

TAC Attack

FEBRUARY 1991



ANGLE OF ATTACK

Did you hear the latest about ... well you fill in whatever rumor you have heard most recently. What does this have to do with safety and accomplishing the mission? The impact of a rumor can range from minor distractions to outright obstacles which could prevent us from accomplishing our mission correctly, efficiently and smart. For example, a rumor gets started that we are going to get a new piece of equipment and suddenly no one wants to spend time or money to maintain the equipment we are currently using. After all, isn't it obsolete and scheduled to be replaced? Or, we hear a rumor that we are going to deploy next week. How many of us will concentrate less on the job at hand and instead begin concentrating more and perhaps too much on what we erroneously think will happen next week? Not a very effective use of anyone's time and often an unnecessary increase in the risk of doing our day-to-day business. To minimize that increased risk, each of us must do our part to limit those rumors. If I hear someone share something that is not part of the official guidance, I need to ask them where they got the information. Is it something true and the word needs to be put out officially, or is it just third or fourth hand hearsay? How many times have we seen the game where a message is passed verbally from one person to the next? By the tenth person, the message seldom conveys the original meaning. In a similar manner, even official information passed around by word-of-mouth can become distorted. One of the best ways to validate a message, and also kill a rumor, is simply to ask your boss about the information. If you are the boss, find out who is starting these things and why. Is it an enemy psychological operation attempting to undermine morale, a disgruntled worker, or a simple failure on our part to keep the troops informed about what is really happening? Don't just ignore the rumors, because we can't afford the impact they may have on our combat capability.

Speaking of capability, what about all us folks who haven't deployed and are still working back here at the home drone? Is it just business as usual for us? Previously we needed two Supervisors of Flying (SOFs) a day, five days a week and we had four



squadrons from which to schedule those SOFs. So the schedulers had a pretty good pool of experienced people to pick from. Now three squadrons are gone and we've got one squadron left. But I still need those two SOFs a day, five times a week; and quite frankly, our one remaining squadron can't provide the same number of experienced SOFs as the four squadrons provided back in July. The same goes for the reduced number of highly experienced flight line supervisors and other supervisors across the board. If the entire wing deploys and we are no longer training back in the states, it's not a factor. But once we split our operations, we also must split the number of experienced supervisors. So it can't be just business as usual. We must optimally utilize the experienced personnel we do have. We'll also need to take a hard look at the way we do our day-to-day business -- is it within an acceptable risk versus training reward payoff or should changes be made? We will have to work/fight smarter -- not just harder, while we train additional warrior-leaders to replace those who are deployed in support of Operation DESERT STORM. To all of our DESERT STORM personnel, keep at 'em.

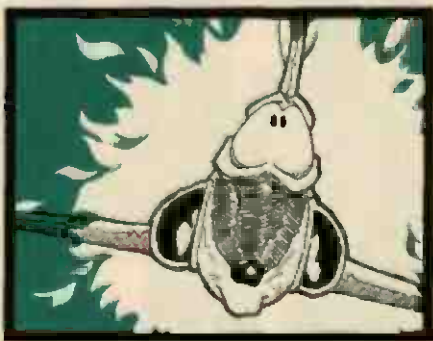
Finally, I want to say farewell to Maj Dan Runyan who is departing the HQ TAC Safety shop to hone his leadership and flying skills in the F-16 at MacDill AFB.

Best of luck to you, pardner!

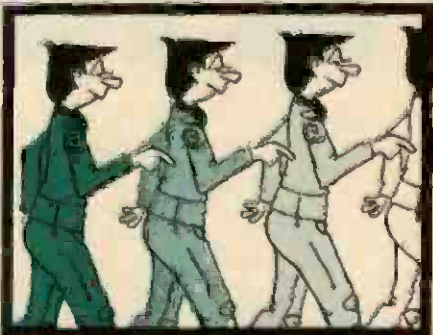
Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC Attack

DEPARTMENT OF THE AIR FORCE



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THERE I WAS

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12 AF/SEF
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How many times have you heard the HORROR story of the "Good" student? Well, here's another one to file away for future use.

It was a Lead-in Fighter Training (LIFT) SA-6 (surface attack POP) ride, and the last syllabus sortie for my student. I reviewed his grade book and noted he was one of the stronger sticks in the class (first STAR introduced in our play). His previous sortie had

also been a POP ride, and he'd gotten a grade of 3 on it (second STAR makes his appearance). The flight briefing was standard as was the crew brief, "Do it like you did yesterday and don't scare me (a featured player peeks around the curtain)."

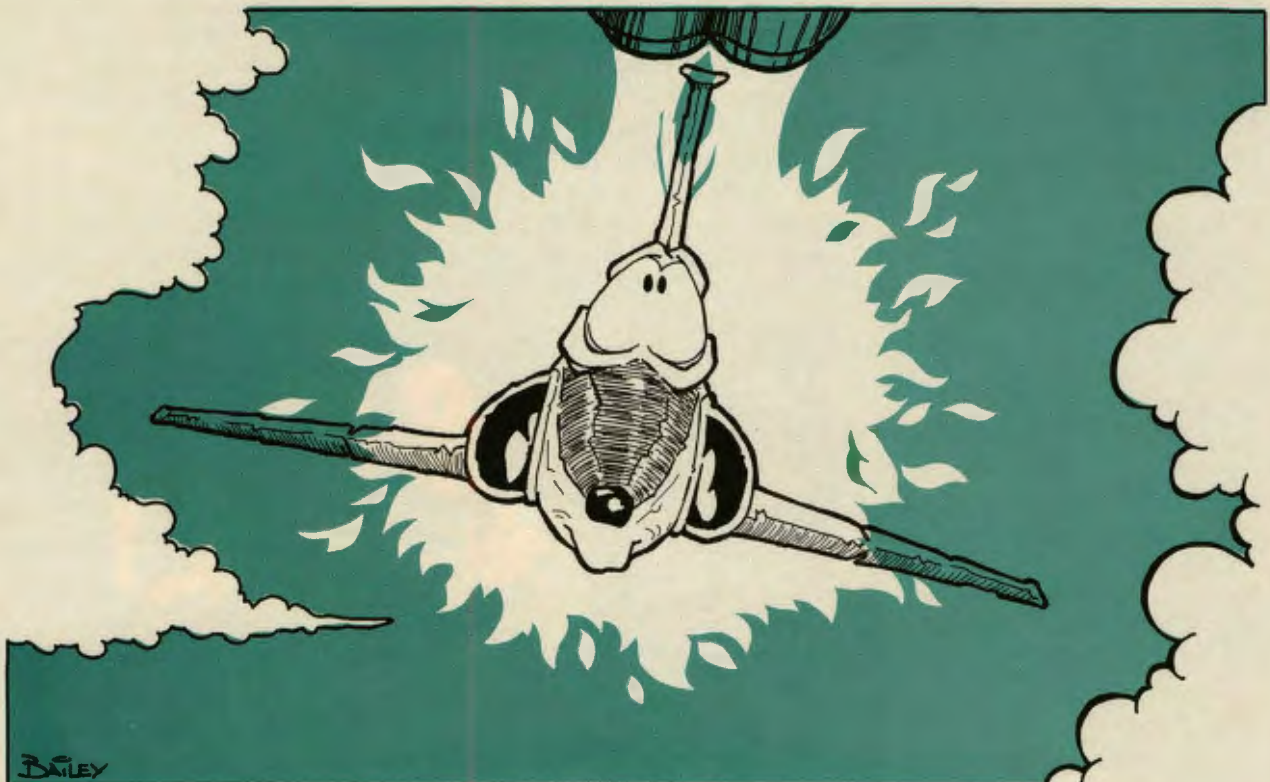
Perfect autumn afternoon at beautiful downtown Holloman air-
 patch, clear and a million; the
 kind of day every flyer prays for.
 We stepped on time and went

through Ground Ops so smooth it felt like a CT sortie (the female lead enters stage left). We took off as two and started a textbook turning rejoin; on the line with just the right amount of overtake. Looking good! Great day to be alive and flying (the stage is set). I was really relaxed and decided to look back over my shoulder to see how the rest of the flight was doing and just generally watch the countryside slide by; it's still hard for me to believe I didn't see what was coming. When I looked to check our progress, my heart stopped, or at least skipped a beat. We were closing on lead fast on a perfect collision course, and we were close; I mean really CLOSE. For a nanosecond, my mind refused to believe what my eyes were telling me. Then survival

instincts kicked in and three things happened simultaneously; the word "overshoot" exploded from my mouth, the stick went forward against the front stop, and the throttles came back to idle. To this day I don't know for sure which one of us actually initiated the overshoot, probably both of us, or how close we actually came to lead. But I can tell you that for a couple of months, I had a fleeting picture in my mind of what T-38 burner cans looked like from two feet.

