

TAC ATTACK

JANUARY 1988



ANGLE OF ATTACK

Welcome back from the holidays. It's good to know that you survived the many hazards of the season and are around to read this "Angle of Attack."

Before you slip out the door for your first sortie of the new year, let me encourage you to think about the fact that January is one of our two most hazardous months of the year. The other one that causes us a lot of problems is October. What do these two months have in common that make them so treacherous for us? Both follow specific periods (the end of the fiscal year and the holiday season, respectively) when TAC does little, if any, flying. This permits concentrated periods of leave and time off from the job. As a result, there are a lot of subtle differences in our mindsets and abilities that may not be readily apparent when we return to work. For example, do you catch yourself in the "back to work" syndrome, wishing your time off or leave had lasted just one more day? Whether you realize it or not, you're not as "good" as you were when you stopped flying before the holidays. Your limitations are not the same as they were before you stopped flying. You've also got to consider that you're not the only one that may be a little "behind the power curve." Everyone else is experiencing a gradual return to their normal operating abilities as well.

Another factor that links these two months together is the significant transition to worse weather that occurs around these times. Nearly all bases in TAC will move into serious winter conditions in January. What will your response be to that reality? Have you considered the changes that must occur in your normal routine: more clothes to keep you warm, longer preflights, longer time needed to taxi out to the runway due to ice and snow? Or, do you act as



though nothing has changed?

The answer to the problems of accurately gauging our personal abilities as well as changing weather conditions is discipline. Good discipline starts with adequate preparation on the ground, before you ever step into the briefing room. Honestly acknowledging your personal flying and operating limitations is just as vital as being aware of and adequately planning to counter enemy threats during combat. In either case, if you fail to deal with "the threat," the results can be just as serious.

January holds just as many challenges for our support people. All of you working on the flightline and around the base such as crew chiefs, security police, supply folks and everyone else need to take into account how the hard conditions of winter will affect you. Take a few minutes now to consider how it will impact your daily routine.

No matter what, some of you are going to have unplanned experiences just like those shared by Maj Barry Roberts in his article, "Bad Day." Share what you learn with the rest of our TAC folks through an article. If your experiences are a bit too *personal* and you want to remain anonymous, that can be arranged. When we publish your article, we'll send you one of our Fleagle T-shirts. Let us hear from you.

That's all for this month. It's good to have you back, pardner.

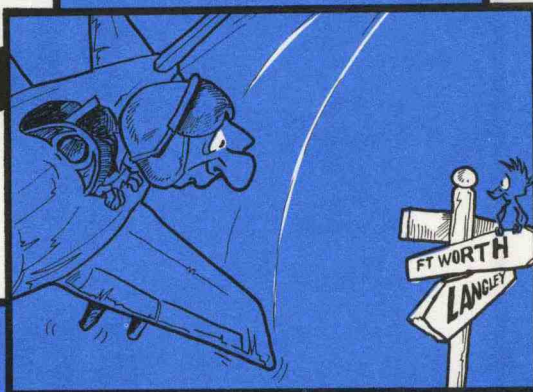
Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC ATTACK

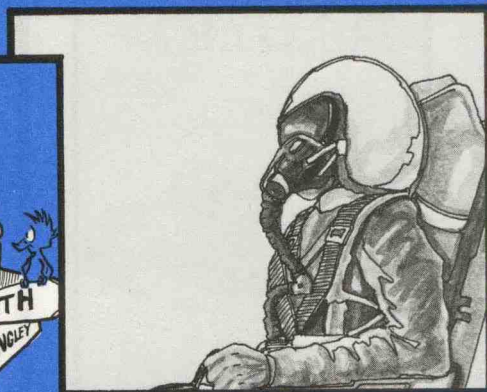
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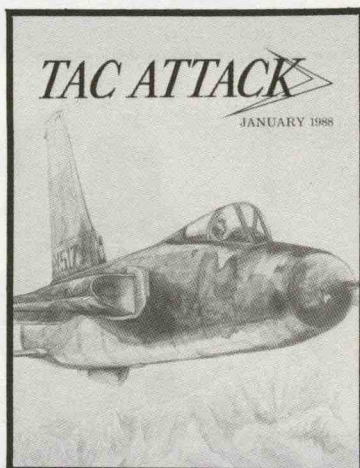
TACSP 127-1

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VIPER 54, WHERE ARE YOU?

Captain Jim Pool
OIC, Fighter Weapons Review
Nellis AFB, NV

Imagine you're line abreast approaching the merge or you're on low-level ingress to your target and things are going great until your wingman calls: "Blind." You look where he should be and he's not there. In fact, you can't find him anywhere. What's your plan?

All of us have been in situations like this. Often it occurs after an attack or threat reaction — sometimes during a routine rejoin off the range. When blind, you lose situation awareness and mutual support; worse, the risk of midair collision increases exponentially the longer you press on.

In my short tenure in fighters, I've already lost a roommate and three close friends to midair collisions or flying into the ground. Unfortunately, this happened because they defied three

basic rules of aviation:

1. Don't hit the ground.
2. Don't hit each other, and
3. Don't do anything to break rule one or two.

The big sky versus little aircraft theory of deconfliction doesn't work. This article offers techniques (not procedures — we've got ample procedures) for avoiding the midair collision. Many of my listed techniques occur simultaneously, and they're not listed in any priority. You'll also find no specific place listed for the "Knock It Off." When to KIO depends on many more variables than can possibly be incorporated into a checklist or procedures. But my experience tells me there are four principles for loss of visual between formation members ("double blindness"):

1. Don't assume.
2. Be safe (get on the radios).
3. Regain visual.
4. Regain mutual support.

I'll cover the four principles in various situations below.

SITUATION ONE:

I see some members of my formation, but can't acquire visual with others.

Ensure the one(s) you actually see are the same one(s) you think you see. Don't assume! Even in the conventional gunnery pattern, "coffin corner" is still a likely place for a midair collision because someone *assumes*. . . . In these days of multi-multi-ship target area tactics, how often have you exited the target area on someone's wing and later discovered it wasn't who you thought it was? **Don't assume!** When in doubt, follow the techniques below.



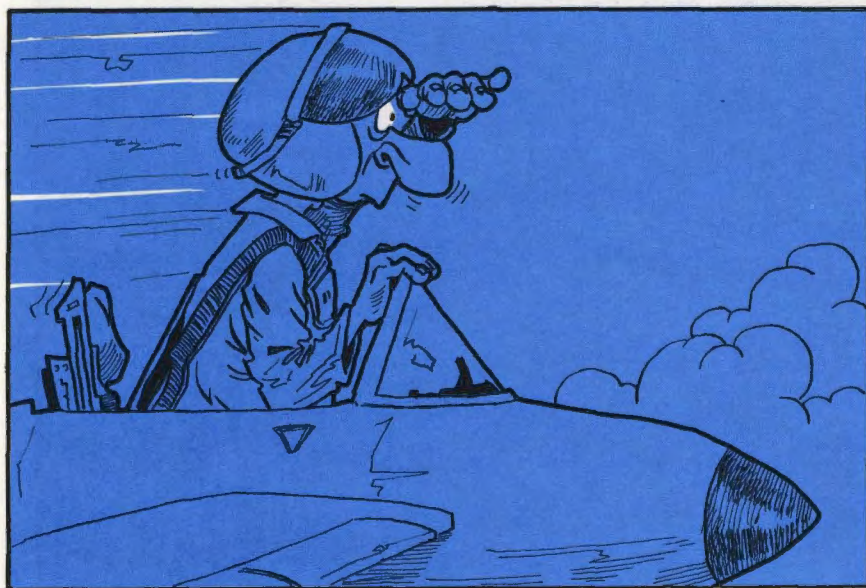
SITUATION TWO:

I do not see the other members of my formation.

Rule number one is to be safe, be conservative and avoid the midair collision. Many of the following techniques occur simultaneously; they're also not listed in chronological order or order of priority. When you can't regain visual, look in the last *known position* (focus on a dis-

tant object and look for the relative motion) while attaining *altitude separation* from the last observed altitude. Don't assume the other flight member(s) have you in sight! Then, increase your search area to include *possible positions* while establishing two-way radio communications

(i.e., "Viper 53 is blind" and wait for Two's response). Flight leads — be directive! Proceed with the *briefed* blind/rejoin plan. Depending on the situation, you must consider *discontinuing* the mission until regaining visual (i.e., return to a previously identified point or the briefed rejoin point with altitude separation). Scan the *postulated* positions while carefully establishing lateral separation (i.e., turn to parallel paths, turn away as in lost wingman procedures). **Don't assume!** Next, using the information provided on the radio, determine an estimated position and search there. Keep your head out and keep it moving; the stationary bug spot on your canopy could very well be your wingman on a collision course. Finally, using time, distance, heading, altitude, and air-speed information provided, ascertain a **predicted** position and scan there.





