

TAC Attack

SEPTEMBER 1991



ANGLE OF ATTACK



WELCOMEBACKEVERYONE!--from your summer vacations and other leisure activities. To our desert returnees, WELCOME BACK and THANKS; we know it wasn't a fun summer. I want to remind each of you that even though the "101 Critical Days" are over, we can't let down now.

There are a lot of adjustments taking place this time of the year: the children are back in school; the pace at work is accelerating; the weather is changing; and many of us aren't quite as sharp as we were before our summer interlude. Now would be a particularly appropriate time for commanders and supervisors to take a good, understanding look at themselves and their people. Have we all recovered from the summer? Is everyone up to par? Probably not, so let's ease back into the more demanding tasks.

One of those tasks is a hurricane evacuation. Our bases along the Gulf and East coasts are the most vulnerable. Has your evacuation plan been reviewed? Did you make provisions to help the families that remain behind when the jets depart? What about your personal hurricane plan? It's a lot easier to stock up on candles, batteries, etc., before the first wind blows.

While coastal units prepare for hurricane season, what about the northern bases? It's not too early to start thinking about and getting ready for winter weather. Take the extra time and use that extra gas to practice some instrument approaches before you have to do it for real. Also, now would be a good time to check your winter clothing and equipment.

Do you have all the cold weather gear necessary for outside work? Frostbitten appendages tend to not work very well. Snow removal equipment could probably use some early attention. The warm days of Indian Summer provide a great opportunity to check out equipment and make repairs in comfort rather than panic when the first snow hits the base.

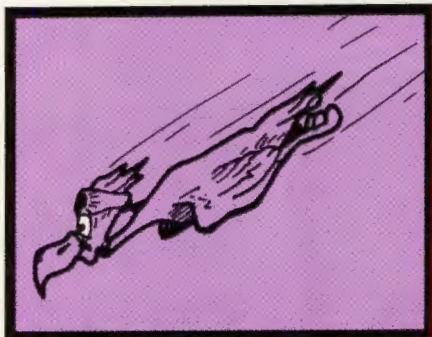
Right about now you're probably wondering why all the questions or "where's the beef?" Planning ahead is why all the questions. Remember the old adage, "Prior Planning Prevents Poor Performance"? By looking ahead and preparing for anticipated events, we're better able to take care of our people and handle the surprises that always seem to pop up. A plan isn't just a point to deviate from. It's a way to build flexibility and responsiveness into our actions. We also get to review the way we do things and see where we can make quality improvements. Forethought, planning and teamwork make for safer operations, whether it's a hurricane evacuation, the first 300/1 day, or the first snow storm. Plan ahead and skip the panic.

Finally, some parting quickies. Bird migrations are starting and a bird strike can be harrowing, and dangerous, ... as our There I Was (Page 4) relates. Don't neglect to send us your surveys and please...enjoy the rest of the good weather safely.

BODIE R. BODENHEIM, Colonel, USAF
Chief of Safety

TAC Attack

DEPARTMENT OF THE AIR FORCE



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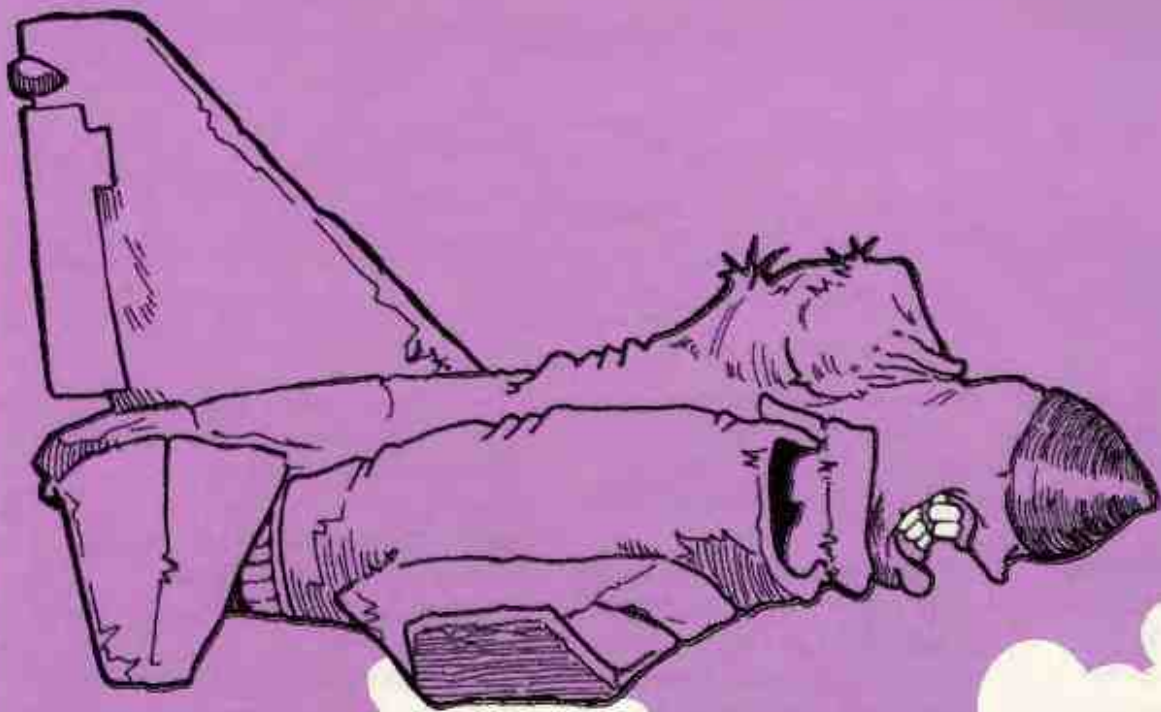
There I was
 There I was
 There I was
 There I was
 There I was

there I was

Col Russell A. Everts
12 AF/DO
Bergstrom AFB TX

THE TIME: Summer '74
THE PLACE: Pahute Mesa,
 Nevada
THE PARAMETERS: 550
 KCAS, 100'-200' AGL, #4 in
 tactical formation
 egressing from a strike on
 Gold Flat airfield.
THE ATTITUDE: Bullet proof,
 invincible, . . . Somebody!!!!
 (Patting self on back for
 successful execution of the
 last 4-ship surface attack

tactics ride in the F-4
 FWIC.)
THE EVENT: BOOM!! What
 the . . . , Holy . . . (That all
 translated means
 BIRDSTRIKE, right
 between the eyes!)
INITIAL RESPONSE: CLIMB!,
 exchange airspeed for air
 and slow down. Check over
 your parts, ACE; it's messy
 in here. Where am I, where
 do I need to go, do the
 other guys know I'm out
 and up? Can't talk, too
 windy and noisy. Squawk
 emergency—let's
 see . . . how do I do that?
 Check in with my pit boss,



let him know I'm alive—bet I don't look like it. Recover the aircraft. Nobody said it would be easy, but why me?

It's probably worth describing some of the specifics of this event as they contain some lessons learned for all of us who feel impervious to personal damage while flying jets. Of the six or so real hits I took in the war, this was far worse than any of them.

Some Observations:

—I never saw it coming. My first indication was a large sound which I equated to a double barrel shotgun being discharged three feet in front of my face. This was followed by flying plexiglas of all sizes, bird stuff and lots (550 knots worth) of wind. The bird blew out the right front quarter panel, glanced off the RWR scope, and

what was left impacted dead center at the juncture of my oxygen mask and visor.

—My first reaction was good—pull up and get away from the ground. Subsequent reactions were sensible, but sloooow. Naturally, I thought I was OK (bullet proof, right?). I figured maybe I was a teensy bit screwed up when I dialed in 0077 for an emergency squawk; thought it looked strange, but couldn't figure out why.

—One look in the center mirror convinced me to inspect my parts. I was most concerned that the exposed parts of my neck might be cut (they weren't).

Beyond that, it was too tough to tell what was bird blood, etc, versus mine; so it was time to ignore that and press on.

