to their destination without further incident. *Late report*.

RQ-11A

■ **Class C**: Aerial vehicle (AV) crash-landed in high wind conditions.

RQ-7A

■ **Class C**: During a recon, the AV lost GPS link, therefore losing operator control. AV has not been recovered.

RQ-7B

■ **Class B**: The tactical automatic landing system (TALS) issued an automatic waveoff to the AV, which did not climb as it should. The AVO issued a climb command, but AV still did not respond. At 200 feet MSL, the AVO initiated chute deployment. The AV has been recovered.

■ **Class B**: The AV got caught on launcher and subsequently broke up before descending to the ground. Failure to remove launch pin is suspected. The AV is a total loss.

■ **Class B**: While returning from a routine training mission, initial indication ignition failure followed by engine stoppage. The AV landed on a downhill slope with damage.

Editor's note: Information published in this section is based on preliminary mishap reports submitted by units and is subject to change. For more information on selected accident briefs, call DSN 558-9552 (334-255-9552) or DSN 558-3410 (334-255-3410).

Near Miss

While performing a daily check on the hoist, an 80 to 100 pound counterweight separated from the crane and fell 30 feet to the floor, barely missing the operator by 5 feet.

Recommendations (at user level):

- Stand clear of hoist during operations.
- Wear a hard hat while operating hoist.
- Inspect lifting devices monthly.
- Add chain lanyard to the counterweight.

footprint
½" deep

—Submitted by Larry W. Anderson, Installation Safety Officer, Ft. Bragg, NC, DSN 236-6605 (910-396-6605), larry.william.anderson@us.army.mil.