

TAC ATTACK

SEPTEMBER 1990



BAILEY '90

ANGLE OF ATTACK

Last September our buddy Hugo visited those of us living along the east coast. It also became a part of the statistics which show that 50 percent of the hurricanes affecting the U.S. occur in—you guessed it—September! So the odds are even that one or more of our fighter wings will execute their hurricane plans this month. Have you ever looked at your squadron's evacuation plan? Does it have any provision for who will help out the families that remain behind, but whose sponsors have accompanied the jets? Who they gonna' call? Is your wife eight months pregnant or is there some other reason you shouldn't hurricane? If so, be sure to remind your supervisor/scheduler now, so they will plan to utilize your talents locally rather than deploy your body. And what about your personal hurricane plan? Candles and batteries are much easier to buy now, before the storm winds arrive. For the folks living near the east coast, we've printed some basic hurricane pointers on page 20.

Speaking of the basics—and no this is not going to be another “we have to get back to the basics” pitch—do we all understand the basics to be the same? You are probably reading this and saying “of course.” What is this person talking about? Well, when I recently discussed this question with Colonel Black, the 355 TTW/DO, I found out the real answer. He had asked his standeval folks out at Davis-Monthan to come up with an anonymous survey which was passed out to the aircrews. It dealt with the “standard” things we do from stepping to the jet, start, taxi, takeoff, all the way thru debrief. What he got back was a real eye opener. It demonstrated that not all of the “standards or basics” were really “standard.” Some procedures which many of the old heads considered obvious and the way to do business were accomplished differently by the newer guys and even



some of the old heads, depending on how they had been taught. In many areas the differences didn't really matter. But one thing for sure, since the survey, the pilots in the 355 TTW are a lot more careful about what they brief as “standard” and what they share in more detail during their flight briefings. I thought the survey was very useful, and we have reproduced a generic version on page 14. Take a few moments to sit down with some of your friends and discover what is and isn't standard at your airpatch. When you're finished, drop us a note about how it came out, or should we just assume it was standard?

Finally, we want to wish Major Martha J. M. Kelley and Senior Master Sergeant Denis P. Jones, both from our Weapons Safety Division, a fond farewell. Major Kelley will be expanding her knowledge and honing her skills at Air Command and Staff College at Maxwell AFB. Sergeant Jones will be sharing his expertise with the 51 TFW in Osan AB, Korea.

Happy Labor Day, pardner.

Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC ATTACK

DEPARTMENT OF THE AIR FORCE



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TAC SP 127-1

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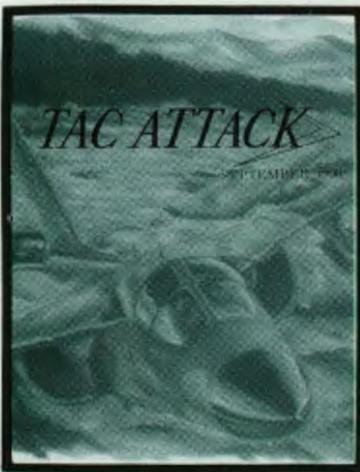
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COMPLACENCY: THE HIDDEN MISHAP FACTOR

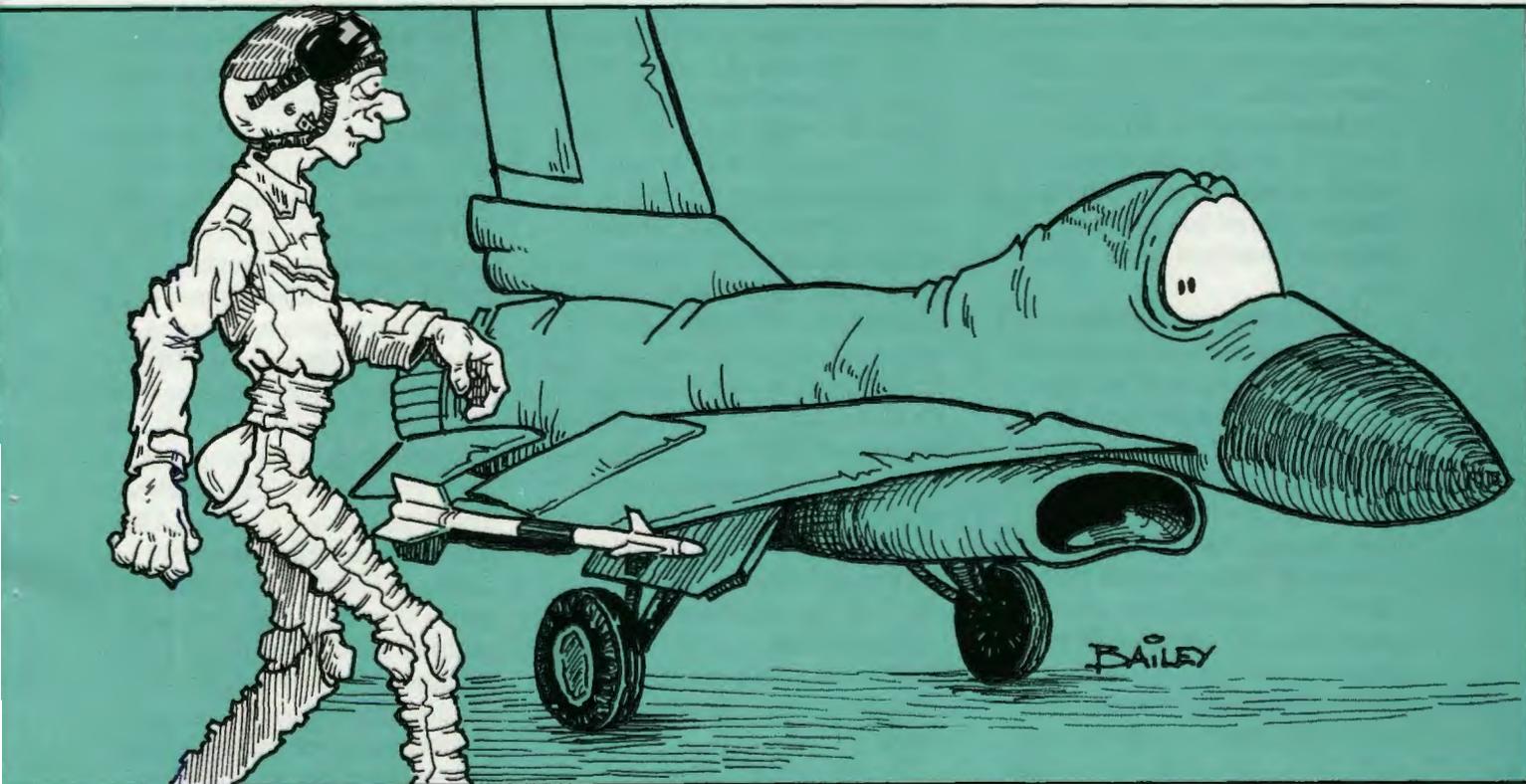
Me, complacent when I fly? I sure didn't think so, until I almost killed myself on a simple range mission.

Capt L. T. Wight
4 TFS/FSO
Hill AFB UT

Me, complacent when I fly? I sure didn't think so, until I almost killed myself on a simple range mission. I was an experienced wingman with about 400 hours in the F-16, but I had developed a bad habit—trying to complete all of the mission regardless of any aircraft system malfunctions. I had the "I'm experienced, I can hack it attitude." I wasn't about to let a simple systems malfunction stop me on a mission. However, a simple systems malfunction not only stopped me, but also very nearly resulted in a midair.

I was flying as number 2 on a low-level mission, when some "Queertrons" struck and threw my navigation system off to parts unknown. I thought "no problem" and continued flying at 300/500' AGL while I tried to fix my system. As we approached the range, I still couldn't fix it, but decided that all I probably needed was an altitude calibration (ACAL), which I could easily get (without needlessly bothering lead with my problem) during the briefed spacer pass over the target. So, without telling lead, I was trying to get an ACAL while flying route forma-

tion at 1,000 feet AGL during the spacer pass. On a normal day, this might have worked. However, this was no normal day and my jet would not take the ACAL. As a result, I channelized my attention on the systems problem and didn't notice the slight bank toward lead that I had induced. The only thing that prevented our impact was that I had also unintentionally developed a slight descent. I passed about 20 feet below lead as I crossed under him. Only then did I finally confess that I had a problem. This near mishap made a significant enough





COMPLACENCY: THE HIDDEN MISHAP FACTOR

impact on me that I pondered the causes behind it for quite some time. It shocked me to realize that I had become complacent in my daily flying. The concept of complacency killing people wasn't new. I had been a police officer in a large city prior to joining the Air Force. I knew the most likely time for an officer to be killed on duty was after about five years on the street. This is about the time that they think they have seen everything and they start missing the little trouble warning flags because "nothing has ever happened before." For pilots, it seems to happen when they start to get overconfident, somewhere around 400 hours in the jet. It tends to last until you get a good scare which wakes you up to your actual abilities. But, if you aren't as lucky as I was, you never wake up.

