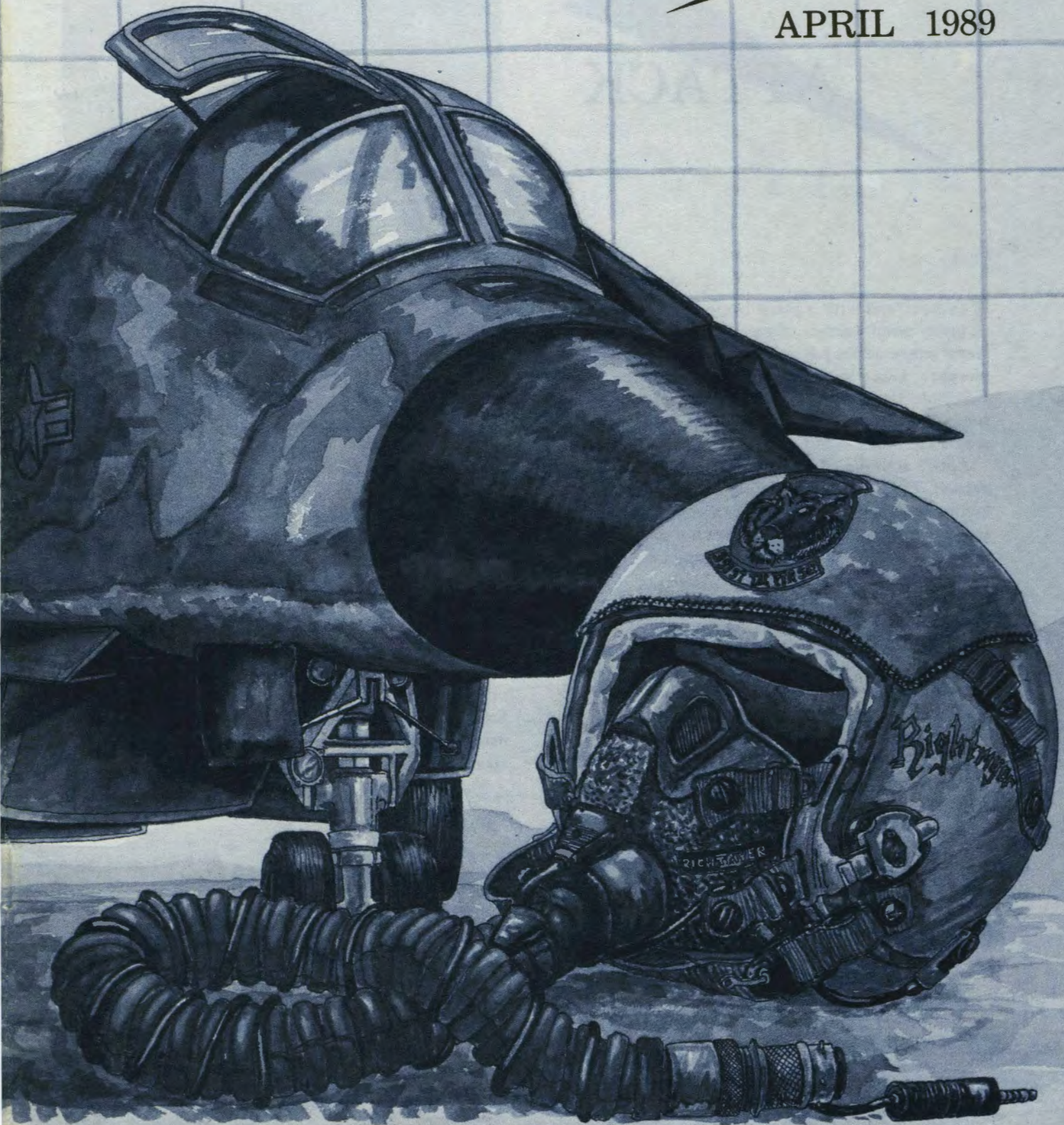


# TAC ATTACK

APRIL 1989



# ANGLE OF ATTACK



**I**t's April and with it you'll begin to enjoy some pretty good weather. Don't let the fair skies and warm temperatures lull you into the old trap of complacency. Good weather not only makes flying more enjoyable for you, but it will also certainly bring an increase of general aviation activity in your flying area. Remember — SEE AND AVOID.

April's arrival means summer is just around the corner. The kids will be getting out of school before you know it, and you'll experience an increase in unit deployments. Let's not get caught up in plans for TDY or leave, and forget about what we're doing today.

When a unit has a mishap, they usually don't repeat that type of mishap for a long time because their awareness is high. Awareness is what prevents mishaps. Let me help heighten your awareness by sharing some words from a "golden oldie" song. They are:

MAINTAIN AIRCRAFT CONTROL  
ANALYZE THE SITUATION  
TAKE PROPER ACTION

You can sing those words to any beat or song you like; from my daughter Michele's favorite rock group, R.E.M., to Chuck Berry and Little Richard. No matter how you choose to do it, the longer you sing this song, the longer you'll continue to be around to sing it. That's what counts.

What's important?? Your answer to that question

is a constantly changing one. It depends on where you are in life, what you're doing, and what your job is. If you are flying, the answer should be *to remember the basics*. If any of you have an article on what's important in the flying business, send it to me and I'll print it here in *TAC Attack*.

How many of you have reviewed your local procedures on how to go about requesting outside assistance such as SAR (search and rescue), technical advice, medical help, etc., if needed? Would you know what to do or who to call?

Every base with a flying operation has planned bailout and jettison areas. Have you reviewed yours lately? Have you actually looked to see what now occupies that piece of ground? Something like houses/trailers, livestock, roads or vehicles may be using that real estate that weren't there when the areas were established. Check it out.

That's all for this month. Be aware, pardner.

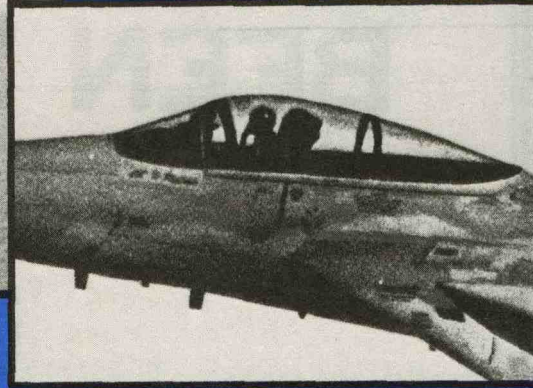
*Jack Gawelko*  
JACK GAWELKO, Colonel, USAF  
Chief of Safety

# TAC ATTACK

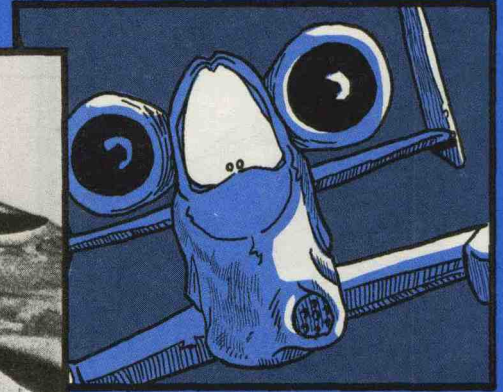
DEPARTMENT OF THE AIR FORCE



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### TACSP 127-1

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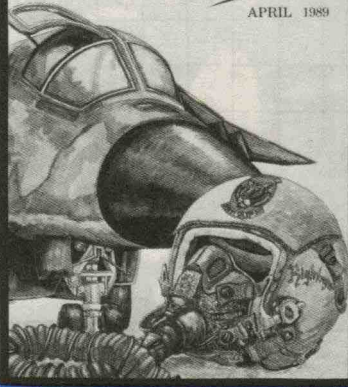
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# TAC ATTACK

APRIL 1989



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# BEEN THERE,

**Capt Jim Shaw**  
**33 TFW/SEF**  
**Eglin AFB, FL**

**I**t was a great day for flying! The sun was just coming up and there wasn't a cloud in the sky. My flight briefing was smooth, and I made it a point to emphasize the hazard of disorientation when flying and fighting over water on a clear blue day. I found out later how right I was!

Right after engine start, Blue Two signaled he was a ground abort. The flight checked in and renumbered with three players. The alternate ACM game plan was confirmed and we taxied out. As the attacking single, I realized my eyeballs were going to get a workout since my radar had "gone south" and we didn't have GCI. The first three en-

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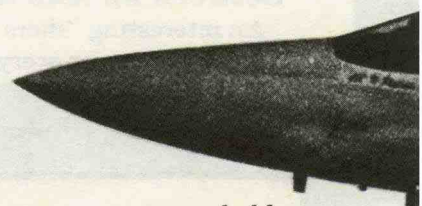
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**As the attacking single, I realized my eyeballs were going to get a workout since my radar had "gone south" and we didn't have GCI.**

---

---

gagements were unremarkable, but on the fourth engagement I got a long range tally and an unseen entry to six o'clock. I was able to pressure Blue Three for awhile; but when Two came back in, I set up for a snap shot and



# DONE THAT (PART II)

separation. The fight had gravitated to the 5,000 foot floor, and I had to pull my nose up to stay above it during the separation. Blue Two tried for a heater\*, so I did an idle break turn. "Betty" began bitching about fuel just as I heard "Fox II, Kill." Everyone was behind me, so I went head down to reset the bingo bug. End of engagement and time to go home.

As I looked back at the element, I heard the gear warning tone. Looking back at the HUD (heads up display), I pushed up the power and pulled the nose up through the horizon. What I didn't realize was that what I perceived as sky was actually water; and instead of being nose high, I was nose low. Because of the geometry, as I looked back over my shoulder, the element was precisely where they should have been.