—Communication was a big

problem! The wind noise, even at 250 knots, was too much for anything to be understandable inside or outside the cockpit. All anyone ever heard was mike-keyed wind noise. I turned my bird gut/feather splattered head and looked at my backseater and, in spite of my thumbs up, he was convinced I was an impending mort. He sent forward a note directing a 7700 squawk—a nice touch which gave me a little dose of reality and an assessment that maybe I wasn't as OK as I thought. He felt we were going too slow, took control of the aircraft and "pushed it up." I countered with an "I've got it," pulled it back, slowed down, and motioned him to look forward on the right. Staring him right between the eyes, about 7 feet ahead, was a large

There I was

piece of remaining plexiglas waving in the breeze, pointy end in, ready to come off and 1) spear me, 2) spear him, or 3) go down the right intake.

—As my head cleared and my heart restarted, all that past training paid off. A quick analysis showed my parts were OK, the aircraft was flying OK, I couldn't talk to anyone, but I needed to land, somewhere, soon! Sure hoped they'd see me coming! Even though no one in the flight saw me leave (I went up quick!), my squawk and absence were soon realized; and by the time I was on short final to Indian Springs, I was being chased, talked to, and cleared to land. We found that below 180 knots we could talk to other aircraft close to us and the tower when within ten miles. On landing, the floating piece of plexiglas attacked the runway and (luckily) not me or the engine. We stopped, got our heart rates back to normal, and, subsequently, exited the aircraft.

Some of the important things to remember:

—You're never invincible...it can, and will happen to you.

Expect the unexpected.

—The three basics—maintain control, analyze the situation, and land as soon as practicable: all work.

—The only reason I have eyes today is because I wear my visor down. It took five years for the powdered plexiglas to work out of the visor/mask line on my face. Use your visor!

Staring him right between the eyes, about 7 feet ahead, was a large piece of remaining plexiglas waving in the breeze, pointy end in, ready to come off and 1) spear me, 2) spear him, or 3) go down the right intake.

—It doesn't take a big projectile to hurt you. The Audobon Society ID'd my attacker as a three-ounce golden thrush (easy ID for the bird watchers; the bird's feet and feathers were stuck in my mask).

—Assume you are more screwed up than you think when foreign objects pummel you inside your office.

—Communication via voice may be impossible. In such cases, actions have to speak louder than words.

—We never crew coordinated for a birdstrike in the cockpit. A prebriefed plan would have been easier to execute.

—Instinctive reactions are the best ones at first; temper them with judgment thereafter.

—Don't panic, don't rush, but don't take too long either. I had some big pieces of plexiglas in my office, some of it sticking in my parts. It wasn't a problem this time, but could have been...

—It's better to be lucky and good.

—Birds probably can't dive when you're flying in ground effect. ➤

Outstanding Individual Safety Achievement Award

On 1 Apr 91 at approximately 1100, an aircraft crew chief was performing an engine run as part of a hot preflight inspection. During the engine run, the number two engine area caught fire. The crew chief initiated emergency procedures and called in a ground



MSgt Phillip R. Estrem
354 AGS, 354 TFW
Myrtle Beach AFB SC

emergency. The fire was located in an area of the aircraft where the internal extinguisher system would not reach. Airman First Class Robert B. Rubio was working on an adjacent aircraft when he heard a loud boom and saw flames coming from the engine area of aircraft 78-0587. Airman Rubio immediately responded with a flight line type fire extinguisher. He attempted to extinguish the fire while the crew chief continued his emergency procedures. Master Sergeant Phillip R. Estrem was approximately four aircraft parking spots away when he heard the ground emergency call come over the radio. He immediately grabbed the nearest fire extinguisher and ran to assist Amn Rubio. Through their combined efforts, they were able to successfully extinguish the engine fire prior to the arrival of the fire department. Their quick response undoubtedly saved not only an aircraft, but also other aircraft in the immediate area. More importantly, they

may have saved the crew chief's life. MSgt Estrem and Amn Rubio averted a potentially life-threatening situation and prevented the loss of a vital Air Force aircraft which earned them the TAC Outstanding Individual Safety Achievement Award.



A1C Robert B. Rubio
354 AGS, 354 TFW
Myrtle Beach AFB SC

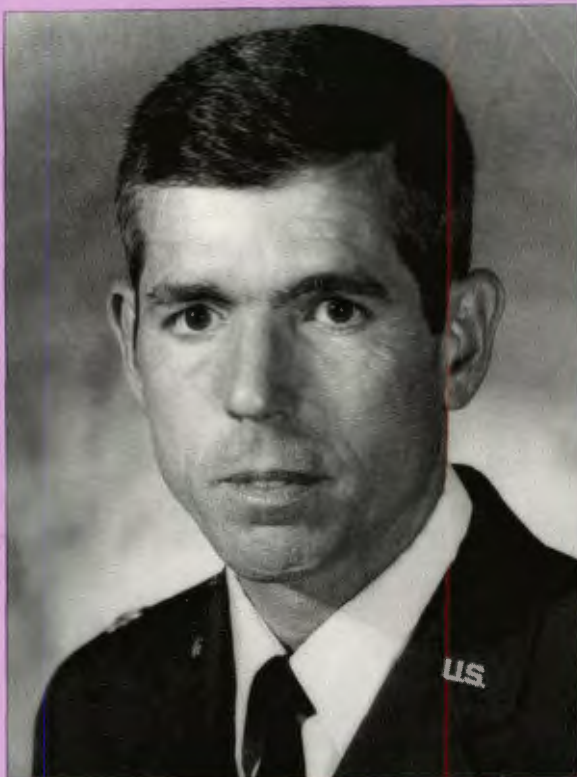
Aircrew of Distinction Award



On 13 May 91, Major Richard McKee, F-111D aircraft commander, and Captain Gregory Wiley, weapon systems officer, were number two of a two-ship surface attack instructor upgrade mission. The profile consisted of a low-level terrain following ingress to Melrose Tactical Bombing Range for twelve tactical deliveries. The crew was flying 400' AGL and 550 KTS on final approach for a tactical loft maneuver when a bird impacted the radome of the aircraft. The radome shattered and as it collapsed backwards over the left angle of attack probe, debris was ingested into both engines. The radome not only broke the angle of attack probe and the pitot probe, but it also severely obstructed Maj McKee's vision. With no pitot static instruments, no reliable angle of attack information, limited visibility, both engines compressor stalling, and the aircraft intermittently pitching and rolling, Maj McKee immediately started a climb and made a knock-it-off call. Capt Wiley placed his hand near the ejection handle in anticipation of a bailout call and selected EMER on the IFF. The crew

then quickly accomplished the before ejection checklist and turned toward the controlled bailout point. The number one aircraft in the formation rejoined with Maj McKee's aircraft providing him with essential altitude/airspeed information and reported fireballs shooting from the rear of the number one engine. While climbing to a safe altitude, Maj McKee assured Capt Wiley that he had control of the aircraft and turned off the pitch damper in accordance with the radome failure checklist alleviating the uncommanded pitch maneuvers. During the climb, the number one engine instruments were fluctuating wildly, and Maj McKee selected full afterburner on the number two engine to sustain the climb. Upon reaching 10,000' MSL, the crew completed a controllability check; and when satisfied the aircraft was controllable, they turned toward the airfield. Maj McKee skillfully maintained formation position despite the deteriorating situation. En route to the field, the afterburner on the remaining engine failed and

would not re-light. In addition to having no reliable airspeed or altitude indications and limited forward visibility, the crew now had the number one engine in idle power and the number two engine in military power with no afterburner. The aircraft began to lose airspeed because of the reduced thrust, and Maj McKee immediately coordinated with the SOF for an opposite direction landing. The crew visually acquired the runway and began a descent toward the field. Due to a higher than normal angle of attack and the radome damage, Maj McKee could not see the runway. With Capt Wiley monitoring the engines and runway alignment and the chase aircraft providing altitude, airspeed, and attitude information, Maj McKee performed a flawless landing in a critically damaged aircraft. After crash recovery personnel arrived on the scene, they were directed to shut down the engines and ground egress. The professional airmanship and exemplary flying skills demonstrated by Maj McKee and Capt Wiley saved a valuable combat resource earning them the TAC Aircrew of Distinction Award.