VIPER 54, WHERE ARE YOU?

SITUATION THREE:

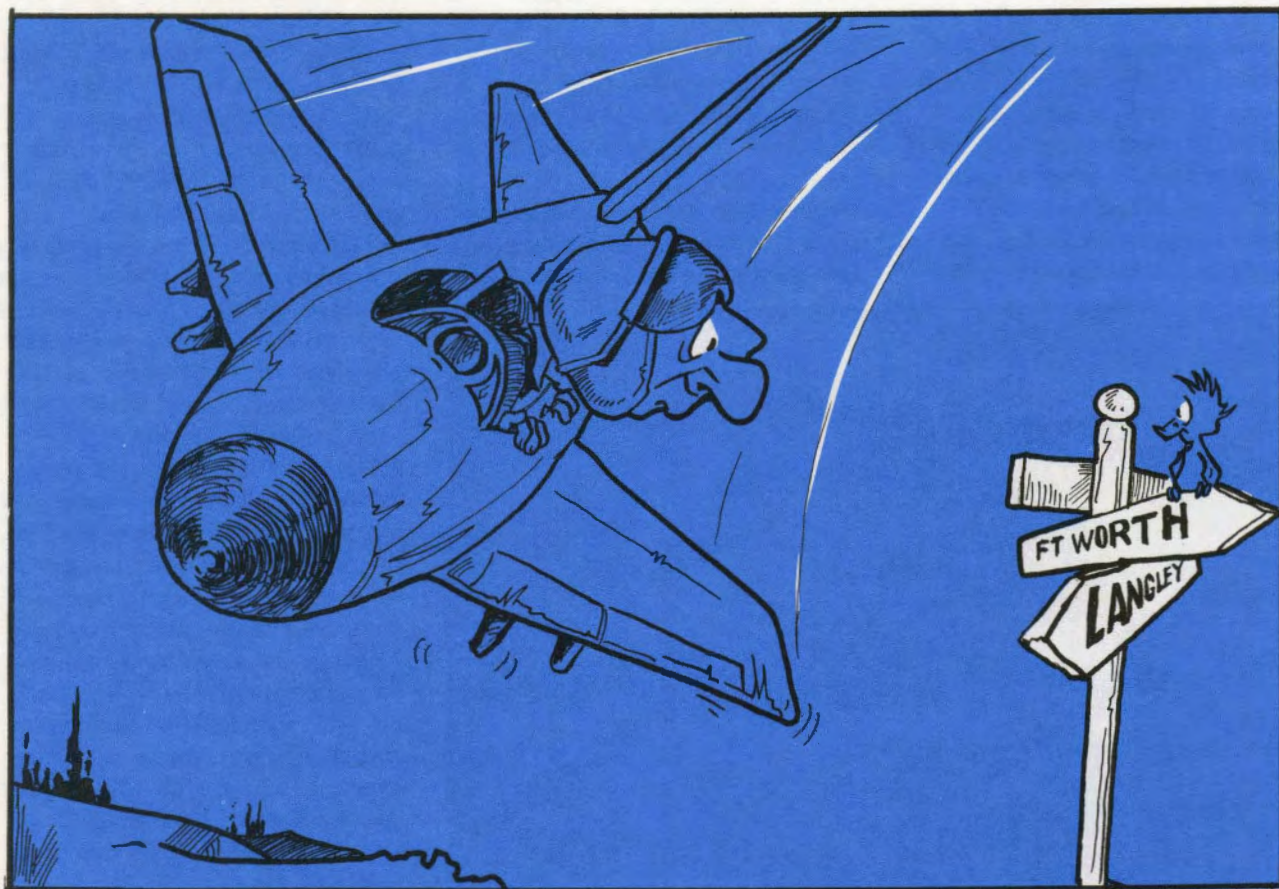
I still don't see other members of my formation.

How do I regain visual? One can use ground references, TACAN radial/DME, air-to-air TACAN, ADF, radar, GCI or INS (all the while maintaining altitude separation). Consider "visual enhancers" like wing rocks, smoke generators, exterior lighting, "torching" (F-111 practice of dumping fuel while in after-burner) and "electronic enhancers" like the radar beacon.

Enough techniques! Either you've regained visual or you haven't. If not, seriously consider "Knock It Off" and discontinue the planned mission or go with the single ship back-up mission, if appropriate. If you've regained visual, it's time to **REGAIN MUTUAL SUPPORT**. Proceed with the briefed plan. Flight leads — be directive. Be expeditious in regaining

your mutual support formation and radar coverage.

Even when visual, keep your head out for that "unbriefed/unscheduled" flight and unexpected civil aviators in your working airspace. What's the bottom line? Don't let temporary loss of visual become that moment of terror just prior to impact. We've lost too many friends and airplanes already. ➤



TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD



Captains Mark A. Milham and Paul A. Madsen were taxiing out for takeoff in their OA-37 when the supervisor of flying (SOF) informed them they were needed for a potential search and rescue (SAR) effort. He told them that a young civilian pilot had become lost during a solo cross-country flight and was running low on fuel. The civilian flyer was orbiting over a small tower at about 3700 feet, but he was unwilling to climb higher so that he could be picked up on radar because of his low fuel state. With only his last known position and radio frequency available, the two pilots were finally able to locate the now panicked pilot by hav-



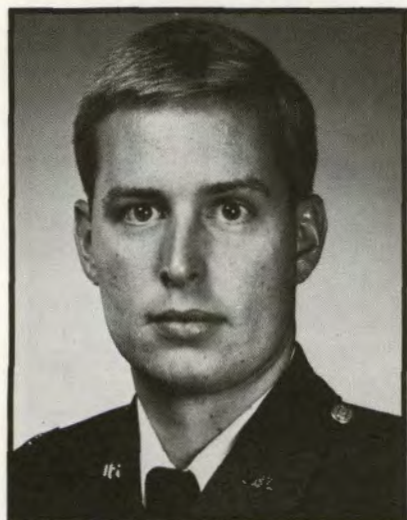
ing him describe the terrain over which he was flying. Their thorough knowledge of the local area enabled them to pinpoint his position and direct him toward a landing strip.

En route to the proposed landing site, the civilian airplane ran out of fuel and the engine quit. Discovering that the pilot had never performed or practiced a forced landing, the two captains realized that they would have to talk him through the procedure. After calming the pilot and assuring him they could handle the situation together, they were successful in talking him through the steps necessary to complete a safe landing on a World War II-vintage dirt strip.

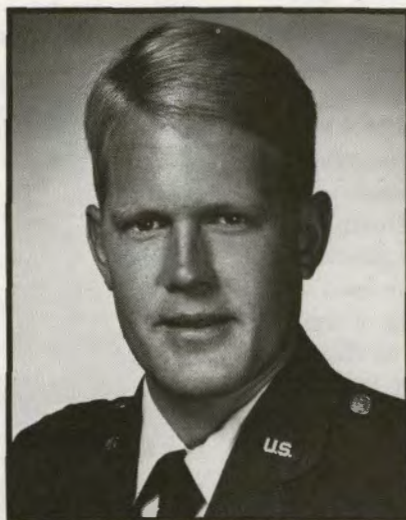
The outstanding knowledge and quick thinking displayed by Captains Milham and Madsen certainly prevented damage or even the loss of the aircraft and possible injury or death of the pilot. Their demonstration of outstanding airmanship has earned them the TAC Outstanding Achievement in Safety Award.

**23 TASS, 602 TACW
Davis-Monthan AFB, AZ**

Capt Mark A. Milham



Capt Paul A. Madsen





When in doubt, use a strap . . .

Due to main runway closure, an alternate location was designated for loading munitions during a forward operating location (FOL) exercise. The munitions trailers were positioned in the grass adjacent to the runway.

The number three weapons crew member, operating the bomb jammer, removed one MK-82 from the munitions trailer while the number one crew member walked alongside the bomb which was not strapped onto the platform. During their maneuvering to get into position, the jammer was backed off the edge of the runway into a drainage trough. This caused the back of the jammer to dip suddenly. The bomb was flipped off the front end of the jammer and it landed fuse-first on the runway. As a result, all of the fuse safing mechanisms were destroyed and had to be disposed of by EOD accordingly.

