TAC ATTACK

FEBRUARY 1984

ADIOS OLD FRIEND

ANGLE OF ATTACK

Welcome to 1984.

I'm certain that you are looking forward to the challenge and hope that comes with each new year. We at TAC Safety are pleased with the command's flight safety record this year—3.7. While the rate has been constantly decreasing every year since 1977 with 1983 being the third best year in TAC history, there is always room for improvement. Unfortunately, our ground safety record in 1983 was worse than 1982. TAC experienced 55 off-duty fatalities compared to 46 in 1982 and 6 Class A on-duty industrial mishaps (2 fatalities) compared to 3 in 1982.

In order for us to improve our flight safety record and reverse our ground safety trend, we must insure that we constantly insist on mastering the basics of our individual responsibilities. Professional duty performance is the basic tenet of successfully accomplishing the mission—every mission. I realize that nearly everyone agrees that professional is the key element to TAC's continuing success. I urge each of us to strengthen our resolve to insure that our personal performance and the performance of our subordinates meets the test of professionalism. Our reward will be improved mission effectiveness and improved safety statistics.

This month Maj Lew Witt assumes command of *TAC Attack*. He has a strong tactical background and joined the safety team from TAC Stan Eval. He is committed to providing you with information that is of use to you. Lew's tactical skills and writing/editing talents are a matter of record. However, he needs your inputs in the form of articles and feedback in order to keep *TAC Attack* relevant and mission oriented.

The results of the reader survey are covered in considerable detail this month. The bottom line says that you find the magazine relevant and useful. We sincerely appreciate your suggestions for improvement and will work hard to insure that our performance meets the test of professionalism.

Harold E. Watson, Colonel USAF
Chief of Safety

On the cover:
Tribute to an aged warhorse. Late this month the very last F-105 Thunderchief will fly from Hill AFB, Utah, to the boneyard at Davis-Monthan AFB, Arizona. Adios old friend.

FEBRUARY 1984

TACRP 127-1

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TAKING YOUR FIRST CABLE

By Lt Col Steve Pritchard
TAC Flight Safety

Remember the first time you came down final with your hook down for an approach-end cable engagement? One of the reasons your heart was pumping so fast may have been from fear (or healthy respect) of the unknown—you'd never taken a cable before. It's one of those emergencies that the simulator just can't simulate. Sure, when we're in the box we go through the motions of preparing to take the wire. But we never really get to *do* it until we're in the jet with a real directional control emergency or slippery runway. In areas where slippery winter runways are a certainty, some units practice cable engagements. The pilot experiences one under minimum pressure so that, when the chips are down, he can concentrate on coping with his emergency. He already knows what it's like to lose 150 knots in a thousand feet.

In other cases, some pilots landing with serious emergencies have been more concerned with what the cable engagement would be like than with their immediate problem. Some botched them both. One pilot landed his modified three-wheeler (read: one main gear retracted) so short and slow that by the time he got to the cable enough nonrubber parts

of the jet had contacted the runway to make the aircraft drift excessively and to convince him to eject while the airplane skidded to a halt.

How about you? Have you been there yet, or do you still wonder what it's like? A well-planned cable engagement is not a big deal. A poorly-planned one is. Here are some general guidelines to follow if your first cable engagement is a real emergency. If you think about applying them to your particular jet, it could make up for some of your lack of practice.

First, is it necessary? If you're in doubt, you probably *should* take the cable. It's not inherently dangerous, and you and the barrier crew can use the practice. It's an easy decision for me. If there's any chance I might go off the side or the other end of the runway (say, because of a known aircraft malfunction or combination of runway/environmental conditions), I put the hook down.

Before you go charging into the cable, consider the ramifications of your engagement and make a plan. First, let the SOF know your intentions and play time remaining. He can then coordinate the response, insure the MA-1A is out of the way, and make a plan for the rest of the inbound jets. If *you* don't need to land immediately, he may want to land some of the others before you close the runway. But if delaying your landing would compound your emergency, get it on the ground.

Another consideration, depending on the nature of the emergency, is whether to divert to a field with a longer or wider runway. That decision should be weighed against whether the cable configuration at the divert field is acceptable and how familiar the people at that base are with your aircraft type.

Just because you've told the SOF, don't assume everyone else knows. Upon initial contact with each controlling agency, let them know you'll be stopping on the runway so they don't plan on landing someone right behind you.

Now, get ready. Burn down or dump gas. The lighter you are, the slower your landing speed and the better your chances of—

- Taking the cable successfully
- Stopping if you miss the cable
- Going around on final or if you miss the cable.

Be ready for any of these options; if going around is a player, save enough gas for that. Think about what you're going to do if you miss the first wire. Is there another? How close? Don't get caught trying to go around just as you snag the next one. It's happened. What about your drag chute? If you used it and decide to go around, get rid of it.

Think through the landing, considering these points:

- Configuring—do it early, especially if hydraulics are a factor and fuel permits. Put the gear down first, then the hook.
- Touchdown—plan it early enough to allow time and distance to lower the nose prior to the cable. You *don't* want to take the wire with the nose in the air (the nose could slap down causing the strut to collapse or worse). At the same time, plan so that you maintain control of the aircraft until you're in the cable. This may

Taking your first cable

mean not landing as short and slow as possible.

- Drift—anticipate it, both that induced by the environment and any aircraft malfunctions. This drift could be the reason for your arrestment. Know its effect so that you can engage the cable as near to the center as possible.
- Brakes—don't. Tell yourself to engage the cable with your feet off the brakes. Heels on the floor works fine.
- Shoulder harness—plan on being restrained. Your Dash One probably tells you to lock it so that the deceleration won't throw you forward. If the shoulder harness is unlocked during the engagement, it may automatically lock when you are thrown forward. Next time you're sitting in your cockpit with a spare moment, lock your shoulder harness and make sure your short little arms can reach any switches you might need after a successful or unsuccessful engagement (emergency brake handle for example).
- Throttle(s)—pull to idle for the engagement. If you just remember that the deceleration and your Hormel *might* move them forward, it probably won't happen.
- The deceleration—highly overrated. It's a smooth, gradual stop not to be feared if you've prepared for it.
- The stop—be ready to control rollback if that's necessary. Plan to use your thrust, with little or no braking. Two bad things can happen when you try to brake an aircraft that's backing up. If your tail/nose starts to wander, your instinct will be to step on the wrong pedal which will just make things worse. If you stomp on both binders, your momentum will probably cause your tail to hit the runway. (Remember how your nose strut compresses when you're going forward?)
- Intentions—get on tower freq and tell them again exactly what you plan to do (shut down, taxi clear). If you are going to shut down, wait for gear pins, chocks, and the fire truck if you can.
- Signals—know them. *You* are in charge of your jet until you're out of it, but you need to follow the directions of the marshaler unless they conflict with your best judgment. Remember, someone on the ground may be able to see a problem you're not aware of.

Deciding to take the cable *without* prior planning (i.e., on takeoff or later in the landing roll) should still be the result of forethought on your part. Can you think of a takeoff abort situation when you wouldn't put the hook down? Some Dash Ones say "hook-down." Period. Others add "as required" or "as necessary." Speed, along with remaining runway and environmental conditions, is a consideration in this scenario. An aborting aircraft that requires only brakes to stop on a long, dry runway may need to make an engagement on a short, slippery runway. Again, when I'm in doubt, the hook comes down. I don't raise it until I've used it or I'm *sure* I don't need it. Same thing on landing. In either case, when the aircraft is under control, let other pilots know what you're doing so they can avoid you, and let tower know so they can coordinate the appropriate response.

OK, it's time for the (pardon the expression) bottom line. The chances of success on your first cable engagement are in direct proportion to the forethought you've given to it. →

AIRCREW OF DISTINCTION

On 12 September 1983, the crew of a CH-3E helicopter was practicing remote site landings in the wooded mountains of Tennessee. The crew consisted of CAPT JON H. ALEXAITIS, aircraft commander; 1ST LT FARON R. THOMPSON, copilot; and TSGT ROBERT A. DIXON and SGT JEFFERY L. LEWIS, flight engineers.

After making several reconnaissance passes over the area, the crew made an uneventful approach and landing in a small remote landing site. The helicopter took off again, climbed to about 200 feet, and accelerated to 70 knots.

Suddenly, without warning, the right jet engine flamed out. Then, the main rotor speed dropped. Because of the high terrain, the rotor and the remaining jet engine were unable to keep the aircraft from descending. Capt Alexaitis made a quick decision on which direction to go and skillfully flew down a valley to maintain terrain clearance. He aimed the falling iron bird towards the only clear spot in the forest.

As the aircraft descended towards the clearing, it cleared several high tension lines by only thirty feet. Capt Alexaitis flew a steep final approach to clear the tall trees that surrounded the landing site. He used the last remaining rotor rpm to cushion the touchdown. After landing, both pilots used maximum braking and brought the CH-3 to a stop less than ten feet from some large trees at the clearing's edge. The aircraft was undamaged, and no one was injured.

The exceptional airmanship of Capt Alexaitis and the professional competence and coordination of the crew have earned them the title of Tactical Air Command Aircrew of Distinction.

Capt Jon H. Alexaitis
1st Lt Faron R. Thompson
TSgt Robert A. Dixon
Sgt Jeffery L. Lewis
703 TASS, 507 TAIRCW
Shaw AFB, SC

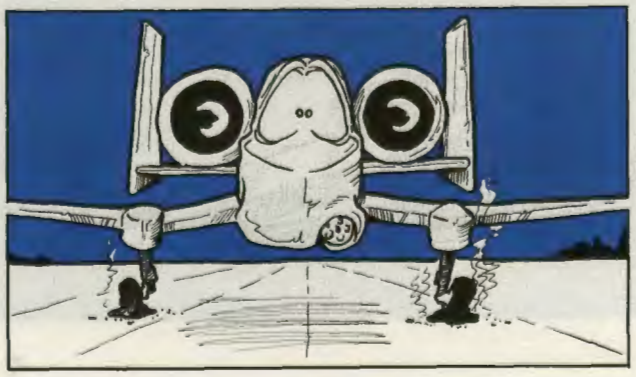
TAC tips

INTEREST ITEMS,

Hot l'il rubber hummers

An A-10 pilot aborted his takeoff roll at approximately 75 knots because he heard what sounded like the canopy rattling (even though the canopy indicated safe). Using only moderate braking, he stopped the Warthog about halfway down the 14,500-foot runway and turned off. When he cycled the canopy, he felt the cockpit pressurize, so he knew the canopy seal had properly inflated. After talking with the supervisor of flying, who referred to the Dash One, the pilot determined that a 15-minute waiting period for brake cooling was necessary before another take off.