Maj Richard P. McKee
524 TFTS, 27 TFW
Cannon AFB NM



Capt Gregory E. Wiley
524 TFTS, 27 TFW
Cannon AFB NM

It's September 1991 ... *Do we know where you are?*

Have you been receiving your copies of *TAC Attack* regularly? We often get some copies back from the post office as undeliverable and, unfortunately, we haven't a clue as to where you may have moved or how your address may have changed.

If your copies are shipped directly to you, take a moment (before anxiously ripping off the wrapping to read another informative, exciting, all around super issue of *TAC Attack*) to ensure your address is accurate

and up-to-date. If it isn't, send us a card or letter, or call us at (804) 764-3658 (DSN 574-3658). Our address is always at the bottom of the Table of Contents page. Just be sure to include your old address, so we can find you in our file listings. This is also an excellent time to adjust your quantity requirements up or down, and you can do it all on an AF Form 764a.

If your copies come through a Publications Distribution Office (PDO), and you experience

delivery difficulties or wish to modify your address or requirements, then they are the folks you need to contact.

In this time of realignments, deactivations, and closures, we anticipate a surge in delivery problems. Don't let us send a precious pack of *TAC Attack* magazines off to some locked and deserted building. **KEEP US INFORMED**, so we can keep you informed.

Remember, nine other people are waiting to read this!



Lt Col Harley Davidson
602 TAIRCW/SE
Davis-Monthan AFB AZ

I guess I can blame my 17-year-old son. He said he wanted a motorcycle. Since he knew that I had ridden motorcycles in my younger days and had a soft spot in my heart for a good machine, he apparently saw me as an "easy mark," and I was. I said, "Okay," but only after I was sure he fully understood and accepted the first reality of bike riding. Reality number one goes like this: "If you ride a motorcycle, sooner or later you **will** crash." The question is not "**if**," but rather "**when**" and how "**severe**" the crash will be. He said he understood totally and still wanted a bike. I recognized in him the true spirit of a 17-year-old—lots of courage, but not much common sense. However, the matter was settled; we would get a bike. You notice I said "WE." I knew it would be impossible to have a motorcycle

If you ride a motorcycle, sooner or later you will crash. The question is not "if," but rather "**when**" and how "**severe**" the crash will be.

sitting in the driveway without me taking it for an occasional spin.

A few days later, I had a line on a good bike. It wasn't the 170 mph "bullet bike" that my son wanted, and it wasn't exactly the "chopper" that I wanted, but it was a good compromise, a street bike with enough horsepower to move in and out of Tucson traffic, but not fast enough to win any races. Everyone knows that if a dad hands a 17-year-old a machine that is reported to go 170

miles per hour, it's just a matter of time before the boy checks it out for himself.

Next came the final stipulation. My son would have to get some formal motorcycle training. Sure, I thought about training him myself, but decided I just didn't have the time and told him he would have to attend the Davis-Monthan base motorcycle course. I knew it had a reputation as one of the finest available. He quickly agreed.

Upon taking possession of the motorcycle, I proceeded directly to the base motorcycle range with three purposes in mind. The first was to sign my son up for the motorcycle course. The second was to have the chief instructor give the bike a good safety check; and finally, I would call upon all my motorcycle prowess from yesteryear and personally put the bike through its paces. I found Staff Sergeant Rydzak, course chief instructor, to be extremely helpful. He enrolled my son, checked my bike over, and said he would come out and watch while I gave the bike a workout. The next few minutes were exhilarating. There I was, Harley Davidson, mounted solidly on a Honda, racing around the range, head locked straight ahead, sleeves rolled up, and knees dangling in the wind. It felt great! I was back in the saddle again! It didn't take long to prove to myself that I had totally mastered this particular piece of Japanese ingenuity. I then pulled up alongside the chief instructor, shut off the engine, and awaited his accolades. Sgt Rydzak grinned at me and said he could tell that I had previous experience, but he did notice I had some bad habits: Head locked straight ahead, sleeves rolled up, and knees dangling in the wind to name just a few. Then he hit me with the ultimate insult, he actually suggested that I might want to sign up for the course! Obviously this guy didn't realize that I was a graduate of the world's finest motorcycle course, the "school of hard knocks." Why, at the age of 14 I was teaching myself to ride motorcycles. I had even soloed on a monstrous vintage "Harley Davidson" that was at least three times too big for me and lived to tell about it. I had extensive experience riding on asphalt, dirt and ice packed roads. In fact, I had even crashed on asphalt, dirt, and ice packed roads. I mean, with that kind of experience, what could this guy possibly teach me? So, I smartly



"Harley-Davidson" RIDES AGAIN

answered the chief instructor, "Sure, I'll take the course with my son." What? Had I really said that? I guess I did.

I showed up for class the first day. We began with the basics. I tried not to yawn—bad example for my son, you know what I mean. But, then the instructor began talking about all kinds of strange

Then he hit me with the ultimate insult, he actually suggested that I might want to sign up for the course! Obviously this guy didn't realize that I was a graduate of the world's finest motorcycle course, the "school of hard knocks."

things (basics) that I had never really considered. I concluded that many of my old riding habits were absolutely wrong and probably contributed to some of my past spills. I was completely blown away. Was it possible that the "school of hard knocks" had graduated an idiot? It was a distinct possibility. I decided I'd better listen up.

The next day on the riding range was a real eye opener and somewhat embarrassing, because my son's performance was distinctly better than mine. He was simply practicing the techniques he had been taught in class. I, on the other hand, was struggling to rid myself of bad habits. It was not an easy task. I noticed some other "experienced" riders were having the same problem. I realized that without the proper learning foundation, a so-called "experienced" rider is just another accident waiting to happen. Looking back at my own riding past, I had proven it—more than once.

The instructors were outstanding (all volunteers I might add). They were true professionals and their genuine concern for the


students was obvious. Oh sure, they occasionally used the "drill sergeant" approach when we, as a group, demonstrated poor judgment or mass ineptness, but even then their real concern showed through. Whenever I did it wrong, I was sent back to do it again and again until I did it right, no slack for anybody in this course. But when I did it right, there was always a big smile, thumbs up, or a pat on the back. I was always motivated toward improvement.

Using a building block approach, we moved into more advanced maneuvering and strategies for survival. It dawned on me that if I had been armed with this kind of intellectual and practical knowledge 20 years ago, I would have spent more time upright and less time in the prone position sliding down country roads.

So, did I have a change of heart after I took the course? I certainly did! Clearly "experience" does not equate to "professionalism." Professionalism, in any business, means **learning, discipline, and doing it right** the first time.

Does being a motorcycle professional mean I'll never crash? Certainly not, but it does mean a drastically reduced risk. Statistically, 90% of all motorcycle mishaps involve nontrained people. Properly trained people are simply less likely to get into critical situations; and when they do, they at least have the skills to minimize the consequences. That's what the USAF motorcycle course is all about, learning professional motorcycle riding skills to minimize risk.

Do I recommend the USAF motorcycle course? Absolutely! It doesn't matter if you're a DOD employee, active duty member, a dependent, or an old Harley Davidson like myself. If riding a motorcycle is in your blood, then take the course. If you are an experienced rider, but have no formal training, bite the bullet, swallow your pride and take the course like I did (you may want to consider the advanced course). Just sign up—trust me. Hey, would a Harley Davidson ever lie?





Ground Safety Award of the Quarter

Mr Davidson is the supervisor of the Technical Services unit for Training Systems Center (TSC), 4444th Operations Squadron. He also serves as the Squadron's Ground Safety Representative and Assistant Manager for Environmental Safety. His efforts in both of these critical areas helped the Squadron to have one of the finest Safety/Environmental programs at Luke Air Force Base. His areas of emphasis are employee safety education and hazardous materials minimization/elimination. The factors that drive the programs are personnel safety, regulatory compliance, and personal/organizational liability.