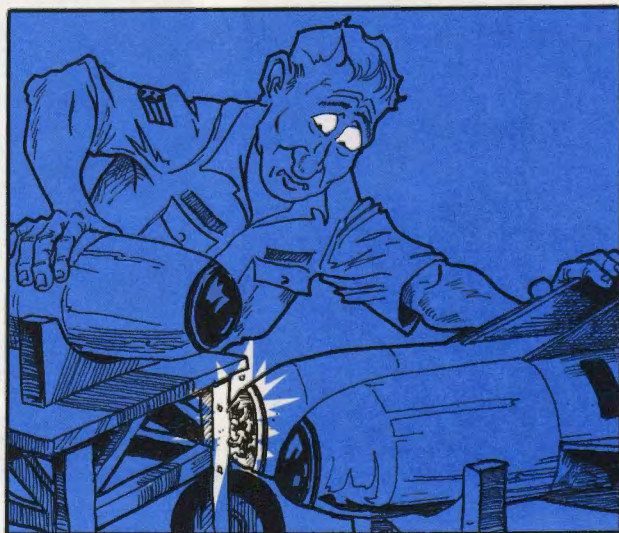
This mishap could have been prevented by

positioning the weapons trailers on the hard taxiway surface where the chances of driving a jammer off into the grass would have been unlikely. The weapons crew also should have foreseen the need to strap the bomb onto the jammer platform to ensure that it wouldn't fall off if the worst case scenario really happened. That's one of the differences between a safe crew and an unsafe one: taking the time to ask yourself what might go wrong so that you can take the necessary steps to prevent it in the beginning.

Watch where you're going . . .

Three weapons maintenance folks were moving a TGM-65D, mounted on a MHU-32/E maintenance stand, after completing an electrical checkout on the missile. As the three individuals pushed the stand through the maintenance work area, the left rear leg of the stand shattered the radome of another TGM-65 sitting nearby.

The workplace in which this mishap occurred was congested with ten missiles and components. While the inadequate facilities had been noted, the close working conditions provided even more reason to devote extra care and attention to where the missile was going and what obstacles



were in its path. Unfortunately, that busted radome represents a lot of dollars that could have been better used for something other than fixing a broken weapon.

I've got to put it somewhere . . .

A two-ship of F-4s taxied to the end-of-runway area for last minute checks and arming. During the arming process, a weapons specialist approached the aircraft from the right side to remove the ALE-40 pin and the captive AIM-9 missile nose cover. As the specialist moved just aft of the engine intake, the ALE-40 streamer and pin sticking out of the missile cover were sucked into the intake. Realizing what had happened, the weapons specialist notified the crew chief to have the aircraft shut down.

The result: damage to the first through seventeenth stages of the engine and inlet guide vanes as well as a valuable sortie lost. Like most mishaps, it could have been prevented with a little extra attention and effort devoted to ensuring the streamer and pin were properly secured.



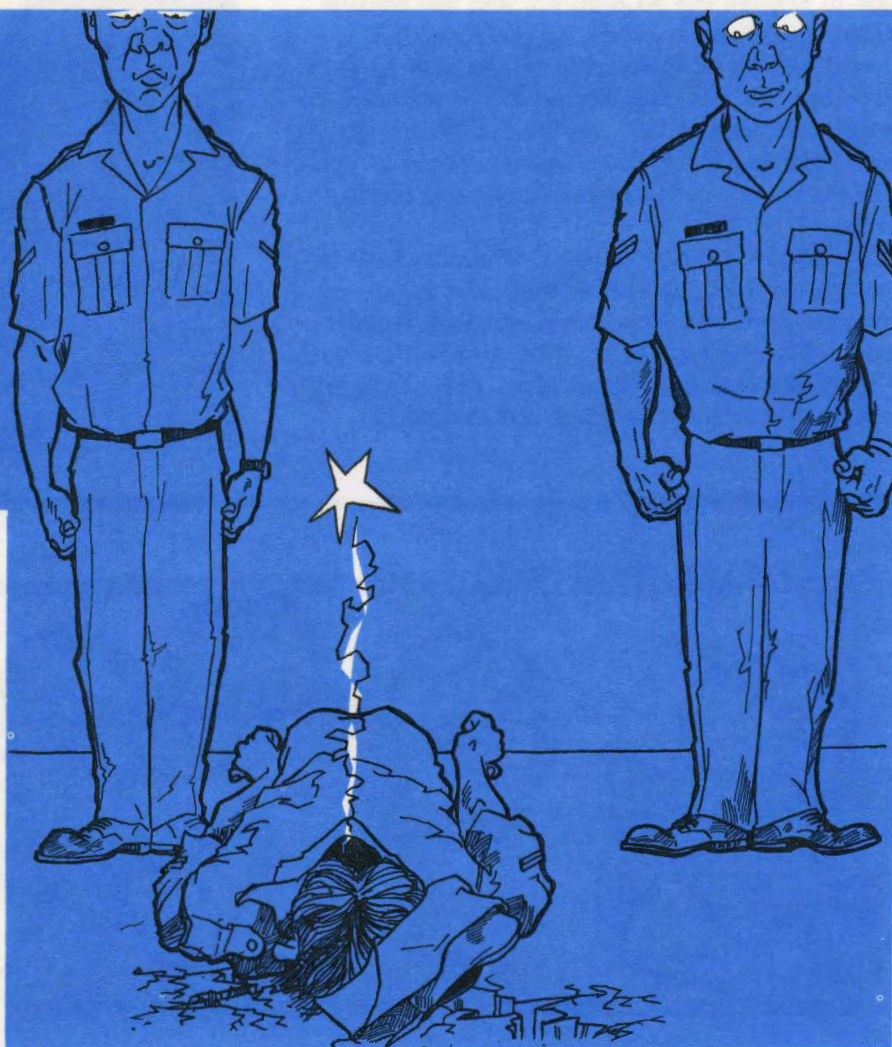
PASS IT ALONG...



BAD DAY

It began as an ordinary training weekend for the troops of a TAC-gained Reserve Group. But, in only a matter of hours, a routine Saturday turned into a really bad day. Imagine yourself on the receiving end of the following reportable mishaps – all in a single, 24-hour period:

First: The day got off to a less than auspicious beginning when an airman standing reveille formation in the hot, July morning, locked his joints and, just like they told us in basic training, fainted. The first indication of a problem was when the young troop fell out of formation (literally) nose-first onto the concrete. He incurred cuts and bruises that required the prompt attention of the Group's medical clinic. Maybe if that event had been taken as an omen, they would've brought the flag right back down the pole and cancelled the rest of the day. It wasn't.



Maj Barry K. Roberts, USAFR
507 TFG (AFRES)
TINKER AFB, OK

Second: Less than two hours later, the safety office phone rang again. The SPs of the Weapons System Security Flight were demonstrating rapelling techniques during an air show on a civilian airport by dropping from the top of the seventy-foot tall control tower. One NCO's "swift hitch" turned out to be a little swifter than intended and he descended the last fifty feet without benefit of the rope. Witnesses gave him



credit for an excellent parachute landing fall which probably saved his life but, unfortunately, he didn't walk away from the mishap because of his newly broken ankle.

Third: One thing about Sky Cops; they are not easily deterred. At home base, the folks in blue berets

were demonstrating their skills for the Group's open house crowd by, you guessed it, rapelling. The plan was to drop from the roof of the Big Hanger, bounce off the wall above the open hangar door and swing to the ground. A slight miscalculation in distance by one demonstrator resulted in his missing the wall, swinging clear through the open door and up into



the rafters inside. The crowd loved it. The result this time was a trashed knee with torn ligaments.

Fourth: Everybody breathed a sigh of relief when the duty day wound to a close and the survivors dragged themselves away to their quarters. It had been a bad day, but it was finally over. Wrong again. The commander's gentle repose was interrupted by a call



from the local police. A group member had been kidnapped from his off-base contract quarters, robbed and assaulted. His knife wounds were stitched up in a civilian emergency room but he was out of action (and somewhat critical of off-base housing).

Needless to say, the Group Safety Office was a busy place long after that ill-fated Saturday. In addition to all their usual tasks, the Safety staff (along with any unoccupied personnel in arm's reach) had to investigate incidents at four different locations, compile information, evaluate it and comply with the various deadlines for messages and follow-up reports. Fortunately, well thought-out procedures already in place guided their efforts and the situation was not worsened by missed suspenses or incomplete reports.

