

TAC ATTACK

NOVEMBER 1987



HARDIGSON

ANGLE OF ATTACK



We have had one month to review the stats from last year and, in all but one area, we were very successful. We accomplished our TAC goal of achieving an aircraft mishap rate below 3.0 (based on number of mishaps per 100,000 flying hours) by reducing our rate to 2.2 for the year. We also brought our command-controlled rate, those mishaps which could have been prevented by someone wearing a TAC patch, to *the lowest level ever--1.1*. In our weapons safety activities, we reduced the number of weapons mishaps by a significant 15%.

The one area where we stubbed our toe this year was in the number of off-duty ground mishaps, principally traffic, which resulted in fatalities. This trend was briefed at our recent TAC Commanders' Conference and all of our senior leaders have taken a special interest in turning it around. This loss of valuable TAC members, our friends and co-workers, should be unacceptable to each one of us. The only way we can hope to solve this problem is for everyone to set a proper example for our people to follow.

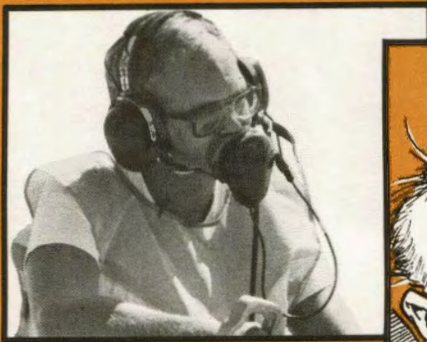
Our overall outstanding record for the past year is due to three qualities that are demonstrated throughout TAC: enthusiasm, discipline and pride. Each of us in Tactical Air Command is involved in an exciting profession and you

exemplify this daily by doing your job in an energetic, innovative and highly motivated manner. You welcome each day as it presents new challenges for your skills and abilities. Your increased discipline, both on the ground and in the air, is largely responsible for your excellent safety record. You've shown that the way in which you maintain airplanes, preflight the fire truck and service customers at Finance is just as important an indicator of self-discipline as the way sorties are flown. Finally, each of you displays a great deal of pride in wearing the TAC patch and being a vital member of this team. As long as we keep these qualities of enthusiasm, discipline and pride finely tuned, we can expect the year ahead to be another great year.

Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC ATTACK

DEPARTMENT OF THE AIR FORCE



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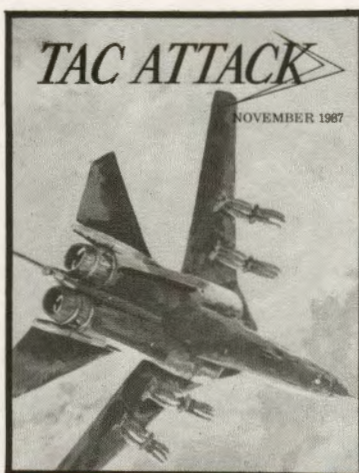
TACSP 127-1

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STAYING

Lt Col Pete Ablor
4443 TTS/CC (AIR WARRIOR)

I have spent a lot of time in my flying career reading and doing my own analysis of mishap reports. Why did this accident happen? How could these two airplanes possibly have run into one another? What could the pilot have been thinking when he flew a perfectly good airplane into the dirt? All these questions have rattled through my mind. Despite the extensive efforts of countless people in mishap investigation and analysis, the final report always leaves me with as many questions as it answers.

Those questions are always a little more subtle than the black and white of the final report. Like, what was the pilot actually looking at when he got in trouble? Or, did he really end up channelizing his attention or was he simply overloaded by the tasks at hand? Where was the breakdown in training? At his last unit? In pilot training? In RTU? Who really knows? I don't, but the questions are still there. Some mishap reports attempt to address these as deeply as they can, but they will never be able to answer the questions to my satisfaction. I know, I've been delving in an area where answers may never be available, but let me take another tack at this subject and discuss one area, ejection – not just the decision, but the whole area of training that leads up to the ultimate decision to abandon the aircraft.

As an acquaintance of mine

finished reading a recent mishap report, he stated that he would never have stayed with the airplane – that at point "X" he would have been sure to eject. I argued that point with him extensively. The mishap board enjoyed the luxury of examining 30 seconds of flight and breaking it down into micro-milliseconds of time and events. Reading of the report probably took a hundred times as long as the actual mishap sequence. I'm convinced that this pilot did not eject because he was just too busy trying to stay alive!

In human response to a perceived danger a person will almost always try to survive – to do whatever is necessary to ensure safety. The average aircrew member is trained to do many tasks and to apply a vast amount of knowledge in carrying them out. The end result of that training is an individual who is supremely confident in his or her ability to face any challenge, to master any problem, to recover the airplane from regimes where "no man has gone before." Every time a pilot successfully handles a difficult emergency, recovers from an out-of-control situation or successfully presses the limits of the foul line to get a better strafe score, that invincible attitude is reinforced. It surely follows that the longer pilots have been flying, the more certain of their personal abilities they become. The more pilots are certain of their abilities to control or regain control of a situation, the less likely they are to eject from an aircraft.

IT COULD GET YOU KILLED



In human response to a perceived danger a person will almost always try to survive.

I had my first really close call many years ago. Basically, I let a student go too far. We ended up in a high-speed dive relatively close to the ground. By the time I got my wits aligned, we were about 75 degrees nose low, passing 6,000 feet and accelerating past the "red line" airspeed of the jet. At that point I didn't think, I just reacted. I grabbed the stick and pulled. It took 8.5 G's and I recovered at 300 feet above the ground. Should I have ejected; could I have ejected? I doubt it. At any rate, the thought never entered my mind. I was too busy trying to stay alive. I made a gut-level reaction on how to get out of the bind I was in. In this case, I was right. In another instance, I might have been the subject of one of those exhaustive investigations into why a qualified instructor pilot flew a perfectly operating aircraft into the ground.

When the going really gets tough, a pilot's first instinct is going to be to fly the airplane. In cases where the airplane can't be recovered, the pilot probably will not immediately recognize that fact. When he can't recover the airplane, he will be subject to short-or



STAYING ALIVE: it could get you killed

long-term confusion. He will continue to attempt to fly the aircraft until he realizes the futility of that approach. The key word is *realization*. In some instances, such as battle damage or a severe fire, the realization and the ultimate decision are easy. In other situations such as out-of-control or a decision to press the attack even though the aircraft is inside the MAP, the realization that you've gone too far usually comes too late, if at all.

Where is this all leading to? I'll tell you. You have been trained to fly your aircraft. Have you been trained to abandon the aircraft? I don't mean in the procedures, the ejection system and the like. I mean in the simulator, in academics and in bar talk with the old heads. Have any of you been busted on a

simulator evaluation for not ejecting? I'll bet less than 1% of you have. I actually busted a simulator evaluation because I hadn't completed the full boldface procedures before I ejected! I had lost control of the situation to the point that ejection was my only option. However, I was criticized for not doing what we have been trained to do – fly and recover the aircraft.

I have since realized that I needed to train myself to eject. High-speed runway departures, loss of control on roll-in and other critical areas are stored in my decision-making computer as times to consider ejecting immediately – times to make that judgment. Can I make it or am I unsure? If I'm unsure I may stick around for another few nanoseconds, but it

I'm always mindful of the ejection envelope and I will pull the handles while I'm still in a position where I know I can make it – in the parachute.

will not be more than that. I'm always mindful of the ejection envelope and I will pull the handles while I'm still in a position where I know I can make it – in the parachute.

Take a few minutes and ask yourself some hard questions. Are you a pretty good flier? Do you spend an appropriate amount of time studying your profession? Can you handle just about any situation thrown at you? Have you "what-ified" all of the possible situations you might expect to encounter during a sortie? Add one more question to your thinking. While you're assessing your ability to handle any situation, analyze the dichotomy of how you've been trained to fly versus how you've been trained to survive. If all of your training to survive is wrapped up in your flying ability, remember – it could get you killed.





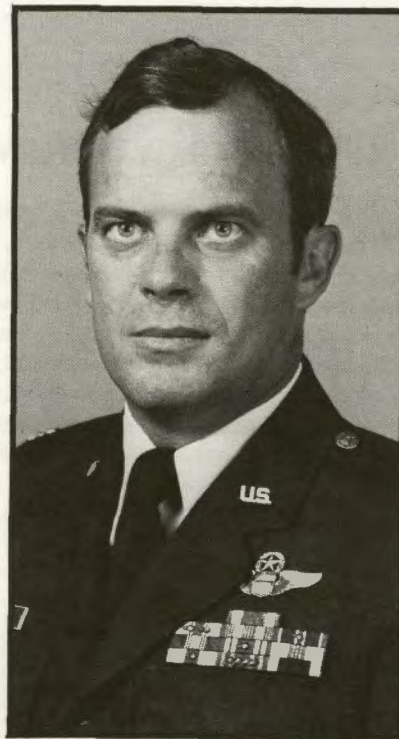
AIRCREW OF DISTINCTION

Major Robin K. McAllister was instructing in the front seat of an F-16B during an instrument training sortie while his student in the rear cockpit flew a TACAN approach. Just prior to gear retraction during the low approach, the engine RPM suddenly rolled back, followed by several severe compressor stalls. Maj McAllister took control of the aircraft and, quickly determining there was insufficient runway to land, gently maneuvered away from the ground and turned the EEC/BUC switch off. With no improvement in engine response and airspeed decaying, he placed the EEC/BUC switch to BUC, gently turned the stricken aircraft away from the populated area around the airfield, jettisoned his

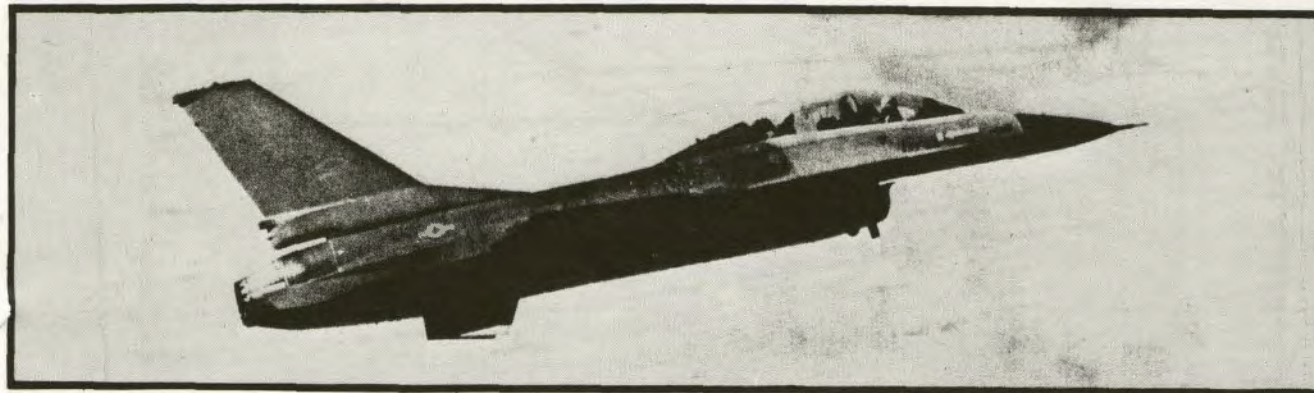
centerline tank and told the other pilot to prepare for ejection.

