We've made tremendous progress in reducing the number of tactical aircraft destroyed and aircrews killed during Tactical Air Command flying operations over recent years. Much of the motivation and impetus to do that has come from our senior USAF and TAC leaders. But, their emphasis, by itself, will not be enough to ensure that we're doing our jobs even smarter and safer in the weeks and months ahead. That will require increased involvement and commitment, especially from our middle-level supervisors, aircrews and everyone else involved with TAC’s day-to-day flying activities. It will take a concerted effort by our squadron commanders, operations officers, flight commanders and flight leads to ensure that we're operating smartly and training our younger aircrews properly. Our ability to work together as a team requires the skills of everyone, from the crew chief working in the winters of Mountain Home or the summers of Luke to our security police, maintenance specialists, supply folks and administrative personnel. Each of us must look around every day at the way we’re doing things in the flight, ground and weapons areas and teach our people how to say “no” when they see something dumb happening.

The primary goal of safety is not a low mishap rate; it’s survivability. While we may be tempted to focus on the statistical descriptions of how we’re doing in preventing aircraft crashes, what really counts is the tactical aircraft, aircrews and support people needed to get the maximum number of successful sorties airborne and back again. That’s what a tactical air force is all about—the ability to deploy and employ against enemy forces when the call comes. Take a look at the lost aircraft and aircrews shown on the TAC Tally. Each Class A mishap means one less aircraft that the bad guys will have to destroy if we’re called to go to war. It also means one less aircraft available for us to use in destroying the bad guys. Each crewmember lost means one less to fly an aircraft into combat. It’s as simple as that. Ten airframes and eleven aircrews lost at the end of July is a significant amount of tactical airpower gone forever that could have been the necessary edge needed in some future conflict. That’s a tradeoff we cannot afford to make.

My staff and I look forward to working with you any way we can to increase and enhance our TAC survivability; to do our jobs smarter and safer. Let us know how we can work together with you to accomplish that goal.

Finally, we wish the very best to Colonel Coupe De Ville as he assumes the base commander’s job at Myrtle Beach. All of us appreciate the significant impact he made on TAC during his tour here. Thanks, pardner.

Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety
features

4 The Decision is Yours
Decisions—the basis of successful tactical fighter operations. Brigadier General Billy McCoy shares his thoughts on the subject.

7 I Was There
Getting your priorities out of order can set you up for a surprise.

10 The Worst Experience I Ever Had
A hard way to learn an important lesson.

18 It's Who Sees You That Counts
A few thoughts on how you can survive hunting season this year.

24 Getting Out: Have A Plan
Having a plan for handling an inflight emergency can be the key to surviving it.

departments

8 TAC Tips
13, 21 Safety Awards
14 Chock Talk
16 In The Center
21, 30 Quarterly Safety Awards
22 Weapons Words
26 Fleagle Salutes
28 Down to Earth

TACRP 127-1

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THE DECISION IS YOURS

Fighter pilots have had to accomplish highly demanding tasks in some of the most complex scenarios throughout their history. Over the years, I’ve tried to explain and describe our job as fighter pilots.
to novices who know nothing about our business. It's hard to do. What makes us different from everyone else? I used to try to describe dive bombing, strafing a target or flying BFM maneuvers to that unknowing individual, but I was sure that my explanations, no matter how enthusiastic, really did not get through. I have concluded that you have to be there; you have to live it, love it and experience it on a daily basis in order to understand what it's like flying fighters.

As the years have gone by, the reality of what makes the difference in us as fighter pilots has become apparent to me. It's the decisions; the many hundreds of decisions we make everytime we strap on a jet. From turning on a switch or
adjusting power in the final turn to making a slight bank change to prevent an overshoot; all those actions point to the countless, correct decisions that result in a safe operation.

Our supervisors share in the success or failure of these decisions. Realistic training and safety go hand in hand on a daily and continuous basis. From watching out for your wingman in flight to the special consideration afforded to deployments and exercises, all of the actions taken point to dedication and involvement in making positive, correct decisions so we won’t repeat the mistakes of the past.

Looking back at all the safety meetings I’ve attended over the years, the theme, the words and the ideas haven’t changed. Safety, discipline, thinking in the cockpit and using your head are still as important today as they were twenty years ago and will be twenty years from now. Those many meetings have stressed the experiences of the past, the tragedies, the close calls, the “what ifs.” It doesn’t matter that our aircraft are more complex or that commitments and, in some cases, our missions have changed. The basic ingredient is still the same—the man in the cockpit doing his job and trying to do it right. That pilot or crew member, calling on lessons learned, past and present, in order to get the mission accomplished; ensuring that they’re around “To Fly, Fight and Win” another day.

During those safety meetings, while expounding on the mistakes of others, we were led to believe that we were there to listen to what we were doing wrong. In reality, we should have stressed the fact that supervisors, pilots and crew members were doing things right—the overwhelming majority of the time. Safety, discipline, thinking in the cockpit and using your head all point to the basics of flying and flying smart.

Our recent operations-related mishaps: mid-air collisions, controlled flight into the terrain, misorientation and out of control are not new—they’ve all been around since day one. They will continue to haunt us because all the things we do in our business are inherently hazardous. Despite that, mishap rates that keep going down are certainly signs that the common ingredients in these mishaps—poor judgement, loss of awareness and complacency—are being handled by our pilots and supervisors in a more professional manner than before. Learning from the past to make even better decisions, smarter decisions and more tactically sound decisions is the key to flying the jet and flying it right.

