

TAC ATTACK

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Tom Studd, December 1985

ANGLE OF ATTACK



Daily, we are doing more difficult jobs more professionally and safer. Our recent Gunsmoke attests to the quality of TAC's people and aircraft. This year extremely skilled aircrews and equally talented supervisors of flying and squadron leaders have recovered very sick aircraft that could have been crash statistics had the team not been as highly qualified. Our ground support folks have caught critical problems in quick check, extinguished aircraft fires and professionally launched hundreds of thousands of successful, safe sorties. The attitude and positive approach characteristic of the "high visibility" exercises have caught on—you're doing it better and smarter on a daily basis. The environment that seems to give us the most trouble recently is the small deployment/cross-country mission. I've put together a "threat briefing" for you this month in hopes of reducing similar losses in the future. We can make this happen.

Also this month we're turning our attention toward a very timely subject—cold weather operations and how to cope as well as a "nickel on the grass" about formation flying.

This is my last Angle of Attack as I turn over my office and my forum for communication with you to Colonel "Coupe" DeVille. He has been the chief of flight safety for the past 18 months. He came to TAC Safety from an extensive tactical background and brought a wealth of knowledge and expertise.

He combines this broad experience with desire and ability to continue to improve TAC's safety record while improving our mission effectiveness. It is a pleasure to pass the reins of TAC Safety and this page to him and to return to the field and the smell of JP-4. There is life after HQ TAC.

HAROLD E. WATSON, Colonel, USAF
Chief of Safety

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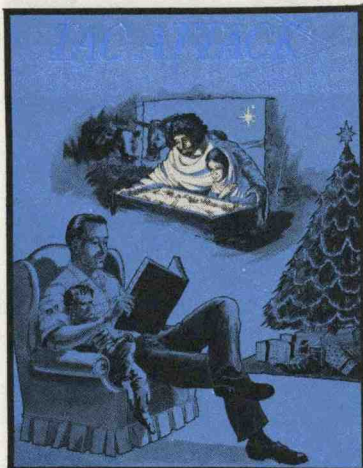
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LETTERS

Letters



Dear Editor

Once, years ago, a colonel red-penciled, nearly to death, a piece I had written. I reaccomplished it, and with seeming disgust he said: "I don't know why you want to publish this anyway—it's *only* a service journal."

Strangely, there are others who have similar disdain for these publications. But now and then, from nearly nowhere comes a letter of appreciation. It's like giving a lecture to 200 students to stop smoking and to have one of them say, "I was almost ready to quit and you helped me."

The author of the enclosed letter [see below] came out of the Air Force blue without solicitation. I never met him. For that matter, I've never talked with you in person. But we talked to him, and he appreciated the words.

Keep talking. Writing "Burnout" [May 85 *TAC Attack* was your piece too. If one little tip on health and safety sense prevents one aircraft accident somewhere in the Air Force in 20 years—it's worth all the trouble. It more than pays our wages.

This is an old idea, but it's still true in 1985.

Best wishes

Richard B. Pilmer, Col. USAF
 Chief, Human Factors Branch
 Aerospace Rescue and Recovery Service
 Scott AFB, Illinois

Dear Colonel Pilmer

Just wanted to drop a line to say I enjoyed your article in the May 85 issue of *TAC Attack* regarding "Burnout." Recently stepping into a supervisory position, it gave me and my fellow co-workers a few pointers.

Thanks again.
 Respectfully

Douglas M. Shea, Sgt, USAF
 Mountain Home AFB, Idaho

Dear Colonel Pilmer

Thanks for the nice words and for making a good point: If we reach just one person, it's worth it. Something for all our potential authors to think (and write) about.
 ED

TALLYHO THE THREAT



Col Harold E. Watson
Chief of Safety

Before a combat mission, the intel folks provide us with a detailed threat briefing in the best tradition of "forewarned is forearmed." In this, my last article as the TAC Chief of Safety, I would like to summarize some threat intelligence based on our last two years of experience.

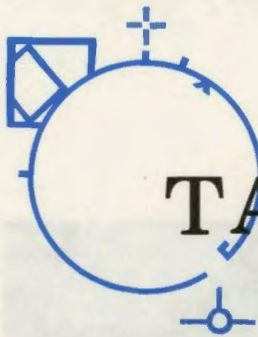
**It has never
been safer to fly
than it is today.**

It has never been safer to fly than it is today. Our mishap rate in TAC, and in the Air Force, is the lowest in history. Yet, there are remaining threats that need

to be suppressed en route to our assigned targets.

Controlled flight into terrain (CFIT) accounts for nearly all of our losses on surface attack missions. Whether in peace or at war, the ground has a P_k higher than the most sophisticated SAM or AAA. Our CFIT crashes have been with perfectly good aircraft and aircrews striking the ground while engaged in a routine task successfully accomplished many times before. These aviators allowed navigation, switches changes, maintaining tally (or trying to get one) to take priority over aircraft control and terrain avoidance. In the past 24 months, 16 aircrews fatally erred by inadvertently ignoring this basic priority.

G-induced loss of consciousness



TALLYHO THE THREAT

(GLC) is a constant threat. With as much attention as this subject has received, I'd like to think we've made progress. The unnerving fact is that, although GLC Class As are decreasing, in three recent GLC episodes, the pilot was going uphill at the time and was fortunate enough to recover. Awareness, anticipation, proper straining and willingness to use fewer Gs when necessary will defeat this threat.

G-induced loss of consciousness (GLC) is a constant threat.

The threat of loss of control should really be an insult, yet it accounts for another one-sixth of our total losses. Instead of briefing sound, identifiable objectives, and knocking off the fight at the prudent point, the attitude of press-on-at-any-cost has led to simultaneously running out of airspeed, altitude and ideas. One might expect that the inexperienced pilot on a relative-

ly difficult tactics mission would be our biggest problem. Not true. We have had one student lose control in the last two years—on a BFM ride. The rest were IPs.

Misorientation (oriented, but on the wrong thing) has accounted for twice as many losses (6) already in 1985 as in all of 1984 (3). (In these mishaps, some unexpected event, usually a minor deviation, took place and the crewmember became totally preoccupied attempting to resolve the problem.) Interestingly, all of this year's misorientation mishaps have occurred during deployed operations. There must be a lesson here. Higher mission demands, increased desire to succeed and, in some cases, cockpit and instrument design require increased surveillance of aircraft attitude and flight vector. There is no substitute for pilot ability to fly excellent basic instruments. TAC pilots do this very well when they try—the problem is being aware of the need to try. I urge you to take out an excellent insurance policy—use the “unexpected event” as a warning light. Don't let it fixate your attention. Keep track of the flight vector (basic instruments)—especially during “unexpected events.”

There is no substitute for pilot ability to fly excellent basic instruments.

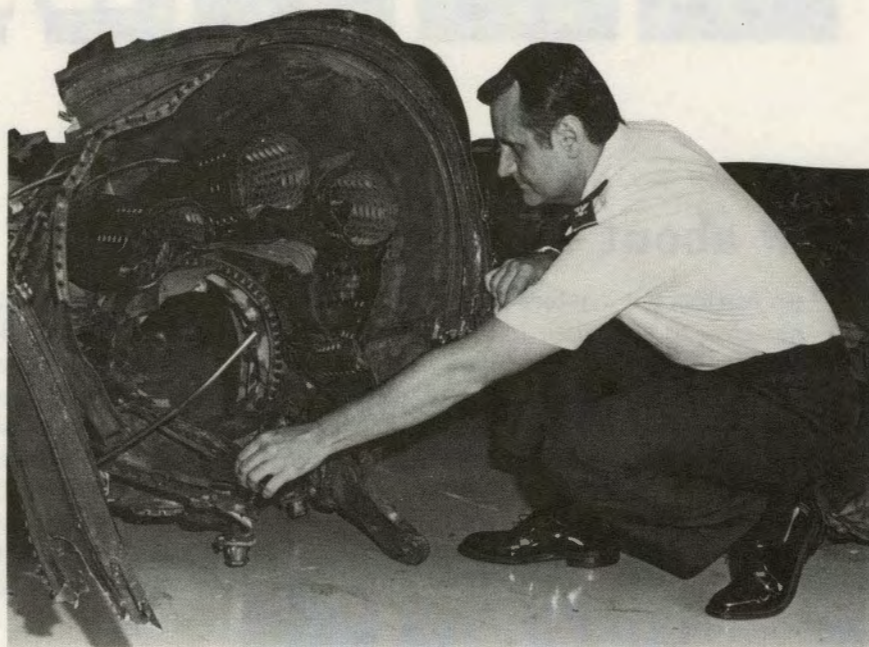
Beyond these threats, there are some “warning lights” before takeoff—deployed operations, schedule changes and contempt that is born from familiarity are the leaders.

Our mishap rate deployed is twice that at home. We must insist on doing the mission deployed with the same quality of supervision, preparation, tech order discipline and standards of execution that we use at home. Red Flag is certainly a high risk environment, but it is one of our safest deployments. Let's make it our case study for all operations away from home, regardless of how small they may be.

Over 45 percent of our operations factor crashes had a significant change to the mission, aircraft, range, aircrew or a com-

combination of these within two hours of takeoff. We must be spring-loaded to assess the "rhythm of the scheduling board." Leaders must continually judge rhythm, and aircrews must take time to accommodate the changes, even if it requires slipping or canceling the sortie.

We have seen a shift in the mishap pilot population. No longer does the new guy with less than 200 hours in the jet have the highest mishap rate.



No longer does the new guy with less than 200 hours in the jet have the highest mishap rate.

Rather, flight leads, instructors, flight and squadron commanders are experiencing more mishaps than the new guys. The recent crew duty day FMI (functional management inspection) indentified some of the probable rea-

sons. Burning the candle at both ends is not the least of these. Difficult tasks become more so. However, when these categories of pilots crash, the investigation board often finds that the crash occurred during rather routine phases of flight. These findings suggest that the experienced pilots may be so comfortable in the jet that they are allowing their minds to drift to the next engagement or range pass; thinking about the debrief; or taking care of cockpit tasks like switches, radio changes, etc.; and not noticing that they are in a critical environment, usually close to the ground. We must

know our aircraft, its systems and our mission. But, we can never afford ourselves the luxury of being contemptuously comfortable.