Shortly after selecting BUC, the compressor stalls stopped but thrust remained low. With his aircraft at 200 feet AGL and 140 KIAS, Maj McAllister started a shallow climb and requested an immediate landing. The most conveniently aligned runway was closed so he was forced to revise his plan while continuing to maneuver his disabled aircraft. Trading airspeed for altitude, he flew to a base key position for the open runway. Maj McAllister then completed a flawless approach and landing.

Maj McAllister's timely decision making and outstanding airmanship prevented the possible loss of a valuable combat resource.



Major Robin K. McAllister
61 TFTS, 56 TTW
MacDill AFB, FL



TAC tips

INTERESTING ITEMS,
MISHAPS WITH MORALS,
FOR THE TAC AIRCREWMAN

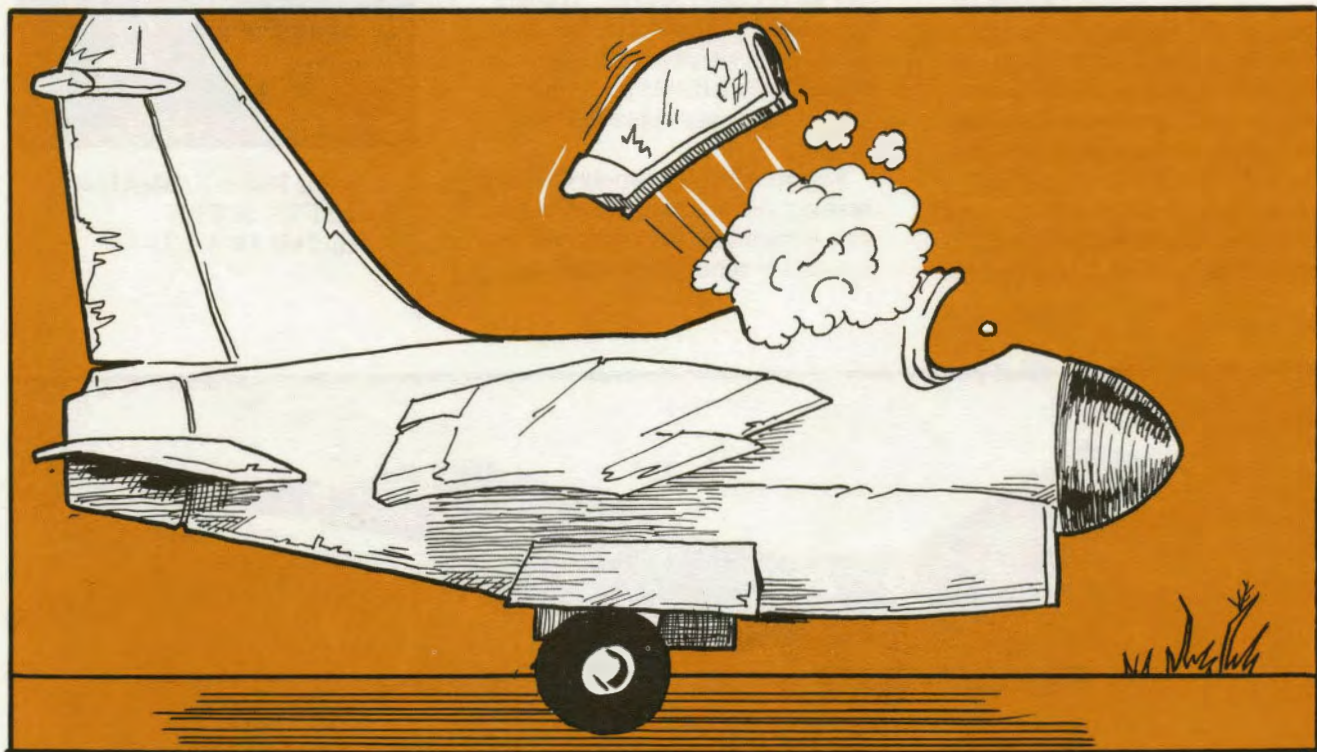
I don't do windows

When an A-7 pilot came out to his aircraft for the first flight of the day, he found ice and frost all over the canopy and windscreen. After engine start, he opened the vent door about 1/2-inch and lowered the lid so the cockpit heat would clear away the frost. His plan was beginning to work. But then the checklist sequence dictated an AOA check; that required the pilot to open the canopy so the crew chief could see hand signals. Boosh! Suddenly it was cold again. When the pilot unlocked his canopy, it sprung open with such force that it sheared the attaching bolts. Then it fell backwards on top of the fuselage, slid down the right wing and fell to the ramp where the

plexiglass broke and the metal frame bent.

What happened? It had rained the previous day and night; then the temperature plummeted below freezing. Moisture had apparently collected on other surfaces, too; like inside the static ports on the left side of the fuselage. Ice was blocking the holes. With the static ports iced over, the vent door nearly closed and the canopy closed, the cockpit overpressurized.

We all know of stories of iced-over static ports. They can be bad news for most aircraft. Looks like we may have discovered a new consequence. Both the pilot and crew chief's exterior inspections call for checking the static ports clear. And at first glance that's probably how they looked. But a little closer look inside would have revealed the ice. Now that we know what can happen, let's look a little closer.



Timing is everything

An F-15 pilot was leader of a two-ship en route to the working area for a syllabus BFM ride when he heard a loud thump that sounded like an engine problem. He immediately checked his engines but didn't notice any apparent problems. He continued the flight and flew three BFM engagements without noting any flight control problems.

After the last engagement, the Eagle pilot directed a rejoin for a routine battle damage check. The upgrading pilot saw that the leader's aircraft was missing most of his right rudder. An emergency was declared and the F-15 was brought back for a successful straight-in approach.

What is the purpose of a battle damage check? It's not just a "mission complete" square to fill. You don't have to wait for the end of a mission to do your battle damage assessment if you suspect a problem, such as an obvious but mysterious thump on your airframe. Check your airframe out anytime the circumstances indicate a need for it.

It only takes a minute

MSgt William I. Vance
1st Medical Group/SGT
Langley AFB, VA

In talking with many fighter crews that attend physiological refresher training, we have become aware of a startling fact. The CRU-60/P oxygen equipment connector is either being overlooked or disregarded during the PRICE check. Maybe it's because the connector stays in the aircraft or because you've never had a problem with one in all the years you've been flying—a result of the old "its always worked before" syndrome.

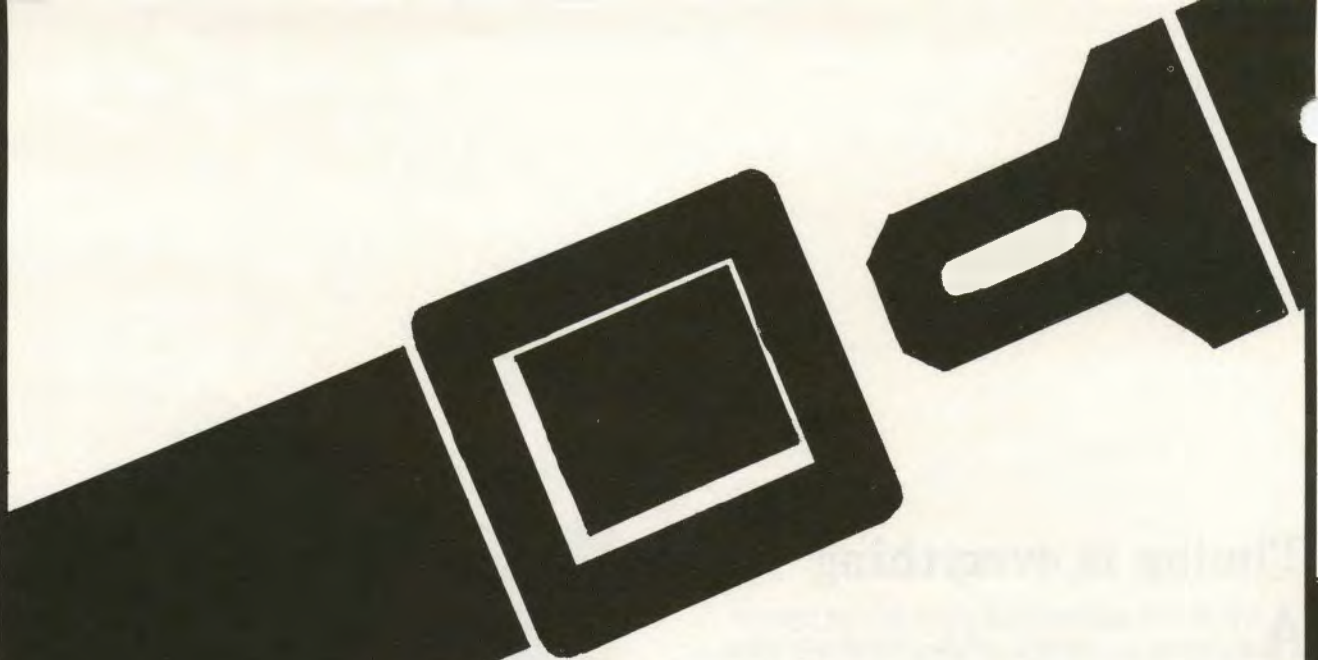


When was the last time you disconnected the CRU-60/P connector from the oxygen regulator hose just to see if it would? It should take approximately 12–20 pounds of force to get them apart.

Now that you have the connector apart, take a look at the following:

1. Check the condition of the sealing gasket (white or green).
2. Check the inlet fitting for the emergency oxygen cylinder for damage and security.
3. Look for a deteriorated, abused or missing "O" ring in the female mask port.
4. Inspect the mask hose for holes, cuts, abrasions or deterioration. Make sure the hose clamps are there and secure.
5. Plug in your oxygen mask, place it to your face and inhale. You should meet a strong restriction, but still be able to draw some air through the connector. This check ensures the disconnect warning device is working.