Safety, discipline, thinking in the cockpit and using your head are still as important today as they were twenty years ago and will be twenty years from now.
The exercise was winding down and everyone was glad to see the inspectors leave the flightline. The relaxation phase of the exercise was just about to begin. We knew that the commander had acquired some liquid refreshment to celebrate the completion of another successful inspection and we were eager to join in.

There were some important jobs, however, that needed to be finished before we could take part in the post-inspection celebration. One task was to remove the wing tanks from the many F-111s that had participated in the exercise.

Things were going great. The crew chiefs led the pack with the defuel trucks removing the fuel before we arrived with the MJ-4 to remove the tanks. Things were going so smoothly in fact that we neglected to read the aircraft forms to ensure the fuel was removed. (Don't get ahead of me now.)

We arrived at one aircraft in our area of responsibility and proceeded to remove the tank. I was on the MJ-4 and raised the boom almost to the correct height as my crew chief pulled the safety pin and unlocked the tank. That was all it took. I was in the middle of my first and last free flight lesson. You guessed it. The tank was full and, when it was unlocked, it acted just as gravity would have it, straight down to the ramp, overloading the weight capacity of the MJ-4 and throwing me into the air.

Nothing was hurt other than my pride. It was the last aircraft we worked on that day, but we didn't get to attend the commander's thank you gathering either. We were too busy filling out forms and being interviewed about what had caused this mishap.

Yes, it was our fault; failing to obey the established policy of reviewing the aircraft forms prior to performing any maintenance on the aircraft. I certainly learned a valuable lesson during my free flight lesson. Where will you learn yours?
Affected in the head

An F-15 driver was passing 4000 feet during climbout for a DACT mission when he turned to watch his wingman cross under from right to left. When he looked forward again, he suddenly experienced tumbling vision followed by uncontrollable rapid eye movement. He immediately leveled the aircraft, put it on autopilot and went to 100 percent oxygen. After 15 to 20 seconds, his vision returned to normal, so he declared an emergency and returned to base.

After the mission, the flight surgeon found that both of the pilot's ears were blocked. The tumbling vision and vestibular disorientation had been a result of his blocked ears combined with the effects of the self-administered cold tablet.

This incident occurred while the unit was deployed away from home station. That's usually the time when we're tasked with a healthy sortie load and may feel like every warm body is needed to fill the schedule. The flying is so good that we can't stand the thought of missing a ride, but we shouldn't let those pressures force us into making unwise moves. A deployment is just the time when changes in sleeping and eating habits can catch up with us and put us a bit "under the weather."

Whether you encounter sickness at home or on the road, you've heard over and over since undergraduate flying training that self-medication and aviation don't mix. There are no exceptions. When you're on flying status and engaged in regular flying activities, don't medicate yourself. That's what flight surgeons are for.

There are a lot of things we could say about why taking pills and flying don't mix, but the important message is DON'T DO IT.

You wouldn't accept an aircraft for flight that only had one of its required two engines, a part of a wing missing or an uncorrected flight control problem. You want the airframe and everything inside to be 100 percent before you strap in and trust your life to it. Your body and health are no different. You're a critical part of the flight. If you're not feeling 100 percent, take yourself off the schedule and get the medication, the rest or the physical maintenance that you need to ensure that you're ready to go when your aircraft is.

The pilot had recognized for at least 48 hours before the flight that he was suffering from the symptoms of an upper respiratory infection. Instead of taking himself off the flying schedule and going to the flight surgeon, the pilot took an over-the-counter cold tablet about 6 hours before his takeoff and pressed on with the mission.
Take it up

An upgrading F-16 pilot and an IP were flying a low level in their B-model when the upgrading pilot saw a large bird approaching just above their flight path. The bird dived, hitting the aircraft just forward of the canopy rail, and entered the cockpit. While both pilots were unharmed, the canopy flexed from the strike and hit the IP on the helmet.

When it comes to a showdown between you and a feathered friend, make it your habit pattern to pull up; but don’t yank an overload of G’s. Most birds will tuck their wings and dive when they sense an oncoming threat. By pulling up, hopefully you’ll shield the more vulnerable parts of your aircraft from being struck and give the bird your sturdier underside for a target. Pulling up to avoid a bird also reduces the chances of collision with the ground or of running into other unseen obstacles. But, remember, any pull up should be made only if it makes sense. If you pull up and miss the bird but depart the aircraft and have to jump out . . . that doesn’t pass the test. If the bird is too close for you to do anything, remain level and duck your head before you take the strike. That way at least you’ll have your head on to help you get your crippled bird back on the ground.

Night owl foul

One of a pilot’s greatest blessings in this country is our weather. Oh, it’s violent at times and miserable at others, but most of the time our weather moves in waves—good, lousy, then back to good again. While that abundance of blue sky is generally a wonderful thing, it limits our opportunities to fly instruments in instrument conditions. So occasionally when we need to depend on that instrument crosscheck, we find it a little rusty or we have to coax it back from vacation.

It was a dark and cloudy night. An F-111 crew was flying a terrain following radar (TFR) low-level mission in auto TFR at 1,000 feet above the ground. About a third of the way around the route, the crew noticed the aircraft wasn’t steering towards the target coordinates. So the pilot disengaged the autopilot and began manually banking the Aardvark toward the target. After passing the target, he rolled into a 30-degree right bank to get on the new course to the next turn point.

