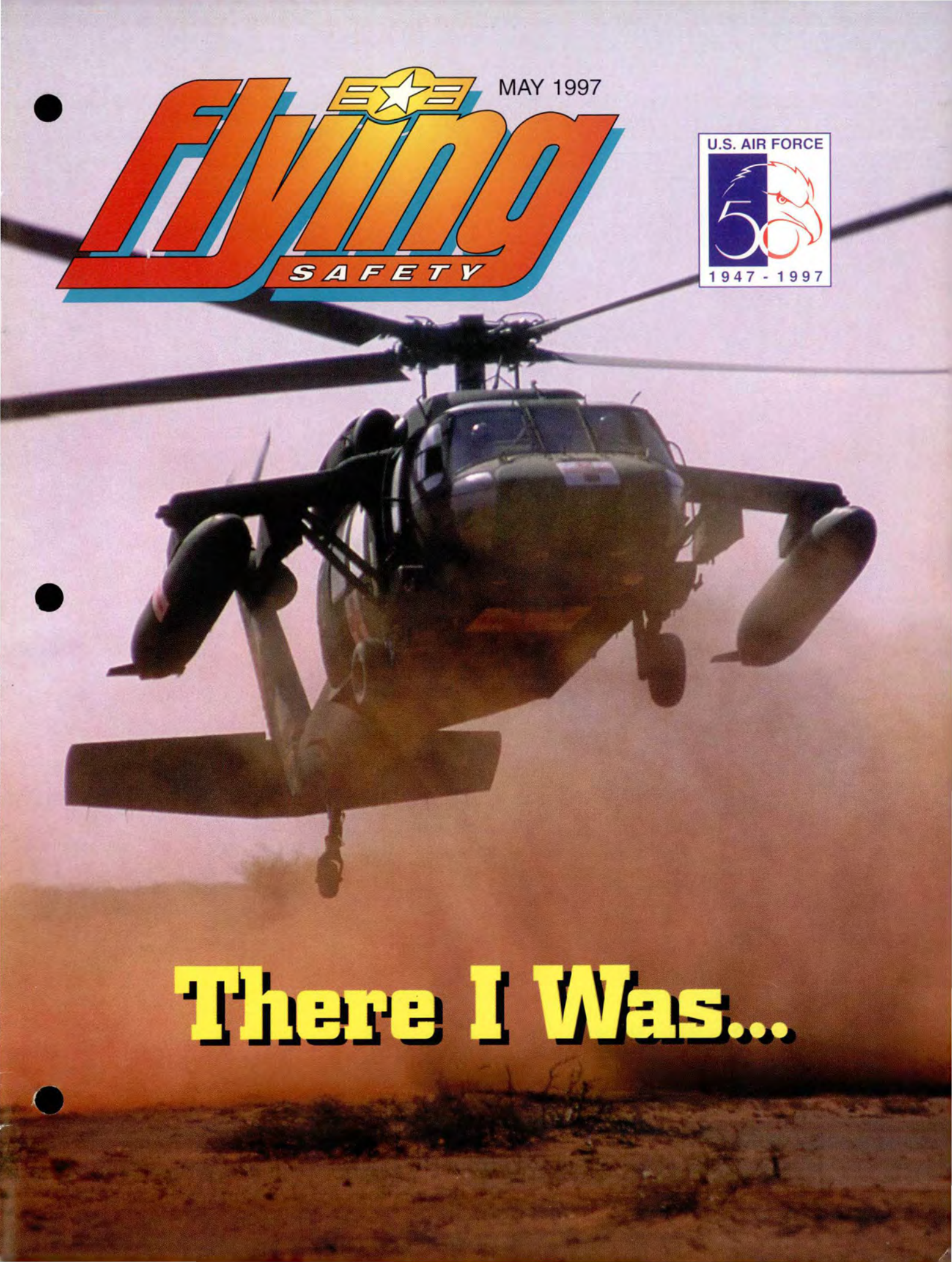
MAY 1997

Flying Safety

U.S. AIR FORCE 50 1947 - 1997



There I Was...

One less "PIG" to work on ?!

Official USAF Photo

ANONYMOUS
Flying Safety, Aug 94

In 1974, aircraft maintenance had just been opened up to women. I was one of the first women maintainers on the base.

In those days, we didn't have "shadowed" tool boxes or even marked tools. In fact, most of the time, the folks on the line used their own tools. I had not needed tools before this and, therefore, used the shop tools when I went out on jobs.

One summer day, we had an instrument writeup on a KC-135. I was using a socket wrench, and when I changed sockets, I put the old one down next to the throttles. A few minutes later, I reached for some other tools in the copilot's seat. The socket near the throttles fell over and rolled down into the throttle bay.

I was horrified. I tried to reach my hand down into the bay to get the socket, but I couldn't find it. My supervisor was due by to check on me soon, so I finished up my job and went downstairs to tell him about the FOD and ask him to get the flight controls guys out to open up the throttle bay.

"What are you worried about?" he asked. "I have another one of those in my truck. We'll just go in and get it."

I was astounded and told him so.

"What's your problem?" he said.

"That tool could cause an accident!" I said.

"So what? They're officers, and no concern of yours. Besides, that'd be one less pig we'd have to work on."

I told him I couldn't go along with him, and I was going to report the lost tool.

"Well, you'll never get anywhere in this man's Air Force with that kind of attitude, I can tell you!" he said in disgust.

It took 4 hours and a lot of razzing to get the socket out of the throttle bay, but I did it. I also have completed nearly 20 years of service, during which I was commissioned, and I now hold the rank of captain.

The moral of the story? Peer pressure isn't limited to teenagers. Integrity is just as important an attribute in an airman basic as it is in a general. Stand up for what is right, ignore the doomsayers who try to lead you off the path, and you will get somewhere in today's Air Force. ✈

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CONTRIBUTIONS

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Ho-hum, another Saturday m

ANONYMOUS
Flying Safety, Apr 91

There I was, flying a ho-hum Saturday morning functional check flight on an A-10. The jet was approaching hangar queen status, so we'd ginned up a weekend flight to get it airborne and, if our luck held, released. It wasn't meant to be.

Ground ops were normal, and I had the working area to myself once I got clear of the control zone and a large adjacent airport. The jet was doing fine until I got to the manual reversion check. After controlling the initial pitchup during transition from normal flight controls, all indications looked good, and pitch trim seemed to be working.

I pulled up to check out the low speed flying characteristics, then pushed it up to military and lowered the nose into a 20-degree dive to check out the high speed end. Terrain elevation normally kept me from getting very close to the 390 KIAS manual reversion limit, but I normally saw 360 to 370 during any pullout which avoided the ground by a comfortable margin.

Pulling back on the stick, I felt the normal heavy-nose characteristic of manual reversion and put in a click or two of trim to help start the pullout. The nose didn't move. I held the trim button aft. Still nothing. The airspeed was approaching the 390 KIAS limit, so I whipped the throttles to idle and tried to extend the speed brakes (they stayed in since hydraulic power is not available in manual reversion).

The ground was becoming more and more of a factor as I grabbed the stick with both hands and pulled as hard as I could. The nose wouldn't come up, and I couldn't quite believe it, but I'd apparently have to eject. I moved my left hand from the stick to the ejection handle. As I looked down to confirm I had the handle, the last thing I saw in my peripheral vision was my nose starting to tuck down, even with full back pressure from the one hand I still had on the stick.

As I reached for the ejection handle with my ejection decision made, a thought popped into my head—get out

Official USAF Photo

of manual reversion! I'd gone from a boring FCF to a real scary situation in about 5 seconds, and by now, my mind was in extremely high PRF. In the one additional second it took me to get from the ejection handle to the manual reversion switch, I had time for an amazing number of coherent and disturbing thoughts.

First, I'd made an ejection decision which probably would have let me survive, but had reversed it at the instant I grabbed the handle, which didn't seem wise. Second, the prescribed airspeed range for transition to and from manual reversion was 180 to 210 KIAS, and I was approaching 390 with no clue as to what gyrations the jet would go through when I threw the switch. Third, I'd found the manual reversion switch more quickly than ever before. When I threw the switch, I got an instantaneous negative 3 Gs due to aileron movement toward powered flight position, but was rewarded with immediate resumption of hydraulic power and normal pitch authority.

I pulled back on the stick until it felt right and avoided the ground by 500 to 1,000 feet. It was several minutes before I could talk well enough to declare an emergency and get a RAPCON clearance back to the field, but there were no other flight control problems, and the landing was uneventful. The maintenance line chief was not pleased with a nonrelease, but got off my back when I told him why I wasn't pleased with the jet either.

It turned out the trim motor was intermittent in manual reversion, and even extreme pilot inputs without operative trim may not be able to deflect the elevator into the airstream at high speed. I'm not convinced to this day I'd done an adequate in-flight check of the trim in manual reversion, but the trim had seemed to change slightly when I'd put in a click to test it right after I'd transitioned. It had definitely checked good during the preflight manual reversion checks.

In any case, my in-flight manual reversion trim checks improved greatly on subsequent FCFs. So did my awareness of the possibility of quickly switching out of manual reversion if problems developed, even after I'd transitioned successfully and begun to wrestle the airplane through the zoom and dive required to quickly check the low and high speed ends.

Despite the excitement in the area, the most chilling part of this whole episode happened on the way home for landing. My heart was still going a thousand miles an hour, but everything at least seemed to be under control, and I even sounded coherent on the radio. But as I looked around the cockpit, I discovered I'd forgotten to arm the ejection seat prior to takeoff. I never did that again. ✈

Flying Safety

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Assuming makes an...

Official USAF Photo

ANONYMOUS
Flying Safety, Nov 90

It was to be a standard range-hopping sortie for a three-ship of F-111s. During the preflight briefing, the flight leader briefed that after departing a bombing range, the flight would rejoin to fingertip formation for a battle-damage check.

The flight progressed smoothly through the low-level and onto the first bombing range. After dropping a half-dozen practice bombs, lead called the flight to depart and transition to another range about 60 miles away. Being good wingmen, No. 2 and I, as No. 3, followed the prebriefed procedure and rejoined to fingertip formation on our leader's right wing.

We cruised along in this position for a few minutes when suddenly, the leader initiated a hard 60- to 70-degree bank turn to the right! The imminent midair collision between three F-111s caused sheer survival instinct to take over. No. 2 immediately pulled straight up, and I simultaneously rolled 90 degrees right and pulled to the stall warning horn.

The "Thunderbird Burst" quickly caught the flight leader's attention, as well as that of his WSO, both of whom had previously been unaware of the position of their wingmen. Lead had assumed his wingmen would stay in trail position since the second range was a short hop away, despite what he had been briefed. And his WSO never bothered to look to his right to check on the position of the other flight members.