You can accomplish all of the above steps in about one minute. That's a real bargain for life insurance.



BUCKLE UP

accidents do happen

Sgt Gordon B. Morgan
836th Supply Squadron
Davis-Monthan AFB, AZ

I have heard arguments both for and against the use of seatbelts for quite some time, but it was not until the morning of July 20 that the argument shifted sharply and solely in favor of seatbelts for me.

On that morning, I received an

emergency phone call from the Tucson Medical Center that my wife and 18-month old daughter had been injured in an automobile accident. Nervous and distraught, I arrived at the hospital where I was met by a family counselor. He informed me of the nature of the accident and of the injuries my wife and child had suffered.

My wife had stopped at an intersection with her turn signal on to make a left turn. Moments later, a monstrous cement truck rear-ended her car, pushing it out into oncoming traffic where she was then hit by a west-bound vehicle.

Later I got to see our car. The passenger side where my daughter had been seated was crushed.

The rear of the car was torn to pieces. The baby's car seat had saved her life as it formed a barrier between the crushed metal and her. It also kept her from being thrown out of the car. My wife was thrown, or actually pushed, into the back seat instead of through the windshield. Her seatbelt kept her from flying forward by forming a recoiling effect, pulling her into the back seat and saving her from even more serious injuries.

My wife and daughter both suffered serious injuries from the accident, but if both of them hadn't been locked into place with appropriate restraints, I would be in a much different state of mind today. Because they took that little extra effort to buckle up, I still have my family.

Please buckle up. You never know when you're going to need the protection. ➔

CHOCK TALK

Incidents and Incidentals with a Maintenance Slant

Speedy

An A-10 was up on an acceptance flight following major maintenance. Everytime the FCF pilot tried to speed up for the speedbrake blow back test, the Warthog would wobble with pitch oscillations. When he'd slow down again, the aircraft was stable. Each time he lowered the nose and tried to accelerate, the same thing would happen. The pilot finally got the

vibrated loose at the same time, it's more probable that someone borrowed the computer while the aircraft was down for maintenance. But you couldn't prove it from the forms – there were no entries about the SAS computer at all.

We need to be careful to use the aircraft forms. They tell us what has been done to the aircraft as well as what needs to be done – but only if we use them correctly and make the right entries. Slowing down and taking the time to write in the forms can save hours of extra work and wasted dollars.

Main ADI failure - not MDRed

While flying night instrument patterns, an A-10 pilot noticed his main attitude indicator (ADI) had gone Tango-Uniform. The main ADI showed wings level, but the standby indicator said he was in a 30-degree right bank. A thorough crosscheck of his instruments and awareness of where he was in the pattern confirmed that he was, indeed, in a 30-degree bank. A few gentle taps on the ADI glass did not help; so the pilot landed, using the standby.

When the broken ADI was removed, it was supposed to be MDRed (material deficiency report) so it could be sent to depot to determine the cause of the inflight failure. It didn't happen that way. Somehow the ADI was returned to supply. No MDR was ever submitted. A thorough search of supply channels could not turn up the faulty part.

The loss of the broken attitude indicator prevented the collection of vital information that might help pre-

message and took the path of least resistance – slow. Then he brought the aircraft back for an uneventful landing.

Troubleshooters found the computer that controls the aircraft's stability augmentation wasn't bolted in place. With the SAS computer running around loose like that, certain aircraft maneuvers made it jiggle around, sending faulty inputs to the aircraft's flight controls. Since it's highly unlikely that both bolts

vent future problems and maybe even an accident. The MDR system is intended to help the folks at the air logistics centers gather data to spot trends on malfunction-prone parts and equipment. It may also help to correct design problems that only become obvious after extended use in the field. The only way these problems can be documented is for those who work around the jets to write up the part that malfunctions.

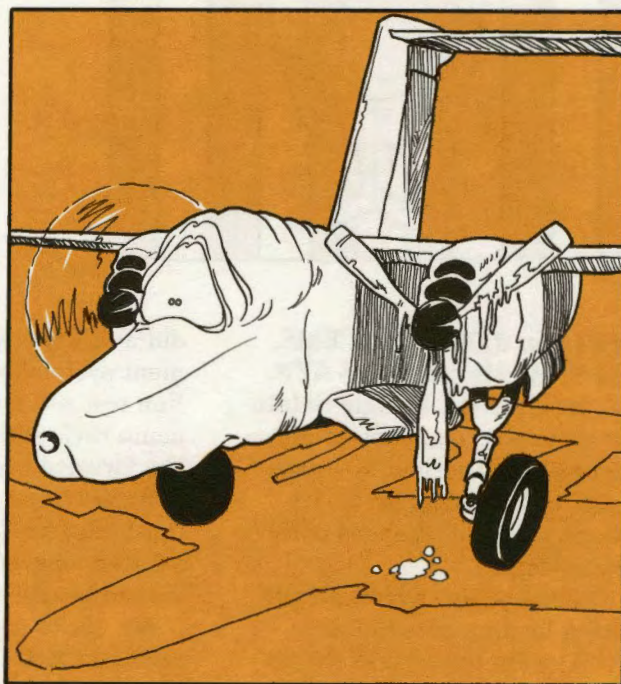
This time the malfunction occurred in a controlled, stable environment with no serious consequences. The next time it could be at night on a low-level route with fatal results.

School on ice

After starting the number one engine and waiting for it to warm up before unlocking the prop, an OV-10 pilot was surprised when the engine popped and flamed out. Wonder why a motor would behave like that?

Later, some troubleshooters came to find out why. When they cranked number two, several chunks of ice tumbled out of the inlet. Looking around, they saw that ice had accumulated inside both engine inlets. Apparently, the crew chief didn't notice it during his preflight inspection.

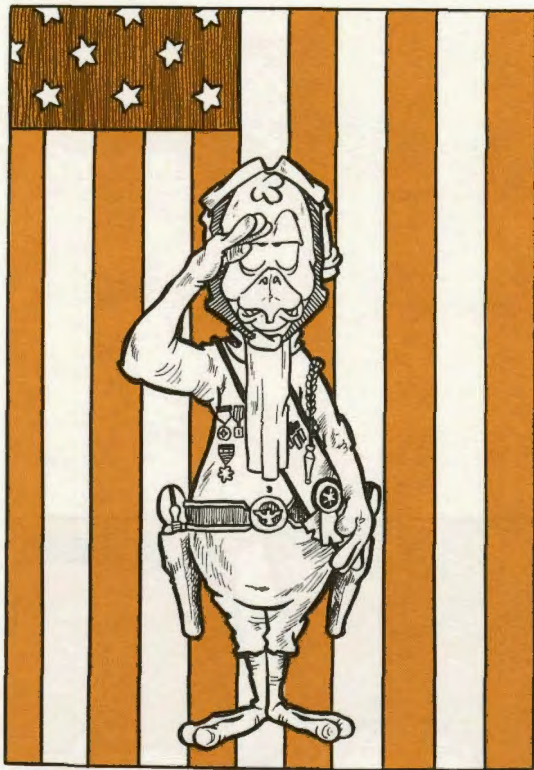
Guess where the aircraft had just come from? No, not Alaska, the wash rack. The Bronco had been washed the day before and moved into a nice, warm hangar. Then, because of a higher priority need for the limited hangar space, the still-wet aircraft was



towed back outside to spend the night in the cold. Outside, where the temperature was below freezing, water that had seeped in around the inlet covers during the wash froze. No mystery here, Sherlock.

Or is there? Later during a follow-up inspection, some quality assurance workers found some interesting information that may be related – several maintenance workers in the outfit didn't know the Dash Two procedures for engine preheating. And some others said they never bothered with them, because most of the time the temperature wasn't below freezing. If the engine had been sufficiently preheated, the ice would have melted.

Now the unit conducts a review session on cold weather procedures each year just ahead of Jack Frost. If your unit doesn't, now's not too late to start.



FLEAGLE SALUTES

Sgt Leon J. Hall, 354 EMS, 354 TFW, Myrtle Beach AFB, SC, receives the Fleagle Salute for numerous occasions when he prevented serious weapons mishaps involving the A-10 30mm gun and weapons delivery systems.

On one occasion, two ammunition loading assemblies (ALA) were towed into the armament section jammed with live 30mm ammunition. Sgt. Hall immediately took charge of the operation and ensured that the proper fire symbols were posted, safety equipment was in place and all applicable standards were used. Both ALAs were cleared and repaired without incident.

On another occasion, an aircraft returned from a bombing mission with three hung bombs on one station. Although everything checked out on the aircraft and in the shop, Sgt Hall

did a full check of the armament systems with the flight line test set. He found one bomb rack with no voltage to the forward breech and stray voltage on the other breech. Sgt Hall found and repaired a shorted wire when he disassembled the rack.

Sgt Hall's safety consciousness and faithful adherence to the use of technical data have earned him a Fleagle Salute.