Suddenly the radar altimeter broke lock (indicating the aircraft was in greater than 45 degrees of bank), and the aircraft began a TFR fly-up. The pilot looked at his ADI (attitude director indicator); it indicated 20 degrees left bank. The pilot was severely disoriented but he didn’t override the fly-up, thinking it was getting him above the terrain. As the aircraft came through the clouds, the WSO noticed lights from a town above and to his right and told the pilot to pull up. The pilot checked the standby ADI which was showing nearly 100 degrees right bank. The fly-up wasn’t getting them away from the ground with the aircraft in that attitude.

Fortunately, our ADIs don’t fail very often. When they do, if it happens at night or in the weather, our best chance of catching it early is an occasional routine peek at the back-up attitude indicator. How does that become routine? You guessed it—practice.
I had an experience two years ago during a range clearance that will leave emotional and physical scars with me for the rest of my life. Our Explosive Ordnance Disposal Unit had been assigned to clear a National Guard bombing range and the job was to be done annually. My turn came in May 1985.

Our job was to pick up 25-pound practice bombs (BDU-33s) and destroy them. Occasionally some bombs do not function as designed when they are dropped. These are called dud-fired, or duds, and in this condition they are very dangerous. For this reason, every bomb should be checked.
to verify that it has functioned. Our first mistake was not checking the bombs to ensure they had fired; our second mistake was rushing the work so the range could be used for additional missions.

I picked up an almost unscratched bomb and tossed it into the bucket of the loader.

The first four days went fairly well as we threw the bombs into small piles for easier loading and removal from the range later. The fifth day, the day we were to leave, started at 8 o'clock in the morning. After we arrived at the range, I removed my shirt as I had on each previous day. As it turned out, this was my third mistake. My fourth one came several moments later as we were loading the bombs, “lobbing” them horizontally into the front-end loader, so we would not initiate any possible duds. We were working on the first pile when I picked up an almost unscratched bomb and tossed it into the bucket of the loader. It landed on its side, on top of the bucket. I bent down to pick up another one as someone threw one in and it struck the bomb on top of the bucket. All I heard was a loud, ear-shattering bang. Instantly, I was engulfed in the fireball produced by this “practice” bomb.

My face hurt so bad, all I could think of was that my skin was burned off. My face felt extremely hot, my arm was aching and my T-shirt was on fire. I ran away with my eyes closed, not knowing what I was doing, but trying to tear the flaming, tattered shirt from my body. Through the ringing in my ears, I heard my teammates screaming for me to roll on the ground. My left arm and the left side of my chest were throbbing with pain, but I dropped like a rock, and tried to roll. My face hurt so bad, all I could think of was that my skin was burned off. The red phosphorus blown out of the
THE WORST EXPERIENCE I EVER HAD

bomb was imbedded in my face and burning.

My teammates put shirts, dampened with muddy water, on my face and upper body to stop the burning. All I wanted was relief, and a helicopter from the nearby military installation rushed me to the hospital. My eyes had been covered because the flight medics feared I had eye damage. My upper body was also covered with cold dressings by the time we arrived at the Army hospital.

WHY ME? How did it happen? Would I be all right? Would I be permanently scarred? What would my wife think? WHY ME? I thought of the last time I was in a hospital, a month and a half earlier to witness the birth of my daughter. That was great. If only I could go back to that time.

The doctors decided my burns could be treated better in the nearby community hospital.

Once again they covered me with dressings and loaded me into an ambulance. When I arrived there, they gave me another shot of morphine and started to remove the dead, burnt skin from my body. The bad news was I had first and second degree burns on the upper left part of my body; the good news was my eyes were undamaged. They cleaned me up, bandaged me and got me ready to go.

When I finally arrived home, I was bandaged from the waist to my shoulder, my entire left arm bandaged and I looked awful. What followed was countless days of indescribable pain and suffering as I underwent at least twenty-seven scrapings to remove the dead skin from my burns in order to allow proper healing.

After two years, the only physical signs remaining from the whole incident are scars on my stomach, chest and left arm. Mentally, however, not a day goes by that I don't think of how much pain and suffering I went through and how it could have been avoided. We didn't follow regulations, i.e., the smart way to do the job, and I paid the price. Believe me, I'll never have to think twice before I follow procedures again. Next time I might not be so lucky.

We didn't follow regulations, i.e., the smart way to do the job, and I paid the price.

September 1987
While Capt Oscar Sordo was driving along the flightline, he saw smoke parallel to the runway but outside the main base compound. When he identified the source of the fire as the runway approach light building, he immediately notified Job Control to dispatch the fire department.

While waiting for the first dispatched fire fighter to open the perimeter gate, Capt Sordo spotted a truck parked alongside the burning building. Concerned about possible danger to life, he accompanied the assistant fire chief through the perimeter gate to the fence surrounding the generator building. Impeded by a locked gate and waiting for the fire rescue team to arrive with bolt cutters, Capt Sordo noticed the truck’s passenger door open.

Fearing a possible life-threatening situation, he swiftly scaled the eight-foot security fence. While running to the building to render assistance, he asked Job Control to contact the hospital for possible support.

As he reached the burning building, Capt Sordo was able to determine that the truck was unattended and no one was in danger. However, a trailer containing two acetylene tanks, two oxygen tanks and a generator was attached to the truck. Seeing the immediate danger from the tanks and the extreme heat, he entered the truck through the passenger’s door and moved it away from the flame-engulfed building.

Capt Sordo’s timely response to a dangerous situation prevented the destruction of valuable Air Force assets and possible injury to firefighting personnel. His actions have earned the TAC Outstanding Achievement in Safety Award.
Incidents and Incidentals with a Maintenance Slant

Where did that come from?

An F-15 Eagle took off on an operational check flight following maintenance. No problems were experienced during the flight but, during the final turn for landing, a panel fell from the aircraft when the speedbrake was raised. Although no damage was caused to the airframe, a fuel tank vent line was broken.

