

TAC ATTACK

JANUARY 1980



HARDISON



READINESS IS OUR PROFESSION



TACTICAL AIR COMMAND

GENERAL W. L. CREECH
COMMANDER

LT GENERAL ROBERT C. MATHIS
VICE COMMANDER



COL RICHARD K. ELY
CHIEF OF SAFETY

MAJ PETE ABLER
EDITOR

STAN HARDISON
ART EDITOR

BEATRICE WAGGENER
EDITORIAL ASSISTANT

SGT DAVID GARCIA
STAFF ARTIST

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TACRP 127-1

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Authority to publish this periodical automatically expires on 26 Jan 1980 unless its continuance is authorized by the approving authority prior to that date.



Angle of Attack

RING OUT THE OLD RING IN THE NEW

"Experience is the best teacher, only the school fees are heavy."

Hegel

One of our traits as humans is to attempt to organize items and events into orderly, logical units. Time is no exception. We have divided years into months, weeks, days, and hours or have expanded them into decades, centuries, and millenia. These time intervals serve to order both the past and present. To many of us, the end of any particular period of time signals a closing of the events of that period.

It is now the 1980s. We are tempted to treat what happened last year and in the rest of the past decade as history--events which should be catalogued and forgotten. It is a fact--all of the events of the seventies are final. None of us can change what happened--be it last year or just five minutes ago. However, we cannot afford to

forget what has happened in the past--those events still affect us.

There are many lessons to be learned from our successes and failures during the last decade. We must carefully examine the past before we look to the future. Once we can appreciate the lessons from the past--then we can turn our attention forward.

The experience of history is a wonderful teacher--if we pay attention. Let's move smartly through the eighties by not repeating our past mistakes.

THE FUTURE IS NOW -- WELCOME TO A NEW DECADE

Richard K. Ely

RICHARD K. ELY, Colonel, USAF
Chief of Safety

CD MAN

REVISITED



Coauthors: Col Richard Pilmer
USAFSAM/EDB
Brooks AFB, TX

MSgt Christopher R. Yancey
USAF Rgn Hosp Shaw/SGT
Shaw AFB, SC

The new aircrew chemical warfare protective ensemble is currently being delivered to TAC wings. The delays which followed Phase I indoctrination, before Phase II "hands on" practice, were due to manufacturing problems in production of the mask and filter pack. Also, operational personnel assigned to "high threat" areas received the equipment before their stateside counterparts.

For those of you who have attended briefings on the equipment, this article should serve to review some of the salient points relating to comfort and safety. For newcomers to TAC, this approach may be augmentable by viewing a new TAC video tape production on the subject soon to be available at the squadrons (Aircrew Chemical Warfare Ensemble; TS 1361).

Rather than think about the threat as motivation for using the equipment, let's verbally get into it. The need for chemical warfare protective equipment is obvious given the demonstrated capabilities of our potential foes. While the exact sequence and method for donning the ensemble has not been finalized, the following procedure will give you a general understanding of the complexity of preparing to fly and fight in a chemical environment.

In June 1978, we introduced you to "CD Man" in an article concerning chemical warfare defensive equipment. In that article written by Major Davy Bass of the 4485th Test Squadron, the new chemical protective ensemble was described and the procedures for its use were discussed. Now that the equipment is being received and utilized at some TAC units, it might be a good idea to review some aspects of chemical warfare protective equipment. The following article deals with this equipment and its use.

1. During your first dressing at the shelter or life support shop, be well nourished, hydrated, rested, and relieved, (NHR). NHR stands for these homeostatic factors or, perhaps more simply, the physiological counterparts to planning for flight. It takes about ten minutes to suit up in the equipment, so you don't want to have to undress again because you forgot to . . . The suit is not designed for long term use. However, in a combat situation, it will enable sorties where you would otherwise be disabled. In many ways the equipment resembles our high altitude pressure suits. If your aircrew members were faced with a chemical or nuclear accident, it could save their lives.

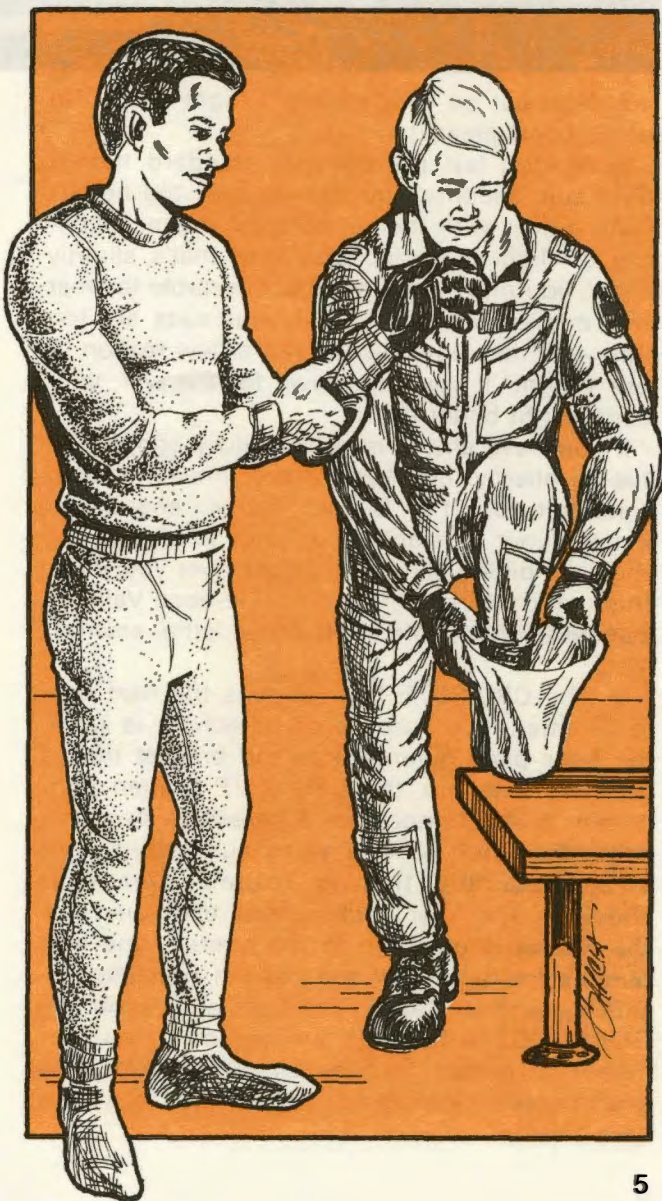
2. Put the long underwear and socks on in good spirits. Even Joe Namath probably would prefer jockey shorts, but these 2-piece longies will make you more comfortable by preventing chafing. They will also better protect you by absorbing your perspiration, thus keeping it off your charcoal suit.

3. Cover your feet with the plastic tube socks. You tape them to the long underwear to keep them from slipping down.

4. For your hands, a pair of white cotton glove inserts. Put on the inserts and tape them to the long underwear sleeves. Over these place the black neoprene gloves and tape them to the sleeves of the long underwear. Your hands under all of these gloves will look a little wrinkled, and you may now look like a roll of masking tape, but press on anyway.

5. Be careful getting into your charcoal suit, as it will rip easily. You wouldn't want a G-suit that leaks air, anymore than you would want a charcoal suit that leaks chemicals. You might want to tie the waist strap with a bow knot to facilitate later removal. Make sure the elastic stirrups are under the arch of the foot to keep the suit from riding up your legs.

6. Now you need your nomex flying gloves. These are put on over the black neoprene gloves and are taped to the sleeves of the charcoal suit.



CD MAN REVISITED



7. Now put on your standard flight boots. No jungle boots please!

8. At long last put on your standard nomex flight suit, securing the sleeves over the nomex flying gloves with the velcro tabs. If your inventory of flight suits includes one that's slightly larger, you may find it more comfortable to wear over this ensemble. If all of your suits are too tight--you may have discovered a new reason to lose weight. If you trim down for the war, your jeans will fit better too.