As the squadron safety representative and assistant HAZMAT program manager, Mr Davidson ensures the requirements of AFR 127-12 are implemented and adhered to. For example, he set up CPR

training for personnel who work in high hazard areas, so they are trained to provide CPR to a coworker in case of an emergency. He received a Certificate of Recognition from Brig Gen Browning, the 832 AD/CC, for his "flawless safety management book and top quality program." In addition, the squadron received an "Outstanding" rating on the Wing Annual Safety Inspection, and the 832 AD/Safety Office Ground Safety Trend Analysis report cited Mr Davidson's outstanding program as "most notable" of the 23 unit inspections they conducted.

Working as Assistant Manager of the Environmental Program, he attended several seminars and training sessions dealing with the care, use, and handling of hazardous materials. He used this training and knowledge to improve the Hazardous Material (HAZMAT) program and prepare the base's first Prefire

and Hazardous Response Book. This book identifies all the work areas in TSC, as well as every process, to include all related chemicals and Material Safety Data Sheets (MSDSs). The Base Fire Department cited the fire-plan book prepared by Mr Davidson as "the example" for other units to go by. The book will be presented to the Fire Chief's Conference as an example of how every unit can vastly improve the safety of both organizational and fire department personnel.

Mr Davidson actively participates in the TSC in-house Environmental Protection Committee which meets monthly to address concerns such as Material Safety Data Sheets, Chemical Storage, and proper labeling for Hazardous Materials. One of the many accomplishments completed by Mr Davidson in this capacity is a computer data base listing all the hazardous materials used in

the squadron. The data base provides immediate access to product safety information to ensure the safe storage, handling, and use of these materials. Because of his experience and expertise, Mr Davidson was requested by name to be a member of the Luke Air Force Base Environmental Compliance Working Group which meets monthly to identify and resolve base environmental issues.

Mr Davidson set up the in-house chemical spill teams for the squadron. These teams practice different spill response situations each month to ensure they are prepared in the event of an actual spill. The teams meet after each practice cleanup to compare notes and improve their response and safety procedures. Their motto is "Practice Makes Perfect" and personnel safety is the reason behind this great idea.

Mr Davidson frequently conducts Commander's Call safety briefings to squadron personnel on topics such as "101 Critical Days," Fire Prevention, Proper Lifting



Mr Thomas R. Davidson
4444 OPS, 832 AD
Luke AFB AZ

Techniques, and Safe Driving. In addition, he prepares a variety of "wallet size" safety cards for squadron personnel to refer to and keep with them. The cards provide detailed information about safety topics such as heat exhaustion, choking first aid, and so on.

Mr Davidson has done an exceptional job of ensuring the safety and health requirements of all squadron personnel are the first priority. He goes the "extra mile" by performing several self-inspections annually to ensure the squadron is in compliance with all safety regulations and personnel are working in the safest environment possible. This type of performance, initiative, and professional attitude toward the squadron safety program helped to earn Mr Davidson the Federal Executive Association Award for "Supervisor of the Year," 1990-91. Mr Davidson's contributions to the Ground Safety Program at Luke AFB have earned him the TAC Ground Safety Award of the Quarter.



Weapons Safety Award of the Quarter

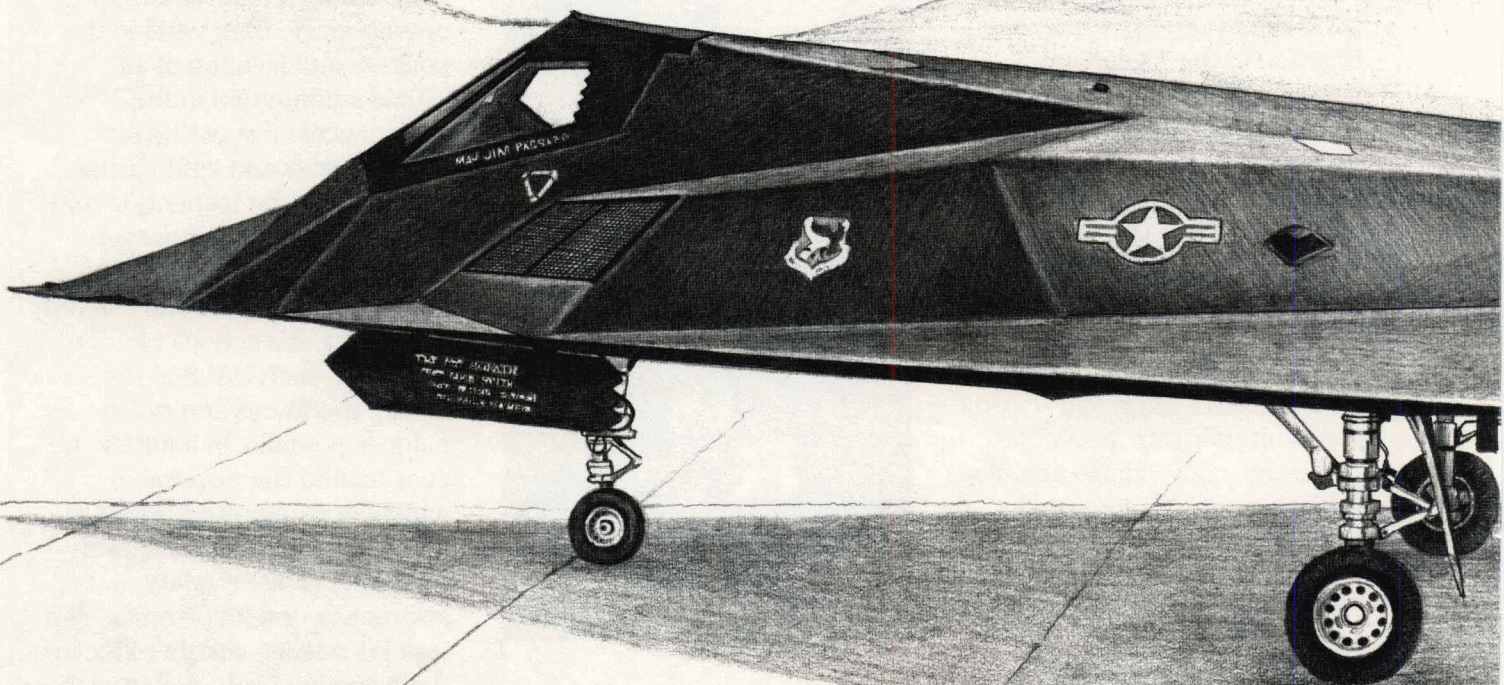
Staff Sergeant Larry White is the 550th Combat Armament Support Team Chief with an excellent understanding of all safety standards, requirements, and precautions pertaining to each maintenance function in the Armament Systems Branch. In addition to being an integral part of the squadron safety council, he constantly contributes to enhancing weapons safety in the organization. He planned and executed a project to configure the hot gun area which is used to clear and repair jammed M61A1 gun and ammunition drum assemblies. His design consolidates all safing devices, maintenance stands, hand tools, residue containers, and empty ammunition cans necessary to expedite handling and repair of jammed assemblies. His improvement was tested recently on two separate occasions. Both instances involved damaged 20mm ammunition inside