While we can be encouraged by the history of the declining mishap rate (down to one-third that of May 1978), we can continue to improve our record by recognizing the threat, applying proven suppression tactics and avoid doing the areas of highest risk. Success thus far has come from strong, positive leadership and mission orientation. Future successes will certainly come from the same effort.

TAG

tips

INTERESTING ITEMS

How about an attaboy

Two fearless F-4 aviators (they'll remain nameless to keep their hat size down) were third in a flight as they redeployed from a weapons training TDY. After breaking ground, they were rapidly catching up with Two, so the pilot terminated afterburner to avoid the other plane's exhaust. As the pilot brought the engine out of burner, the engine stalled; he retarded the throttle



to idle and the stall cleared. The aircrew figured the stall must have been caused by a momentary blast of Two's exhaust. Safely on the ground at home station, our intrepid duo went through maintenance debrief and mentioned the inflight compressor stall problem. Right on, guys! Engine technicians followed up the write-up by running the stall/flameout checklist. Sure enough, the engine stalled again. They moved to more in-depth

checks and eventually found quite a bit of engine compressor blade damage, some beyond repair.

Had it not been for the two guys that mentioned their aircraft's problem, even though they thought it was caused by an obvious reason, this saga might have had a different ending. When your jet doesn't work as advertised, make sure you get it down on paper so that maintenance folks can make sure there's not something else wrong.

Attaboy, guys. Great work.

All slushed up

An A-7 was redeploying from a close air support exercise in the dead of winter. The pilot encountered slush on the taxiway and during the takeoff roll. At the en-route RON base, the temperature hovered between -10 and -16 degrees Centigrade throughout the night and up to time for departure on the last leg home. After takeoff, the nose gear failed to fully retract and showed unsafe. It was extended again and the aircraft was landed without further difficulty.

A good look at the nose wheel well and aircraft exterior showed that the slush thrown up on the first sortie had covered all the gear components. The temperatures at both bases and at altitude turned it into ice—nice and solid. During the second takeoff, the ice prevented the nose wheel

AS, MISHAPS WITH MORALS, FOR THE TAC AIRCREWMAN

unlock assembly from working properly. The condition caused the gear doors to work out of sequence and close first, allowing the nose gear to lodge against the outside of the doors.

This incident could certainly have been headed off with a thorough preflight. Another part of this problem could have been prevented by the pilot cycling the gear according to all-weather procedures in the Dash One. Finally, an awareness of where he'd taxied the aircraft and what the effects might be was essential.

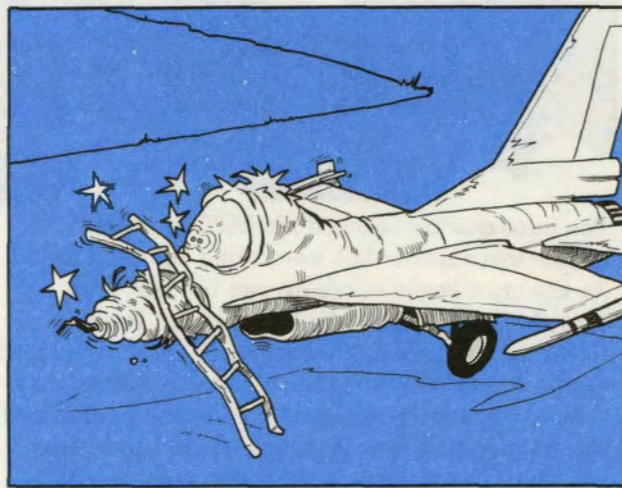
Avoid slush and standing water if you can. But, when you have to move through slush, water and snow while the temperatures are below freezing, take action to prevent it from hanging around on your aircraft and becoming solid matter again.

And open your eyes on your preflight.

Blow me away

Your jet's exhaust is no small thing. Not only is it hot back there, but there's a lot of force present that can do serious damage if used improperly. The leader of an F-16 flight began to taxi from his parking spot and completed about 30 degrees of turn when the crew chief signaled him to stop. The crew chief had noticed a tank pin that hadn't been pulled during launch and wanted to catch it before the flight went any further.

After pulling the pin, the crew chief directed the pilot to continue his taxi. The pilot used excessive thrust to start the Falcon rolling and blew a ladder lying behind him into another aircraft parked two spots away. The ladder hit the aircraft's centerline ECM pod and damaged the nose radome beyond repair.



Something should have clicked in both the pilot's and the crew chief's minds when they stopped the jet halfway through the turn. In fact, whenever you're ready to taxi or run an engine up for any reason, first clear the aircraft's tail. And remember, it doesn't take mil power or AB to taxi. If it does, check to see if your gear's down. Manage your power wisely and keep track of your tail, so the boss isn't looking for a piece of yours.

Lit up like Christmas

What would get your attention? No, we're not talking about a bad attitude, but your undivided attention in the air. How about an illuminated Fire and Overheat light for every engine you've got—whether it's one, two or four?

A couple of Phantom recce jocks saw just that on a single-ship, day, low-level sortie. About 15 minutes after takeoff, the pilot selected the centerline fuel tank. Three minutes later, both Fire and Overheat lights came on and then began flashing.



The pilot quickly checked his EGT and other engine instruments but everything showed normal. As the crew began climbing and brought both throttles back to idle, the lights began flashing faster and then came on steady. The EGT remained within limits with no other abnormal indications.

Suspecting a centerline tank fire, the pilot raised the air refueling door to depressurize the system and all of the warning lights went out. The fire detection system checked good. An airborne check by another jet didn't show any external damage or leaking fuel, so the pair declared an emergency and landed.

The spurious warning lights were eventually traced to a faulty fire and overheat control unit. Like any other machine or part, it can and did fail. Here's the point: How did you feel at the thought of all those red lights coming on at once in your

cockpit? Hopefully, you haven't conditioned yourself to view a Fire light as a bailout signal. They are certainly never something to be taken lightly. When they come on—take proper actions, check other instruments and have someone else look you over if possible. When it's time to leave your jet behind—do it—but don't let stray electrons lead you into hasty and premature decisions.

Pickle-pickle-pickle

An upgrading fighter pilot-to-be had some real problems grasping the proper operation of his jet's pickle button. The results may read like a comedy, but the potential for real problems is obvious.

On the fledgling's first pass, he pushed the wrong button and didn't get a bomb off. Drats. How embarrassing. Well, it wouldn't happen again. So, after he located and identified the correct button to mash, he kept his thumb on it during all succeeding passes. Great motive but **WRONG**. Sure enough on the second pass he got a bomb off the plane. So far, so good. Then, on downwind just before he turned base, he unintentionally pressed the pickle button again and another bomb came off outside the range boundary.

Fortunately, inadvertent releases usually impact without damaging anything, but that's not the message here. This young fellow had been thoroughly briefed on the proper operation of armament controls and the dangers of unintentional releases. We all have—during weapon system upgrade as well as during periodic weapons and safety sessions. Most of us heed those warnings, but it still doesn't stop an occasional stray bomb from being dropped.

We hope you don't fly around with your thumb poised on the pickle button. It's like a gun trigger—only use it when you want to employ the weapon. Wait until you're in a place where a bomb coming off would land on range property before fully arming up. If you do that, you won't have to worry about another problem—driving around armed up over populated or nonrange areas. Not smart. Getting your bombs on target is a real thrill. Dropping your bombs where you don't want them to go gets the wrong kind of attention and ruins your whole day.

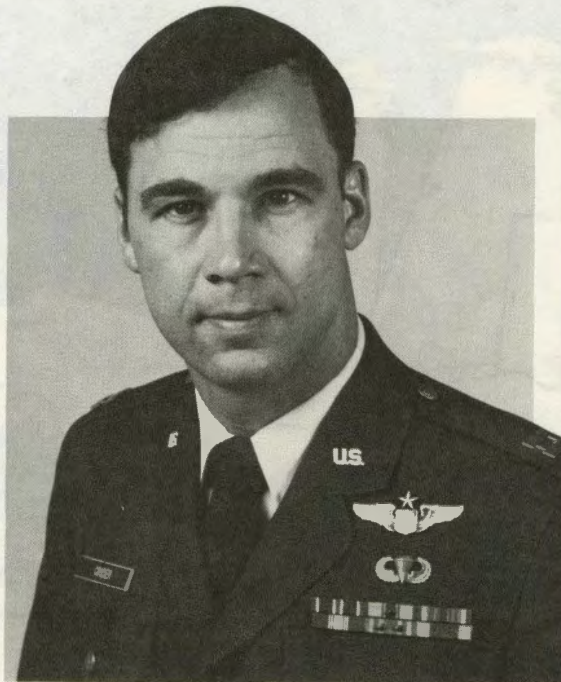
AIRCREW OF DISTINCTION



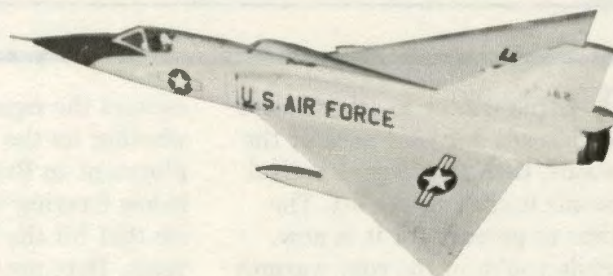
On 9 June 1985, CAPT MICHAEL E. CRIDER, was number two in a pair of F-106s deploying to Tyndall AFB, Florida. Everything went as planned until they rendezvoused with a tanker for inflight refueling. Several hook-ups were accomplished, but his interceptor would not take fuel. Before reaching the bingo fuel for Tyndall, Captain Crider discontinued the efforts to refuel and the flight departed the tanker.