If you have any form of transitory congestion due to allergy, etc, keep a dry inhaler in your flight suit pocket or G-suit. This will enable you to open your ears and sinus prior to placing the chemical-biological oxygen mask over your face. This mask makes the hand-on-the-nose Valsalva maneuver impossible in an actual lethal environment.

9. The CRU-80/P filter pack is the next item to be fitted. If a harness or parachute is worn, the filter pack mounts onto the bracket that is normally used for the CRU-60/P oxygen connector. If you do not wear a parachute or a harness, the filter pack is worn suspended by a strap assembly that is routed over your shoulder. The filter pack purifies toxic air while the wearer is en route to the aircraft, and also purifies the output of the oxygen regulator inside the aircraft. NOTE: The filter pack assembly DOES NOT filter out ammonia or carbon monoxide fumes. So stay away from hydrazine and in case of aircraft or hanger fires, depart the area quickly.

10. If you have a skull cap, put it on before donning the Chemical Biological Oxygen Mask, CBO-L3/P. (This makes it easier on those of us who lack some cranial foliage, and it also helps eliminate hot spots from your mask straps.) Loosen the straps and place the mask on your face with the straps centered on your head and your face piece resting comfortably on your face. Tighten the straps equally on each side and then adjust the top strap. As you look out



from your gold-fish view, you see that you have some visual problems at the 5 and 8 o'clock positions. You will have to rubberneck a little to overcome these visual blindspots! When clearing your ears, use either a swallowing method or pressure from the oxygen regulator. Pressure from the oxygen regulator with a prolonged blast of increased flow will also help clear up misting of the visor; and if a lot of heavy breathing causes moisture to form in the valves, use a cotton absorption ring from the life support section to absorb excess moisture. If you wear glasses when flying, take a spare pair to the life support section and they will install the glasses permanently in your CBO-L3/P oxygen mask.

11. You are now ready to put on your helmet. The Army helicopter helmet was necessitated because of the large face piece of the oxygen mask. You adjust it just like an old football helmet; and with the skull cap, it fits more comfortably. Your helmet comes with a CBO-13/P oxygen mask retention strap assembly which



holds the mask up when you pull positive G's. Make sure that any tension on this retention strap assembly is equal. Also, insure that the straps are not twisted when they are routed around the face form and are connected to the bayonet receiver mechanisms.

12. Now comes the Butyl Rubber Hood which is worn over the mask and helmet. It keeps liquid contamination off the neck, mask, and helmet areas. Stretch the visor opening around the face piece of the mask and secure it with the hook tape. This helps retain a layer of reduced toxicity air around the CBO mask face area. Fluff the hood if exhaled air balloons the hood up. Don the colored sun visor if needed over the clear visor.

13. Plastic overboots are needed over your flying boots to wear to and from the aircraft.

These plastic booties and a large plastic overcape (baggie), which completely covers you from head to toe, are worn to the steps or ramp of the aircraft. The overbooties are then taken off, by the crew chief, prior to entering the aircraft. Remove the plastic overcape immediately after entering the aircraft and discard it outside the aircraft. When the mission is completed, redon a clean overcape and plastic booties prior to stepping off the steps or ramp, and proceed to the decontamination station.

14. Limitations of the chemical warfare protection ensemble:

a. Ensemble traps heat--limit physical activity to a minimum while wearing the suit.

b. There is no way to replenish body fluids while wearing the CBO oxygen mask in a toxic environment.

c. No Valsalva maneuver capability in a toxic chemical environment--use oxygen regulator pressure to aid in clearing the ears.

d. The chemical charcoal suit can cause skin irritation--wearing high necked undershirt and long underwear will help.

e. The gloves cause some lack of tactile dexterity--crew member can no longer feel location of switches and must actually look at them.

f. Butyl Rubber Hood is flammable--remove ASAP in case of fire.

g. Visual problems--CBO oxygen mask cuts down the peripheral vision, so the crew member must look around more.

That should give you an overall view of the current chemical warfare protective equipment. Anyone who has used it can attest that it is not as good as it could be. The equipment was developed in a relatively short period of time and contains a number of flaws. Permanent replacement equipment is currently under development, but it will be some time before this equipment is available. The new equipment will be more comfortable, easier to use, and will offer greater protection. For the present, we will have to live with what we have--we may not be able to live without it. ➤

TIPS

A good listener is not only popular everywhere,
but after a while he knows something.

W. Mizner

VIOLATION OF AIR TRAFFIC CONTROL AIRSPACE LIMITS

There has been an increasing number of reports alleging pilot deviation from an ATC clearance. An allegation, regardless of the motivation that prompted it, generally has a basis in fact and deserves balanced attention.

A majority of the reports allege unauthorized excursions outside the boundaries of special use airspace to which assigned (spillouts). A spillout is a serious matter as it not only violates an ATC clearance, but also negates the very purpose for which special use airspace was designated--to reduce the mix of civil and military flight operations and the attendant midair collision potential.

The likely effects of a midair collision between a USAF and a civil aircraft could have a far-reaching impact on our readiness posture. I'm sure you will agree that we could expect to feel enormous pressures to further limit our flight prerogatives, to the extent that the degree of realistic training we now enjoy would no longer be approachable.

Large-scale exercises are particularly susceptible to spillout incidents: many of the pilots are new to the exercise airspace and are afforded considerable latitude in the interest of realistic training. We need to insure that we stay within our assigned airspace at all times. It's the easiest way to prevent future problems.

...interest items, mishaps with morals, for the TAC aircrewman

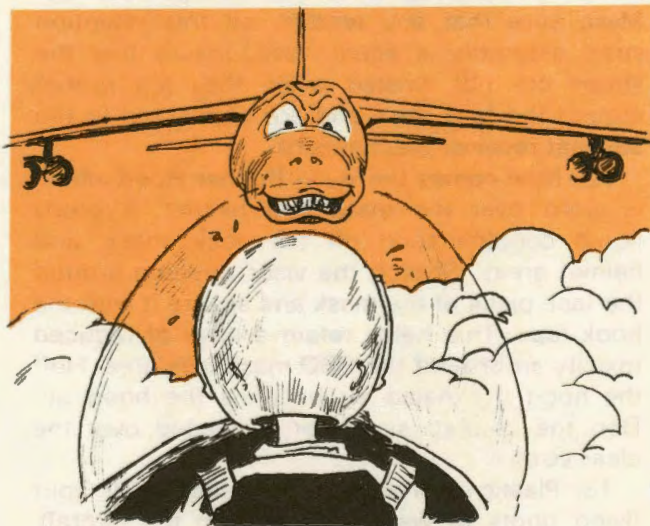
IFR MILITARY TRAINING ROUTES

A couple of incidents on IR routes have generated some concern that aircrews are not following the rules as published in FLIP and AFR 60-16.

In one incident, an aircrew assumed that the controller really meant "eleven" instead of "seven" and ended up flying several legs of an IR route at other than published altitudes while IMC. The crew knew what the right altitude was, but never questioned the controller.

In another incident, an aircrew wanted to take a look at an RBS maneuver area from different headings. The crew called the RBS site and was notified of the proposed site closing time. Between takeoff and arrival at the site, a B-52 had received a scheduled RBS time. The fighter crew assumed the site was closed and pressed on--ending up head on with the BUFF.

In both cases, the aircrew "assumed" that what they were doing was right. We all know how to break down the word "assume." It's a lot better to know what you're doing is right . . .



HINDSIGHT

An F-106 was on a routine training mission. Near the end of the mission, while doing VFR pattern work, the pilot noticed fumes and odors in the cockpit. He terminated the mission and landed the aircraft without incident. Upon arrival at the parking spot, fuel was observed leaking from the engine bay, leaving a significant trail behind the aircraft. At this point, the fire department was called to wash down the large pool of fuel that had accumulated under the aircraft.