When the 15 minutes elapsed, he roared down the runway a second time. This time, as the aircraft accelerated through about 100 knots, the master caution and right-engine-hot warning lights illuminated; so he got to practice the abort procedure again. Stopping distance was about the same as the first attempt. The pilot turned his jet around on the runway and taxied back to the mid-field taxiway where the dearm crew was stationed. Just as he entered the dearm area, the fuse plugs in both main tires melted from the heat generated by some very hot brakes. Both main tires went flat.



The interval between takeoffs prescribed by the chart in Section V of the flight manual insures that peak brake temperatures are reached before the second takeoff. This feature should keep the tires from deflating during takeoff roll or once airborne. The chart does not make allowance for a second abort or an immeditate landing.

Two consecutive aborts will probably result in tire deflation even if the recommended cooling period is observed. Rolling all the way to the end of all that concrete after the second aborted takeoff may have saved all that rubber.

Seat pin FOD

After landing his F-4, the pilot shut down the right engine and began to taxi back. He encountered a delay and had to hold for a while, so he decided to pin his ejection seat. He opened the pin bag, took out the face curtain safety pin, closed the pin bag, and then inserted the pin in the seat. Shortly after placing the pin bag on top of the seat just behind the face curtain pin, he resumed taxiing.

As he taxied, a gusting right crosswind blew the pin off the top of the ejection seat. The bag, still closed but feeding out the lanyard to the face curtain pin, bounced off the left inlet ramp and was sucked into the left engine. The pilot heard the engine compressor stall. He looked over his

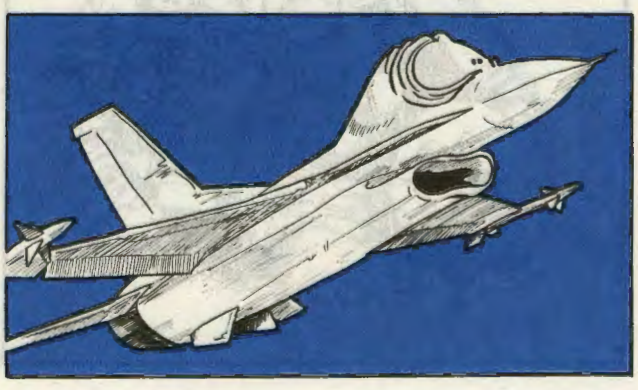
left shoulder and saw the yellow lanyard leading into the engine inlet. He immediately shut the engine down and stopped the airplane with emergency brakes.

The engine suffered foreign object damage to several compressor stages. A check of the pin bag showed that the lanyard to the face curtain is long enough to allow the pin bag to enter the engine inlet even though the pin was installed.

Several pilots mentioned that putting the pin bag on the top of the seat was a common practice. It looks as though it shouldn't be. Pinning the seat with an engine running doesn't gain much, but it can cost a lot.

Falcon pilot undone

Heads up for newly assigned Falcon pilots and Life Supporters. An F-16 pilot was dropping practice bombs on a range. During the pullout from a low angle delivery, his lap belt disconnected. He climbed to a safe altitude and reconnected the belt. While rolling in for another pass, the belt disconnected again. This time he terminated the mission and started for home. En route, he discovered that every time he applied G-load on the aircraft the survival radio and Mark XIII flare on the front of his survival vest leaned on the Frost lap belt fitting.



Back on the ground, the life support folks strapped him in a vacant jet to see the problem firsthand. The survival radio and flare did not contact the lap belt connection—until the anti-G suit inflated; then, whenever he shifted left or right, the belt disconnected. Turns out the survival vest was improperly fit but subtly so. Life support modified the vest to allow more clearance between the survival equipment and the lap belt connector.

The wrong stuff

During an F-111 air refueling mission, the last member of a flight hooked up with a KC-135 and offloaded his allotted fuel. When the boom operator advised the Aardvark pilot that he had received the briefed amount of fuel, the pilot requested a disconnect and pressed (and held) the nosewheel steering/air refueling-disconnect button. The boomer also initiated a disconnect, but the switches in both aircraft failed to release the air refueling nozzle from the F-111's receptacle. Seeing the receiver aircraft drifting aft, the boomer transmitted, "Stabilize, negative disconnect." Unfortunately, there was another call within the receiver flight at the same time, and the IP in the other seat was simultaneously advising

the pilot over the intercom that the boom was still connected. So the pilot didn't hear either warning, assumed a disconnect had taken place, and reduced power to back away from the tanker. Although the boomer transmitted, "Move forward five feet," and continued to try to disengage the boom, and although the IP selected full military power, the heavyweight F-111 continued to back away from the tanker until a "brute force" dis-

connect occurred. The boom would not subsequently retract and later required depot repair.

In the air refueling business, *assuming* a disconnect is always risky. Most receiver aircraft have lights that indicate when the nozzle is free of the receptacle. The tanker's receiver-director lights also advertise the event. There's just no reason to make this assumption. If you're trying to take gas from a tanker up in the ionosphere and you're heavyweight, it's a good bet you won't be able to recover from such a false assumption.

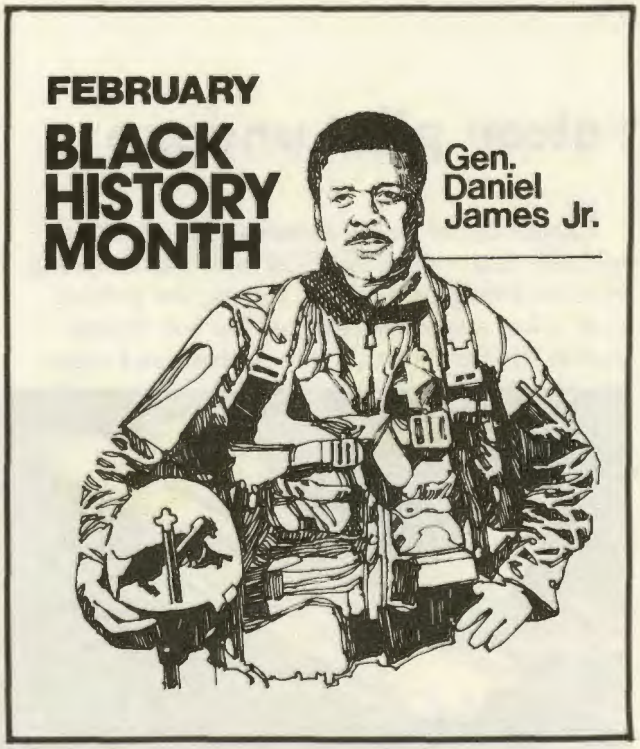
There's another lesson here too—radio discipline. Yes, there are calls that need to be made within the flight and to the tanker crew while a flight member is refueling. At issue is timing and brevity. Is it the right time, or should I wait? Can I find out my post air refueling clearance without playing "Twenty questions"? A little forethought may prevent the incident in which the receiver pilot misses the breakaway call because his wingman is asking the copilot about fishing near the tanker base.

How to end one small hassle

Do you have a problem with those steel rings that hold your checklist together? Are they bent? Do they fall out? They may not only be an annoyance but a FOD hazard in the cockpit.

Now Maj Gary Goebel of the USAF Air-to-Ground Operations School at Hurlburt Field, Florida, offers a suggestion to end the hassle with steel rings. He suggests using the plastic electrical straps that hold wire bundles together. The straps don't come apart, so they aren't likely to fall off in the cockpit. And if one were left in the cockpit, it wouldn't be as likely to cause damage as a steel ring would. When you get changes to your checklist, simply cut off the old straps and replace them.

To order the plastic straps through supply, ask for "strap, tiedown, electrical components—NSN 5976-00-984-6582." The unit of issue is a sack of 100. Be sure to order enough for several checklist changes.



Keeping the takeoff simple

By Captain Roy A. Gilbert
391st TFS/OV
Mountain Home AFT, Idaho

The takeoff is one of the shortest but most critical phases of flight. When everything works right, it's almost mechanical: Brake release, full burner, engine instrument checks, nose wheel steering disengaged, speed checks, rotation, and finally liftoff. The aircrew assumes everything will go smoothly, because it has so many times before. But accidents and incidents continue to show that too many times even the best pilot is caught at 140 knots with a problem and no ideas. We've all read the reports of blown tires, ripped out cables, aircraft departing the runway, or worse, being rolled up into a ball in the overrun because an erroneous or late decision was made during takeoff.

There are a few things that we aircrews can do to better prepare ourselves for emergencies during takeoff. Besides reviewing the takeoff and refusal speed charts, we can go over in our own minds what these speeds really represent, and how they affect our decisions. We should review the flight manual's normal and emergency procedures sections on the takeoff. Many notes, cautions, and warnings are associated with this subject, with a story behind each one. We may have forgotten something in there.

Secondly, let's discuss this part of flying with other aircrews. We can get a wealth of knowledge from the real life stories of aircrews who have already dealt with takeoff emergencies and aborts. Sometimes they didn't handle the problems correctly, but they learned a lesson from their mistakes. A great deal can be learned from good, honest hangar flying sessions.

Finally, we need to take the established procedures that we have reviewed and the approved solutions which we have discussed and apply them. Let's take the time to sit down and put ourselves through a few situations that perhaps we haven't thought about for a while. We can reinforce our ideas by practicing these situations during SEPTs and in the simulator to take a good look at what might happen.

As professonal aviators we need to be prepared for all contingencies when we take the runway. Sometimes we slight the significance of some of the more simple parts of our flying job because we're thinking ahead to more demanding parts of the mission. This practice can turn around and bite us. By frequently reviewing the pubs and procedures, taking part in discussions about our job, and hangar flying to mentally keep ourselves sharp, perhaps we can keep something as *simple* as the takeoff from ruining our whole day.

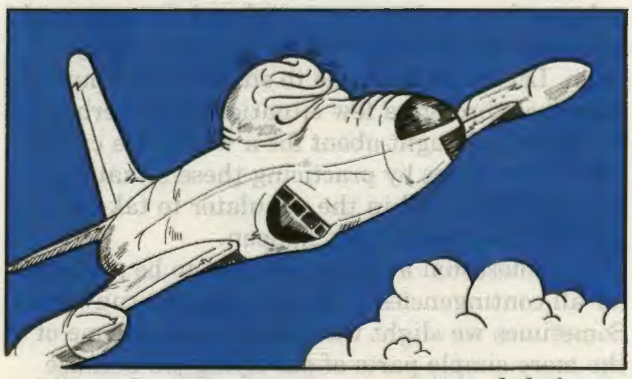
Captain Gilbert graduated from Southern Illinois University in 1975. Following UNT in 1976 and F-4 RTU at Luke AFB, Arizona, he flew F-4s at Kunsan Air Base, Republic of Korea, until August 1978. He also flew F-111Ds as a WSO at Cannon AFB, New Mexico. Following selection for pilot training and completion of UPT at Reese AFB, Texas, in 1982, Captain Gilbert ugraded in the F-111A at Mountain Home AFB, Idaho, where he is currently assigned to the 391st TFS.