Shortly after my near-mishap, I began to notice in safety reports a trend of even experienced, high-time pilots and supervisors involved in "complacency" related mishaps. Thus, I began to think that no one is immune and that complacency may be a factor more frequently than we would like to admit. For example, how many times have you been rushed on a sortie or had to go to a spare aircraft and skipped some preflight items? You may have said to yourself, "This crew chief always does a good preflight—if he says it's

ready, I don't need to do a preflight myself." However, that may be the one day he was too rushed to finish his preflight and thought "Well, the pilot always does a preflight anyway . . ."

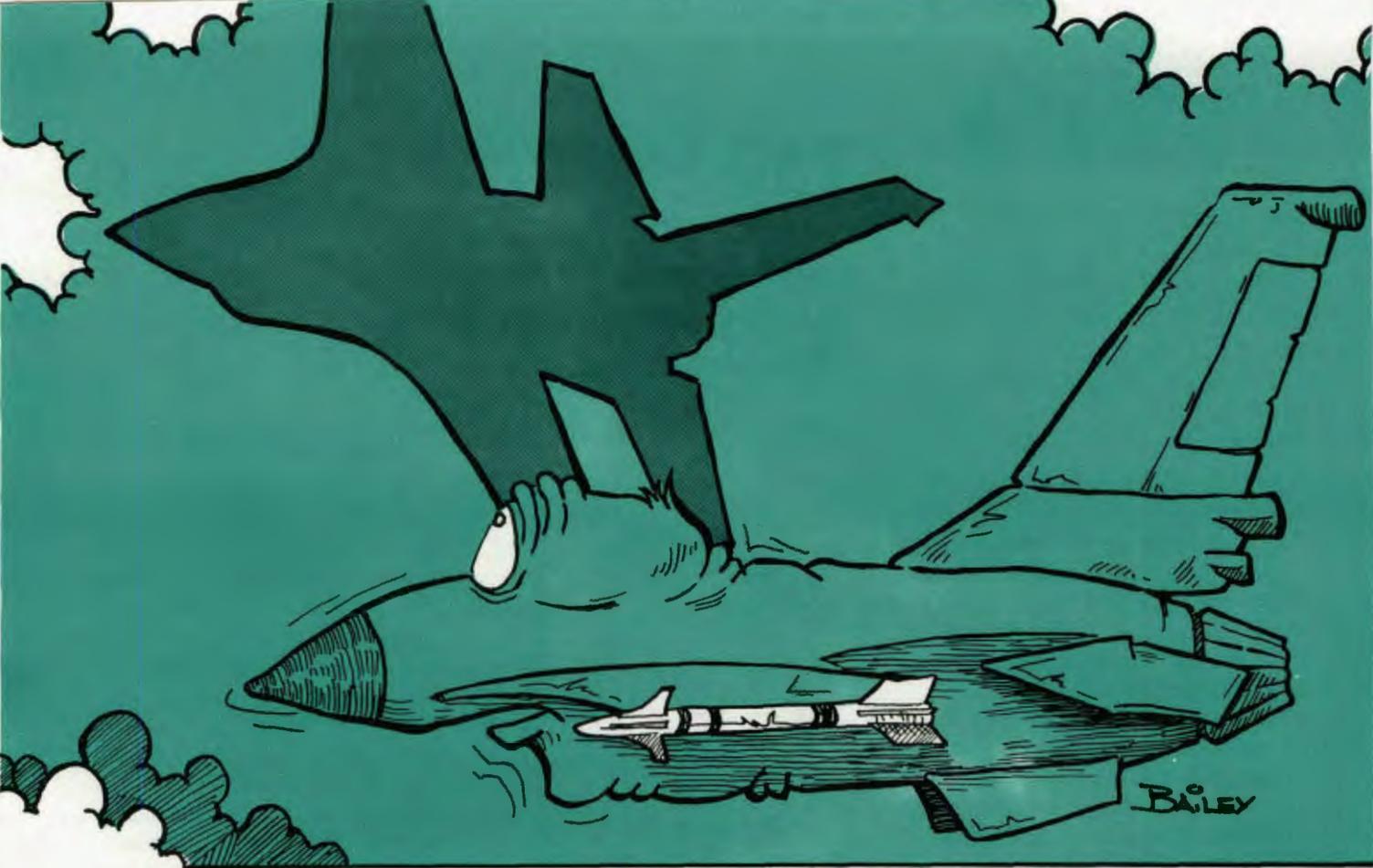
I know, you probably would never officially admit this happened to you. But since you've probably had a friend who did something like this, the question becomes "What can be done to break this vicious circle?" The way I went about it was to leave my ego outside as I entered squadron and admit that I had a complacency problem. I sat down and took a hard look at all of my flying areas and asked some tough questions. Do I really know all of the Ops limits? Can I do the time-critical emergency procedures correctly without initially referencing the checklist? Do I really understand the essential and complicated aircraft systems like the engine, electrical system, and flight control system? Can I really fly a flameout approach that I can land out of? Am I prepared to deal with a real fuel emergency that involves immediately climbing to optimum altitude and diverting to the nearest field? Am I really checking the important items during my preflight and do I really know what to look for? Would I recognize something wrong if I saw it?

Because I didn't like my answers to these questions, I

realized that I needed to correct my complacency problem. So, I challenged myself. First, I dug

I passed about 20 feet below lead as I crossed under him.

into the Dash-1 and really spent some time studying the systems that seemed the most complicated. Then, I forced myself to read Chapter 3 of the Dash-1 (the emergency procedure section) at least once a week. I also forced myself to memorize all of the ops limits instead of using a checklist crutch. Then I asked myself what airborne emergencies I was most afraid of (Emergency Fuel Divert, Low Altitude Engine Failure, IMC Flameout Approach, Hud Off ILS, etc.) and went to the simulator for some punishment. The simulator IP's thought I was nuts, but I felt a lot more confident about my ability to handle an actual emergency after having gone through multiple simulations of my worst nightmares in all kinds of different aircraft configurations and flight parameters. I forced myself to stop being lazy and really handle the EP's like I would in the jet



and carry them all the way to a landing.

Then I put my regained knowledge into action. I really started rehearsing my Critical Action Procedures in the arming area before every takeoff. While I was driving to the working area or back to base, I challenged myself by asking, "What if my engine failed now?" and tried to come up with a realistic game plan. I forced myself to really get back to the basics of Aviate, Navigate, and Communicate and insisted on it from my wingman. When I fly the wing position now, I realize that my primary job is not to hit anything—lead or the ground—and everything else is secondary. I don't need to be trying to search, sort and target an air-to-air threat in the radar while flying in route formation. When

No one is immune and that complacency may be a factor more frequently than we would like to admit.

I'm at low altitude and anything appears unusual, my first reaction now is to climb and then sort the problem out, instead of trying to fly a 300 foot low level and work a fuel gauge malfunction. I now realize how much truth there is in

the old saying, "**CLIMB TO COPE.**" As a symbol of my new preparedness, I take my checklist out of my G-suit pocket where it has languished and strap it to my leg for every sortie because I realize that there really isn't time to be digging in my G-suit for my checklist when I have my hands full of a sick jet.

So, what did I really learn from my near-fatal mistake? Am I still complacent? I certainly hope not, but I have learned that it is very easy to get used to nothing going wrong with the reliability of our jets and the "Big Sky Theory" functioning pretty well. However, I am now convinced that something could happen at any time and I feel like I am much more ready to handle the unexpected if and when it happens. **ARE YOU?** ➤



TAC AIRCREW OF DISTINCTION AWARD

For superior airmanship and judgment in a stressful environment, Major Leonard "Lenny" P. Predaina and Major Richard L. "Trickey" Patterson earned the TAC Aircrew of Distinction Award. They were flying a full scale heavyweight weapons delivery mission to Atterbury Range. They were doing 520 knots on the low level when a 4-1/2 lb turkey vulture hit the lower front and right quarter panel. The windscreen shattered as the bird came through the right front quarter panel tearing out gages and mirrors. The crew reacted instinctively and professionally to recover the aircraft. The following narrative is a firsthand account, from the pilot, of what he saw and thought during the emergency. He also shares what worked, what didn't, and what might have helped.

There I was . . .

On the first leg of the low level, my backseater, Trickey, called out traffic on the APX. We attempted to acquire contact visually and with radar, but both efforts failed. We were behind time, so our true airspeed at that time was 520 knots. I abandoned my visual search for the traffic and looked forward just in time to see a large, dark colored bird filling my windscreen at very close range. I recall what appeared to be a freeze



Maj Leonard P. Predaina
113 TFS, 181 TFG
Terre Haute IN

frame image of him trying to escape. I attempted to dive behind the instrument panel for protection and closed my eyes as his image melted into a gray blur. There was actually only enough time for me to turn my head away about 45 degrees left prior to impact.