Hindsight tells us this would have been one time to declare an in-flight emergency and be met on landing by the fire department personnel. They probably would have seen the leaking fuel and advised the pilot to shutdown the aircraft before he could taxi it to the parking area. They also would have been available if the fuel had ignited.

No criticism of the pilot is intended. Incidents and their causes are investigated so we can all learn from the results of the investigation. Pilots and flying supervisors need to analyze situations and take proper action. When something isn't right and an abort is called for, consider the fire fighting force in your planning process. A declared emergency alerts a lot of people. A few false alarms will occur, but you only need to be right once to make it worthwhile.



BUGGED AGAIN

Just after lift-off on a wing formation takeoff, the F-4 began to nose over. The pilot was able to maintain position with back stick and trim until afterburner termination when the aircraft started severe pitch oscillations. The pilot depressed the paddle switch, but the oscillations continued for another ten seconds. The aircraft then stabilized and the pilot disengaged the stab aug and the aircraft began to oscillate again. Once they slowed the aircraft down below 350 knots, the oscillations stopped. Fuel was burned down and a controllability check was performed. Full nose up trim would not maintain level flight at any speed from 175 to 250 knots, but sufficient stick authority was available to control the aircraft. The pilot completed a safe landing without further incident.

Investigation revealed the bellows system had a number of small leaks and the bellows probe heater was burned out. Neither of these discrepancies could have caused this incident by themselves. A large bug was found lodged in the bellows venturi. The bug was lodged in such a manner it could move back and forth alternately blocking and opening the venturi. Changes in aircraft attitude, power changes, etc, would cause changes in the trim system and thus the large oscillations were created.

It's nigh unto impossible to miss all the bugs in the air. Your next best bet is to figure out where they can get into your aircraft--pitot tubes, bellows probes, etc--and what will happen if they do. After that, all you can do is be prepared and hang on.

This is another good reason not to hold 'er on the runway while making ready to honk up to a closed downwind.

TAC TIPS

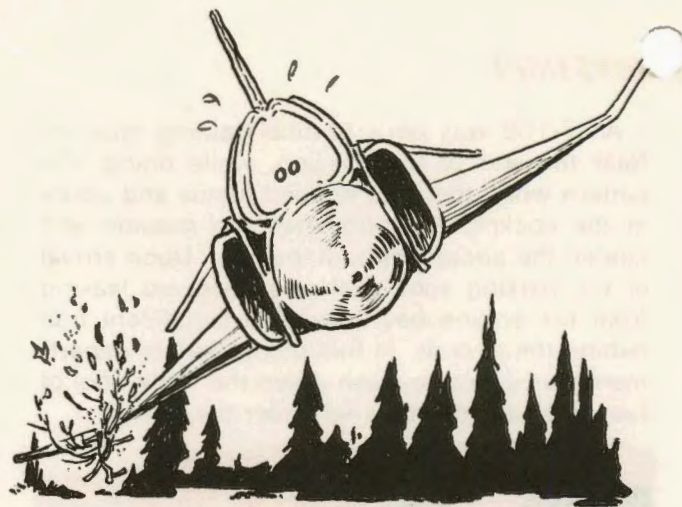
CLOSE CALLS

By Maj Ken McBride
HQ TAC/SEF

Recently an F-4C in a turn on a low level proficiency mission, drug a wing tip through the trees. The pilot climbed the aircraft to a safe altitude, performed a controllability check, and landed with no further problems. Not long before this incident, another F-4 unknowingly hit a power line that was 25 feet above the ground, an F-100 hit a cactus, an A-10 hit an antenna, an A-7 hit a tower cable, an A-37 hit the trees...

The list could go on. These are the lucky ones. They all made it, and they represent a fair share of those who have almost been involved in a catastrophe due to: judgement, situational awareness, depth perception, looking for wingman, loose object in cockpit, sun glare, uncharted tower, map not annotated, altitude of obstacle unknown, poor optical quality of canopy or windshield.

The files continue to grow with these low-level



close calls, and these are the lucky ones that we know about. We also know about those that weren't so lucky--those that ended up with wreckage strewn two plus miles across the ground. What about the others?

It is difficult to be unique in providing cautions about the hazards of low level. If you have to be down in the weeds to defeat the threat, then be there. But remember those causes that got others into trouble. It has been said many times that a kill is a kill, regardless of whether the enemy fires a shot or not. Let's not give it to them the easy way, in peace or war. The low altitude record has only been tied. No one will ever beat it.

Are you editor material? If you're a captain with recent tactical fighter/interceptor experience (both would be ideal) and are still breathing--check your pulse too--you have a good start. Additionally, you must be eligible to PCS in the Aug to Nov 1980 period. You should also be remote ineligible.

Of course, we're also looking for someone with a reasonable amount of writing ability. No, you don't have to be a Hemingway or Thoreau to get the job. You only need the ability to put your thoughts on paper in a logical, readable manner. That's not tough to do with a little practice.

If you're interested in this rewarding job and completing a staff tour at the same time, contact Maj Pete Abler at AUTOVON 432-2937/3373 or write me at HQ TAC/SEPP, Langley AFB, VA 23665. I'm looking forward to hearing from you.



AIRCREW OF DISTINCTION

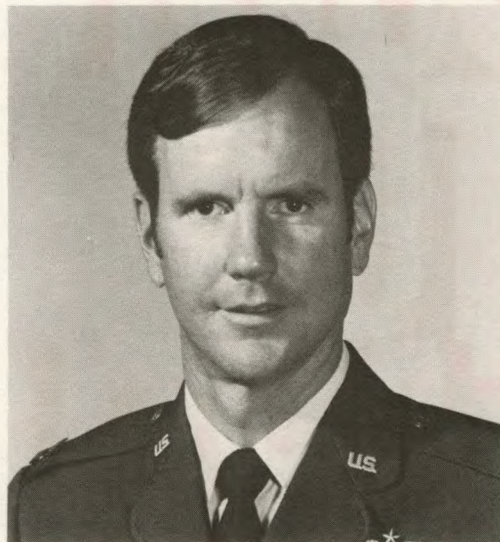


27 TFW
Cannon AFB, NM

On 20 Sep 79, Captain Stephen J. Feaster and First Lieutenant Roy A. Gilbert were flying a night range mission in an F-111D. During base turn for weapons delivery, while performing automatic terrain following flight at 1,000 feet AGL, both crew members heard a thump and observed a flash of light from the left side of the aircraft. They immediately checked the engine instruments and noted nothing unusual. At the same time, Captain Feaster disengaged the automatic terrain following system, rolled wings level, and began a climb. Captain Feaster checked engine response to throttle movement and ascertained that both engines appeared to be operating normally; the only discrepancy was the left nozzle slightly open. At this point, the crew again heard a thump and saw a flash of light followed immediately by left engine rollback, which was confirmed on engine instruments. As Captain Feaster retarded the left throttle, the left engine fire warning light illuminated; he continued retarding the throttle to the cutoff position, and Lieutenant Gilbert depressed the fire pushbutton and activated the fire agent discharge. The Range Control Officer (RCO) was then notified of the situation.

The RCO confirmed that he had seen indications of a fire. The crew then switched to the local emergency recovery frequency and contacted the Supervisor of Flying (SOF), notifying him of their intention to land as soon as possible. Lieutenant Gilbert completed required checklist actions. During this time the fire light went out; Captain Feaster checked the warning circuit, found it to be inoperative, and notified the SOF he might still be on fire. Captain Feaster visually acquired the runway and positioned himself to intercept final approach approximately seven miles from touchdown. While positioning the aircraft, the crew configured for a single engine landing and computed heavyweight final approach speed.