Another look at the HUD (slightly washed out from the sun) confirmed my seat-of-the-

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**What I didn't realize was that what I perceived as sky was actually water, and instead of being nose high, I was nose low.**

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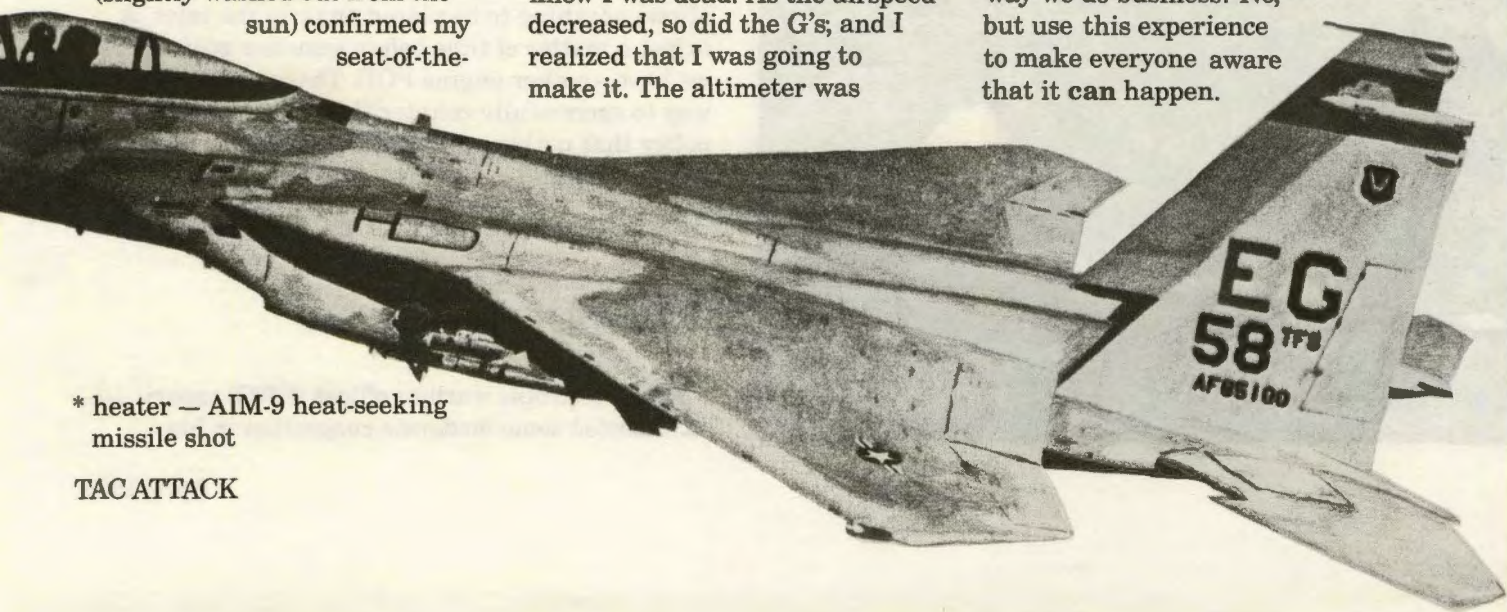
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pants feeling of being nose high with decent airspeed (still actually nose-low). Another look at the element, but this time something was wrong! This time I saw belly, and not the top of the aircraft. Another look out front, and all I could see were waves! My brain shifted to automatic, and with both hands on the stick, I rolled and pulled to white over black on the ADI. I knew my altitude was real low; and since I couldn't see the airspeed, the throttles stayed in mil. "Betty" went ballistic and my head was buried in my lap. I knew I was dead. As the airspeed decreased, so did the G's; and I realized that I was going to make it. The altimeter was

climbing through 1500 feet as I called a knock-it-off and headed home.

The postflight film review showed the recovery was initiated from 70 degrees nose low at 2600 feet MSL. The aircraft recorded 12.5 G's on the OWS (overload warning system). The lowest point during pullout was 420 feet above the waves. Light fuel weight, a fairly straight pull, and the inherent strength of the Eagle resulted in the aircraft flying again two days later.

Do I do anything different now? Not much, but I haven't flown on a day like that since. Had I been over land, had some clouds or even a midday sun, this would not have happened. The important thing to realize is that it can happen! Will it happen again? Probably, and hopefully the next guy will be as lucky as I and do exactly what he needs to do to save his life. Change the way we do business? No, but use this experience to make everyone aware that it can happen.



\* heater — AIM-9 heat-seeking missile shot

# TAC tips

## INTERESTING ITEMS, MISHAPS WITH MORALS, FOR THE TAC AIRCREWMAN

### Please don't feed the jets

An F-16 pilot was performing an emergency power unit (EPU) check in the end-of-runway (EOR) area prior to his takeoff. After he advanced the throttle, EOR personnel noted black ash coming from the engine and the smell of burning plastic as the pilot noted a slight difference in the engine's sound. The engine was immediately shut down and both a videotape recorder (VTR) cassette and a black carrying case were discovered lodged against the first stage fan. Come on, folks! Our jet engines are well fed and cared for. They don't need the constant diet of foreign objects that some people keep trying to feed them.

In this case, the pilot arrived at the aircraft with the VTR tape and case in his helmet bag. The pilot thought he gave the tape to the crew chief for

installation and proceeded with his aircraft preflight. The crew chief didn't remember receiving the tape from the pilot. Regardless of how it got there, the VTR tape and case ended up on the inlet under the recorder door. Both the pilot and crew chief erroneously assumed that the other person was going to see to the VTR tape installation. They were both wrong. The aircraft maintenance unit OIC had also come by the aircraft to talk with the pilot and noticed the tape lying on the inlet. He also assumed that the pilot and/or crew chief would correct that situation. Wrong again.

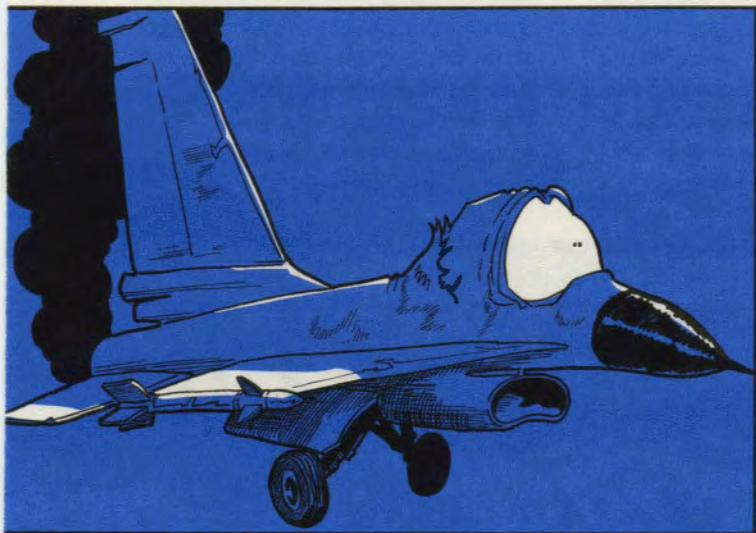
Both the pilot and crew chief failed to ensure that the inlet and ECS duct areas were clear before starting the engine. By the time taxi out to EOR was accomplished, the tape had vibrated close enough to the intake to be sucked in. *Quila'*—FOREIGN OBJECT DAMAGE.

Assumptions can be disastrous. Teamwork and communication are essential to doing our job and doing it right. When it comes to assuming something, don't.

The top of the F-16 inlet looks like a good place to set things down for a moment. It's not! If a unit allows anything to be placed on or in the inlet, it is just a matter of time before someone goofs and we have another engine FOD. There is only one way to successfully counter this threat, a strict policy that nothing gets set down on or in the intake—EVER!!

### No, No, No

An electronic warfare officer (EWO) experienced some moderate congestion in his



sinuses and ears two days prior to a flight. He self-medicated with a nonprescription decongestant and felt considerably better. By the day of the flight, he was able to clear his ears successfully. Although he still felt some congestion, he had flown this way before without incident, so he didn't worry about it.

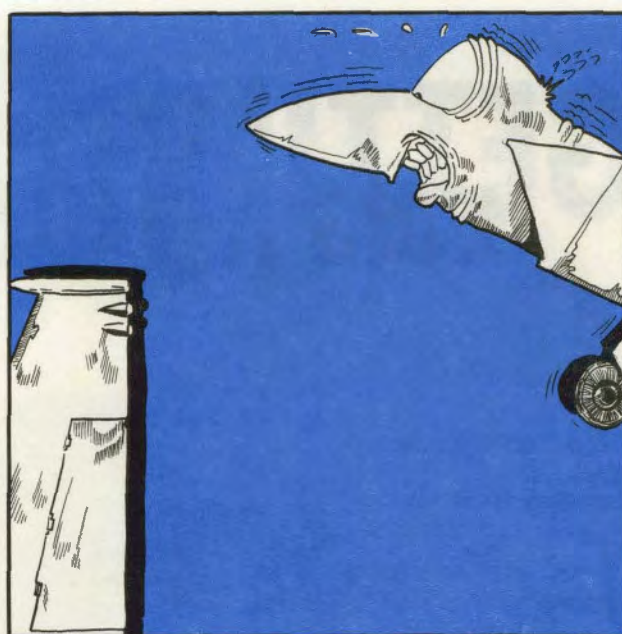
The mission was uneventful until the high level portion when the EWO began to experience a sinus headache. He informed the aircraft commander, and a gradual en route descent for landing was made to preclude further problems.

When the crewmember was examined by the flight surgeon, a moderate ear and sinus block as well as a sinus infection were discovered. The EWO was given prescribed medication and placed on nonflying status for 15 days.

Ensuring that your "aerospace" body is air-worthy is as important as ensuring that your aircraft is ready for a mission. We all know self-medication is wrong, and it only tends to mask the symptoms that are trying to tell you that you are not 100 percent. Don't try to convince yourself that because you've flown sick once and nothing happened, you can do it again.

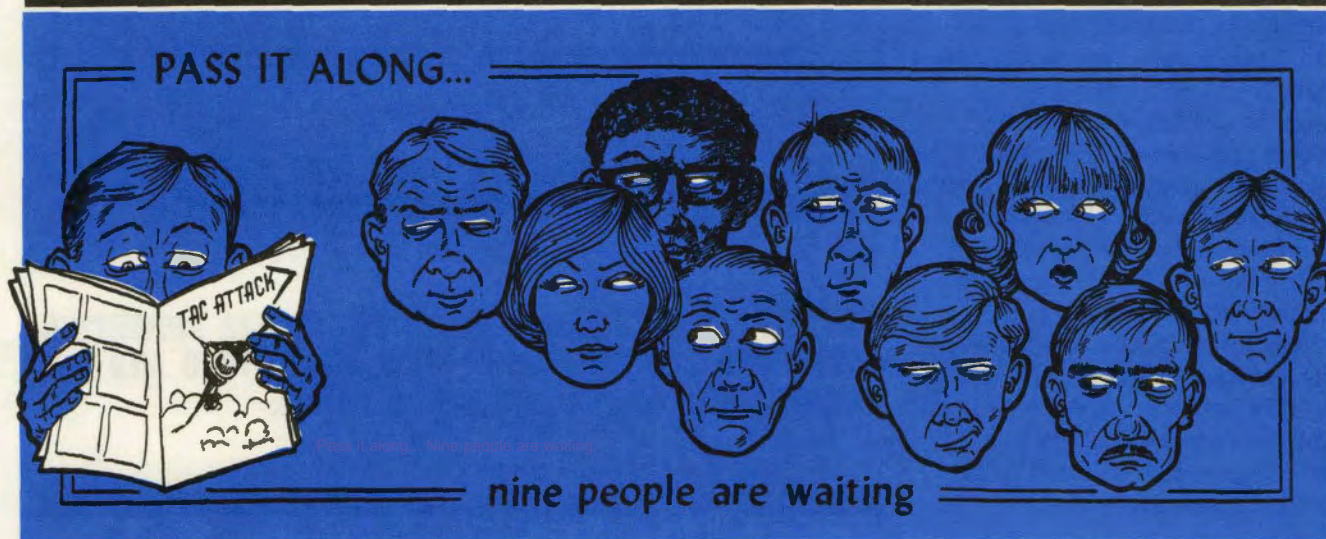
## Being aware

**A** flight of four F-15s was landing at a transient airfield. Because the 11,000 foot runway was being resurfaced, the aircraft were directed to land on the other runway, 8,000 feet in length. The first F-15 stopped at the end of the



runway while waiting for the transient alert vehicle to arrive and direct him to parking. The second and third aircraft pulled up and stopped behind the first one.