The impact was unbearably

loud and explosively forceful. I took a stunning blow to the right side of my head, neck, and right shoulder. A pulverized mass of bird flesh, jagged bones, and glass bounced off of the inside of the canopy and struck me from right to left. In what seemed like less time than the blink of an eye, my environment had changed to one of overpowering noise and frustratingly limited visibility. It was very disorienting. I was unaware of the fact that the force of the impact on my body had been translated into a violent down/up pitch movement. I never felt it; just like I did not feel Trickey come on the controls, a few seconds later, in an attempt to pull us away from the ground.

Like everything else I could see in the cockpit, my helmet visor, though still intact, was coated in bloody pulverized fowl. This gave me a very enclosed, confined, almost claustrophobic bias to my point of view. As a result, I tended for some time to dwell on what was inside my cockpit to the partial exclusion of the outside world.

After I recovered from the initial shock of the bird's impact, my first priority was aircraft control. Almost immediately, I began a very gentle wings level climb, checked my engine instruments, and throttled back slightly to try to reduce the deafening noise

around me. Although totally isolated at this point, I recall being overcome by a curious sense of calm. I never doubted for a moment that we would land safely. Having survived the impact, the hard part was over.

My next priority was to establish contact with Trickey. I turned left and looked down to turn my intercom volume full up. Seeing this from behind, he thought I had collapsed. With the intercom volume full up, I could faintly hear him shouting, asking if I was okay. I felt him fight me for the controls to pull the nose up even higher as I shouted back to him that I was all right and in control. I transmitted, "Racer 42 has just taken a severe bird strike and we're heading home." All anyone heard above the background roar in my transmission was "Bird Strike," but that was enough.

I had a distorted perception of distance and time for the next few minutes. Since I could not hear anything, but intercom and wind noise, I had Trickey handle the radio and relay what he heard to me. To my surprise, I could hear lead's transmissions once he closed within about 100 feet. I spoke to him directly in an effort to get a precise message to ops. I asked lead to call the SOF and declare an emergency, relay I had taken a bird strike through the canopy and also advise that we both were okay.



Maj Richard L. Patterson
113 TFS, 181 TFG
Terre Haute IN

We realized instantly why our attempts to contact the SOF had failed. We were too low, but I did not want to climb too high as I was concerned that the higher true airspeed might cave in my windshield. As we climbed, I described to Trickey what happened. The windscreen was crushed and

I could not see through any of it. The right quarter panel was 90% gone, and I could not see through the canopy. I could only see through the upper two-thirds of the left quarter panel.

Then I described my physical condition. I was covered with broken plexiglass, jagged chips of bone, and pulverized feathers and flesh. I plucked the largest fragments from my neck and checked again for bleeding. In a frustrated attempt to see better, I tried to wipe off half my visor, **big mistake**. I only succeeded in making a greasy smear that I could not see through. The wind buffet inside the cockpit was surprisingly gentle considering it was so brutally loud. I had no problem seeing with my visor up, but then a chunk of glass flew off the windscreen and struck me in the face. I put the visor back down and left it there. I cleaned the side I had smeared as best I could and then I left it alone.

We discussed how we would fly the approach and landing. We agreed to eject if we departed the paved surface of the runway at high speed and went over the signal to eject one more time. I could not be 100% certain that my seat was undamaged, but it looked normal in my mirror, so I decided to trust it if we needed it.

About six miles from the run-

way, I decided that the lack of forward visibility made a formation approach the least risky option. So we aborted the approach and asked Racer 41 to lead us down for a formation approach. Mobile control suggested an approach and arrestment. We agreed and lowered the hook. Trickey started reading off the appropriate checklist even before I could ask for it. I reminded Racer 41 to keep his approach aim point short. The SOF recommended that he bring us down as low as he safely and comfortably could without touching down himself. We then coordinated our missed arrestment plan with mobile control. In the event the hook skipped, we would execute a touch and go, rejoin, and try it all again.

As we neared the airport boundary, I began to crosscheck the left edge of the runway, so I might have some level of directional control in the event of a "Bolter." As a result, my formation flying suffered and I drifted

high. Seeing this, 41 shortened his approach aim point even further in an attempt to drag me down to a proper profile. His corrective action had the desired result. We touched down 500' to 600' short of the barrier—just slightly right of center line. We felt the hook catch the cable, and mobile transmitted a confirmation of our successful engagement. Egress on the runway was uneventful following confirmation the canopy was safe to open.

LESSONS LEARNED:

1. **Avoid channelized attention.** I spent too much time clearing for VFR traffic out the left side without a break to look forward.
2. During the first half of this emergency, I concentrated far too much of my attention inside the cockpit. Climbing higher and having my back-seater speak directly to the SOF would have eliminated much confusion and put me in touch with a valuable resource—the support of my ground

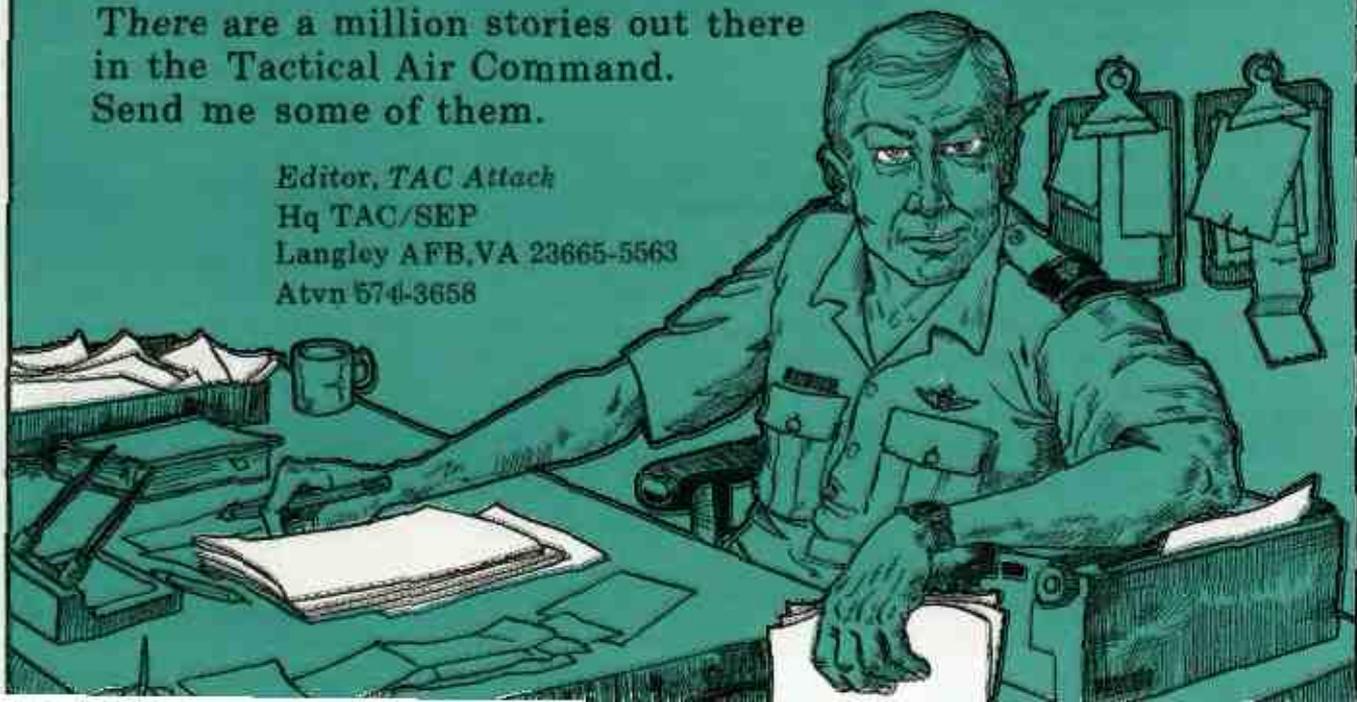
team. I had my reasons for staying low, but they caused me to under utilize a valuable asset.