CHOCK TALK

chock talk incidents and **INCIDENTS AND**

T-bird almost strung out

A T-33 pilot's control stick jammed while he was making a formation rejoin. He avoided the other aircraft and then tried to overcome the binding that prevented the stick from moving aft or left of center. Finally, the stick broke free, and the pilot regained full stick travel. After a controllability check, the aircraft recovered safely.



When the maintenance troops started their search for flight control gremlins, the first thing they found was four inches of wax string lying loose in the upper right quadrant of the stick well. The string is used to tie together the electric wire bundles for the control stick trim. The string showed evidence of stretching and fraying where it had been caught on some object in the stick well.

An alert technician found two sheet metal screws that protruded 5/16 of an inch through the lower right forward portion of the stick well. Apparently the wax string ties caught on the pointy end of one of the screws.

It turns out there was no tech data specification for the hardware used to attach the right side wall to the floorboard of the stick well. Some of the unit's aircraft had rivet connections and others had nuts and bolts. Several more jets were found with sheet metal screws or rivets that protruded into the stick well.

The portions of fasteners which pushed into the stick well were all cut off flush with the metal surfaces. The incident resulted in a TCTO inspection of all T-33s and an added warning in the Dash Two is forthcoming.

Good thing the trim wires were bound with 160# tensile strength string—instead of nylon cord or bailing wire.

Out o'rig, out o'line

An F-16 pilot was performing the routine backup control (BUC) check after engine start. Transfer to BUC was normal, but after he retarded the throttle to idle, the engine flamed out.

Maintenance workers tried and got the same results. The front cockpit throttle of this F-16B was out of rig to the extent that it could be retarded past the BUC idle detent and cause the engine to flame out.

This was the first sortie since maintenance workers had changed the throttles while troubleshooting a radar cursor malfunction. The technicians performed the throttle change according to the TO except for one step which they omitted—checking .01 to .03-inch clearance between the throttle gate and throttle quadrant

button. Both technicians were confused about the required measurement. Their OJT trainers were unaware of the requirement for a throttle clearance adjustment check. Even the inspector who signed off the red X was unaware of the check. How could this happen? How come this problem didn't surface earlier?

Remember, the technicians were sent out to troubleshoot a *radar* problem—they were avionics troops. They were trained to change out throttles and had done so before—but this time they replaced the front cockpit throttle assembly with the rear cockpit throttle grip. While this is perfectly acceptable practice, the clearance requirements differ greatly between the front and rear cockpits; overlooking the clearance adjustment check caught up with them.

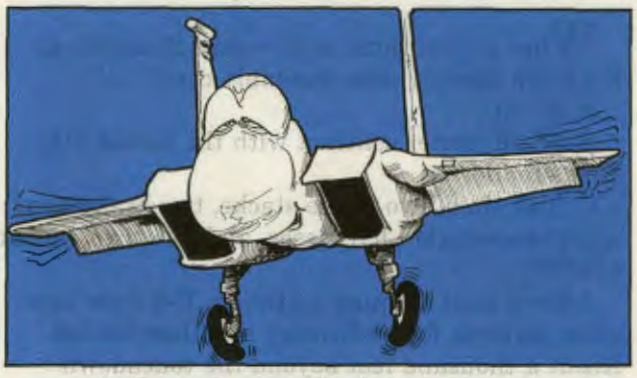
Another contributing factor in this incident was that the technicians, the trainers, and the inspector were *all* avionics troops. A 431XX specialist was never involved. And the feeler gauge required to measure the throttle clearance was not even available in avionics tool kits.

The training, kit contents, and final throttle rigging inspection by an APG specialist have all been corrected. The point is, why did it take a reportable incident to highlight a checklist compliance problem?

Everybody who works on and in airplanes has a checklist to follow to accomplish technical tasks in a standard, orderly way. Whether it's apparent or not, there's generally a good reason for *each step*. Rather than overlook steps we don't understand, or see a need for, we've got to perform them or get help to perform them. Because sooner or later the price of negligence always comes due.

Murphy performs ill-eagle act

A pilot wisely decided not to continue flying his night air refueling and intercept mission when his F-15 began dancing around during departure. He felt uncommanded flight control in-



puts in both pitch and roll. So he declared an emergency and returned for landing. The spurious flight control inputs continued until he configured the aircraft for a controllability check. With gear and flaps extended, the jet was much more stable. Except for a couple of uncommanded rapid rolls to about 20 degrees of bank on final, the recovery was uneventful.

Troubleshooters found that one of the stabilator's actuators failed the free fall test, one of a series of checks of the longitudinal control system. They also found that the longitudinal feel trim actuator was out of rig because of an improperly tightened actuator rod end. The free fall problem indicated binding which would cause one stabilator to hang up, or lag behind the other stabilator, causing an uncommanded roll.

The rigging problem with the longitudinal feel

trim actuator was more subtle. The actuator had been worked on nineteen flights prior to the incident. Whoever reassembled it improperly installed the locking device between the jam nut and the longitudinal feel trim actuator. The locking device is simply a washer with a nipple in it that fits into a groove in the actuator. If this washer is installed with the nipple just outside the groove, the nut tightens normally. Later, if the washer turns slightly and the nipple slides into the groove, a considerable amount of free play suddenly appears. Free play makes it impossible for the pilot to fly in a stable, trimmed condition.

Can you imagine the problems that may have occurred if the uncommanded flight control inputs suddenly developed during air refueling instead of on departure?

What's a nine-cent clamp cost?

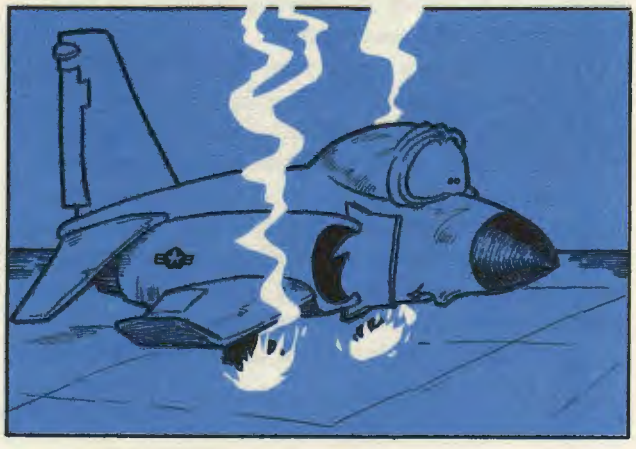
What do you think a nine-cent clamp for an F-4 main landing gear assembly costs?

A. $0.09

B. $5.36 (under contract with the lowest bidding supplier).

C. Two tires, two brake stacks, two brake housings, two antiskid harnesses, and two tires—about $16,000.

After a local training sortie, an F-4 crew flew some patterns for proficiency and then landed. About a thousand feet beyond the touchdown point the right main tire blew. While performing the boldface emergency procedure, the pilot blew the other tire, but he managed to bring the aircraft to a stop on the runway. The wingman transmitted, "Your mains are on fire—get out." The aircrew scrambled out of the airplane, and the fire department put the wheel fires out before the flames spread to the aircraft.



Someone had incorrectly installed a nine-cent attaching clamp on the right main gear. It was supposed to face one direction but wound up facing the other. Everything worked OK for who knows how long. But every time the gear was retracted, the clamp brushed up against the utility hydraulic lines in the gear well. The repeated contact distorted the shape of the clamp and chafed wires held within the clamp. One wire from the antiskid harness wormed its way out from under the clamp and chafed enough to wear away its insulation. The antiskid on the right wheel then ground out with no warning to the aircrew. When the aircraft touched down, the normal touchdown protection feature of the antiskid wasn't working; so the residual hydraulic pressure applied to the brakes locked the wheel, and the skidding tire gave up and exploded.

So what does a nine-cent clamp cost? You've probably already guessed the answer. If the clamp is installed backwards (without reference to the illustrated tech data), and if the work is inspected and signed off by a a supervisor as satisfactory maintenance practice, then it costs something like answer C. We can't afford too many $16,000 nine-cent clamps.

This message, made out of 16-foot letters, was laid out in a field near Moody AFB by MSgt Charles H.Camp,Jr., and his son. The photo was taken by SrA Eric Olson from an aircraft at 1,000 feet.

TAC SAFETY AWARD

CREW CHIEF SAFETY AWARD

A1C Donald D. Wier, Jr.

A1C Donald D. Wier, Jr., an aircraft maintenance specialist with the 307th Aircraft Maintenance Unit, 31st Aircraft Generation Squadron, 31st Tactical Training Wing, Homestead Air Force Base, Florida, is this month's recipient of the Crew Chief Safety Award.

Airman Wier was conducting an aircraft preflight inspection when he noticed an almost unobservable crack in one of the afterburner fuel pump cases. He immediately notified his supervisors of the problem. Further investigation by quality assurance confirmed that there was a defect in the pump; the pump was removed and sent to nondestructive inspection.

What Airman Wier had found was a ⅛-inch hairline crack. Any engine operating with the defective pump could have resulted in serious aircraft damage.

Airman Wier's safety awareness and keen eye for detail helped prevent serious damage to a valuable aircraft. He has earned the Tactical Air Command Crew Chief Safety Award.

INDIVIDUAL SAFETY AWARD

SSgt Stanley Taylor

SSgt Stanley Taylor is this month's recipient of the Individual Safety Award. He is a jet engine mechanic with the 325th Component Repair Squadron, 325th Tactical Training Wing, Tyndall Air Force Base, Florida.