As evidenced by this story, we made it. What happened to ruin a perfect day? Several things; the student was on his last ride at LIFT, maybe his last in the T-38, and he wanted to show me a snappy rejoin (seems some instructor told him that's the way

we do them in TAC); and since I wasn't saying anything, he figured he was doing alright. He made two errors; snappy rejoins are bogus, and I was not an IP (forgot to tell you I was an IWSO). I made the classic and nearly fatal error; I relaxed and quit being an active crew member. Bottom line, I trusted the student, the student trusted me and the flight lead trusted both of us; the first time lead knew something wasn't right was when I told him 2 would be a little late getting into position. As you can see, several people had a hand in directing the play described above. There were some mistakes made, the biggest was mine. I quit doing my job and became a passenger; a sin I plan to never be guilty of again.



Aircrew of Distinction Award



1Lt Richard Johnson
75 TFS, 23 TFW
England AFB LA

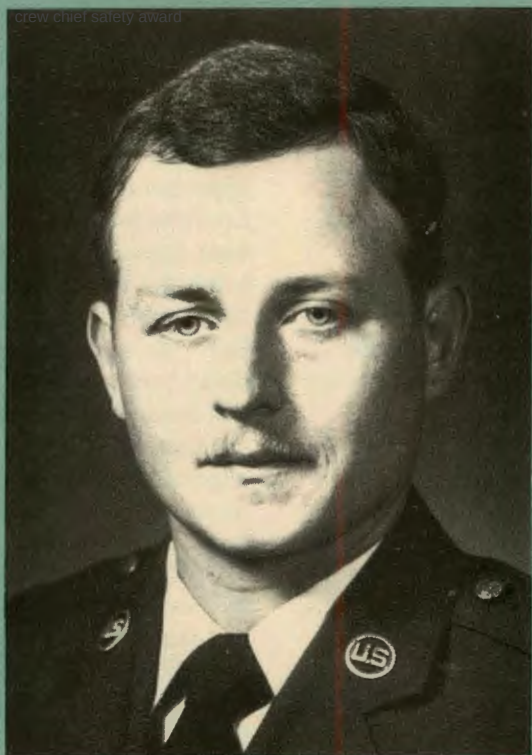
Lieutenant Richard Johnson was flying as number two in a two-ship flight of A-10s on his Mission Ready check ride. During his second strafe pass on a conventional range, the gun malfunctioned causing a round to explode out of the firing chamber. Recognizing an unsafe gun, Lt Johnson called "Knock it off" and began a climb. The gun switches were safed in accordance with the Dash 34 checklist. His flight lead's visual inspection revealed damage

to the gun bay and nose wheel well areas. After contacting the SOF, it was determined that a controllability check should be accomplished. When Lt Johnson attempted to lower the gear, the nose wheel would not extend. Visual inspection revealed a gun bay access door had blown outward and was jammed into the nose gear door preventing it from opening. Working together as a team, Lt Johnson, the SOF, wing leadership and depot technical representatives tried to solve the problem. Multiple attempts to extend the nose gear using positive G's, negative G's and yaw were unsuccessful. With fuel becoming a factor, it was decided to perform an intentional all gear-up landing, an act only accomplished

once before in the A-10. After two practice approaches, Lt Johnson smoothly landed the aircraft. After skidding approximately 1,500 feet, the aircraft began to fishtail. Lt Johnson skillfully kept the aircraft under control using the limited rudder authority and the differential braking provided by the emergency brake system on the fully retracted but partially exposed A-10 main landing wheels. Having only 90 hours in the A-10, Lt Johnson displayed exceptional professionalism and airmanship. Post-flight inspection revealed that damage resulting from the gear-up landing was minimal. The aircraft was returned to flying status in less than a month. The actions of Lt Johnson saved a valuable combat aircraft and earned him the TAC Aircrew of Distinction Award.



TAC *Crew Chief Safety Award*



SSgt John A. Campbell
4507 CAMS, 507 TAIRCW
Shaw AFB SC

While performing unscheduled engine maintenance on an OV-10A aircraft, Staff Sergeant John A. Campbell discovered that the number two engine propeller hub housing was internally cracked in two places. If the cracks had gone undetected, they were located in a critical area and would have further developed to a point of catastrophic failure of the entire propeller hub assembly resulting in separation of individual propeller blades or the entire propeller. He promptly brought the defect to the attention of his production superintendent, apprising him of the situation and offering recommended corrective action. Immediate action was taken to assess the condition of the remaining propellers in the squadron. Sgt Campbell's visual inspection of the propeller went far beyond that required of the engine maintenance he was performing. Sgt Campbell's technical expertise, coupled with his keen sense of initiative, corrected a serious condition which prevented possible aircraft loss, aircrew injury, or loss of life. Sgt Campbell's dedication to smart mission accomplishment earned him the TAC Crew Chief Safety Award.

Behavior Pattern

-- Cause or Symptom ?

Anonymous

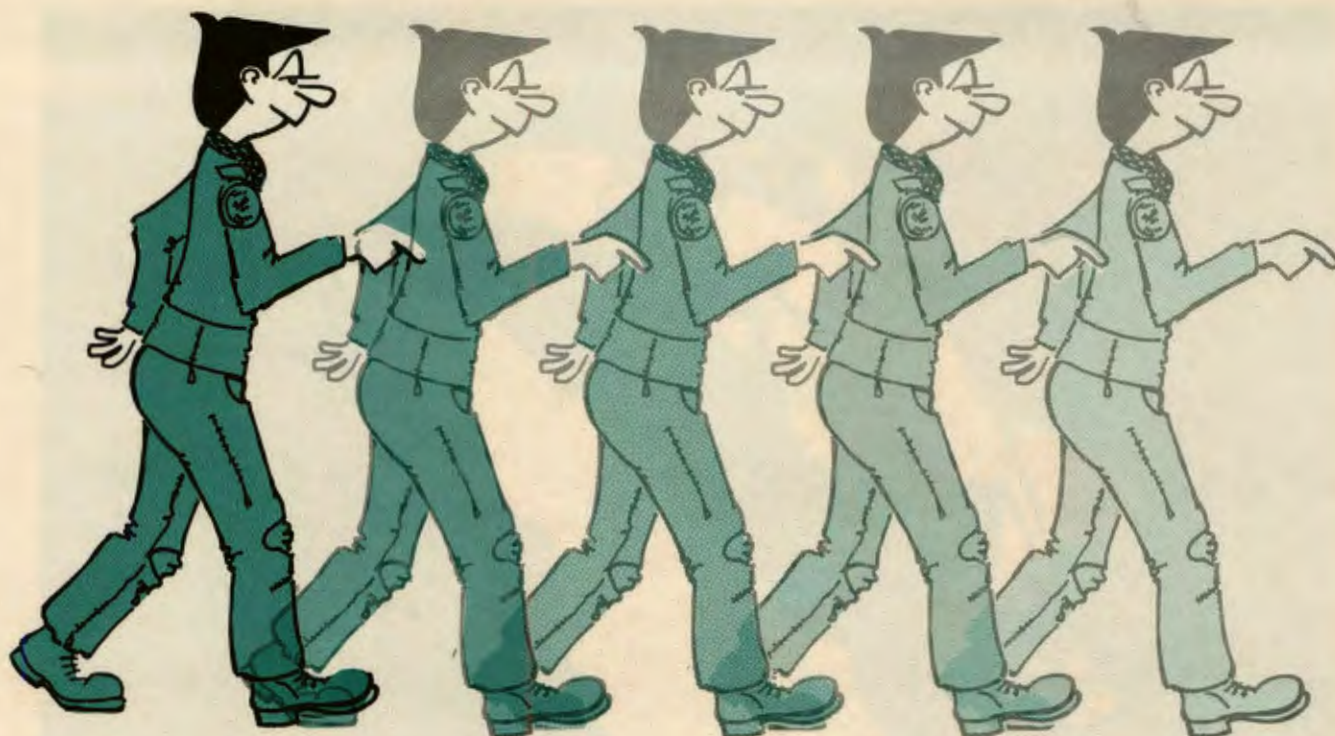
Looking back, one could see the behavior pattern that led up to it; and it's really too bad, because he had good hands, and he was no dummy. Back then as the new -- and junior -- guy in the squadron, he was made CINCSNACK, and he turned that squadron snack bar operation into a moneymaker with a wide selection of goodies. Next, he was given that perennial headache -- pubs -- and straightened them out in short order. In themselves, those may seem like trivial things; but when combined with his good stick and rudder skills, they should have added up to someone who could apply himself, take some initiative, and make an outstanding aviator.