While climbing to FL 330, Captain Crider heard the fuselage tank feeding out early, indicating a possible trapped fuel condition. At level off, 150 miles from Tyndall, he noticed an imbalance with the left side fuel tanks reading 500 pounds lower than those on the right side of the aircraft. The right #3 tank, however, was 200 pounds lower than the corresponding left tank. This uncommon coupling of imbalances momentarily masked the critical nature of the situation.

Captain Crider continued the climb to FL 410 as he analyzed the situation and tried to get trapped fuel to feed after declaring an emergency. He determined that Tallahassee, 68 miles away, was the closest suitable recovery field. At FL 410, the right #3 tank had dropped to 400 pounds. It was now obvious that the right #3 tank was the only one feeding the engine. Captain Crider made an idle descent from 40 miles out to a 12,000-foot high key for a flameout approach. Contending with thunderstorms in the area and cloud layers from 3000 feet to FL 180, he executed the approach and broke out of the clouds halfway through the final turn. At three-fourths of a mile on final, engine RPM began decreasing, the main generator dropped off line and secondary hydraulic pressure dropped as the engine flamed out from fuel starvation. Captain Crider quickly extended the RAT and completed the landing. His accurate analysis, prompt reaction and superb airmanship saved a valuable aircraft.



Capt Michael E. Crider
49 FIS
Griffiss AFB, New York



FLYING IN WINTER



If true winter weather hasn't already hit your neck of the woods, then December's arrival means it can't be far off. The time to prepare for it is now, while you're in the cozy warmth of the aircrew lounge, not after you find yourself in some of the "finest" weather the year has to offer. Virtually no area in TAC

escapes the rigors of winter, whether its the extremes of deployment to Brim Frost or the below freezing temperatures and ice that hit the South in recent years. Here are a few pointers on winter flying and aircraft operations to get you thinking in the right direction. The rest is up to you.

PREPARATION

Preparation for any flight begins long before you ever step to your aircraft. During winter months, it's important that you keep physically fit, rested and ready to fly. It's easier to catch a



cold during this season, but balanced meals and adequate sleep will go a long way toward keeping you healthy.

Start your flight planning early. Plan your missions thoroughly because you probably won't be able to accomplish as much as you're used to because of more frequent marginal weather and higher bingo fuels. For medium altitude cruise legs, remember that the jet stream shifts to the south, increases in velocity and is at a lower altitude. Expect stronger en-route winds. Pay particular attention to the altitudes where you can expect to pick up icing and make sure the weather is within your

A BRISK EXPERIENCE

personal limitations. Consider the terrain you'll be flying over, and make sure you have the survival gear you'll need if you have to jettison the aircraft.

Spend some time checking your destination and en-route airfields. Diverting for a lot of reasons is more likely during this time of year, so be prepared. Don't get caught short on fuel or ideas when the time to go somewhere else arrives.

PREFLIGHT AND GROUND OPERATIONS

When you're ready to brave the elements and preflight your aerospace vehicle, dress properly. As a minimum, wear long underwear and gloves in addition to your other flight gear. Again,



consider the type of terrain you'll be flying over. Prepare for the worst, and you'll be ahead of the game. Use gloves with woolen inserts while preflighting, and keep your lightweight

flying gloves dry for cockpit use. If you have to spend a night on the ground, heavyweight gloves and a watch cap will be worth their weight in gold.

Why all the fuss about dressing properly for preflight? If you're doing your walkaround in 20-degree weather, with the wind blowing hard enough to frost your long johns, you'll tend to rush. That's exactly what you don't want to do. Dress so you give your aircraft the extra close look that is essential. Pay special attention to static ports, control surfaces and gear wells. Ensure that the aircraft is completely deiced, including frost on the windscreen and canopy. Carefully check fuel and hydraulic lines for leaks caused by contraction of fittings and shrinkage of packings.

After you're sure your jet or prop-job is airworthy, it's time to climb in. Be careful of an icy ladder lest you bust your butt. Keep your gloves on. A bare hand on very cold metal can actually leave skin behind.

Engine start and runup require special precautions. Oil temperatures and pressures must be within specified limits, so keep an eye on the gauges. Cold, thick fluids just won't flow if they haven't been preheated enough, and it's not uncommon for lines, hoses or seals to give way.

When your chocks are pulled, go easy on the throttles. Engines put out more power in cold weather. Taxiing on an icy surface can be an exciting experi-

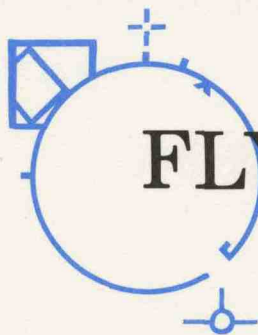
ence as you make your way to EOR. Keeping clear of other aircraft and obstacles can be tricky if ramp and taxiway markings are covered with snow and ice. So, keep it slow and allow more room for turning and stopping.

TAKEOFF AND EN ROUTE

If everything checks out, you're ready to go fly. Line up on a dry spot if one is available. Brakes may not be adequate to complete a full runup, so be ready to complete the checks during the first part of the takeoff roll. Check to make sure the



pitot heat is on, and that you've selected the correct setting for cockpit and canopy heating. Directional control can be a problem during the roll, so watch out. Make sure your feet are off the brakes—a locked wheel on ice can cause a blown tire, or worse, if you hit a dry spot. On takeoff, you'll accelerate faster than normal. Don't be in a rush to get your gear retracted. Stay



FLYING IN WINTER

below gear limit speed and allow the slipstream to blow off any slush or snow thrown up by your tires, otherwise you may have frozen gear problems on landing. Don't forget that you can get engine ice at high power settings and low airspeeds even when not in visible moisture. So use the anti-ice as directed by your flight manual.

When you're airborne, keep ahead of the weather by maintaining a constant watch on weather conditions at home station and divert airfields. If you have to fly through icing conditions, use the anti-icing system early to prevent ice buildup. It's much better to keep it off in the first place than to try getting rid of it once it's there.

LETDOWN AND LANDING

As you approach your destination, don't be too eager to accept descent en route unless you're

sure it won't result in excessive fuel use or prolonged flight in icing conditions. Know what you're descending into. Before beginning your descent, turn on your defrosters in time to prevent windscreen frosting. Carefully evaluate landing conditions: RCR, crosswinds, landing surface, approach visibility and barrier location. Be prepared to use all of the information sources available such as RAPCON, Center, ATIS, Tower, the SOF and PMSV (the weatherman).

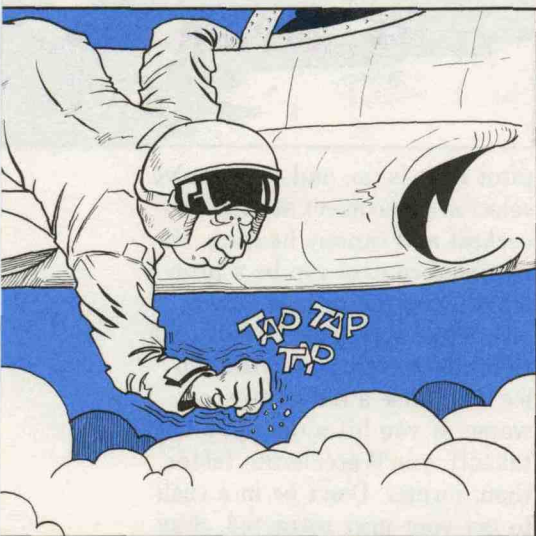
Be prepared to locate the runway when you break out. A runway obscured by snow may be difficult to acquire. Fly an on-speed approach—those extra knots may be good for the wife, kids and family dog; but that also means longer landing rolls, which you don't need. Plan a firm touchdown to help dissipate some of the energy. Brakes won't be as effective on a wet, slush, or snow covered runway as on a dry slab of concrete; so the drag bag and/or maximum aerodynamic braking is a must. In a stiff crosswind, be patient and hope the brakes will hold. If you do start to slide, make the most of your nosewheel steering, rudder, ailerons and differential thrust. Don't be hesitant about going around, diverting or snagging the cable. Once you have directional control, you may want to shut one engine down (if you have more than one) to get rid of residual thrust.

Once you get your aircraft under control and clear the active, don't get complacent. Taxi-back is often trickier than going out for takeoff. With the same thrust and a lower gross weight, you may have to ride the brakes more. It may be better to shut down and get towed in than to slide off the taxiway. Stay ahead of your aircraft until you're safely in the chocks and you shut down the engines.

Climbing down from your plane can be as tricky as getting in. Don't blow it and become a human hockey puck because you're in a hurry to get to maintenance debrief. If you RON at a stop en route, make sure you, or transient alert, do all those extra little things required in cold weather. Look over the Dash One for guidelines before you leave home.

We've just hit on a few of the important areas of flying and operating aircraft during the winter. As always, it boils down to the same old fact. You have the responsibility for ensuring the safe handling and operation of your aircraft. Don't let cold temperatures, ice, snow or freezing winds or some outside agency press you into a corner or catch you with your long johns down. Adequate preparation, both physical and mental, is the key to coping and enjoying the thrills of winter aviation. ➤

Adapted from an article by Capt Marty Steere, *TAC Attack*, November 1976.



TAC Individual Safety Award



AIC Michael K. Jones
31 CRS, 31 TTW
Homestead AFB, Florida

AIC MICHAEL K. JONES was selected to receive this award because he discovered burn damage to a fuel cell area on an F-4D that was very difficult to detect and would not have been discovered had it not been for his attention to detail and decision to investigate further.

Airman Jones had just removed the bladder from the fuel cell cavity and was inspecting the cavity for serviceability when he saw a slight discoloration of the paint. Although he was working against a deadline to complete the job, he decided to take a closer look. His closer look revealed a minute amount of ash, which later was determined to be burnt sealant. NDI (non-destructive inspection) was notified and a conductivity test was performed which revealed massive heat damage to the fuselage bulkhead and cavity coming from the engine bay area.