Normal preflight checks were accomplished and the aircraft was readied for flight. Panel 66 had been written up in the forms as being removed. The “Corrected By” block and red X were signed off; however, both individuals had inspected the wrong panel to verify that the installation had been accomplished.

It doesn’t do much good for your people to document the work they’ve done if you don’t pay attention to what they’ve written. Incomplete misinspection = another dropped object. Sooner or later one of these dropped objects will result in losses we won’t want to even think about.

Got my signals crossed

An F-15 pilot was under the control of a marshaller as he pulled his Eagle into its parking spot. During the final stages of maneuvering the jet into place, the pilot stopped taxying when he became confused by the crew chief’s non-standard hand signals. Unfortunately, that left the F-15’s exhaust pointing straight at a small prop-driven aircraft parked nearby. When the pilot added power to start rolling forward again, the exhaust caused damage to the small aircraft’s flight controls.

The standardized hand signals for aircraft movement provide a shorthand for communication between ground crews and pilots. When everyone involved knows and uses the estab-
lished signals correctly, the whole process of moving aircraft on busy ramps full of AGE and other aircraft is made much simpler and safer. The time to know those signals is before you hit the flight line, not when you've got the pointy end of a jet coming your way.

FOD: A nasty word

MSgt Dennis Manley
1 TFW/FOD Prevention NCO
Langley AFB, VA

FOD—that's one of the nastiest acronyms circulating in today's Air Force. Why? As everyone knows, those three letters stand for foreign object damage. The day-to-day results of FOD cost us combat capability, tax dollars and potentially aircrew lives. Those are all resources that could be much better spent on other programs and areas that we need badly.

Unfortunately, FOD may not always be easily recognized because it comes in many forms such as a screw, washer, stone, lockwire or soda can. These items end up at the wrong place at the wrong time, on or near an operating jet engine or aircraft. They can be sucked up by the engines, caught in the aircraft controls or cause cut tires.

You may be thinking, "Well, that's their problem down there on the flightline; I don't work near the airplanes." Wrong answer! You may not work in an organization directly related to aircraft maintenance but one that requires you to be on or near the flightline just the same. How about all the trash that is left in base parking lots? It's amazing how that stuff manages to make its way onto the flightline.

But, knowing a little bit about FOD is only half the battle. The big problem is: How do we stop FOD? We can start by "thinking FOD" and remembering that prevention is our most important weapon. AFR 66-33 lists a myriad of ways you can prevent FOD and steps you can take when working on or near the flightline. Here's a handy, quick reference for your own personal anti-FOD campaign, the four Ps of FOD prevention.

- Pack up all tools and hardware after use.
- Pick up and discard all foreign objects and trash on or near the flightline.
- Police up during FOD walks, after maintenance and before engine runs.
- Practice FOD prevention at all times.

FOD will only stop if you and I both do our part by being FOD-conscious at all times. Remember, "Think FOD."
Hunting season is upon us once again. And once again you'll be inundated with all the standard firearm and hunting safety rules we've heard so many times before. Well, not this time; not all of the rules anyway. I'd like to talk with you about one, and even then in a different light.

Being in the woods armed and with other hunters who are also armed is really a challenge. Your main concern is not getting shot or, on the other side of the coin, not shooting someone else. I'm talking about making sure what you have in your sights is, in fact, what you want to shoot. But, for the other guys, turn that around and say "Make sure what the other hunter has in his sights is not what he wants to shoot."

Since we are in the military, we all either have, or have access to, camouflage clothing—the Battle Dress Uniform (BDUs). Being a Combat Arms Instructor, I have several sets. Combat controllers, SPs, PJs, EOD troops and a few others are all in the same situation. They too wear the BDU. For other folks who don't wear BDUs, they're readily available through your average "G.I. Joe's" military surplus store.

BDUs are great. They're made of heavy construction to ward off briars and stickers, lots of big pockets to pack a whole host of stuff in, and being of four different colors, they blend in nicely with the woods and weeds for those who have color vision. Ah ha! Color vision—the key word. Hunters go into the woods and weeds after deer, elk, squirrel, boar and bear wearing their BDUs, thinking they will become "invisible" to their quarry. Hey y'all, animals can't see color. Did you know that? That's right, all they see is black.

Animals can't see color. They see black and white shades of gray.

white and shades of gray. So what good is four-color camouflage clothing to a hunter? Who is he trying to hide from, the other hunters or the hunted? Here's a quickie physiology lesson for you: the retina of the human eye is made of rods and cones. The rods pick up light and transform it into signals which the brain interprets as black, white or gray in between. The cones act in the same manner only they are for color. Pretty neat, huh? The Master Design Engineer had it together on this one. Animals—mammals, that is—don't have cones in the retina, only rods. Consequently, they don't see color. So, what color is four-color camouflage to an animal who can't even see it?

Blaze orange has been determined as the solution to being seen in nature. Blaze orange doesn't exist anywhere in nature and it's very noticeable and "loud" to those with color vision, even defective color vision. I'm color blind; my reds, greens and browns are all screwed up, but I can spot blaze orange at least fifteen feet away. Really, even with my messed up concept of colors, I can see blaze orange quite vividly. Your best bet for hunting safety this year is to go into the woods glowing and reeking of B.O. (that's Blaze Orange; the deer will smell you quick enough). Don't worry, the deer can't see it. They don't see color, remember?
If you don’t believe me, try this experiment. Get some black and white film and some color film for your 35mm camera. Take your camos and your B.O. vest, hat, etc., into the woods. Hang both on a bush or from a limb and take a picture of the clothing. When the prints come back, I believe you will see the light. Blaze orange blends into the woods and weeds better than the camouflage. Go even one better than B.O., go blaze orange camouflage. You’re sure not to be seen by the critters, but you’ll be right in style in the latest hunting apparel.