We all survived, but this story could easily have had a very unhappy ending. The lessons learned here are obvious for both flight leaders and their crewmates. What I learned from it all is that in the flying business, things can go from smooth sailing to life threatening with absolutely no warning at all. ✈

Editor's note: What I learned from this was to be careful when we assume we know what another pilot or aircrew is thinking. A simple "two's in" would have reminded lead of what the situation really was in this case. SA is a fragile thing and needs inputs from everyone to be properly maintained.

The Killer Vapes

Official US Navy Photo

LT ROXANNE KIMBALL
Courtesy *Approach*, Sep-Oct 95

We had just departed Kadena AFB on our last leg back to base with the usual two pallets of cargo and 45 passengers. We were actually on schedule. Imagine that!

About 5 minutes after takeoff, the loadmaster called frantically asking us to immediately level off. Apparently one of the cruise boxes was leaking an unknown fluid. The copilot and I exchanged quizzical glances as I told ATC we needed to stop our climb. What could be going on back there? The dreaded idea of turning back was becoming a possibility.

Finally, the flight attendant told us to land ASAP. The level-off had reduced the deck angle enough to slow the leak, but the crew still could not contain it. We asked what kind of fluid was leaking. Was it toxic? But all we got was a hurried, "The cruise boxes are locked. We think it might be freon because it's evaporating so rapidly and there's no odor. We're cleaning it up as fast as we can."

We reluctantly advised ATC that although there was no emergency, we needed to return and land at Kadena.

After a smooth overweight landing, we rolled into our parking spot and unloaded everything. We then broke the lock on the cruise box. Inside, an open metal container labeled **"Trichlorotriflouroethane—Breathing Vapors May Be Fatal"** lay on its side. *["Trich" is an oil-free cleaning agent commonly used to clean aircraft oxygen systems.*—Ed.]

We left the pallets behind, loaded everyone back on the plane, and off we went. That night, three crewmembers became extremely sick and were medically grounded the next morning. After making numerous phone calls to medical and the occupational health group, I discovered this material, a type of freon, is not listed in the NAVSUP PUB 505 (Hazardous Material Guide for Transportation), but the CNO had issued a warning: "Trichlorotriflourethane vapor is hazardous and can cause death if too much is breathed."

Here are a few things to consider.

1. Cockpit crew should go on oxygen the moment they detect a leak of an unknown material.

2. Aircrew should consider their own safety first and use portable oxygen and personal protective equipment since hazardous materials can be absorbed through the skin.

3. Ensure that cruise boxes are unlocked once loaded on the aircraft or that keys are available. Never hesitate to use bolt cutters. ✈

USAF Photos by SSgt Andrew N. Dunaway, II

Our bucking Tomcat ride...

LT TODD PARKER*
Courtesy *Approach Mech*, Jul-Aug 96

We had just transited the Suez Canal after spending the last 6 weeks flying over Iraq. Things were heating up (again!) in Bosnia, and we were all excited by the prospect that we might be doing "the real thing" in a few days. En route to the Adriatic, we took a day to fly maintenance check flights and make sure all the jets were ready to go during the heavy fly-days coming up.

I had just returned to the ship from detachment and had not flown off the carrier in a couple weeks. My pilot and I were scheduled to fly a Pro "C," a relatively benign hop that we viewed as a good chance to get back in the saddle. Because neither of us had flown in a while, we decided to brief the flight more thoroughly. We covered all the basics and discussed the flight in detail from start to finish, including just about every problem we could think of. Little did we know how many things can go wrong that aren't covered in the books.

We manned up and started without incident. We launched and completed the profile quickly. There were still 15 minutes until the recovery, so we decided to do some mild-G maneuvers and 1 v 0 ACM.

After doing several sustained-G 360s and a couple of loops, we headed back toward the ship. Because we were still several thousand pounds over our fuel ladder, we decided to do one more sustained-G turn.

We were 270 degrees into the turn when my pilot leveled his wings and asked, "Did you feel that?" All I had felt was the mild buffet normally associated with loaded turns in the F-14, so I replied, "No." He told me he had felt some mild uncommanded pitch oscillations, but that everything seemed fine now.

Proceeding inbound, we got a tally on the other section of Tomcats and set up the rendezvous for a three-plane break. Just as we began our descent to join, our jet decided to do its best bucking bronco imitation—pitching violently nose down, followed shortly thereafter by several positive 5-G and negative 2-G pitch oscillations in rapid succession, mildly painful and very disorienting.

Just as quickly as it began, the violent motion stopped, and the jet recovered itself. But we had lost 5,000 feet and were now at 13,000 feet. My pilot told me that the motion had been completely uncommanded, almost like there

had been a flight-control disconnect, and that he now needed forward and right stick to keep the jet straight and level.

I quickly pulled out the PCL and began scanning the procedures for those that seemed to apply, but none jumped out at me. After a quick discussion, we decided we needed to land and asked the Boss for an emergency pull forward. We continued reviewing emergency procedures for several possible causes of our problem, but none seemed to relate to our situation.

In the meantime, the lead aircraft of the other Tomcat section detached his wingman and started a rendezvous. As we described our problem to him, the abrupt pitch oscillations began again—first a severe negative-G pushover, followed rapidly by several positive- and negative-G spikes. As before, the jet would not respond to the controls. Somehow, the aircraft again miraculously recovered itself, and we leveled off at 7,000 feet. My pilot reported that he now needed aft and left stick to maintain level flight. Again, we looked in the book for a possible solution but could find none. I asked the Boss's permission to divert because we did not believe a shipboard recovery would be wise or even possible.

We began heading toward the nearest divert field, with the other Tomcat now joined to escort us. He checked us over and reported that there did not seem to be any external damage or indications of fire, which was a concern because several Tomcats had recently been lost when fires burned through flight-control rods.

As we steadied up toward the divert and climbed above 10,000 feet for a controllability check, the jet once again started its wild ride. After several seconds of the violent pitch movements, the jet rolled rapidly right and pointed straight at the water. With no response to stick inputs passing 5,500 feet, my pilot called for ejection. Too late; I had already pulled the lower handle.

As I was pulling, visions of my swim training came back to me, and I thought, "You idiot! You just looked down at the handle!" I somehow managed to get my head back in position before the seat fired and remained conscious throughout the whole ejection.

When I felt that miraculous tug of the parachute opening, I looked up and saw that I had a full chute. My only problem was twisted risers. I quickly untwisted them and made a quick check. I was pleasantly surprised to feel no pain and saw that I still had all my body parts. I quickly began scanning the sky for my pilot and saw him several hundred yards away, also with a fully deployed chute.

I yelled to him and got a thumbs-up, so I was now confident that we were going to make it through this rather eventful day.

I began going over my IROK procedures. What the heck did the "I" stand for again? Oh, yeah, "inflate." I inflated my LPU and then tried to release my raft. I tugged on the yellow handle, but no matter how hard I pulled, the raft would not deploy. I again looked over at my pilot and saw that he had his raft deployed. Even though it was May, I thought that the water would be pretty cold. I deployed my four-line release and began steering toward him so that if we had to, we could both get in his raft. To this day, he swears I had my survival knife out to cut him loose and steal his raft!

We ended up landing only 20 feet apart, and I swam over to him. Together, we finally got my raft out and inflated it. Then we hooked our rafts together and boarded them. We could see our escort flying overhead, so my pilot pulled out his PRC-112 and made contact.

To our surprise, our escort immediately pointed out two helicopters a few miles away. The plane guard had quickly assessed our situation from listening to the radio and was already heading our way when we punched out. We called several turns for the helos and got them pointed straight at us. Although I had pulled out my smoke and flares, I decided not to use them because the helos were about to fly right over us. They saw us, and within minutes we were out of the water and headed back to the ship, alive and unscathed.

Though it happened just a few months ago, it already seems like just a dream. I always thought that it would never be me, that ejections always happen to "the other guy." I was so confident about my abilities in the aircraft that I figured no matter how bad things got, we would always be able to pull it out. Well, I was wrong. Sometimes there is nothing you can do. No matter how many procedures you go through and how much experience you have, sometimes you need to just get out. The board determined that a material failure of the flight-control systems had been at fault, and there was nothing we could have done to save the jet.

The helo pilots later asked me why I had not used my smoke. I said that since they were heading right for us, I assumed they saw us. They told me that even at 150 feet, a helmet in the water looks just like a whitecap, and that if we had lost radio comm, it might have taken them much longer to locate us.

Once you get back home, you have to give up all your survival gear anyway, so you may as well use it all while you have the chance. They even took my unopened box of Chiclets! ✈

*Lt Parker was with VF-41 at the time of this story. He is now assigned to the Strike Weapons and Tactics School Atlantic.

Divert to Taegu!

Official USAF Photo

LT COL DON HUNSUCK
1 FW/SE
Langley AFB, Virginia

It was a snowy day (even by South Korean standards) 15 years ago when I first got the chance to divert to a strange field.

Said another way, I nearly ran my F-15C out of JP-4. I was a brand-new flight lead, on my first assignment out of UPT, and as a lieutenant, I would still fly the wing slot on occasion. This was one of those sorties—a 16-ship no-notice check ride for one of our mission commanders during the annual Team Spirit exercise. Our squadron had deployed from Kadena to Kwang-Ju Air Base in the Republic of Korea.

Some background: Kwang-Ju is not a famous TDY location and at the time had only one instrument approach to its single runway—a TACAN approach. There was no PAR, no ILS, and no crosswind runway. To make matters more sporty, there's a 4,000-foot mountain just 10 degrees right of centerline just past the departure end of runway 04.

Well, after a 0330 wakeup for an 0415 briefing, we stepped out to the aircraft shelter as a light snow began to fall in the predawn light. Hack! Engine start and ground checks were normal for all 16, and we taxied as briefed, barely seeing the yellow lines through a half-inch of fresh March snow. The SOF confirmed the launch with the mission commander, and we lined up just as sunrise increased visibility for takeoff. Departure was 20-seconds trail, straight ahead to avoid Mudung Mountain, and we ended up on top of the weather just above 10,000 feet.

Being No. 16 of 16, I used a little burner to get into formation. We formed into the super-wall as briefed, proceeded north towards the KOTAR range, and swept the skies for 30 minutes. It was a simple, but effective, game plan for the mission commander, and we had a memorable time shooting USAF F-4s and ROKAF F-5s that rose to meet us in an aerial duel. All too soon, a few of us called "Joker" fuel, and it was time to RTB.

We headed back towards Kwang-Ju via Taegu AB, which was our planned alternate due to the poor weather. Ours was the first four-ship back to the IAF/holding fix, and we entered holding while we talked to the SOF on field conditions. I was just 0700L. Weather was above minimums for the TACAN, but it was snowing harder—Taegu was still the alternate.