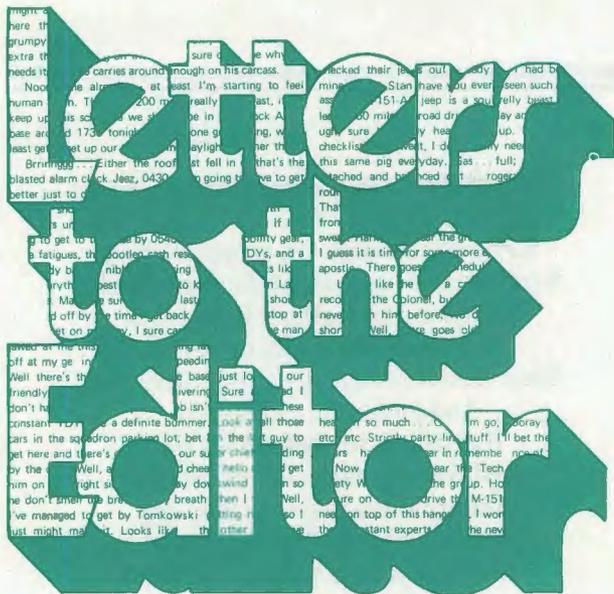
3. The exposed skin on my neck suffered the greatest damage; from now on I will wear a turtleneck whenever temperature permits. The value of flying "mask up and visor down" goes without saying.
4. While we coordinated the use of "Bolter" as a code word for missed engagement, we had no such code word for a successful attempt. A simple call, such as "Good Trap, Good Trap" would eliminate confusion about what is being said at this critical time.

SUMMARY: Regardless of whether or not this incident was avoidable or what mistakes might have been made dealing with it, one thing is certain: Team effort had a marked effect on guaranteeing a safe conclusion. All of the player's contributions cannot be underestimated.

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

Editor, *TAC Attach*
Hq TAC/SEP
Langley AFB, VA 23665-5563
Attn: 574-3658





Dear Ed

There was a mix-up in authorship of the article "Great Day to Fly Hogs" in the July issue. Credit should be given to the author:

Capt Ty Cobb
355 TFS, 354 TFW
Myrtle Beach AFB SC

Thanks for the correction.

Maj Mick Dove
354 TFW
Myrtle Beach AFB SC

Thanks for bringing this to our attention.

ED



TAC Personnel Who Have Made Noteworthy Accomplishments To Unit Effectiveness

Lt Col Kenneth J. Burke
58 TFS, 33 TFW
Eglin AFB FL

SrA Paul C. Weber
4 CRS, 4 TFW
Seymour Johnson AFB NC

SSgt Dean R. Novak
SSgt Patrick C. McAuley
A1C Joseph H. White
405 AGS, 405 TFW
Luke AFB AZ

MSgt Robert B. Rhinehart
363 AGS, 363 TFW
Shaw AFB SC

Capt H. Brent Baker, Sr.
4557 SUPS
Keflavik NAS IC

Mr. John R. Spickenreuther
405 TFW
Luke AFB AZ

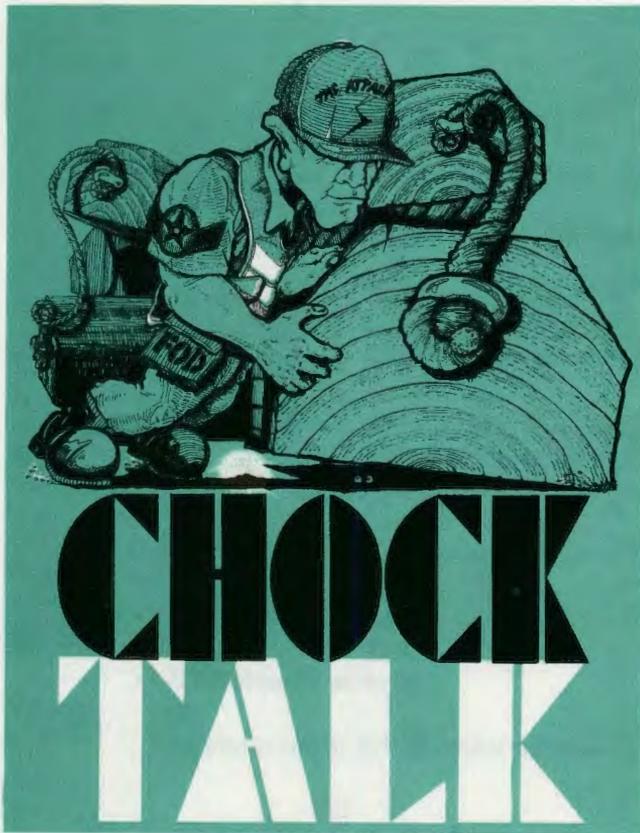
SSgt Claude W. Reed
366 TFW
Mountain Home AFB ID

MSgt Russell W. Adamski
355 TFW
Davis-Monthan AFB AZ

Capt Douglas H. Dal Soglio
479 TFW
Holloman AFB NM

Capt Richard J. Dennee
479 TFW
Holloman AFB NM

Sgt Robert A. Byrd
405 TFW
Luke AFB AZ



Path of the Calf

2Lt Jamie Allen
72 AMU, 56 AGS
MacDill AFB FL

A few months ago, I moved into base housing and, while trying to decide where to put everything, I came across my old dust-covered schoolbook on safety management. I decided to sit down with a cold soda, blow the dust off the cover, and flip through the book to see if there was anything good in there to make it worth keeping through a couple of more PCS's. As a newly chartered aircraft maintenance officer, I was looking for something that would aid me in helping my unit produce safer and more effective sorties. After all, good stats, motivated people, and great inspection ratings are super as long as every sortie we produce results in the same number of landings as takeoffs. Right?! As I glanced through the pages, I came across the following:

Path of the Calf, Samuel Walter Foss

One day through the primeval wood
A calf walked home as good calves should;
But made a trail all but bent askew,
A crooked trail as all calves do.
Since then three hundred years have fled,
And I infer the calf is dead.
But still he left behind his trail
And thereby hangs my moral tale.
The trail was taken up next day
By a lone dog that passed that way;
And then a wise bell wether sheep
pursued the trail o'er vale and step,
And drew the flock behind him, too,
As good bell wethers always do.
And from that day o'er hill and glade
Through those old woods a path was made.
The years passed on in swiftness fleet,
The road became a village street;
And this, before men were aware,
A city's crowded throughfare.
And soon the central street was this
Of a renowned metropolis;
And men two centuries and a half
Trode in the footsteps of that calf.
Each day a hundred thousand rout
Followed this calf about
And o'er his crooked journey went
The traffic of a continent,
A hundred thousand men were led
By one calf near three centuries dead.
They followed still his crooked way,
And lost one hundred years a day;
For thus such reverence is lent
To well established precedent.

For men are prone to go it blind
Along the calf-paths of the mind,
And work away from sun to sun
To do what other men have done.



At first I chuckled because it reminded me of a few things I had done in the past—that's right, back when I was a crew chief. But the chuckles quickly went away. Mr. Foss's tale described in haunting detail why a jet was almost lost by a unit I had been in.

The jet rolled out of phase late into swing shift and was to fly the next day. During a forms review after a late night preflight, the crew chief noticed a red X for a flight control actuator panel being removed. He hadn't noticed it missing during his preflight, so he signed it off as corrected without verifying it was installed (mistake #1). He then had a 7-level sign off the inspected by; also without performing a visual (mistake #2). No, it gets worse! Although the panel was on the aircraft, it was "tacked" with only four screws out of the required 40-50 screws. The jet, subsequently, flew four sorties over the next couple of days and accumulated along the way two preflights, two thru-flights, one Basic Post Flight (BPO), four pilot preflights, and four end of runway checks. Amazingly enough, nobody had noticed the missing screws. Finally, after the fourth sortie, a crew chief noticed the screws gone during a BPO. Since he found a piece of screw bag string hanging from one of the screws, he thought someone had jerked the bag off and stored it somewhere. When he couldn't find the bag of screws anywhere, he went to bench stock and got new screws (mistake #3). The jet flew cross-country the next day. Later that day and after many conversations, it was discovered the original bag of screws had been attached to one screw, but was placed inside the panel—not outside!

Transient alert at the cross-country base was immediately notified of the problem. They removed the panel and found the entire bag of screws was still in the actuator bay and, although not attached to anything, found the screw bag had not come open.

Whew!



When the person who installed the new screws was asked why he didn't look inside the panel, he said, "When screw bags are attached to panels, the bags are left outside the panel. **We've always done it that way.**" The "Path of the Calf" and "we've always done it that way" sure seem to be one in the same, don't they? And even though that technician won't be the last person to be caught in that trap, he surely wasn't the first. Samuel Foss wrote his tale in 1895!



STANDARD IS STANDARD

Isn't it?

Start, taxi, marshalling will be standard, any questions? And the flight lead presses on to the meat of the mission. But have you ever wondered if standard really means the same thing to all the different jocks? Oh sure, they can all give you the book answer, but is the book answer the way they really do it? And does the lieutenant do it the same way as the major who's been there for three years?

Colonel Black the DO for the 355th Tactical Training Wing wondered about that same question. He decided to find out just what was and was not standard for the A-10 drivers out at Davis-Monthan AFB. His methodology was a survey of questions which his DOV (Stan Eval) folks put together. To get some honest feedback, the surveys were kept anonymous.