It was really a matter of attitude; he thought he was so good he didn't have to bother himself with things that concerned lesser mortals. For instance, he took a hit on his initial qual check for not knowing some fairly basic stuff about local procedures. And there were little things after that, all -- in retrospect -- showing an attitude that said he felt rules were for other people.

Another indicator came on an October evening when we were supposed to be in a three-ship to the tanker followed by night intercepts. It had rained most of the day, tapering to a drizzle (freezing level was reported as 2000 feet), and the other two jets ground aborted. As the drizzle ended, we launched single-ship for refueling and max time night instruments. Rather than spend the whole evening droning around Elmendorf, we planned to do the HI-TACAN to Anchorage and spend some time in the radar pattern there before motoring over to Elmendorf for more approaches. I got the approach book out, reviewed the appropriate page, and then said I was ready to take the controls while he reviewed the approach. His response was, "Naw, that stuff just confuses me. You talk me through it." There being only one high altitude penetration to Elmendorf, he had memorized it to pass his check ride! Now really, as smart as he was, he **could** have looked at the approach plate and figured it out (how else had he gotten through UPT?); but once

again, that sort of thing was for lesser mortals.

We did the penetration and approach (basically a straight-in from the west) OK. After we went missed approach, the radar controller told us to turn right to 160 degrees and climb to 1600 feet. We started climbing, but we didn't turn, which meant we were still headed toward the foothills of the Chugach Range at the east edge of town. I had this vision of us slamming into some doctor's expensive house in Hillside, and said, "Come on, let's turn right." His response was, "How does your ball look?" Just then, the controller came on (I can still hear the urgency in his voice) with a bigger turn to keep us away from the high terrain "Alpha Papa __, turn right heading 180." That got his attention, and we turned without further ado. When we leveled out, I checked my ball and it looked OK. We shot two more approaches, and then after we had turned and leveled off after the third, he again asked me to check my ball. This time it was deflected, and a fuel check showed us beginning to feed internal fuel



when we should still have been feeding externals. We deduced we had an external wing tank with trapped fuel. This had given us the slight ball deflection he had noticed earlier, with less of a discrepancy due to there still being some fuel in the opposite external wing tank. Good instrument cross-check but a poor time for troubleshooting, a la Eastern 401.

I turned my checklist to the appropriate page and said I was ready to read it when he was ready. But, he had a better way to handle it and started dumping fuel at 1600 feet over downtown Anchorage! This was **not** the correct procedure by any stretch of the imagination and, in fact, will not correct the problem. But would you believe it, the ball started to go back to center! He stopped dumping fuel, and we requested a vector to the pattern for Elmendorf where we full-stopped.

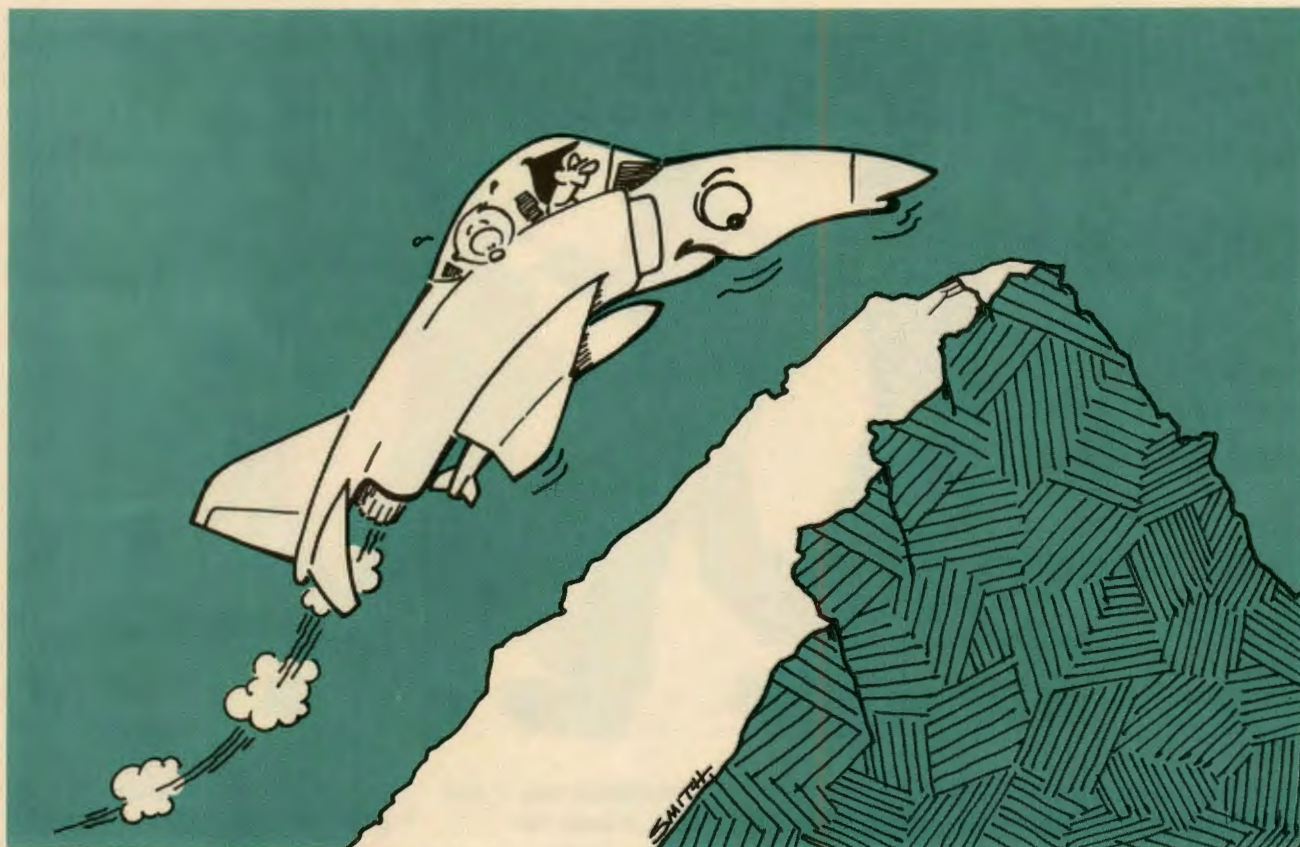
At maintenance debrief, we wrote up the trapped fuel

problem. The debriefer said it had most likely resulted from the daylong rain getting some condensation into the external tank valve, which had then frozen at altitude. When we noticed the problem, we had been back below the freezing level (2000 feet, remember?) just long enough for it to melt. He didn't mention anything about dumping fuel and he probably still felt his "special procedure" had saved the evening.

About six months later, I was scheduled with him again, this time for a dart tow mission. The weather in the dart area was below minimums, so we were to go forth and fly instruments. I mentioned to him that when my earlier mission was scrubbed, I had filed IFR to Kodiak for a low approach and return. Since he had never been there, he decided he'd like to see what the place looked like, also.

Kodiak had an 8000 foot runway with one end on the eastern shore of Kodiak Island. At the other

end, the terrain rose very steeply to a 4000 foot mountain. On either side of the airfield, there were ridges coming down from that mountain toward the water. It was your basic box canyon, with the sides getting higher and closer together as you went along. The approach, not surprisingly, was over the water, and the Minimum Descent Altitude (MDA) was reached about two miles out to allow safe clearance from all the high terrain on shore. For some reason, he pressed right on past MDA, ignoring both the ground radar controller and me. We kept getting lower and lower, and the mountain and ridges kept getting higher and higher. I said repeatedly, "Come on, let's clean it up and get out of here!" No response. Finally, over the overrun at 180 knots, he raised the gear and flaps and went full burner. Now, to someone in an Eagle or Electric Jet, the situation might not have looked bad; but in old Double Ugly with the external



tanks just fed out and a dart tow rig under one wing, it was pucker time. Those ridges on either side were way higher than we were. As we began a steep left turn, I basically made the ejection decision -- unless things got a lot better real fast, I was stepping over the side. He didn't like to fly with the handle rotated, so we would each pursue our own destiny.