What all this leads to is making sure you’re not a target. Every year stories find their way into local newspapers about somebody who got shot because he looked like a deer. If he was wearing his orange, there would have been no problem. Deer don’t see color and they don’t wear clothes. If you’re in the brush and in camo, it’s pretty easy to be confused for something else. How many times have you put antlers on a bush? The combination of angle, just the right lighting and excitement all lean in the direction of deer and it’s usually a big deer, too. You’ve got a pretty cool head, right? Little, if any, buck fever? What about the other guy who has his crosshairs super-imposed on your chest? How cool is he? Does his buck fever thermometer boil at the sight of a deer? Or what he thinks is a deer? Let’s not find out.

Birds do see color and camouflage is necessary.

Turkey hunting is something all together different. Birds do see color and camouflage is necessary. Extra caution on both sides of the fence is also necessary. One problem which complicates matters is the fact that calls are normally used to lure in turkeys. With the calls on the market today, you can really talk “turkey.” If you call on your slate box or the ‘ol gobble tube, I certainly hope you’re in the woods alone. To sound like the hunted as well as maybe look like the hunted certainly doesn’t put things in your favor.

Don’t be afraid to wear blaze orange while hunting this year. It doesn’t bother the deer, and it may make the critical difference in keeping you alive to hunt again next year.
TAC CREW CHIEF SAFETY AWARD

As a dedicated crew chief and unit FOD monitor, SSgt Querry has served as a role model for the entire AMU (aircraft maintenance unit) in his commitment to mishap prevention. His attention to detail resulted in zero defect ratings on all FOD and safety inspections of his aircraft. His self-motivation to perform daily spot checks of tool boxes, AMU support equipment and vehicles has also resulted in the identification of several potential safety and FOD hazards. SSgt Querry also leads the daily FOD walk for both shifts and has inspected all aircraft ground wires and AGE for possible problems.

SSgt Querry’s continual alertness was demonstrated when he noticed several rivets missing from an aircraft intake during a preflight. After engine specialists did not detect any defects during an engine borescope, the missing rivets were replaced and the aircraft flew on time. His alertness averted what could have been a potentially serious mishap had the engine actually suffered foreign object damage from the missing rivets.

SSgt Querry’s concern for safety is second to none, and his demonstrated leadership in actively pursuing mishap prevention has earned him the TAC Crew Chief Safety Award.

SSgt Richard J. Querry
405 AGS, 405 TTW
Luke AFB, AZ

TAC FLIGHT SAFETY AWARD OF THE QUARTER

Capt John Caudill’s innovativeness and hard work as a Squadron Assigned Flight Safety Officer have helped make his squadron’s safety record one of the finest in TAC. His feeling that stronger flight safety awareness was needed in maintenance and life support resulted in the establishment of a regular meeting for squadron AMU and life support personnel to highlight current flight safety interest areas. He also instituted a program to recognize the outstanding aircraft/crew chief combination for each quarter which emphasized the crew chief’s importance in the safety chain. Presentation of this award at a combined maintenance and operations meeting has created excellent rapport between both groups.

Capt Caudill also instituted a GLC (G-induced Loss of Consciousness) program that requires quarterly G-suit refitting and an academic class covering G-awareness. He also instigated a shift in centrifuge training scheduling to include older pilots who hadn’t had access to the current training offered during RTU and fighter lead-in.

Capt Caudill’s aggressive efforts to integrate flight safety into his unit’s daily operations have earned him the TAC Flight Safety Award of the Quarter.

Capt John F. Caudill
94 TFS, 1 TFW
Langley AFB, VA
Use precaution, not remedies

Precaution. Look at that word a little closer. Pre-caution—something you do in advance to protect against possible failure or danger. If we would use a little more precaution, then many safety investigations, accident reports and trips to the hospital could be avoided completely.

One weapons load crew was putting inert MK-82s on an A-10 during a steady rain. Using an MJ-1, the driver lifted the bomb about six inches above the bomb trailer while the load crew chief checked the bomb’s position on the bomblift table. Determining that the bomb was situated properly, the crew chief cleared the driver to back up. Even though the members of the team tried to steady the bomb by hand, it slid off the bomblift when the driver stopped the vehicle. The nose fuse and tail fins were damaged in the fall.

The load crew was using the proper tech data, and everyone was fully qualified to do the job. The steady downpour of rain acted as a lubricant between the metal casing of the bombs and the aluminum support rollers of the bomblift. Even though not required by the TO, use of the tie-down strap would have prevented any movement of the bomb during starts and stops of the lift and associated vibrations. In this instance, a little precaution could have prevented the need for corrective actions later.
It just gets in the way

The A-7s had had a great day on the range with live Maverick deliveries and strafe passes using high explosive incendiary ammo. Later, during the postflight dearming, the ground crew noted that armament panel F-7 was open and wouldn’t close. Back in the chocks, the crew chief noticed a one-inch square puncture on the nose gear door. Further examination of the panel and skin puncture showed that the two were directly related.

The armament panel apparently came open during flight and, in the fully open position, extended into the path of the aft nose gear landing door. Whether the panel came open due to a bad fastener or improper closure was impossible to determine. We can keep on top of such problems by ensuring that panels are cinched down properly and shaky fasteners are replaced before the airplane is released to fly.