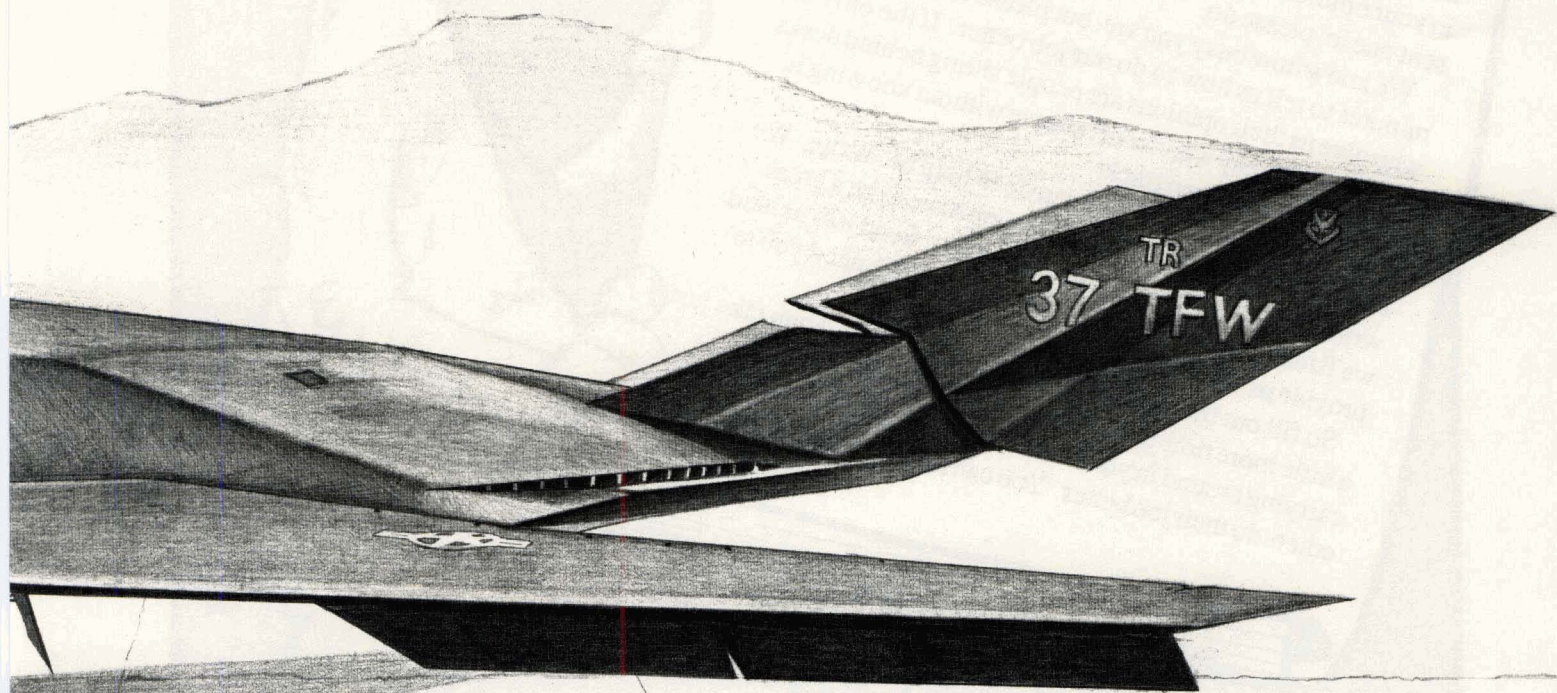
SSgt Larry White
405 EMS, 405 TTW
Luke AFB AZ

Universal Ammunition Loading Systems (UALS). Sgt White's first concern was to suspend other tasks in the immediate area posing a possible hazard to the clearing and disassembly operation. He then verified the position and location of all visible ammunition in the system while inspecting for loose powder and bent casings. Based upon the inspection and the type of malfunction each loader had sustained, he systematically safed and cleared both units. His actions restored service to each UALS in the most expeditious and safest manner possible. In addition, he coordinated the disposal of damaged ammunition with the Explosive Ordnance Disposal Team. Sgt White's safety awareness, careful planning, and task knowledge clearly reduced the hazardous potential in each of these situations and earned him the TAC Weapons Safety Award of the Quarter.

37 Tactical Fighter Wing
Tonopah Test Range NV
Colonel A. C. "Al" Whitley, Jr., Commander



F-117 STEALTH



Bailey -91-

HELP US HELP YOU

Last month, we included two ballots in each magazine for you to tell us how we can better serve you. Since we only send out one magazine for every ten people in our audience, we know many of you didn't have a chance to send in your opinions, so here's your opportunity. If you haven't sent one in, please do.

We know how busy you are, but please take a few extra minutes to tell us how to do our job better. If the only ones who give us their opinions are people sitting behind desks like ours, we may wander off course without knowing it. You can... keep us on track.

There's another thing you can do to help us: Write. We rely on your articles. Don't think you have to be a great writer; just communicate your message. Send it to us, and we'll take care of the rest—that's our job. We need you to provide us with fresh ideas.

So fill out the survey form and mail it to us. Then take just a little more time to write us about that idea you've been carrying around in your head for a while—the idea that'll help others do their job better. You can make the magazine better!



TAC Attack

Survey

1. What is your rank or grade and time in service?

2. What is your job?

- a. pilot
- b. WSO
- c. other aircrew member
- d. aircraft maintenance
- e. weapons
- f. flight medicine
- g. air traffic control
- h. life support, survival
- i. safety
- j. other (specify) _____

3. What is your age?

- a. under 21
- b. 21-25
- c. 26-30
- d. 31-35
- e. 36-40
- f. over 40

4. Your sex?

- a. male
- b. female

5. How much formal education have you had?

- a. didn't finish high school
- b. high school
- c. some college, but no degree
- d. associate's degree
- e. bachelor's degree
- f. master's degree or higher

6. How often do you read TAC Attack?

- a. every month
- b. almost every month (at least six a year)
- c. occasionally (from three to five a year)
- d. rarely (once or twice a year)

7. How often do you read these regular departments? Answer with corresponding letter.

- R - rarely
- O - occasionally
- N - never
- F - frequently
- A - always

Fleagle _____
 Angle of Attack _____
 TAC Tips _____
 Chock Talk _____
 Down to Earth _____
 Short Shots _____
 TAC Safety Awards _____
 Weapons Words _____
 Aircrew of Distinction _____
 Other Awards _____
 Phys Bizz _____
 TAC Tally _____
 Been There, Done That _____

8. What kinds of articles should we print more of?

- a. _____
- b. _____
- c. _____
- d. _____

9. What kinds of articles should we print less of?

- a. _____
- b. _____
- c. _____
- d. _____

10. Of the stories we printed last year, what was your favorite?

11. What story in the last year did you like the least?

12. Overall, do you think TAC Attack is-

- a. interesting and useful
- b. interesting, but not useful
- c. useful, but not interesting
- d. of no value at all

13. Has a TAC Attack article ever saved your life or kept you from doing something dangerous? If so, briefly describe the situation.

14. How does TAC Attack compare to other safety magazines?

- a. better than most
- b. about the same as most
- c. worse than most
- d. don't read any others

15. How do you like our layout and design?

- a. excellent
- b. good
- c. fair
- d. poor
- e. terrible

16. What magazines or newspapers do you regularly read?

- a. _____
- b. _____
- c. _____

17. What changes would you make to TAC Attack if you could?

- a. _____
- b. _____
- c. _____
- d. _____

18. Other comments:



FOLD

CUT

FOLD

Official Business

Editor, TAC Attack
HQ TAC / SET
Langley AFB VA 23665-5563



EXPLOSIVES HISTORY—The USAF Nonnuclear Munitions Safety Board

**Maj Jonny J. Hepler
HQ TAC/SEW**

Almost anyone with any appreciable time in munitions is familiar with the series of explosions that shook the flight line in 1965 at the Beinh Hoa Air Base, Republic of Vietnam. The resultant loss of life and equipment had an immediate impact on the nation's war fighting capability and attracted the attention of our national leaders at the highest level. This single tragic event caused the Air Force to examine the way it evaluated the safety of conventional weapons before they were brought into the munitions inventory. As a direct result of the Air Force procedural evaluation, the Nonnuclear Munitions Safety Group (NNMSG) was chartered in 1965 and had its first meeting in 1966. The group was comprised of representatives of the separate major air commands.

The function of the NNMSG was to review each new Air Force conventional weapon to ensure it was designed with enough built-in safety features

to prevent unintended functioning. Although it changed its name to the Nonnuclear Munitions Safety Board (NNMSB) in 1969, its primary purpose did not change. Engineering and technical support for the NNMSB is provided by the Air Force Development Test Center's Directorate of System Safety; and based on the center's analysis, the NNMSB determines if an item is safe enough to be developed further or brought into the active munitions inventory. It ensures safety designs are established and incorporated to protect personnel and resources from inadvertent detonation of munitions from manufacture up to and through a safe and reliable release from the aircraft. They have done an exceptional job.

This year marks the Silver Anniversary of the NNMSB. For the past 25 years, it has made significant contributions in research, development, testing and advising program managers on design-safety matters and assessing hazards involved with testing new weapons. Based on its numerous outstanding accomplishments, it has developed a national and international reputation for excellence.

We commend them for their dedication and entreat their continued efforts for quality. Thanks for a job well done! Keep it up!