As I began to assume the ejection position, things seemed to happen in slow motion. We were climbing too slowly to clear the ridge, and our airspeed wasn't building much... but wait, there was a saddle in the ridge. Maybe we could turn hard enough to reach it, and maybe we'd have the altitude to make it through... Naah, better get out now before the terrain gets too rough... Well, maybe we **will** make it after all...

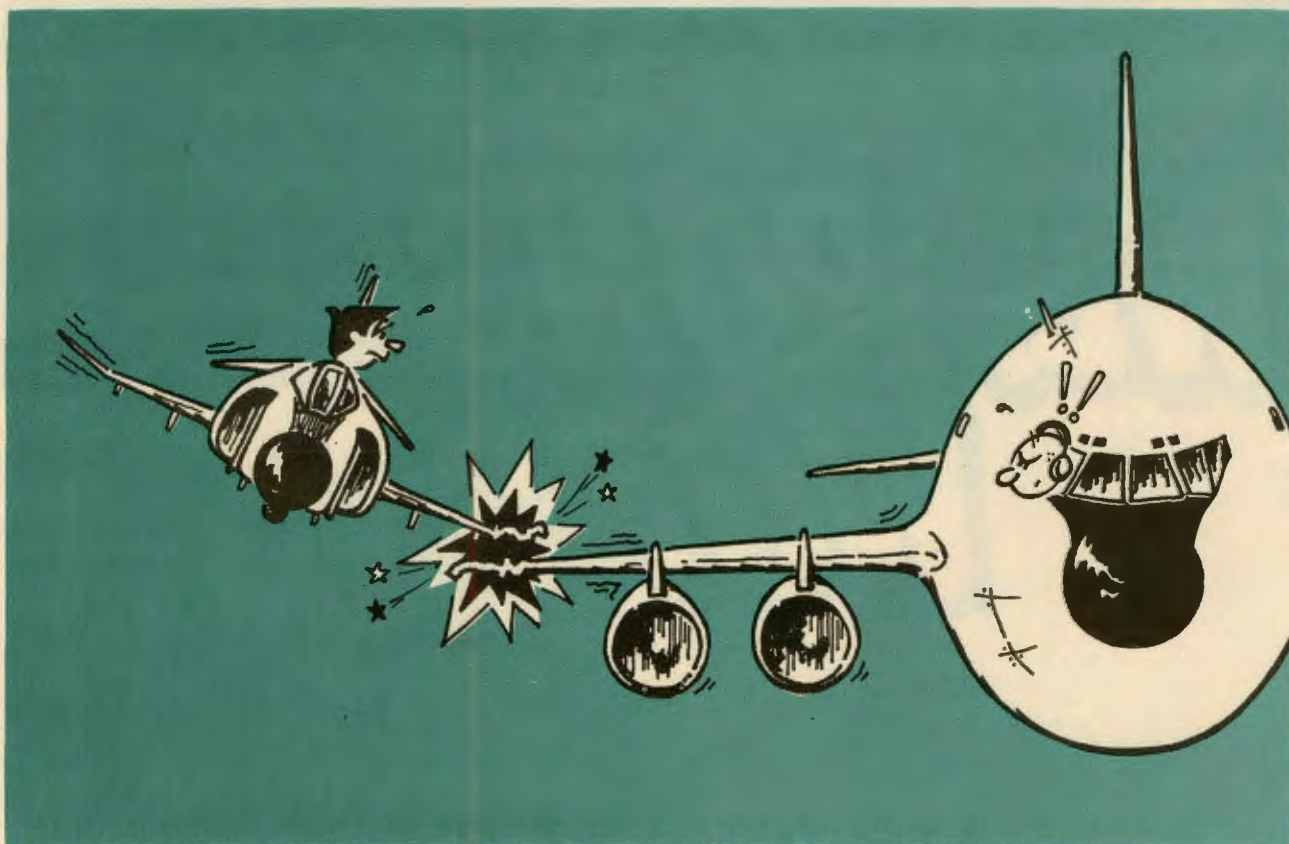
So call me stupid, but I decided to stay with the jet, and we did make it through the saddle -- the trees looked real big, almost as big as my eyes! We were at 230 KCAS, at least 45 degrees of bank, full burner, and had only a minuscule climb rate.

As I began to assume the ejection position, things seemed to happen in slow motion.

The cockpit was quiet on the way home. I was still getting over the scare. What if both burners hadn't lit -- Double Ugly is a good old jet,

but to put yourself in a position where you **had** to have them? What if that saddle hadn't been there, remember he had never been there before in his **life**! I don't remember in detail what I said to him after we landed, other than that I hadn't appreciated it. I also talked to the Ops Officer about the incident. I don't know what he may have said to him either. I didn't see much of him after that -- I was in a MAJCOM staff job, attached to the squadron for proficiency flying. Shortly afterward, there was a manpower slot shuffle, and I found myself in a nonflying job for a few years.

Unfortunately, there was an epilogue, and it happened about a year later. A KC-135 crew had wives and girlfriends along for a ride on an overwater fighter drag, and they were taking home movies



out the window. They asked the F-4 pilot to tuck it in nice and close to their wing. The F-4 driver was only too happy to oblige. He tucked it in so close they got suction between the airfoils and there was some dented metal. It was the pilot I had flown with earlier, but fortunately, I was **not** the WSO. There was a hasty radio conversation to put together a cover story which the crews told after landing. Then somebody blew the whistle, and legal proceedings ensued. He was soon **allowed** to resign in lieu of court-martial.

Looking back, one can see the root problem that led up to it -- a cocky, I don't need the rules because I'm so great attitude. The behavior patterns/incidents above were merely visible symptoms of that attitude. The results were

costly, the loss of a future career flying fighters for him, some twisted sheet metal and the loss of a potentially good fighter pilot for the TAF. But it didn't have to end that way.

More importantly for us today, it doesn't have to end that way for anyone we know. Yes, we need to train fighter aircrews to be aggressive -- we aren't training first officers but rather warriors. But, we have to balance that aggressiveness with an ingrained self-discipline. So what can we do to help ensure the new aircrews fly smart and exercise good flight discipline -- especially when they are in a situation where they are the only ones who will ever know about it? One proven method, which remains unchanged in spite of the numerous technological innovations to our jets, is for each

of us to set a good example. As a commander, supervisor, flight lead, or even wingman, are we exercising the proper balance between aggressiveness and flight discipline? Do our actions demonstrate that balance, or do they contradict our words? Do we know our flight members well enough to recognize who to encourage to be more aggressive, to be more disciplined or even both? Do we care enough about them or even ourselves to be open and honest when we see attitudes or actions which need to be redirected? With good role models and caring leadership, the new aircrews will develop the proper balance between aggressiveness and flight discipline. Then they will be ready to fulfill the TAC mission -- **To Fly and Fight!**



Munitions Musings

Col Alan C. Graham, Jr.
HQ AFISC/SEW
Norton AFB CA

After Saddam Hussein's invasion, we began the most dramatic build-up operation in USAF history; and judging from the reports in the press, we haven't seen anything yet. From the isolation of my warehouse office (no windows, you see), it is hard to appreciate the challenges facing the AMMO troops supporting Desert Shield. However, perhaps the musings of a former wing weapons safety officer (Phu Cat Air Base, Vietnam) may prove helpful to the current generation of AMMO troops who are dealing with the reality of life and times in Southwest Asia.

Weapons safety is a survivability issue, and mission accomplishment may depend on how well we limit collateral damage from an accidental or enemy initiated explosion. Let me give you a couple of "for instances."

When I arrived at Phu Cat (in the middle of the Tet offensive), the base was busily erecting ARMCO revetments to protect our aircraft from enemy mortar and rocket attacks. We had been operating from

open ramps with aircraft operating virtually wing tip to wing tip, and one enemy round could take out several aircraft. I spent a great deal of time getting the munitions line delivery and flight line loading troops to keep the prepositioned load of ammunition behind the revetment wall and to park the delivery vehicle in an empty revetment when it wasn't actually delivering the next load. We took a few enemy rounds in the revetment area, and the revetments did limit frag damage to adjacent aircraft. However, we were fortunate that the bombs and CBU's were never initiated because the initial revetments faced each other across a central taxi line, allowing an unbarricaded line of sight up to three other aircraft. As a result, we lived with the very real risk of a domino propagation of explosions until we rebuilt the revetments with a concrete arch roof (Concrete Sky) in a front-to-rear exposure configuration.