The damage was caused by an improperly installed gasket on the #1 engine bleed air duct which runs in the engine bay underneath the #4

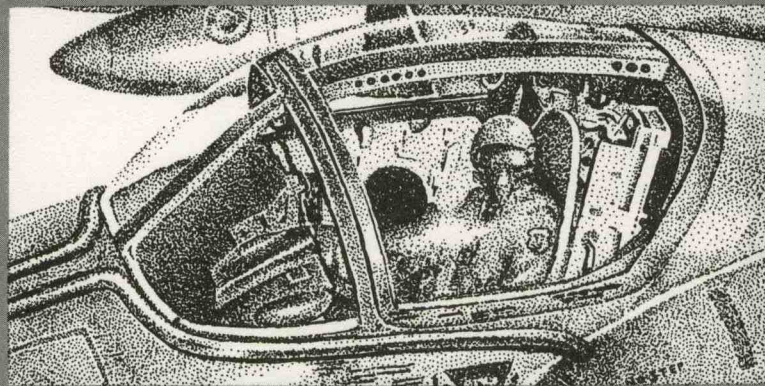
fuel cell cavity. Had this aircraft attempted to fly, only a few more minutes of hot bleed air on this fuel cell would have resulted in a massive fuel leak and high probability of a serious fuselage fire or explosion.

HEADS UP

Next month, in the

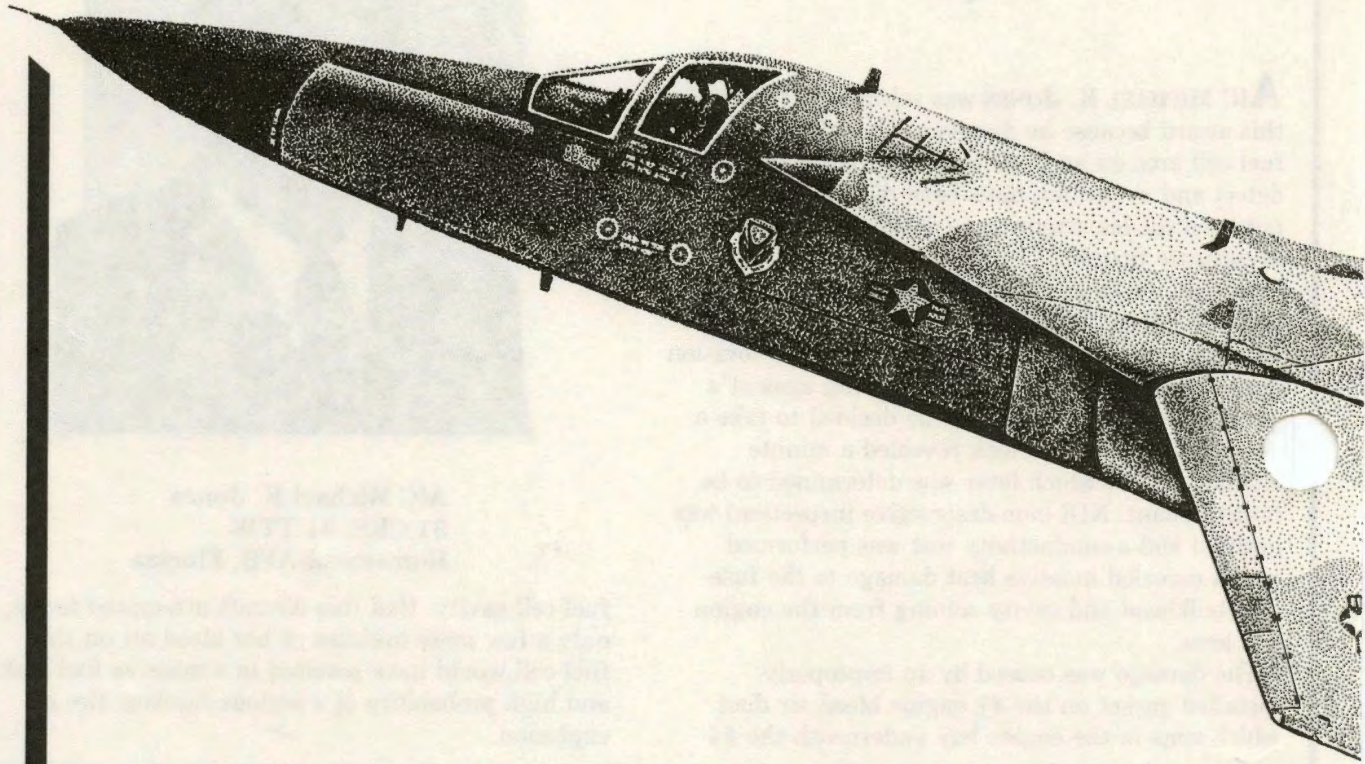
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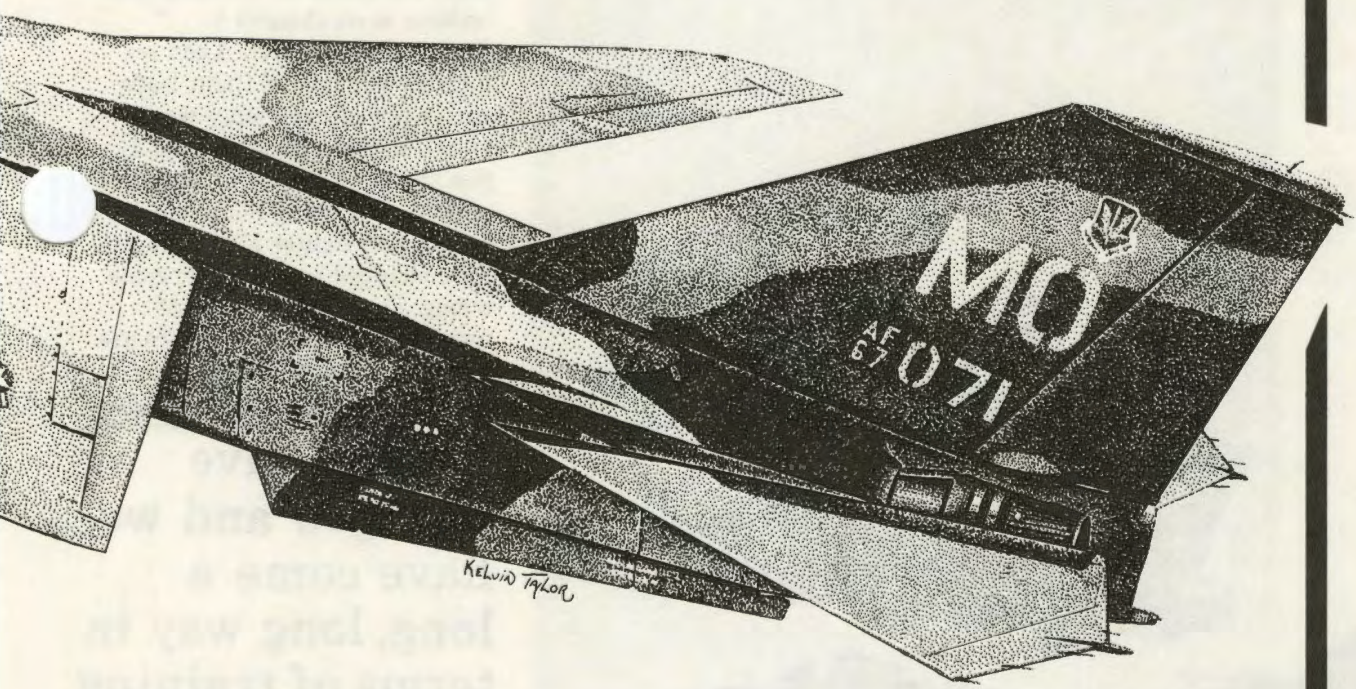
issue of *TAC Attack*, you can look forward to seeing SrA Kelvin Taylor's stipple rendition of the OA-37B **IN THE CENTER.**



F-111A AARDVARK

F-111A Aardvark





Kelvin Taylor

The...

long, long way to...

and wisdom...

HERE'S ANOTHER ON THE GRASS

Col Coupe DeVille
Chief of Flight Safety

The squadron is up to its ears in Blue 4s but really hurting for flight leads; so as soon as I meet 51-50 flying time, I'm gonna be checking you turkeys in on channel 1 . . .” Sound familiar? Well, I can remember when good flight leads with loads of experience were plentiful. Back then, as Blue 4, you had time, plenty of time, not only to gain flying hours but to season as a fighter pilot. Things have changed and we have come a long, long way in terms of training and readiness. There are a few areas, such as seasoning

Things have changed and we have come a long, long way in terms of training and readiness.

and judgment, however, that could stand a little more attention.

I think we have the same amount of talent and leadership skill in the trenches today, but, because of the way we do business, our mode of seasoning has changed. That's all. The need for



NICKLE

good flight leads remains the same. The challenge—it's the same. The jets—some difference, but they still demand the same amount of respect. (There are some who don't think so, but that's another story.) My point is, the need for good flight leads will never be exhausted—regardless of how we go about flying and fighting.

Regardless of which side of the bar you sit on, it's the quality of the suds that counts. We all want to sip the best, but not all are willing to pay the price. Coach Vince Lombardi said it best: "It's the basics that count—if you can't block and tackle, you can't win football games. You can play but you won't win." Same principle applies to us: We can fly, but without mastering the basics we will never make Top Gun. I can't promise you'll make the Gunsmoke Team with the techniques I'm going to share with you; but, I can promise you will be a better leader, wingman and pilot. So here's my nickle on the grass.

What I'm proposing is that you get back to flying basic fingertip formation on a regular and routine basis. Plan to fly it every mission, but perhaps not in the same way you have been.