Unbeknownst to the fourth aircraft in the flight, the first three were taking up nearly 2,000 feet of the available runway space. The final landing aircraft was still in a nose high aerobraking attitude when he crossed the intersection. When he finally put the aircraft's nose down onto the runway, he was almost on top of the third aircraft's tail. Fortunately, number three must have seen the Eagle bearing down on him in his mirrors because he quickly pulled to the far right of the runway. The landing F-15 passed on the left of the stopped aircraft before he was able to stop, averting a mishap. "Checking 6" and applying good situational awareness don't just apply when you're in the air.



# GETTING ARRESTED: USING A VALUABLE TAC ASSET

**Mr. Charlie Kruse  
TAC/DE  
Langley AFB VA**

**I**t all begins with a message from the Air Traffic Control Center that one of the wing's aircraft is returning to base with a serious malfunction, requiring it to take the aircraft arresting system (AAS) in order to get safely stopped. Base Operations immediately notifies both the fire department and barrier maintenance that an aircraft with an in-flight emergency is 10 minutes out. Personnel from both organizations quickly scramble for their designated positions alongside the runway and anxiously await the aircraft's return.

The crippled aircraft finally comes into view with its landing light on and the tail hook extended. As the aircraft touches down, the tail hook shoe skims along the runway surface at 165 knots. The jet's main gear crosses the BAK-12 arresting cable and the tail hook shoe slams into and engages the BAK-12 arresting cable. Dust flies as the cable is picked up by the tail hook and the tape begins to pull out. The aircraft immediately begins slowing down as the BAK-12 system applies braking pressure and comes to a safe, complete stop 1100 feet from where the tail hook originally engaged the cable.



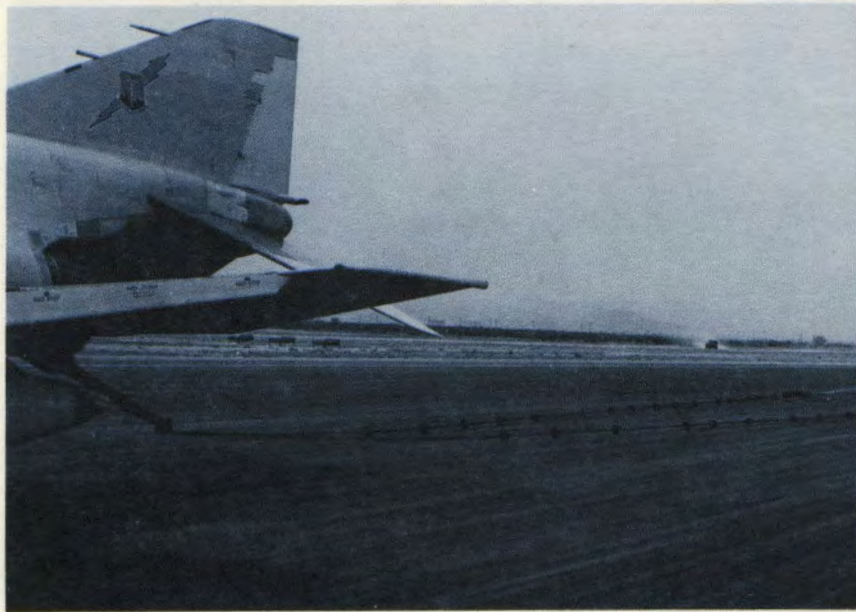
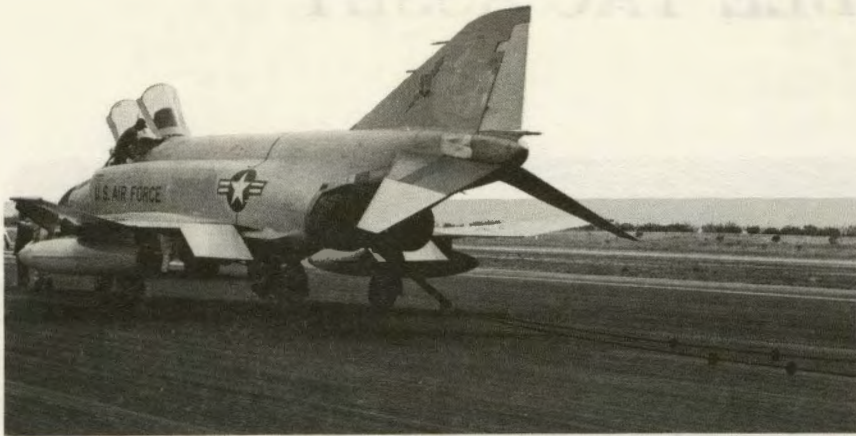

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**AS THE AIRCRAFT TOUCHES DOWN, THE TAIL HOOK SHOE SKIMS ALONG THE RUNWAY SURFACE AT 165 KNOTS.**

**THE JET'S MAIN GEAR CROSSES THE BAK-12 ARRESTING CABLE AND THE TAIL HOOK SHOE SLAMS INTO AND ENGAGES THE BAK-12 ARRESTING CABLE.**

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Fire fighters sprint down the tapes, checking for cuts and abrasions, while other fire fighters stand ready to rewind the system. Simultaneously, power production technicians perform after-engagement inspections on the BAK-12. Following rewind, the system is certified and the senior fire official-in-charge declares the system fully operational. Total elapsed time from disconnecting the cable from the aircraft hook to declaring the system fully opera-

tional has taken less than 10 minutes.

This scenario is repeated hundreds of times yearly. Up to mid-November, TAC had logged 462 aircraft saves on its aircraft arresting systems during 1988. The reasons for declaring an in-flight emergency (IFE) and taking the cable were widely varied, including such factors as low fuel, bird strike damage, compressor failure, generator failure, engine problems and unsafe landing gear. However, as a

result of the aircraft arresting systems available to TAC aircrews when they were needed, potentially extensive damage to valuable combat aircraft and even possible loss of life were averted. To place this in perspective, TAC aircraft arresting systems safely arrested 558 aircraft worth approximately 12.8 billion dollars during CY 87.

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**EACH SYSTEM MUST BE THOROUGHLY INSPECTED AND CERTIFIED DAILY PRIOR TO BEGINNING FLYING OPERATIONS.**

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The BAK-12 friction brake system is TAC's primary arresting gear. This system is extremely reliable with successful engagement rates from 1986 through 1988 of 98.9%, 97.6%, and 98.1%, respectively. In order to achieve this high level of reliability, these systems must be maintained within full technical order compliance. Mechanical excellence is no accident. The outstanding reliability of these systems can be attributed to the individuals in the base civil



# GETTING ARRESTED: USING A VALUABLE TAC ASSET

engineer power production shops command-wide who spend hours inspecting and maintaining our systems.

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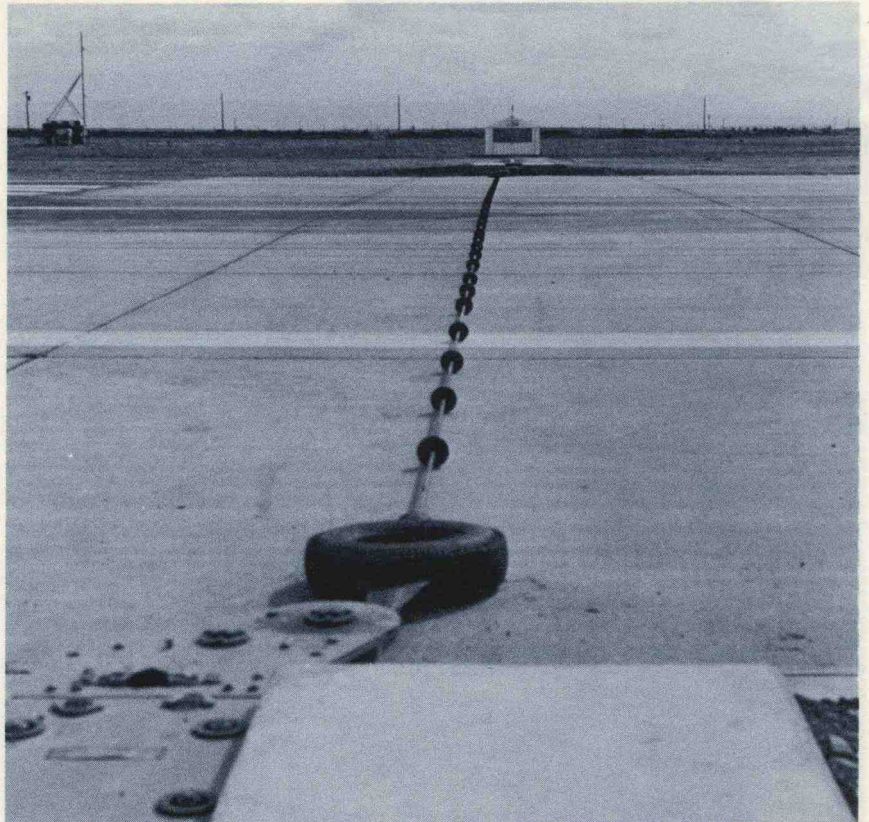
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**IF BARRIER DAMAGE OR A SERIOUS MALFUNCTION OCCURS DURING THE FLYING DAY, THESE SAME FOLKS WILL BE OUT FOLLOWING THE TERMINATION OF FLYING TO ACCOMPLISH REQUIRED REPAIRS AND HAVE THE SYSTEM OPERATIONAL BY THE FOLLOWING MORNING.**

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The process begins at about 0530 each morning, 365 days a year, as barrier maintenance truck headlights can be seen going from one barrier location to the next, performing the required daily inspections. Each system must be thoroughly inspected and certified daily prior to beginning flying operations. If barrier damage or a serious malfunction occurs during the flying day, these same folks will be out following the termination of flying to accomplish required



repairs and have the system operational by the following morning. Strict attention to detail by competent personnel is required when accomplishing barrier inspections and maintenance because catastrophic failure of the system during an arrestment is the eventual price paid for complacency.

Another primary player in TAC barrier operations is the base fire department. These folks recock the arresting gear following an arrestment, activate or deactivate systems as necessitated by wind direction changes, and perform inspec-

tions and equipment adjustments as required. The senior fire official at the scene of an aircraft arrestment is the supervisor in charge of the rewind operation.