The answers provided some great discussion starters for the line jocks, and pointed out that in some areas their standard procedures really were standard, while in other areas the responses were evenly split between two or three "standards." We've reproduced below a "generic" survey for pilots of any jet at any base. Take a few minutes and check it out with some of your other jocks—is standard really "standard?"



1. Do you carry the -1 checklist during your preflight inspection?
 - a. Never
 - b. Always
 - c. On check-rides and during inspections
2. If you answered "Always" to #1, do you refer to the checklist or just carry it?
 - a. Never
 - b. Always
 - c. Only when someone important is looking
3. Do you use the -34 checklist to preflight ordnance?
 - a. Never
 - b. Always
 - c. Only when something beside BDU-33s are loaded
 - d. Only when something beside practice rounds and practice missiles are loaded
 - e. c and d above
4. When do you set the flaps for takeoff? _____
- 5a. When do you set the code into the IFF? _____
- 5b. When do you turn the IFF on? _____
6. When do you arm the ejection seat? _____
7. When do you turn on the anti-skid? _____
8. When do you engage the nose-wheel steering? _____
9. When do you engage the pitot heat switch? _____
10. Do you turn the windshield defog/deice switch on before takeoff?
 - a. Never
 - b. Always
 - c. When weather conditions require
11. How many of the items on the descent checklist do you actually accomplish?
 - a. All of them
 - b. All but _____
 - c. All but _____ and _____, _____
12. When do you turn off the anti-skid? _____
13. When do you safe the ejection seat? _____
14. When do you turn off the landing light? _____
15. When do you change exterior lighting? _____
16. When do you unstrap? _____
17. After landing, at what speed do you disengage the anti-skid? _____
18. What amount of fuel do you normally land with? _____
19. When and where do you perform your G-Awareness maneuver? _____
20. What are some of the other standards at your base?

We would welcome any feedback you have on the survey or what you discovered about the standards at your base.

For questions 12 thru 16, answer with one of the following that pertain to after landing:

- a. On landing rollout
- b. Clearing runway
- c. In the dearm area
- d. Taxiing back to chocks
- e. In chocks



F-15 Joe Plummer, 1986©



F-15
EAGLE





TAC GROUND SAFETY AWARD OF THE QUARTER

MSgt Lewis E. Newman
1878 Comm Sq, 347 TFW
Moody AFB GA



Master Sergeant Lewis E. Newman has managed the Ground Safety Program of the 1878th Communications Squadron, 347th Tactical Fighter Wing at Moody AFB GA since July 1988. Since his appointment as the unit's Ground Safety Manager, he has consistently emphasized mishap prevention by utilizing innovative, proactive techniques he calls "complacency displacement." All unit personnel have become involved in mishap prevention efforts due to Sgt Newman's ability to create interest in quarterly safety themes. The period from Thanksgiving to New Year's was designated as the "Forty Deadly Days." During this period, Sgt Newman used briefings, correspondence and "We Care About You" personal contacts to share traffic safety tips with his squadron personnel. The following quarter, he maintained the high level of involvement with a squadron safety quiz that offered prizes for the top scores. This approach proved to be effective, resulting in great enthusiasm towards safety education which then carried over

to unit personnel's on- and off-duty behavior. Sgt Newman created and published a safety "word search" in the base newspaper to enhance safety awareness base wide. Sgt Newman has identified mishap prevention responsibilities at each level of the organization and ensures these responsibilities are carried out by performing monthly self-inspections. He has achieved outstanding results utilizing the Management Evaluation Guide and Management Oversight Risk Tree (MEG-A-MORT). All program elements required by AFR 127-2 were evaluated by host base safety and found to be flawless.

The 1878th Communications Squadron did not experience a single reportable on- or off-duty mishap during the first six months of the current fiscal year. This accomplishment was achieved through teamwork which was carefully fostered by Sgt Newman. His demonstrated dedication to mishap prevention has earned Sgt Newman the TAC Ground Safety Award of the Quarter.

TAC WEAPONS SAFETY AWARD OF THE QUARTER



Staff Sergeant Kelvin J. Horton is dedicated to ensuring the weapons safety program directly contributes to smart mission accomplishment in the Armament Systems Branch of the 405th Equipment Maintenance Squadron, 405th Tactical Training Wing, Luke AFB AZ. He has thoroughly trained branch personnel on the identification and correction of all weapon system discrepancies; concentrating on explosive items maintained by the Armament Systems Branch and explosive loaded aircraft on the flight line. Sgt Horton is an exceptional noncommissioned officer whose leadership, managerial talent, and technical expertise have molded the armament branch into the best in the 832d Air Division. He trained all Combat Armament Support Team (CAST) personnel on the importance of weapons safety. He briefs each newly assigned member of the Armament Systems Branch on the hazardous areas within the shop and on weapons safety as it applies to all models of the F-15 Eagle. Sgt Horton's plan to pre-

vent weapons safety problems consists of several basic steps. He requires all CAST members to report any possible weapons safety hazards immediately. Sgt Horton's mandatory weekly review of all safety data has provided an on-going training program for personnel. In addition, he spot checks each CAST weekly during both in-shop and flight line operations for procedural compliance. He then briefs branch supervision on any noted deviations. Sgt Horton's initiative to identify the need for improvement in maintenance procedures on the new F-15E weapons system has eliminated unnecessary exposure to potential explosive hazards. Sgt Horton is an avid proponent of weapons safety and a dedicated NCO. His highly successful program culminated with an "Excellent" rating during the recent semiannual 832d Air Division Safety inspection; the branch's second consecutive "Excellent" rating. His outstanding performance has earned Sgt Horton the TAC Weapons Safety Award of

the Quarter.

SSgt Kelvin J. Horton
405 EMS, 405 TTW
Luke AFB AZ





DOWN TO EARTH

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

Prepare for a hurricane

When a watch is issued

- Check supplies:
 - Transistor radio with fresh batteries. Have enough batteries to last several days.
 - Flashlights, candles or lamps, matches. Store matches in waterproof container. Have lantern fuel for several days. Know how to use safely.
 - Full tank of gasoline. Fill your vehicle up as soon as a hurricane watch is issued. When there is no electricity, gas pumps won't work.
 - Canned goods, nonperishable foods and a non-electric can opener. Store packaged foods that don't need to be cooked or refrigerated.
 - Containers for drinking water. Have clean, airtight containers to store sufficient drinking water (½ gallon/person/day) for several days.
 - Materials to protect glass openings. Have shutters or lumber for large windows and doors and masking tape for small windows.
 - Materials for emergency repairs. Your insurance policy may cover cost of materials used in temporary repairs, so keep all receipts. These will also be helpful for any income tax deductions.
 - Fire extinguisher.

- Prepare a separate survival kit to take if ordered to evacuate that includes: first-aid kit, nonperishable foods, eating utensils and can opener, bottled water (½ gallon/person/day), medications, eyeglasses, hearing aids, batteries, radio, flashlight, diapers and formula, sleeping bags or blankets, change of warm clothing, ice cooler with ice and lightweight folding chairs (in case you wind up at a shelter).
- Refill prescription drugs.
- Make arrangements to stay with relatives or friends further inland if ordered to evacuate—use shelters as a last resort.
- Make arrangements for pets—they can't go to shelters.

When a warning is issued

- Listen constantly to radio. Plot hurricane position on a map as advisories are given. Discount rumors and use telephone sparingly.
- If you live in a mobile home, check tie-downs and leave immediately for a safer place.
- Prepare for high winds. Brace your garage door, lower antennas. Be prepared to make repairs.
- Anchor or bring in outside objects: garbage cans, awnings, loose garden tools, toys and lawn furniture.
- Protect glass openings. Board up or shutter large windows. Tape exposed glass to reduce shattering. Draw drapes across windows and doors to protect against flying glass.
- Move boats on trailers close to house. Fill boats with water to weight them down. Lash securely to trailer and use tie-downs to anchor trailer to the ground or house.
- Check mooring lines on boats in water, then leave them.
- Store valuables in waterproof containers.
- Prepare for tornadoes and floods.

If you remain at home

- Stay indoors. Don't go out in the brief calm during passage of the eye of the storm. The lull sometimes ends suddenly as winds return from the opposite direction. Winds can increase in seconds.
- Protect property. Without taking any unnecessary risks, protect your property from damage. Temporary repairs can reduce your losses.
- Stay away from windows and glass doors.
- Stay on leeward, or downwind, side of house. As wind directions change, move to another room. If your home has a room with no outside walls, stay there during the height of the hurricane.
- Keep radio tuned for information from official sources. Unexpected changes can sometimes call for last-minute evacuations.
- Keep radio tuned for information from official sources. Unexpected changes can sometimes call for last-minute evacuations.
- Don't use electrical appliances.