I don't call being ruddered out at the departure end and rocked to close on the glide slope or af-

ter wings level on short initial "flying fingertip on a regular basis." You need to plan for it. Brief it and fly it daily. There are other ways to fine-tune the basics, but this old fighter pilot found fingertip the easiest and

If you want to be a better pilot, fly more fingertip.

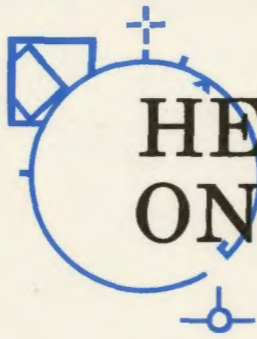
the best. My bottom line—if you want to be a better pilot—fly more fingertip. Here's how.

Plan a formation takeoff for a majority of your missions but don't go tactical at the departure end. (Wingies, don't you love the lead who immediately rudders you out to route at 500 feet and then turns into you while giving a channel change.) Keep him on the wing until you reach the edge of your radar coverage. Give him a few cross-unders and turns on each wing while clearing. Yep, I know you will now have to *crosscheck* like hell to nail that level off—need to plan ahead—watch heading lead point—anticipate power reduction—can't call a channel change now—where's the sun—have got to *lead* that level off, etc. . . . because he's *right there*. That's

how you should be thinking all the time. Fingertip helps build this type of habit pattern.

Plan to make one instrument approach in fingertip after every mission, then beat up the pattern if you like. I know, sometimes you won't be able to, but you can plan for it just in case—this "plan" has come in handy for me many times—in Vietnam it paid off, once big time (a good war story). If you rock him in at the radar pickup point rather than the FAF, you'll have to *crosscheck* more. SHACK! You begin to think, think, think ahead. Find yourself continuously building backup plans—and when you finally need one, you grin 'cause it's a piece of cake. After a while you begin to notice how easy it is to role out 240 degrees—not 238 or 241, but 240 degrees, the new assigned heading. "On course, on glide slope" starts to sound like a broken record during our GCAs. You will be flying smoother in all phases of the mission and with much less effort.

You will also be telling approach, tower, center, etc., what you have planned, and let them work it rather than the other way around. Your judgment improves because you have been working and continually evaluating your options. It begins to become second nature. All because



HERE'S ANOTHER NICKLE ON THE GRASS

of that guy out there welded to your wing. Everything begins to matter a little more—doesn't it? Result: we work harder at being the best leader in the squadron. And if you fly fingertip on a regular basis, it's a sure thing.

OK, so what's in it for Blue 2/4? Well, let me splain it to you this way. After he *knows* he's gonna have to keep the light on the star longer than a burner blowout, he begins thinking along with lead radio calls, channel changes, descents, roll rates, power changes, configuration changes—you name it. The point is he's beginning to think, *When did he start this turn?* (because he never felt you begin it). *I'll have to ask him how he does it.* Now that was a smooth approach. *Wonder how he does it?*

There is an easy explanation. In tactical, chase, route or any position other than fingertip, he does his own thing. He doesn't need to think along *with* lead as closely because he has time to react. That's what he does—75 per-

cent of the time—react. He seldom has the chance to fly *with* the leader. What happens in fingertip is another story.

If he wants you to see him glued into position, he has to think and fly as a team member. And, if you are good, he'll imitate you right down to the way you pull on the G suit. He'll try to fly with you every chance he gets. He'll ask to fly more formation. But if you yank and bank and make him look like a gooney bird (the feathered one) on an SFO at Wake—he'll avoid you like the plague. On the other hand, if you'd rather not give him the choice, keep him in route or tactical. With him out there you can relax a bit. Slack off on the basics. He will still think you have golden hands because you found the target. And that takes pure skill these days with only one INS and one air-to-air radar, doesn't it?

I can hear the MACA (mid-air collision avoidance) birds squawking now: Too congested

to fly fingertip, YAK . . . need to clear, YAK . . . need to maneuver, YAK . . . YAK . . . YAK. Granted, some bases have more flying activities than others, but there has to be a slack period. Times when even the most MACA-minded would venture a formation takeoff and fly fingertip to the drop-off point. Times that beginning a formation approach in fingertip at the 25 DME or prior to the IAF would be safe. Clearing requires well defined areas of responsibility for any formation. Good judgment should dictate when flying fingertip is not wise.

For those who give this some serious thought and practice, call me three months from now and tell me I'm wrong. You won't be able to. For the rest of you amarougians, I've got a few nickels left.

Oh, one more thing. Besides helping you become a better pilot and leader—fingertip is fun—yep, F U N . . . Fun to watch, fun to fly. ➤



TAC Flight Safety Award of the Quarter

CAPT FREDERICK W. OFFUTT'S accomplishments as a flight safety officer (FSO) are characterized by innovative initiative and effective action.

As a squadron FSO, Captain Offutt's squadron had the lowest inflight emergency and reportable mishap rate in the wing. He developed operations and maintenance interface programs which were used to exchange flight safety information, and, to recognize outstanding crew chiefs, he developed aircrew critique forms. His expert capabilities as an investigator on an F-5 Class A mishap resulted in his being requested to investigate a subsequent A-10 Class A mishap. During the A-10 investigation, he helped discover inadequate technical data and the first known failure of the Aces II ejection seat.

From the squadron, he moved up to the position of assistant chief, wing flying safety. In this position, he initiated a program that improved safety inspections and training for local FSOs and provided the guidance to establish a meaningful squadron trend analysis program. He also obtained the information briefed in the Midair Collision Avoidance program. Each of these programs received very favorable comment in the recent TAC MEI (management effectiveness inspection).



Capt Frederick W. Offutt
479 TTW
Holloman AFB, New Mexico

For two months, Captain Offutt was acting chief of wing flying safety. The TAC MEI reflects his accomplishments: It mentioned that the assistant chief is superbly managing the wing safety program and that all major programs exceeded TAC requirements. Two squadrons received an excellent on their flying safety program and two received an outstanding; the wing flying safety program received an overall outstanding rating.

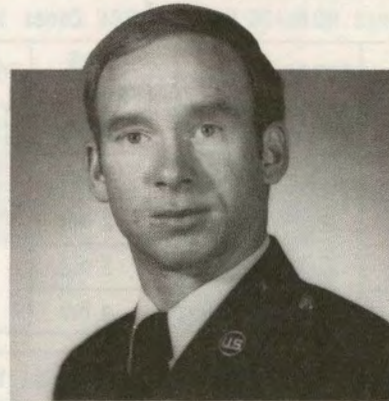
TAC Ground Safety Award of the Quarter

TSgt DWIGHT G. ROYAL is unit safety NCO for the 57th Aircraft Generation Squadron (AGS), the largest AGS in TAC. Sergeant Royal does an outstanding job as unit safety NCO and has achieved a significant reduction in the mishap rate, both on and off duty.

Sergeant Royal conducts interesting monthly safety meetings and briefs details concerning any ground incident occurring in TAC that is pertinent to the 57 AGS. For commander's call, Sergeant Royal dramatizes how to avoid accidents through the use of safety skits.

His newcomer briefing spotlights specific hazards within each work area and driving hazards on Nellis AFB. His research into various tech orders and tech data has resulted in rewriting local policy letters, checklists and several operating instructions.

Two of his innovative ideas are excellent: He designed two wallet-size cards. One identifies the



TSgt Dwight G. Royal
57 AGS, 57 FWW
Nellis AFB, Nevada

three classes of fires that occur in maintenance areas and what type of fire extinguisher to use; the other card explains mishap notification procedures so that mishaps are reported and investigated quickly and correctly.