Working together, TAC civil engineering and fire fighting personnel ensure that TAC aircrews can launch off on their missions, knowing that the barrier is in place back at base for their safe, efficient recovery if they need to use it. Each time it happens, barrier maintenance and base fire fighters prove that aircraft arresting systems are a valuable TAC asset. ➤



## AIRCREW OF DISTINCTION

**M**aj Donald H. Perry was number two in a flight of three AT-38Bs returning from an air combat maneuvering mission. He had just completed the battle damage check when suddenly both throttles were blocked and could not be reduced below 95 percent. He immediately informed the flight leader of his problem, and simultaneously extended his speed brakes. After being given the lead, he declared an emergency with Approach Control and, while proceeding directly to base for a runway 34 straight-in approach, he communicated his plan with the Supervisor of Flying and requested that the departure-end barrier be raised for his use.

By carefully advancing each throttle, Maj Perry verified that higher power settings were available if required. He elected to continue with both engines running, while using positive G-loading and speed brakes to reduce speed for landing configuration. Once configured, he would decide whether to shut down one engine before landing or wait until touchdown to shut both engines off. Knowing the potentially disastrous consequences of landing too fast, Maj Perry was determined to land as close to on-speed as possible. With gear, full flaps and speed brakes extended, a 360-degree descending spiral was flown approaching the field to lose excess

altitude and speed prior to line-up on final approach. Established on final at seven miles, with airspeed control becoming a problem, Maj Perry elected to shut down the right engine using the fuel shutoff switch. He also retracted the flaps to 60 percent and continued with a single-engine approach (the left engine was kept running in order to retain normal gear, speed brake and flight control operation from the utility hydraulic system).

The plan was working perfectly until Tower announced on 4 mile final that the barrier had failed to come up on runway 34, but that runway 25 was available with a raised barrier. Maj Perry immediately retracted his speed brakes and initiated a critical single engine go-around in afterburner with only 800 pounds of fuel remaining. He initiated a right climbing turn, then reversed left to land on runway 25. His landing was perfect, on-speed and 500 feet past the threshold. As the aircraft began to accelerate after touchdown, he immediately shut down the left engine using the fuel shutoff switch. Unable to aerobrake due to total loss of hydraulics, Maj Perry employed optimum braking and stopped the aircraft short of the barrier.

Maj Perry exhibited superior airmanship in recovering his disabled aircraft from a dual



**Maj Donald H. Perry**  
479 TTW  
Holloman AFB, NM



throttle quadrant malfunction. His timely decisions and actions, coupled with a flawless single-engine go-around when fuel was critical, prevented the loss of a valuable training aircraft and earned him the TAC Aircrew of Distinction Award.



# CHOCK TALK

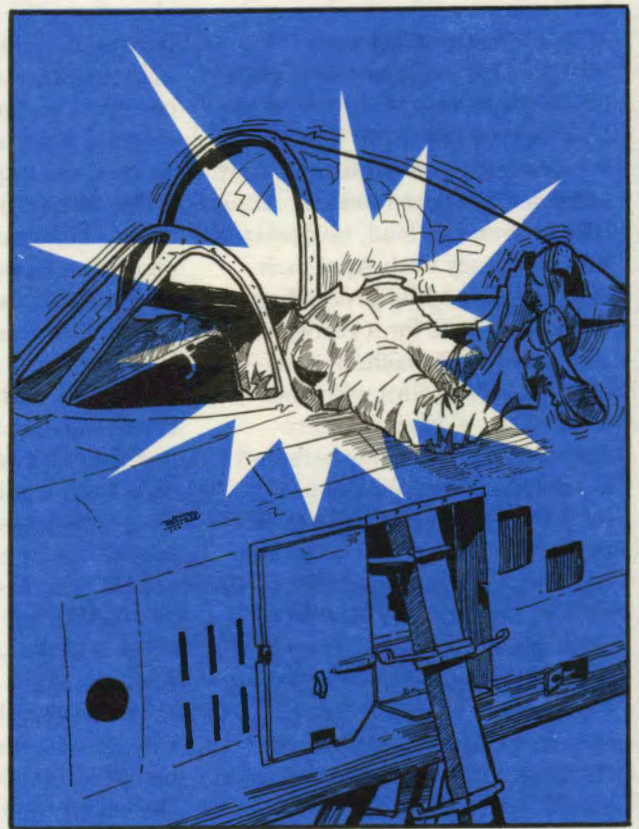
## Now what'cha gonna do

**A**n A-10 unit recently experienced an incident that involved a crew chief getting caught between an aircraft canopy and the canopy rail. The aircraft had returned from a routine training mission and the pilot had exited the cockpit by way of an external boarding ladder. The crew chief climbed the ladder and began a routine cockpit inspection. He began with the right side console, center and left side. While checking the right side, he noticed the canopy switch had been left in the Open position. The crew chief put his left knee on the canopy rail, reached across the cockpit and moved the switch into the Hold position before continuing his inspection.

When the crew chief repositioned the switch, he unknowingly also came in contact with the "Remove Before Flight" streamer attached to the pilot emergency canopy release pin. The cable connecting the streamer and pin lodged behind the canopy switch and allowed the canopy to come down. The crew chief was unaware that the canopy was closing because he was "heads down" checking the cockpit. He was also wearing hearing protection, and several aircraft close by were running.

Upon feeling pressure on his back, the crew chief was unable to escape from getting caught. For-

## Incidents and Incidentals with a Maintenance Slant



tunately, the external boarding ladder prevented canopy closure and serious injury. The circuit breaker was popped and removal was achieved by manual disconnection of the canopy actuator.

Lessons learned—use an external boarding ladder whenever possible; always perform cockpit checks from inside the cockpit (pilots as well as maintenance folks); and make sure you complete all checklist items. If you do, hopefully you can avoid getting pinned down by your work.

## Not a storage bin

An A-10 pilot was scheduled for an early morning launch on a weapons delivery mission. As he started the left engine, the crew chief noticed a large flame shooting out of the exhaust and told the pilot to shut the engine down. There hadn't been any indications of fire or other problems inside the cockpit.

During engine inspection, they found the remains of a pair of plastic ear protectors. Someone apparently left them in the intake during the preflight inspection process. While the crew chief's preflight checklist directed him to "inspect the engine inlet and exhaust for foreign object," both he and the pilot failed to notice the mislaid protectors.

The hours of darkness make it much more difficult to notice such problems as tools lying around, panels not properly fastened and fluid drips that are much more apparent during the daylight hours. If you're working during the periods of dawn or dusk, remind yourself to use an extra measure of care needed to look into nooks and crannies that are easily seen during the daytime.

One way to prevent objects from being left behind on the aircraft and becoming FOD is to view your aircraft as a "no storage" area. Make a habit of **not** using intakes, exhausts or any other part of your jet to store tools, forms, clothing or anything else that might be forgotten and embarrass you later. Know what tools you brought to do your work and make sure you have them all when you leave.

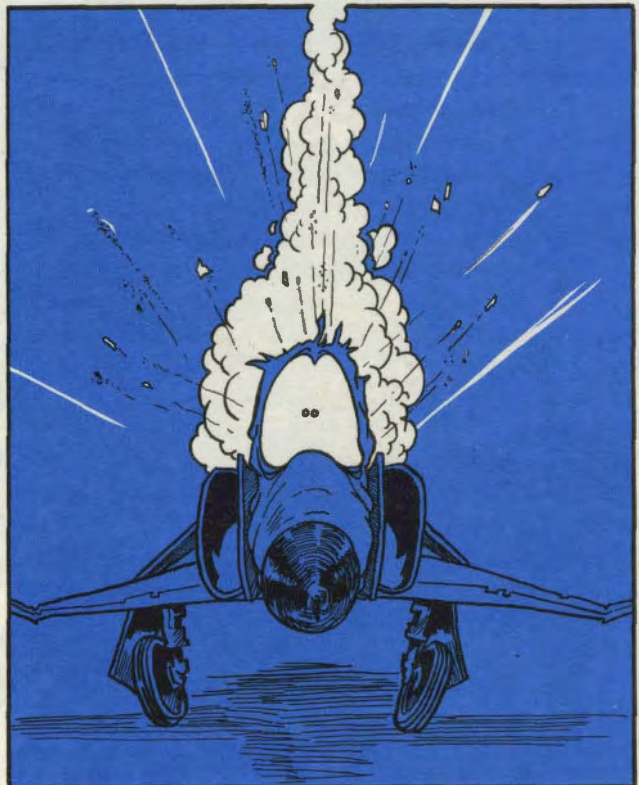
## Don't go too far

Two egress technicians were performing the final inspection of an F-4 rear cockpit with one individual reading the tech order checklist as the

other performed the required steps. Both the thru-flight crew chief and the technicians had supposedly verified that the ejection seat was secure.

Everything went as expected until they reached a checklist step which stated, "survival kit actuating lanyard connected to emergency harness release handle links." As the technician performing the steps pulled up on the handle, he noticed the safety pin falling away from the handle, and the system fired.

A failure to ensure proper safety pin installation was the final link which allowed this incident to occur, but the technicians also erred by manually bypassing the trigger safety feature and pulling the handle. Even though this practice had become accepted as a local procedure above and beyond checklist requirements (to ensure that the linkage was free and working properly), it was not an authorized technical order procedure. Proper use of tech orders means doing all the steps in order without leaving out something or adding anything extra.



# the LAW

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We look upon the law and our deviations as varying hues of gray, one blending with the next.

Yet the simple truth is that laws and other rules imply black and white standards.

You either act within the context of a given law or rule - or you violate it.

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SSgt Steve Schultz  
TAC / SEG  
Langley AFB, VA

**D**on't you get infuriated when you're cruising down a winding, rural two-lane highway at 65 MPH (the traffic's light—who cares about the posted 55 MPH speed limit?) and you suddenly come upon a vehicle in your lane doing 45 MPH?! That old geezer shouldn't be allowed on the road! **That's the sort of person who causes accidents**, the one who doesn't keep up with the flow of traffic, isn't it?

Wrong! That person has one thing in their favor: they're cruising within the limits of the law. You've broken the law and could be held liable for any collision that might occur as a result.

The law and other rules are strange things. They exist and are well publicized, yet each of us frequently violate them. We look upon the law and our deviations as varying hues of gray, one blending with

the next. Yet the simple truth is that laws and other rules imply black and white standards. You either act within the context of a given law or rule—or you violate it. Even Keira, my cat, knows this. Keira knows she's allowed on the sofa, but not on the end tables. But she's been influenced by humans

ing. Of course, she's caught and given a swat on the nose. She knows that could happen, but still persists in trying.

Though we're a higher, more intelligent life form, most of us aren't much different from Keira the cat. We know good from bad, right from wrong. Most of us refrain from kill-

paws on the end table. In our cars, we speed, drink and drive, and neglect to use our turn signals. On the job, we take shortcuts that aren't in the tech data, use unapproved tools and engage in horseplay. None of those examples appear to be on the same level as murder. That's because they're not directly capital offenses. But each of them have on occasion resulted in death to someone. So even simple, common incursions into those hues of gray areas violate rules and can be construed as criminal. Every time one of us elects to violate a rule or law, we take the chance of hurting someone.