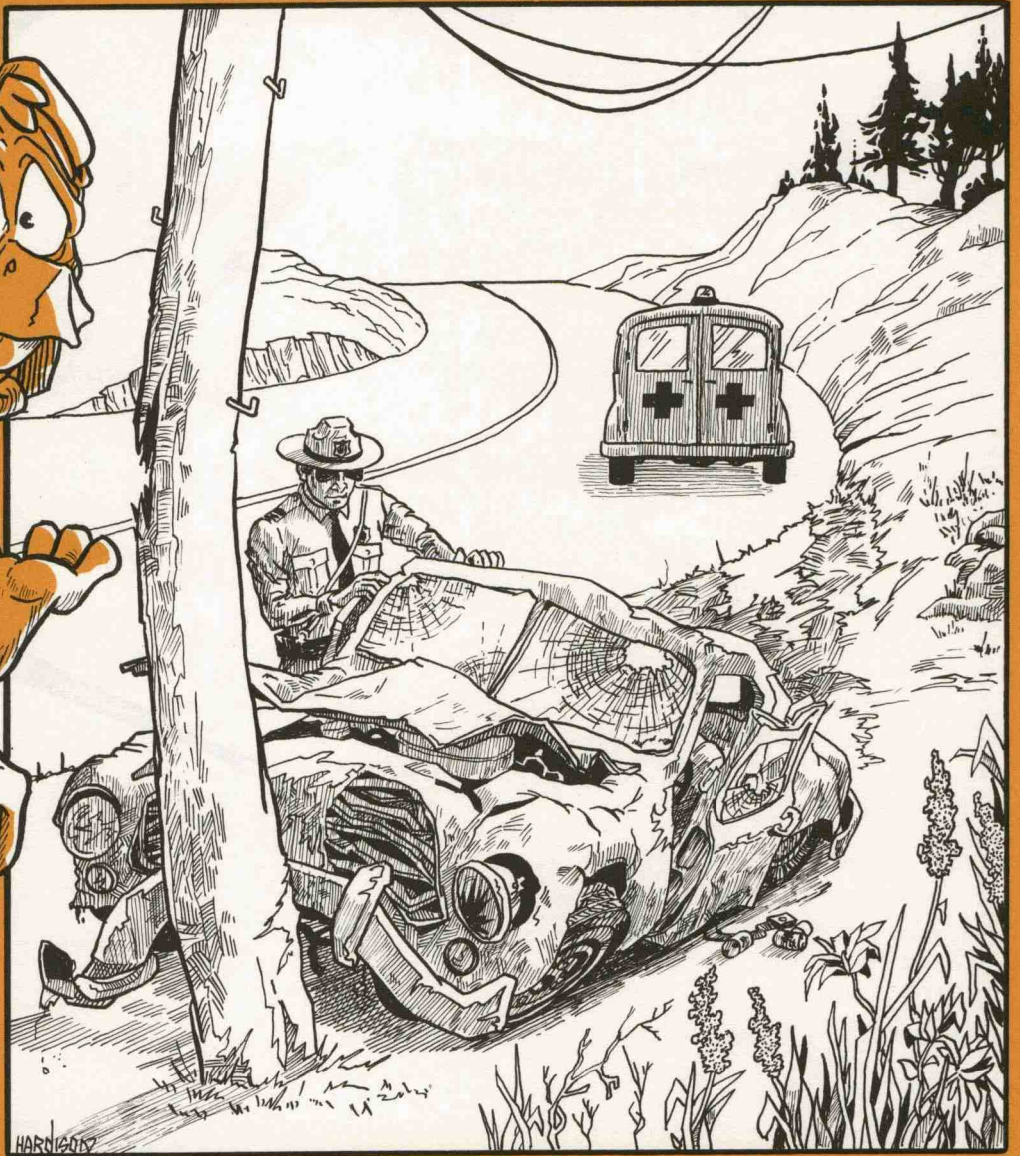
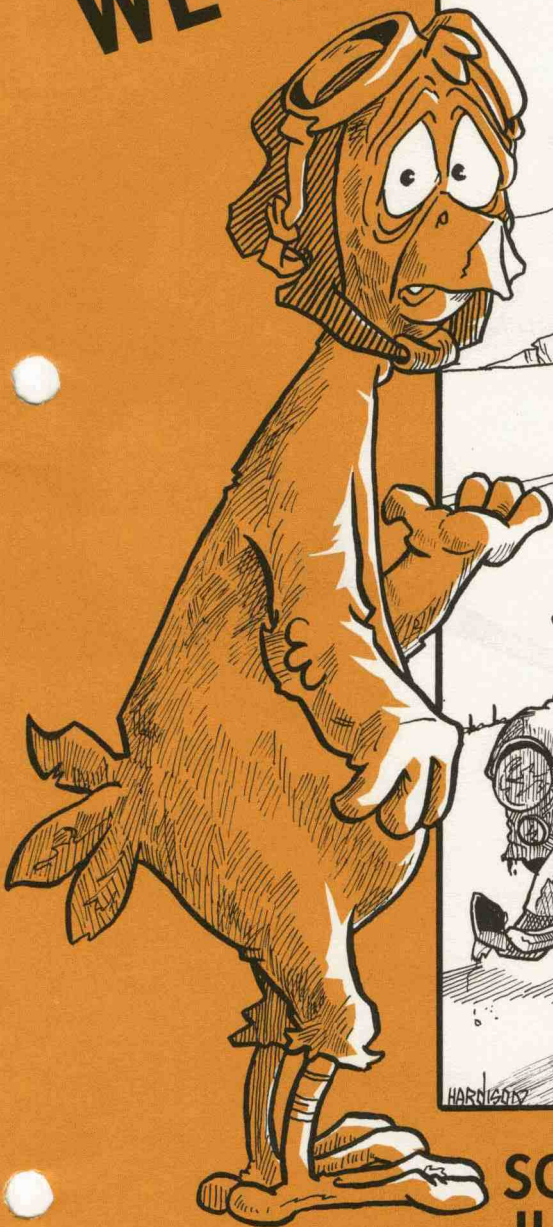


Captain Bradley G. Norton's performance as a Squadron Assigned Flying Safety Officer (SAFSO) in the 45 TRTS, 67 TRW, Bergstrom AFB, TX, has been superior. Trained in the TAC COMPAS program, his

application of that knowledge has been obvious in his Class C investigations. Additionally, he has shared those analysis techniques with other wing FSOs. Capt Norton was the first person to highlight a flap problem on the unit's aircraft, allowing the wing to carefully monitor and analyze a serious flight control problem. His insight on safety awareness and mishap prevention were also useful during a staff assistance visit to an Air National Guard unit and in the development of several programs to enhance the wing's flying safety program. Capt Norton's initiative and thoroughness as a flying safety officer have earned him a Fleagle Salute.