The lesson reinforced from this unhappy series of events was that sometimes a lot of things *can* go wrong all at once. Every safety office should keep that in mind so that mishap investigation and reporting procedures are designed to deal not only with the occasional accident, but also ready for when you have a really bad day. ➤

TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD



Staff Sergeant David Dillon
347 AGS, 347 TFW
Moody AFB, GA

Staff Sergeant David Dillon was performing a routine end-of-runway (EOR) inspection on an F-4E aircraft when he dis-

covered that the right nose tire retaining ring was missing. He immediately signaled the aircraft commander to shut down

the engine in order to prevent any possible foreign object damage. Further investigation also revealed frozen nose wheel bearings and a severely damaged axle.

If SSgt Dillon hadn't detected the nose gear discrepancy, further damage to the aircraft and the aircrew could have resulted. The crew would have had serious steering and controllability problems on takeoff and landing. His alertness and dedication to detail prevented a potentially disastrous situation. SSgt Dillon's professionalism and outstanding performance have earned for him the TAC Outstanding Achievement in Safety Award.



when was the last time?

As supervisor/manager, when was the last time you took a close look at your work environment, including the operations and task performance of your employees? If you answered daily, then you're performing admirably as a TAC supervisor/manager and meeting the intent of AFR 127-2, *The U.S. Air Force Mishap Prevention Program*, and AFR 127-12, *Air Force Occupational Safety, Fire Prevention, and Health (AFOSH) Program*. If not, you may need to reassess the way you work to maintain a combat-ready posture.

The Air Force Mishap Prevention Program is based on the premise that mishap prevention is basic to combat readiness (Ref AFR 127-2). The goal is to preserve Air Force combat capability by helping commanders conserve

resources while accomplishing their mission. When mishaps occur, we have failed to accomplish the goal, workers suffer injury, workloads are increased for other employees, valuable resources are lost or damaged, the cost of mission accomplishment increases and chances are taxes will increase or funds will be diverted from other needed projects to cover the losses. In the long run, we all lose from the effects of unwanted mishaps.

The key to the success of any mishap prevention program depends on how well you and your employees perform mission tasks. Two leading causes of TAC mishaps are failure to follow technical data and inadequate supervision. Both are considered controllable cause factors. It will take a concerted effort at all management levels for us to wipe out these two

mishap cause factors. As supervisors/managers, you are charged with the responsibility to provide a safe and healthful work environment. The only way you can ensure that responsibility is fulfilled is by preventing mishaps. This includes making a critical evaluation of your work environment, operations and task performances with emphasis on safe mission accomplishment and immediate corrective action in areas requiring improvement. When was the last time you did that????



CHOCK TALK

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 indications 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.

Missing anything?

The F-5 functional check flight went fine until the left generator light came on as the jet descended through 28,000 feet. When the pilot attempted to reset the generator, smoke filled the cockpit and obscured the engine instruments. He quickly turned the offending generator off and brought the left throttle to idle as he went to 100 percent oxygen and dumped cabin pressure to clear the smoke. The aircraft was immediately returned to base and the landing was normal.

The electrical system specialists first thought some pieces of chaff found around the generator had been the cause of the problem. When a new generator was put in the aircraft and power

INCIDENTALS WITH A MAINTENANCE SLANT

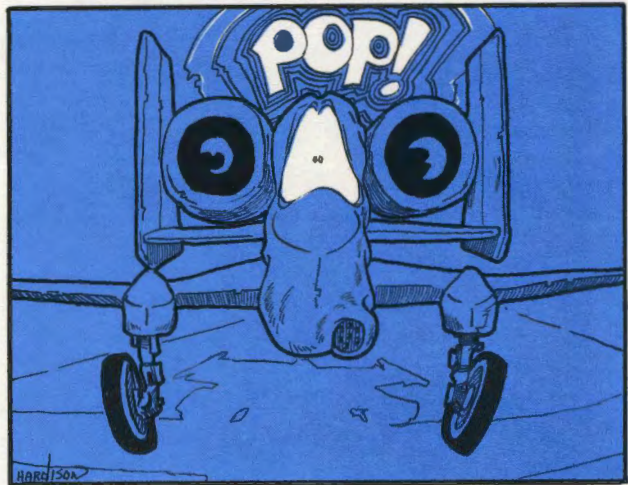
reapplied, sparking, arcing and smoke started coming from the left aft section of the cockpit. Further investigation beneath the left console circuit breaker panel produced several foreign objects, including a drill bit. Even though the terminal board where the short occurred was covered with a fiberglass panel, the foreign objects still managed to become lodged under it and cause the problem.

Good maintenance procedures include taking all the proper tools you need to do a job. Even more important, when you finish a job, make sure you police the area where you've been working. Do a complete inventory of your tool box and make sure there are no empty slots where that drill bit, screwdriver or wrench should be.

Sneaky ice

Snow had fallen on and off for the last five days. Temperatures had lurked around the freezing mark just enough to turn some of the solid white stuff into liquid and back to ice later. Typical weather for many bases in TAC during the winter months. During his preflight an A-10 pilot noticed some snow and ice on the top and rear of the left wing. That was removed with deicing fluid and the rest of the walkaround didn't turn up anything out of the normal. No other snow or ice was noticed during the flight control or slat/stall warning checks either.

During takeoff, the Warthog pilot followed his leader at a ten-second interval. About a thou-