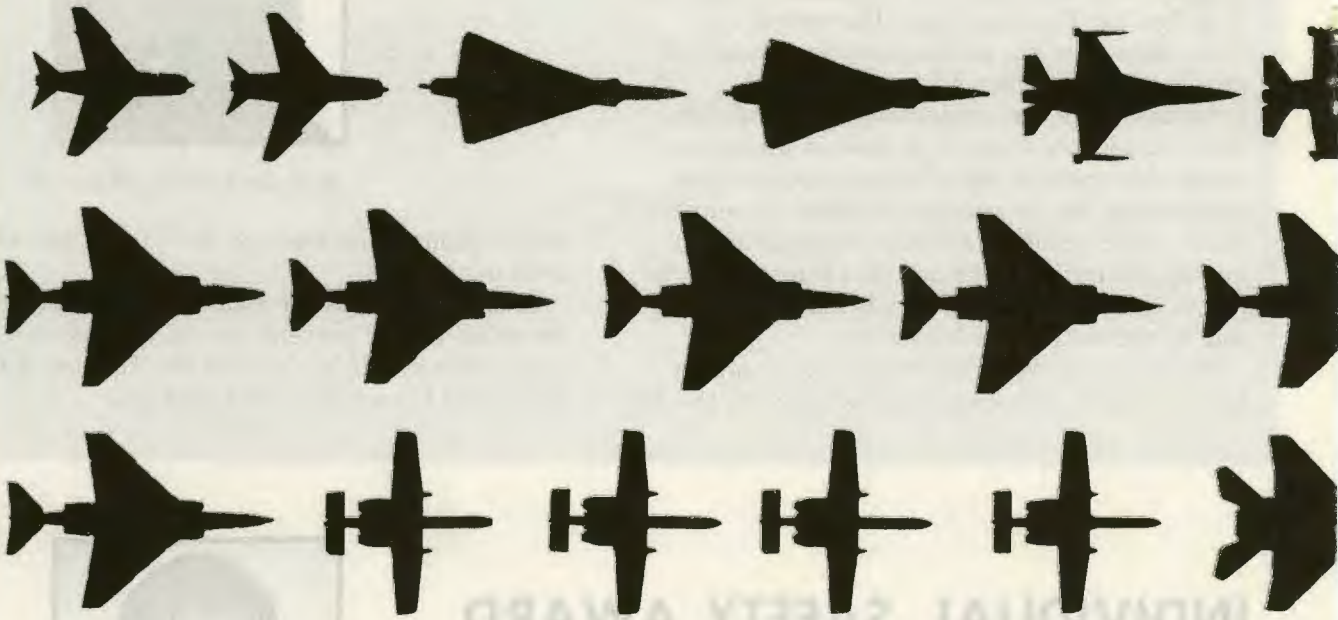
After completing routine maintenance on a J-75 engine, Sergeant Taylor and his crew were to do a functional check. They transported the engine to the M37-T20 test cell and placed the engine onto the rail mounts. But something just didn't look right to Seargeant Taylor—the engine didn't rest on the mounts properly.

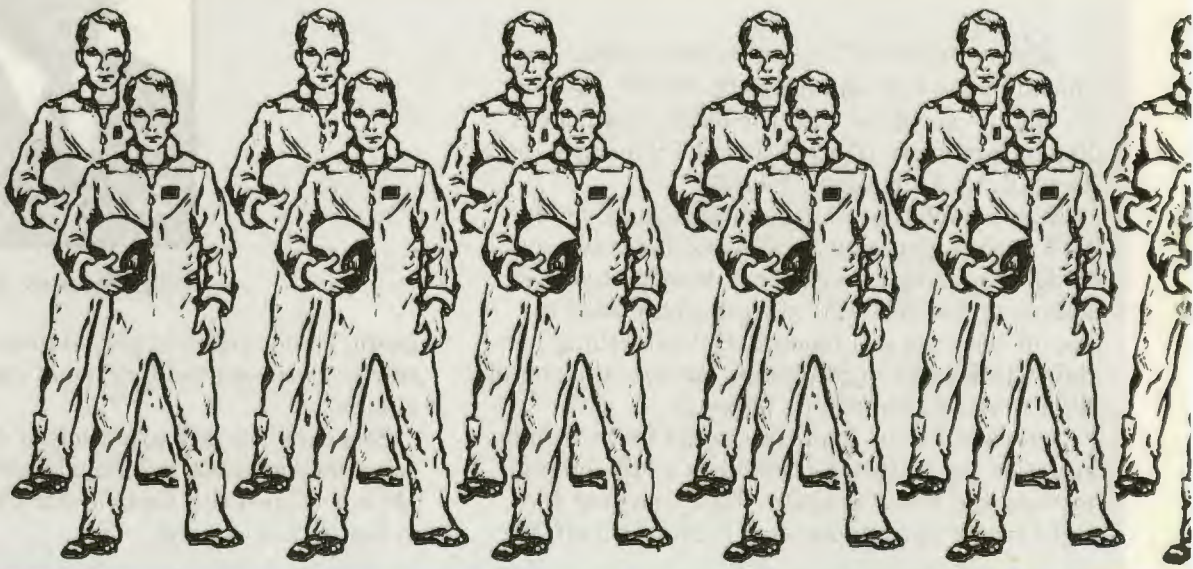
Sergeant Taylor knew this could be an unsafe situation, so he took a closer look at the engine mounts and roller adapters. He found that the right rear roller adapter had broken in half. Sergeant Taylor replaced the adapter, and the crew safely continued the functional check on the engine.

Sergeant Taylor's attention to detail and conscientious attitude prevented a serious mishap. He has earned the Tactical Air Command Individual Safety Award.

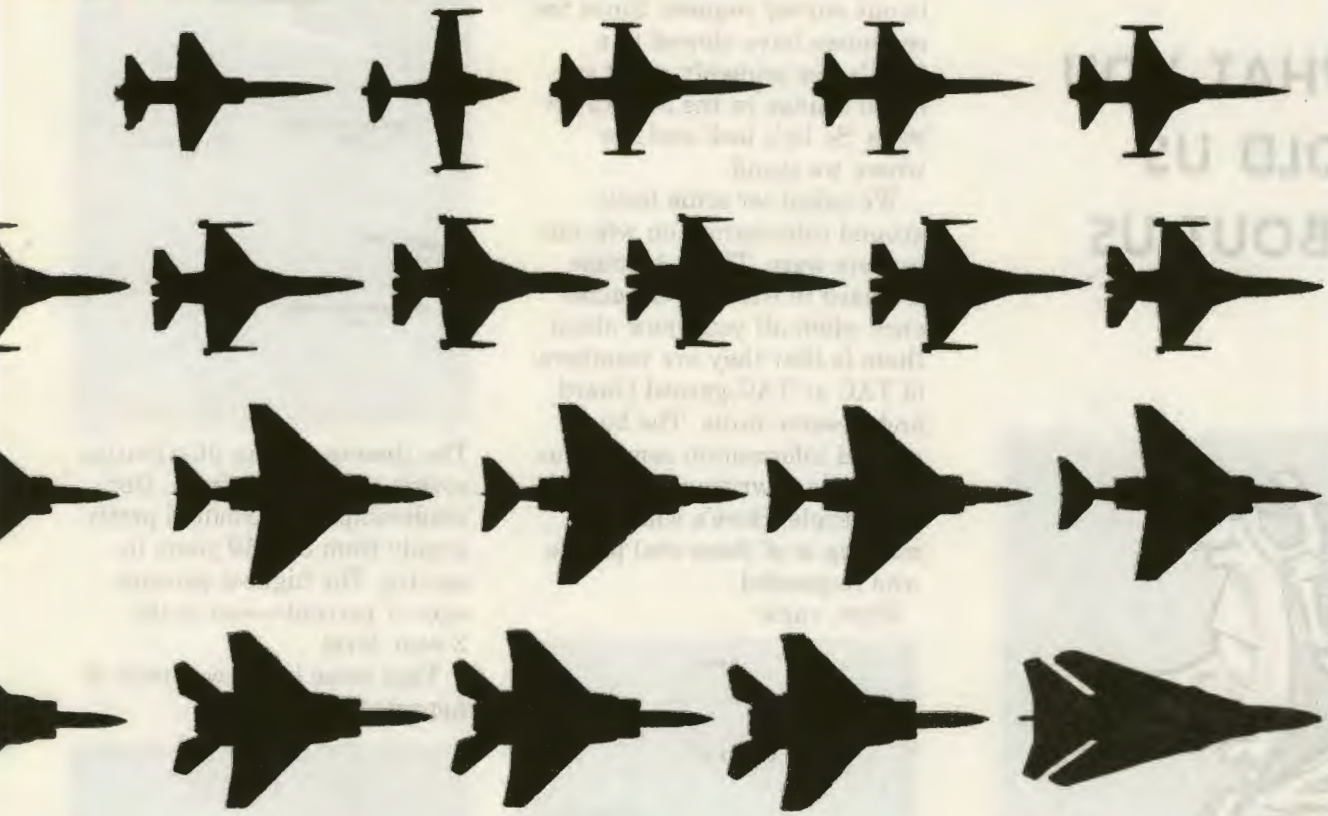
OUR TAC AND TAC-GAINED

JANUARY - DECEMBER 1983





LOSSES IN THE AIR



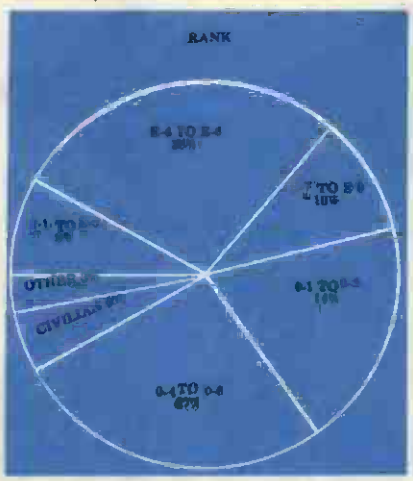
TAC Attack Survey Results

WHAT YOU TOLD US ABOUT US

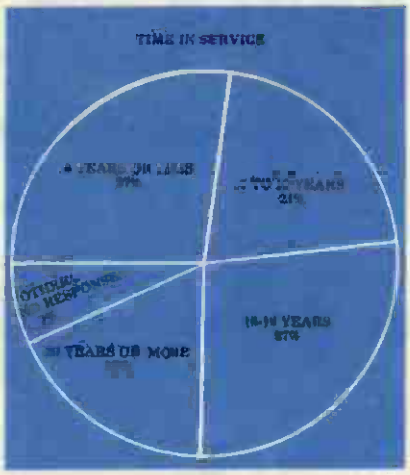
We've tallied 264 responses to our survey request. Since the responses have slowed to a trickle, we probably won't see much change in the overall results. So let's look and see where we stand.

We asked for some background information on who our readers were. That's because it's hard to write for an audience when all you know about them is that they are members of TAC or TAC-gained Guard and Reserve units. The background information reminds us that we are writing to and for real people. Here's what the makeup is of those real people who responded.

First, rank:

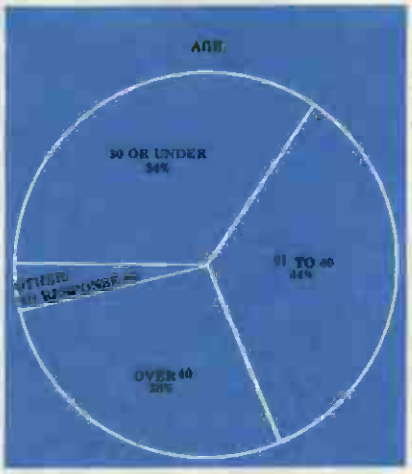


As you can see, the bulk of our respondents were in the middle ranks among both officers and enlisted. O-6s accounted for only 3 percent of the responses, so the predominance of middle ranks among officers is even more pronounced than the chart shows. The largest single category was O-3, accounting for 16 percent of the total responses.