We began a four-ship penetration in radar trail to allow the other three four-ships to penetrate ASAP after us. I was No. 4 following another junior flight lead. As we began the TACAN approach, I was glad I had remembered to mark the approach end of the runway as a "backup" to the TACAN, since there was no other NAVAID available in this mountainous section of South Korea. Visibility was limited to the inside of the canopy as we penetrated in the snowfall.

As we began the turn from the arc to the inbound

course, I checked my fuel state again at just above 3,000 pounds—a little low for the divert, but the weather was above mins—no sweat! I fought a crosswind on the inbound course, approaching the FAF, when the radios began to get busy. My flight lead had just landed and made a call on the squadron aux: "Whoa, I almost lost it there!" My mind queried that call. Almost lost what?

As I called FAF, gear down, I began my descent to the MDA, and my fuel was 2,500 pounds—on the low side of comfort. Then things got even uglier.

As I began to search for the airfield environment in the crosscheck, I noticed my TACAN needle had begun to swing, and the DME had disappeared! Just then I heard, "Number Two's taking the cable!" Why me, Lord? The INS (No. 2) needle was still pointing ahead, but the HSI TACAN data was showing off flags. No reliable approach data. Looking out the canopy, I could see the snow-covered Korean countryside—down, but not forward. A hut, a stream, but no airfield. It was still snowing—hard. As I began to key the mike, No. 3 beat me to it. "Eagle 73 is missed approach, diverting to Taegu!"

That settled it. Mil power, gear and flaps up, climb runway heading (just as the INS needle swung the 3/9 line). See you later, dudes. No Kwang-burger for lunch today. Get above 4,000 feet. Mudung Mountain is just off the right wing. The time was 0715L, and I had just over 2,000 pounds of fuel to go 125 miles to Taegu. This was gonna be tight.

As I began to search for the airfield environment in the crosscheck, I noticed my TACAN needle had begun to swing, and the DME had disappeared! Just then I heard, "Number Two's taking the cable!" Why me, Lord?

A thought entered my busy mind: Should I punch off the centerline tank to reduce drag? Nope, there's a town down there. Maybe later. Keep climbing. I had memorized a rough heading, distance, and TACAN channel during local area preparation. It was paying off. Turn right to 045 degrees. TACAN channel 125. Climb above 30,000 feet.

As I passed 10,000 feet, I broke out above the weather. Next, I dug into the map case since the TACAN hadn't locked on to Taegu yet. What's that lat/long? Punching it into the INS, I was glad to see I was only a few degrees off my general heading. I centered the needle and kept climbing. How's the gas? Using the ADI computer and the fuel flow, I figured I would arrive between min and emergency fuel. Let's see—aviate, navigate, communicate. Time to talk.

As I ripped the throttles to idle and slowed to 220 knots, I called, "Taegu approach, Eagle 74 is 60 miles southwest, minimum fuel!" In a Korean accent: "Aircraft calling minimum fuel, say again call sign?"

"Roger, Eagle 74 is 60 miles southwest, minimum fuel. What is your current weather?"

"Eagle 74, Taegu weather is VFR." Did he say VFR? Super! "Eagle 74 is requesting vectors to VFR straight in."

Taegu gave me a heading and an altitude with local altimeter and set me up for a short final. I read back the numbers and requested descent at pilot discretion. I had been at idle for a long time and didn't want to touch the throttles. I floated in at 220 knots in the Eagle, broke out under a 4,000-foot overcast on a 5-mile final with Taegu on the nose. What a beautiful airfield! I put the gear and flaps down with only 800 pounds on the gauges—emergency fuel—and touched down with 700 pounds. I hadn't touched my throttles for 60 miles. A memorable landing!

I taxied at their direction, which was tough to follow since the tower dudes were wearing gas masks. I was the first F-15 ever to land at Taegu. As I shut down, a C-123 (I kid you not) was low-flying the field spraying purple water from his defoliant system. Taegu was having a chem-warfare exercise in their corner of Team Spirit. As I put on my gas mask and gloves (I wasn't even complaining), Eagle 73 flared and landed (where had he been?). I was glad to see another Eagle—we were the first of six on this divert.

After we took off our gas masks and made a phone call back to the SOF at Kwang-Ju, we had lunch at the Taegu Club. Over Taegu-burgers, fries, and a Coke, we went over the day's events. My lead had discovered a low RCR the hard way and barely stopped by the end of Kwang-Ju's runway. His wingie played it safe and took the cable. That made No. 3's decision about his loss of TACAN signal easy. Time to go around. I had assumed it was just my TACAN receiver. It wasn't. Some electronics genius had turned off the TACAN while we were on final.

The next four-ship diverted from holding (at a more comfortable fuel state). The other two four-ships were about to divert when the TACAN came back on (someone had called the comm guys pretty fast—just not fast enough for some of us).

Why did No. 3 land after me? I had declared minimum fuel (I should've declared Emergency Fuel) before No. 3 had contacted Taegu approach. After No. 3 called, he never declared min or emergency fuel. In fact, he went all the way to the IAF—30 miles beyond Taegu—while I was getting priority. He just never spoke up. Between french fries, he vowed never to do that again. Not that I was pristine. I hadn't called the SOF or called diverting. The SOF just figured I was diverting with No. 3. Oops.

How had we done? Well, we earned our flight pay and landed the jets safely. *Aviate, navigate, communicate.* We kept our priorities, for the most part, in the correct order. File this one away to experience. Keep your priorities in order and live to enjoy your divert—even if it is a snowy divert to a chem-warfare exercise in Taegu, South Korea. Fly Safe! ✈

"Well, that would NEVER h

ANONYMOUS
Courtesy *FlightFax*, Nov 96

We've all heard it. Most of us have said it—maybe a couple of times.

It happens when we hear a "war story"—or read an account in *FlightFax*—about some tragic, scary, or incredibly stupid experience in aviation. Our bluster is a kind of posturing—deflecting possible notions by peers that chinks might exist in our armor.

But how many of us have actually been present as one of these aforementioned events unfolded? How many have actually sat there watching things get stupider and stupider? And it's *you* sitting there. And you find yourself essentially powerless to do anything.

I'm here to tell you that, despite aircrew coordination training, despite the "Two-Challenge Rule," despite *anything*, it can happen, and it does happen every day.

My Tale Begins...

...in the jungles of Central America—the last mission of the last day of a 6-month road- and school-building operation. The pilots were two senior W4s: one, an IP, PC and UH-60 operations officer who'd been in-country for the entire operation; the other, me, at the end of my second 2-week deployment.

A Chinook was scheduled to extract a group from a hillside LZ, but the aircraft developed maintenance problems. Ops decided our UH-60 would try to do it. But it was the rainy season, and the afternoon torrent had already begun.

With the rain coming down faster than an inch per hour, visibility was nearly nonexistent as we cranked, and water poured into the cockpit from various leaks. Nevertheless, the PC thought we might make it to the pickup point by slowly working our way up the river that ran by our base camp. We crept off the ground, our young—and now drenched—crew chief clearing us past mist-shrouded trees.

We picked our way along in intense rain with the ceiling defined by getting high enough into the shower to lose sight of the ground. I remarked that it didn't seem like a very good idea to try to get through in these conditions, but the PC told me he'd seen worse. I suggested we try a route along the nearby coastline since shower activity looked to be minimal there. He agreed but wanted to press on in case we could skirt everything via the river.

Then the FIRE Light Came On.

Knowing that false alarms are common in heavy rain, we checked for smoke or other evidence of fire. No one was surprised that nothing was wrong. Moments later, the FIRE light went out.

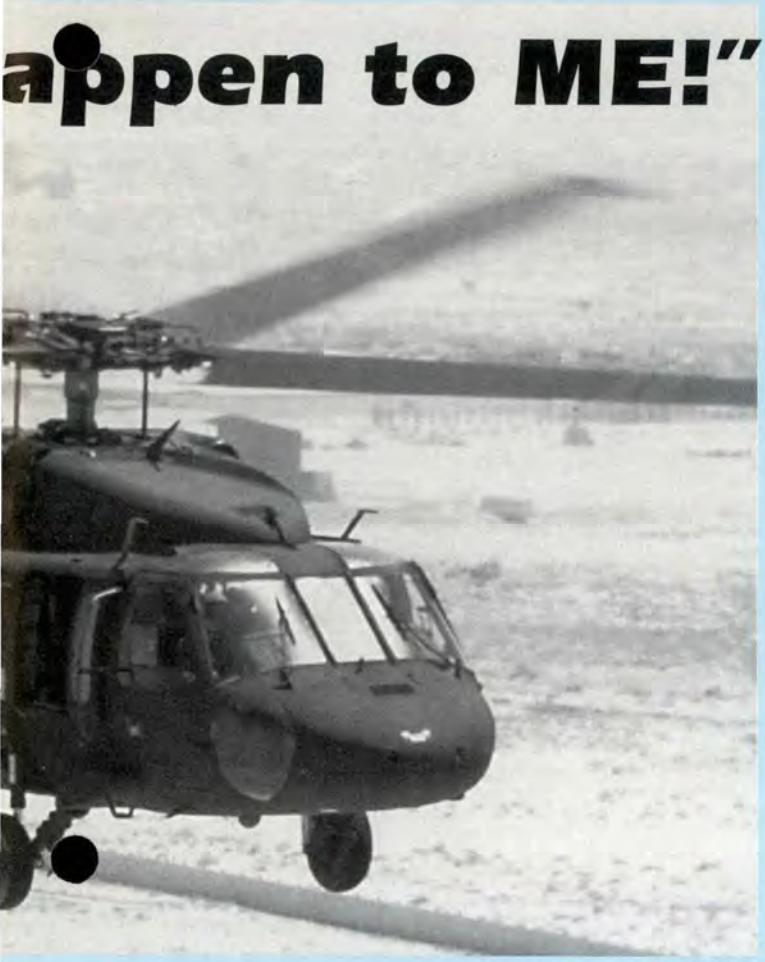
We continued, conditions worsening and visibility decreasing—as low as a hundred feet or so in some of the heavier downpours. Even with the windshield wipers flailing at their highest speed, navigation was treetop-to-treetop at best. I told the PC this *still* didn't seem like a wise thing to do, and he sort of agreed, admitting it didn't look good to him either. The FIRE light popped on again and went out.

This prompted us to turn around. Then the FIRE light came on and stayed on. Concerned, I suggested we call this whole thing off, but the PC now wanted to try the coast and asked if either of us had a problem with doing that. Considering that the crew chief and I both knew the FIRE light was a false alarm and the coast looked a lot better, we reluctantly assented.

Toward the coastline, we immediately broke out of the heavy rain, and the FIRE light disappeared. We headed along the fringe of the rain activity to try to find a spot to get through.

But it quickly became obvious that this shower wa[illegible] massive—a solid wall running through the hills for many miles. As we continued, conditions worsened again. The downpour resumed, and visibility in the direction we needed to go dropped to zero.

appen to ME!"