If you must evacuate

- Secure your home and leave immediately.
 - Shut off gas valves.
 - Pull main electrical switch.
 - Turn off main water pipe.
 - Tape all windows.
 - Take important papers with you.
 - Fill swimming pool full and super chlorinate.
 - Lock windows and doors.
- Leave early in daylight. Don't travel farther than necessary. Dangerous winds and tides may arrive 3

to 5 hours before the hurricane.

- Take survival kit.
- Keep important papers with you at all times: driver's license and other identification; insurance policies, property inventory, medic-alert.

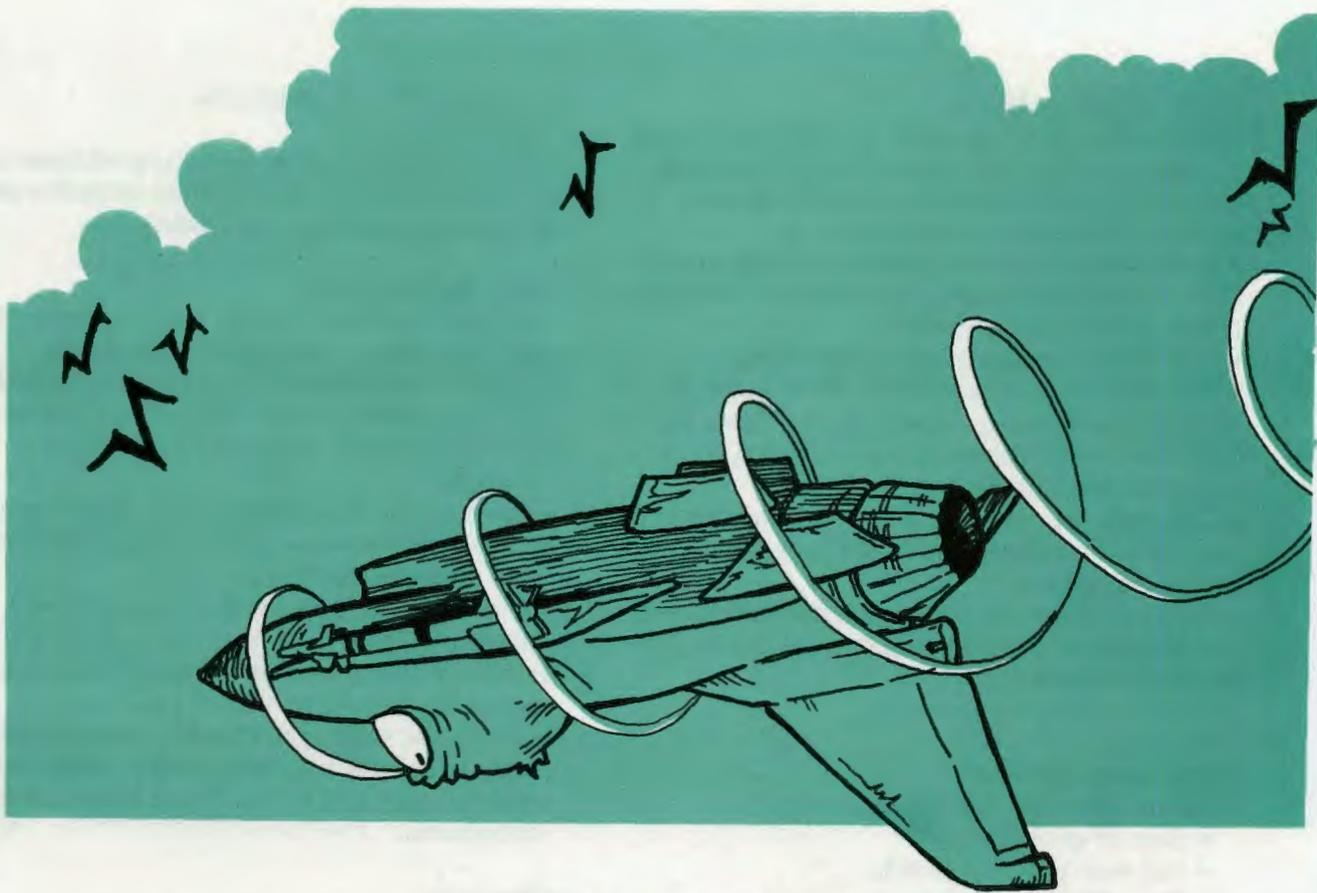
After the hurricane

- Beware of outdoor hazards. Look for loose or dangling power lines—report them immediately.
- Walk or drive cautiously. Debris-filled streets are dangerous. Snakes, insects and animals will be a hazard. Washouts may weaken road and bridge structures.
- Re-enter your home with caution. Repair immediate hazards. Open windows. Don't strike a match or use flame until you check for gas leaks.
- Guard against spoiled food. Food may spoil if refrigerator power is off more than a few hours. Freezers will keep food several days if doors are not opened. Do not refreeze thawed food.
- Do not use water until safe. Use your emergency supply or boil water before drinking until official word that the water is safe. Report broken sewer or water mains.

Clean-up

- Notify your insurance representative.
- Protect property. Make temporary repairs to protect property from further damage or looting. Keep all receipts.
- Be patient. Insurance reps will settle hardship cases first.





Capt Michael A. Reichert
555 TFTS
Luke AFB AZ

WINGMEN,

You're number two on a low level intercept mission and your flight lead descends below the minimum briefed altitude for the sortie. As a wingman, do you?

- Not even notice
- Say nothing because lead is more experienced
- Stack level to prove you can hack it
- Knock it off and bring it to his attention

Obviously "D" is the correct answer, but accident history reveals that many pilots chose one of the other options. Those choices often resulted in the loss of valuable aircraft and even more valuable airplane drivers. Numerous mishap investigations show that if someone in the flight had said,

"This is stupid, why are we doing this?" or simply queried lead concerning his intentions, then the chain of events leading to the mishap would have been broken, and the mishap would have been avoided.

No, this isn't another article on what qualities make a good wingman. Wingmen are not the only ones who can raise the proverbial "BULL" flag up the flag pole when operations are not going as planned. It is every flight member's responsibility to ensure successful conduct of the mission in as safe a manner as possible. So, let's take a look at why fighter aircrews may choose the wrong answer to the above scenario.

Experience. Experience does

not exempt a pilot from making mistakes, nor does it give someone the right to intentionally break the rules. In the above situation, lead may momentarily have his attention channelized in the cockpit while working his radar and be totally unaware of his descent through the minimum altitude. Or perhaps, while low level ingressing at 300 ft AGL to an action point for an element split attack, lead goes heads down to select another bomb station, not realizing he is in an insidious descent that, if not corrected in a timely manner, will result in ground impact. Just because someone has lots of hours does not mean they are immune from inadvertently committing errors



RAISE THE FLAG!

or making incorrect decisions, which can line up a lethal mishap chain of events. A word from a flight member may be all that's needed to realize the error and correct it.

Conversely, inexperience does not exempt a pilot from ensuring safe conduct of the mission. A pilot with only 70 hours in the jet may be the first member of the flight to observe a safety deficiency and be in a position to raise the flag. He should not feel intimidated by his inexperience, so that it adversely influences his decision to make an input to the flight lead. Nor should flight members disregard an input from "the new guy" just because of his inexperience. His perception of the

situation may be correct and end up saving the day. However, his inputs need to be tempered with judgment so as to preclude a breakdown in proper flight and radio discipline.

Peer Pressure. Everyone wants to be just as good, if not better than the next guy with their flying skills. The truth is that not everyone can be in the top 10 percent, on any given day. All pilots need to realize their own personal limitations on a day-by-day basis. If you don't feel comfortable flying in a particular flight envelope or maneuvering at a specific low altitude, then admit it. Your ego may be temporarily bruised, but it won't be fatal. Along the same lines, we all enjoy being part of

the close knit camaraderie associated with membership in a fighter squadron. We don't want to be known as the guy to tell lead that he's wrong, or the jerk who sends guys home for rule violations. However, if lead impacts the ground, in our example, and you remained silent, wouldn't you be thinking . . . "if only I had said something, it could have saved him. Was saving face and bowing to peer pressure worth it?"