On final approach, the SOF advised the crew that they appeared to be on fire and should take the approach-end barrier. The aircraft tailhook was lowered and final approach airspeed attained. Captain Feaster and Lieutenant Gilbert completed a final review of required checklist items and reconfirmed proper configuration prior to executing a flawless approach-end barrier engagement. As the aircraft came to a stop, leaking



Capt Stephen J. Feaster



1Lt Roy A. Gilbert

fuel from a ruptured fuel tank engulfed the aft section of the aircraft in flames, and the crew successfully ground egressed.

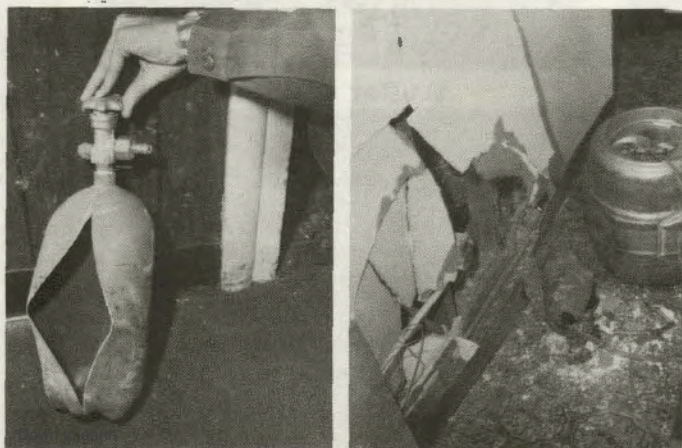
The total elapsed time from the first indication of a problem to landing was approximately five minutes. The prompt reactions and superior airmanship displayed by Captain Feaster and Lieutenant Gilbert, not only averted injury or loss of life, but held aircraft damage to a minimum. Their actions qualify them as the TAC Aircrew of Distinction.

DOWN TO EARTH

A LITTLE TOO MUCH GUSTO

The scene is in one of your standard AF barracks. A group of folks are having an organizational party in the dayroom. Everyone's having a good time when--BLAM!!

Everyone's first reaction is shock as people wonder what happened and if anyone is hurt. As the ringing in their ears slowly subsides, they start looking around . . . There's a hole in the wall, in the next room a man is holding his leg, and there's another hole in the opposite wall. Out in the hallway they find a ruptured CO₂ bottle which had been used to charge the beer keg.



Luckily, the man's leg is only bruised--it could have been much worse.

Let's back up a few hours. The beer keg and CO₂ bottle were procured from the MWR folks, but the CO₂ bottle was low. So, our folks asked the base fire department to charge up the bottle. (The base fire department uses CO₂ for charging fire extinguishers, etc.) While the bottle was being charged, the safety valve blew. (I think the safety valve knew what it was doing.) The individual who was filling the bottle had trouble removing the ruptured safety disk, so he gave up and installed two new disks on top of the ruptured one--that's like putting two pennies in your fuse box instead of just one. After the disks were installed the bottle was filled to an unspecified pressure--obviously more than the bottle was meant to handle.

Next time you get someone to do you a favor, make sure they know what they're doing.

HOT TUBS CAN BE A REAL PAIN

Twelve incidents associated with hot tubs or spas which resulted in 13 deaths and a near drowning are being studied by the staff of the Consumer Product Safety Commission (CPSC).

Seven of the deaths were drownings; two were related to electrical shock incidents, and four were related to excessively hot water. Three cases were first identified in the Death Certificates provided the agency by the health-reporting jurisdictions. Reports of five incidents came directly through the news media.

Tubs should be wired according to the requirements of the National Electrical Code and the installation should be inspected by an electrical inspector from the respective building code jurisdiction. This should be done to ensure the adequacy of the electrical system in protecting against electrical shock hazards.

Tubs present some of the same hazards to children as do swimming pools. Children should not have access to the tubs if a responsible adult is not present; and if they are permitted to use the tubs, they should be supervised at all times.

Water that is more than 104 degrees Fahrenheit is too hot for a tub's occupant.

All tubs should be equipped with a thermostat. A good rule for new tubs would be to set the temperature for no higher than 100 degrees Fahrenheit and later, perhaps, to reset the



temperature slightly warmer, up by two degrees, after the users have gained some experience in using the tub.

A thermometer in the tub is often a better indicator of the water's temperature than a thermostat. Therefore, in addition to ensuring a tub is equipped with a thermostat, make sure an accurate thermometer is available or is in the tub.

Consumers are especially cautioned against combining excessive heat with alcohol or other drugs. Excessive use of alcoholic beverages prior to immersion in the hot tub or heated spa may have been a factor in the fatalities.

If you feel drowsy in your tub, regardless of the thermometer reading or the thermostat setting, get out of the tub immediately and turn the thermostat down before using the tub again.

CAUTION: CIGARETTE LIGHTERS CAN BE HAZARDOUS TO YOUR HEALTH !

In the October issue we covered two incidents where individuals were injured when their butane lighters exploded. A few more incidents came across our desk a few days ago:

A civilian company experienced two deaths within a month when plastic butane lighters exploded. One resulted when a slag spark from a burning operation flew into a man's pocket, burned through the lighter, and exploded. The other occurred when a welding spark burned through a man's pants pocket causing his lighter to explode. The man's leg was amputated. However, he died three days later.

Both these mishaps involved welding operations. However, many of us are exposed to

similar situations daily--in the metal shop, engine shop, base auto hobby shop, even at home in our workshops. If you use a plastic butane lighter, it might be best to leave it someplace where it won't turn into a bomb.

SUPER SKIER

Now that the snow is really piling up on the slopes, I'm sure that the urge to get out has either already grabbed you, or will very shortly. Before you dash out to show the snow bunnies your fantastic form, it might do you well to take a few minutes preparation.

Get yourself and your equipment in shape. You've probably been semiactive since last season, and your equipment has been in the closet for more than six months. A few weeks of exercise will go a long way towards preventing a lot of aches, strains, and sprains. Make sure your bindings, boots, and poles are in good shape.

Don't try to be a downhill racer the first day out. Take your time and get the feel of skiing back. You didn't learn to ski in a day, so don't attack the slopes intent on conquering them all in eight hours.

Remember to practice common courtesy on the slopes. Watch out for the less experienced skiers and don't impede those who are better than you.

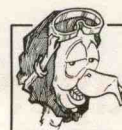




**By Capt Craig Lamkin
461 TFTS
Luke AFB, AZ**

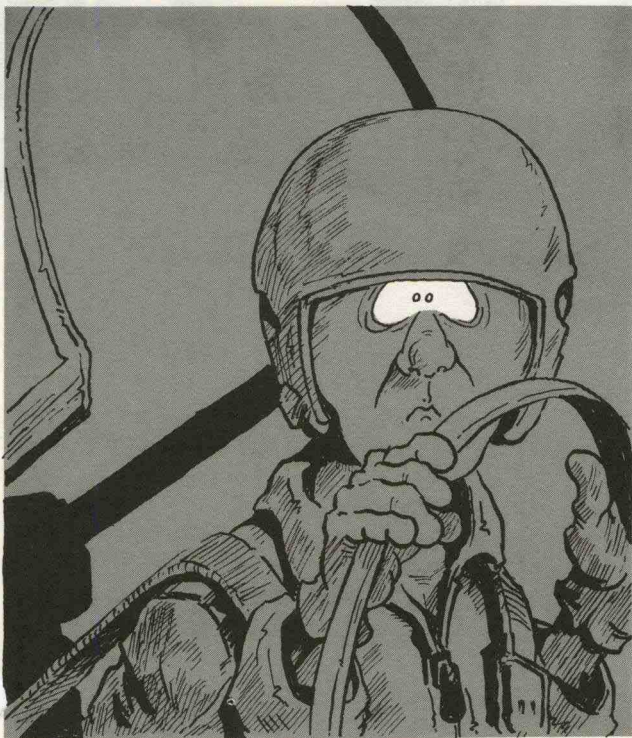
I remember my amazement the first time I went lost wingman, but it was not for the obvious reasons. Rather than being in the weather or at night, it was one of those crystalline clear Arizona days with 100 mile visibility. At the time, I was an F-15 student on a formation training sortie when my IP said, "Go lost wingman." It was prebriefed and not a surprise, but I was still surprised at how easy it was and the tremendous separation gained in the brief 15 second turn away. I thought of the lives lost in just such

a maneuver and wondered, "How could it happen?" My own personal answer wasn't long in coming. Several weeks later we briefed a routine night tanker and intercept training sortie which included special emphasis on spatial disorientation and lost wingman procedures. It was my fourth trip to a tanker, my second time at night, but my first time solo. On climbout to the refueling track as number four, I knew I was going to have some hard work ahead for there was no moon and a lot of cirrus at altitude. As four, I had a lot of time on the tanker's wing to relax before my turn on the boom. We were in and out of weather on the track; and after my share of problems on the boom, I was relieved to finally complete my on-load. As we came off the