The time-in-service distribution covers a broad spectrum. Our readership is distributed pretty evenly from 3 to 19 years in service. The highest percentage—7 percent—was at the 3-year level.

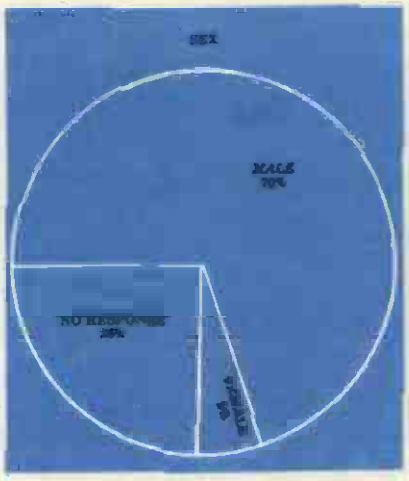
That same broad coverage is apparent in age.



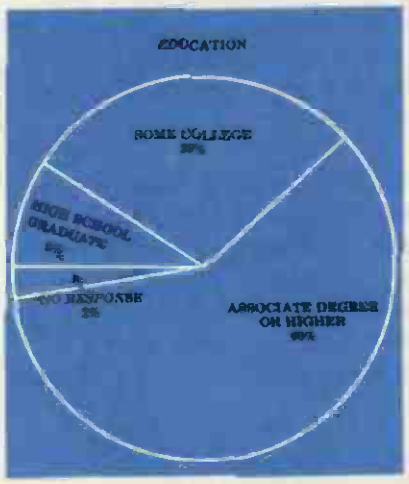
But our readers are nowhere near evenly divided between male and female.

If we assume that the no-responses are distributed about the same as those who did respond, then 94 percent of our readers are male. That picture is slowly changing, however: 17

percent of *our* readers under 31 years of age are female.

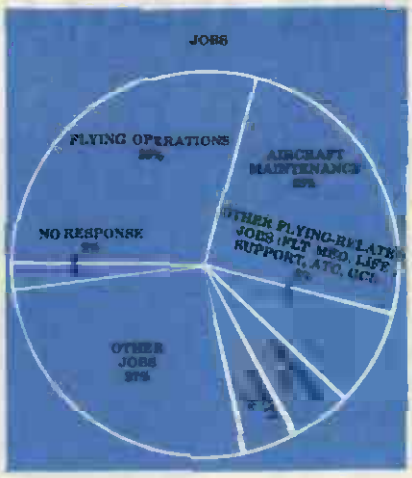


The education of our readers is impressive:
89 percent have had some college.



Only one respondent was not a high school graduate. Many respondents indicated they had advanced degrees.

Finally, we asked about jobs. It's no surprise that most of our readers had flying or flightline-related jobs. After all, the magazine has been aimed at that audience since its inception.
But notice that a significant portion of our readers—27 percent—hold other jobs not directly related to flying. These



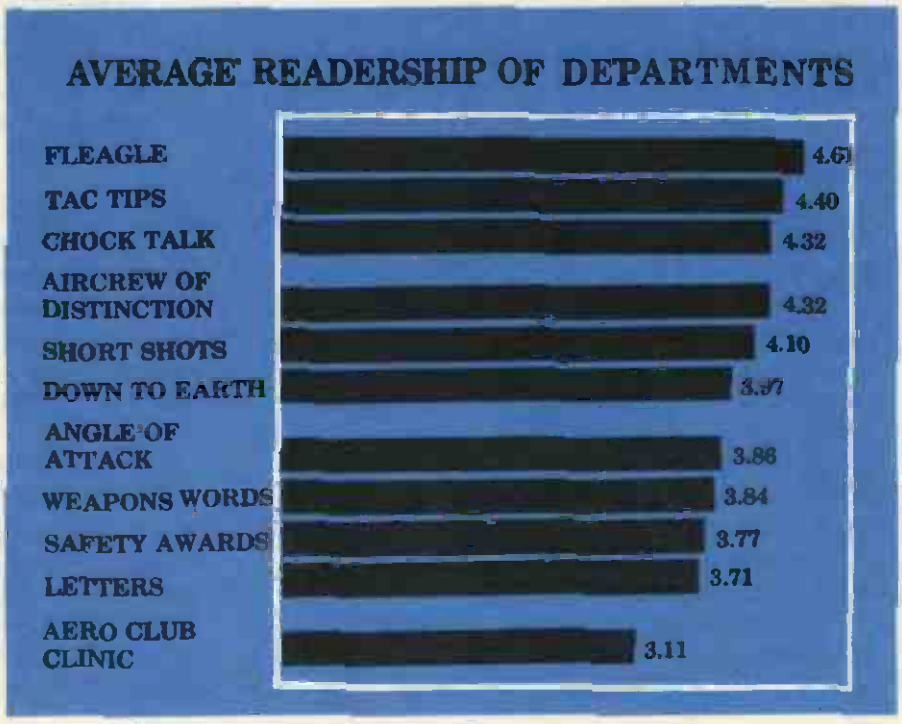
include civil engineering, supply, security police, data automation, administration, public affairs, and many other fields that are important to the mission.

That's what our readership looks like; or at least that's what the readership that responded looks like. The typical operations respondent would be a captain, pilot, male, in his thirties, with a college degree.

The typical maintenance respondent is an E-4, male, about 25 years old, with some college but no degree. But the *audience overall* covers a wide variety of ages, ranks, and occupations.

So, what does this audience think of *TAC Attack*? Well, first, our survey respondents were regular readers. Seventy-four percent said they *always read* the magazine; another 18 percent said they read it frequently. Together, those categories accounted for 92 percent of the responses. We can't assume that the respondents are typical of our average reader, but it *seems* fair to assume that they represent our regular readers pretty well.

If that's true, then our regular readers really like reading "Fleagle." No surprise there. "Fleagle" has always been our most popular department *overall*. Here's how the departments stack up:



WHAT YOU TOLD US ABOUT US

The number after each department is the average score given by our respondents for frequency of reading on a scale of 1 to 5 where 1 equals "never;" 2, "rarely;" 3, "occasionally;" 4, "frequently;" and 5, "always." What it tells us is that our average respondent reads "Fleagle" almost always. He reads "Tac Tips," "Chock Talk," "Aircrew of Distinction," and "Short Shots" frequently. All the other departments except one are read pretty close to frequently.

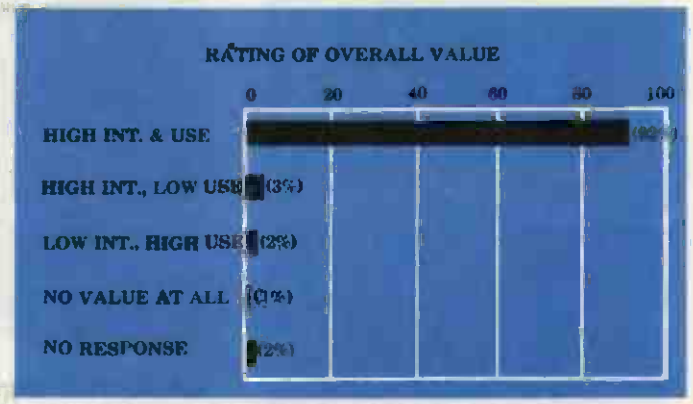
The one exception is "Aero Club Clinic." It is read only occasionally by our respondents. Remembering that our respondents are loyal readers for the most part, we can assume that "Aero Club Clinic" is read less often than occasionally by our average reader. That level of readership is hardly enough to justify the space the department occupies, so "Aero Club Clinic" bites the dust.

That doesn't mean we'll never do stories about the aero clubs. When we have an aero club story that needs telling, we'll tell it. But aero clubs won't have their own regular department.

The rest of the magazine seems to be in pretty good shape. Last year, on the advice of a magazine layout expert, we modified our overall design and layout. Naturally, we were curious what you thought of the changes. Ninety percent of the repondents thought our layout and design were good to excellent. Five percent rated it fair, and only one percent rated it poor.

The change in layout and design most often suggested was to use full color. But we can't justify the additional cost, so we don't plan on any changes along that line. A few writers suggested we use more actual photos and fewer cartoon representations in our art. But the cartoons help maintain the anonymity of the people and units involved in the incidents we write about. And by injecting some humor, the caricatures of airplanes looking, as one reader put it, as if they had "just wet their pants" keep us from developing a sermonizing tone in the magazine. Still, for variety's sake, we will try to use more photos in the magazine when we can.

The most important question we asked was what you thought of our overall value. The response was overwhelmingly favorable.



Even allowing for the fact that those who responded were regular readers, we were still surprised that such a large majority felt the magazine was highly interesting and useful. That indicates that we are serving your interests, and it places a burden on us to continue to serve you.

While we appreciated the vote of confidence, we did take a hard look at the criticism we received. Admittedly, some were hard to take seriously, for instance:

> I'm disturbed by the increasing amount of publications that are garbage and of no measurable value (except maybe make some editor rich [whose (sic) probably the general's brother]) . . . Do us all a favor and turn yourself in to the fraud, waste, and abuse department.

Well, nobody on our staff is getting rich from *TAC Attack*. The Superintendent of Documents of the Government Printing Office may be getting a few dollars in for subscriptions but hardly enough to cover handling costs. And none of us are related to a general (except maybe the Superintendent of Documents; don't know about him or her).

A more reasonable criticism was that we didn't devote enough space to the "other" jobs. In one sense that's inevitable. We cover flight, weapons-explosives, and ground safety. Because of the expenses involved, we devote considerable space to flight safety. Much of weapons and explosives safety is flight related, and so is some ground safety. So as long as the mission of the magazine

stays the same, the majority of the articles are going to be flight related.

On the other hand, we'd like to print a greater range of stories in that portion of the magazine that isn't flight related. The only problem is, our small staff doesn't have the expertise to write about all the "other" areas that have safety implications. In short, if you don't write the stories, we can't print them.

A closely related criticism came from members of units that fly big, multiengine aircraft. We don't do enough stories about them. That's true. The reason is that we haven't identified safety issues for the big aircraft that aren't adequately covered in the *MAC Flyer, Combat Crew,* or *Flying Safety* magazines, or else wouldn't be better addressed locally by the units involved. We are not in competition with other safety magazines; our purpose is to complement them. But when it comes to pats on the back in the magazine for jobs well done, members of those units flying heavies have received and will continue to receive their share. We'll print other stories also if we think they have broad application within TAC.