Watch this

The flight of A-10 Warthogs taxied to the end of the runway for quick-check and arming prior to takeoff. After one of the jets was cleared for arm up, the ground crew started removing the safing pins from the triple ejector racks. When the team chief removed the pin from station 2 of the TER, the practice bomb fell to the ground; the spotting charge didn’t go off.

The culprit turned out to be a mechanical malfunction in the TER, but that’s not the reason for this story. The importance of this item is that “the spotting charge didn’t go off.” Why not? Because the arming crew was following approved technical procedures. These procedures require the TER rack safety pins to be pulled before removing the BDU-33 safety blocks. Why? To prevent some of the horror stories usually reported here about second- and third-degree burns from practice bomb spotting charges functioning.

This story had a happy ending because the arming procedure was done “by the book.” Following the script provided does prevent mishaps. Makes for a nice story and a happy ending.

Pop goes the ...

A weapons load crew was sent out to upload a captive AIM-9L on an F-16. During the process, the missile was pushed past the launcher detents. When the crew tried to free the missile in order to reposition it, the missile popped free of the rail. The sudden weight change caused the number three man to lose his balance and control of the missile, allowing it to hit the concrete ramp, damaging both the radome and the guidance and control unit. A little less brute force while installing the missile on the rail and more attention while trying to correct the situation might have kept this from happening.
GETTING OUT:
have a plan
You’re cruising along in your single engine fighter, finding it hard to believe that somebody is paying you to do this. Suddenly, fate decides that your number is up and pulls the plug on your sole source of thrust.

Whether it’s an immediate loss of thrust or an impending flameout, the resulting “sinking” feeling can cause a cold sweat on the coolest of jocks. The trick to coping with the situation, as with an emergency procedure, is to pre-plan a course of action. Obviously, the actual causes of a flameout, or any other significant loss of power, and the resulting flight patterns are unlimited; but your decision process can be greatly aided by pre-planning and studying the actions available to you.

The first step of this mental game plan should be to establish when you are going to eject. Probably the hardest part of any ejection is making the decision to get out of the aircraft. It’s not easy for a pilot to voluntarily leave the warm and seemingly safe surroundings of his cockpit. Every fighter pilot believes in his capability to recover an aircraft, but it is equally important to be able to recognize a bad situation, and commence the ejection, when necessary, as early as possible. This recognition process can be sharpened by reviewing possible emergency situations before you ever walk out of the squadron and by establishing personal guidelines on when you will initiate an ejection.

Making this commitment to get out of a jet when it becomes necessary gives you a framework and backup plan to use in formulating your recovery attempt. Now you can apply the procedures for handling the situation within workable constraints that allow a margin for survival. Deciding early on ejection is probably the biggest step towards living to fly another day.

Deciding early on ejection is probably the biggest step towards living to fly another day.

Once you’ve mentally prepared for ejection and know your personal limits for staying with a crippled jet, you can begin concentrating on the appropriate approach and landing.

The same need to pre-plan when you’ll get out applies to any crippled fighter: single seat, single engine or multi-crew, multi-engine. Waiting until it’s time to pull the handle is too late to start seriously considering the possibility. You’ve got to plan and think ahead.
Amn Larry J. Arceneaux, 347th Supply Squadron, 347th Tactical Fighter Wing, Moody AFB, Georgia, was dispatched to refuel an F-16 for an FTD class. When he arrived at the aircraft, he observed the trainee draining the aircraft sump for the visual fuel sample. When the sump valve stuck in the open position, JP-4 jet fuel splashed into the trainee’s eyes. Amn Arceneaux quickly reacted by taking the emergency eye wash bottle from his refueling unit and flushing the individual’s eyes. He then called for the fuels expeditor to ensure the victim was transported to the hospital for further care. Amn Arceneaux’s quick and precise actions saved the FTD trainee from eye injury or possible sight loss.

Sgt Scott R. Eisenhauer, 2 TFTS, 325 TTW, Tyndall AFB, Fla., was performing runway operations monitor duty. It was his first solo duty since he had completed his training program. During his duty period, Sgt Eisenhauer saw that a T-33 on final approach was gear up. He immediately fired the flares and made a radio call on Guard frequency, sending the T-33 around and preventing a gear-up mishap.

On more than one occasion, SSgt Joel F. Harris' (116 CAMS, 116 TFW, Dobbins AFB, Georgia) alertness and prompt actions have saved personnel and valuable aircraft resources from hazardous situations.

While launching his aircraft, SSgt Joel F. Harris noticed that the F-15 parked in the adjacent spot had caught fire from a secondary power system malfunction. He immediately informed the pilot in the aircraft he was launching of the hazard and quickly completed taxi checks and marshalled the aircraft to a safe location.

Later, during an integrated combat turnaround, SSgt Harris was performing duties at the #1 APG position when he observed another member of the ICT team approaching the danger zone of an F-15’s engine intake. SSgt Harris entered the danger zone and pulled the individual to safety just as he was entering the engine inlet vortex area.

SSgt Harris’ outstanding performance displays the skill and ingenuity of a dedicated professional. His alert actions have saved valuable resources and possibly the life of a co-worker.
Second Lieutenant Steven G. Masters, F-16 student pilot, and Major Wolfgang Marr (German Air Force exchange officer), instructor pilot, were performing a fuel check following their first intercept when they noted only 3,000 pounds of fuel remaining, 2,000 pounds less than at the start of the intercept. Suspecting a major fuel leak, they immediately reduced power and turned toward the nearest suitable runway. Noting abnormally high fuel flow for the selected thrust setting, Major Marr directed a flight rejoin, then obtained a visual inspection which confirmed a massive fuel leak in the aft fuselage.