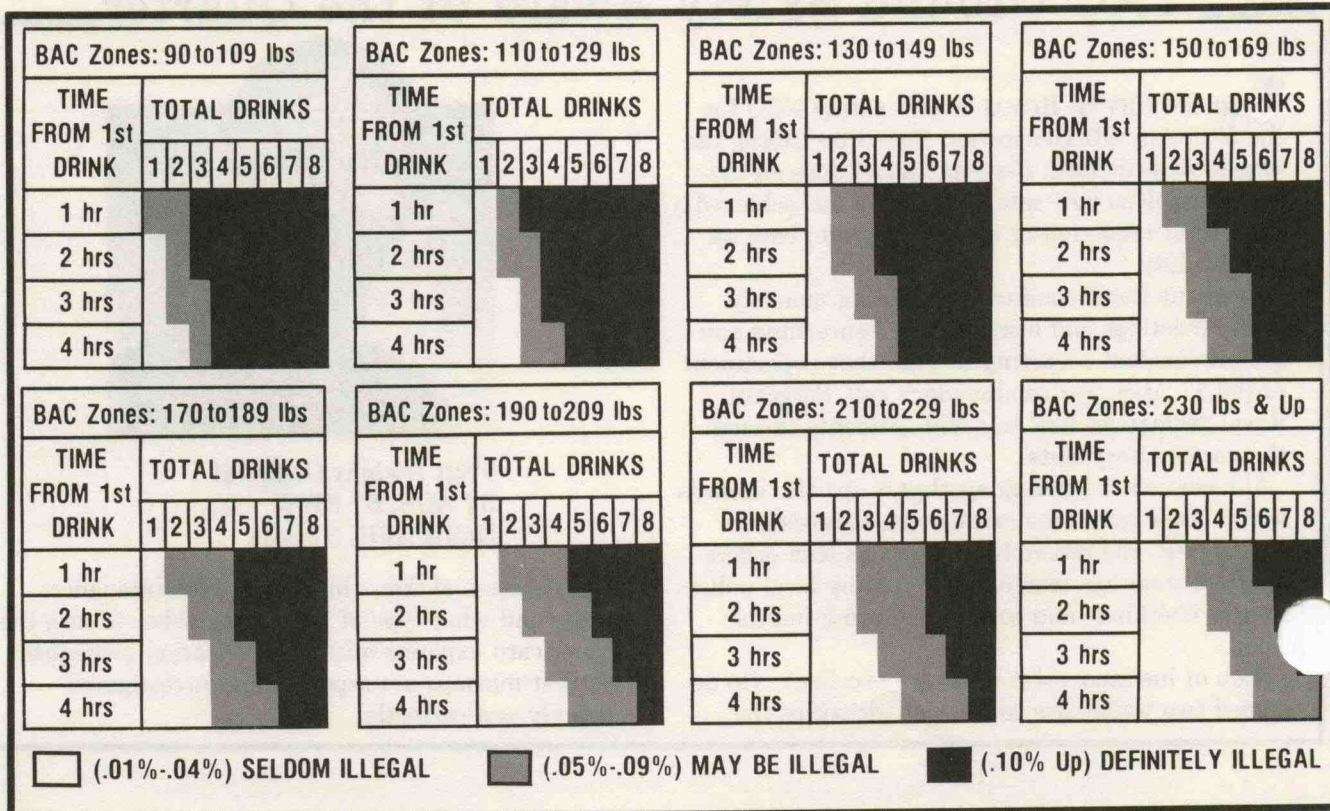
DOWN TO EARTH

ITEMS THAT CAN AFFECT YOU AND YOUR FAMILY

If you drink, don't drive

There is no safe way to drive after drinking, as you can see from the charts below. They were prepared by the California Highway Patrol, the Office of Traffic Safety, the Department of Alcohol and Drug Programs and the Department of Justice. Take a look at the chart that includes your weight and go to the total number of drinks. One drink is a 12-ounce beer, a 4-ounce glass of wine or a 1¼-ounce shot of 80-proof liquor, mixed or unmixed. And the impact of alcohol on the body is different if you drink on an empty stomach, are tired, sick or taking medication; so add a few more to the actual count.

Now follow the drink column down to an amount of time. If you stay in the white, you're OK. If you're in the gray, you could be illegal, and your chances of having an accident are 5 times higher than if you had had no drinks. If you're in the black, you're illegal; your chances of having an accident are 25 times higher. Coffee doesn't lower your blood alcohol concentration (BAC), only time does. If you have some *holiday cheer* this holiday season, take a taxi.





Office safety

Often we fail to pay as much attention to office safety as we should. Offices are heated and air conditioned, lighted and ventilated. There are usually very few machines that have exposed moving parts, few or no toxic substances being used and limited noise exposure. For these reasons, office workers and their supervisors sometimes become complacent about their work area.

People do get hurt in offices. They strain their backs lifting something too heavy or lifting the wrong way, they smash their fingers, run into desk corners and open drawers, and mostly they slip and fall. The biggest troublemakers are chairs, litter, objects in aisles and walkways, telephone and electric cords, open drawers and slippery floors. How does your office stack up?

- What's in the aisle or hallway that a person could run into or trip over? Those old chairs you've been trying to get rid of. Or maybe last year's filing.
- Are the floors slippery? A professional wax job actually prevents slipperiness. Is carpet worn? Look especially at steps.
- Stairways should have secure rails. Do yours jiggle?
- Office furniture should be arranged near outlets to minimize the use of extension cords. Cords running over floor areas should be enclosed.
- Purchase a ladder or stepstool so no one has to use a chair.
- Where's the nearest fire extinguisher and does everyone know how to operate it? Contact your local fire prevention office for hands-on training.
- Are exit doors blocked? If they are, you know what has to be done.

Courtesy ATC

Tech order violations can be "shocking"

SSgt Allen Taylor
ADTAC/SEG

The development and maintenance of a healthy respect for energized electronics is a must. In my efforts to generate a periodic newsletter on the subject to our radar maintenance personnel, I soon felt like the preacher directing his message to the choir. I mean, what could I tell these specialists about the hazards associated with their jobs that they don't already know? Not much, but as you can see from the following mishaps, the problems are the same as they are for any technical field: tech order violations, inattention, carelessness and poor supervision.

• • •

A transmitter control console operator and assistant were trouble-shooting a power supply circuit breaker. They attempted to isolate the malfunction by removing components fed by the power supply and were re-energizing the circuit breaker to see if it would still trip. AFOSH standards and tech orders require the use of grounding sticks after each test to ensure that no voltage is present on any capacitor. After powering down the system, worker number one was distracted by a telephone call. When he returned, he proceeded to connect a capacitor bank but forgot to discharge the capacitors with the grounding stick. He discharged the capacitor between his right forearm and stomach.

While performing a trouble-shooting procedure

DOWN TO EARTH

Down to Earth

on a G-band radar transmitter, this person inserted a probe, and his hand, approximately 15 inches into the modulator section of the transmitter, which happened to be in the immediate area of 50,000 volts and 15 amps. He received an electrical shock, but was not injured.

Two workers were removing a high voltage shield on a power supply cabinet to re-do the painted stencils. Worker number two was reinstalling the top shield which is held on with three wing nuts. One of the nuts dropped behind the shield onto the

stacked diode shelf. While the equipment was still energized and without a ground rod, he reached in to pick up the wing nut. A five-inch arc jumped from the stacked diodes and entered his right hand, traveled across his shoulders and exited his left bicep. He did not lose consciousness but experienced numbness in both arms due to the high amount of voltage which was estimated to be 5000 volts DC with 3 amps of current.

• • •

For now, the preacher rests.



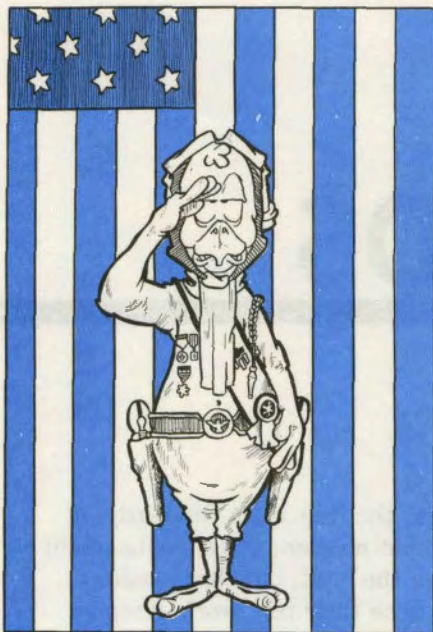
Need some ideas for Christmas gifts? How about a **fire extinguisher**. Look for one labeled with ABC. A means it's good for a wood, cloth or paper fire, B fights gas and grease fires and C is for electrical fires. Or a **smoke detector**. Don't discount someone who has one—one isn't enough. A smoke detector is needed on each level of a home or at both ends of a single-story house. How about a **fire hose** that attaches to a faucet and fits under the kitchen sink. New generation **electric blankets** turn off the current in case of hot spots or overheating. For the blue-collar worker, buy **safety**

shoes; the white-collar worker, **videoshades** — they're goggle-type glasses that protect computer users' eyes against glare. Here's one that's great for someone's bathroom or kitchen; easy-to-install-in-an-outlet **GFCIs** (ground fault circuit interrupters). They shut off current to an appliance to prevent a serious or deadly shock. **Toy chests** with lift-up lids need to have spring-loaded lid supports. Someone with a toddler could use **plug guards** that fit over plugged-in plugs. Older relatives could use a battery-powered **computer cap** that fits on standard pharmacy containers and flashes and sounds an alarm when the next dose of medicine is due. Why not a **gasoline safety can**? There's one on the market that has porous foam inside to retard the build-up of vapors. And for the person who really does have everything, a **Fleagle T-Shirt**. But you'll have to write us an article to get it. Next year, OK?

Woodstove regulations are coming, probably within the next 18 months. The Environmental Protection Agency plans to set stove-performance standards to curb the amount of pollutants woodstoves can emit. Woodstoves and inserts would have to be equipped with catalytic combustors which will add about \$200 to the cost.

What's the most dangerous room in your house? The bedroom. Getting up in the middle of the night to go to the bathroom is especially hazardous when the lights are off. Solution: Night-lights or better bladder control.

FLEAGLE SALUTES



Mr. Eduardo Tovar, Jr., Aircraft Repair Inspector, 479 TFW, Holloman AFB, NM, had just returned from the flight line when he detected a bad odor. He began looking for the problem and found an electrical short in a wall switch. The light switch then began to spark, so he found the circuit breaker and turned off the power supply. The fire chief commended Mr. Tovar's actions commenting that shutting down the power had saved the building.

Capt Stanley C. Kolodny, 354 TFW, Myrtle Beach AFB, South Carolina, was flying on the wing in an A-10 formation takeoff and had just retracted his gear and flaps when he heard several thumps, an explosion and felt the aircraft begin to vibrate. Flying at less than 200 knots, he skillfully maneuvered away from his leader and realized that their flight path had taken them through a flock of birds. One

bird had gone into the #2 engine and several others had struck the left wing, causing a BDU-33 practice bomb to explode while still on the aircraft. As the aircraft vibrations worsened, Captain Kolodny set up for and completed a flawless single-engine approach and landing.

Capt Bruce S. Toma, 159 FIS, Florida Air National Guard, was flying in an F-106 when he experienced problems as the two-ship flight was rejoining following intercept practice. As Captain Toma applied military power to carry out the rejoin, the throttle stuck at that setting. All attempts to free the throttle were ineffective due to a main fuel control failure, so he was directed to proceed to NAS Cecil Field where 12,500 feet of runway would be available. Speed brakes and high G turns were used to dissipate airspeed down to gear lowering speed. Following F-106 Dash One procedures, he turned off both main fuel shutoff switches when landing was assured.

SSgt John R. Brewer, SrA **Larry S. Mansfield** and A1C **Charles M. Walden**, 48 FIS, Langley AFB, VA, were trimming a newly installed engine in a T-33 when a fire developed in the aft section. Amn Mansfield, who was controlling the ground operation, noticed smoke rising from the aft section after being informed by Sgt Brewer, who was performing the engine run, that the Overheat light had illuminated. Sgt Brewer notified maintenance operation center of the fire and performed all emer-

gency engine shutdown procedures. Because of their immediate response to the fire, it was extinguished prior to the arrival of the fire department.