ON-THE-JOB EMERGENCIES CAN BE SERIOUS, EVEN FATAL

MSgt Gary Reniker
442 TFW
Richards-Gebaur MO

People have come to expect emergencies at home. They keep first aid kits on hand and emergency numbers by the phone. But I know many Air Force people that seem to think they are immune to emergencies in the work place.

The truth is, emergencies can happen anytime,

anywhere. Furthermore, some emergencies that might happen on the flight line or office, such as heart attacks, strokes or even choking, can be life threatening.

All of us should be prepared for health emergencies. We often underestimate the severity of a medical problem, be it injury or illness; and this failure to identify and respond quickly to an emergency can prove fatal.

To help recognize an emergency, the American College of Emergency Physicians says the following are warning signs:

—Sudden pain at any location in the body. For example, chest pain or pain/pressure in the upper abdominal area (heart attacks frequently are mistaken for indigestion).

—Sudden dizziness, weakness or change in vision.

—Faintness.

—Difficulty in breathing; shortness of breath.

—Severe or persistent vomiting.

These may not always signal an emergency. But it is best to call for help and let medical personnel be the judge of the situation.

At work, just as at home, be sure to keep numbers of emergency services phone numbers posted near the telephone. When you call for help, speak calmly and clearly. Give your name, location, phone number, the location of the patient, and the nature of the problem. Never hang up until the dispatcher tells you to do so.

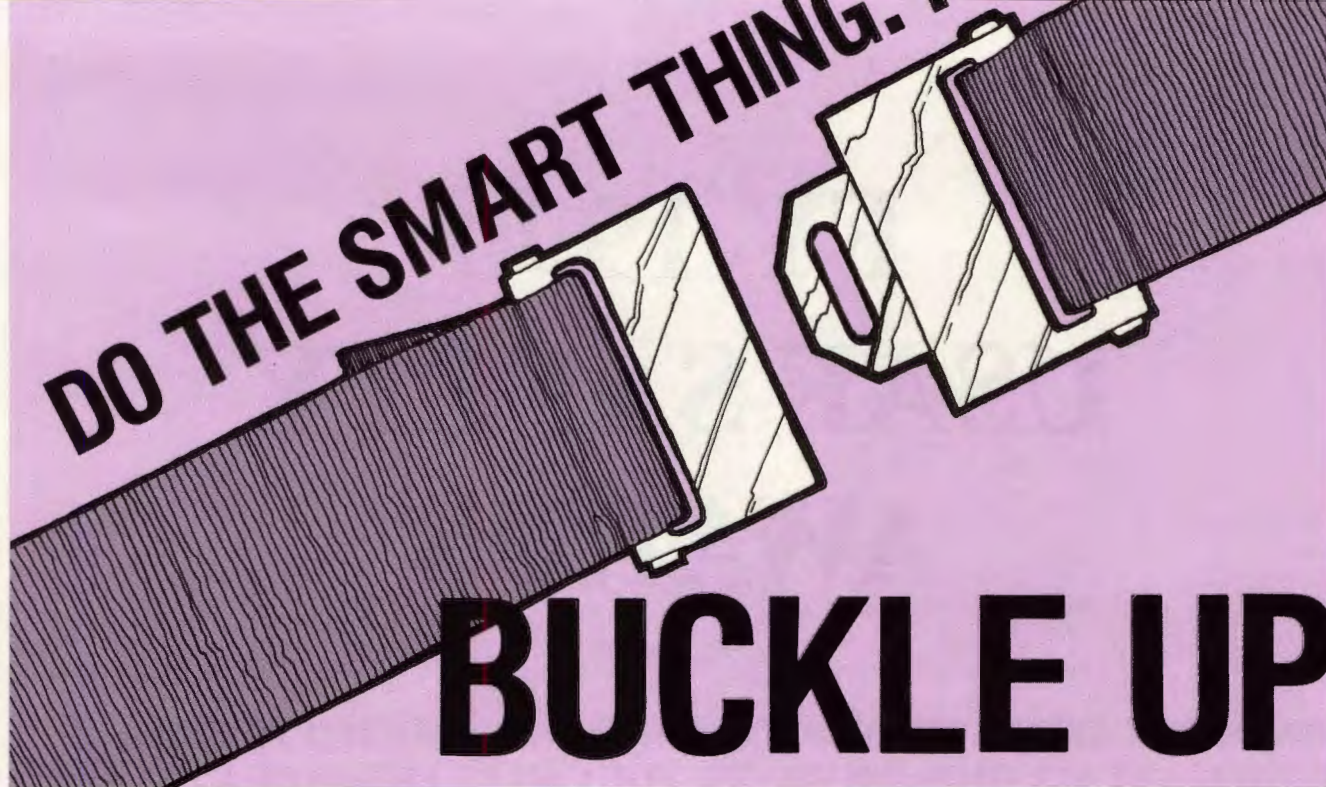
In the emergency medical room, patients are treated based on the severity of their condition. If possible, the patient should be prepared to list specific circumstances surrounding the emergency (when the chest pain began, etc.); but if the patient is unable and you have accompanied him or her to the hospital, you may be called upon to provide as much information as possible.

Think ahead and have a plan. Don't let an unexpected on-the-job emergency be a fatal surprise.

DOWN TO EARTH



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



WHY

SSgt Gregory M. Schmidt
552 CRS
Tinker AFB OK

It began as a normal type of Saturday, a day for running all the errands that you can't do during the week. As I got into my vehicle to run one of those errands, out of habit, I put on my seat belt and ventured forth to battle the streets of Oklahoma City.

I had just completed my mission and was heading towards home. About a block away in front of me, I noticed a Greyhound bus at a traffic light. I was stopped at another light. As the light changed to green, I started thinking about how to maneuver around that bus. I was on a four-lane street with the bus on the inside lane. Just then I saw a cloud of smoke and dust. At first, I thought it was just the Oklahoma wind blowing again; but as the dust cleared, I saw a vehicle tire fall to earth and roll down the street. I stared at the accident with disbelief, then shock. The bus had moved slowly from the light and then stopped. My heart raced as I started to think about what happened as I drove up to the

accident scene. I was saying to myself, "Okay, I know CPR and some first aid from my buddy care classes." I hoped that I would not need to use the training I had received. As I approached the accident, I saw a large car had run the light and hit the side of the bus. There was extensive damage to the vehicle from the windshield to the front bumper, but the windshield was not shattered. As I saw this, I said to myself, "Good, nobody went through the windshield."

That's when I saw the driver. He was halfway out of the driver's window and was bleeding profusely, like someone had just turned on a faucet. Several people had seen the accident, and they were checking on everyone in the bus. Others were looking to see if anyone else in the car was hurt. There was no one else in the car; the driver of the car was dead. There was nothing anyone could do for him now. The one thing he could have done was to put his seat belt on when he first got in his vehicle.

As I got back into my car after the reports were made and the accident scene cleaned up, I again put on my seat belt. I'm glad I do it by habit. I just had to wonder **WHY** the other driver had failed to buckle up. Now on those normal Saturdays when I continue to use my seat belt, I always recall the accident scene and wonder **WHY** the driver, now dead, decided against using his seat belt. Did he think his seat belt was not needed? Did he think it was too restrictive? Or on this normal Saturday, did he just forget to buckle up? The driver and the answer are both gone, but I still wonder **WHY!**



FY 1990 USAF SAFETY AWARDS

**CONGRATULATIONS TO EVERYONE WHO CONTRIBUTED TO THESE
SIGNIFICANT ACCOMPLISHMENTS. YOU CAN BE PROUD OF A JOB WELL
DONE!**

USAF FLIGHT SAFETY PLAQUES are awarded to the following organizations for meritorious achievement in mishap prevention:

**56 TTW MACDILL AFB FL
57 FWW NELLIS AFB NV
355 TTW DAVIS-MONTHAN AFB AZ
366 TFW MOUNTAIN HOME AFB ID
128 TFW MADISON WI (ANG)**