Some of the criticism we received seems to stem from a misunderstanding of the purpose of *TAC Attack*. Our purpose is not to publicize units or missions; that's the job of the public affairs folks. All we are interested in publicizing are issues affecting safety. Granted, that's a broad field. If your unit has solved some safety problem, we'll give you publicity—not only to congratulate you, but also so others can contact you for help. But we don't do publicity for its own sake.

A few respondents in the "other" category thought we could save money by limiting our distribution to the flight line. Maybe so, but not much money. Printing is one of those operations in which economy of scale plays a large part: the first few copies are very expensive; additional copies become less and less expensive. And many of our readers in the "other" category appreciate being able to read about flying activities. For example, a sergeant in supply wrote: "This type of magazine keeps up the morale of the American fighting person. It helps to be reminded once in a while about the true mission and end results of all our hard work. Keep it up!" Certainly, much of our ground safety information applies to everyone.

But if your unit feels you don't need as many

copies of *TAC Attack* as you are getting, just let your publications distribution office (PDO) know. They'll change the requirement with us. We don't want any copies going to waste. The 1 for 10 ratio is meant as a maximum for us to print, not a requirement for you to order.

Then again, some of you who could use *TAC Attack* may not be getting it. That's worse. But the solution is the same: tell the PDO. If they have any questions, tell them to call us, and we'll reason together. *TAC Attack* can't help you prevent mishaps if you don't get to read it.

There's more we could talk about. Many of the respondents had worthwhile comments, and we considered them all. Some we can't do because of budget, the size of our staff, or our view of our mission. But we have made some changes in response to what you told us, and we'll be making more.

We know we can still improve, but we don't plan to make any radical changes. After all, most of you who answered the survey told us you were pretty well satisfied with what we were doing. We're going to work hard to continue to keep you satisfied. Without your support, we're useless.

WEAPONS WORDS

New life for an old bomb

A class of some explosives ordnance disposal (EOD) trainees went out to an EOD training range to practice disabling bombs. Now this kind of duty is a pretty exciting way to earn a paycheck, even on slow days; on this particular day, it was especially so.

After some instruction and demonstration, each trainee used the special tools and techniques of the trade to cut through the metal case of an inert general purpose bomb that was mounted in a barricaded area. The bomb had been around a while; it was adorned with cuts and holes from previous training sessions.

When all the trainees had completed the lesson objectives, the instructor determined that a new inert bomb training aid was required before the next class. So he prepared this bomb for disposal by placing C-4 explosives inside the nose of what was left of the bomb. When everyone was safely clear and ready, he detonated the charge.

The instructor expected the explosion to be vented through the holes that had been cut in the bomb's case. He was wrong. Actually the holes and cuts weakened the bomb case so much that it encouraged fragmentation.

This was the first time that an EOD instructor at this range had placed explosives *within* an inert bomb case. When the bomb exploded, a four-by-six-inch fragment sailed 800 feet, pierced the metal roof of a mobile home in the base trailer park, and landed in the sleeping resident's bed. When the rest of the surrounding area was searched, another large fragment was found in an open field outside the training range. Fortunately no one was injured.

The important lesson learned from this mishap is that placing explosives within an inert bomb case creates a frag-producing munition—not allowed on EOD *training* ranges unless they also meet *disposal* range criteria. Check out AFR 127-100 when in doubt—before the blast.

What's plan b?

The range work went as planned except one of the A-7's practice bombs didn't release. The pilot chose a route home that avoided populated areas. He planned to recover on the runway designated by the unit for hung ordnance. Unfortunately, a thunderstorm was parked on final approach to that runway, so the pilot flew to the reciprocal runway. The flight path to the other end of the runway is over more populated territory. About four miles from landing, the BDU-33 practice bomb quit hanging around.

It may have been an act of God, luck, or the zoning commission's good work, but the bomb hit in a vacant lot causing no damage or injuries.

By the way, there was nothing wrong with the bomb rack. The weapons folks' best guess was

that the impulse cartridge (CCU-44/B) did not generate sufficient pressure to completely open the bomb rack hook.

Hung bombs are probably going to continue to be a problem for this or any number of reasons. The point is, what's *your* plan? Was it developed before the new shopping mall was built off the end of the runway, or is it still current? And when Plan A isn't going to work, does your unit have a Plan B? If you only have one runway, plan B may mean dragging a hung bomb elsewhere to land.

Who did the damage?

While trying to download a captive AIM-9 from an F-4, the load crew had a hard time sliding the missile off of the rail. The load crew chief checked the missile and found the umbilical block retaining clip still connected. The umbilical had partially broken loose from the guidance and control unit. When the retaining clip was unfastened, the missile downloaded much more easily.

The crew loaded the missile onto the trailer. Then the number 2 crewmember engaged in a conversation with the line delivery driver about repairing the missile. While explaining repair procedures, the driver pushed the missile umbilical down flush with the missile.

Later, when the missile was inspected at the shop, damage to a pin hole on the guidance and control unit was found at the point where the umbilical mates. Such damage is usually caused by an umbilical with a bent pin or by careless installation of the umbilical.

We'll never know whether the damage was caused by the failure to disconnect the umbilical before downloading or by the driver's pushing the umbilical block down. But either could have caused the damage, and neither should have happened. The load crew chief failed to follow his tech data, which includes a step to disconnect the umbilical. And the line delivery driver wasn't qualified to perform any type of missile repair; he didn't even know the missile could be damaged if the umbilical block wasn't mated to the guidance and control unit very carefully.

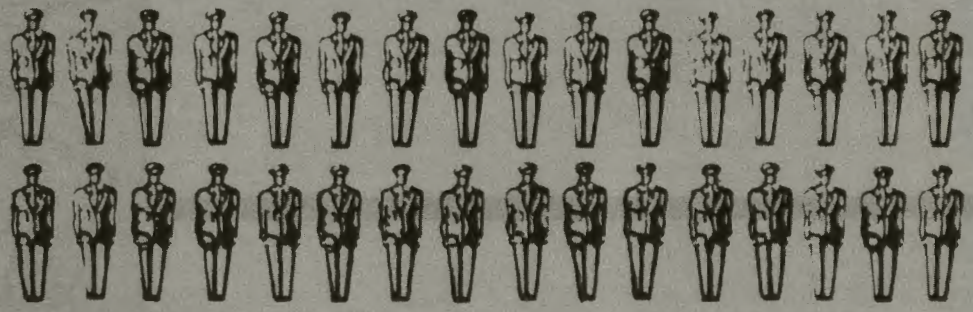
So no matter what really caused the damage, we relearned two lessons: (1) always use the tech data; and (2) if you haven't been checked out on a piece of equipment, keep your hands off.

Our TAC Losses on the Ground

JAN-DEC 1983

OFF DUTY MISHAPS

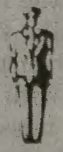
Automobiles



Motorcycles

Sports / Recreation

Electrocution

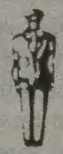


Crushed by tree

Private acft

ON DUTY MISHAPS

Industrial



PMV

H_2O +/- ANTISKID = TROUBLE

Twenty minutes before an F-4 returned from a day weapons delivery mission, a heavy rain shower clobbered the air base. The cloud ceiling and visibility were good (8,000 and 7) when the aircrew returned, but the runway was reported to be wet with no standing water. The pilot anticipated minor problems stopping the aircraft, so he took extra care to fly a good approach and touched down with the recommended slightly slow angle of attack. His landing was firm, about 300 feet beyond the runway threshold. He deployed the drag chute and stepped on the brake pedals. When he felt no deceleration, the pilot released the brakes for a moment and then reapplied them. Boom, boom—two blown tires. What happened? Didn't the antiskid work? Didn't the pilot do everything right?

The pilot *almost* did everything right. The antiskid worked exactly as it's designed. Here's what happened:

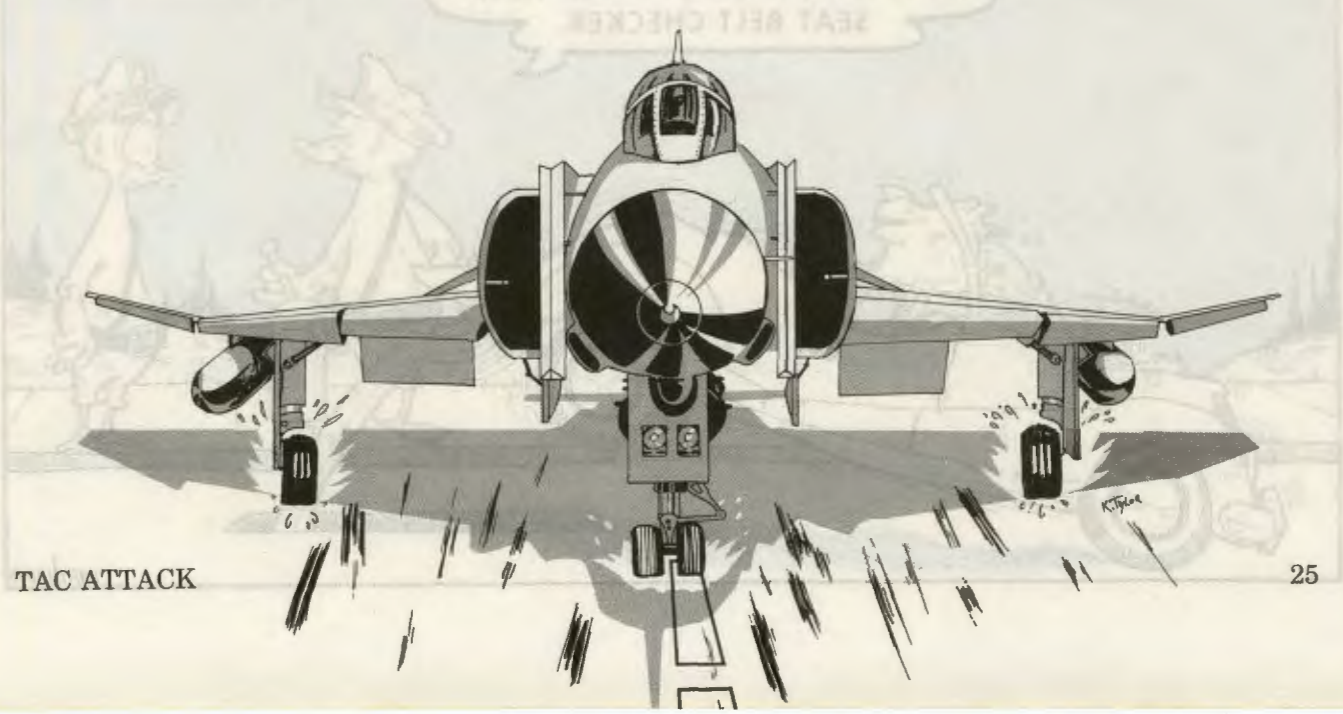
The first 1,500 feet of the runway was covered with rubber deposits besides being wet. When the aircraft touched down, the tires sailed along on top of the layer of water which covered the rubber deposits.