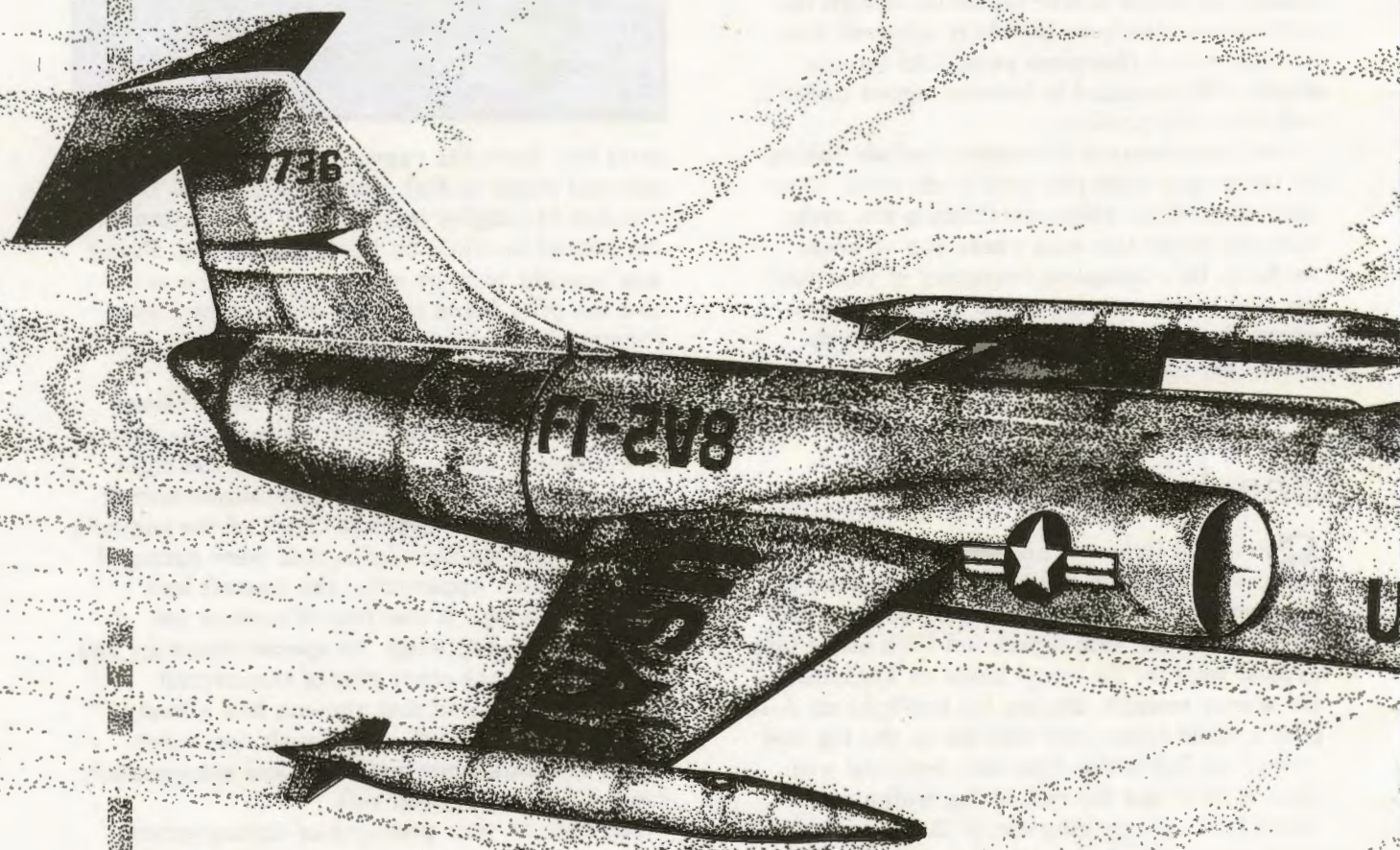


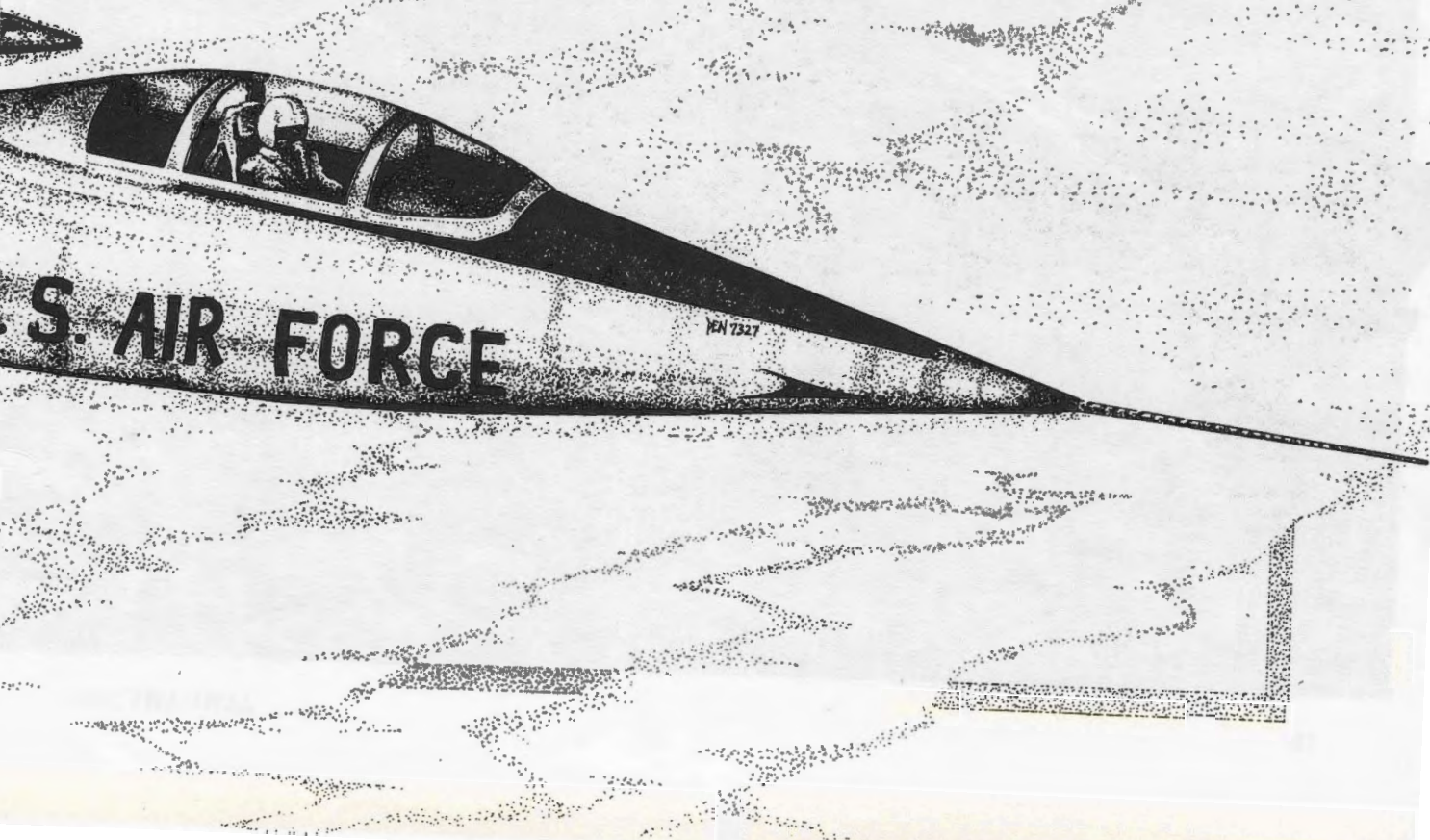
sand feet down the runway, he heard a slight pop and began to feel aircraft vibrations. He checked his engine instruments and continued his takeoff to rejoin on his leader's wing. Power was brought back on each engine alternately, and the pilot found that his right engine was causing the problem. He then brought the jet back for a successful landing.

The person in the RSU (runway supervisory unit) during the takeoff had noticed some snow or ice coming off the leading edge of the right wing and going down the engine intake during the takeoff roll. A thorough check of the engine's insides found six fan blades that were damaged beyond repair. Apparently, the aircraft had looked as though it was free of snow or ice except for the left wing. No special attention had been given to the other side of the aircraft because it appeared that the sun had already melted everything off. As a result, ice underneath the slats went unnoticed and subsequently came off during takeoff roll.

Don't slight your preflight or deicing procedures when weather requires added precaution. In the winter, you might find ice hiding underneath flight controls and other hard-to-see places where the sun doesn't shine.

F-104 STARFIGHTER





**there
I was...**



Lt Col Dennis Prucha
3246 Test Wing
Eglin AFB, FL

The year was 1972, sometime in the spring; the place was DaNang AB, Republic of South Vietnam. I was a first lieu-

I cannot adequately explain the moments of sheer terror that gripped my body and turned it to stone as I grabbed the "D" ring and waited for the "command to eject."

tenant on my first operational tour after completing all the required flight and survival training schools. I had arrived in January and distinctly remember the alternating day/night flight schedules shared by the two fighter squadrons there. I received my in-country checkout and shortly thereafter flew my first night mission into the DMZ (demilitarized zone) with the squadron commander.

The mission was rather

uneventful until we approached the DMZ where I misidentified an illumination flare as a SAM launch and excitedly informed the flight! Needless to say, shortly after that I became an *expert* on the characteristics identifying flares and SAMs.

Time passed and, as in all good squadrons, the "old heads" were crewed with the "butterbars and half tracks" to keep'em outa trouble and alive. I flew several missions with two highly experienced lieutenant colonels. As I remember the rules for night bombing, there was to be no more than 120 degrees of bank for the roll-in and no steeper than 30 degrees of dive, except on the beach where 45-degree dive was permitted.

I remember one particular night with a highly experienced F-4 pilot whom I trusted and respected, a leader who had survived because of his skill and ability. The best I can remember, we were single-ship with 12 MK-82 "slicks" operating in a permissive environment on a moonless night, dropping under the illumination of a flare. We had made three passes from a "wheel" pattern and were about to make the last pass. I remember each time the pilot would roll in with 160-180 degrees of bank and 45 or more degrees of dive. This made me very uneasy (read *scared*) and I told him, "Boss, we're bustin' the rules!" He apparently didn't care and probably wrote me off as a wimp.

On the last pass as we rolled in, I remember seeing the flare.

As we got to 180 degrees of bank and about 45 degrees of dive, sweaty, scared and experiencing some vertigo, I attempted to transition to the backseat clocks and did not perceive the roll-out. The altimeter unwound in a blur ... bump ... bump ... bump ... With the bombs gone, I began to feel the 6 Gs on my rear end; however, I was certain we were in a "Split-S." My eyes almost exploded as the messages they were sending to my brain (ADI gray over black, VVI pegged up, altimeter increasing) were in direct conflict with my external clues ... perception of not rolling out ... and we're pulling into the ground. I cannot adequately explain the moments of sheer terror that gripped my body and turned it to stone as I grabbed the "D" ring and waited for the "command to eject" which never came! You see, the flare had gone out and I had gotten the stars and the little lights on the ground mixed up as task saturation and concern for parameters occupied a major portion of my computer!

I suppose the pilot was very lucky too, as I had the command selector valve turned horizontally; lucky that I failed to make the decision to eject before I ever took off; lucky he had my trust and respect; lucky I didn't punch his lights out when we got back on the ground. I was kinda lucky, too, because I didn't have to walk home that night, or wait for negotiated freedom. That was the day I made the decision to eject if I was ever in a similar situation.