In all candor, it is unfortunate that the odds are in the favor of the violator; chances are good that nothing remarkable will happen. And if that person does get caught, the result is usually only a ticket from a cop or a DSV (detected safety violation) from QA.



for too long and has seen them break into tones of gray. She insists on lying upon the arm of the couch with a paw or two upon the end table when she thinks I'm not look-

ing each other because we know that murder is unlawful and morally wrong.

Look at the laws we do violate, the ways we figuratively put our

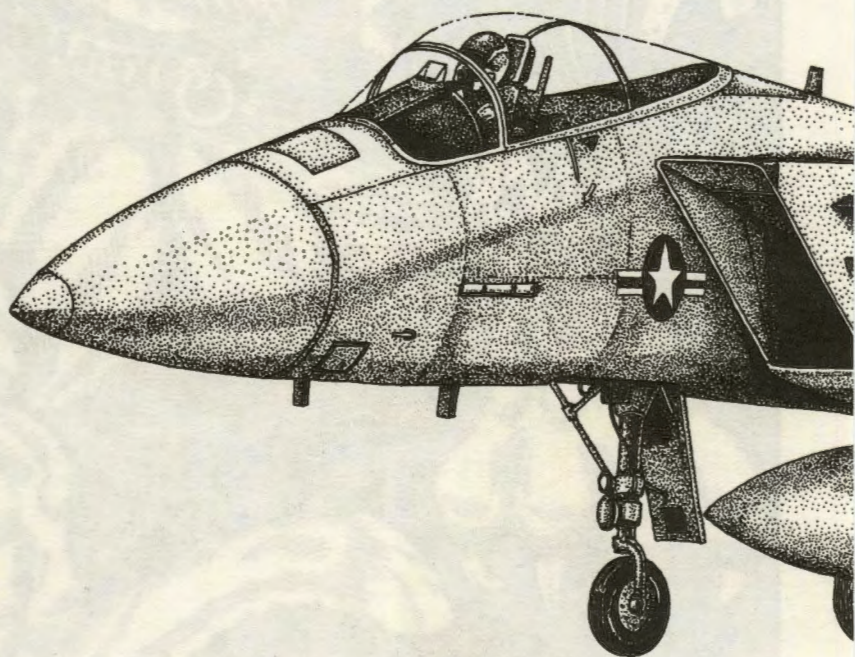
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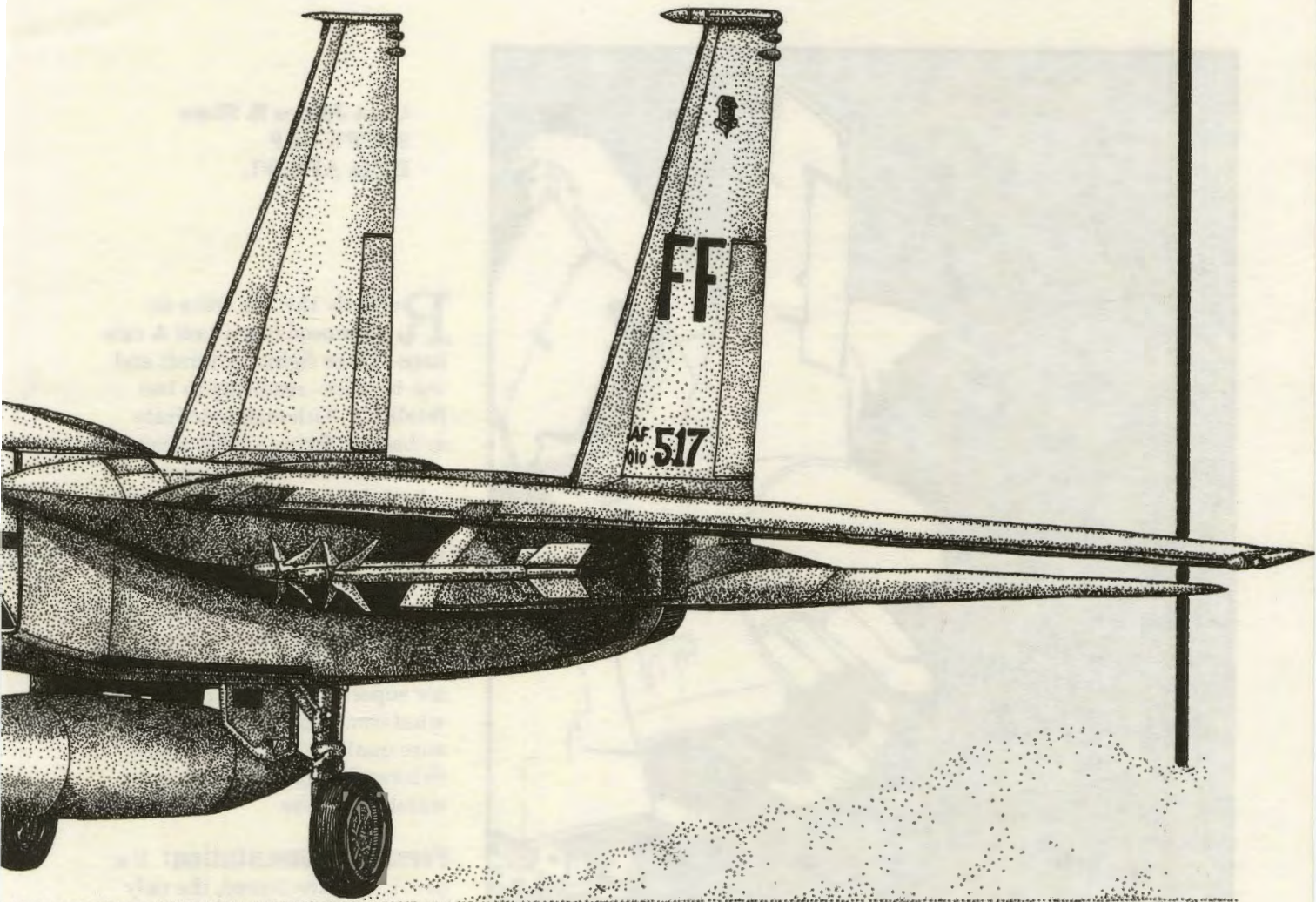
That equates to an extra expenditure next month or a possible butt chewing from the supervisor. Every now and again, we hear of a violator—now a criminal—whose neglect killed someone. If it's an acquaintance, we think, "Poor Charlie. He got caught." That's the fine line in that gray area that separates the merely daring from the criminal—getting caught. Like with a craps shooter, challenge the odds enough times and you'll eventually crap out. ➤

# F-15 EAGLE





FLYING SAFETY:



Faint, illegible text, likely bleed-through from the reverse side of the page.

# FLYING SAFETY:



**Capt James B. Shaw**  
33 TFW/SEF  
Eglin AFB, FL

**R**ecently the Air Force experienced four Class A mishaps—three fighter aircraft and one bomber—resulting in two fatalities. Although a definite setback in flying safety, we can all learn from these mishaps.

Let's begin with the backbone of aircraft flight operations—the maintainers. Without your pride, dedication and professionalism, the F-15 and our other TAC aircraft would not be able to perform their mission—whether its air superiority, ground attack or whatever. Your mission is to ensure quality maintenance and this can be accomplished in a number of ways.

**Forms Documentation:** If a problem is discovered, the only way to ensure it gets fixed is by properly writing it up. How many times have you read about an aircraft damaged or lost because a previously identified discrepancy was not documented? It takes only a minute to fill out the AFTO 781, and it may save a life and/or an aircraft.

# WHOSE RESPONSIBILITY IS IT ?

**Tech Order Usage:** The human brain is a wonderful thing, but, as we all know, it has its faults. We can't possibly remember everything we've learned, which is evident when we forget something important like a birthday, anniversary, appointment, etc. The worst that could happen in those situations is anger or hurt feelings. What happens when you're working on a multimillion dollar jet and you put the wrong torque on a flight control item because you tried to recall it from memory? We must use,

adhere to, and rely on the tech order; it's the key to quality maintenance and a successful mission.

**Foreign Object Damage:** The first launch of the day is twenty minutes away; the pilots have already stepped to their aircraft and proceeded with engine start. Suddenly the radio comes alive—"Redball aircraft 555—engine problems." You're the one they depend on to make this sortie; you're the best. You'll make it happen. You snap to,

resolve the problem, and all systems are "Go." You watch with pride as he takes off to accomplish that important mission while you pack up your tools for a much deserved break. Wait, where's that  $\frac{3}{8}$  inch open-end wrench? Suddenly the radio comes alive: "We have an IFE, aircraft 555, engine malfunctions. . ." FOD, think about it.

Now, let's consider the other half of the picture—the fighter pilot. You've worked long and hard to get where you are. The college degree, the initial and upgrade pilot training; you've made it—a fighter pilot—one of a kind. Your mission is to ensure the skies belong to the friendlies, and this can be accomplished in a number of ways.

## Mission Planning and Preparation :

Flights always seem to be better when everyone is prepared. We can't plan for every contingency, but there are a few that should be considered. Have a plan for fall out, no adversaries, no GCI and a weather backup. Know what weather to expect for takeoff, landing, the working area and any alternates. Check the NOTAMS for the status of runways, barriers, and nav aids at home base and at planned alternates. If you are flying low level, ensure that you have an updated (CHUMmed)





# FLYING SAFETY: whose responsibility is it ?

map for the area and know the location of obstacles. Always have specific mission objectives that are thoroughly understood by everyone.

**Rules and Regulations:** We have to know them to follow them. Not knowing a rule is no excuse for violating it. If you're not sure, ask. If there is no one to ask, use common sense and be conservative. In the Eagle, for ex-

ample, we are the air-to-air experts. We have to be the protectors of the training rules. They have been born of our blood in air-to-air mishaps. They are there to help prevent another mishap from happening. They are rules to *live* by.

**Emergency Procedures:** No amount of planning will prevent some emergencies from happening, but it will make for smooth,

efficient handling of those that do occur. Point at the nearest suitable field, figure out what you have, apply the checklist procedures, and declare an emergency if necessary. If the airplane is not flying, don't delay an ejection in futile attempts to recover it. Make your ejection decision now, on the ground where you can think about it, not in the air when a pause for thought can kill you.

**Forms Documentation:** When you arrive at your jet, you expect a Code 1 bird. It's quite a let-down when you're prepped for a mission and you have to abort for a system malfunction. Yet, how many times have you flown a jet and noticed a "glitch" in one of your systems? It only lasted for a minute or two and worked for the remainder of the flight. The question is: did you write it up or let it slide? Sometimes we may be tempted to let it slide, but we all know what the correct answer is—*write it up!* We expect the maintainers to give us a Code 1 jet, but how can they fix something they're not aware of? Write it up!