The Mark III antiskid requires the main gear tires to spin up to at least 48 knots before any braking is available; this feature, as well as a built-in three-second delay, is designed to decrease the probability of blown tires at touchdown if the pilot inadvertently has his feet on the brakes. When the pilot initially applied brakes, there was no braking because the wheels were not spinning fast enough.

The flight manual says that during hydroplaning the *wheels* may slow (after initial spin up) to 30 knots or less. Below 30 knots, antiskid protection is not available. So if the tires are sliding over a slippery surface, the Mark III antiskid may falsely sense that the *aircraft* speed is below 30 knots and revert to manual braking with no antiskid protection. When the pilot reapplied the brakes, he got manual braking, which locked the wheels. As the aircraft came to the end of the rubber deposits, the hydroplaning was over instantly and the tires predictably exploded.

The pilot almost did everything right. Had he better understood the operaton of the antiskid on slippery surfaces, he probably would have waited until past the rubber deposits before he applied the brakes; and this incident probably wouldn't have happened.

By the way, the closer to the 500-foot mark we make our landings on sunny days, the less rubber deposits we'll have to worry about when it's wet.



DOWN TO EARTH

Seat belts: excuse versus fact

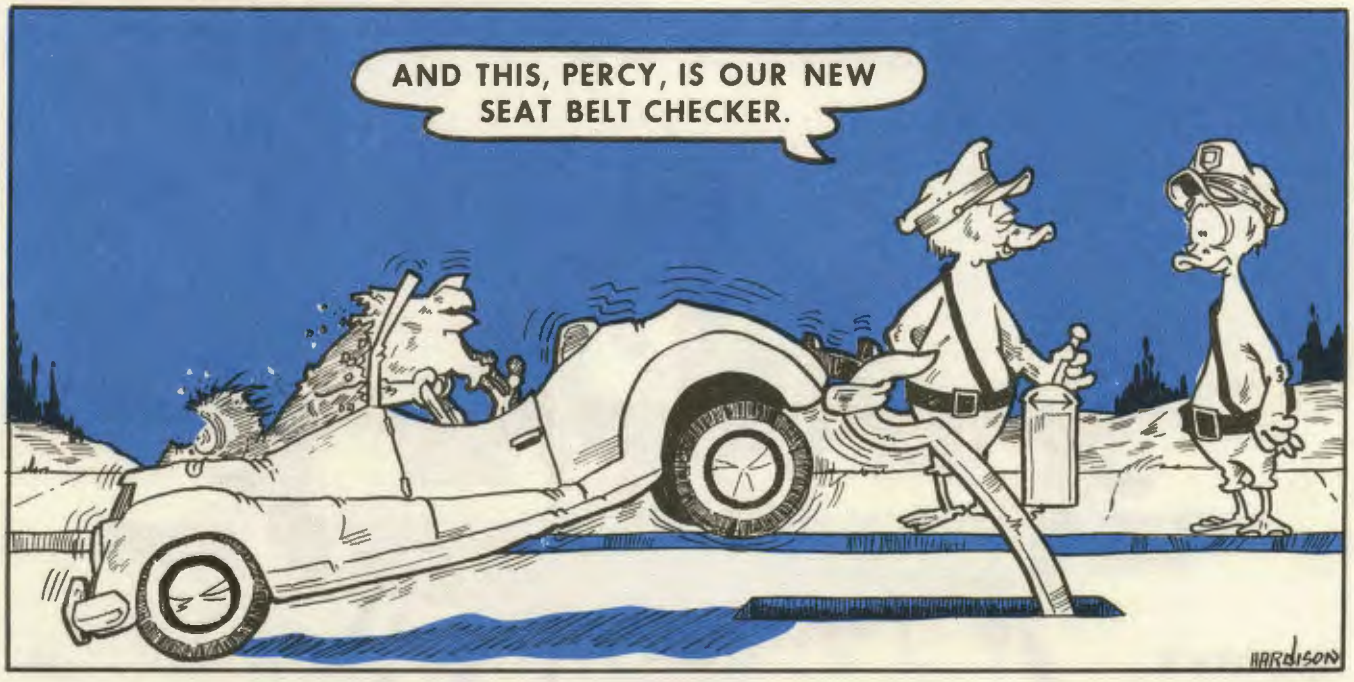
I *don't need seat belts because I'm a good driver, and I have excellent reactions.* No matter how good a driver you are, you can't control the other car. When another car comes at you, it may be the result of mechanical failure, or someone else's poor judgment and bad driving. There's no way to protect yourself. Think of the other hazards—pot holes, rock slides, icy roads, a blown tire, or faulty brakes.

I don't want to be trapped by a seat belt. It's better to be thrown free in an accident. Being thrown free is 25 times more dangerous. If you're wearing your belt, you're far more likely to be conscious after an accident, so you can free yourself and help others. And don't be overly concerned about fire or submersion; less than one-half of one percent of all injury-producing collisions involve fire or submersion.

I just don't believe it will ever happen to me. As a statistical average, every one of us can expect to be in a crash once each 10 years. For one in 20, the crash will be serious, and for one out of every 60 born today, it will be fatal.

I only need to wear them when I have to go on long trips, or at high speeds. Eighty percent of deaths and serious injuries occur in cars traveling under 40 miles per hour, and 75 percent of deaths or injuries occur less than 25 miles from your home.

I can touch my head to the dashboard when I'm wearing my seat belt so there's no way it can help me in a car accident. Safety belts were designed to allow you to move freely in your car. They were also designed with a latching device that locks the safety belt in place if your car should



come to a sudden halt. This latching device keeps you from hitting the inside of the car or being ejected. It's there when you need it.

When I have my lap belt fastened, I don't need to fasten my shoulder belt. During a front end crash, a shoulder belt keeps your head and chest from striking the steering wheel, dashboard, and windshield. A lap and shoulder belt offers you the best possible protection in the event of a crash from any direction.

Most people would be offended if I asked them to put on a seat belt in my car. Polls show that the overwhelming majority of passengers would willingly put their belts on if you would ask them.

I don't need seat belts. In case of an accident, I can brace myself with my hands. At 35 miles an hour, the force of impact is brutal. Arms and legs are just not strong enough to brace you against that kind of instant acceleration. The force of impact at just 10 miles an hour is equivalent to catching a 200-pound bag of cement tossed from a first-story window.

Too much in a hurry

By M. J. Whitfield
TAC/SEW

My sister and I had just left the doctor's office with little Miguel, my son. He got a clean bill of health and three shots. We were in a hurry to get to the shopping center, so I forgot to buckle Miguel to the car seat and then I didn't secure the car seat with the car's seat belt.

We were driving down Main Street when suddenly a car pulled in front of us. My sister slammed on the brakes. My son, still in the car seat, was thrown to the floor of the car. I was so upset to see the car seat on the floor that my sister had to pick it up for me. Little Miguel was frightened but alright.

My mother always told me to make sure the baby was secured to the car seat and that the car seat was secured by the car's seat belt. If I had taken the time to do what my mother had said, Miguel would not have been thrown to the floor of the car.

Car seats for children have been proven to save lives. A lot of child deaths each year could have been avoided if the parents had taken the time to buckle the children up. Miguel was lucky this time; next time he'll be buckled up.

Think about the fumes not just the gas

Do you know how to catch a unique rabbit? You "nique" up on it. Well that's what happened to this NCO, only it wasn't a rabbit, it was gasoline fumes. The NCO decided to get rid of a gas/oil mixture that was left over from the summer boating season. Instead of taking the mixture to a proper disposal area like a gas station, he poured the mixture down the laundry sink drain located in the utility room of his military family housing unit. The gas-operated hot water heater happened to be located in the same room, which had no ventilation. Fumes from the mixture started to come up through the floor drain and were ignited by the hot water heater's pilot light. The NCO received first and second degree burns to his hands and face.

Gas is a unique mixture. The fumes will sneak up on you.

SHORT SHOTS

Explosive Baking. If you're one of those people who likes to make all that good stuff that contains flour, make sure you don't sift the flour near an open flame or near someone who's smoking. Mixed with air, flour dust is very explosive.

Insurance and Seat Belts. At least one insurance company is convinced that seat belts save lives. If someone they cover is involved in an automobile accident while wearing a seat belt, they'll provide an automatic $10,000 increase in medical and death coverage (if needed, of course) with no additional increase in premium. Check it out.

Light Up Your Car's Rear End. Starting with the 1986 model year, every new car will have a third brake light mounted at driver's eye level, according to the Transportation Department. The new light should reduce rear-end accidents and eliminate about 40,000 injuries and $434 million in property damage per year. Right now there are about 3.5 million rear-end accidents per year that cause about 600,000 injuries. The National Highway Traffic Safety Administration estimates the lights will cost $7 to install for the first two years and only $4 after that. Hmmm—if they are that effective, maybe I should consider putting one on my old '77.

Put It in Milk. If a permanent tooth is knocked out, place it in milk until you get to the dentist. Milk enables the ligament cells on the outside of the tooth to continue functioning; that could improve chances for a successful tooth implant.