THERE I WAS . . .

I think guys are maneuvering into situations and failing to recognize the last available opportunity to avoid eternity.

I suppose you've heard this all before, but if you've gotten this far I gotta tell ya, there's a sea of highly trained "steely-eyed" killers out there that don't recognize situations from which they cannot escape. We know that aircrews may be "augerin' in" due to *complacency* — "a feeling of well-being, self-satisfaction, smugness." How complacent do you think I was on that dark night in 1972?

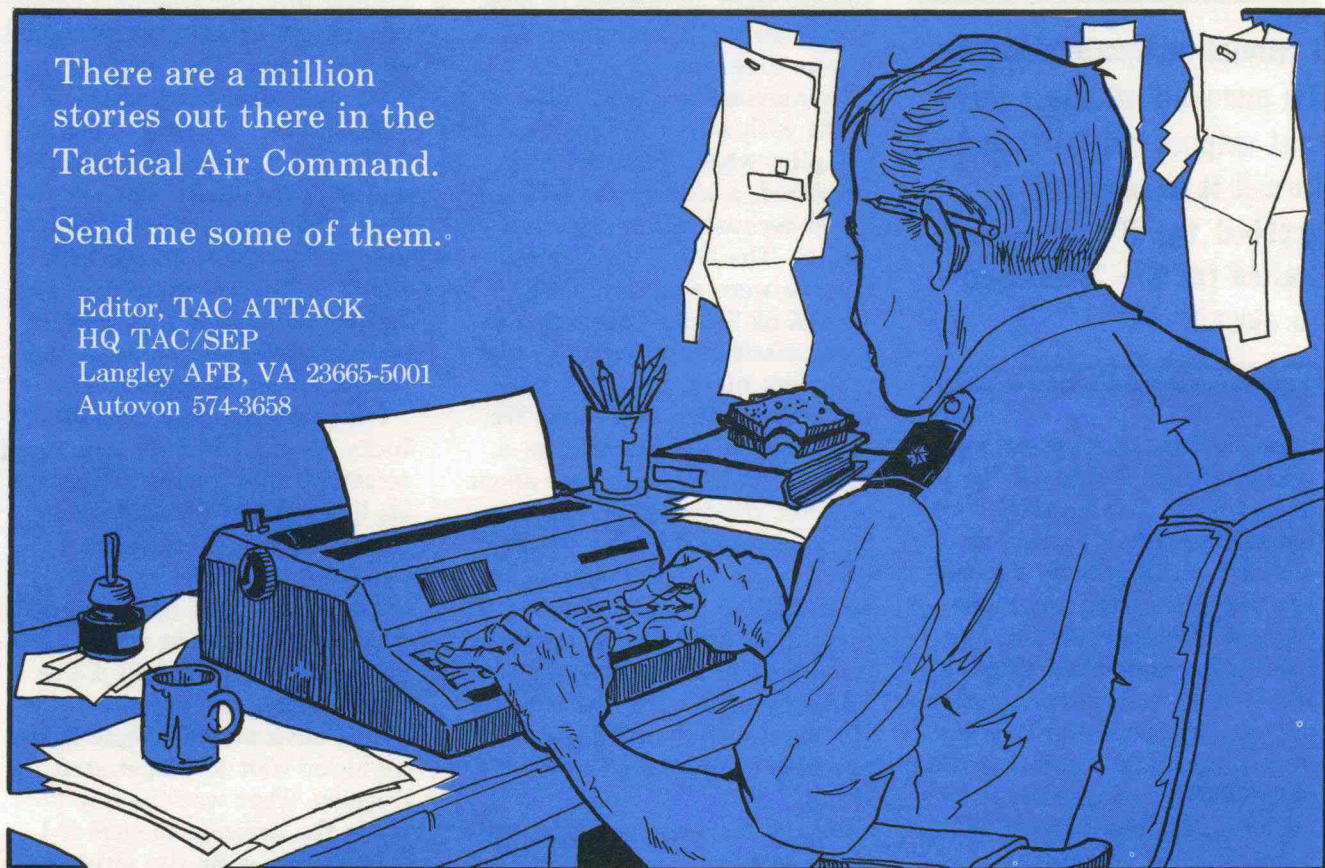
The point I'm trying to make is, I think guys are maneuvering into situations and failing to recognize the last available op-

portunity to avoid eternity, regardless of the type machine they are flying. It's sort of like walking on thin ice — once off the firm ground (late recognition), it's just a matter of time before you're up to your axles in ice cubes! We each need to invest considerable time on the ground in "situation training" before we ever jump in the cockpit and "slip the surly bonds." Minutes spent now considering possible situations and your options may help you make the most of valuable seconds later in the air. ➤

There are a million stories out there in the Tactical Air Command.

Send me some of them.

Editor, TAC ATTACK
HQ TAC/SEP
Langley AFB, VA 23665-5001
Autovon 574-3658



what will be will be?

Mr. Cal Faile
TAC/SEG
Langley AFB, VA

There is the fatalistic point of view among some people that "whatever will be will be." How many times have you heard people say, "If it's your time to go, there is nothing you can do about it?" Well, no one knows for sure because no one has returned from death to confirm or deny it.

I prefer to believe that we have a great degree of control over our existence. It's wonderful to be a human being because we have the conscious ability to rationalize, examine circumstances, analyze facts and courses of action, make logical or illogical decisions and take some action based on our own individual perceptions or needs. You know what all that boils down to? You and I are responsible for the majority of what goes on in our lives.

Too often mishap investigations, media reports and interviews with people involved in a mishap reveal that a personal action, a change in behavior pattern or decision-making process would have interrupted the chain of events leading to a mishap. For example, an individual takes a short cut to save time and/or work and misses a key step in established safe proce-



dures, the system fails and it results in the individual's death. Do we offer the age-old excuse, "What will be will be," "It was his time to go and there was nothing that could have been done to prevent it" or "He/she was in the wrong place at the wrong time?" These comments are used too often as excuses to take the blame away from the individual or anyone else that was responsible for the mishap's occurrence and make the personal loss a little more acceptable.

The so-called "accidental death" is the most tragic kind of loss. In most cases the sequence of events leading to such a mishap could have been interrupted. Just think of all the lives that could have been saved or serious injury avoided by a simple decision — to follow established safe procedures in task performance; not to abuse drugs or drink and drive; to wear personal protective equipment; to stop an unsafe operation instead of ignoring it in the interest of meeting a deadline; or just by simply saying "No!" when circumstances are not safe. Quite often saying "No" takes a lot of courage. It demonstrates character and maturity and could save your life. Think about it and be responsible for your actions. What will be will be only if we make it so. ➤



A piece of Cake

**Lt Col William C. Jones,
Va ANG
192 TFG
Sandston, VA**

It was a bright, sunny afternoon in late summer and I was leading a flight of four F-105 Thunderchiefs on an air combat training mission over Pamlico Sound, North Carolina. We had completed several en-

gagements that were fairly routine (if there is such a thing) and were setting up for one more before RTB (return to base).

My wingman, Gene, and I were the defensive element in

There was a loss of thrust, RPM spinning down and warning lights - all the indications of a flameout.

our block at 15,000 feet, line abreast and heading east at 400 knots. The attacking element lead had just called "Tally Ho" and was in the process of closing when I heard (or felt) a slight "pop." There was a loss of thrust, RPM spinning down and warning lights — all the indications of a flameout. Some things you never forget. Ten years after the fact, I can still remember the feelings and events that followed the engine failure with considerable clarity.

Gene called for me to "Break Left." My very first thought was that I would have to start the engine before I could maneuver to defeat the attack. It seemed to take considerable effort to collect my thoughts and react in the context of the real situation.

My call was "I've flamed out." I apparently sounded so matter-of-fact on the radio that Gene asked me to verify that my engine had actually flamed out. I assured him that it had quit and I was in the process of trying an airstart (we found out later that the main fuel line had separated; there would be no chance to start the engine).

Thinking back, I am still disturbed that even though I was gliding a single-engine (no engine) jet, I didn't even consider the ejection possibility for probably a full minute or so. Maybe that was because nothing violent had occurred — no fire, no explosion and so forth.

I have since tried to guard against my delayed decision mindset by making a few pre-decisions. For example, I don't retract my landing gear on takeoff until I decide I've



reached the point that, no matter what, I won't abort the takeoff. It's my "too-late-to-abort point" so I don't ever have to make that decision under stress. I also know that there are a lot of gray areas that don't easily fit into categories.