While they referenced the emergency procedures checklist and directed the chase aircraft to watch for any change in the flow from the fuel leak, Lt Masters flew the aircraft while Major Marr coordinated with ATC and provided guidance on heading, altitude and thrust setting to maximize range and minimize fuel consumption. The pilots subsequently performed a straight-in SFO and safely landed the aircraft with only nine minutes of fuel remaining.

In preparation for the morning flying schedule, the Electronic Warfare System (EWS) End-of-Runway Crew, 347 CRS, 347 TFW, Moody AFB, Georgia, had placed the lighted signs on a taxiway prior to the first takeoffs. At 0700, SSgt Clarence C. Brooks noticed the cotter pin and six inches of the connecting chain were missing from the pintle hook of their trailer. He promptly verified that the chain and pin had been in place prior to moving the signs. He then alerted the EWS Dispatcher and Job Control of the problem and initiated a search. He and 11 other people searched and backtracked the one-half mile distance from the shop to where the sign was placed as well as the immediate taxiway without success.

SrA Christopher Ryberg, not satisfied with the results of their search, continued to search a 10-foot corridor of the taxiway. He finally located the black cotter pin hidden in the asphalt slab divider in sufficient time to avoid delaying the taxi of the morning’s first sorties.

Immediately upon returning to their shop, SSgt Brooks and SrA Ryberg inspected all cotter pins and chains on EWS vehicles and trailers. Deciding that nylon-reinforced steel cord would be a safer alternative, they subsequently replaced all the metal chains and pins in use.

The safety consciousness and diligent efforts of SSgt Brooks and SrA Ryberg avoided the possible FOD of an F-4E aircraft and prevented similar problems from occurring in the future.

Second Lieutenant Bernhard Tantarn (German Air Force), student pilot, and Captain Glen J. Plaisted, instructor pilot, 35 TTS, 35 TTW, George AFB, CA, had just finished night formation work, during the lieutenant’s first local night flight in the F-4E, and had returned to the airfield for instrument patterns and touch and go. After the third touch and go (IP demo), aircraft control was returned to the student in the front seat. When he raised the gear handle and slat/flap switch, the master caution and check hydraulic warning lights came on indicating a total utility failure. With approximately 3,300 pounds of fuel remaining, they declared an emergency and Lt. Tantarn made a right climbout to set up for a 15-20 mile straight-in.

The SOF was contacted and notified of their problem as they planned for an approach-end barrier engagement and completed all applicable checklists. When the aircrew had extreme difficulty in obtaining visual contact with the runway due to ramp lighting, Capt Plaisted took control of the aircraft to allow the student to pick up the runway. When the runway environment was finally picked up at 3 miles, aircraft control was returned to Lt Tantarn who made a successful approach-end barrier engagement at night.
ATVs: Using them safely

Leonard A. Sorrentino, P.E.
24 AD/SEG
Griffiss AFB, NY

Government safety experts say manufacturers should voluntarily stop selling motorized all-terrain vehicles (ATVs) for use by children or face the threat of a federal ban. This was the headline in a recent New York Times article. Although this strong criticism is a recent occurrence, this vehicle traces its ancestry back many years. In 1839, a blacksmith by the name of Kirkpatrick Macmillan completed work on the first self-propelled two-wheeler in Scotland. After that came the tricycle which was designed for a woman to ride instead of a bicycle. Finally, someone got really daring by adding a motor and the evolution was in full swing. As a result, we got the motorcycle, motorbike, motor scooter, moped and now the latest development—the ATV.

Invented in the early 1970s by Honda, the ATV was designed to track through rugged terrain and was used for a variety of tasks, including agricultural use, ski patrolling, crowd control and rescue work. The Air Force is planning the use of ATVs by maintenance and security forces to support the Over-the-Horizon Backscatter (OTH-B) Radar system.

It wasn't until 1979 that the general public discovered the machine and the popularity of ATVs as off-road recreational vehicles escalated. Unfortunately, ATV-related accidents also exploded at an alarming and accelerated rate. In 1982, the Consumer Product Safety Commission (CPSC) reported 22 deaths from ATV-related accidents; compared with 324 deaths occurring from 1983 to 1985. The most startling statistic reported was the 78,000 ATV-related injuries treated in hospital emergency rooms in the first nine months of 1985, up from 8,600 in 1982. That frightening statistic showed 22% of the injuries and deaths from ATV use have involved riders between the ages of 5–12 and 46 percent of the riders were under 16. Apparently many of those accidents occurred because of carelessness. Although ATVs were designed for off-road jaunts over rough and uneven surfaces, they are capable of speeds of up to 50 mph. As many drivers are children riding on slick, hard surface roads, accidents involving excess speed are commonplace. Other accidents involved drinking and driving, riding double or “popping wheelies” (rearing back and pulling up the front wheel).

Three-wheelers look inherently safe and stable. However, they have a high center of gravity and tip over very easily. In an effort to promote safe use of ATVs, the Specialty Vehicle Institute of America (SVIA) was formed. The institute trains instructors to teach a four to six hour course for first time riders. A toll-free 800 number (1-800-447-4700) has been established so riders can find out where the nearest course is taught. The SVIA also publishes several pamphlets on ATV safety material which address safety measures and riding techniques and helps parents decide if their children can handle ATVs.