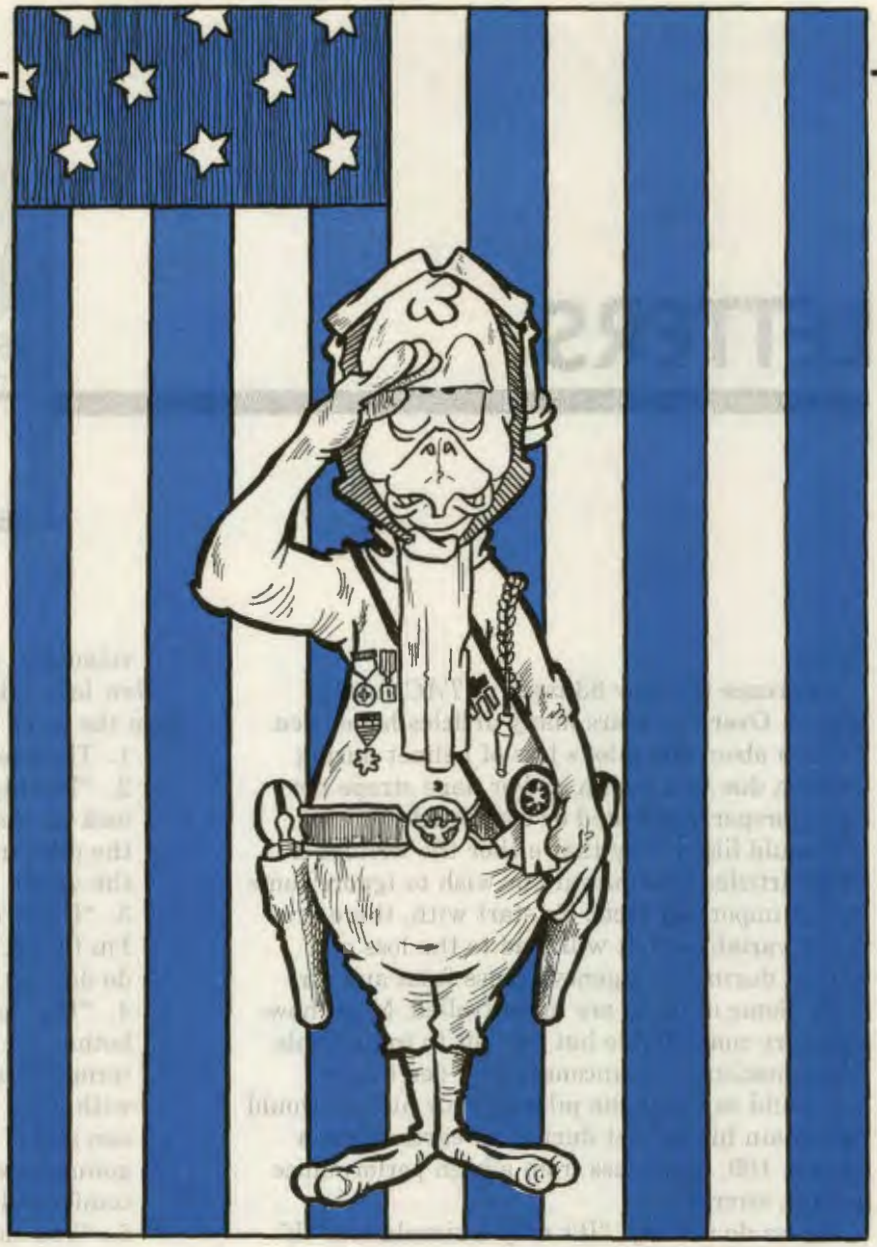
Child-Proof Electrical Plugs. It's a shield that costs about a dollar, and keeps kids from pulling plugs out of electrical outlets. The shield is screwed into place over cords already plugged into an outlet. They come in several colors or you can paint them to match your room. Check with your local hardware store for more information.

Diabetes. National statistics indicate that about half the diabetics in the country are unaware that they have the disease. Warning signs are frequent urination, unusual thirst, drowsiness or weakness during routine tasks, blurred vision, and an uncontrollable craving for food, especially sweets. Other symptoms are numbness, pain, or tingling in the fingers, legs, or feet, and frequent skin infections or itchy skin. If you are over 40 you may not have any symptoms—you may just not feel well. Women, people with a family history of diabetes, those who are overweight, and people over 40 have a higher chance of getting diabetes.

If You Don't Shiver. Shivering is a way for your body to keep warm. It's also a warning that you're getting too cold. But according to Dr. Nelson Norman from the University of Aberdeen's Institute of Environmental and Off-Shore Medicine, about five percent of all people lack the shiver response. If you don't shiver, you could be in trouble in cold environments. You could get hypothermia and not even know it.

Exchanges Recall Smoke Alarms and Chain Saws. The Electro Signal Lab, Inc., is recalling its 300-series, battery-powered smoke alarms. The alarms were sold in exchanges in Europe, the model number is ESL-331, and they have a date code of 070181 through 022383. And Homelite is recalling it's model 330 chain saw, lot numbers 4E283 through 4E289. They were sold in exchanges worldwide. If you have the defective smoke alarm or chain saw, return it to your local exchange for a replacement or refund.

FLEAGLE SALUTES-



SSgt Daniel Gurney, USAF Air Demonstration Squadron, "Thunderbirds," 57th Fighter Weapons Wing, Nellis AFB, Nevada. Sergeant Gurney walked out of the Thunderbird hangar and saw an F-5E with its nose on the ground and a person pinned underneath. He ran to the aircraft and directed four onlookers to lift the nose of the aircraft off the crew chief who was pinned under it. He pulled the injured airman from beneath the jet and administered first aid until an ambulance arrived. His quick response and leadership helped avert a more serious injury.

AlC Kevin A. Aure, Detachment 1, 57th Fighter Weapons Wing, Indian Springs Air Force Auxiliary Field, Nevada. Airman Aure was working on the side door assembly of a UH-1N when he noticed several cracks near the helicopter's tail. He warned his supervisor and asked to inspect the rest of the fleet. When the tail boom was taken apart, three cracked support ribs were found. Airman Aure's alertness may have prevented the loss of the helicopter and its aircrew.

SSgt Randall E. Nelson, 56th Aircraft Generation Squadron, 56th Tactical Training Wing, MacDill AFB, Florida. While completing an aircraft inspection following an F-16's first sortie, Sergeant Nelson discovered a small "BB"-size hole in the rubber seal of the engine inlet and in the metal behind the seal. He notified his supervisors and recommended the engine be removed for a FOD inspection. Because of his attention to detail, minor engine damage was discovered which could have become severe had the aircraft flown.

LETTERS

Editor

Reference the Nov 83 issue of *TAC Attack,* page 6. Over the years many articles have been written about the pilot's loss of helmet during ejection due to the chin and/or nape straps not being properly adjusted or connected.

I would like to say that either the writers of these articles are unaware or wish to ignore some rather important facts. To start with, there are many variables that will lead to the loss of a helmet during emergency egress from any aircraft. Some of these are uncontrolled. Most, however, are controllable but are left to individuals who consciously or unconsciously don't care.

I would say that the pilot in your picture would not retain his helmet during an egress from a Cessna 180, much less from a high performance combat aircraft.

Please do not say, "It's only a simulation." If that is the case, then you should simulate *All the Way.*

1. His chin strap is not fastened . . .
2. His helmet does not fit properly. (Note the space between his eyebrows and the bottom edge of the helmet.)
3. The mask is too small for his face. (Note the roll at the bridge of the nose and the fact that his chin is not seated in the faceform properly.)
4. Excess adjustment strap on top side of hard shell. (Straps have not been properly secured.)
5. Visor is up.
6. Flight suit is not closed and collar is not raised. (This has nothing to do with helmet retention, it's just poor flight safety practice.)

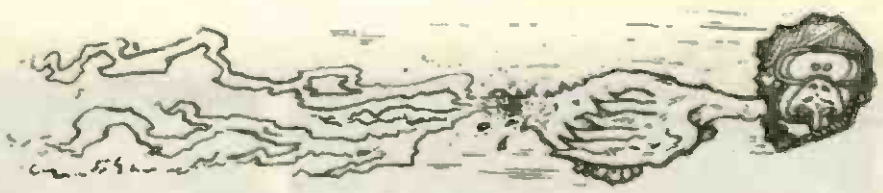
Now let's take a look at some of the comments from the jocks in the field:

1. The ever-popular "It's only a simulation."
2. "The higher the helmet sits the better my look-up vision . . . " (It doesn't appear that the pilot in the picture has a gull-wing on the visor.)
3. "I like 'em loose so I can adjust 'em while I'm flying." (These guys don't have enough to do during D/ACM.)
4. "The distraction of the loose straps doesn't bother me." (I don't recall anyone using the term distraction except the jocks that fly with loose straps.) The fact that the straps can slip is answered with, "The helmet's gonna go when I eject. I might as well fly comfortable."
5. "You can't see what you're doing when you have the dark visor down."
6. "Now just a *minute* that's a bit pica-yunish." (Which is about how long it would take—with professional assistance—to get the pictured pilot ready to eject. In simpler terms, about 26,000 feet at 300 miles per hour.)

What say the next time a jock loses a helmet we find out what really happened, from his initial fitting to his dressing practices to the day he punched out. Blaming the chin strap does not help the aircrews.

R. A. Bleasdale
Northrop 379
APO NY 09616

TAC TALLY



	TAC			ANG			AFR		
	DEC	THRU DEC		DEC	THRU DEC		DEC	THRU DEC	
		1983	1982		1983	1982		1983	1982
CLASS A MISHAPS	1	26	29	0	10	6	0	1	1
AIRCREW FATALITIES	0	11	17	0	9	3	0	1	0
TOTAL EJECTIONS	3	25	26	0	9	5	0	0	2
SUCCESSFUL EJECTIONS	3	22	22	0	4	4	0	0	2

TAC'S TOP 5 thru DEC '83

TAC FTR/RECCE	
class A mishap-free months	
49	355 TTW
32	363 TFW
28	58 TTW
21	4 TFW
18	37 TFW

TAC AIR DEFENSE	
class A mishap-free months	
131	57 FIS
84	5 FIS
81	48 FIS
69	318 FIS
40	87 FIS

TAC-GAINED FTR/RECCE	
class A mishap-free months	
140	188 TFG (ANG)
132	138 TFG (ANG)
131	917 TFG (AFR)
109	114 TFG & 174 TFW (ANG)
104	112 TFG (ANG)

TAC-GAINED AIR DEFENSE	
class A mishap-free months	
114	177 FIG
80	125 FIG
63	119 FIG
47	107 FIG
38	147 FIG

TAC/GAINED Other Units	
class A mishap-free months	
173	182 TASG (ANG)
157	110 TASG (ANG)
153	USAF TAWC
145	84 FITS
141	105 TASG (ANG)

CLASS A MISHAP COMPARISON RATE

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

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TAC	1983	6.9	5.3	3.4	3.8	4.0	3.8	4.5	4.1	3.9	3.7	3.8	3.7
	1982	7.8	5.7	5.9	5.2	5.9	5.7	5.1	4.7	4.4	4.1	4.1	4.2
ANG	1983	9.1	7.0	4.4	4.3	3.4	4.2	4.8	4.2	4.7	4.3	3.9	3.6
	1982	0.0	2.7	3.2	3.4	3.6	2.9	3.1	2.7	2.4	2.1	2.3	2.2
AFR	1983	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.1	2.8	2.5	2.3	2.2
	1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.1	2.7	2.5	2.3

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FLEAGLE
HARRISON
SCREEECH!
STOP!
SPLAT!
YEAH, WHEN IT CUMS T'BRAKES, A HEAVY FOOT TURNS INTO A HOT FOOT.