We received a lot of ammunition by air, primarily by commercial contract carriers. Some days we had a tough time clearing out the hot cargo pad before the next flight arrived. There was a constant temptation to just let the stuff stack up and get to it later (read

that after dark - when all the incoming cargo flights were finished for the day). Add the flight crew's eagerness to button up and get out of there, and you have a prescription for building a disastrous situation.

The Weapons Safety staff obviously spent a lot of time in the bomb dump and on the flight line, but we also went to the defensive fighting positions to ensure the troops treated their AMMO with the respect it deserved.

Limiting the accumulation of flammable materials in and around ammunition stocks was a major concern. Removal of dunnage and packing material

limiting the number of rounds they had in the firing pit as well as moving the dunnage and packing materials well away from the AMMO.

I'd like to be able to say that all of our diligence resulted in a zero accident tour, but that was not to be. We had one Class A mishap when a security police troop walked into a well marked mine field and stepped on an anti-personnel mine during a compass training course. His entire team focused so intently on the task of finding the small numbered stake which marked the target on the course that they didn't see the mine field signs when they



was never a real problem in the AMMO area. We had Vietnamese work crews who did nothing but police up the containers, dunnage, packing materials and banding straps being generated by the assembly crews; and there were a lot of Vietnamese families who were able to improve their homes with AMMO lumber (the troops in Southwest Asia will probably have to manage the problem themselves). We had a security police mortar team; and when they had firing missions, it was easy for them to forget to manage the scrap containers and dunnage which quickly accumulated. Together, we worked out procedures which allowed them to do their job effectively while

climbed over the triple strand of concertina wire which delineated the mine field.

Channelized attention is a killer, no matter which safety area you are concerned with. Don't ever lose track of your surroundings . . . or you may find yourself the subject of someone's lessons-learned safety article!

In the final analysis, the task of the safety professional is to be the eyes and ears of the commander, to provide an independent, unbiased assessment of the risks the troops are facing, and offer safer and more effective ways to accomplish the mission.

Lt Col Scott Wales HQ TAC/ISER

"Live fast, die young." Ever heard that phrase? It seems to have an air of inevitability about it, doesn't it? Anyone who flies high performance fighters is going to be living fast without a doubt, but dying young is certainly **not** inevitable. Only one small problem clouds the picture. The crucial element in this equation is you, the aircrew. Our maintenance crews have been doing such a superb job that material and logistics factors have almost disappeared as causes of mishaps. That's the good news. The bad news is that operations factor mishaps have been fairly steady over the past several years.

That puts the ball in our court as operators and operations supervisors. You are essentially the last frontier for TAC mishap reduction. Part of the reason that operations factors continue to be so high is that we treat our "stick actuators" differently than we treat broken "widgets." When a part breaks, we do a fairly elaborate review to find out the reason or reasons it failed. If the problem appears to be widespread, we do inspections to check for other faulty "widgets;" and if more are found, they are fixed, replaced and spares are removed from supply channels. No such process takes place with aviators.

Predictably, this is more difficult to do with the human part of the man/machine interface. Partly because of "professional courtesy" and partly because we are reluctant to meddle in someone else's life, we do not always replace the man when there are clear signs he's not functioning at peak efficiency. The possibility of injured pride and personal ani-

mosity are two reasons we don't confront an individual whose performance is not up to standards. Instead, we operate on the "big boy" principle and assume that an aircrew will work out his physical or psychological problems on his own. Fortunately, we don't treat failed or suspect aircraft parts the same way or we'd have planes littering the landscape nationwide.

So what can we do? The Soviet Union has a solution, typically an overreaction to a problem. Not surprisingly, external control is a big part of their solution. In his book *MIG Pilot*, Victor Belenko indicated a visit to the regimental physician routinely preceded virtually every flight. In addition to the standard examination of blood pressure, eyes, ears, nose and throat, the pilots were also examined for alcohol use. Next, they were interviewed verbally regarding their fitness for flight. Belenko went through such an interview within hours of his defection in a MIG 25 aircraft. Obviously, the physician's presence did not pre-

vent Belenko's daring escape.

Placing a flight surgeon in every squadron is the Soviet Union's draconian solution to a continuing problem. Our own system relies instead on individual honor and discipline for both physical and psychological problems. Understandably, the Soviet solution to this problem is unlikely to please either the aviation or medical community. A Big Brother in every squadron is a role that no one wants in Air Force circles.

However, the Big Brother approach does serve to highlight the role of squadron supervisors in determining the fitness of aviators to fly, and acting on warning signs that troubled individuals may display. This role is probably seen by some individuals as that of spy, but it can also be likened to that of a lifeguard.

Psychological warning signs of fliers may not manifest themselves as readily as say, the seven warning signs of cancer. The aviator himself may not know he is in trouble. The following are some





clues to look for regarding changes in individual behavior patterns:

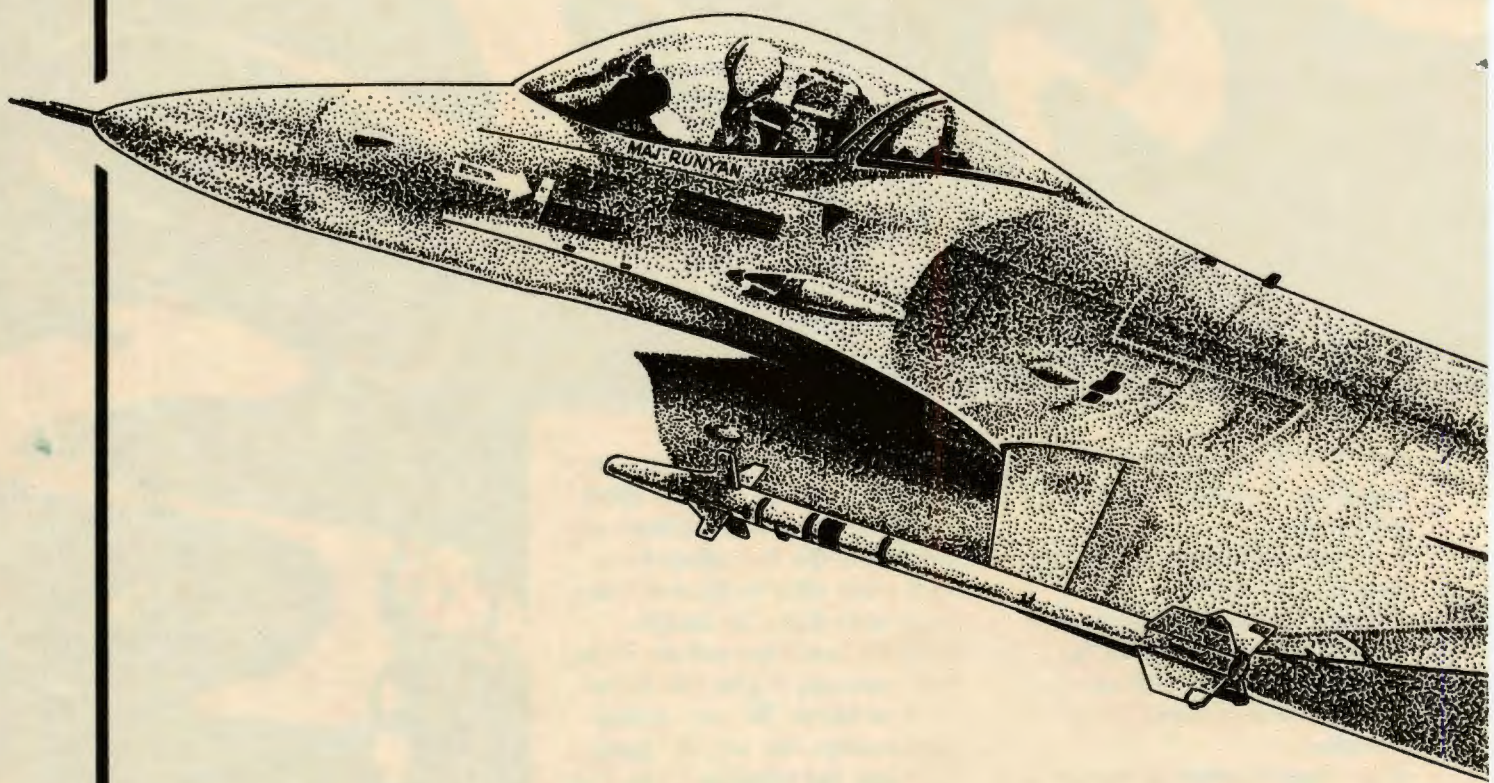
- Increased moodiness, or argumentative behavior
- Forgetfulness, stubbornness
- Signs that the individual has turned inward, or withdrawn from his circle of friends and coworkers
- Increased number of injuries, cuts, sprains, pains, and headaches
- Increased alcohol use
- Sexual promiscuity, impulsive behavior

The above may be caused by or be the result of divorce, a failing marriage, financial reverses, or a death in the family. Other stressors such as family separations (Desert Shield or other lengthy deployments) and impending career changes (staff assignments, retirement, separation from military service, "stop loss" actions) may also cause unhealthy behavioral changes. Even if the individual knows he's in trouble, he may deny it, particularly if he is con-

fronted by an "outsider" (i.e., anyone who is not an aviator). **Intermediate level supervisors are probably the key players in any such efforts.** In most cases, these individuals are familiar with the personnel and are in the best positions to spot and correct such problems. We can't change personalities, but we can change attitudes and behaviors. The first step in this process is training ourselves to recognize danger signals, and then having the intestinal fortitude to do what must be done to correct the situation. If you're a supervisor, think of yourself as the line chief for bent or broken fliers.