If you or your kids ride an ATV, here are some helpful tips which can make you a
safer rider:
— Choose an ATV that is the right size for you. Your dealer can help you make this decision.
— Before riding, read and follow manufacturer’s guide for use, maintenance and pre-use checks.
— Always wear protective clothing (helmet, goggles and protective clothing).
— Get professional instruction before you begin riding. ATVs have unique handling characteristics. Practice on a level area and then in a more difficult, but controlled, environment before tackling all-out, rough terrain.
— If children are allowed to ride, provide training and adult supervision.
— Do not exceed speeds that are safe for the terrain. Many accidents happen when a rider attempts a turn or hits a rock or other small obstacle and loses control.
— Do NOT use ATVs on paved roads or streets. It’s illegal in most states and extremely dangerous.
— Do NOT ride double. Three-wheeled ATVs are designed for one rider only.
— Do NOT operate an ATV when under influence of alcoholic beverages.

Base safety offices may want to consider forming an ATV Club or establishing a hands-on ATV off-road practice program if they have a high ATV riding population. Information on how to establish such a program is available by writing to: Specialty Vehicle Institute of America, 3151 Airway Avenue, Building K107, Costa Mesa, California 92626.

Editor’s Note: Both the 347 TFW (Moody AFB, GA) and the Tactical Fighter Weapons Center (Nellis AFB, NV) have very active ATV training programs. For TAC bases interested in developing a program, please contact Mr. Green at Moody (AV 460-3968) or CMSgt. Pauppard at Nellis (AV 682-2140) for additional information. They are proud of their successful programs and are willing to share them with you.

Taking chances

Interested in playing a game in which the odds are 5 to 1 in your favor?
The game is called Russian Roulette—and it’s one of the most exciting, but dangerous, gambling games there is. The odds are always 5 to 1 in your favor, but that 1 is a real killer.

Soldiers in the Russian army started the game when they became bored with service on some far-flung frontier where nothing ever happened. One bullet was put into a six-shooter, the cylinder was spun and the soldier would put the revolver to his temple and pull the trigger.

The chances were 5 to 1 there would be a click and no explosion.

Not many of us are foolish enough to bet our lives on the pull of a trigger. But there is a variation of this game that too many of us play every day, both on and off the job. Like Russian Roulette, it’s a form of “beat the odds.”

We play this game when we ignore a safety rule ... or take a shortcut ... or refuse to wear seat belts ... or fail to put the machine guard on ... and in scores of other ways as well.
Taking chances is like betting against the odds. But even when you do win, you don’t end up with anything you didn’t have in the first place ... like your fingers, your eyes or your life. So why take the chance? The stakes just aren’t worth it.
— Author Unknown
TAC WEAPONS SAFETY AWARD
OF THE QUARTER

TSgt Scott E. Westfahl was tasked to develop a weapons safety program for Air Forces Iceland (AFI). This was no easy task since AFI is composed of squadrons and detachments from TAC, MAC and SAC and also routinely hosts units from the Air National Guard, Air Force Reserve and various NATO countries. TSgt Westfahl designed the program from scratch and ensured that all appropriate directives of the services and organizations involved were included.

TSgt Westfahl’s exceptional abilities, coupled with strong command support, have resulted in a superior weapons safety program. His program was rated “best seen” by a 1 AF staff assistance team and “outstanding” during the TAC IG’s UEI. His program has also received safety award recognition at both the TAC and USAF levels. The direct results of TSgt Westfahl’s knowledge, dedication and leadership have earned him the TAC Weapons Safety Award of the Quarter.

TAC GROUND SAFETY AWARD
OF THE QUARTER

Technical Sergeant Glenn W. Rosse’s performance as unit safety NCO for the 366th Aircraft Generation Squadron (AGS) has contributed to significant decreases in both the unit’s on-duty and off-duty mishaps. In the last six months, on-duty mishaps dropped from 7 to 2 compared to the previous six months and off-duty mishaps from 12 to 1. Disabling injuries were also reduced drastically to no more than one in each category and the unit’s DUI (driving under the influence) rate was reduced by 50 percent.

TSgt Rosse was instrumental in turning around a marginal weapons safety trend within AGS. He ensured that all discrepancies from earlier inspections were satisfactorily corrected and, as a result, there was only one minor discrepancy during the annual weapons safety inspection. Inspectors noted that weapons safety practices had “improved dramatically.” His efforts also contributed to an “excellent” rating for AGS leadership and management during the HQ TAC IG unit effectiveness inspection.

TSgt Rosse’s continual stressing of the use of seat belts at roll calls contributed to saves in two separate life-threatening mishaps involving AGS personnel. In both cases, the use of seat belts in two serious roll-over accidents resulted in only minor injuries.

TSgt Rosse’s dedication to mishap prevention and his continual efforts to make unit operations safer and more efficient have earned him the TAC Ground Safety Award of the Quarter.

September 1987
### Class A Mishaps

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### TAC's Top 5 thru Jul 1987

| Class A mishap-free months | 182 TASG, 110 TASG, 138 TFG, 177 FIG, 114 TFG |

### Class A Mishap Comparison Rate

(Cum. Rate Based on Accidents per 100,000 Hours Flying Time)

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I THINK I'VE HAD ENOUGH.

C'MON (MC) LEGS GIT UNDER MY BODY.

WHY IS ALL THEM (MC) PEOPLE STANDIN' 'ROUND THAT CAR? WHY TH' FLASHIN' RED LIGHT?

I JUST DON'T UNDERSTAND WHY I DIDN'T SEE HER IN THE STREET...

I DIDN'T HAVE THAT MUCH TO DRINK.

IT'S JUS' NOT WORTH IT.