Capt Craig Lamkin
is this month's
Fleagle T-shirt winner

tanker, lead started a climbing left turn away from me to comply with ATC instructions. Before I realized it, I was on the outside of the turn steadily falling back when the flight disappeared. My first reaction, and my first mistake, was to hang in there and attempt to acquire the flight on radar. Almost immediately I got a radar lock-on, but my HUD showed an opening velocity and nothing in the target designator box. This information made the temptation to follow almost overpowering, but the realization that I had no idea who I was locked on to and that I could not get rejoined in the weather changed my mind. Night formation and refueling were difficult; however, I found the hardest task I had all night was keying the mike and admitting I was lost wingman. (False pride?) All my previous training demanded I get on the gauges, but for some reason I rolled to what I thought was wings level with my head out of the cockpit searching for the flight. It seemed only a matter of seconds until I felt a light airframe buffet. Finally going to the gauges, I noted 30 degrees left bank, 30 degrees nose high, airspeed decreasing through 200 knots, and that I was



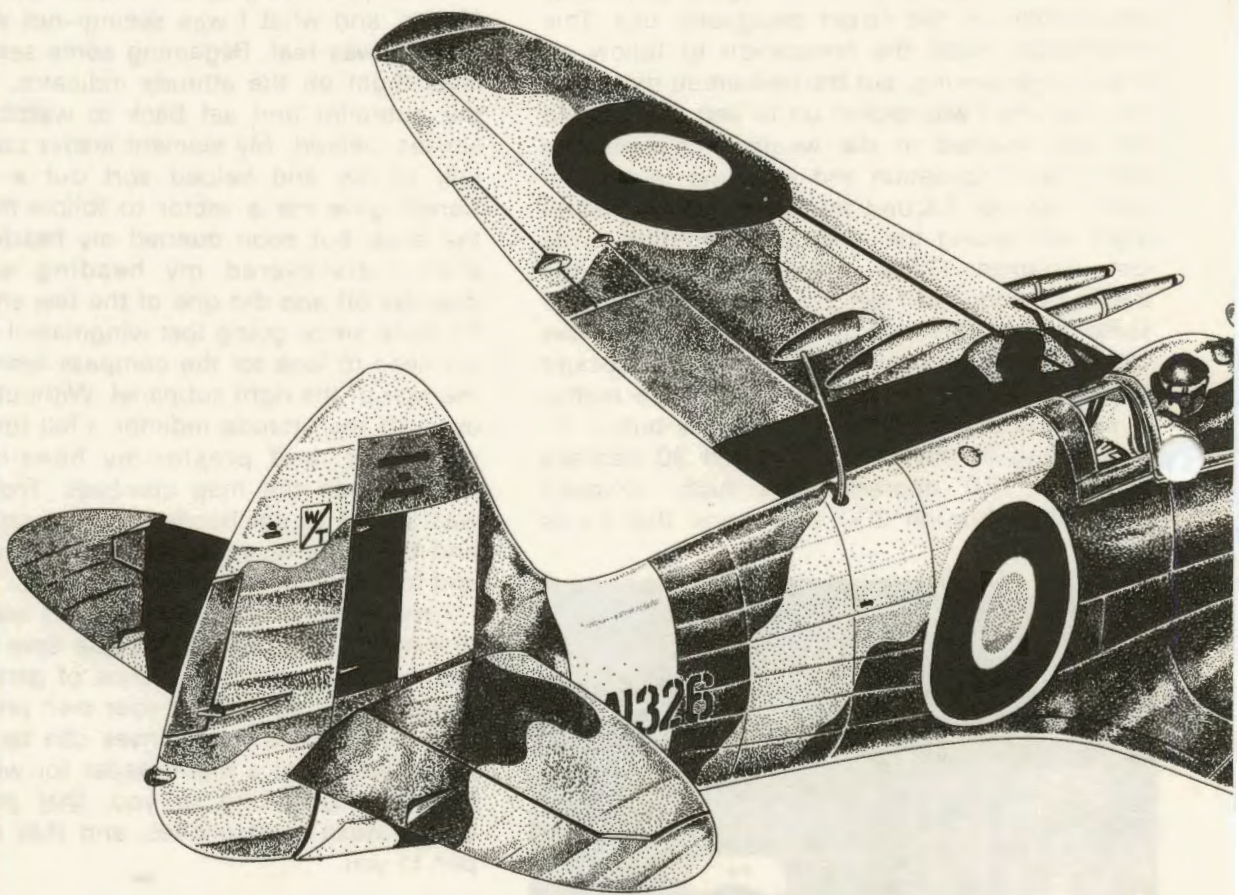
climbing through our assigned flight level. My senses told me I was in a descending right turn, and I was beginning to get nervous when my element leader called and asked if I was having any problems. His simple, concerned radio call was like a breath of fresh air, and I finally began to do the things I had learned and even taught in a ten-year flying career. I knew then I had the "leans" and what I was seeing--not what I was feeling--was real. Regaining some semblance of level flight on the attitude indicator, I engaged the autopilot and sat back to watch while my senses cleared. My element leader continued to talk to me and helped sort out a clearance. Center gave me a vector to follow the flight to the area, but soon queried my heading. It was then I discovered my heading system 90 degrees off and did one of the few smart things I'd done since going lost wingman--I didn't turn my head to look for the compass synch knob on the rear of the right subpanel. Without taking my eyes off the attitude indicator, I felt for the knob, pushed it, and presto--my heading system aligned with the mag compass. From there it was simple to get headed in the right direction, find the flight on radar (by now 30 miles away), and follow them to our working area.