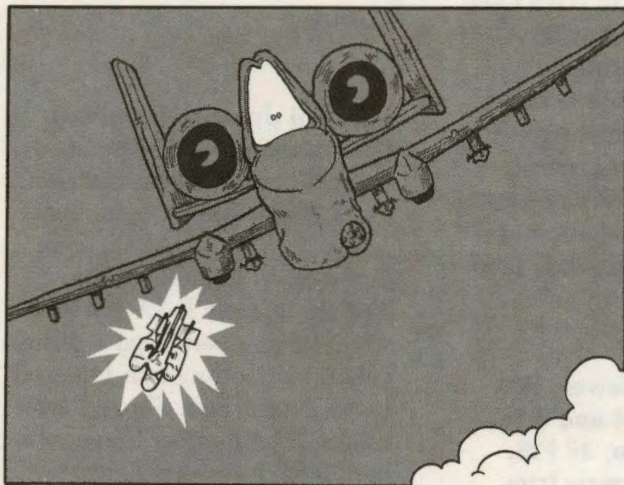
SSgt Bradley D. Worch, 49 AGS, 49 TFW, Holloman AFB, NM. While servicing the aircraft hydraulic system on an F-15, Sergeant Worch noticed that the fluid in the servicing cart appeared to be contaminated. Further investigation revealed that the servicing cart contained a mixture of hydraulic fluid and water. He recalled seeing the same cart in use on at least one other aircraft, so he immediately notified the flight-line expediter and the production superintendent; two aircraft were removed from the operations schedule.

Lt Col Joseph Moynihan, **Capt George W. Muldoon, Jr.**, **Capt Suzanne Dunn-Poorman**, and **CMSgt John Olsen**, 965 AWACS, 552 AWACW, were deployed to Riyadh, Saudia Arabia, in their E-3A AWACS when they experienced a serious generator malfunction followed by an engine fire. Shortly after takeoff, the number 7 generator indicated overspeed followed shortly by abnormal fuel flow indications on the number 4 engine. The generator was disconnected and then a fire warning was received on the same engine. Six-foot flames were observed coming out of the engine and the engine cowling was lost. The crew accomplished the appropriate checklists for engine fire and flew a flawless 3-engine approach and landing.

WEAPONS WORDS

Bombs away

The A-10 was loaded wall-to-wall for its range sorties: a TGM-65 on station three and TERs with three BDUs each on stations four, eight and nine. Six passes on the range were made with proper releases; but, on the seventh pass, both the TER and the three BDUs on station nine were jettisoned. (They impacted on range but not on the target.)



The pilot's cockpit switches were all in order and shouldn't have caused the unwanted jettison of a \$5,000 bomb ejector rack. All of the armament control circuitry and hardware involved also passed functional checks done on them.

The culprit turned out to be the TER cable lock ring which wasn't fully locked at the pylon. By not being completely tightened, it allowed the firing voltage to be diverted to the MAU-40 bomb rack and the TER (plus bombs) came off.

We usually preflight ordnance to insure that everything is properly connected so that the bombs

will release on target the first time. Obviously, if this had been a combat mission, three bombs might have hit someone on the head, but they wouldn't have exploded and done their best work. Keep an eye open for connections that aren't secured properly both during preflight and during quick checks at EOR.

Looks ain't everything

The F-16 Falcon was cruising away from base at 400 knots and 5000 feet when a BDU-33 just fell off the left TER. No switches had been thrown. No pickle button depressed. Another dropped object. The bomb exploded when it hit the ground but nothing was damaged.

Back on the ground, maintenance troops started taking the armament system apart to determine the problem. The ejector cartridge hadn't been fired, so an electrical malfunction was ruled out. When the TER was benchchecked in the armament shop, the culprit came to light: some rivets used to secure the breech retainer clip to the rack housing were too long. They hadn't been installed according to tech data and prevented the breech from seating fully. The breech, in turn, prevented the lock/unlock linkage from seating properly. Despite all of the pieces that didn't correctly fall into place, the safety pin could be installed which indicated a locked condition. Regardless, the forward hook was not fully engaged and allowed the bomb to drop off at the wrong time.

Tech data works every time—but we must use it properly.



And away we go!

Two munitions folks were told to move a trailer load of AIM-7s and AIM-9s from the loading standardization section of the missile shop. One of the pair said he would drive, so they hopped in the tow vehicle and started out. Before they had gone very far, the driver missed a turn. The passenger requested that they disconnect the trailer and turn around manually, but the driver said he could back the turn.

While they were making the turn, a loud pop was heard; but they thought it was just the trailer tongue shifting. After they drove about 100 yards, the passenger noticed that the missile trailer wasn't tracking properly. At this point things started looking up. The driver and passenger stopped the vehicle to examine the problem. They found that the hinge pin which connected the trailer tongue to the steering arm was broken on one side.

When the problem was examined further, they found that the person driving the tow vehicle wasn't even qualified to operate it while the passenger was fully checked out. In fact, the fellow riding had driven during all of the first part of the shift. The supervisor had assigned specific duties at the beginning of the shift, but the driver chose to ignore that and his own lack of necessary skills.

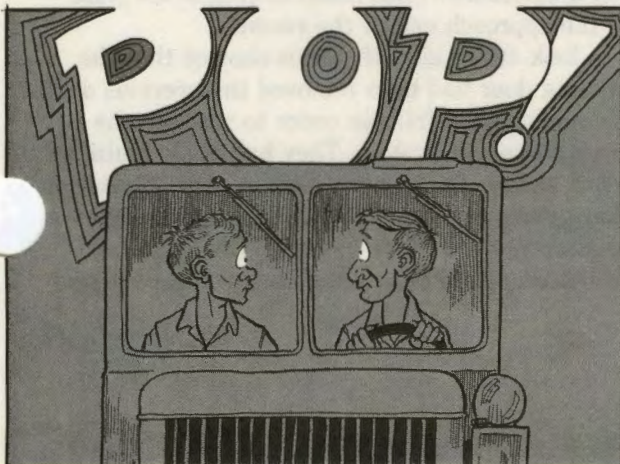
This incident could have been much more serious with a trailer load of missiles dumped on the ramp or possible physical injury. There's a reason we check our people out on equipment: to insure that they know how to operate them and what the limitations are such as turn radius, max speed and lifting ability for each.

Knock it off

Some of us just don't know our own strength. We think that anything done right must be done with brute force and at maximum speed. Unfortunately, this is seldom true.

One instance where a little less force would have been appropriate occurred when some folks were loading AIM-9s on an F-16. The load crew had positioned the missile too far aft to properly upload the captive AIM-9. One man who was in training was handling the front end of the missile. He was unaware of the potential for shearing off umbilical blocks and, as the missile was moved forward, that's exactly what happened. The umbilical block was allowed to hit the umbilical cable retainer and broke off.

We need to emphasize to our folks the proper techniques for loading and unloading each type of munition that we plan to use. We need to be aware of fragile areas on each munition to ensure that we don't turn a large, expensive piece of hardware into a worthless piece of junk. The amount of force and speed used should be tailored to each task. Max force and full speed ahead are not always appropriate.



CHOCK TALK

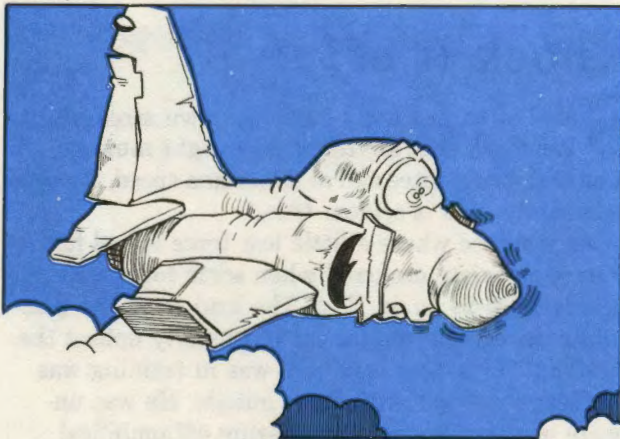
Chock talk

Incidents and

INCIDENTS AND

Got your wires crossed

Two F-4 aircrews got a surprise when they took a jet out for an FCF following a double engine change. Everything went normal until they lifted off, then the airspeed dropped to zero and the altimeter soared to 99,000 feet. The crew joined up with another jet and made an uneventful straight-in approach and landing.



The problem was traced to the pitot static lines up in the radome. The lines were installed backwards which caused the resulting erratic indications and damaged the CADC, the mach airspeed indicator and the altimeter. Write-ups in the 781 said that the lines had been connected in compliance with the proper tech data. The work had been inspected by a supervisor and a leak check performed by a third person. Obviously, none of those tasks was done properly because each person involved should have noticed the mistake. A specific caution in the TO warns about the hazards of putting the lines on wrong. The supervisor

should have noticed the error while using the tech data to check the work, and the person sitting in the cockpit during the leak check should have noticed erratic instrument indications. If just one person had completed his job correctly, the problem could have been nipped in the bud, instead of blossoming into an inflight emergency.

Each person involved in the maintenance process from the one who first writes up the discrepancy to the last person that signs it off has a vital role. Make sure you do your job right. You may be the one person that stops the accident before it occurs.

Comedy of errors? Hardly

The flight of two A-10s was just tooling along minding its own business when the wingman noticed that his leader's aircraft was missing a panel from the top of the number two engine. After the aircraft landed, maintenance found that door assembly N-8 was sure enough gone, and barrier maintenance folks found it lying in the grass at the approach end of the runway.

A look at the aircraft forms showed that the missing door had been removed the previous day by the engine shop folks in order to work on the aircraft's bleed air system. They had made multiple red-X entries in the same block of the 781 stating that panels N-52 and N-8 had both been removed to allow more work to be done. The forms also stated that both panels had been reinstalled, and

INCIDENTALS WITH A MAINTENANCE SLANT

the red X was cleared by a seven-level technician.