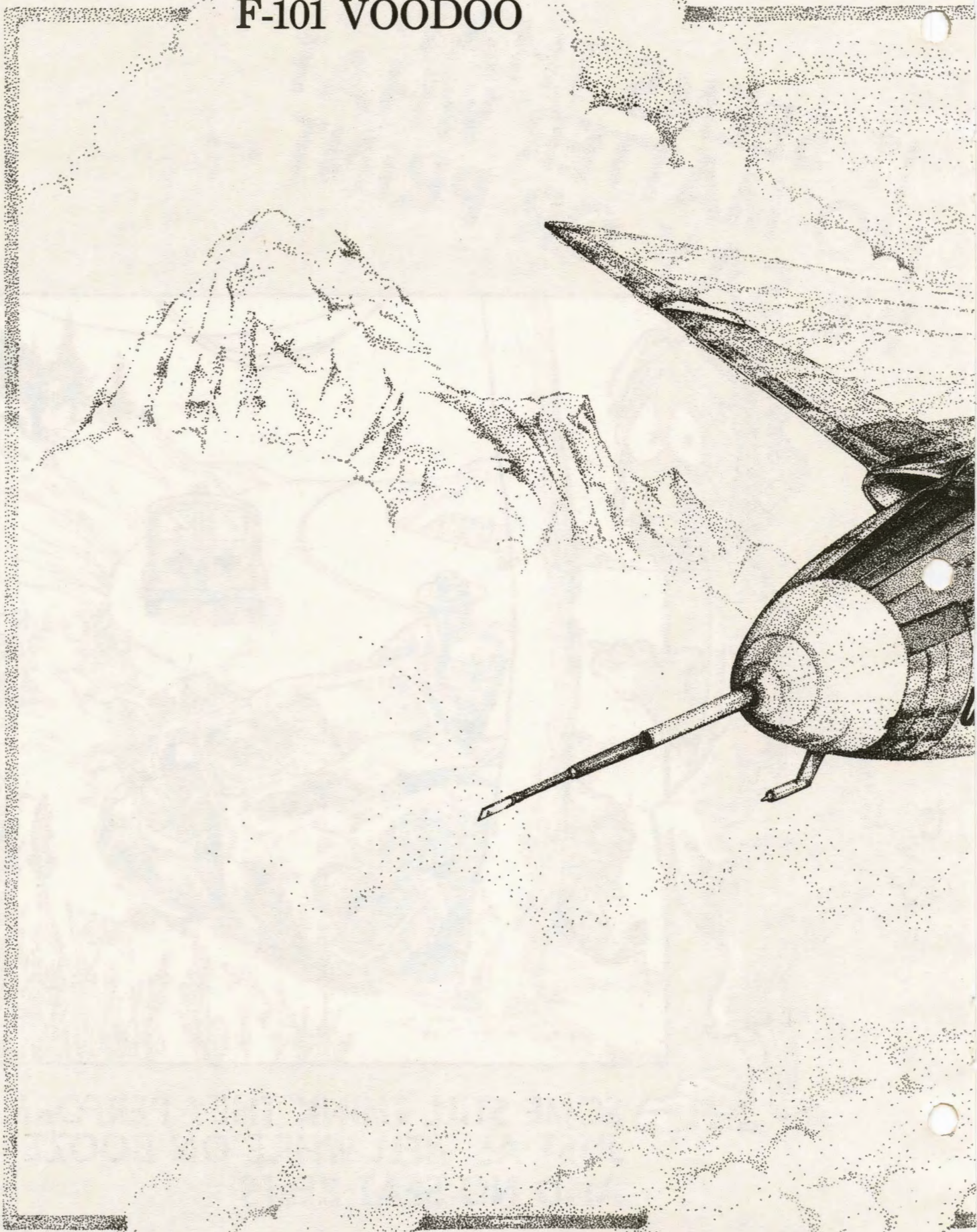


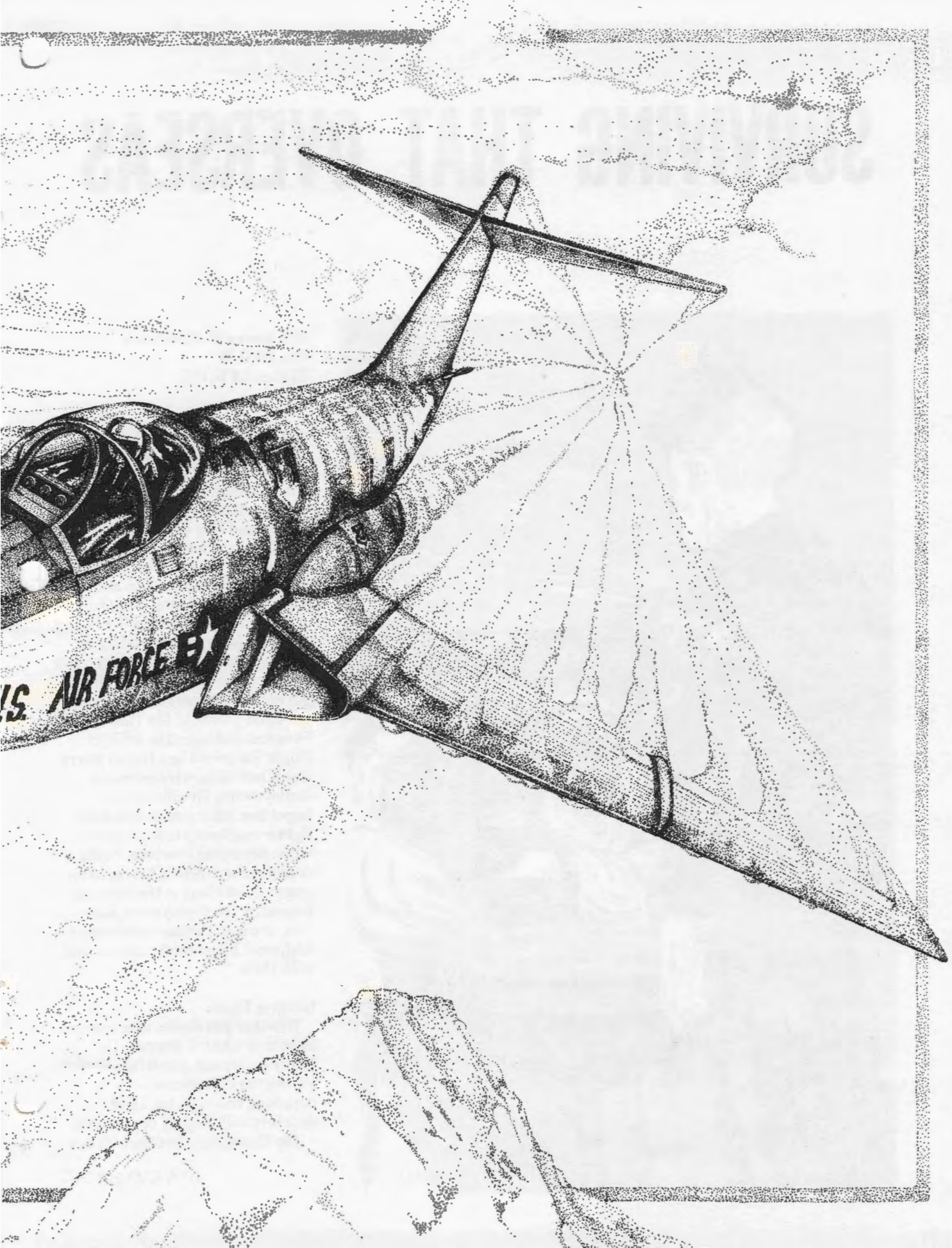
**IT SEEMS THAT
NO MATTER WHAT
WE SAY OR PRINT ...**



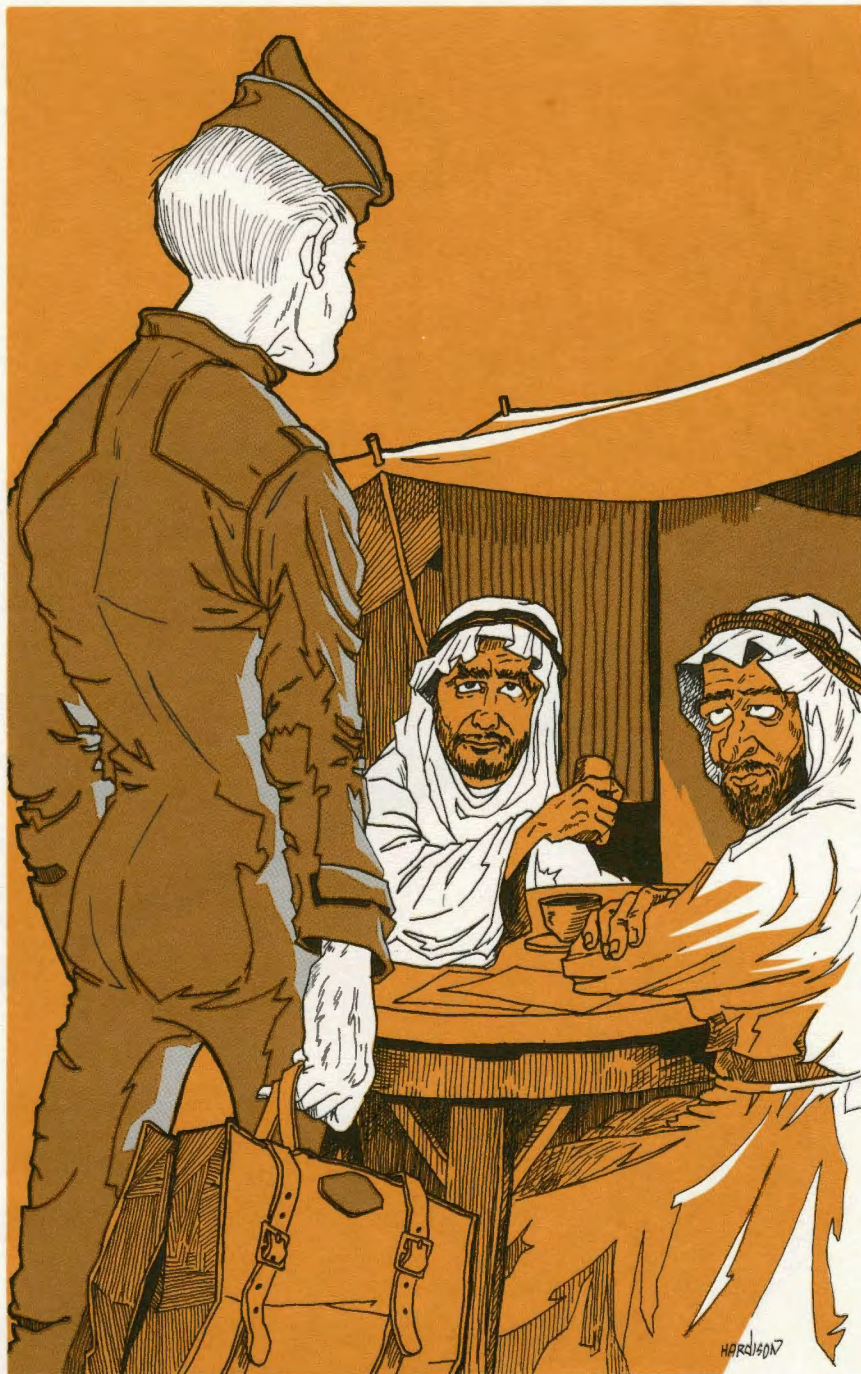
**SOME STILL THINK THEY PERFORM
JUST AS WELL WHILE ON BOOZE
AND NO SEAT BELTS**

F-101 VOODOO





SURVIVING THAT OVERSEAS



1Lt James M. Froehlich
552 AWACW
Tinker AFB, OK

Barroom bragging is a TAC tradition – hearty tales of low fuel, lost engines and dogfights seem to fill the air whenever Eagle, Falcon and Hog drivers get together. So I love to tell these guys about the harrowing AWACS deployments I've been on and watch their jaws drop. The thought of twenty-four hours in a C-141, living in an Arab culture and flying fourteen-hour missions every other day for three weeks is enough to get anyone's attention. It certainly got mine. I went to the Tinker AFB Hospital and talked to AWACS Flight Surgeon Capt Daniel Berry about how to survive overseas deployments. He shared some important information that both fighter and heavy crews can use when deploying overseas. Using a deployment to Saudi Arabia as an example, let's look at the stresses caused by the deployment, location, work and living environment and, most importantly, how to deal with them.

Getting There

Whether you deploy overseas in a fighter or a heavy aircraft, Dr. Berry points out, you'll face varying degrees of stress caused by boredom, noise, jet lag, tight quarters and sensory deprivation.

The C-141 flight between Tinker

TDY

AFB and Riyadh, Saudi Arabia contains all of those stresses. The experience can best be likened to sitting in the world's narrowest movie theater watching the longest, dulllest movie ever made – a twenty-one hour epic entitled “Cargo Pallet” with a three-hour intermission in Frankfurt, Germany. The movie's soundtrack, the roar of four engines, must have been recorded in a basketball arena after a game-winning slam dunk. And there is no seat on earth that can keep a person comfortable for such a prolonged period.

“The best remedy is preparation,” states Dr. Berry. “With some forethought these stresses can be reduced. A few days before the trip, start resetting your body

Whether you deploy overseas in a fighter or a heavy aircraft, Dr. Berry points out, you'll face varying degrees of stress caused by boredom, noise, jet lag, tight quarters and sensory deprivation.

clock. This will help you adapt to the time zone you'll be working in. If you're going east, start going to bed earlier, vice versa if you're going west. Take some time to gather reading material, games and puzzles to occupy yourself during the trip when you aren't sleeping. Having a variety of things to do will reduce the chances of boredom.”

A C-141 ride is a solitary experience. The roar of the engines makes ear protection a must and conversation impractical. “You'll need to ‘exercise’ your senses to keep them sharp and feeling fresh. Keep occupied to help pass the time,” says Dr. Berry. “Also, pack some citrus fruits, apples and tasty snacks that you will enjoy. During the trip, drink plenty of water and take a brisk walk up and down the aisle every hour or so. The key is to remain active mentally and physically.”

Being There

Upon arrival, the crewmember must adapt to the deployment location itself. Saudi Arabia, for example, surprises those who have never lived in a desert. What's more, Arabic customs and culture mystify the uninitiated.

The harshness of the place stuns most first-time visitors. The city of Riyadh lies on a hot, dusty desert plain that stretches to every horizon. Crews undergo several in-briefs and wait for the customs inspection at what appears to be an abandoned airline terminal. The

inspectors dress in traditional white *thobes* (a long-sleeved, shirt-like garment that extends almost to the floor), sandals and red-and-white checked headresses held on by black head bands. They inspect every bag thoroughly and confiscate any prohibited materials such as alcohol, pork products and inappropriate reading materials.

Coping

Although common freedoms and comforts sometimes vanish in the unfamiliar surroundings of foreign cultures, people do survive these weeks away from home. Some people *enjoy* the challenge of adapting to unusual conditions. They start by creating a comfortable environment for themselves.

“To lessen the shock of a foreign culture, you can bring a little bit of home with you and build a base to work from,” states Dr. Berry. “When a long day ends, don't discourage yourself by returning to a hotel room that has TDY written all over it. Bring small things that will remind you of home. Photographs, a tape player and a good book can help. Wall posters pop up in rooms occasionally. So do colored lights at Christmas time and costumes at Halloween,” he says.