Official DOD Photo

Suddenly...

...our PC turned out to sea, heading for an island about 5 miles across open water, telling us his plan was to follow a string of islands and try to reach the pickup point that way. In driving rain, at an altitude of about 500 feet above the water, without flotation gear, no navigational receiver or GPS, a marginal-at-best tactical radio, and no map, I felt like we'd been hijacked. Only I couldn't squawk 7500 because the transponder didn't work either. And besides, what the hell were we doing in heavy rain showers at 500 feet and more than 2 miles from the nearest patch of solid ground? I told him I had genuine reservations about continuing.

"No problem," he told me as we followed the islands back toward The Great Wall of Weather. He'd been here 6 months, he said, and knew exactly where he was. I told him that might be true, but *I* still didn't have a good feeling for where we were. He lamented that people sent down here didn't get the opportunity to become as familiar with the area as *he* was.

He began describing landmarks visible here and there and insisted he knew where he was. I told him none of that would matter if we got stuck behind some ridgeline. He pointed out that we had plenty of fuel.

As we continued, I imagined someone reading the account of this foolish misadventure as part of an accident report. Suddenly, all the unbelievable, fact-filled reports I'd read assumed a new reality—it was *me* being drawn ever deeper into deadly absurdity by some individual apparently obsessed with accomplishing a mission. Remembering my aircrew coordination training, I again told him I was genuinely uncomfortable with what we were doing and that we should turn back. No response. ("Two-Challenge Rule" scoffers take note: *YOU* get into a cockpit fighter under these conditions!)

Back on the mainland, we felt our way through the torrent, poking around hilltops until he decided this approach wouldn't work after all. To my—and I'm sure our crew chief's—utter relief, he headed back toward the bay and more open conditions.

But as we continued homeward, he spotted an opening and decided to follow it. I told him again how uncomfortable I was with doing this—the Cold War was over, and there were no Russians chasing us. He chuckled as we followed the cloud-obscured ridgeline until finding a tiny hole.

He dropped over it despite my warnings about its volatility. No problem; we could always find another way out.

Now inside the ridgeline and committed to a yet *more* intense adventure, he joked about our spending the night at the remote camp.

Nobody Laughed.

Following a dirt road and a few treetops, we located the edge of a village and picked up the road our Task Force had built. We traced it up the mountain, slowly ascending through the downpour toward the ragged cloud bottoms. The LZ came into view just beneath the ceiling. The PC gave me the controls and I landed.

Our contact was "Shark Fin 07," and the radio operator sounded amazed as he answered our call. The PC asked for 10 passengers, and they sent them. I told him that once—and *if*—we got back, that was *it* for this day as far as I was concerned. Sensing by now that I was somewhat troubled by the enormous amount of unnecessary risk this mission represented, he told the radio operator this would have to be our only load. The radio operator assured us that was okay. Because of the weather, they'd already set up rides back to the base camp for everyone via ground vehicle anyway. He thanked us for our efforts.

Loaded up, I pulled in power to find our rotor in the clouds. The PC took the controls. He'd spotted some trees down the hillside and headed for them. We began picking our way back along the base of the ridgeline, now looking for an escape.

As we approached what looked to be a hole, I angrily told him I thought what we were doing was foolish and absolutely unnecessary, that we now threatened the lives of 10 innocent people in addition to our own. The crew chief, who had been keeping quiet all this time, came on the intercom to say he wanted out when we got back.

The hole turned out to be a good escape, and we dove for it. All at once, visibility improved, and we headed back. He gave me the controls again. He'd proved he

continued on page 27

Pucker Factor X 2!

Official USAF Photo

ANONYMOUS
Flying Safety, Apr 92

I was flying the T-28 "Trojan" out of Udorn Royal Thai Air Force Base during the war in Southeast Asia. Udorn was a single runway with about eight squadrons of F-4s, 40-some T-28s, and a lot of miscellaneous aircraft operating out of the Air America compound. It was a **very busy place!** With that in mind, there was a continuing emphasis on minimizing time on and around the runway. It got real busy about the time we recovered a Linebacker strike from over the North.

The T-28 was a real cute little aircraft with a 1425-horse, 9-cylinder radial engine (that's those engines we had before jets). We used it to go up north somewhere and drop MK-81s and MK-82s—kind of fun, but it didn't impress the Phantom Phlyers too much.

Well, anyway, one day I turned base to land, and as luck would have it, there was a bunch of double-uglies—excuse me, I mean Phantoms—rolling out on final close behind me. The tower, as usual, started his chatter to use the next available turnoff and expedite my taxi (I was still going about 100 knots).

Being a conscientious sort of guy, I did my best and got on the binders as hard as I could and attempted to make the next runoff, which was quite close. I almost made it, but didn't. Turning around was not an option, so it was on to the next turnoff which was a few thousand feet down the runway. The tower, naturally, was offering their encouragement... I jammed in the power to get a little more taxi speed and hurried down to the next turnoff at the departure end of the runway.

The problem was the T-28 had some idiosyncrasies. One of them was that it had good brakes—but only if you used them just once. They faded rapidly during that initial use and then just kind of disappeared. I had already used them once during my initial hard braking. Thus, I was in for a big surprise. As I stepped on the brakes while expeditiously approaching the end of the runway, I got not even so much as a little slowdown—nothing. I had absolutely no brakes.

I went off the end of the runway, through the overrun, and off into the tules. The F-4 dearmers watched casually from their shack which was over near the parallel taxiway. Surprisingly enough, the gear didn't collapse. I just kept on bounding along through the rough. I eased in a little rudders/NGS and started a gentle turn back towards the parallel taxiway. The dearmers bailed out of there with **great** haste.

Surprisingly enough, I bounded back onto the parallel taxiway, now at a much more controlled rate of speed. Tower/ground control had not uttered a peep. I don't know whether they hadn't seen me or were just rendered speechless. They never did call—it was wartime, after all. I strolled on down the taxiway, and soon my faded brakes returned. Postflight inspection revealed no damage to my aircraft, although I did cause my flight suit to be temporarily unserviceable.

In retrospect, I did learn/relearn a few lessons.

- Once cleared to land, the runway is yours, and it's yours until you clear it, regardless of who's next.
- Be careful about expediting on the runway or trying to make an early/rapid turnoff. You can't help the guy behind you if you close the runway.
- Cross-countries aren't all they're cracked up to be.✈

'gator bait!

ANONYMOUS
Flying Safety, Oct 87

Some years ago, I was set up to fly a T-38 day/night out-and-back sortie. At the very last minute, the scheduler changed my student to one who had been having trouble with instruments and with whom I had not flown before. After a hasty briefing, we were out the door. Destination was an Air Force base in the southeast.

The first leg was uneventful, and the weather was good. After strapping in for the return leg, Clearance Delivery advised us our clearance had been lost. It was very dark when we were finally ready to go again.

Official USAF Photo

During the climbout, Center had us level off at FL 230. It had been clear over the field, but we were now in the clouds. And with isolated thunderstorms in the area, it was not the kind of place to be with a T-38. I was coordinating with Center for an expedited climb when I heard a high-pitched voice from the front seat inform me, "SIR, THE PITOT BOOM IS ON FIRE!!"

While this revelation sank in, I noticed the front canopy was growing an interesting shade of lavender-green. Seconds later, as Center cleared us for the climb that would put us above the clouds, a bolt of lightning lit up the surrounding sky.

I took control of the airplane and started an afterburner climb to our new altitude. The plane was climbing very nicely, which was fine with me, and to which I attributed the use of afterburner. Then it happened...

Almost simultaneously with exiting the tops of the clouds at FL 300, I felt that sensation so common to T-38 drivers—the "tickle." A quick glance at the angle-of-attack indicator showed it pointing to .6.

Now the whole story was clear to me. I had been able to climb so well because the pitot tube had iced up while in the clouds. At the instant of that revelation and its implication that I was much slower than the .9 Mach showing on the airspeed indicator, there were two little pops, and it got very dark and very quiet.

As we nosed over and went back into the clouds, I got a call off to Center and directed the student to get out his flashlight and prepare for the checklists. The airspeed indicator dropped to zero, and I had only the dimly lit turn and slip and an unwinding altimeter.

For many seconds, the only sounds from the front seat were grunts and groans as the student tried to remember where he had stowed his flashlight. Then, once found, many more seconds passed while he tried to find the appropriate checklist. During this time, I kept having visions of ejecting successfully, only to be eaten by alligators.

Passing 15,000 feet and growing impatient at his inability to find the checklist, I directed the student to shut off the throttles, and I restarted the engines without it. An uneventful recovery was made to our departure base. The entire flight had taken less than 20 minutes.

On reflection, I believe there are several points worth pondering.

- *Don't assume.* In the debrief, the student claimed he had never been taught to use the pitot heat, so it never occurred to him to turn it on. I had wrongly assumed he had. In all the excitement, I had not directed him to turn it on.
- *Don't rush the briefing.* How many times have you heard this one? But it is still true—a few minutes of briefing might save some gray hairs.
- *Where's the flashlight?* Is your flashlight somewhere you can get at it in a hurry if you have to? The regs require it for a reason, and it may keep you from becoming a late-night snack for alligators. ✈

THREE STRIKES, YOU'RE OUT!

2LT SHANNON D. McATEER
603d Aviation Support Battalion
Hunter AAF, Georgia

We had completed a risk assessment for this mission, but, because we didn't take it far enough, it did not tell the whole story.

Better pilots than I have often told me about a preflight procedure in which mission cancellation is considered when three or more significant deficiencies are found. I once had a chance to apply that advice. However, in the spirit of "mission accomplishment," I did not—with almost disastrous results.

I was a warrant officer at the time and new to the Black Hawk, having just transitioned from Cobras. After progressing to RLI day and night, I had already tucked a few missions under my belt and was feeling pretty good about my new aircraft. After receiving a mission with a new PC, I was excited; my IP and the commander were showing confidence in me.

The strike sequence began when we received our mission. The mission was at night, and I had not yet begun my NVG progression. Low light levels made matters worse. Strike one.

During preflight, we discovered that the VHF radio was inop, leaving us with only the UHF radio for air traffic control. Strike two.

Perhaps an inoperative radio was enough to cancel the mission when combined with unaided flight at night in low light. But we didn't cancel.

Then we checked the weather. Although legal, conditions were marginal at best. Strike three.

I know what you're thinking; we would be crazy to depart. Two relatively inexperienced pilots on a night unaided mission under low light conditions, marginal VMC, and only one radio.

Our mission was simple: Travel clockwise around the reservation and insert a squad into an LZ. With 10 soldiers on board, we departed to the west. After turning to the north, the weather started getting worse, so I began flying lower. At this point, I finally started feeling uncomfortable and said so. The PC said it was not bad enough to cancel and to continue on, so we did.