**552 AWACW TINKER AFB OK
325 TTW TYNDALL AFB FL
USAF TAWC EGLIN AFB FL
49 TFW HOLLOMAN AFB NM
388 TFW HILL AFB UT**

USAF MISSILE SAFETY PLAQUES are awarded to the following organizations for outstanding achievement and contribution to missile safety:

**832 AD LUKE AFB AZ
USAF ADWC TYNDALL AFB FL**

USAF EXPLOSIVES SAFETY PLAQUES are awarded to the following organizations for outstanding achievement and contribution to explosives safety:

**831 AD GEORGE AFB CA (Deactivated)
23 TFW ENGLAND AFB LA
836 AD DAVIS-MONTHAN AFB AZ**

USAF MOTORCYCLE SAFETY AWARD is awarded to the following organization for outstanding achievement and contribution to mishap reduction and safety education in motorcycling:

USAF ADWC TYNDALL AFB FL - CATEGORY III

THE KOREN KOLLIGIAN, JR. TROPHY FY 1990

FIRST LIEUTENANT JOHN D. NOAH
89th Tactical Fighter Squadron
906th Tactical Fighter Group
Wright-Patterson AFB OH

The Koren Kolligian, Jr. Trophy was established in 1957 in memory of First Lieutenant Koren Kolligian, Jr., declared missing in the line of duty off the coast of California on 14 September 1955. The Kolligian family established this memorial in honor of Lieutenant Kolligian's great feeling for the Air Force and love of flying. The award recognizes outstanding feats of airmanship by individual aircrew members. The trophy is awarded annually to the USAF aircrew member who most successfully coped with an in-flight emergency situation during the preceding year.

Lieutenant Noah displayed superior aerial skills in such a situation and safely recovered a valuable combat asset. This feat is indicative of the pride in performance and teamwork in action TAC has come to expect from tactical aircrews.

Congratulations--TAC Salutes You!



FY 1990 COLOMBIAN TROPHY

**57th FIGHTER WEAPONS WING
NELLIS AFB NV**

Established in 1935, the Colombian Trophy is one of the highest flight safety awards. It recognizes the tactical organization considered to have the most meritorious achievement in flight safety in a fiscal year.



FY 1990 COLONEL WILL L. TUBBS MEMORIAL AWARD FOR GROUND SAFETY

TACTICAL AIR COMMAND

The Colonel Will L. Tubbs Memorial Award for Ground Safety was established by the Directorate of Aerospace Safety to recognize the MAJCOM with the most effective ground safety program.

Fleagle

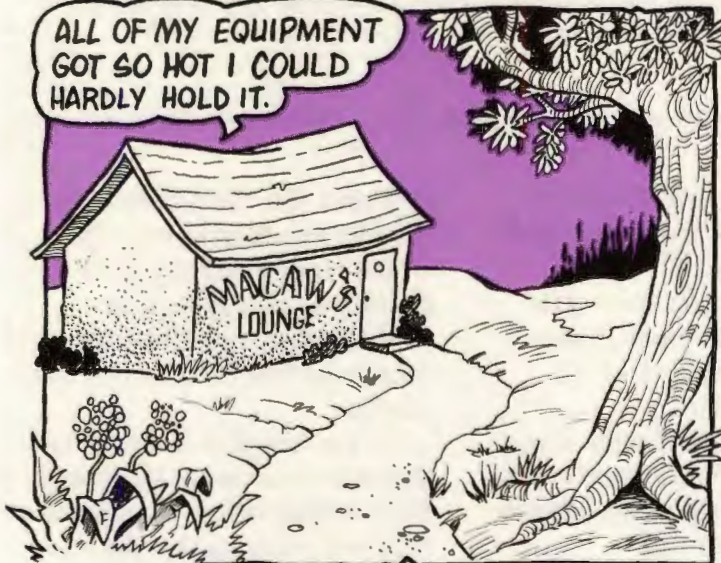
I TELL YOU, FLEAGLE, IT WAS TH' HOTTEST PLACE I'VE EVER SEEN.



TH'SUN BEAT DOWN TIL I FELT LIKE MY BRAIN WAS COOKED.



ALL OF MY EQUIPMENT GOT SO HOT I COULD HARDLY HOLD IT.



AND TH'SAND. EVERYWHERE I STOOD, SAND, SAND, SAND.

I GUESS FLYING OUT OF A DESERT IN A STRANGE COUNTRY DO TAKE SOME GETTIN' USED TOO.



FLYING...DESERT?



I'M TALKING ABOUT TH' BASE GOLF TOURNAMENT I WAS IN YESTERDAY.



Deadly Distraction

Maj Ed Brownstein
HQ TAC/SEF

In my position as TAC's A-10 Safety Project Officer, I have the opportunity to review many past and present mishap reports. You don't have to read many before you start to see some common threads among the majority of them. They fit into the cliché; "we aren't inventing new ways of crashing airplanes."

One of these common threads is distraction. In today's fighter environment, the sources of potential distractors are countless. We try to design out many of the sources of distraction, but we can't get them all. The engineers even try to design some distractions in to counter our own. Still, however, we hear of pilots landing gear up while the gear warning horn is sounding in their headsets or stalling the aircraft on final despite the distraction of stall buffet. Most of our distractors involve the intricacies of our mission. It might be a cosmic composite force, air interdiction scenario, or as simple as monitoring your wingman on a navigation sortie. Anything that distracts us from the primary task of flying the

Learn to expect the unexpected. Don't let these little surprises catch you off guard. When the unexpected occurs, as it usually does, learn to take it in stride and assign it priority number two or three as warranted.

airplane can have disastrous implications if we do not learn how to manage it.

Distractors can show up in mishap reports under many different labels. How about misprioritization?

Misprioritization is often simply a decision to focus attention on some distraction at the expense of your primary task.

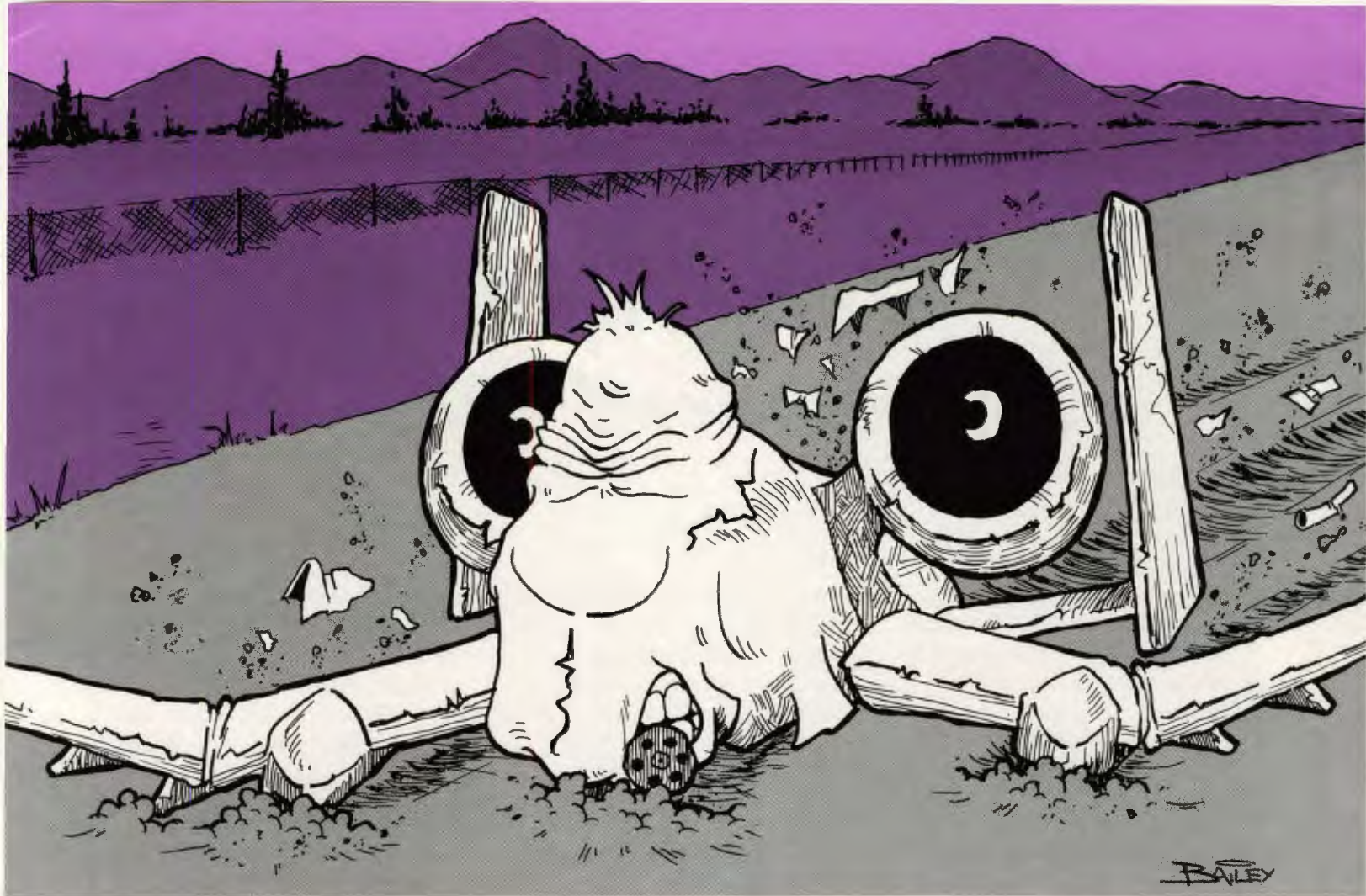
Distraction also has its part in that ever-famous syndrome, "lack of situational awareness."