Once you've established a comfortable home base, go out and enjoy the culture. There is plenty of shopping and sightseeing to do anywhere in the world. Seek out tours to local points of interest if you have the time. Exercise is another option. A good workout



SURVIVING THAT OVERSEAS TDY



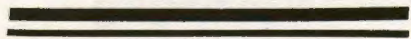
can take the edge off a hard day and prepare you for the next one.

Dr. Berry offers one final tip. Plan around your work schedule so you can adjust sleep and leisure time accordingly. When things do get tough, you can fall back on the plan and not worry about the unexpected. This "no-brainer" way of operating takes the pressure of last minute decisions off your back. Planning also prevents schedule

conflicts. It will help keep you fresh for the decisions that really matter.

Working There

After you've settled into your quarters and in-processed, it will eventually come time to fly. Proper pacing ensures readiness. "Since you can't count on an all day or night schedule, radically changing your normal sleep cycles can create



"After a long day, consider a quick shower and a brisk walk to refresh yourself."



frustration and lessen productivity," says Dr. Berry. "Instead, plan your work schedule to include rest. Drink soda pop or coffee for a quick wakeup or to keep alert. Avoid eating foods heavy in carbohydrates because they will make you drowsy. Also, plan to stretch out occasionally and drink plenty of water. The amount of liquid you consume will have an amazing effect on how you feel. Don't let yourself get dehydrated. If you have nothing better to do, get up and get some water."

"After a long day, consider a quick shower and a brisk walk to refresh yourself. Remember, you're recovering from relative inactivity. Your body needs a chance to stretch out. Revive yourself with fresh air and light exercise."

Living There

We often overlook the social and psychological aspects of an extended overseas deployment. Your interaction with others can serve as a source of strength or dis-

Your interaction with others can serve as a source of strength or distress.

truss. Dr. Berry points out that teamwork is the keystone to success of any Air Force mission. "Promote teamwork. Participate in team sports, run or weight lift in groups or plan a crew party. These activities breed *esprit de corps*; they help the group to pull together through tough times."

Courteousness and professionalism count most when crewmembers gather together as a group. Grumbling out loud about conditions or delays doesn't do anyone any good. Always be on time. Being late makes everyone else late: There is no quicker way to gain the ire of your fellow crewmembers than to make them sit in a hot bus

waiting for you.

The lack of privacy can be a problem. Frustrations build and eventually the time comes to "blow off some steam." There's always someone to talk to, suggests Dr. Berry. "Whatever's bothering you, don't be afraid to talk to a good friend, your supervisor, the chaplain or your flight surgeon. Chances are he's been through the same experience. A good long talk behind closed doors often helps put things in perspective."

Good Luck!

Overseas deployments are exciting. They are stressful, but also challenging. The key to overcoming the stress is recognizing it and preparing to relieve it.

That's the highlights of what (travel, location, work and living) to expect on an overseas deployment. Taking time to prepare for each portion will help make for a better stay. Whether it's your first deployment or your tenth, it's up to you to make it a success. ➤

PASS IT ALONG...



nine people are waiting



DOWN TO EARTH

ITEMS THAT CAN AFFECT YOU AND YOUR FAMILY HERE ON THE GROUND

A winter challenge for survival

Mr. Cal Faile
TAC Ground Safety

As winter weather approaches, there are probably many unnoticed hazards that you've accumulated during the summer months which could cause you serious injury if left uncorrected. There isn't one household or work center that is immune to this possibility. We advocate spring clean-up prior to the summer months but too often we fail to recognize the need for a thorough fall clean-up in preparation for the harsh winter months. As a result, we can jeopardize the safety and health of ourselves and others around us.

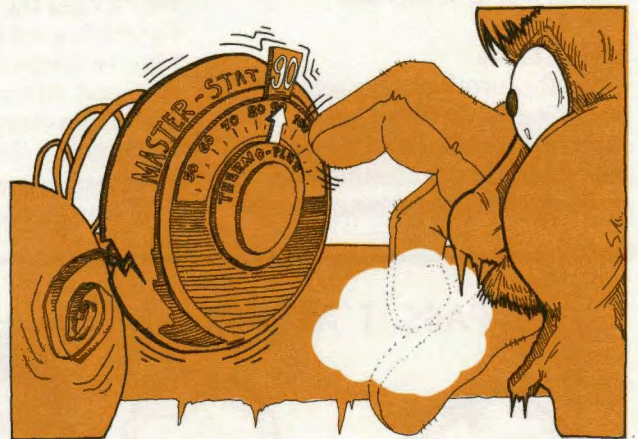
Here are some common areas that deserve a few minutes of your attention:

- **Heating Systems.** First, your heating system should be checked by a qualified technician to ensure it is in

Always try to drive so that your license will expire before you do.

NATIONAL SAFETY COUNCIL

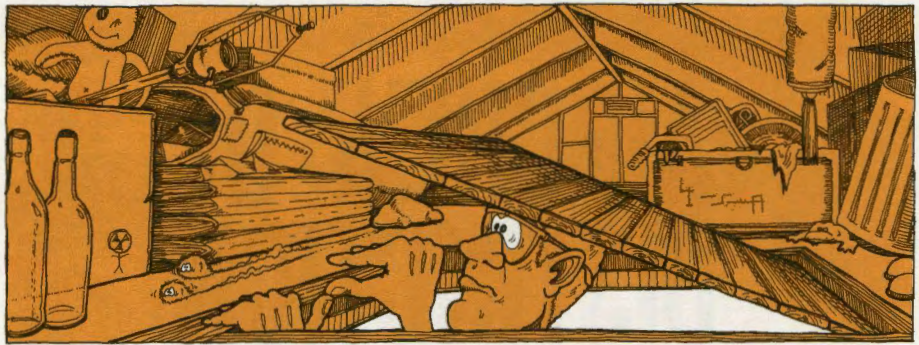
safe operating condition. Just because it hasn't been used during the summer months doesn't mean it will work like it did last winter. It can be a chilling



experience if the system does not work when the temperature drops. Second, the space around your heating system should be cleared (as specified by the manufacturer) to ensure proper ventilation and to prevent fires. Don't forget to have your chimney(s) checked by qualified personnel as well. They should be checked annually and cleaned if needed.

- **Attic/Storage Space.** These areas should be cleaned. Removal of unneeded items accumulated during the summer months will enhance safety for everyone.

Flammable/combustible liquids should be stored outside. Rags, papers and other combustible materials should be stored in metal containers with covers or discarded. Areas under stairways should never be used for storing these items. A fire underneath could weaken the stairway and block your exit.



- **Emergency Evacuation.** Everyone, especially families with children, should develop and practice a plan for how to get out of the house (or apartment) in case of a fire or other emergency. Establish an assembly point at a safe distance away from the building so you can check that everyone made it out safely. Special considerations must be given to evacuating invalid or infirm people from the area. Some fire departments provide window stickers to identify rooms containing small children and invalid/infirm people to aid rescue efforts.

- **Winterizing Recreation Equipment.** Boats and motors should be properly prepared for storage. Remove the spark plugs, squirt 30-weight oil in each cylinder and then reinstall the plug. Drain water from all cavities. If water freezes, it could cause damage. Remove the battery and ensure it is fully charged. Inadequately charged batteries will freeze faster. Store in warm, well ventilated areas and away from sources of ignition. Cover your boat to protect it from the harmful effects of winter. These actions should ensure safe operation next season. This would also be a good time to clean and check your PF'Ds (Personal Flotation Devices). Clean and store them according to the manufacturer's guidelines.

- **Hunting.** Going hunting this year? Now is the time to check and clean your weapons. The first step is to make sure the weapon is unloaded and remove the bolt assembly, if possible. If you are not sure how to properly clean your weapon, consult a qualified gun specialist. In any case, before you go hunting, make sure the barrel of the weapon is clear of all obstructions, i.e., cleaning pads, excess oil, etc., to prevent an unexpected explosive experience.

- **Vehicles.** Your car, van or truck can turn into your worst enemy if it breaks down in a cold weather situation. A general tune-up now could prevent a lot of tense, cold moments later on. Have your brakes, tires, fluid levels, battery and windshield wipers checked. Failure of any of these important items could result in an accident or, at best, your being stranded when you least expect it (usually when the weather is at its worst, right?). A timely check-up can make your winter driving more comfortable and possibly save your life as well.



Forethought and common sense will go a long way toward helping you meet the challenges that winter will present during the next few months. You are ultimately responsible for your safety and the well-being of you and your family and being prepared is one important factor in meeting these challenges. Proper planning and a positive attitude can help you overcome an adverse situation should it arise. So, let's all plan ahead to minimize the adversities of winter and survive to enjoy 1988.

Who? The guy you really have to watch on the highway, you will find, is the guy behind the guy ahead and ahead of the guy behind.

HERM ALBRIGHT
INDIANAPOLIS, INDIANA



AIRCREW OF DISTINCTION

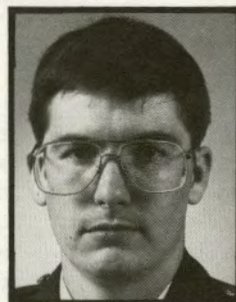
Capt John L. Davis and 2d Lt Paul M. Thompson were on a low-level tactical checkride when their RF-4 aircraft was struck by a large bird. The birdstrike centered on the forward canopy; destroying three-quarters of the plexiglass and filling the cockpit with bird remains and plexiglass pieces. Capt Davis was nearly blinded by the fragments and received painful bruises and cuts around the arms and chest.

As briefed, Lt Thompson took control of the jet and started a turn toward home while climbing, reducing airspeed and notifying the chase aircraft of their problem. Capt Madsen and Maj Brigance rejoined to a route position to assist the mishap crew. After the initial terminate call, communications could not be made between aircraft or intra-cockpit for the remainder of the flight due to the windblast and loss of Capt Davis' communication cord.

After cleaning his eyes, Capt Davis assumed control of the aircraft and examined the cockpit. He noted the upper ejection handle was flailing in the airstream and positioned himself to reduce the flapping. The chase crew also spotted serious damage to the drogue chute container. Knowing that an inadvertent deployment could result in an ejection and serious injury, Capt Madsen slowed the flight to 200 knots which significantly reduced the windblast. The chase crew, now leading as briefed,

declared an emergency and coordinated an expeditious route home. Maj Brigance's coordination with

Capt John L. Davis
91 TRS, 67 TRW
Bergstrom AFB, TX

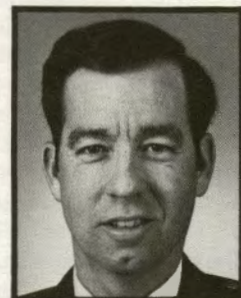


2d Lt Paul M. Thompson
91 TRS, 67 TRW
Bergstrom AFB, TX

home base via HF radio permitted a quick and accurate response upon recovery.