To fly today's "high tech" aircraft, we need to be high performance aircrews. We each need to be operating at 100 per cent every time we strap into our jets. While we're all required to fly fast, there's never a requirement nor a valid reason to die young in a mishap.





F-16 FIGHTING FALCON



Been There,



Lt Col D. Day
HQ TAC/ISEF

At one time or another most aviators have come back from a mission asking themselves: "How did things get so mixed up? The flight was well briefed. I knew what we had planned to do, and all the wingmen knew what we had planned to do. The weather was not a factor; we shoved off on time; but things sure went to heck in a hand basket when we got tapped."

The debrief is generally filled with statements like, "I thought you turned left there," or "I couldn't follow you, I had a bandit at my six." If we are lucky, all flight members are back to put the colors on the board, and provide the answers in what can be a long and somewhat heated debrief. Unfortunately, on some occasions that has not been the case.

The mission was planned as a four-ship interdiction with dissimilar assets providing the "red" air. All the aircrews were highly experienced and current for the planned sortie. The briefing was well done. The flight lead even provided a few minutes at the end of the briefing for "element coordination." Step and ground ops were uneventful, and everybody was ready and anxious to get the show on the road. The first two legs of the low-level ingress went as planned. The bandits were ready and the fight was on.

The mud beaters were in an offset box, separated by 1-2 miles. The bandits came out of their cap, and the box split with the lead element proceeding on undetected. The trailing element took the appropriate action and remained busy with one

Done That

element of the red four-ship.

Nearing the IP, the lead element was finally detected by the other two bandits. Mud beaters 1 and 2 are now line abreast, 6000-9000 feet apart. Lead calls "heads up, bandit high right," followed shortly thereafter by a "beaming" call. Unfortunately, the bandit has split the middle of mud beater flight, lead goes left and two goes right, initiating a chain of events that will have a tragic ending.

Because of the mountainous terrain, Mud beaters 1 and 2 are unable to keep each other in sight. Additionally, the separated aircraft are working at low altitude and several radio transmissions are missed by both 1 and 2. Lead questions #2 about his position, Mud beater 2 replies he is headed south, #1 is headed northeast. Both aircrews attempt to cross the same ridge at the same time in the same piece of sky resulting in the tragic loss of two irreplaceable aircrews and two very expensive pieces of machinery.

Looking back on this mishap, it's easy to pick out where things went wrong, just like in the debriefs when we are all there to talk about it. Someone lost "Situational Awareness (SA)." Total SA defined as "the accurate perception of the position of all aircraft that may affect the engagement, an understanding of the dynamics of flight, and a proper assessment of the maneuvering potential of the aircraft in relation to each other and the ground." Both pilots needed total SA to prevent a midair in this situation. Total SA means the ability to determine if any SA is lost! There have been times when a pilot felt like he had total SA; but in truth, he had no SA at all.

Both pilots had SA on the bandit. Each knew the proper way to beam based on his position relative to the bandit. However, #2 did not maneuver in relation to lead. His SA told him to turn right, and he did.

Communication began to break down at the "beaming" call. The communication process used to attempt to get the flight back together was hampered by the operating environment. Although lead was trying to build his SA, he offered very little to his wingman that would aid #2's SA when he asked #2 for his position.

Gaining the ability to recognize a lack of total SA, can be quite hazardous to your health. Most "old heads" have at one time or another "been there, done that" when it comes to the SA arena. The knowledge gained from those "close calls" has often been the primary factor in a decision not to "stick their nose into that fur-ball." For the "newbees," briefings/debriefings provide an alternate means of learning about SA without the expense of having to buy some new underwear.

When you start looking at what went wrong with a mission, you can hang a lot of errors on the SA nail. Debriefings provide the forum for all of us to analyze our actions in relation to those of other flight members and determine what our SA level really was. It's not enough to think you had SA; you must know you had it. In FY 90 the TAF experienced six mid-air collisions resulting in the needless loss of 4 aircrews and 9 aircraft. The consequences of anything less than total SA is a price far too high to pay.





TAC Attack 1990 Writing

Best Flight Safety Article



Capt Richard McSpadden
49 TFW
"A Wall of Eagles" (January)

Best SAFETY Article



Brig Gen Bill Ball
28 AD Commander
"Live Safety" (October)

Best Weapons Safety Article

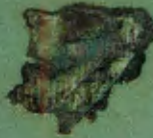


SMSgt Dwight Morehead
155 TRG/NEANG
"How to Almost Stage a Disaster!" (April)

Honorable Mention

Lt Col William Wilson, 24 COMPW/SE
Lt Col Scott Wales, HQ TAC/ISER
Lt Col Rich Kirkpatrick, HQ TAC/ISEF
Maj Martha Kelley, HQ TAC/SEW
Maj Dan Runyan, HQ TAC/ISEF
Capt John Calvin, HQ TAC/LGMF-16
MSgt Peter Stover, 113 RMS/LGSF

Awards



Best Ground Safety Article



Mr Cal Faile
HQ TAC/ISEG
"An Ignominious Adventure" (May)

Contributor of the Year -- a tie!



Maj Don Rightmyer
16 AF, Torrejon AB

"Just a Simple Installation" (January)
"Three Rules for Having a Mishap" (January)
"What Makes a Great Safety Magazine" (July)
"Learning by Experience" (August)
"How to Have a Flight Mishap" (October)
"Passing the Common Sense Test" (November)
"Complacency Will Kill You" (December)



Mr Jimmy Campbell
1 AF/SEW

"Try Harder and His Sawdust Experience" (April)
"Try Harder and His Celebrating Experience" (June)
"Try Harder and His Fishing Experience" (August)
"Is That Munition Live?" (October)
"Try Harder and His Hair Raising Experience" (October)
"Try Harder and the Great Turkey Shoot" (November)
"Try Harder and His Christmas Dream" (December)

TAC

Outstanding Achievement in Safety Award

Technical Sergeant Ronald Brovold, Sergeant Gary McDonald and Senior Airman Kevin Bengs were dispatched to perform a 50-hour inspection on an F-16A aircraft. They went above and beyond the requirements for this inspection and found a chafing EEC (Electronic Engine Control) cooling line. This line could not be properly examined while on the engine due to its location among various other components. Upon removal and subsequent inspection, a scribe pene-

trated the line with minimal resistance. This line was in such poor condition that it could have ruptured at any moment, dumping fuel in the engine bay, resulting in a catastrophic fire. The remaining unit aircraft were grounded for a one-time inspection of this line, and three additional lines were found to be chafed beyond allowable tolerances. Inspection of this area has been added to the 50-hour inspection criteria. A Crosstell was sent

to inform other units of these findings. The engine specialists did an outstanding job in finding this as the F-16A had only been assigned to the 119 FIG for a very short time, and the location of the line was in a very difficult area to inspect. Their motivation and professionalism in locating this potential problem may well have saved not only the life of a pilot, but the aircraft as well. For their superb performance, the team earned the TAC Outstanding Achievement in Safety Award.



TSgt Ronald Brovold



Sgt Gary McDonald
119 FIG
Fargo ND



SrA Kevin Bengs

Fleagle

SURE IS A MESS OF LEAVES
T'CLEAN UP THIS YEAR.



WHO SAYS THEY
GOTTA BE IN A PILE
'FOR YOU BURN'EM.



WOOSH!

WOW! LOOK AT THEM
SUCKERS BURN.



HUH...?



WOOSH!
#2

IT CHANGED... TH... TH'WIND...
IT CHANGED...