I glided the Thud for 3 minutes and 15 seconds.

By recognizing some of these and evaluating the options, I feel better about reducing my own complacency factor.

I glided the Thud for 3 minutes and 15 seconds. Is that a record? The tape from my recorder was recovered from the wreckage and, even though the quality was poor, the sequence of events up to the ejection could be reviewed.

Gene (as well as the other flight members) provided timely reminders from the checklist. I was aware that the second element was already setting up the SAR. Another flight checked in and offered to help. There was

Approaching 5,000 feet, I finally accepted the fact that ejection was the only practical option.

no clutter on the radio; just cool organization. These guys were well-disciplined and professional. I was impressed and pleased with how well I was being supported. At one point, Gene said, "Don't wait too long." I asked him for a reminder call at 5,000 feet.

Approaching 5,000 feet, I finally accepted the fact that ejection was the only practical option. The aircraft was flying beautifully, even at 200 knots. The engine was windmilling smoothly at about 30 percent and, except for a zero fuel flow indication, everything appeared to be normal. I hated to leave my comfortable cockpit and I was genuinely sad that I would shortly abandon this fine aircraft.

Gene's call at 5,000 feet was like a gentle nudge. I was now



A PIECE OF CAKE . . .

over the Outer Banks, just north of Cape Hatteras. I made a slight turn away from the ocean toward the Sound (I didn't want the aircraft to crash on any towns or houses on the Banks and I definitely didn't want to

The ejection seat worked as advertised. I saw the canopy bow pass below me and I watched the horizon blur as the rocket motor accelerated me away from the aircraft.

eject over the ocean). I slowed to about 185 knots. My last call on the radio was "See ya." Up to this point, I felt pretty confident with my actions during the emergency.

The ejection seat worked as advertised. I saw the canopy bow pass below me and I watched the horizon blur as the rocket motor accelerated me away from the aircraft. The seat rotated about 90 degrees to the right (maybe to hide my eyes from the dying Thud), then the "butt-snapper" did its thing and kicked me away from the seat. Almost immediately I felt the opening shock of the force-



deployed chute (man, what a jolt!). The raft inflated and was tethered to me along with the survival kit. I looked up and saw the fully-inflated canopy. Both underarm LPUs inflated when I pulled the lanyards.

I wanted to do all the procedures properly. After all, the egress and life support shops had done their jobs well, so I proceeded with the four line jettison.

This was a piece of cake.

The canopy had numerous holes in it (I thought they were normal vents. Dumb observation). I wanted to do all the procedures properly. After all, the egress and life support shops had done their jobs well, so I proceeded with the four-line jettison. (A few weeks later I reviewed a life support ground school video tape where it stressed that an inflated canopy should be intact and that we should not do the four-line jettison if any damage had occurred. I don't know why I didn't hear that the first time.) My error didn't seem to hurt anything, but I was told later that if the parachute skirt had torn apart, my water landing would have

been at a much greater and more unpleasant speed. I made no headway when I tried to slip the chute toward the shoreline, and I don't care what anyone says, it was no better than the hanging harness.

Gene was still circling overhead when I splashed down. I got out of the chute, pulled the raft over and climbed in.





A PIECE OF CAKE . . .

Gene was still circling overhead when I splashed down. I got out of the chute, pulled the raft over and climbed in. I was really proud of myself for remembering to close the parachute and LPU clips so they wouldn't poke any holes in the raft. Wanting to do something positive, I pulled out my knife and cut a line that was across my lap. I thought it was part of the parachute, but it was actually the line that tied the survival kit to the raft (chalk up another one for DUMB things *not* to do).

Before I had a chance to do anything else wrong, a small boat came out to pick me up.

Immediately I started to second guess the emergency. Had I checked everything? Did I miss a procedure? Did I do something wrong to lose the aircraft? (How much second guessing goes on before an ejection?)

Before I had a chance to do anything else wrong, a small boat came out to pick me up. The first thing I did on shore was call home to let my wife know I was O.K., but I wouldn't be home for dinner that night. I

got some enjoyment out of knowing that although I was the acting safety officer, someone else would have to initiate the paperwork.

I enjoyed a pleasant dinner with the commander of the local Coast Guard station while the folks at home figured out how to rescue me from my remote TDY. Later that evening, I was transported to the base hospital at Seymour Johnson AFB where they confirmed that I was O.K.

Here are some valuable lessons learned that I gathered from my experience:

1. Pay attention to the life support briefings, especially the parts you don't get to see or practice very often.
2. Strap into the jet as though your next step will be to eject. It pleases me to say I strapped in right the very first time I flew, and I haven't had to change any personal techniques or procedures because of my ejection experience.
3. Make sure you can assume the ejection position after

you close the canopy just before takeoff. Everything should feel right. This was another good habit pattern I had already established.

4. Do a quick review of takeoff emergencies before brake release; those things that require immediate response and leave no time to wind the clock.

5. Think about and discuss as many "what ifs" as possible to help improve your knowledge and speed up reaction time. If there are some areas you can "pre-decide," so much the better.

6. If you fly near any water, expect to get wet if you have to eject. Are you really ready to go swimming if the water is cold? "Gliding distance to land" is N/A in a spin.

7. Be cautious about second guessing under stress. It could cost you valuable altitude, seconds, etc.

8. Guard against complacency. Someday you could be "the other guy" and **it might not be a piece of cake.** ➤



TAC tips

INTERESTING ITEMS,
MISHAPS WITH MORALS,
FOR THE TAC AIRCREWMAN

When it's time to leave . . .

AT2 William Washburn
AIRTEVRON Five
NAS China Lake, CA

After a recent visit to a west coast naval air station, the aircrew of a USAF F-4E prepared to fly home. Since the two petty officers performing the ground support had no experience with the F-4E, they asked the aircrew for fueling and starting instructions. Neither of the crew members really understood the fueling process, but the proper tech order was found and the refueling was completed.

After start-up, the two Navy petty officers attempted to perform the standard launch checks, but the aircrew did not respond to hand signals for rudder, flaps, speedbrake or tailhook. Despite a lot of frustration, the petty officers were able to get through the launch process and then led the aircraft out to the active runway for takeoff.

Any aircrew on a cross-country hop should ensure they understand the servicing requirements for their aircraft. Ground personnel at many locations may not know how, and don't rely on a ground intercom system. Hand signals are the basic method for ensuring aircraft readiness and ground crew safety. You need to make sure that you are ready to communicate.

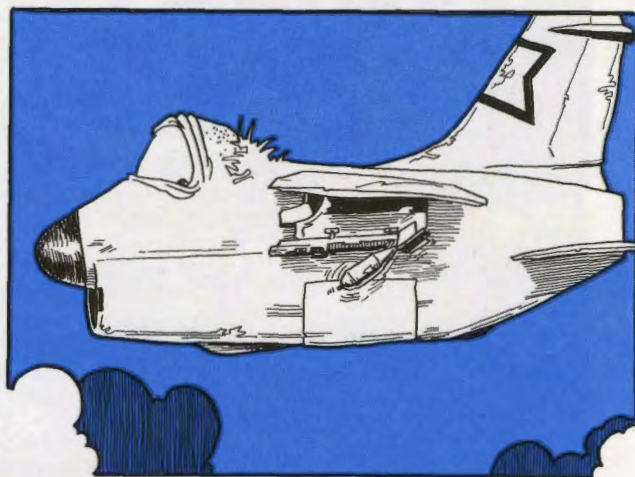
Then suddenly it's gone

On his third bombing pass, an A-7 pilot was told by the range tower that he had a no spot. The cockpit indications had shown a good release signal, but he

could see in the mirror that the bomb was still on the TER. After making a second pass to get the bomb off, to no avail, the pilot remained in the pattern, intending to try a manual release. When he rolled out on final for the manual jettison, he noticed that the bomb was gone. He checked the area just overflown and saw the bomb had impacted about a mile off-range.

Back on the ground, a complete check of the aircraft release systems didn't turn up any electrical or mechanical problems that could have caused the hang-up and subsequent uncommanded release. The TER was also dismantled, but no problems were found. The final conclusion was that a slow burning impulse cart only partially opened the TER release hooks; which, after several turns, allowed the bomb to fall off.

Seems like another good reason to avoid populated areas when you have to RTB with a hung bomb.