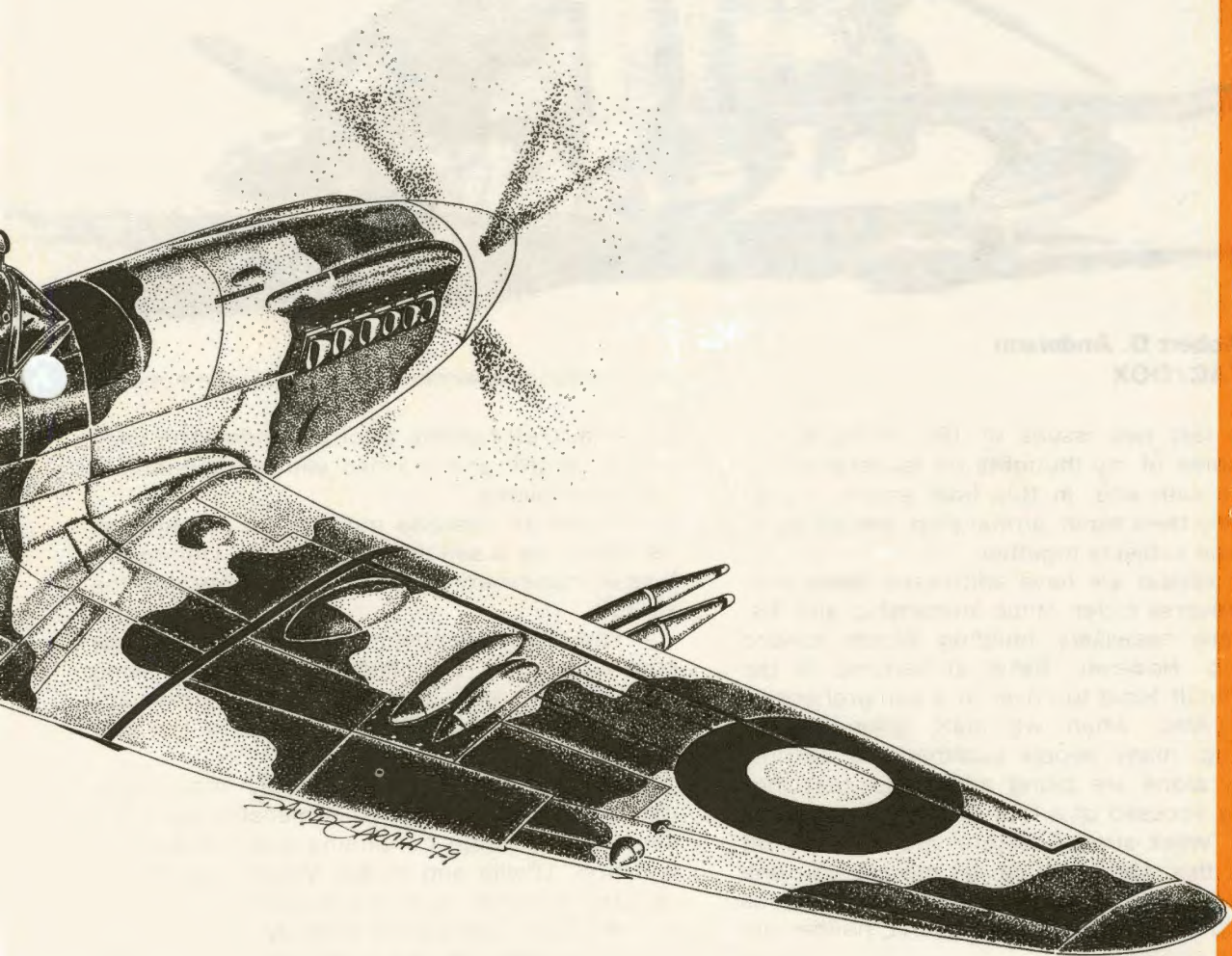
I made a lot of mistakes--but I learned a lot that night. I learned why people have died going lost wingman, the importance of getting on the gauges, how dangerous your own pride can be, how treacherous your senses can be, the calming influence of a flight leader (or wingman for that matter) talking to you, that all I'd been taught wasn't just cliches, and that it can happen to you.

Bio --

Capt Lamkin's background is non-TAC, and the F-15 is his first exposure to fighters and single seat aircraft. He is a Senior Pilot and graduated from UPT at Laredo in 1970. After a tour in C-130's at Clark and in SEA, he returned to Laredo as a T-37 IP. He entered the rated supplement in 1976 at Laughlin as a Foreign Training Officer and also served a year in Korea as a Headquarters Squadron Section Commander. He is currently enrolled in F-15 training with the 461 TFTS at Luke and will be assigned to the 8 TFS at Holloman. He was commissioned through OTS, attended SOS in residence, and has a Bachelor's and Master's degree.

Supermarine Spitfire





LEADERSHIP, DISCIPLINE



By Col Robert D. Anderson
HQ TAC/DOX

In the last two issues of TAC ATTACK, I've shared some of my thoughts on leadership and discipline with you. In this final article, I shall discuss my third topic, airmanship, and I'll try to tie all three subjects together.

It may appear we have addressed these subjects in reverse order, since airmanship and discipline are necessary building blocks toward leadership. However, basic airmanship is the most difficult topic to cover in a comprehensive manner. Also, when we start talking about airmanship, many people automatically assume that they alone are being addressed—that they are being accused of a lack of basic flying skills and are "weak sticks." Before you turn me off and skip this whole article, let me ask you one question, "Are you as good a pilot or WSO as you could be?" You know you aren't; neither am I. So, let's continue.

Do we really need to emphasize basic airmanship? Our mishap experience says we do. Leadership and discipline have been causal factors in many of our accidents, but our greatest problem in operations factor accidents is airmanship. In the period we previously discussed, 21 out of 27 accidents were attributed to loss of control, flying into the ground, or lack

of situational awareness. Here are some examples:

- An aircraft holding prior to range entry went out of control and crashed without any indication of problems.

- During an exercise mission, an aircraft was "attacked" by a simulated aggressor. During defensive maneuvering, the pilot lost control of the aircraft.

- Low level navigation mission over snow covered ground, the pilot was apparently flying with outside references only and flew the aircraft into the ground. An IP was in the rear cockpit.

While the basic ability to fly may come naturally to some people, airmanship skills are developed through continuing practice and application. Orville and Wilbur Wright did not get up one morning, build the Wright Flyer and go out and fly it. Many years of study about aerodynamics, airfoils, etc, were involved. The brothers even built their own wind tunnels and tested different aircraft models. Hard work, numerous experiments, and failures preceded their success at Kitty Hawk.

Just as their abilities grew step-by-step, so every aircrew member learns his skills one step at a time. TAC fighter pilots aren't made overnight. It takes several years to take an individual,

LINE, AIRMANSHIP

AirmanShip

teach him to fly, and then teach and allow him to master the skills necessary to employ a fighter aircraft.

In the past, we had the luxury of an abundance of flying time to accomplish these tasks. Today, this is not the case. We can no longer give everyone as much flying time or as many sorties as they want. The bulk of sorties and flying time will go to those who need them most to develop and hone their skills. The current flying program has resulted in TAC crews flying an average of 15% more sorties this year than last year. We will hopefully continue to improve. It is obvious however that resource constraints alone make development of airmanship a difficult task. Difficult? Yes. Impossible--no!

From the first days of aircrew training we have been taught several basic points--know the limits of your capabilities, know the capabilities of your aircraft--and don't exceed either one. If these rules are followed, you'll have a good chance of becoming an old, bold pilot. Let's face it, all aircrew members are not equal. Some of us have good hands--some of us not as good. Our capabilities are as diverse as we are. When you first transition to a new aircraft, your capabilities with that aircraft are slim. You surely could not handle the aircraft safely through its entire envelope. But after 300 hours in that aircraft, your abilities will be closely matched to the aircraft's.

Perhaps an even harder airmanship task is to define the limits of an aircraft's envelope. Many people feel that each pilot must explore the entire aircraft envelope including full stalls and departures. Perhaps this may be carrying things too far. You don't need to touch a stove to prove it can burn--or to get your aircraft into a flat spin to prove you really can't recover from that mode of flight. Approaches to stalls, etc. are flown to familiarize a pilot with indications of impending trouble. After that, a pilot ought to fly the aircraft to stay away from those danger areas, not to see how close he can come without getting bitten.

Perhaps the most difficult aspect of airmanship is not physical but mental. A small

percentage of people lack the physical skills and coordination necessary to fly. Your mind--your situational awareness--determines how successful a pilot you are. Do you know where you are in the aircraft's envelope or do you just guess? If you listen to your aircraft, you'll realize it's constantly talking to you. Engine noise, vibration, the airstream, airframe buffet, tickle, burble--all add up to the airplane telling you what it's doing. If you pay attention to these signals, you won't have to look into the cockpit as often. You must also know where the other members of the flight are, the altitude of the next leg on your route, target defenses . . . to name a few. These and many other considerations continually occupy your mental processes, in addition to just strictly flying the aircraft. Many aircraft require in excess of 50 maintenance man-hours of preparation and repairs for each hour of flying time. I'll bet our preparation of the human machine doesn't even approach that figure.