Hopefully, reading this article will generate discussions regarding how and when you should raise the proverbial flag. If more flight members had done this in the past, there would be more hardware to fly today as well as more pilots to fly them. ➤



TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD

Technical Sergeant Nathan M. Dixon, Jr., of the Armament Branch, 354th Equipment Management Squadron, 354th Tactical Fighter Wing, Myrtle Beach AFB SC, was instrumental in averting a possible disastrous explosive mishap. Two armament shop technicians were experiencing extreme difficulty in removing a jammed cartridge retaining breech, containing an explosive impulse cartridge, from a triple ejector rack (TER-9/A). As the operation slowly progressed, other technicians one by one became engrossed in the operation and offered their assistance and advice on how to best accomplish the task. Sgt Dixon, though not assigned to this section, seeing the group of workers around one table felt something was wrong. He took a closer look and found several unsafe conditions. He imme-

diately halted the operation and briefed all the individuals involved. Sgt Dixon explained how work like this required precautions to prevent the build-up of static electricity. Personnel were not utilizing static "slap bars," and during the operation someone had stepped on the grounding wire disconnecting the work bench from the grounding system. Also, too many people were involved in the explosive operation; for this type operation only two people were required. He also explained the operation they were performing was extremely hazardous and should be performed by explosive ordnance disposal personnel only. The attempt to remove the frozen breech cap was halted. The firing lead with the frozen breech cap was removed from the TER-9/A and turned over to EOD for proper disposal.



T'Sgt Nathan M. Dixon, Jr.
354 EMS, 354 TFW
Myrtle Beach AFB SC



Sgt Dixon's concern for the safety of his fellow workers turned a possible disaster into a safe operation. His swift and expert reactions to an unusual operation within the armament shop work bay earned him the TAC Outstanding Achievement in Safety Award.

TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD



SSgt Ricky E. Frederick
405 CRS, 405 TTW
Luke AFB AZ

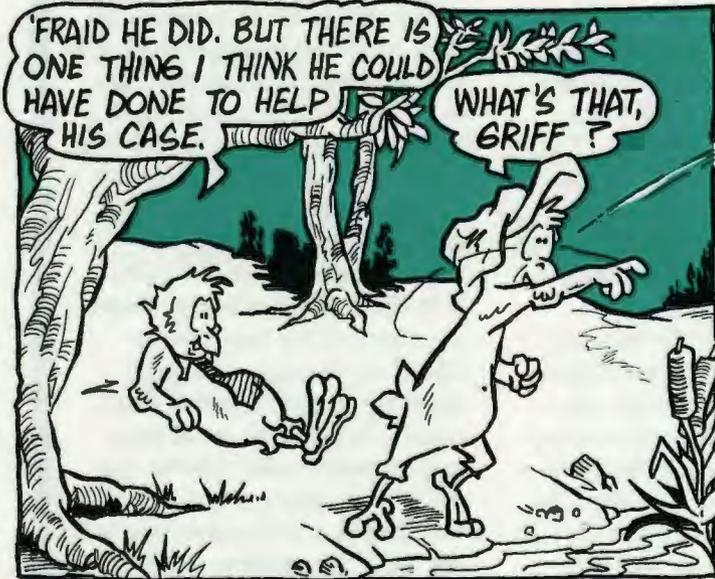
floor free of hydraulic fluid and residual fuel, Sgt Frederick was using an oil absorbing material manufactured by the 3M Company (Type 100 oil sorbent). This material is also used by the base fire department and all assigned aircraft maintenance units to clean up fuel spills from the flight line. Sgt Frederick accidentally dropped a tool near the material he had spread on the floor. When he went to pick it up, static electricity arced from the material to SSgt Frederick's hand. Recognizing the potential for explosion, he immediately removed the material from the hangar floor and then gathered and secured the fuel

shop's supply of the material. He then contacted his supervisor who briefed the incident up his chain of command. His branch chief then contacted ground safety who, in turn, called the 3M Company and found the material was not static free and definitely not suited for cleanup of fuel spills. The use of this particular absorbing material has been discontinued on the base. The quick thinking of Sgt Frederick eliminated a hazard that could have caused catastrophic results. Sgt Frederick's safety consciousness and attention to detail earned him the TAC Outstanding Achievement in Safety Award.



Staff Sergeant Ricky E. Frederick of the 405th Consolidated Refueling Squadron, 405th Tactical Training Wing, Luke Air Force Base, Arizona, was busy working on an F-15E aircraft in the fuel barn. He was attempting to isolate a static fuel venting malfunction. To assist in keeping the

Fleagle



TAC CREW CHIEF SAFETY AWARD



While performing a basic post flight (BPO) inspection on an A-10 aircraft, Sergeant Scott A. Rice of the 354th Aircraft Generation Squadron, 354th TFW, Myrtle Beach AFB SC, found an auxiliary power unit hydraulic support bracket cracked and about to fall out. This bracket is located in an area not easily found and often overlooked until the 400-hour phase inspection is performed. Had this discrepancy gone undetected, it would have only been a short time before hydraulic lines chafed together creating a severe leak and possible



loss of hydraulic pressure during flight. Sgt Rice has also been instrumental in detecting and averting several other unsafe situations. During a night launch, Sgt Rice noticed an unsecured pylon panel on one aircraft taxiing for takeoff. He quickly got the attention of the pilot, had the aircraft stopped, and secured the panel. On another occasion while performing a routine aircraft inspection, Sgt Rice found a minute crack in the windscreen. The crack was in an area not easily detected, and structural repair technicians who inspected the crack commended Sgt Rice for an outstanding find. When an A-10 returned from deployment, Sgt Rice started a BPO inspection. He noticed the right rudder had a dark spot at the top. He examined it closer and determined it was a burnt spot. He related this information to the production supervisor and then began to investigate further. It was discovered the aircraft had flown through lightning. With this information, Sgt Rice continued his inspection. Although there was no apparent damage to the aircraft, he still went one step further and coordinated an entire aircraft reliability check to include electrical and weapons systems checks. Although no major discrepancies were found, Sgt Rice's persistence was significant. Sgt Rice consistently goes beyond the norm to be

sure his aircraft is safe for flight. He is one of those crew chief's we all wish we had—dedicated, capable, and extremely thorough. His quality work leads the 354 TFW Aircraft Generation Squadron, and his "do it right" attitude is a benchmark for others to follow. The above examples are indicative of how Sgt Rice takes an ordinary task and does it better. His outstanding performance has earned him the TAC Crew Chief Safety Award.

Sgt Scott A. Rice
354 AGS, 354 TFW
Myrtle Beach AFB SC



Spot Inspection Reflections

Capt Gene Doremus
9 AF/SEW
Shaw AFB SC

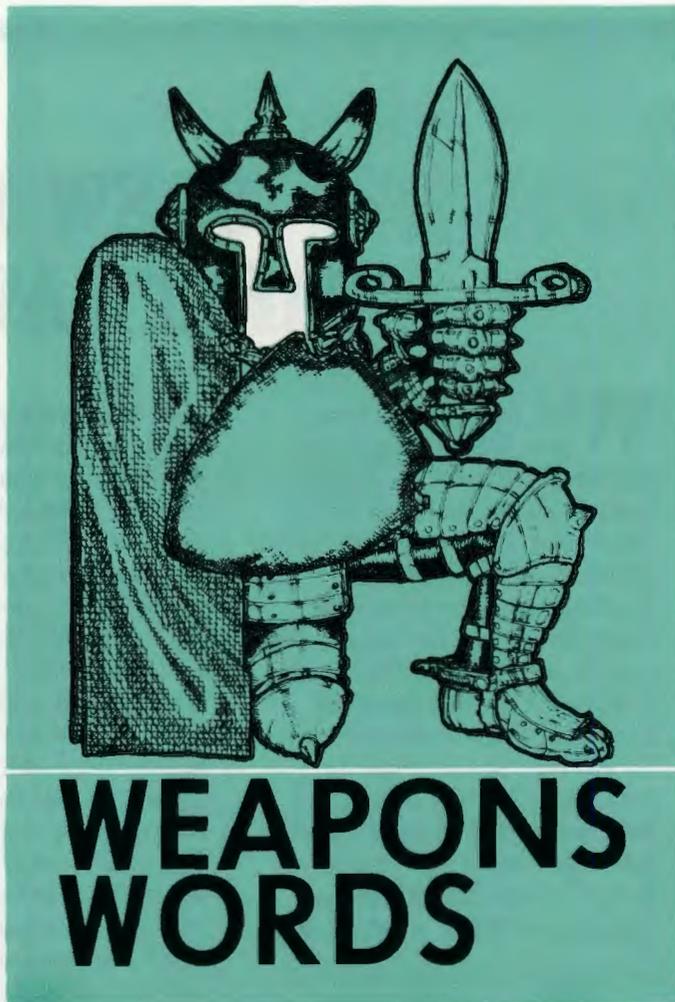
I am neither old nor wise, but I do have some experience in safety and have observed numerous programs. When I meditate (or daydream) on the subject of spot inspections, the following thoughts come to mind.

Reflection #1: Spot inspections are the most important elements in any weapons safety program. They should account for more of your time than all other elements combined.

Reflection #2: Spot inspections are akin to preventative maintenance. You're doing work now that will reap benefits later. Good spot inspections will find discrepancies before they turn into problems.

Reflection #3: Spot inspections can resolve things at the lowest level. Minor discrepancies need not be up channeled and resolved through the formal annual inspection system. In-depth spots can find and fix many problems in minutes without getting bogged down in the paperwork of formal annual inspections.