HARRISON



TRY HARDER

AND HIS SHED BUILDING EXPERIENCE

Jimmy Campbell
HQ 1AF/SEW

It is time for change! Try Harder finally gave up and decided his garage was too full. His cherished 1966 Mustang convertible had just suffered a major attack when one of the bicycles he had hung from the ceiling fell. The bicycle went right through the new cloth top, ripped the back seat cover and ended up with the kick stand denting the trunk lid. Yes, he definitely had to build a shed to store all the bicycles, lawn mower, barbecue grill and who knows what else that had collected in the garage.

Try did a little more planning than he normally does. He went to several home fix-it stores and found that he could build his own shed for less than the cost of a factory built one. He got a videotape on how to build sheds, some lumber and headed home. Try parked his Mustang with the trailer full of lumber in his back yard next to an old concrete slab. He was going to build a super neat new shed right where someone else had built one years ago.

Try had also rented some power tools, but he had his own trusty hammer. He figured after looking at the videotape three times he must be ready. Besides, he was sure his neighbor, Jim, would

come by before long and he might even be able to con him into helping. Maybe he could tell Jim he felt safer with help. Jim was sure to fall for that line because safety was always an important consideration with Jim.

Try, wearing his World War II aviator's cap, was ready to get started. He laid out the measurements for his first batch of 2x4s by using a plan from the fix-it store. He would cut the boards with the rented circle saw, but first things first. He opened the guard over the bottom of the saw blade and placed a wedge in it so the guard would not close. He had seen that done before when some carpenters were working on a project at his work place. He didn't know why they did it, but he figured it must be a good idea since they had done it.

Try didn't remember to rent any sawhorses, so he placed the boards on the trailer with the ends to be cut off next to the trunk of the Mustang. He had placed a rug on the trunk of the car to protect the finish when he laid his tools on it. He picked up the circle saw, took a deep breath and pulled the trigger. SSSSREEMMM, Try thought to himself, "Wow, that's neat, those blocks fall off like cutting butter."

Try completed the last cut and

laid the saw down on the rug. The blade was still spinning as it touched the rug. SSSCREACH, OOUCH, BANG! The saw whipped around and pulled away from his hand. The blade cut through the rug and walked across the trunk lid, leaving a jagged scratch as it went. The saw glanced off Try's leg and hit the ground beside his foot. Jim, who had been watching from his yard, hurried over to help. They both examined Try for damage and found only a bruised shin and twisted wrist. Try said, "Well, I guess the guard is not suppose to be blocked up on one of these saws."

Jim went back home, returning soon with two saw horses and goggles for both of them. They assembled the walls and put up the rafters without any more problems. Jim had another appointment, but before he left to get ready, he reminded Try not to take any risky shortcuts. He would be back later and together they could finish the project safely.

Now was his chance. With Jim gone, Try knew he could really make the sawdust fly. From watching the tape, he figured his next step was to remove several braces that were in the way and then to put on the plywood roof.

To save some time, he let the braces just stay where they landed. He was really glad Jim had gone because he was sure Jim would insist upon cleaning up the area. Jim would claim that all those braces and scrap boards laying on the ground were tripping hazards. Sure, and all those big nails sticking up were something to be stepped on. But, what the heck, what Jim didn't know wouldn't bother him.

Enough of that, it was time to get the step ladder out and get on with putting on the roof. Try looked around for a good place to put the ladder so all four legs were on the ground. The problem was, all those braces and scrap boards were in the way. Not to worry, the dirt was a little soft and muddy; but he would just lean the ladder against the wall of the shed and go from there.

Try placed the ladder against the wall, picked up a sheet of ply-

Jim would claim that all those braces and scrap boards laying on the ground were tripping hazards. Sure, and all those big nails sticking up were something to be stepped on.

wood and began climbing. He was just about ready to place his foot on the top step when everything went wild. The ladder started to slide out at the bottom, causing Try to lose his balance. SSSWWWISH! As he went down, he dropped the plywood and grabbed for the shed wall. CCCRASH, BBANGG! The shed wall then collapsed onto his Mustang, denting the hood and cracking the windshield. Try landed on one of the braces with the sheet of plywood giving him a final blow to his back.

Jim heard the noise and came running. He pulled the plywood off Try's back and saw that a nail had punctured Try's left hand. Jim helped Try up from the ground and examined his hand. As they headed to the hospital to get a tetanus shot, Try told him, "Well, I guess I really didn't save much time by taking those shortcuts, did I?" ➤

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

**Editor, Tac Attack
Hq TAC/ISEP
Langley AFB, VA 23665-5563
DSN 574-3658**



TAC

Outstanding Achievement in Safety Award



SSgt Karl J. Proteau
833 CSG, 833 AD
Holloman AFB NM

Staff Sergeant Karl J. Proteau and Sergeant Shawn E. Thomas were on patrol as a Security Response Team near the F-15 aircraft parking ramp. As they were waiting for an F-15 to pass before crossing the taxiway, they noticed the aircraft's right main landing gear was burning with the flames within inches of the fuel tank. They immediately moved to inter-

cept the aircraft and successfully stopped it before it could enter the mass parking apron. While Sgt Proteau dismounted the vehicle and signalled the pilot of the emergency, Sgt Thomas radioed Central Security Control to summon the fire department. Meanwhile, two individuals working at a nearby sound suppressor saw the security police vehicle's emergency lights and responded with a fire extinguisher and put the flames out. By this time, the fire department had arrived, the pilot was extracted from the aircraft, and Sgts Proteau and Thomas had established a safety cordon around the aircraft. Due to the severity of the fire, the fire chief had the aircraft towed to an adjacent pad and watched for over an hour to ensure it had cooled sufficiently to be safely returned to the mass parking area for repairs. The fire department station chief, MSgt Williams, stated that the fire had been caused by hot brakes that ignited the tire. He estimated that had the fire been allowed to burn for another minute, the tire would have blown, causing the aircraft to lean to one side and place the fuel tank di-



Sgt Shawn E. Thomas
833 CSG, 833 AD
Holloman AFB NM

rectly into the flames. The quick thinking and action by Sgts Proteau and Thomas averted a potentially life-threatening situation and prevented major damage or loss of a vital Air Force aircraft and personnel. These actions demonstrated by Sergeants Proteau and Thomas earned them the TAC Outstanding Achievement in Safety Award.

ZUSAMMENSTOSS AUF GEGENFAHRBAHN:

(COLLISION ON OPPOSITE LANE)

DOWN TO EARTH



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

CW2 Thomas D. Jackson
(USA)
C Troop, 5/6 Cavalry
Wiesbaden, West Germany

Aviators, race car and smart drivers always wear their seat belts. From a logical view-point, we all know that seat belts will help hold us securely in our autos and give us a better chance of surviving a mishap. But, far too often a friend or family member is killed because they failed to put that logical information into practice. This is especially alarming when you consider that all they needed to do was "buckle up"—which was neither physically nor mentally demanding of them. Many safety conscious countries, including West Germany, where I am stationed, have laws that require the proper use of seat belts. Those laws helped motivate me to apply what I already knew. Over here, I could receive a stiff fine for not wearing my "belt." If a driver is involved in an accident and receives injuries but was not wearing a seat belt, the driver can be held responsible for contributing to the accident. So, let me share my adventure with you.