FLYING FOXPAWS

Capt Toni D. Berkenbush
Capt Jonathan M. Williams
325th Weapons Controller Training Squadron
Tyndall AFB, FL

You've all read in TAC ATTACK safety tips on how to first identify a mishap potential, and then how to prevent it from happening again. If you're a pilot or a maintenance troop, you can relate to those stories. But, what if you're a weapons director (WD)? What is there for a WD to worry about in flight safety? After all, the worst that could happen is to fall out of your chair in the middle of a 4 v 4 dissimilar air combat mission, right? Wrong!

Flight safety is the concern of everyone involved in TAC's mission of preparing to fly and fight. Here in the 325th Weapons Controller Training Squadron at Tyndall AFB, Florida, we're doing something about it. Every flying unit has an additional duty flight safety officer (ADFSO), and, since our weapons directors are part of the pilot/GCI team, we also have ADFSOs. Our flight safety program is a year old and, while there's still much room for improvement, we've made a good start.

The highlight of our program is our flight safety newsletter, "Flying Foxpaws," put out quarterly to both students and staff. The ADFSOs review quarterly trends and publish the results in the "Foxpaws." ("Foxpaws" is the alternate pronunciation of faux pas, hence the title "Flying Foxpaws.")

Here's an excerpt to give you an idea of flight safety from the WD side of the team.



As we get close to the end of 1987, questions arise as to the changes this year has brought us. Several trends are apparent. FAA has suffered nation-wide from criticism that the national air transportation system is not safe enough in light of the gradual recovery from the PATCO strike and increase in air traffic disasters in the last few years. It is not surprising when "little things" like airspace spills, outs bring immediate, strong reactions from whichever ATC agency is involved. As a result, the importance of flight safety must be emphasized continually in light of the consequences of FAA-related incidents. Every qualified WD or trainee has to think, every time they sit down for a mission, that they will avoid three things:

1. Allowing aircraft under their control to exit the designated air-

space without clearance. Treat all boundaries like "brick walls." As a minimum, make a "whisky alert" call before the aircraft crosses the boundary.

2. Directing any aircraft to a conflicting altitude inside 10 miles. This could be sending your fighter to a target altitude or ignoring the altitude of a non-participating aircraft.

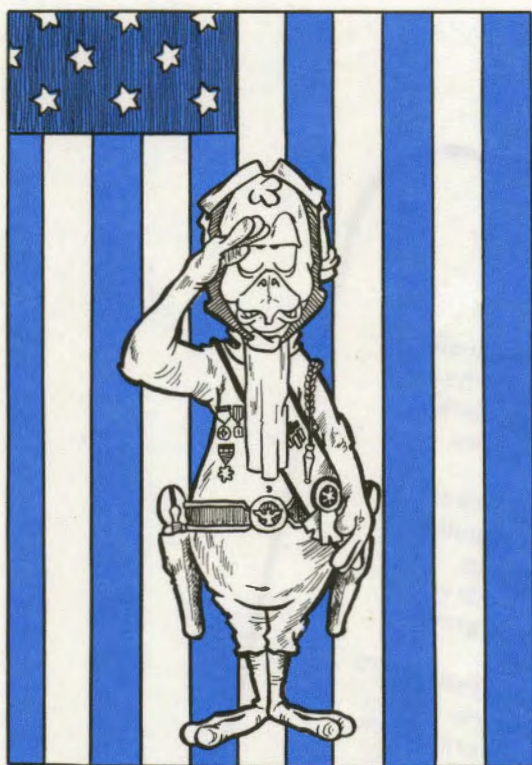
3. Neglecting to call off strangers by 10 miles and failing to avoid the merge. Give fighters a quick BRA (bearing/range/altitude) report by ten miles and follow it up if the merge becomes imminent. Don't hesitate to give a "Knock It Off" call, if required.

Of these three, concern in ATC about airspace boundaries makes it the "high interest item" for both GCI and pilots. Knowing you don't see any traffic outside the airspace doesn't allow you to brush it off as "no big deal."

Emphasis on airspace integrity is just one of the items emphasized in our safety newsletter. "Flying Foxpaws" is, by necessity, weapons director-oriented and doesn't pull punches when it comes to flight safety. Because we work with

entry-level controllers, we've got to make sure they know their role in ensuring a tactically smarter and safer mission.

If you've got any "There I Was" accounts from the WD point of view, send them to: 325 WCTS/DO, Tyndall AFB, FL, 32403-5000, ATTN: FOXPAWS. Flight safety is everyone's business, so WDs, make it happen in your unit as well. ➤



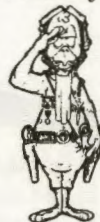
FLEAGLE SALUTES

Capt Deon Gieg and Capt Michael Winslow, 57 FWW, Nellis AFB, NV, were flying a two-ship F-15 instructional Dart mission when the Dart tow, an F-86 flown by a civilian contract pilot, experienced a catastrophic bearing failure at 14,000 feet that reduced thrust and engine RPM to 50 percent and raised the exhaust temperature above aircraft limits. Capt Gieg assumed a chase position as the F-86 pilot jettisoned his external stores and assumed an optimum glide toward the nearest airfield, 50 miles away.

As Capt Winslow served as a radio relay to the Supervisor of Flying, it became apparent that the F-86 would not be able to make the active airfield so Capt Gieg turned the flight toward a closer inactive airfield. Precise navigation without benefit of an instrument approach facility was necessary to negotiate the

25 miles remaining to the runway through a 1200-foot cloud deck.

Capt Winslow proceeded ahead of the formation to visually acquire the field and establish an orbit directly overhead the runway. Capt Gieg then acquired a radar lock-on to his wingman and further refined the distance remaining to the field. The F-86 pilot acquired the field at 4 miles and was able to make a successful approach and landing. Capt Gieg's and Capt Winslow's outstanding airmanship and timely assistance to a fellow airman in distress have earned them a Fleagle Salute.



Lt Thomas E. Doyle, an F-16 student pilot in the 62 TFTS, 56 TTW, MacDill AFB,

FL, was making a weapons delivery pass at 500 feet AGL and 500 KCAS when he heard an engine bang and noticed the nozzle start to fluctuate. He immediately retarded the throttle to midrange and started a zoom to high key over the runway at Avon Park. With engine thrust quickly deteriorating, he declared an emergency and had a chase aircraft inspect the nozzle area. While Lt Doyle positioned his aircraft for a possible flameout landing, the chase pilot reported smoke and flames shooting out from the engine exhaust. Lt Doyle calmly continued the approach and shut down the engine as the aircraft touched down for a safe landing. Lt Doyle's save of a valuable aircraft earned him a Fleagle Salute.





TAC TALLY

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

* SUCCESSFUL/UNSUCCESSFUL

TAC		
NOV	thru Nov	
	FY 88	FY 87
0	4	7
0	2	4
0/0	3/0	5/1
0/0	0/0	0/0

ANG		
NOV	thru Nov	
	FY 88	FY 87
1	1	3
0	0	0
1/0	1/0	5/0
0/0	0/0	0/0

AFR		
NOV	thru Nov	
	FY 88	FY 87
0	0	1
0	0	0
0/0	0/0	1/0
0/0	0/0	0/0

TAC'S TOP 5 thru NOV 1987

1st AF	
class A mishap-free months	
87	318 FIS
34	325 TTW
22	57 FIS
22	5 FIS
11	49 FIS

9th AF	
class A mishap-free months	
57	33 TFW
30	507 TAIRCW
21	31 TFW
16	354 TFW
13	347 TFW

12th AF	
class A mishap-free months	
55	366 TFW
39	355 TTW
33	58 TTW
26	35 TTW
20	474 TFW

ANG	
class A mishap-free months	
220	182 TASG
204	110 TASG
179	138 TFG
161	177 FIG
156	114 TFG

AFR	
class A mishap-free months	
87	482 TFW
77	924 TFG
65	906 TFG
39	507 TFG
26	917 TFW

DRU's	
class A mishap-free months	
134	28 AD
4	USAFTAWC
1	USAFTFWC

CLASS A MISHAP COMPARISON RATE

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

TAC	FY 88	6.0	3.1										
	FY 87	7.5	5.8	5.1	4.7	4.2	3.7	3.3	2.9	2.9	3.1	2.8	2.9
ANG	FY 88	0.0	2.1										
	FY 87	4.0	6.6	4.7	3.5	2.8	4.5	3.8	3.3	3.4	3.0	2.7	2.5
AFR	FY 88	0.0	0.0										
	FY 87	21.8	11.7	8.5	12.6	10.2	8.3	7.0	12.2	10.8	9.6	8.5	7.8

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