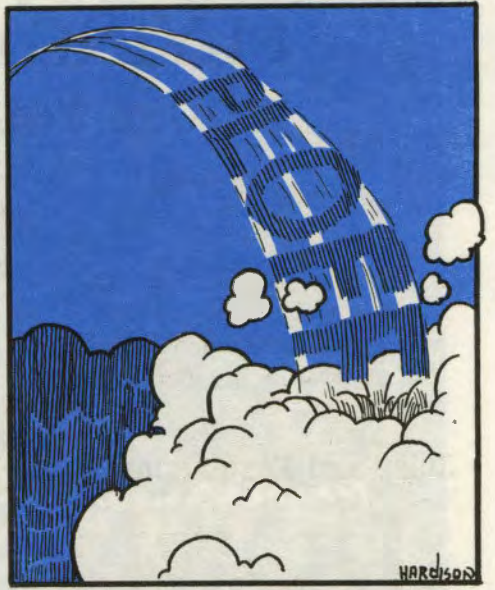
So we're back to the question of flying safety—whose responsibility is it? It's pretty evident that it's a team effort. If the maintainers and pilots do not work together, we cannot accomplish our prime objective—to fly, fight and win. Let's continue to be a winning team by working together to get the job done right.



Fleagle



BAD!

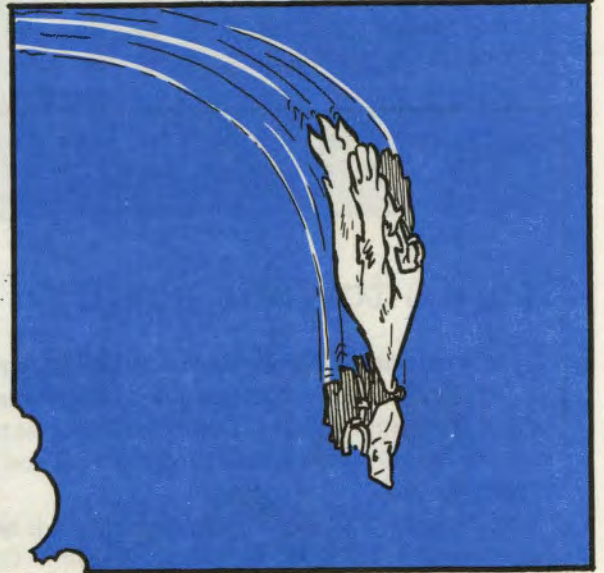


HARDISON



I BETTER GET BACK UP OVER ALL THIS MESS.

© STAR HARDISON 1989

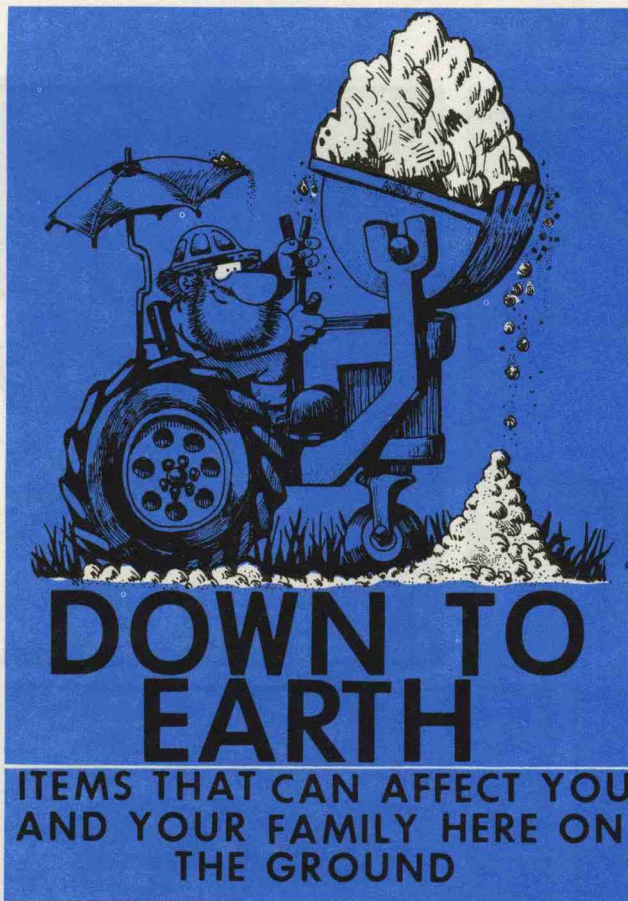


SURE IS A EASY CLIMB.



WHEN YOU GET YOUR DESCEND MIXED UP WITH YOUR ASCEND, YOU SOON RUN OUTTA SPACE TO DO EITHER.

SAY WHAT?



## Here's to your seeing

**F**ailure to use eye protection and using the wrong type of protection equipment are the two main causes of eye injury. That probably makes sense to you, but here are a few items of interest that you might not be aware of.

Did you know that face shields do not provide adequate eye protection? In the case of flying objects, face shields are more easily penetrated than goggles or safety glasses. For maximum protection for both your face and eyes, use your face shield on top of your other eye protection equipment.

Are your safety goggles or safety glasses the correct ones for the job? Do your safety glasses



require side shields? If you care enough about your eyesight, you've already answered these questions. If you don't know the correct answer, check AFOSH STD 127-31, Attachments 3 and 4, for the answers.

Be smart — identify the hazard — use eye protection. You're worth it.

## Three types of workers who need extra attention: Some food for thought

**A**n article in a recent issue of *Today's Supervisor* suggests three types of employees need special attention from you as a supervisor. These are new workers, difficult employees and night-shift employees.

*New Workers.* According to the article, new workers—especially those who are young—are apt to look up to the supervisor as someone to respect, even to emulate. If supervisors exhibit safe work habits, new workers will accept safe working procedures as a matter of course. *But*, if supervisors indicate they stress safety only because management has asked them to, new workers will take the cue and neglect safe working procedures themselves.

*Difficult Employees.* Difficult employees may place a low level of importance on safety, or cynically remark that the company is worried only about the cost of accidents and isn't truly concerned about its employees' welfare.

The article recommends taking a strong stand with such workers, requiring them to follow safety rules as they would any other rules of the job. It suggests they may respond to appeals relating safety to the welfare of their family or to the fact that injuries may inhibit their social or athletic activities.

Supervisors are cautioned against debating the motives of safety or loss of control measures. There is no reason to be defensive about wanting to avoid accidents for the benefit of the organization and everyone else concerned.

*Night-Shift Employees.* One of the many problems associated with night-shift employees is fatigue. In addition to performing usual off-the-job chores, some workers try to hold down part-time or even full-time jobs during the day. Supervisors must consider these factors when providing safety training to night-shift employees.

(Courtesy—National Safety Council and Aetna Life and Casualty)

# TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD

**S**gt Troy D. Driggers is an F-4 Dedicated Crew Chief who sets the example for professionalism in unit aircraft maintenance. His attention to detail, coupled with team spirit and an in-depth knowledge of daily maintenance practices, has prevented unsafe flights on several occasions.

For example, Sgt Driggers faithfully uses a locally developed checklist for foreign/dropped objects to inspect jets on which he is working. This has resulted in his aircraft maintenance flight and AMU having fewer discrepancies than others in the wing. This has also contributed to a reduction in the foreign/dropped object rates.

On one occasion, Sgt Driggers was performing a thru-flight inspection on an F-4 when he found an inlet guide vane (IGV) on the number two engine not connected to the actuator ring. Upon further investigation, it was determined that the IGV had never been connected. The aircraft had flown over 400 hours during the year with this difficult to detect discrepancy. The aircraft had experienced a compressor stall on the opposite engine immediately prior to his discovery. Sgt Driggers' ded-

icated efforts prevented the aircraft from flying again with a potentially catastrophic problem.

On another occasion, Sgt Driggers found a loose CSD (constant speed drive) dome. When engine personnel investigated further, they found a loose mount bolt. This could have contributed to foreign object damage and the possible loss of a valuable aircraft.

Sgt Driggers' outstanding attitude toward quality maintenance and safe operating practices have earned him the TAC Outstanding Achievement in Safety Award.

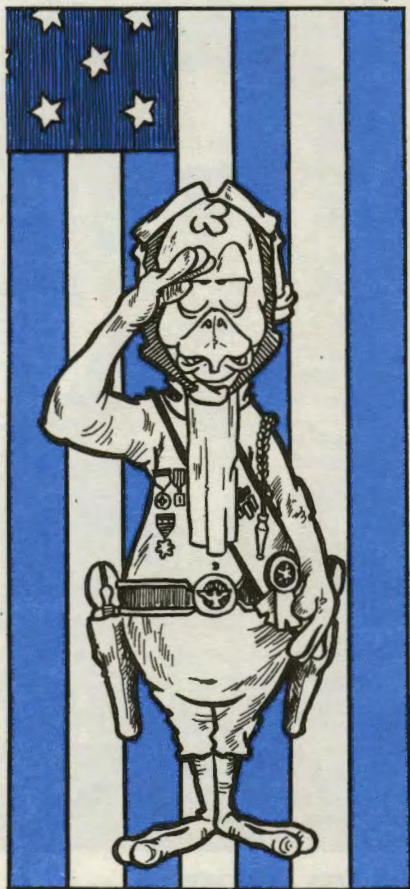


**Sgt Troy D. Driggers**  
4 AGS, 4 TFW  
Seymour Johnson AFB, NC



# FLEAGLE SALUTES

## TAC'S OUTSTANDING AIRMEN



check his aircraft. They discovered that the left wing leading edge panel over station three had delaminated and bent upwards into the airflow, acting as a spoiler.

After declaring an emergency, Capt Broda climbed to 8,000 feet for a controllability check and determined that the minimum control speed was 145 knots. He flew an uneventful no-flap, no speed brake approach at 165 knots, forcing him to decrease his airspeed approaching the runway overrun. This required constantly changing rudder and stick inputs as the angle of attack was increased. Capt Broda's outstanding handling of this difficult in flight emergency saved a valuable combat aircraft from further damage and has earned him a Fleagle Salute.



**Flight Lieutenant Dick Garwood** (a Royal Air Force exchange officer) and **Captain Timothy Digman**, 91 TRS, 67 TRW, Bergstrom AFB, TX, were flying an RF-4 reconnaissance mission at low altitude during a local exercise when they heard a loud explosion and felt the aircraft roll and yaw left. Flt Lt Garwood, using both hands, depressed the emergency quick release lever and began a gentle climbing right turn. Capt Digman reported that the

leading edge flaps were damaged, as Flt Lt Garwood noted the fuel quantity had suddenly decreased, showing no internal wing fuel. After declaring an emergency and evaluating their situation, the crew returned to home base, while a chase aircraft joined with them and reported the aircraft's left outboard fuel tank and ECM pod missing, damage to the leading edge flap and a 3-by-16 inch hole in the bottom of the wing. The crew performed a controllability check, then accomplished a no-flap approach to a successful landing and approach-end barrier engagement. The superior airmanship, prompt reaction and excellent crew coordination demonstrated by Flt Lt Garwood and Capt Digman in handling a serious emergency resulted in the safe recovery of a valuable combat aircraft and earned them a Fleagle Salute.