The farther north we went, the worse the weather became. I turned to the east to follow our route, and out of nowhere came a solid wall of fog. I banked hard to the right to avoid the fog, momentarily entering it. We came out in a dive that I pulled out of just prior to entering the trees.

That was when the PC and I decided to take our passenger back to the PZ and return to base.

I couldn't see the PZ because it was out our left door and I was in the right seat, so I transferred the controls to the PC. As he initiated the turn, he inadvertently ascended into the clouds. We finally got smart and committed to IFR. Feeling the sharp increase in our rate of ascent, the soldiers in the back made it known that they were

Official DOD Photo

having a great time, oblivious to what was going on in the cockpit.

We contacted our flight-following agency and told them our status. The controller gave us a VHF frequency for radar control. We, however, did not have a VHF radio, so after a short delay he gave us a UHF frequency.

The stress in the controller's voice was evident when he realized our situation. We were at 3,500 feet as we started receiving vectors for downwind. We were in inadvertent IMC. It couldn't get any worse, right?

Wrong.

As our crew chief dug for the approach plate, our UHF radio started going intermittent. Then, for what seemed like a very long time, it was totally silent—and, oh, by the way, our fuel was getting low. Finally, our radio crackled back to life, and we made a safe landing.

Mission accomplishment was so important that it clouded our judgment. We put not only the crew but also our passengers in a dangerous situation.

As professional aviators, we have a responsibility to our passengers and to ourselves to apply sound risk management. We had completed a risk assessment for this mission, but, because we didn't take it far enough, it did not tell the whole story. We had looked at each "strike" separately; had we considered their cumulative effects, we probably would have done things a lot differently.

That's the whole idea behind the three-strike rule: Small problems combined with other small problems can turn into big trouble quick!

Looking back on this mission, I wonder: What in the world was I thinking? ✈

What th...! Hey, he hit us!

Official USAF Photo

CAPT JANET GRUNFELDER
351st Air Refueling Squadron
RAF Mildenhall, United Kingdom

We were flying over Europe, scheduled to refuel 30 allied F-16s with 5 hours time on station. The weather was "clear and a million," except for a scattered deck of clouds at 2,000 feet.

The allied F-16 pilots were getting requalified in air refueling. We could tell they were a bit rusty. My boom operator had told several receivers quite firmly—"BACK FOUR"—meaning they were too close and should back up 4 feet. The receivers learned quickly, and we had only one actual breakaway before receivers 20 and 21 came up to refuel. By this time, night had fallen, but the weather was perfect with just a low deck of clouds 16,000 feet below us.

No. 20 refueled with no problems. The boom cleared him to left observation, and I watched him move to observation position on our left wing. No. 21 also had no problem refueling, despite the fact we were rolling out of a left turn. After the boom cleared No. 21 to left observation, I looked for him to rejoin his flight lead who was flying low and about 50 yards off the left wing. I couldn't see No. 21 anywhere, and I assumed he was still near the boom or hidden behind my left wing and engines. Suddenly, I saw an F-16 cockpit popping up from underneath my left wingtip. I knew in a heartbeat he was too close and was going to hit us. I barely got the throttles moving forward when No. 21 struck our left wing with a firm, solid blow.

"What was that!?" asked the navigator.

"He hit us," I muttered over interphone as I watched No. 21 pull away from us in a climbing left turn. He didn't look like he was having any control difficulty.

"WHAT?!?" the nav exclaimed in disbelief.

"He hit us," I repeated a little louder.

There was silence in the cockpit…

Well, our aircraft seemed to be flying okay so far. George (the autopilot) was doing a fine job of maintaining aircraft control. I pulled the throttles back to a normal cruise setting and took a deep breath. I called the F-16 over boom frequency on UHF radio #1. Nothing. I called again. Still nothing. I transmitted to our allied GCI controller over UHF #2, that an F-16 had just hit us and that we're done refueling for the night.

"He HIT you?" said control, his voice rising.

"Yes, he hit us," I repeated.

"He HIT you?" control asked again, perhaps thinking his English wasn't as good as he thought.

"Yes, control," I replied patiently. "He hit us on the left wing. We are done refueling for the night. We would like to maintain the anchor area and the altitude block flight level 160 to 190 while we check out our aircraft. Do you know if the -16 is all right?"

"Tanker, you are cleared the anchor area and block equested," control told us.

After the initial shock, my crew swung into action like the well-trained professionals they are. This was the first time all four of us had flown together as a crew, but an outsider would have thought we had always flown together. The nav grabbed the Dash One and looked up controllability checks and other related subjects. The boom operator used the HF radio and worked a phone patch back to home station with the duty IP while the copilot took over the radios and backed george up on flying the jet.

From the left seat, I didn't have a good view of the wingtip 66 feet away, but I could see some metal was sticking up. We discussed what other problems a damaged wing could cause. Fortunately, we had no noticeable fuel leaks from the No. 1 reserve and No. 1 main tanks which were closest to where the fighter hit us. The outboard aileron on the KC-135R is locked out when flaps are up, but as the flaps are lowered, that aileron starts becoming effective—a definite concern during approach and landing if it is jammed. The nav also expressed concern about flying over the North Sea back to RAF Mildenhall, England, with possible controllability problems, which led us to consider diverting to a closer airfield.

When I was a young copilot, I was assigned to a "know-it-all" aircraft commander who "had a cow" if anyone on the crew made any inputs. Now that I'm the aircraft commander, I can't understand that philosophy. Having three extra people to help with brainstorming and troubleshooting is a bonus, as far as I'm concerned.

The boom operator finally got a phone patch to Mildenhall with the duty IP. We told him the situation and that we were thinking of diverting to another airfield if the controllability check didn't go well. The duty IP told us to go ahead and run the controllability check and that he'd like us to return to Mildenhall if all went well.

After we ended the phone patch, I looked out my window again and thought how nice it would be to know if there was any aileron damage before we started the controllability check. I sent the boom and nav back to look through the two tiny windows on the left side of the cargo compartment. The boom aimed a light through one window while the nav looked for damage through the other window. They couldn't see any damage to the outboard aileron but reported definite damage to the wingtip.

About this time, control called to offer us an F-16 chase ship to check us over. Every fiber in my body screamed not to let another one of those F-16s near my aircraft, but common sense and the need to know how much damage there was overruled any fear on my part. The F-16 chase ship joined on the left wing and reported that while here was damage to the wingtip, he didn't see any to the outboard aileron. We cleared him off and ran through the controllability check.

We descended to FL 120, lowered the flaps 10 degrees at a time, doing S-turns at each flap setting. The boom stayed at the back window and watched the movement of the outboard aileron. The airplane flew normally, and the boom reported no problems with the operation of the outboard aileron.

The crew discussed flying back to Mildenhall. We all felt comfortable with going over the North Sea after the successful controllability check, so we cleared off with control and headed home. Before we left his frequency, control told us that the F-16—No. 21—had landed safely, but with damage to his right wing, fuel tank, and horizontal stabilizer.

When we got back over England, we ran through another controllability check using the same procedures as the first, but this time at landing weight and speeds. Once again, the aircraft flew like a champ, and the boom operator reported no problems with aileron movement. We landed uneventfully except, of course, for the greeting party at the end of the runway.

The crew of my aircraft did a great job of "crew coordination" throughout all the excitement. Everyone kept their cool, and I received many helpful inputs from all crewmembers. When I was a young copilot, I was assigned to a "know-it-all" aircraft commander who "had a cow" if anyone on the crew made any inputs. Now that I'm the aircraft commander, I can't understand that philosophy. Having three extra people to help with brainstorming and troubleshooting is a bonus, as far as I'm concerned. My whole crew participated in the troubleshooting and recovery efforts which ultimately led to the safe return of a damaged aircraft.

As I drove home late that night, I thought of other midair collisions I had heard about during our squadron safety briefs and how they often resulted in broken aircraft falling out of the sky. Fortunately, ours was a "fender-bender" with some minor damage to the last 3 feet of wing, but it could have been much worse.

During air refueling, the tanker crew doesn't have the best view of the airspace around them. The pilots sit a good 60 feet from the wingtip and can't tell exactly how close a fighter is to the wing, while the boom operator can't see above and not very far to the sides of the boom pod. The receiver pilots have a much better view, and we tend to rely on them to keep their distance.

T.O. 1-1C-1-3 (Tanker Flight Crew Air Refueling Procedures) states, "Because of the magnitude of interrelated aerodynamic effects, flying two airplanes in close vertical proximity is not safe." Air refueling is something many of us take for granted, and we forget there can be danger involved. Aircrews, both tanker and receiver, should always be vigilant during air refueling. It's a mighty bad feeling, bringing a broken airplane home to your commander, but it would be a much worse feeling to be in that same aircraft and falling out of the sky. ✈

Don't need no stinkin' checklist...

ANONYMOUS
Flying Safety, Jun 92

When I was a student pilot, I soloed at 9 1/2 hours of instruction. My instructor had been telling me I was doing some of the best takeoffs and landings he had ever seen a student perform. My pattern work was also excellent.

Well, when it was time to do my first solo, I thought I was hot stuff! I did my three takeoffs and landings with no problems. I did some more dual work with the instructor and was doing very well. Needless to say, I was getting a big head.

At about 18 hours total flight time, I again started some solo work in the traffic pattern. I was flying from Peter O. Knight Airport in Tampa, just outside MacDill AFB. There were three of us Tomahawks in the pattern doing touch and go's. We were all students. A friend of mine was in front of me with his instructor. He did his landings, but mine were better—so I thought. I was doing so well I thought to myself, "I don't need to use a checklist. I know it all."

Well, in my seventh pattern, I made my turn to base with flaps at one-half, turned to final, and on short final, lowered flaps to full. I touched down at 55 knots, lowered the nose, applied full power, and started my takeoff while calling on Unicom 122.8 to tell everyone my intention. I was on the go. Mistake #1.

I got off the ground and flew to about 15 feet, and airspeed stayed at 65 knots. "What's going on here?" I lowered the nose to gain speed, but it stayed at 65. Five hundred feet ahead was a 25-foot-high security fence at the end of the runway. Talk about pucker factor! I checked for full power—it was maxed out. I checked carburetor heat—it was off. I did not have room to land and stop on the remaining runway, and I sure couldn't fly through the fence.

I made another quick scan of the instruments. All were okay. I then saw a bird fly past my left wing, and there it was! Out of the corner of my eye, I saw the flaps full down! I reached down, grabbed the flap handle lever, and moved the flaps up. Mistake #2.

I dropped down to 5 feet above the runway. The fence is now 100 feet ahead. I then figured if I lowered flaps a tad, I might make it over the fence. I lowered the flaps a few degrees and was now flying at 70 knots.