I've only scratched the surface of the difficult subject of airmanship. To fully cover this subject would take an excess of time and space and would include many things you and I know already. Stated simply--define the limits and capabilities of the man and machine and don't exceed them.

Although I treated leadership, discipline, and airmanship individually, they cannot be separated. In tactical aviation, they are totally dependent upon one another. A force of the best pilots and airplanes could easily lose a fight if they lacked the discipline to operate as a team or the leadership to keep them headed for the objective. Our success is also totally dependent on these factors.

We know as long as we fly we will lose aircraft--but we have lost too many due to lack of leadership, breakdowns in discipline, and basic flying skill deficiencies--areas we can and must improve.

Those are my thoughts on these three areas. Perhaps you would care to share yours with us. Keep your mach up and check six (and twelve)!



**By Mr. Joe Kovac
Danish Arctic Contractors/Weather
Thule AB, Greenland**

Winter (the dark season) is with us again, so I guess the Arctic statute of limitations has expired, and I can tell you this true tale. It happened in the spring of the year, which around here means the sun was appearing above the horizon at midday--but only just. We had been basking in the glory of clear and unlimited conditions when a little cigar of wind slid down off the ice cap--phooft!--200 obscured, $\frac{1}{4}$ mile visibility in blowing snow, and 90 degree/45 knot wind across the ice-covered runway.

Sometime before the wind started, Delta Delta Zed (name changed to protect the innocent airplane), a ski-equipped Twin Otter (UV-18 when it is flown by USAF types), left Station Nord en route to the big city of Thule. Not quite half way, the pilot heard a call on HF that Thule was in a Phase Alert condition. He retuned his radio to Nord, found that Phase Alert meant severe weather conditions were possible, and decided to press on. No refueling? "Naw, I got plenty. Save some for the next guy."

Why? We missed the IP, saw the first turnpoint go by the left wing unexpectedly, then caught sight of the target. Up and over we go, fully loaded and nowhere near the briefed attack angles, but we're gonna get that target no matter what! . . .

Unknown to our intrepid aviator, three C-130s on special missions out of Thule had already experienced various fortunes. The first received a surprise when he touched down with an 8 knot head wind then turned sideways on the slippery runway as the first wind gust caught him. Number Two made a missed-approach in moderate turbulence (by then the cigar of wind was causing zero/zero on the runway) and headed south. Number Three didn't even bother to descend below FL210. The crew checked to make sure they had their razors and stewardess-chasing cash with them and turned for Sondre Stromfjord.

"Thule approach, this is Delta Delta Zed, 20 northeast, request landing instructions."

Why? There are the power line towers, one each side of this valley just like the chart shows. They sure make good checkpoints, even when it's a bit hazy like now. Gotta keep below them . . .

What? Who is that? Where'd he come from? "Delta Delta Zed--Thule approach. No radar contact. Thule is presently 200 obscured, one quarter mile, below minimums due to blowing snow with a 90 degree crosswind at 45 knots."

"Thule approach--Delta Zed. I'm VMC at low level, declaring emergency fuel, request straight-in approach please."

"Delta Zed--Thule approach. Cleared for straight-in approach to runway 16, wind 240 at 38 gusting 46, altimeter 3019. Please say location, we do not have you in sight or on radar."

Why? I think I can hack this guy. We're 4,000 feet back but too much angle off for a good heat shot. I'll tighten up a bit more and squeeze one off. Dog-gone AOA tone . . .Gotta pull harder . . .Oh . . .

The first we in the Base Ops building knew of Delta Zed was the sound of his engines as he came in low across the building, just clearing the rawinsonde antenna bubble on the roof. He touched down at the edge of the taxiway by the parking ramp and bounded into the air again as he disappeared into the cigar of blowing snow that still obscured the runway. He had completed his approach straight in. Straight in--to the wind. The next we saw was Delta Zed sliding backward downwind, out of the snow cigar toward the parking ramp. After a few corrections in drift to just miss a parked C-130, he shut down when the chocks were in place.

Why? Ooops. I'm too close to lead here, and we're supposed to be sliding over to the other side now. Watch this neat roll up and over lead . . .

I looked up as the pilot of Delta Delta Zed approached the weather station briefing counter. He was young and full of spirit, in a flying suit that looked like he had slept in it.

"Hey, Stormy." (That's original.) "How's the weather at Rae Point?"

"Huh?" (That's original, too.), I responded.

"Rae Point. Out west beyond Resolute."

"You don't wanna fly now. That 45 knot crosswind will continue for another six hours or so."

"Jeez, Stormy, didn't anyone tell you" Wind over the wings is what makes an airplane fly. I'll need winds at six and 10,000 feet while you're at it."

"Aha. Gotcha now. Rae Point is 200 obscured with visibility of $\frac{3}{8}$ mile in moderate snow. Resolute Bay won't hack it as an alternate, either."

"They're always like that this time of year. Never made an approach where I could see anything until June. Can I have this 700 millibar chart? Thanks, I'll see you on the way back."

Delta Zed didn't get a chance to see Rae Point that day. Ops refused his clearance request to take off directly from his parking spot.



What bothered me about this man? It wasn't his appearance; it was his attitude. "Press on regardless" is how it was once aptly expressed. I fully realize that aircrews need to be highly motivated to eagerly leap into an airplane and intentionally go out and get shot at. It is their duty to be brave and to press on in wartime. But during peacetime the "press on regardless" approach can only lead into square corners, box canyons, and other "no win" situations. "Press on," but use your head while you're doing so. ➤

Ed Comments: I'm sure we have all exhibited the "Press on regardless" approach, either at the bar, in the air, or both. Perhaps some of us have done such a good job at role playing that we've come to believe it ourselves. You might also ask yourself if this is the image you want to project to other folks.

Joe Kovac is currently Supervisor for Weather, Danish Arctic Contractors, Thule AB, Greenland (not one of your hot and dusty, typical tropical TAC bases). He retired in Aug 1978 after 26 years (eight enlisted) as a weather officer in the USAF. Since 1965 Joe has been working in the air defense business with one year out for SEA. Direct TAC type support included three years at Incirlik AB, Turkey and 365 days at Nakhon Phanom. High point of the tour in Turkey was two months at Jiddah with Hard Surface; low points in his career were the times he was a member of aircraft accident investigation boards. "Every junior officer who aspires to be a hot-rock fighter pilot should first be required to soak up the smell of the first 24 hours at an accident site. That stays with you much longer than any pictures or words in a story."

SPEAK to me

By Capt Gary V. Earl
35 TFW/DOTSF
George AFB, CA

Capt J. Blast got out of the plane with a sigh of relief. You could tell by the frown on his face that the mission had not gone well. The clearance was messed up which made him late to the range, and they had to rush to complete all the events. Things hadn't gone well with approach control either. He didn't see the need to get vectored around half of the southern US just to land. Still, that wouldn't have seemed so bad if the ADI hadn't tumbled on the range; and to top it off, they hadn't fixed the hydraulic write up from the last flight. The "CND" in the corrective action column had automatically aroused his suspicions, but he hadn't questioned it.

Sgt Barnstormer, the crew chief, finished putting the downlocks on and came up to find out how the aircraft was. All he got for his efforts were an icy stare and a few mumbled words about maintenance in general. "Wonder what's eating him?" he thought to himself as the disgruntled pilot walked away.

At maintenance debrief, Capt Blast explained the write ups in infinite and irate detail. "I'll just add a few about the dirty cockpit and windscreen for good measure. Maybe that will get those folks jumping." After a few more words to the bewildered debriefers, he stalked out.