**SSgt Luis C. Posada**, 363 AGS, 363 TFW, Shaw AFB, SC, was preflighting an RF-4C aircraft when an F-16C experiencing a hydraulic problem pulled into a parking spot some distance away from him. When the Falcon pilot shut down the engine, the F-16 began to roll down a slight incline onto a parallel taxiway and

**Capt Michael W. Broda**, 104 TFG, Barnes MAP, Westfield, MA, was number three in a four-ship of A-10s on a conventional weapons delivery mission. During recovery from the first 30-degree dive bomb pass, he felt the aircraft roll violently left to about 50-60 degrees of bank; so he relaxed back stick pressure and attempted to roll the aircraft wings level. An abnormal amount of right stick was required to roll the aircraft; and when he reapplied 5-6 Gs to recover, the aircraft again rolled left. Using a combination of back stick pressure, right aileron and rudder, he managed to pull the aircraft out of the dive and recovered at about 700 feet AGL. He called "knock it off" and asked the flight lead to



towards an unprepared dirt surface. SSgt Posada heard the F-16's engine winding down and noticed the jet starting to roll. Alert to the real possibility of a mishap, he immediately grabbed a set of chocks, sprinted about 70 yards to the F-16, and tossed the chocks in front of the left main tire. SSgt Posada's quick thinking stopped the aircraft about 10 feet from the edge of the taxiway, saving a valuable aircraft from potentially serious damage, and earned him a Fleagle Salute.



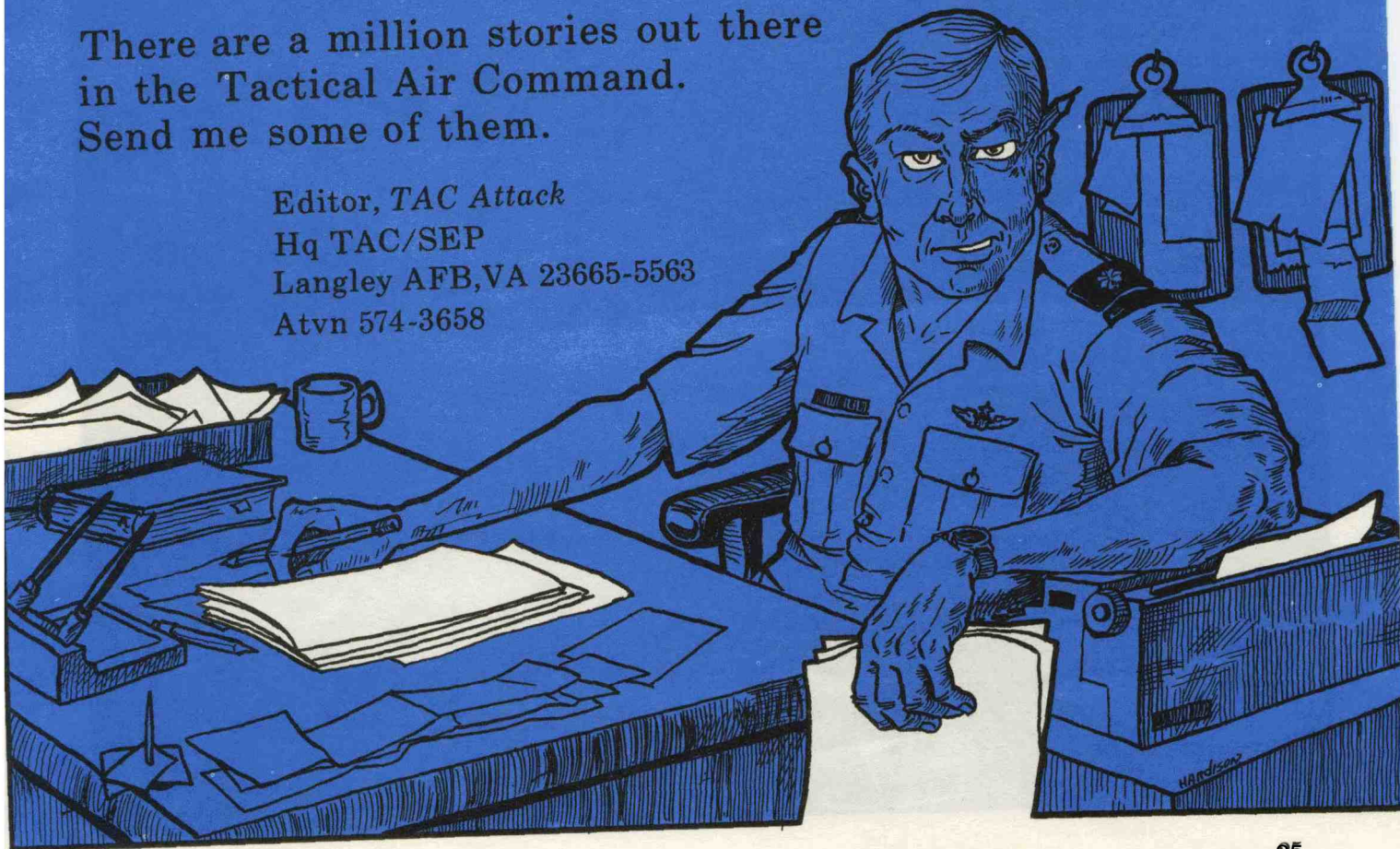
**Airman Armando E. Mondragon, Jr.**, 363 AGS, 363 TFW, Shaw AFB, SC, was performing general aircraft maintenance on the flight line when he found a captive television-guided missile that had separated from one of its launcher suspension lugs and was literally dangling beneath the launcher. Noticing the dangerous situation, Amn Mondragon immediately notified the on-site supervisor of the loaded launcher's unsafe condition. The appropriate personnel were notified and the missile, with its launcher, was downloaded from the aircraft without incident. Amn

Mondragon's quick thinking and positive actions prevented the possible loss of a valuable Air Force asset worth well over \$35,000 and earned himself a Fleagle Salute.



There are a million stories out there in the Tactical Air Command. Send me some of them.

Editor, *TAC Attack*  
 Hq TAC/SEP  
 Langley AFB, VA 23665-5563  
 Atvn 574-3658





# CAN YOU TELL THE DIFFERENCE BETWEEN AN A-HOG AND AN OA-HOG ?

**Maj Gregg Straight**  
355 TTW/DOTL  
Davis-Monthan AFB, AZ

One of the air-to-surface training rules says to call a "knock-it-off" whenever an unscheduled flight enters the range. We sometimes think "it can't happen to me," but while leading a two-ship of A-10A Warthogs on an air-to-surface gunnery mission, I had two Marine A-4 Skyraiders enter the controlled range I was working and expend six practice bombs each before anyone knew they were there.

My wingman and I had just finished doing a 45-degree dive bomb pattern and were doing a dry spacing pass to lose altitude and check surface winds prior to doing low angle strafe with our 30mm GAU-8 Gatling guns. As I was looking down to see how the strafe rags were hanging, I heard

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**The A-4s had made no radio calls on our range frequency and had disappeared as quickly as they had arrived.**

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my wingman say that there were other aircraft on our range. I looked back at left 7 o'clock and saw an A-4 pass between me and my wingman, slightly beneath our altitude and perpendicular to the range run-in heading. As we started a climb and made our "knock-it-off" calls, I looked back at the target circle we had just finished bombing and saw two strings of six BDU-33s near the target. We held high and dry for 10 minutes until we were sure they wouldn't be back. The A-4s had made no radio calls on our range frequency and had disappeared as quickly as they had arrived.

Meanwhile, on a tactics range about 10 miles southwest of our controlled range, a flight of two OA-10As were talking to a flight of two Marine A-4s. The A-4s had been cleared to proceed from the IP towards the target, but the OA-10 FAC did not have them in visual contact. The FAC then fired a white phosphorus rocket to mark the target and help the A-4s find it. About this time the A-4 wingman spotted smoke on the ground, saw two A-10 aircraft and called the target in sight. The FAC told them to continue, but that he didn't have them in sight. The A-4s transitioned from a dive bomb event to a low angle release and, with #2

in the lead, they bombed the "target" and egressed. The FAC suspected something was wrong when the A-4s called "In" and he still didn't see them, so he immediately called for an "abort." The A-4s told him they'd already expended (without clearance) and were on their way home. The FACs could not see any smokes on the ground on their tactics range.

The story was pieced together back on the ground in front of some anxious DOs. The A-4s had mistaken the valley where the tactics range was located for the valley our controlled range was in. They saw the smoke from the BDU-33s on our last dive bomb pass, just as the OA-10s were firing their smoke rockets in the target area. "A-10s" and smoke on the target were all the A-4s needed to attack the wrong target.

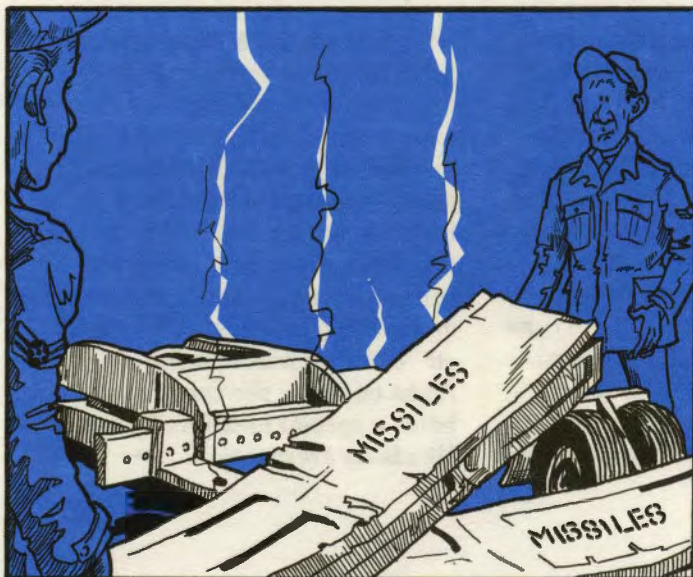
In the end, the Marine pilots got a lesson on navigation and dropping ordnance without clearance to expend. The OA-10 FACs learned some valuable lessons on positive control of fighters. I learned that an unscheduled flight can enter your restricted range airspace without warning *at any time*. Briefing a "knock-it-off" call for an unscheduled flight entering the range now holds a special meaning for me. Heads up everyone! ➤



## WEAPONS WORDS

### Did you see that?

**A** missile crew was tasked to move two stacked containerized missiles from outside the missile shop to the storage bay, using an MHU-83 bomb lift to do the job. The crew chief prepared the lift for use but didn't notice that the forks were



iced over. With two crew members acting as spotters, the lift driver positioned the forks under the missile on top of the stack and lifted it. While the spotters moved to secure the missile with a tie down strap, the missile slid off the forks and fell to the ground.

The crew should have fastened the missile container down securely before ever lifting it. But even more important during these winter months, keep your eyes open for slippery conditions on both your equipment and the area where you are planning to transport munitions.