I kept the nose down until I was about 50 feet from the fence. I yanked back on the yoke and cleared the fence, but I think I knocked off a few fleas. I climbed to 1,200 feet and squawked 7700. After I finished shaking, I noticed MacDill AFB was calling me on the Unicom channel. They directed me to change to their frequency and gave me another squawk.

I told them what happened, and they let me fly around over Tampa Bay for about 30 minutes and kept other aircraft away from me. I did a flyby at their tower, and they let me go back to Peter O. Knight to land and stand by the phone. The senior controller called and reassured me and encouraged me to continue flying, which I did. The only thing I did right that day was follow MacDill's instructions.

I learned three things that day. (1) Follow your checklist. It will keep you out of trouble. (2) Don't be afraid to ask for help. (3) Air Force air traffic controllers are professionals and know their jobs well. ✈

•Knock It Off!

ANONYMOUS
Flying Safety, Nov 94

I was the aircraft commander on an HC-130 aircraft participating in an air power demonstration with allied air forces. The scenario for the demonstration called for a simulated airfield takedown by US and allied special operations forces interspersed with flybys of participating aircraft from both the USAF and the host country air force.

In the premission planning, each type aircraft was assigned holding patterns and altitudes from which they would then depart and perform their portion of the demonstration at the airfield. Two HC-130s were tasked to participate in the demo. My aircraft was assigned a holding altitude 1,000 feet below the other HC-130. Additionally, the demonstration airborne mission commander was aboard my aircraft and would coordinate all aircraft activities via VHF and UHF radio.

My copilot was a high-timer getting ready to upgrade to aircraft commander. I let him fly the majority of the time, with the exception of the actual flybys.

The flight proceeded uneventfully through the first two flybys and returns to holding. On the third return to holding, the other HC-130 aircraft was already holding 1,000 feet above us. My copilot began his turn into holding early, and the other aircraft, as if in answer, turned early also.

My copilot apparently took this as a challenge, tightened his bank, and reduced airspeed to get some "positive cutoff" and beat our buddies around the turn. The other aircraft made a corresponding bank increase and airspeed reduction. The airborne mission commander, a former fighter pilot, then got involved by advising the copilot on how to "get his guns on the other guy."

The turns became more aggressive, and airspeed continued to drop. Still, I did not step in and call "knock it off." Finally, my copilot had the "bogey" in his sights and jammed in full left rudder to swing our nose around on the other aircraft.

Suddenly, the aircraft began to buffet and, looking down at my instruments, I found the aircraft in an extreme sideslip with rapidly decaying airspeed. In short, the aircraft was on the verge of a stall. Just as I was about to take the aircraft, the navigator stated (in quite an excited voice, as I remember), "Let's knock this off!" Truer sentiments were never spoken, and I seconded his motion by taking the aircraft and recovering from the near stall.

How could an experienced, disciplined special ops crew nearly crash a perfectly good airplane? On the ground after the flight, I asked myself that question as I prepared to debrief the flight.

Several contributors immediately came to mind. First, the HC-130 is not a fighter aircraft and is not designed to perform max performance turns and air intercepts, nor is the crew trained in these maneuvers.

Second, I let confidence in my copilot's abilities lull me into a false sense of security. I had flown with him on numerous occasions and considered him the best in the squadron in terms of flying skills and judgment. Yet, as I found out, no one is immune to a lapse in judgment.

Official USAF Photo

Third, I let the experience of the airborne mission commander affect me. We had flown together on numerous occasions, and I respected his varied experience in both fighters and special ops. But, as much as I wanted to, I could not avoid acknowledging the primary contributor, and that was me, the aircraft commander.

The aircraft commander is ultimately responsible for both the successful and safe completion of the mission. I let a false sense of security, along with a healthy dose of complacency, affect my judgment, and the result was the near loss of a valuable aircraft and seven irreplaceable crewmembers.

If something you are doing, or are allowing your crewmembers to do, invades your comfort zone, fails the "bad karma" check, or just doesn't seem right, then earn that extra aircraft commander pay by taking positive action to safeguard both your aircraft and crew! ✈

Hello? Anybody there?

ANONYMOUS
Flying Safety, May 86

Going ACE for a few weeks is usually a good deal to get you off the local air patch for a while. But even the best of us can be bitten by a combination of unfamiliar procedures at a strange field, a busy radio, and inattention to detail.

It was the classic setup. Departing McGuire AFB for Pease AFB, we filed for a radar departure at FL230 to pass west of the NYC TCA by 40 miles. No sweat. We loaded up and called for a clearance. "You're cleared the Point Pleasant-One Departure" read clearance delivery, "Hampton transition, direct Manta. Cross Manta at 6,000...Departure on...Squawk..."

USAF Photo by MSgt Fernando Serna

I had a SID booklet on board, but which of the nearly dozen was it? Oh...there it is—Number 10. Can I fly it? Yes.

It takes us out 50 miles east of the coast. We have the water wings and rafts...the climb rates are okay...no TACANs...good grief, it's 50 miles at 6,000 feet! There goes my fuel for approaches.... I'll probably get vectored to Virginia before I can head north.

A few seconds of mental calculations and I knew I could make it.

Takeoff was uneventful. Sure is hazy. "Proceed direct Coyle; maintain 4,000; traffic, 1 o'clock, slow moving, altitude unknown."

No tally, let's see...Coyle 113.4 and 81, that's to the east.

Then, not 30 seconds later, we heard "Proceed direct Manta, climb/maintain 6,000, VFR traffic 11 o'clock at 4 miles, altitude 5,500, unverified."

I don't see the traffic. Whew! Where's Manta? The Sea Isle zero five nine at 76...that's one-f o u r t e e n point....

"Traffic now 2 o'clock, 2 miles, has you in sight." I gave the copilot the best fix-to-fix I could.

"Contact New York Center on 381.4."

The radios were so busy I couldn't raise the controller for what seemed like forever.

Suddenly, over all the chatter, I heard our call sign "Proceed direct Manta. You appear to be heading north. Turn to a heading of 110 and contact New York Center on 377.4"

Whew! We were on a good heading, weren't we?

Oh, no! I never finished dialing in the full VOR frequency. I was heading to the wrong fix! We turned and set our VOR and UHF radios.

Sure enough, I didn't tune, identify, and monitor! How embarrassing!

Then I got that chill. What if that had been a point-to-point in a nonradar, mountainous area with the wrong VOR station tuned in!

We were quickly given clearance to flight level and shortly thereafter vectored on course. But the lesson is: Apply the procedures. Tune, identify, and monitor. ✈

NUTS to garble speak...

Official USAF Photo

ANONYMOUS
Flying Safety, Dec 94

My crew and I were performing a functional check flight (FCF) on a KC-135. It was the second attempt to complete the FCF profile.

We performed a water-augmented takeoff with a normal takeoff roll and rotation. At 200 feet AGL and 180 KIAS, we started the flap retraction sequence. I noticed an increasing demand for left aileron and informed the crew something "interesting" was happening with the control yoke. I suspected a jammed right flap.

I pulled the power back to stay below the flap placard airspeed and then sent the boom operator back to scan the right flaps. He reported the flaps appeared to be up, but the right outboard aileron was full up. We cycled the flaps up and down several times to see if we could free whatever was binding. This had no effect on the outboard aileron. I was able to keep the aircraft straight by using about 50 percent of the available aileron and lots of rudder.

We climbed up to 11,000 feet and checked the Dash One for jammed flight control information. We found very little guidance other than keeping our airspeed up during the landing. We performed a controllability check to see what our options were. I checked with the crew to make sure we had not missed anything pertinent to our situation. We decided a 30-degree flap landing with a constant speed approach would be our best course of action.

We contacted the SOF and advised him of our plan. Next, we declared an IFE with Approach Control and passed all of the required information. We requested and received extended vectors for an ILS straight in. We landed the aircraft in a 10-knot left crosswind. At times, almost full aileron control deflection was required.

Postflight safety inspection revealed a castellated nut had not been torqued to specifications, and the cotter pin was not installed. This allowed the nut to drop off the bolt during the takeoff. The bolt worked its way up and jammed against the airframe as we retracted the flaps. The jammed bolt caused a control link to shear and the right aileron to jam full up.

This presented us with a threefold problem. We lost half of our available aileron with flaps up, we had appreciable drag from the full-up aileron, and we lost crosswind capability by reducing the aileron we had available.

Several important things were reinforced during this mishap. Sometimes you get problems which are not covered by the books and have to apply judgment to get the airplane back on the ground. Also, Approach Control misunderstood when we declared the IFE. On short final, they inquired what we would like the fire department to do for "jammed flight pumps" when we had actually called in jammed flight controls. Lastly, the fire chief takes over when you are on the ground and has to terminate the emergency so you can taxi to parking. Expect a fire truck to follow you to parking even if you have already been checked for hot brakes.

Fly smart, fly safe. ✈

Phew! How l-o-w can you go....?

ANONYMOUS

As an F-16 instructor pilot, I've seen my share of student errors over the past 3 years. But in the FTU business, that sort of thing is expected. Students are supposed to screw up. That's why they're students. It's our job as IPs to teach students all we can to minimize mistakes and maximize learning.

As an IP, one of the cardinal rules I've learned is to monitor everything the student does as best I can, from engine start to shutdown. This rule applies equally whether I'm in the backseat or have a student wingman and is especially true concerning experienced pilots versus young lieutenants.

Generally, the young butterbar knows his limitations. I've found that frequently the major with 1500 hours in another fighter is the one to really watch. I'll get a rude awakening every so often reminding me my vigilance at monitoring a student's actions is getting lax. Something happens when I least expect it.

Finally, any errors I didn't catch during the flight I could usually catch during debrief where we'd review the "meat of the mission" using the 8 mm video tapes carried onboard for just that purpose. The tapes recorded the view out of the pilot's Heads Up Display (HUD), radar display, and all the intercom and radio audio.

One day I had the opportunity to lead a four-ship low altitude step down training mission. The flight consisted of myself and another IP plus two students. The objective was to introduce the students to maneuvering as a formation, performing tactical low-level intercepts in the 500-feet AGL regime. The student wingmen needed to learn to divide their attention between the rocks, keeping the visual with lead, using the radar, getting the bandit tally, employing weapons, and maintaining effective communications throughout. My briefing stressed the usual things that can cause problems on missions like this—altitude awareness, prioritization, task saturation, formation considerations, comfort level, etc. The airspace was in a restricted area over flat, featureless desert terrain.

The mission went well, with the two elements alternating as fighters and bandits. As bandits, we flew simple formations and used limited maneuvering, comm,

Official USAF Photo

and weapons employment. We were expected to provide a good training aid to the fighter element and ultimately get shot.

As fighters, we maneuvered more aggressively to gain advantage, and we actively employed ordnance. My student had been a strong performer in the program and did well as my wingman. In the debrief, we reviewed all the fighter intercepts, noting the student's radar use, communications, formation position, and weapons employment. Overall, a solid mission. There was nothing left to do but the gradesheet.