Reflection #4: It's easy to get in a rut and let each spot inspection be a square filler instead of a no-kidding mishap prevention act. Here are some examples of preventative spots.



1. Talking to trainees and junior technicians (at the job site) about mishaps that have occurred while doing the same task they are now doing. Or taking them a mishap report that pertains to their job and asking them to tell you how or why this wouldn't happen to them.

2. Listening to the maintenance radio net and finding out where things are a little hectic; then checking it out.

3. Reviewing the "corrective action" portion of your base's mishaps during the last two years to see if they were ever really implemented.

Reflection #5: An effective spot inspection program is achieved through visibility. Your presence, as a safety officer, will stimulate the troops thought processes to perform their tasks safely. If a mishap is going to occur, most likely it will involve the worker.

September 1990

TAC AIRCREW OF DISTINCTION AWARD



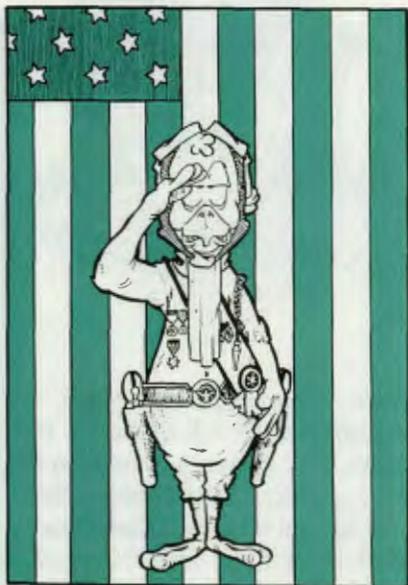
Captain Billy T. Graham, Jr., was the instructor pilot on an F-15 Formal Training Unit (FTU) high aspect basic fighter maneuver (BFM) mission. Near the end of the mission, Capt Graham directed a lead turn exercise to help his student review the mechanics of the maneuver. As the two aircraft merged, his student abruptly applied nine G's, losing consciousness for the next 20 seconds. As the student's aircraft rolled left to a nose low, inverted attitude, Capt Graham recognized a dangerous situation and called knock-it-off. There was no reply from the student, whose aircraft was now passing through 60 degrees nose low and nearing 600 knots. Capt Graham issued two more knock-it-off calls with still no reply from the student.

Realizing that he was too far away to tell the exact attitude of his student's aircraft, Capt Graham directed him to "roll wings level and pull straight up please." At this point the student had regained enough consciousness to initiate a recovery and began a 10.1 G pull from 80 degrees nose low at 10,500' MSL, stopping his descent at 3,500' above the water, but continuing up to a nose high attitude and then back to 40 degrees nose low at 380 knots. He then initiated a second recovery. As Capt Graham approached a range where he could see his student's actual aircraft attitude, he calmly directed his student to "roll wings level," and again directed "roll out there, please." As the student regained control of his situation, Capt Graham continued issuing instruc-

tions: "Okay, you're in a climb, roll wings level; roll slightly to the right...MIL power, pull back on the stick slightly." Capt Graham then coordinated with the Supervisor of Flying and Air Traffic Control for a successful recovery back to base. Capt Graham's composure and "take control" attitude during this G induced loss of consciousness situation were instrumental in saving two valuable combat assets.

Capt Billy T. Graham, Jr.
1 TFTS, 325 TTW
Tyndall AFB FL





FLEAGLE SALUTES

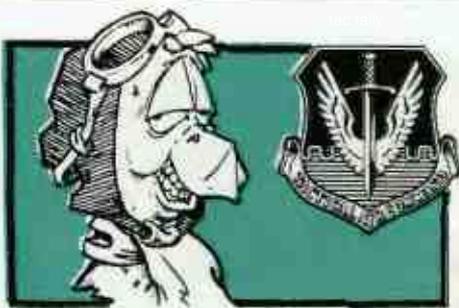
TAC'S OUTSTANDING AIRMEN

While performing routine periodic inspections on ready-use War Reserve Materiel (WRM) AIM-9 missiles, **Staff Sergeant Eric P. Schreiber** of the 1st Equipment Maintenance Squadron, 1st Tactical Fighter Wing, Langley AFB VA, discovered a damaged aircraft umbilical connector. A closer inspection revealed that two of the four screws connecting the umbilical to the missile were sheared off. Only a close visual inspection and a "touch-test" enabled Sgt Schreiber to detect the damaged screws which are covered by a sealant. Suspecting that other damaged screws may have gone undetected, he inspected 100 percent of his section's "ready" missiles. Ten percent of these missiles had one or more damaged screws. If not corrected, damage to the electrical connections and/or a missile misfire could have occurred. Only Sgt Schreiber's technical expertise and close attention to detail enabled him to detect this critical defect of war reserve assets. This accomplishment, typical of his performance, earned Sgt Schreiber a **Fleagle Salute**.



First Lieutenant Kent R. Vogel, 93d Tactical Fighter Squadron, 832d Tactical Fighter Wing, Homestead AFB, FL, was an F-16A pilot, flying as number two, in an air combat maneuvering mission. Following the termination of the last engagement, Lt Vogel initiated a rejoin. As he closed for rejoin, he attempted to retard the throttle to control his closure. After he determined that the throttle was stuck, he selected speed-brakes, discontinued the rejoin, and called "knock it off." Attempts to free the throttle resulted in reduction in RPM

from 85% to 82%. RTB was initiated and the abnormal engine response checklist was accomplished by Lt Vogel with the assistance of the flight lead. The Supervisor of Flying was contacted and briefed on the recovery game plan. At straight in simulated flameout landing (SFO) range, the back-up fuel control (BUC) system was selected. The RPM decayed to 72% at which time Lt Vogel determined he could proceed to high key for an overhead SFO. The SFO checklist was accomplished, and an SFO was executed controlling the excess thrust with speed-brakes override. A flawless SFO pattern and landing were accomplished in the first 1,000 feet of the runway. Lt Vogel lowered the nose to the runway, selected speed-brakes override and initiated wheel braking. He stopped the aircraft in the available runway. Lt Vogel had only 87 hours in the F-16A at the time of the emergency. The calm and professional manner in which he handled this critical in-flight emergency resulted in the safe recovery of a critical combat resource and earned him a **Fleagle Salute**.



TAC TALLY

Total			TAC			ANG			AFR					
JUL	THRU JUL	JUL	JUL	THRU JUL	JUL	JUL	THRU JUL	JUL	THRU JUL	JUL	THRU JUL	JUL	THRU JUL	
	FY 90	FY 89		FY 90	FY 89		FY 90	FY 89		FY 90	FY 89		FY 90	FY 89
1	22	22	1	14	14	0	5	8	0	3	0	0	3	0
2	13	6	2	7	4	0	4	2	0	2	0	0	2	0
2/0	17/0	18/4	2/0	9/0	8/2	0/0	6/0	10/2	0/0	2/0	0/0	0/0	2/0	0/0
0/0	1/1	1/1	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0

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

• (SUCCESSFUL/UNSUCCESSFUL)

CLASS A MISHAP COMPARISON RATE

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

TAC	FY 89	1.7	2.7	3.0	3.2	2.6	2.4	2.3	2.9	2.6	2.5	2.6	2.4
	FY 90	1.8	2.8	2.7	3.0	2.4	2.7	2.8	2.9	2.8	2.7		
ANG	FY 89	0.0	0.0	1.5	2.3	2.8	3.1	3.2	2.8	3.0	3.6	3.2	3.3
	FY 90	0.0	0.0	1.6	1.2	0.9	0.8	1.3	2.2	2.4	2.2		
AFR	FY 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY 90	20.4	11.2	8.2	5.9	4.7	7.7	6.4	5.5	4.8	4.3		
Total	FY 89	1.2	1.8	2.5	2.8	2.5	2.5	2.4	2.7	2.5	2.6	2.6	2.5
	FY 90	2.4	2.5	2.7	2.6	2.1	2.4	2.6	2.9	2.8	2.7		
MONTH	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

TAC'S TOP 5 thru JUL 1990

1st AF		9th AF		12th AF	
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"					
129	48 FIS	62	507 TAIRCW	143	58 TTW
54	57 FIS	37	1 TFW	50	388 TFW
14	325 TTW	33	4 TFW	39	479 TTW
		18	363 TFW	31	355 TTW
		16	56 TTW	30	366 TFW

ANG		AFRES		DRUs	
"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"					
450	119 FIG	148	301 TFW	166	552 AWACW
426	147 FIG	111	482 TFW	57	28 AD
230	110 TASG	108	924 TFG	36	USAFTAWC
210	177 FIG	96	906 TFG	28	USAFTFWC
210	138 TFG	71	507 TFG		