The mishap flight navigated to avoid weather, and performed a controllability check. The chase crew led a smooth approach and passed the lead to the mishap crew when assured they could land safely. The mishap crew completed

Capt Norbert Madsen
12 AF/DOV
Bergstrom AFB, TX



Maj John A. Brigance, Jr.
67 TRW/DOV
Bergstrom AFB, TX

an uneventful landing with a seriously damaged aircraft.

The efforts of these aircrews demonstrated the best aspects of formation flight. Utilizing the abilities of each crewmember, knowledge of their aircraft and positive control of the flight, they were able to promptly and accurately respond to a serious emergency. Their actions resulted in the safe recovery of a valuable aircraft while taking every precaution to prevent further injury or loss of life.

MOI

MOI

TSgt Sherwood Emerton
9 AF Weapons Safety
Shaw AFB, SC

“How safe is safe?”

“Safe is as safe does.”

“Take care of safety
and safety will take
care of you.”

“Those are all boring cliches. Man, am I tired of hearing safety this and safety that. It really cuts down on production, and it also creates a morale problem. I mean, if Sgt Shortcut says it's OK to carry two BDUs at the same time, why should I, Airman Impressionable, worry about some outdated MOI (Maintenance Operating Instruction) that says to carry one at a time? God gave me two hands and I am a strong, capable, “can-do-anything” type of guy. It seems sensible; one BDU for each hand, just like my hero, Sgt Shortcut.”

Does that sound familiar? This was my attitude until one day when Sgt Shortcut was carrying two BDUs from an igloo and he stumbled. In the process of trying to regain his balance, he dropped one and it impacted on the nose. The spotting charge functioned exactly as designed. The end result (no

pun intended) was that he took the full charge in his gluteus maximus. Red phosphorus and flesh do not mix well. The doctors had to dig (read *cut*) a hole in his backside three inches in diameter and two inches deep. Not a pretty sight. Believe me, I was impressed! Sgt Shortcut, however, was no longer my hero, no longer my boss and no longer in the Air Force.

What's my attitude now? Read the MOI, understand the

MOI and follow the MOI. It was written by a knowledgeable individual with two main considerations in mind. Accomplish the mission successfully and safely.

Here are some last thoughts. People are impressionable and attitudes play a big part in safety so let's impress our people with a safe attitude and continue our ability to meet the “frag.” This will enable our aircrews to fly, fight and win. ➤





WEAPONS WORDS

Brass attack

Near the end of his fifth pass with the 30-mm GAU-8 cannon, an A-10 pilot heard a rumbling sound and noticed the Gun Unsafe light. Rats! Just when he'd figured out the windage and elevation. The pilot safed all the switches, declared an emergency and brought the Warthog directly home.



After the aircraft was parked in the unsafe gun area, some weapons folks dropped the gun access panel to clear the weapon. When the panel was opened, several empty 30-mm cases fell out and scattered all over the ramp. The problem was obvious – the access unit's load gate was ajar because only one of the latches was fastened.

Apparently after loading the cannon, the load crew didn't completely fasten one of the latches (the sprung latch, on the right side of the load gate, wasn't readily visible except from a vantage point directly beneath it). When the gun fired, vibrations caused the latch to disengage, and the load gate opened slightly. Then a wayward spend case wedged into the opening and jammed the gun. Minor mistake.

In peacetime, gun jams caused by minor mistakes like this one are frustrating to pilots and specialists who have to repair the damage. They're also expensive; this little omission cost about \$18,000. But in combat, where we need every bullet to count, a minor mistake like this may cost much more. We need to be training like *we're going to fight*. That's not a cute little phrase for pilots – it's a mandate for all of us.

Lost at sea

When an F-4 returned from an air-to-air mission, the crew chief noticed the TER (triple ejector rack) was missing from the MAU-12 bomb rack under one of the inboard pylons. Since the bomb rack didn't contain any explosive carts, the pilot couldn't have jettisoned the TER. Apparently, it was lost at sea – during high-G maneuvering in a warning area over the Atlantic.

The bomb rack and TER were uploaded during the wee-hours in preparation for this early morning mission. The load crew that uploaded the TER must have thought they didn't need a flashlight since the operation was conducted in a lighted hangar. Without a little direct light on the subject, however, a valid visual check of the lock indicator wasn't made. The load crew also neglected to use the safety pin for the MAU-12 bomb rack to physically check that the rack was locked.

Unless we bring all the required tools to do the job, chances are we can't do it by the T.O. If we have all the

tools but don't use them, we're still asking for trouble – we're totally depending on our experience to keep us from human error. If we only had one job to do, maybe we could pull that off. But weapons handlers have literally scores of operations to perform. And from time to time the equipment or procedures change or we get new workmates. All those variables increase our chances of making a mistake. That's why we have tech data. But we have to *choose* to follow it – even if it means an extra trip to get all the tools.

Knock it off - blue two's got a hot gun!

Two Eagles against four Aggressors. The Eagles had the edge. They had the technology. They had the tactics. They had Murphy and they had **HOT GUNS!**

The weapons crew know that the first two Eagles launched were going up for a DART mission. Add a second weapons crew and a runway change. The first

Eagles were armed by the second weapons crew and the second Eagles were armed by the first weapons crew who thought they were the first Eagles. Confused yet? (You can smell Murphy already.)

"These Eagles aren't ready for a DART mission. Reset the rounds counter. Remove the cam holdback tool. Yank that electrical safing pin."

The flight leader was in a position to observe his wingman's aircraft being armed but was pondering whether the sun gives off light or sucks in the dark.

Maybe the trigger check would have saved the unsuspecting F-5 driver. We'll never know for sure because the mishap weapons crew supervisor checked the schedule after the Eagles got airborne and realized what they had done. The SOF got the word out in time to prevent an incident ranking right up there with the famous WSEP Fox II shootdown.

Lessons learned: 1) Murphy never dies. 2) Pilots should watch folks messing around with their wingman's jet. 3) Trigger checks are your last chance to stop Murphy. 4) The sun gives off light – use it to watch what's going on around you!

TAC CREW CHIEF SAFETY AWARD

Airman Basic Darris D. McMillan demonstrates a continual safety-mindedness while performing his duties as an F-4 assistant dedicated crew chief.

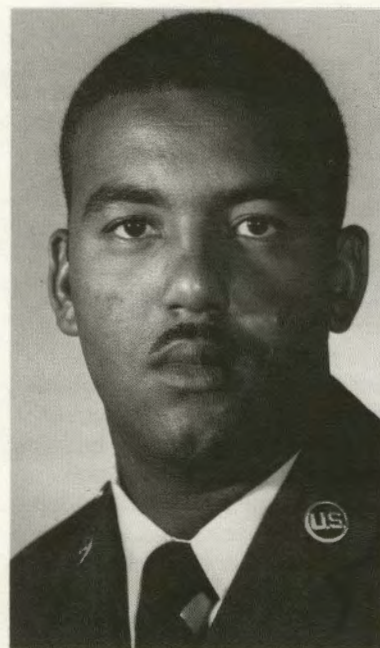
On one occasion in May, AB McMillan recovered an aircraft in its flight line parking spot and discovered hot brakes during the tire rollover check. He immediately notified the flight line expediter so that the fire department could assess the situation and prevent a tire explosion or aircraft fire.

On another occasion he discovered a fuel leak from door 22 and immediately notified the aircrew to shut down. On closer inspection, he found a broken safety wire and a

fuel drain not fully closed. A thorough repair of the problem was made in time to safely meet the scheduled takeoff.

Finally, AB McMillan noticed an F-4 taxiing for takeoff with a 370-gallon fuel tank safety pin still installed. He stopped the aircraft and removed the pin, eliminating a serious problem had the aircrew needed to jettison their external stores.

AB McMillan's constant vigilance and attention to detail have prevented numerous potentially dangerous situations from developing into serious flight or ground mishaps and earned him the TAC Crew Chief Safety Award.



AB Darris D. McMillan
4 AGS, 4 TFW
Seymour Johnson AFB, NC

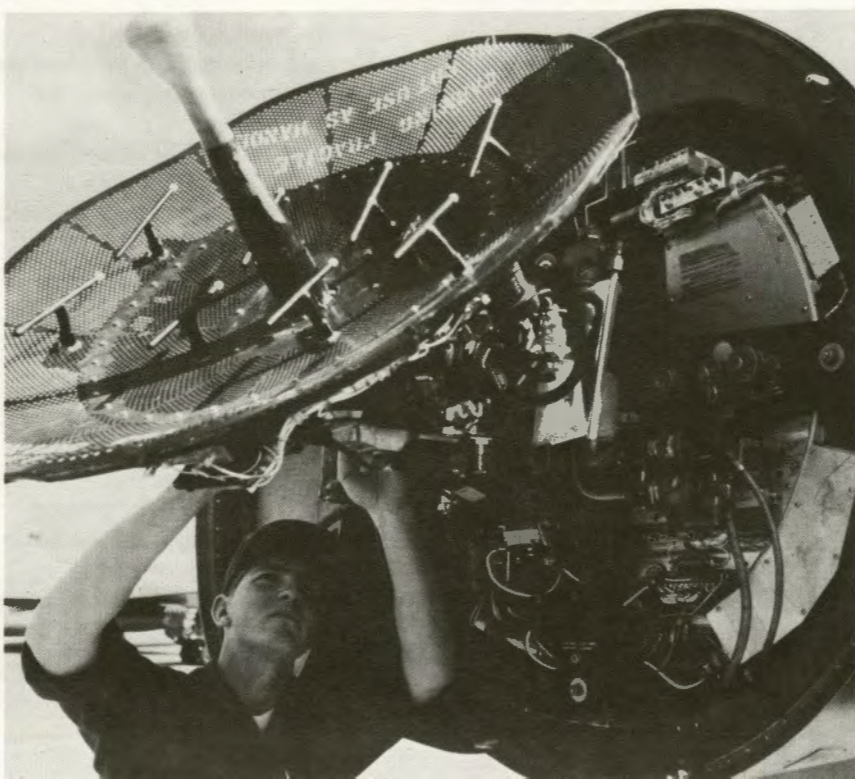
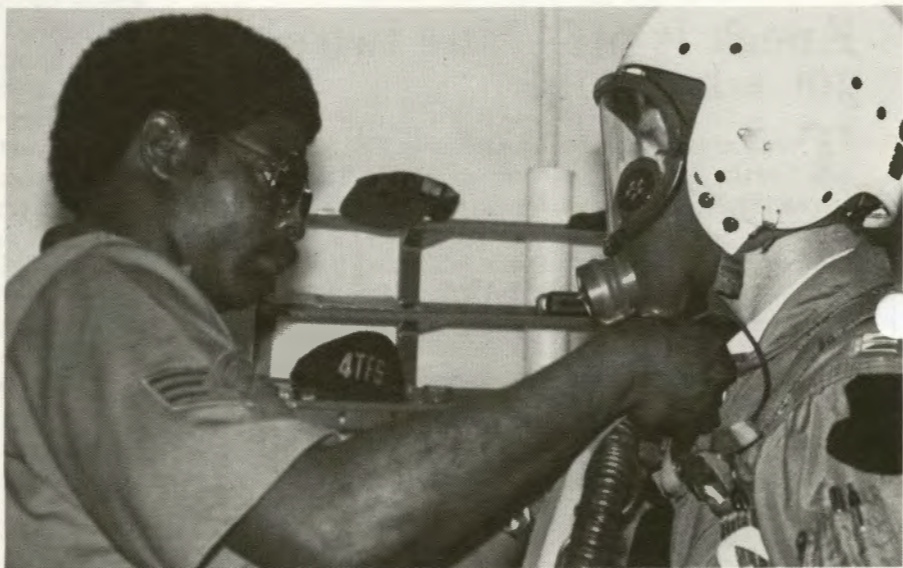
LIVING IN THE FAST LANE