Distractors serve to undermine our awareness. One could argue that most controlled flight into terrain accidents have distraction as a major contributor.

One such mishap involved a two-ship of A-10s that were part of a composite close air support package during a Green Flag exercise. Dense communications jamming on

UHF and VHF frequencies was used by opposing forces. The A-10s rendezvoused with their forward air controller and proceeded to work the target area delivering BDU-33 practice bombs.

On the first attack, the A-10s ingressed in a wedge formation. The number two A-10 and the FAC were attacked by aggressor air and the flight aborted the attack. The flight lead then called for a reattack which was successful. During the egress from the reattack, the A-10s performed a prebriefed hook turn to place number two in a position to be the primary shooter for the next attack. During the turn, the lead A-10 lost sight of his wingman and did not reacquire him until after the mishap. The wingman attacked the target, attempting to deliver a string of 6 BDU-33s



from a 300 foot level delivery. The mishap pilot most probably set the weapons release switches incorrectly, which resulted in a release of only a single bomb. After the attack, number two executed a left rolling turn and impacted the ground approximately 3/4 NM past the target. The mishap pilot recognized the impending ground collision and initiated an out of the envelope ejection. He was fatally injured.

Why did this mishap happen? The short answer to the big question is, we aren't sure. The Safety Investigation Board stated that the mishap pilot lost situational awareness and allowed the aircraft to enter an attitude from which there was

insufficient altitude to recover. The board determined this occurred for one or a combination of the following reasons:

1. Airscoring the bombs.
2. Looking for aggressor aircraft.
3. Looking for his flight lead.
4. Looking inside the cockpit at his armament control panel.

Any or all of the above are valid enough to explain how this mishap occurred, but they still don't explain why. Why would he be looking for aggressor air at a time when he should be looking at his aircraft's attitude? Why would he devote his attention to the armament control panel at the expense of flying the airplane? The answer

is that he became distracted. The weapons release error was unexpected and distracted him. The attacks by the aggressors distracted him during his attack and egress. They were also unexpected events.

This points to one method of handling distractions in the cockpit. Learn to **expect** the unexpected. Don't let these little surprises catch you off guard. When the unexpected occurs, as it usually does, learn to take it in stride and assign it priority number two or three as warranted. Priority number one is to always fly the airplane. "Maintain Aircraft Control" not only works in an emergency, but should be the first reaction to any distraction. ➤

Outstanding Unit Safety Achievement Award

During the recent Operation Desert Shield/Desert Storm deployment, the 69th Tactical Fighter Squadron demonstrated exemplary mission accomplishment while maintaining a zero mishap rate and an outstanding safety record.

On 5 Jan 91, the 69th deployed 24 aircraft in early morning darkness from Moody AFB GA. After stopping overnight in Spain, the 69th continued to the United Arab Emirates (UAE) to arrive with all 24 aircraft with no aborts or in-flight emergencies. Upon arriving, the pilots, operations, and maintenance personnel began training for theater operations. At the same time, a ten-building squadron was built from scratch, training sorties were flown, and the 69th prepared for sustained combat operations.

On 16 Jan 91, the 69th launched its first aircraft to begin 43 consecutive days of combat operations. During this time, the 69th finished their squadron FOL in the UAE. On 23 Jan 91, the 69th deployed forward to an established A-10 base without F-16 compatible facilities. Operations established integrated combat turnaround and hot pit refueling procedures, mission planning cells, and radio communications

with the flight line without missing one combat sortie. No flying or ground mishaps occurred nor was mission accomplishment degraded in any way, even though SCUD attacks were experienced nightly. During these 43 days of combat operations, the 69th was tasked for many different types of missions. SCUD missions became the highest priority with pilots taking off at night and coordinating with airborne assets for possible targets. Other missions included last

minute tasking in support of SAR operations. These missions were further complicated by blacked out ingress and egress, delivery of ordnance through undercast, and numerous aerial refuelings.

On 27 Feb 91, combat operations ceased. However, the 69th still had to redeploy to the UAE. Forty-one pilots, 24 airplanes, and over 200 maintenance personnel again moved operating locations. On 17 Mar 91, the 69th prepared to split their operations. Twelve airplanes and 25 pilots returned to Moody AFB. Again, the deployment was made with no aborts or emergencies. Twelve airplanes and 16 pilots remain in support of the peacekeeping force.

During Operation Desert Storm, over 1500 combat sorties were flown, mostly at night, yet only 12 aircraft aborted their mission due to weather or maintenance. The preparation, training, safety consciousness, and professionalism of the 69th combined with an outstanding team effort resulted in zero mishaps during sustained combat operations. The superb contributions to mission accomplishment with outstanding safety results have earned the 69th Tactical Fighter Squadron the TAC Outstanding Unit Safety Achievement Award.



**69 TFS, 347 TFW
Moody AFB GA**



TAC TALLY

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

* (SUCCESSFUL/UNSUCCESSFUL)

TOTAL			TAC			ANG			AFR		
JUL	THRU JUL		JUL	THRU JUL		JUL	THRU JUL		JUL	THRU JUL	
	FY91	FY90		FY91	FY90		FY91	FY90		FY91	FY90
2	22	22	1	10	14	1	12	5	0	0	3
1	7	13	1	3	7	0	4	4	0	0	2
1/0	17/1	17/0	0/0	6/0	9/0	1/0	11/1	6/0	0/0	0/0	2/0
0/0	0/2	1/1	0/0	0/0	1/1	0/0	0/2	0/0	0/0	0/0	0/0

CLASS A MISHAP COMPARISON RATE

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

TAC	FY91	0.0	0.0	0.7	1.8	2.2	2.2	2.2	1.9	1.7	1.8		
	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	3.8	2.0	1.3	3.9	3.2	4.0	5.2	5.0	4.9	4.8		
	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		
	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	2.3	2.4	2.6	2.9	2.7	2.5	2.5		
	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 JULY 1991

1st AF			9th AF			12th AF		
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"								
141	48	FIS	49	1	TFW	51	479	TTW
66	57	FIS	28	56	TTW	43	355	TTW
26	325	TTW	19	33	TFW	42	366	TFW
			15	23	TFW	37	27	TFW
			13	354	TFW	23	49	TFW
ANG			AFRES			DRUs		
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"								
462	119	FIG	123	482	TFW	178	552	AWACW
248	110	TASG	120	924	TFG	69	28	AD
222	138	TFG	108	906	TFG	48		USAFTAWC
195	112	TFG	83	507	TFG	40		USAFTFWC
164	155	TRG	70	917	TFG			

SAFETY

**DON'T JUST THINK IT,
LIVE IT**

THIS...



NOT THIS...