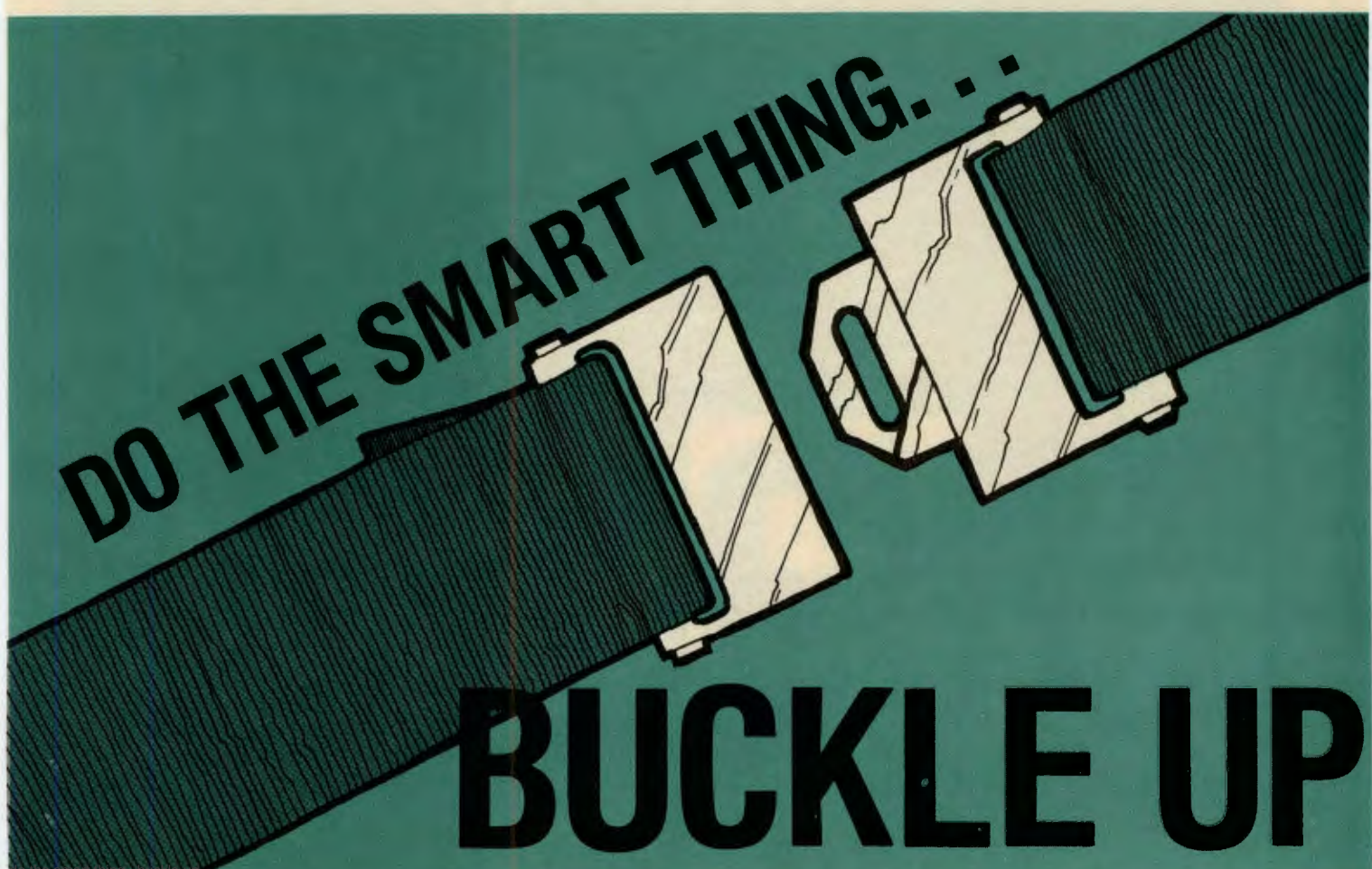
After finishing the day's work, I exercised awhile, cleaned up, dressed and proceeded to my automobile. I was going down to a local restaurant for dinner and afterwards to take some evening photographs of the mountains. I was about five miles from the base, on a two lane road and rounding a gentle curve when it happened.

A driver coming from the opposite direction had apparently lost control of his automobile. The car was coming towards me broadside in my lane as I was coming out of the curve. The collision was un-

avoidable. I don't remember what happened next. All I know is I woke up in the hospital the following day trying to figure out what was going on. I was told by the nurses that I had been in a serious car accident. I had gone into shock, but I was alive. The emergency crew had found me unconscious but securely fastened in my seat. All the windows of my automobile were shattered. Items in my vehicle had been thrown out by the impact forces. Even my watch broke because of the impact. I spent the following 24 days in a hospital recovering from

the major injuries—two broken knees, broken nose, bruised ribs, head injuries and cuts and bruises all over my body.

Why am I sharing this with you? **I am alive only because I was wearing my seat belt.** I would like to say "thanks" for all the states and countries that have passed seat belt usage laws and those people who've encouraged me to use seat belts. Hopefully those laws and encouragement will help more of us to do what we already know is the smart thing—**buckle up!**



DO THE SMART THING...

BUCKLE UP

TAC

Outstanding Achievement in Safety Award

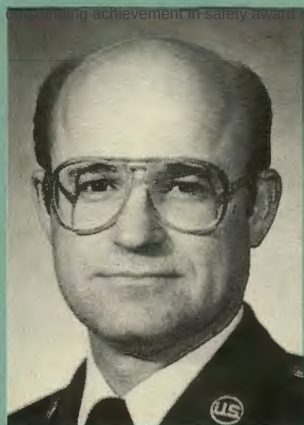
Master Sergeant Michael G. Sauvageau, Technical Sergeant Craig G. Kulla, Technical Sergeant Frederick Neumann and Sergeant Nathan R. Brenneman were dispatched to perform acceptance inspections on an F-16 aircraft. The canopies and seats were removed for time change verification on all explosives items. Upon completion, a visual inspection of the seats and canopies was performed. The visual inspection did not require the removal of the JAU-8 initiator panel since the part numbers and serial numbers could be verified with the panel

installed. However, since this system was new to the unit, the team elected to remove the panel so the linkage could be visually inspected. Upon removal of the panel on the seat, one of the two initiator firing links was found to be disconnected which reduced reliability of the egress system. Upon removal of the panel on a second seat, clip type safety pins were found installed in both of the JAU-8 initiators totally disabling this seat. Quality Control and Safety were immediately notified,

and all assigned F-16 aircraft were grounded until inspected. No other discrepancies were found. San Antonio ALC was notified and a one-time inspection of all USAF F-16 aircraft was initiated. A change to the Tech Order, requiring the visual inspection of the seat to include the removal of the JAU-8 initiator panel, was incorporated. This team of specialists' attention to detail prevented a possible loss of life and corrected a serious Tech Order deficiency. For their actions, the team earned the TAC Outstanding Achievement in Safety Award.

TSgt Craig G. Kulla

TSgt Frederick Neumann

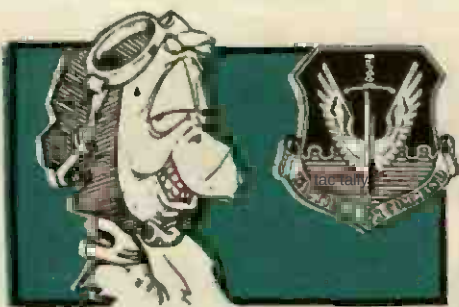


MSgt Michael G. Sauvageau



Sgt Nathan R. Brenneman

**119 FIG
Fargo ND**



TAC TALLY

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

• (SUCCESSFUL/UNSUCCESSFUL)

Total			TAC			ANG			AFR		
DEC	THRU DEC		DEC	THRU DEC		DEC	THRU DEC		DEC	THRU DEC	
	FY91	FY90		FY91	FY90		FY91	FY90		FY91	FY90
1	2	6	1	1	4	0	1	1	0	0	1
0	2	6	0	0	2	0	2	2	0	0	2
1/0	1/0	2/0	1/0	1/0	2/0	0/0	0/0	0/0	0/0	0/0	0/0
0/0	0/0	1/1	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0

CLASS A MISHAP COMPARISON RATE

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

TAC	FY91	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	1.8	2.8	2.7	3.0	2.4	2.7	2.8	2.9	2.8	2.7	2.8	3.2
ANG	FY91	4.2	2.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	0.0	0.0	1.6	1.2	0.9	0.8	1.3	2.2	2.4	2.2	2.0	2.2
AFR	FY91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	20.4	11.2	8.2	5.9	4.7	7.7	6.4	5.5	4.8	4.4	4.0	3.6
Total	FY91	1.2	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	2.4	2.5	2.7	2.6	2.1	2.4	2.6	2.9	2.8	2.7	2.6	3.0
MONTH		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

TAC'S TOP 5 thru DEC 1990

1st AF		9th AF		12th AF	
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"					
134	48 FIS	67	507 TAIRCW	55	388 TFW
59	57 FIS	42	1 TFW	44	479 TTW
19	325 TTW	23	363 TFW	36	355 TTW
		21	56 TTW	35	366 TFW
		13	31 TFW	30	27 TFW

ANG		AFRES		DRUs	
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"					
455	119 FIG	153	301 TFW	171	552 AWACW
431	147 FIG	116	482 TFW	62	28 AD
235	110 TASG	113	924 TFG	41	USAFTAWC
215	177 FIG	101	906 TFG	33	USAFTFWC
215	138 TFG	76	507 TFG		

DESERT DIARY

THIS PAGE IS DEDICATED
TO OUR TROOPS IN OPERATION DESERT STORM

(Reprinted from the *Desert Defender*, a newspaper supporting Operation Desert Storm)