CMSgt Ron Christiansen
TAC Ground Safety

There aren't many occupations in the civilian world that are as fast paced as ours in the Air Force. Our various missions require a degree of urgency and intensity. Many people who leave the Air Force often find that the financial compensation on the outside doesn't adequately substitute for the dynamics, responsibility and authority they had in the Air Force. There are very few outside jobs that allow a young officer or NCO to be responsible for millions of dollars of resources and any number of workers. We can moan and groan about recalls, exercises, details and other incidentals, but when you watch those silver-winged birds leave the ground, there's a little piece of you that goes with them.

Being a member of the Tactical Air Command is pure pride! Sure, we've got a tough mission; hard and





long hours and things we don't like but it's our country. We're free and we intend to stay that way. That's what we're all about. We live in the fast lane of life and in doing so we've got to make smart and correct decisions. There's a significant amount of risk we must deal with – but, as long as we know what it is, we can do the job right. It's when the supervisor and old-timers assume that young personnel understand and know it all that we get into trouble. It's also the young person who is unsure, who's afraid to ask the boss for fear of being ridiculed, who goes ahead anyway and makes the mistake. In whatever situation you find yourself, when you elect to “wing it” instead of finding the right method, the consequences can be catastrophic. The loss of fingers, arms, legs and even death have occurred because someone failed to

follow through. Whether it's because we didn't give the right training or the boss's directions weren't clear or someone disregarded what they were told, we've missed a prime ingredient necessary to keep the fast lane open and running smooth. That's *care!* We must care enough to watch out for our peers, the people that work for us and the boss. Whether or not you like someone has no meaning in being a professional. A professional Air Force member has pride, trust, integrity and a love for what they do. Protecting others is everyone's responsibility. When you're a professional, it's a natural part of you.

Living in the fast lane is fun, challenging and rewarding. But it also has its pitfalls if you're not on your toes. It's a superb life, but be careful out there, won't you?

Without you, the birds can't fly! ➔

we care about you

**we care
about
you**



OUTSTANDING ACHIEVEMENT IN SAFETY AWARD

Captain Jeffrey C. Gurney's initiative, motivation and professional expertise as a flight safety officer and F-16 instructor pilot have enhanced flight safety in the 61st Tactical Fighter Training Squadron and the 56th Tactical Training Wing. The success of his energetic approach to flight safety is reflected in his squadron's record of no Class A or B mishaps during the fifteen-month period that he served as squadron assigned flight safety officer (SAFSO).

Capt Gurney's personal management of the wing Trend Analysis Program resulted in the shift from a basic number-crunching exercise into a useful tool for both wing supervisors and unit pilots. By tapping an existing maintenance product, he was also able to make a consolidated maintenance history of squadron-assigned tail numbers available to squadron pilots.

As a SAFSO and functional check flight pilot, Capt Gurney's

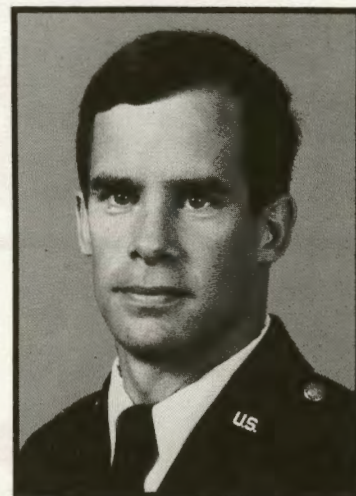
frequent interface with the aircraft maintenance unit (AMU) and the maintenance flight safety officer (MFSO) significantly enhanced the operations/maintenance relationship. Through development and implementation of a comprehensive training program for additional duty flight safety officers and MFSOs, he was able to ensure that newly appointed safety personnel were ready to complement the wing's mission.

Capt Gurney also developed a technical order applicability sheet (placed in each aircraft's forms) which allowed every pilot to quickly identify the current modifications on each F-16. He improved flight safety awareness in the AMU by creating a mishap read file containing current F-16 mishap information. The read file allowed maintenance technicians to stay informed of F-16 mishaps.

Capt Gurney's dynamic and insightful leadership have made a

significant impact on the flight safety efforts of the 56 TTW and earned him the TAC Outstanding Achievement in Safety Award.

Capt. Jeffrey C. Gurney
61 TFFTS, 56 TTW
MacDill AFB, FL



The 405th Tactical Training Wing Helicopter Operations has distinguished itself by operating without any Class A mishaps since its inception in December 1971. During that period, the unit

has supported all branches of the U.S. armed forces as well as several state and federal agencies.

While maintaining three operationally ready UH-1 helicopters, 405 TTW Helicopter Ops has

accomplished ten saves during the last eighteen months ranging from the transport of heart attack victims to the successful search and rescue of pilots involved in flight mishaps.

The members of the 405 TTW Helicopter Operations played an invaluable role in two flight mishap investigations when they transported safety investigation board members to otherwise inaccessible locations. Without such support, the mishap investigation process would have been significantly delayed.

This unit's vital contribution to the TAC mission and its noteworthy safety record has earned it the TAC Outstanding Achievement in Safety Award.



405 TTW Helicopter Operations
Luke AFB, AZ



TAC TALLY

CLASS A MISHAPS
AIRCREW FATALITIES
* IN ENVELOPE EJECTION
* OUT ENVELOPE EJECTION

* SUCCESSFUL/UNSUCCESSFUL

TAC		
SEP	thru Sep	
	1987	1986
2	12	19
0	11	7
3/0	9/0	14/0
0/0	0/2	0/0

ANG		
SEP	thru Sep	
	1987	1986
0	4	5
0	5	7
0/0	2/0	7/1
0/0	0/2	0/0

AFR		
SEP	thru Sep	
	1987	1986
0	3	1
0	4	0
0/0	0/0	1/0
0/0	0/3	0/0

TAC'S TOP 5 thru SEP 1987

1st AF	
class A mishap-free months	
85	318 FIS
32	325 TTW
20	57 FIS
20	5 FIS
11	48 FIS

9th AF	
class A mishap-free months	
55	33 TFW
28	507 TAIRCW
19	31 TFW
14	354 TFW
12	4 TFW

12th AF	
class A mishap-free months	
53	366 TFW
37	355 TTW
1	58 TTW
24	35 TTW
18	474 TFW

ANG	
class A mishap-free months	
218	182 TASG
202	110 TASG
177	138 TFG
159	177 FIG
154	114 TFG

AFR	
class A mishap-free months	
85	482 TFW
75	924 TFG
63	906 TFG
37	507 TFG
24	917 TFG

DRU's	
class A mishap-free months	
132	28 AD
2	USAFTAWC
2	USAFTFWC

CLASS A MISHAP COMPARISON RATE

(CUM. RATE BASED ON ACCIDENTS PER 100,000 HOURS FLYING TIME)

	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974
TAC	3.5	4.8	2.7	6.8	2.2	5.4	2.0	4.4	1.6	4.1	1.9	3.7	2.3	3.6
	2.0	3.2	2.0	2.5	2.2	3.9	3.9	3.8	2.0	2.5	2.3	2.0	2.2	2.2
ANG	0.0	4.3	0.0	2.4	4.4	3.1	2.3	2.7	2.6	3.0	2.8	2.5	2.4	2.5
	0.0	5.1	0.0	5.1	3.2	2.3	2.7	3.0	2.6	3.0	2.8	2.5	2.4	2.5
AFR	23.1	0.0	12.7	0.0	8.1	6.0	14.2	11.9	10.0	8.6	7.6	8.6	7.6	7.6
	0.0	4.6	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.6	4.2	3.9

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Fleagle

HERE I AM,
AWAY FROM HOME
ON ANOTHER
HOLIDAY.



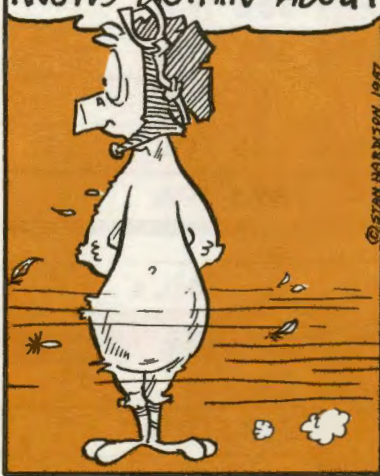
TROUBLE IS, I
DON'T EVEN KNOW
WHAT HOLIDAY
IT IS



PROBABLY JUS'
SOME LOCAL THING...



THAT NOBODY ELSE
KNOWS NOTHIN' ABOUT



OH WELL, MAYBE I CAN
FIND A GOOD
MOVIE.



WHAT TH?!



NOW I REMEMBER, IT'S THANKSGIVING!