When asked about the work that he had done, the crew chief who signed off the corrective action admitted that he hadn't personally replaced the N-8 panel. He had relied on the word of another

individual that the job had been done correctly. The supervisor who cleared the red X misinterpreted the forms and only inspected panel N-52.

The end result of all this was that the missing panel hadn't been properly reinstalled and wasn't inspected by the responsible supervisor. Is this part of the cause for dropped objects at your base—poor forms writeups and erroneous assumptions?

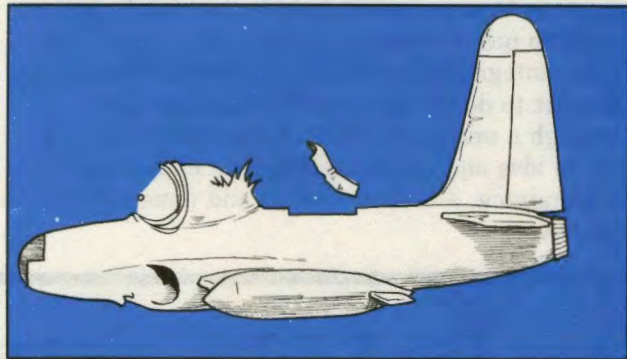
Only partly secure

There always seems to be a steady flow of things falling off aircraft, ranging in size from small caps and fasteners to large panels. When that happens in flight, those parts become dropped objects and result in aircraft damage, valuable dollars lost in parts and possible physical injury to someone on the ground. Unfortunately, most of the incidents could be avoided with a little more vigilance by each of us.

One example of this occurred when a T-33 was deployed off-station because of an approaching hurricane. Because of a starting problem, the maintenance folks had to open the plenum chamber access door. During the maintenance, the right side of the access door was temporarily secured with

three fasteners. After the work was completed, the door was never completely tightened down. Subsequent inspections by the supervisor and preflight by the pilot also missed the incomplete fastening job.

When the T-bird was redeployed to home station, the access door came off as the pilot reduced power to begin his descent. The door struck both the fuselage and the left elevator, resulting in over



\$7000 in lost parts and aircraft damage.

Being in a hurry and not giving every part of an aircraft a good once-over is a large part of our dropped object problem. Let's ensure that the entire airframe is airworthy before we sign it off.

What you don't see

During engine start, the pilot of an F-106 noticed that his EGT gauge was sticking as the engine accelerated to idle speed. With the

CHOCK TALK

engine running normally otherwise, the pilot called maintenance redball to have a new gauge installed.

When the quick-fix truck arrived, one fellow got out of the truck to put the engine inlet screens on. He located the left side screen, gave it a cursory glance and shook it before placing it up to the intake. A supervisor standing nearby noticed a red streamer being sucked into the intake from the just-installed screen. The engine was immediately shut down, and they found a drag chute safety pin and streamer lying in front of the first stage inlet guide vanes. A packing clip and several inches of steel cable were missing, but damage to the compressor sections wasn't.

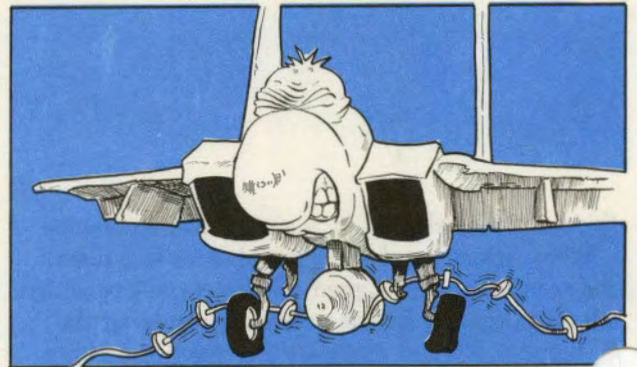
It defeats the purpose of putting intake screens on if they've got all sorts of goodies lying or stuck inside. Sort of like letting a fox into the henhouse. The kind of damage that can result warrants an extra thorough look to ensure that nothing but the screen is put in front of the engine.

The purpose of redball maintenance doesn't justify haste and carelessness. The whole idea is to get a problem remedied quickly, but safely, in order to meet scheduled takeoff times, maintain flight integrity and give the aircrew a fully capable aircraft to do the mission. FODing an engine through a misplaced sense of urgency misses the whole idea and usually results in a missed sortie, lost training, a broken aircraft and unnecessary paperwork.

Barrier with a bite

Barrier cables aren't known for beating up on aircraft but occasionally they do. Usually, the cable's a friend, just lying around not bothering anybody. Sometimes though, a barrier cable decides to be mean, and, when it wants to, it can sneak up and bite.

One F-15 crew experienced the bite of a vicious cable. Inspection of the victim jet following a sortie revealed marks on the centerline tank, a couple of fuselage panels, shingle flaps and both burner cans.



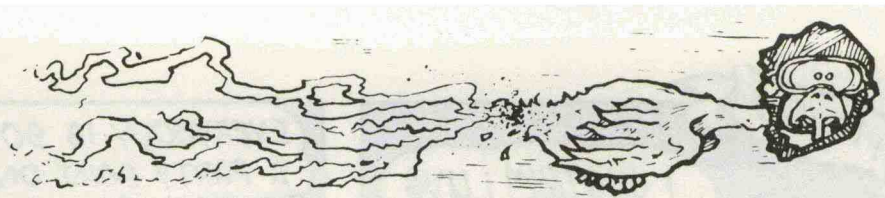
On the cable, they found a broken tiedown that failed due to normal wear which allowed the cable to strike the aircraft.

Routine barrier inspections at this base took place during normal shift changes for the barrier maintenance folks. Sometime during that shift was when the tiedown failure cropped up. If your base has a high density of aircraft operations, consider more frequent barrier checks to insure that you keep barrier tiedown failures under control and that other problems don't go undetected until too late.

Pass it along...



TAC TALLY



CLASS A MISHAPS
AIRCREW FATALITIES
TOTAL EJECTIONS
SUCCESSFUL EJECTIONS

TAC		
OCT	THRU OCT	
	1985	1984
0	14	20
0	9	16
0	11	15
0	8	12

ANG		
OCT	THRU OCT	
	1985	1984
1	12	6
0	7	2
1	8	5
1	8	4

AFR		
OCT	THRU OCT	
	1985	1984
0	1	1
0	1	0
0	0	2
0	0	2

TAC'S TOP 5 thru OCT 85

TAC FTR/RECCE	
class A mishap-free months	
39	405 TTW (F-15, F-5) Luke AFB, AZ
32	33 TFW (F-15) Eglin AFB, FL
30	366 TFW (EF/F-111) Mtn. Home AFB, ID
29	49 TFW (F-15) Holloman AFB, NM
26	67 TRW (RF-4) Bergstrom AFB, TX

TAC AIR DEFENSE	
class A mishap-free months	
153	57 FIS (F-4) Keflavik, Iceland
106	5 FIS (F-15) Minot AFB, ND
103	48 FIS (F-15) Langley AFB, VA
62	318 FIS (F-15) McChord AFB, WA
53	87 FIS (F-106) KI Sawyer AFB, MI



TAC-GAINED FTR/RECCE	
class A mishap-free months	
154	138 TFG ANG(A-7) Tulsa, OK
131	114 TFG ANG(A-7) Sioux Falls, SD
120	183 TFG ANG(F-4) Springfield, IL
117	180 TFG ANG(A-7) Toledo, OH
109	124 TRG ANG(RF-4) Boise, ID

TAC-GAINED AIR DEFENSE	
class A mishap-free months	
136	177 FIG ANG(F-106) Atlantic City, NJ
102	125 FIG ANG(F-106) Jacksonville, FL
85	119 FIG ANG(F-4) Fargo, ND
69	107 FIG ANG(F-4) Niagara Falls, NY
61	147 FIG ANG(F-4) Ellington AFB, TX

TAC-GAINED Other Units	
class A mishap-free months	
195	182 TASG ANG(OA-37) Pcoria, IL
179	110 TASG ANG(OA-37) Battle Creek, MI
175	USAFTAWC (many fighters) Eglin AFB, FL
167	84 FITS (T-33) Castle AFB, CA
109	552 AWACW (E-3, EC-130) Tinker AFB, OK

CLASS A MISHAP COMPARISON RATE

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

TAC	1985	3.2	3.4	2.7	2.4	2.9	2.7	2.5	2.6	2.5	2.3		
	1984	3.4	4.3	3.3	2.5	2.9	3.8	3.3	3.2	3.1	3.3		
ANG	1985	4.8	4.8	3.0	4.5	4.2	4.9	5.4	5.2	5.1	5.0		
	1984	0.0	2.3	1.5	2.2	2.6	2.1	1.8	2.1	2.3	2.5		
AFR	1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.3		
	1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.7	2.5		

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

FLEAGLE



I JUS' (HIC) LUVS KRIGSMAS.



EVERYBODY IS SO FRIENDLY AND THERE'S A PARTY GOIN' ON 'BOLT ANYWHERE YA' LOOK.



BARKEEP, OLD FRIEND (HIC) IT DO SEEM MY MUG HAS RUN DRY. (HIC)



DON'T YA'THINK YOU'VE HAD ENUFF? DIDN'T YA'KNOW THAT A LIFE IS LOST EVER 20 MINUTES DUE TO DRUNKEN DRIVING?



SMART MOUTH. THEY GO TO BARTENDER SCHOOL AN' THEY BECUM X-SPERTS ON (HIC) HIGHWAY SAFETY.



BY GOLLY (HIC) I GOT FRIENDS IN OTHER BARS IN THIS HERE TOWN



ROB, WHY IS IT THAT TH' MORE FOLKS DRINK TH' MORE FRIENDS THEY THINK THEY HAS?

BEATS ME, GRIFF. 'CAUSE FRIENDS DON'T LET FRIENDS DRIVE DRUNK.

HARRISON