About an hour after the debrief ended, my student came to me. He looked shaken and asked if he could talk to me privately. Going back to one of the briefing rooms, he said he wanted to show me something on his tape. Cuing the tape, he said he'd been reviewing the intercepts where our element had been acting as bandits. Normally, on a mission of this type, I don't look at the bandit portions in detail since our maneuvering is limited with simple formations. I'll just review any shots taken or gross errors and problems I noted in-flight. This is due to time constraints since, typically, students and IPs have limited debrief time before going off to simulators, academics, meetings, or some other scheduled activity.

The HUD video started towards the end of our first engagement as bandits. The student was at 550 feet AGL on the radar altimeter, 440 KCAS, approximately 2 nm from me and swept aft, as briefed—a typical low-altitude bearing formation. As the intercept progressed for the next minute, comm is heard between the two of us as I maneuvered our formation in relation to the other element. I was also trying to get my student's radar and eyes on the other formation.

The featureless terrain had a slight upward slope to it. Over the next 30 seconds, the student descended from 550 feet AGL to 320 feet AGL. The altitude warning, set to go off below 500 feet AGL, was flashing in the HUD, but the student was dividing his attention between the radar, watching me off to his right, and gaining tally on the fighters, and so he didn't see it. The voice message system, which should have been saying "ALTITUDE, ALTITUDE" in his headset any time he's below 500 feet AGL, was silent.

After 15 seconds more, the student descended from 320 feet AGL to 125 AGL. He stabilized there for another 15 seconds before beginning a climbing right turn to 1,500 feet AGL as the intercept reached the terminal phase. Neither he nor I had any idea he was well below 500 feet AGL for approximately 1 minute.

This was a classic case of misprioritization—watching lead, the radar, and getting a tally at the expense of watching the rocks. This was aggravated by the featureless, upsloping terrain we were flying over. Only his post-flight review caught it. He was obviously upset with himself for allowing his extreme low altitude to go unnoticed for so long.

I wasn't too thrilled with my act either, and I thought of the lessons learned.

Lesson 1: I'd broken one of my own cardinal rules by not watching him more. I was too busy running the formation, working my own radar, and going for a tally. Admittedly, in the fighter business you can't watch your wingman all the time. But in this case, a quick glance back over my shoulder could have alerted me to his situation.

I was also irritated that he was the one who caught it on tape and not me during debrief.

Lesson 2: I made another error in that I assumed little could go wrong flying a benign bandit formation, and so I paid little attention to it in the debrief. This resulted in a potentially fatal error going unnoticed and the lesson it could've taught everyone. Now I review *all* engagements thoroughly.

The student volunteered to show the tape at the next pilot meeting and brief the squadron on what occurred. There were a lot of low whistles in the crowd that day as everyone watched the radar altimeter creep lower and lower. I think it made a big impression on students and IPs alike. Fortunately, the student had the discipline to own up to his *faux pax*. He just as easily could've kept it to himself. It made me wonder what I would've done had it been me. All pilots have done stupid things at one time or another (I have), and they were the only ones who knew. Mentally, we promised ourselves to "never do that again" and pressed on.

Lesson 3: Yeah, it's embarrassing, but have the gumption to speak up when you screw up. You'll be surprised how many other guys will admit having done the same thing. You might prevent a repeat occurrence, and people will respect you for your honesty. Only fools think "that couldn't happen to me!" You could even write an article like this.

Lesson 4: This lesson is systems related. The F-16 is a great jet with cosmic systems. But the one system designed to prevent this situation from occurring, the voice message system, didn't operate when it was needed most. It should have been repeating "ALTITUDE, ALTITUDE" in the pilot's ear the whole time he was below 500 feet AGL. It turned out it was inadvertently switched off. Don't depend on the jet or your wingman to save your butt. It's ultimately the pilot's responsibility.

Lesson 5: Take to heart all the hazards you hear about concerning low-level flying. It's all true and it does happen. In this case, the results were not fatal.

Fly safe and check six! ✈

Too...close for comfort!

USAF Photo by SSgt Andrew N. Dunaway, II

ANONYMOUS
Flying Safety, Jul 87

My first trip to Red Flag in the FB-111 was a 2-week TDY, and we were on our ninth and final sortie on the tenth and last day of the "war." Both Nellis and Las Vegas had been fun and educational in many ways, but like just about everyone else, I was ready to go home.

During the last few days, the intensity of the exercise and the requirements for maximum concentration began to peak. Live ordnance was being released regularly, and deconfliction problems began to gain a lot of attention as compression of TOTs and target area saturation were emphasized.

Formations began pushing the gap at 30-second intervals, and that's not much when planes are ingressing at 540 knots and egressing supersonic. Into that, add aggressor aircraft, ground threats, C-130s, French Jaguars, Wild Weasels, and terrain-following attackers, and there is a high potential to see someone where you don't expect them.

See and avoid was obviously high priority. Today, however, we didn't expect to see much since all the F-15s who had previously been trying to down us were now on our side. We still had aggressors (F-5s) challenging us, but we hadn't seen them on previous sorties and didn't think they would be a factor with F-15s providing

CAP. If it had been real combat, we would have had the nerve to call it a cakewalk.

The weather was bad as we entered the range, but as we expected, it cleared near the target area. The excitement began on the bomb run, but that's not unusual for guys who find the IP inbound to be fun. We took 30-second spacing on lead to simulate the frag of an MK-82 even though we were only dropping smoke-producing MK 106s.

As we neared the target, we spotted lead's smoke well placed on a column of trucks. The bombing system looked good as the time-to-go counted down to zero. Bomb away! We banked and pulled, and in the turn, I could see our smoke also on target. We rolled out at 300 feet with burners lit and lead in sight with a planned join-up at Mt. Helen. We would then blast through EC West avoiding ground threats and trying to keep from going supersonic over the manned sites.

I checked our rear and saw an F-5 beginning to convert, called it to lead, and thought to myself we might have fun today after all. We rocked our wings so the aggressor knew we had him visually, and after a short chase, he broke off and climbed to our 3 o'clock. We then heard lead call "Chili Flight, AAA 1 o'clock." As we began our defensive actions, smoke salvos appeared on our right. We started to move back to a line abreast position on lead as he banked to the left.

Out of nowhere, a flash appeared below us, and we realized it was another attacker. I heard myself half yell "Holy ----! Someone flew under us!" We knew that at our altitude we missed the other guy by maybe 100 feet with a closure of over 1,000 knots. We told lead, and we all began to look for a wingman, but it became apparent the IFR conditions we thought we left upon entry were waiting just ahead in the hilly terrain of Cedar Pass.

I brought my attention back into the cockpit, and we armed up the terrain-following radar. I checked my radar scope to ensure terrain clearance as my pilot transitioned to instruments. Lead was doing the same. The visibility had gone to zero in this short time, and the DME on our air-to-air TACAN also read zero. In these conditions, we had little idea of lead's direction and concluded we had reached our saturation point, and it was time to get out.

Our climb began with my attention on the DME, which seemed to be decreasing, and the altimeter, which wouldn't increase fast enough. In the excitement, I almost forgot a critical step in the 111 during decelerating flight—moving the wings forward. Other 111s had been lost when this step was left out. Of course, my pilot remembered to bring the wings forward as we leveled off still in the clouds. At the time, I was interested in results without caring much how they were accomplished.

Later, as we discussed those exciting 5 minutes, we agreed we had been lucky not to hit someone else and that a friendly airplane can be just as deadly as a missile or a bullet. Most importantly, we found out that in a deteriorating situation, the most essential thing you can do is stay in control of what you still have control over. ✈

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could "accomplish the mission." And he'd certainly impressed me.

All I Wanted Was Out.

After landing and shutdown, I grabbed my gear and stormed off in the still-pouring rain, more angry at myself than anything else.

Stupidly, I had let myself be drawn under the control of someone with an obsessive compulsion to "accomplish the mission" regardless of risk. What happened to myself and the crew chief is the very stuff I "tsked" about when reading accounts of events leading up to accidents. It will never happen again.

Every day during my deployment, I'd posted a "Thought for the Day" in Flight Ops. That day's was: "Experience is something you don't get until just after you needed it." Apparently, I'd missed my own point.

I had a long talk with the aviation OIC but to little avail; after all, the operation was over now. The next day, I took the ops officer/IP/PC aside for a half-hour discussion about how stupid it had been. I was lucky because *he* was lucky. How would he like his excessive motivation to be responsible for killing a bunch of innocent people? I think he listened. Or perhaps he didn't.

What might have prevented the whole debacle would have been a serious pre-mission brief stressing risks, controls, and the criticality of continually verifying *everyone's* desire to continue. Plying a razor-thin line between treetops and cloud-bottoms is hardly the place to discover your PC has flushed everything he learned in aircrew coordination training. And that seems the most important lesson, since in today's "can do," "Hooah!," "good-to-go" world, excessive motivation increasingly replaces calm, considered judgment.

And, sorry, but I don't want to hear, "Yeah, well *I* woulda took them controls!" or "*I* woulda put it on the ground right then and there!" or any other armchair quarterback chin music. Like any genuine war story, you had to *be* there!

And Remember Too...

...this guy is *still* out there. ✈

Ahh, such a nice day to eject...

Official USAF Photo

LT COL DON HUNSUCK
1 FW/SE
Langley AFB, Virginia

Our F-15 squadron had deployed to Osan Air Base in the Republic of Korea for a Joint/Combined exercise. The PACAF Inspector General was also in town to give the 51st Tactical Fighter Wing (Composite) an inspection. This was nearly 15 years ago, when Osan boasted F-4s and some OA-37s for its Forward Air Controllers.

It was a beautiful summertime exercise, and the weather was very cooperative for flying large-force employment. We were on our third day of DACT heaven—shooting everything the Navy and Marine Corps could put up against us. On this memorable sortie, our OPSO ("Pops") was leading an eight-ship [I was Pop's wingman], and our Assistant OPSO ("Easy Ed") was leading the second eight-ship.

The entire flight, from briefing to fighting to recovery, was great sport, but uneventful. The weather, as I said, was beautiful—most of South Korea was VMC, and our recovery fuel was set to maximize training. We were fencing out and established on recovery routing when the squadron common frequency got busy. "Easy" called my lead and advised us to land ASAP—Easy's wingman ("Hooker") had suffered total utility hydraulic failure. ["Hooker" had been a test engineer at Edwards and had actually done the tail-hook tests on the F-15 before he got his slot to UPT.]

We all listened as Easy and Pops discussed the plan. Everyone but Easy and Hooker would land at Osan, then Easy would chase Hooker through all the EP considerations. The checklists called for emergency gear extension and an approach end cable engagement. Easy would chase Hooker and planned to land at nearby Suwon Air Base since Hooker would probably close Osan's only runway for a while.