### Condition: UNSAFE

**A** weapons maintenance crew was sent out to do 30- and 60-day weapons systems inspections on several F-15s. On the second jet, two crew members began setting up AGE equipment while a third person prepared the test equipment. The crew chief and two other members began inspections on the LAU-106/MAU-12, while another person removed the sealed cartridge retainers in preparation for a weapons system jettison check. During the 30-day gun rotate and lube, the cockpit was safed for maintenance and power was applied. As verification checks progressed to station five, the test equipment was placed in the MAU-12 position and cockpit switches set to Pylon. When the jettison button was depressed, no voltage was present at the MAU-12 bomb rack; but as the pylon safety pin was removed while the jettison button was depressed, the pylon cartridges fired. Luckily, damage was minimal because the safety pin was only partially removed (first detent), preventing separation from the aircraft.

This incident could have been avoided with proper weapons systems preparation for all armed stations prior to any tests. Unfortunately, this was not done. The damage experienced was minimal due to the safety pin. We were lucky; a four hundred-plus pound pylon departing an Eagle creates a high potential for injury.

# A DISEASE CALLED "HS"

**Capt Robert Ethridge**  
82 FTW/MOA  
Williams AFB, AZ

All too often I've read in the newspapers, seen on television or heard over the radio that someone was seriously hurt or killed in a motorcycle or automobile accident for one of the following reasons:

1. Failure to wear a helmet
2. Failure to wear a seatbelt
3. Excessive speed
4. Alcohol
5. Failure to be properly trained in or adhere to motorcycle safety
6. Failure to obey traffic rules

These six items are not the reasons why vehicular accidents, injuries and death occur, however; they are only symptoms of a misdiagnosed disease. This disease is known as "HS" (Human Stupidity). Some people may feel that is too strong a term and maybe "Human Error" would be more appropriate. But, as written in *Webster's Dictionary*, an error is a mistake, not something that is done on purpose. None of these six acts can occur as an error; they only happen as the result of deliberate "Human Stupidity." For example, why would anyone ride a motorcycle without a helmet when they know that a motorcycle provides no protection in an accident? Why would anyone refuse to wear a seatbelt when they've been proven to reduce severe in-



juries and save lives? Why would anyone engage in excessive speed when there are speed limit signs posted on roads and highways and they know that violating these speed limits is against the law? Why would anyone want to drive a car under the influence of alcohol when their ability to walk, think or react is obviously impaired under the influence of alcohol, not to mention their ability to drive an automobile or a motorcycle? Finally, why would anybody fail to get the proper training or fail to obey traffic rules that were set up to protect themselves and others?

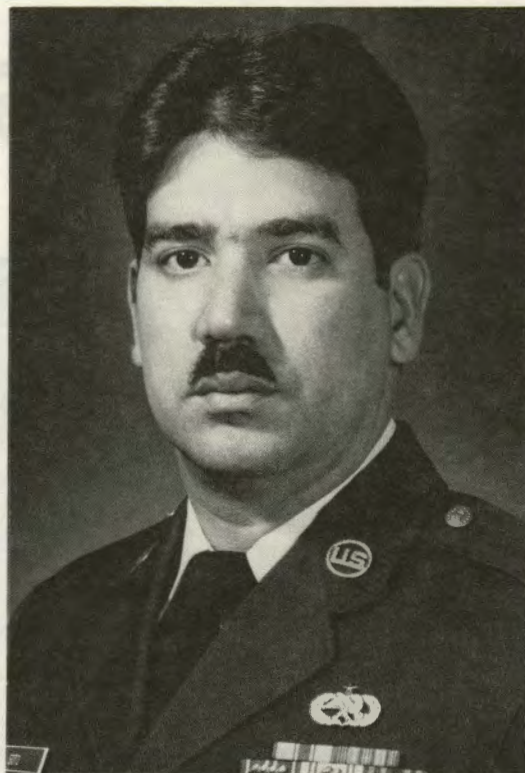
The answer to each of these questions is easy and is the same for each one—Human Stupidity. Unfortunately, the answer is also a sad one because all too often "HS" results in the injury or death of one or more people, sometimes innocent bystanders and the destruction of property. Anytime a life is lost or someone has to change their lifestyle because of an injury due to a vehicular accident, the price is too high. "HS" can afflict people of any age, race, sex or religious preference. But, just as it can afflict anyone, it can be quickly and easily cured through a good dose of maturity and common sense.

Don't become the next victim of "HS." Obey the traffic rules; get all the vehicle operator training available to you; don't drink and drive; and use all available safety devices. **Remember, the life you save may be your own.**

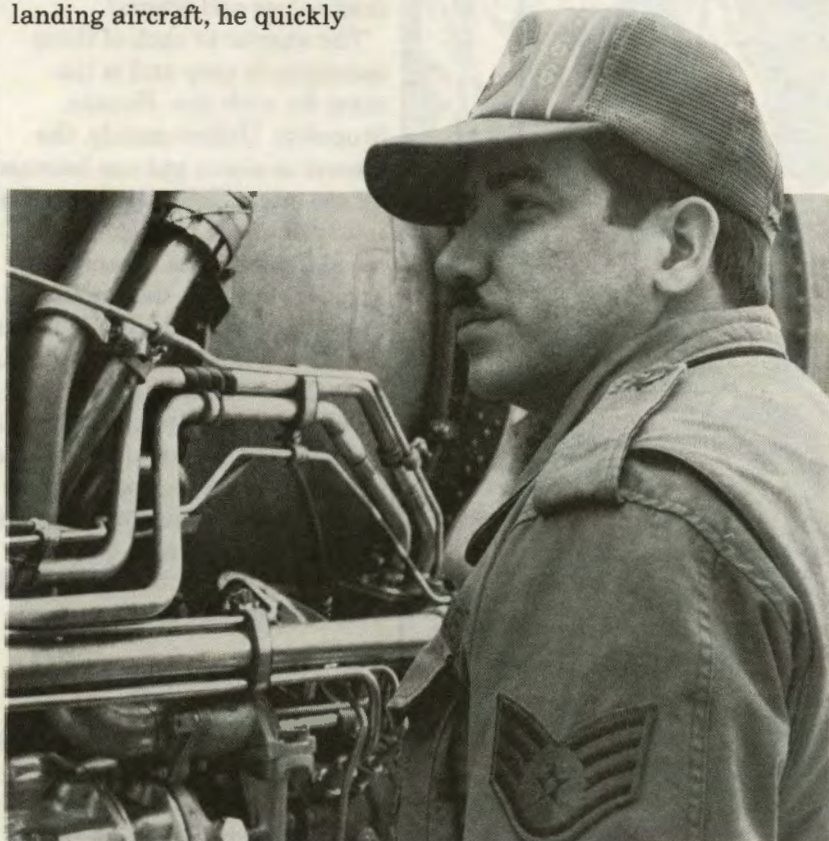


## TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD

**S**gt Jorge L. Soto was completing a post-run inspection at the Hush House when he saw a portion of a landing F-111A's flight control surface fall off and hit the runway. Realizing the potential hazard for subsequent landing aircraft, he quickly

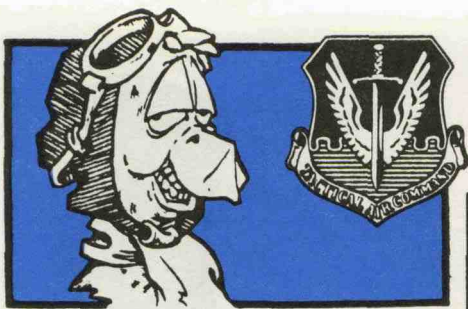


**SSgt Jorge L. Soto**  
366 CRS, 366 TFW  
Mountain Home AFB, ID



scanned the horizon for incoming aircraft and saw one about three miles out on final approach. Without hesitation, he notified the Maintenance Operations Center, who in turn notified the wing command post of the problem. They were able to vector an incoming F-111 and two C-130s away from the area until the debris could be removed from the runway. A flap vane was recovered; the runway cleared; and the aircraft cleared to land.

SSgt Soto's alertness, clear thinking and decisive actions prevented a potential mishap from occurring and earned him the TAC Outstanding Achievement in Safety Award.



# TAC TALLY

CLASS A MISHAPS
AIRCREW FATALITIES
• IN THE ENVELOPE EJECTIONS
• OUT OF ENVELOPE EJECTIONS

Total		
FEB	THRU FEB	
	FY 89	FY 88
1	10	10
1	3	5
1/1	6/2	6/0
0/0	0/0	0/1

TAC		
FEB	THRU FEB	
	FY 89	FY 88
0	7	7
0	1	4
0/0	3/0	5/0
0/0	0/0	0/1

ANG		
FEB	THRU FEB	
	FY 89	FY 88
1	3	1
1	2	0
1/1	3/2	1/0
0/0	0/0	0/0

AFR		
FEB	THRU FEB	
	FY 89	FY 88
0	0	2
0	0	1
0/0	0/0	0/0
0/0	0/0	0/0

• (SUCCESSFUL/UNSUCCESSFUL)

## TAC'S TOP 5 thru FEB 1989

1st AF	
CLASS A MISHAP-FREE MONTHS	
102	318 FIS
49	325 TTW
37	57 FIS
16	48 FIS

9th AF	
CLASS A MISHAP-FREE MONTHS	
72	33 TFW
45	507 TAIRCW
20	1 TFW
16	4 TFW
12	347 TFW

12th AF	
CLASS A MISHAP-FREE MONTHS	
41	35 TTW
35	474 TFW
27	37 TFW
23	49 TFW
17	24 COMPW

ANG	
CLASS A MISHAP-FREE MONTHS	
219	110 TASG
194	138 TFG
176	177 FIG
171	114 TFG
135	155 TRG

AFR	
CLASS A MISHAP-FREE MONTHS	
102	482 TFW
92	924 TFG
80	906 TFG
54	507 TFG
41	917 TFW

DRUs	
CLASS A MISHAP-FREE MONTHS	
19	USAFTAWC
11	USAFTFWC
5	28 AD

## CLASS A MISHAP COMPARISON RATE

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

	FY 89	1.7	2.7	3.0	3.2	2.6							
<b>TAC</b>	FY 88	6.4	3.4	3.0	2.7	2.6	3.3	3.0	3.1	3.3	3.2	3.0	3.4
<b>ANG</b>	FY 89	0.0	0.0	1.5	2.3	2.9							
	FY 88	0.0	0.0	0.0	0.0	0.9	2.2	2.5	2.7	2.9	3.0	3.5	3.2
<b>AFR</b>	FY 89	0.0	0.0	0.0	0.0	0.0							
	FY 88	0.0	10.6	7.7	5.9	9.5	7.9	6.7	5.8	7.5	6.8	6.2	5.7
<b>Total</b>	FY 89	1.2	1.8	2.5	2.8	2.5							
	FY 88	4.3	2.9	2.4	2.2	2.5	3.2	3.1	3.1	3.5	3.3	3.3	3.5
<b>MONTH</b>		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