We set up for initial, and the other 14 of us landed and de-armed as the fire and rescue trucks arrived, blocking further taxi progress. We sat in EOR and watched and listened as Easy and Hooker went through the emergency procedures.

By the way, the SOF was our Squadron Commander (an initial cadre F-15 IP from the Weapons School). Hooker, Easy, and the SOF went through the checklists,

now that we were all off the runway, for emergency gear extension. But only the nose and right main gear extended! The backup system had failed to open the left main gear door.

The PACAF IG was now out evaluating a real EP with enough cameras to make a Japanese photo club proud. If we had had any gun camera film left (we were pointed at the approach end), we'd have been taking pictures, too.

What happened next was a first for the F-15. The commander and Easy suggested a touch-and-go to jolt the airframe—maybe that would unlock the left main gear door enough. Hooker did a beautiful touch-and-go on the right main gear—too smooth from what I could see. Nothing. Still just a nose and right main gear.

Now he was getting low on fuel (1,200 pounds). Easy and Hooker set up for the final straight-in, this time for the cable. It seemed to me, listening, that everyone had focused on getting the gear down, but until now, nobody had read the approach end arrestment checklist. Being a fellow lieutenant and wanting to help my bud out, I called on the aux: "Hooker, check hook down and shoulder harness locked."

Hooker, in his professional lieutenant voice, responded, "Hook down, shoulder harness locked." I was about to add, "Make sure you land long." But I got a stare from my OPSO, parked just to the left of me, that stopped me from further transmission. His eyes seemed to say, "Get off the radio." I regret, now, not saying that.

Why land long? Those OA-37s had a problem with their low-rider gear doors being dinged by cables. Osan, unlike other fighter bases, had its first barrier 2,700 feet down to allow the -37s to be airborne before the cable. Although this was part of the base Stan/Eval brief, it wasn't super-highlighted. Now, when it was important, nobody had mentioned that fact, and, I guess, supervision figured Hooker had seen/remembered the cable location on his touch-and-go.

Easy chased Hooker on final and reminded him to engage in the center, in idle, and off the brakes. His last radio call, concerned about the left gear still up, was "If things really get bad, you can always eject." With those words ringing in his ears, and down now to 800 pounds of fuel, Hooker set up for his first-ever cable engagement. The audience was his entire squadron, all available on Osan Air Base, and the entire PACAF IG team. No pressure.

We watched and held our breath. Instead of landing 1,000 to 1,500 feet down, Hooker touched down on brick one and slammed the nose gear down. The hook started sparking, and the left wing, now devoid of angle of attack and lift, and with nothing supporting the left side of the aircraft, began to drop. The centerline tank began scraping, and then its JP-4 fumes began to torch—pretty impressive. Next, the left stab began to scrape, turning into a bigger hook than the hook itself. The F-15, now very draggy on the left side, began to veer to the left edge of the runway, despite flight controls countering this.

After much scraping, Hooker asked, "Is anything happening yet?" Easy answered, "You're just now getting to the cable."

The rest of this happened to me in slow motion. About the time Hooker got to the cable, he was 50 feet left of centerline. That fact, coupled with that big hook of a left stabilizer, yawed him big time to the left. He had slowed down to about 70 knots as he engaged the cable. From our vantage point, he was going 30 or 40 as his jet, wing low about 10 degrees, departed the left side of the runway at show center.

The IG team had cameras rolling at a fast pace. As I was thinking, "Time to shut down the engines, open the canopy, and ground egress..." Hooker's canopy left the aircraft. Before I could think, "Why'd he jettison the canopy...?" Haley's comet rode up the rails with a little black seat and a little green dude leading the comet. That ACES II seat leaves a trail the length of an F-15. From his viewpoint, Hooker saw a ravine and a Vulcan gun emplacement. He ejected as the jet left the left side of the runway at zero altitude, 40 knots, and 10 degrees left bank.

The ACES II had carried Hooker up about three F-15 lengths into the air when the comet burned out. The little green man separated from the black seat which then arced across the north side of the field and landed near that Vulcan implacement. No damage. From Easy's F-15, he saw the ejection off his right side, saw the comet, but didn't notice man/seat separation. He saw the seat impact and thought Hooker had bought it. Instead, as advertised, Hooker got chute opening at peak trajectory—horizontally. Then Hooker and his chute rotated 90 degrees, one swing, and Hooker did a PLF onto the runway. He landed, popped his Koch fittings, and ran away down the centerline. We all cheered, "He's okay! Man, what a show!"

The fire trucks arrived and shut down the F-15 engines after climbing up the left wing and into Bay 5 (where the canopy used to be). The ambulance captured Hooker and let the flight docs observe him for a night. He had shrunk 2 inches in height, but he regained an inch over the next day. Net loss—1 inch. The safety officers impounded the jet, but when the crane went to lift it out of the mud, the left main came down and locked! ARRGH!

On recap, we learned that the JFS accumulator backup system to lower the gear (used once by Hooker) could've been used several more times until depletion. Also, had he G'd up the jet while doing this, that might have worked to unlock the gear door as well. Supervision/Operations was dinged for not reminding him to land long.

Nobody faulted Hooker for ejecting. Ejection was an option that could and did work well—better that than be strapped to an Eagle that decided to roll over. Also, the ACES II worked better than advertised (a 10-degree left bank), but it was minimal time from full chute to PLF.

Be ready. When it's your turn, things may happen fast. Fly safe! ✈

Dumb! I mean

ANONYMOUS
Flying Safety, May 93

Twenty-five years of flying experience, nearly 10,000 hours in the cockpit—you'd think I'd know better. It was an early morning local training mission in the C-141. I'd like to blame it on getting all of 2 hours sleep prior to the alert call.

Crew fatigue is a real problem, but only one of the links in the unbroken chain of events leading to a mishap report. The crew consisted of myself, five other pilots, and two engineers—I'm a flight examiner pilot, and another pilot is an instructor.

The crew had more flying time and experience than you can shake a stick at—the type of crew a mishap report would call "highly experienced and qualified." The weather was beautiful—high overcast, nearly calm winds. The only visibility restrictions were the patchy ground fog in the trees and the curvature of the earth. The board might say "weather was not a factor." The aircraft, for a 33-year-old, was in rather good shape. There were only relatively minor open discrepancies. The kind of aircraft which leads a mishap board to use the phrase "The pilot failed to..." (read that "pilot error").

We had been flying almost 3 hours. The local had worked out very well. Each of the six pilots accomplished three approaches and at least two touch and go's. Every other approach was an opposite direction approach. All approaches and landings had been very well planned and flown. The morning had been extremely productive.

I was in the right seat. I had an annual composite eval coming up, so I decided to finish the local with a no-flap approach and landing. We were in the closed VFR pattern. There had been some call sign confusion by the tower controller between us and another local in the pattern. Originally, we were to be No. 2 for the approach and landing, but due to the call sign confusion, we were now No. 1. This was fine with me because I was already late for the engine running crew change.

For the benefit of the other local, I reminded the tower we were planning a no-flap, full stop. We were cleared for "the option," and, again, I reminded the tower we would be a full stop. The tower cleared us to land. Due to the tower's apparent confusion, additional communications were required, and I failed, for a short time, to pay attention to flying the aircraft. As a result, I delayed getting the power back and getting the aircraft configured. I couldn't extend the pattern (or could I?) because we were now No. 1 inside the other -141.

Well, we all know how the Star Pig likes to fly no-flap approaches—20 knots hot on final, 30 knots hot over the threshold. I had, and passed up, several opportunities to "break the chain" of events leading to a mishap investigation. I've got two chain-breaking opportunities left at this point—go around or land and get it stopped before the other end. Remember, I'm late for the crew change, and I've got all this experience. You guessed it. I planted that sucker.

For those of you waiting to read the mishap report, I'm very glad to say there will be no report. I put it down smoothly in the first 1,200 feet and injected the brak with only 4 million foot-pounds of energy.

Was it the correct decision? *Absolutely not!* This has got to be one of the poorest decisions I've made since pilot training. I chose to break the mishap chain at practically

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...really Dumb!

the last possible link. I must tell you, I am furious with myself for this decision. There are several reasons for my feelings.

Permit me to "what if." What if the thrust reverser(s) had not extended? What if the spoilers had asymmetryed? What if, because of the close temperature and dewpoint (remember the fog in the trees?), the runway had been moist and I needed heavier braking at the far end of the runway—in the rubber deposits?

Official USAF Photo

What if I needed heavier braking and the antiskid malfunctioned? What if I had executed a go-around? (All the other what-ifs would have disappeared.) I caught grief from the next IP for being late at the change anyway. What's another 5 minutes compared to an investigation?

What makes me most angry with myself is I am a flight examiner, and my performance sets a tone for the way the rest of the pilots in the squadron fly the airplane. As the saying goes, "Your actions speak so loudly, I can't hear what you're saying." I tried, after the local, to make it very clear to the rest of the crew I had made the wrong decision. I hope they can hear over my actions.

Our discussions after the local led me to ponder one other disturbing point. I always state in my premission briefing that if **anyone** sees **anything** they don't like or understand, please bring it up. It's better to clear up the problem among ourselves than try to explain it to someone else later.

After we were on the bus back to the squadron, several of the crewmembers said during the approach and landing they thought to themselves things like "Aren't we a little hot?" "Maybe we should go around," or "This is going to be very interesting!"

Don't get me wrong. I am **not** attempting to shift responsibility for my poor performance from myself; however, "The **crew** failed to..." is another favorite phrase in mishap reports. I am certain if I had rolled through the approach lights at the other end, the "Why didn't you..." questions asked by the investigators would have to be answered by more people than myself. I also feel certain nothing was said to me, in part because of my crew qualification, and the other crewmembers were sure I knew what I was doing.

Every time I go flying, I learn something. Occasionally, the learning curve is steep. This local training mission was one of those *steep climbs.* Next time, I hope to break the mishap chain sooner rather than later. The sooner it is broken, the more options there are available.

Also, there are too many mishaps discussed in resource management classes where the obvious question asked is "Why didn't _____ say something?" Generally, most everyone in a classroom forum says, or feels, they would say the appropriate phrase in a given situation to break the mishap chain. I watched it not happen on this local. I am going to try to feel more free to speak up when I see something apparently wrong. I am also going to try harder to foster the same feeling in other crewmembers.

Finally, if I had made the right decision and gone around, I would have been embarrassed, but I would have felt better knowing I had made the right choice. If I had ended up sitting in the middle of the localizer antenna, I would have been very embarrassed and certainly much more angry at myself than I am now. This time, things went my way. I'm not going to press to test again. ✈

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Critical Days of Summer

Make 'em memorable, not a memorial!