Sgt Barnstormer got the aircraft forms back about an hour later and did a slow burn as he read the write ups, especially the last three. He knew exactly what they meant. "Why?" he wondered. He had a lot of pride in his airplane and the job he tried to do. "Those nomex-clad turkeys! They just come out, jump in the aircraft, and go fly. They don't have any idea how much work I put in out here, or the extra hours we spend trying to trace discrepancies. I worked six hours yesterday with the guys from hydraulics and the electric shop trying to locate the problem. We used the hydraulic mule and even did



a ground run. Nothing we did would show up the 'intermittent hydraulic pressure fluctuation.' The broken attitude indicator I can buy, but he sure didn't have to write up the cockpit like that. I just cleaned it two flights ago anyway."



Sgt Barnstormer could just hear what the line chief was going to say about the repeat write up, not to mention the ones about the aircraft's cleanliness. "I'd sure like to get out of this outfit," cycled through his head at regular intervals.

Any part or all of the previous narrative sound familiar? I'll bet it does. All too often we try to talk to each other on paper when we should be talking to each other with our mouths. There's nothing like words from the horse's mouth to help explain the words in the 781.

"Maintenance communication is the interaction of pilot with mechanic to properly explain and clarify any malfunction or irregularity of airplane performance. It is essential."¹

Both aircrews and maintenance personnel

need to realize that each of us has a job to do. We're both professionals.--too often we fail to appreciate that fact.

Expect maintenance personnel to communicate clearly with you and be sure to reciprocate. If something is wrong with the aircraft, give the first clue to the crew chief. Don't let him find out later via the 781. Be sure to ask his opinion and take suggestions. Be open to new and constructive ideas. It's a sign of maturity and shows interest. Besides, it can go a long way to soothe misunderstandings.

If you do have something wrong with the aircraft, after you've told the crew chief, write it up and explain exactly what's wrong. Tell what, when, where, and how long and any other information that might help the specialist troubleshoot the system. Avoid abbreviations unless you're sure that they will be understood by everyone. "Bill Davis of Piedmont Airlines tells of the pilot who wrote this gripe: 'Number one transceiver APON.' The mechanic didn't have a clue. When they finally located the pilot he explained the abbreviation meant 'ain't putting out nothing!'"²

If you're on the maintenance side of the house and the pilot doesn't seem too willing to talk, ask. The flight described at the beginning of the article might have turned out better if the crew chief had explained the troubleshooting they went through before the CND, and would the pilot be sure and watch the system so they could determine the exact phase of flight where the problems occurred to help them out?

When something has gone wrong, don't let an unprofessional attitude and anger destroy a good communicating relationship. The wounds take a long time to heal. No one wins in a battle of words, and we could both end up the losers!

¹FLIGHTFAX, Vol 7, Number 43, 15 Aug 79.

²Ibid.

ABOUT THE AUTHOR

Captain Gary V. Earl received his BS in English and Education from Utah State University in 1968 and a MA from Chapman College in 1976. His military experience includes: Titan II Combat Crew member at Little Rock AFB, Arkansas; UHT (UH-1F) Missile Site Support at F E Warren AFB, WY; and (CH-53) 21 SOS NKP, Thailand. He presently is Chief of Support Flight Operations at George AFB, California.

WEAPONS WORDS

THAT'S WHY

By MSgt John Mann
HQ TAC/SEW

Why do we talk about cockpit switches in Weapons Words? Because they control explosive devices. If you aren't familiar with aircraft and all the different handles, buttons, and switches in the cockpit, then perhaps the list of mishaps below may not mean much. Even for some of us who work around aircraft cockpits for a living, the similarities between the mishaps are vague and each mishap appears to be an "isolated occurrence." Closer scrutiny reveals some common threads that run through each of these mishaps:

- In each case, the people were trying to accomplish a task to the best of their ability.

- Every mistake was made in the proximity of the aircraft cockpit.

- Each activated control device was visually marked for caution; i.e., painted yellow and black stripes and highlighted in tech data as an emergency system.



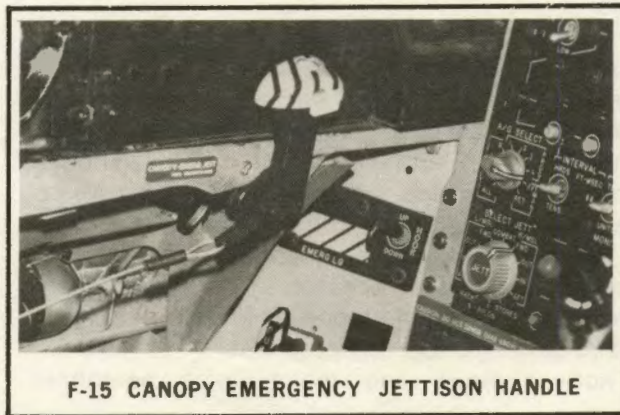
- In each incident a pyrotechnic device functioned as designed--causing an explosive mishap.

As a rule of thumb, the black and yellow switches, handles, knobs, and buttons should only be actuated when the emergency dictates or when the particular system is undergoing a functional check. Functional check procedures should be reviewed prior to doing the task, and you should only perform tasks you've been trained for. Even experienced people sometime forget steps of tasks--especially if they are performed infrequently.

If technicians are to perform their tasks properly, two things are required: they must



EMERGENCY AIR REFUEL HANDLE
WITH SAFETY PIN INSTALLED



F-15 CANOPY EMERGENCY JETTISON HANDLE

PHOTOS COURTESY OF 1 TFW/MAT

have the desire to do the job safely and be equipped with the tools to do the job correctly. Knowledge improves desire and is an invaluable tool in completing any task. Knowledge gained through experience--especially experience gained through other's mistakes--should be used in our training programs so everyone doesn't have to learn firsthand. We all prefer to learn through proper training to avoid the embarrassment and cost of mistakes. Since we

have the lessons of experience available, we can amortize the cost of these mishaps each time we prevent a mishap.

Let's assume the mishaps listed below represent "the 10 percent of the technicians who didn't get the word." Then our job as technicians, supervisors, and educators is to try harder to reach that 10 percent to enhance awareness and knowledge of their working environment to prevent future mishaps.

COCKPIT RELATED EXPLOSIVE MISHAPS

F-4E Emergency Canopy System Activated \$1,922.30

Transient alert crew member climbed to the front cockpit to reset the drag chute handle. His right foot slipped; and when he grabbed for the canopy rail, he pulled the canopy jettison handle.

F-15 Emergency Air Refueling System \$5,694.00

An assistant crew chief was working a discrepancy; and when he removed the BIT control panel (normally performed by 32677 avionics technician), he activated the handle which fired the emergency refueling door thruster cartridge.

UH-1N Fire Extinguisher System \$373.08

A crew chief was performing a power-on preflight inspection. He performed a check of the emergency fuel shut-off valves by activating the "T" handles which fired the extinguisher cartridges. The fire extinguisher selector switch was in the "main" position.

F-15 Emergency Harness Release System \$722.60

Two life support specialists were performing a 30-day inspection of the survival kits. The inertia reel strap was twisted. To release and straighten the strap, one technician pulled the emergency harness release handle. The individuals safed the system and afterwards checked the tech order which stated "not to pull the emergency handle, as it would fire the rapid escape system."

F-15 Emergency Canopy Jettison System \$1,869.78

During a tow operation it began to rain; the brake man attempted to close the canopy, but pulled the emergency canopy jettison handle which fired the explosive components.

F-15 Emergency Fire Extinguisher System \$1,341.50

The system was fired sometime between BPO inspection and preflight inspection. Exact time and cause unknown. Actuation of system requires external power and a two-step arm/fire sequence.

T-38 Emergency Canopy Jettison System \$1,215.80

Aft canopy thruster discovered fired at quick check area when the aft canopy would not close. Investigation revealed the thruster had been fired by an unknown person who activated the M-27 aft canopy jettison "T" handle and then stowed the "T" handle and inserted the safety pin.

F-15 Emergency Air Refueling System \$5,403.00

When the speed brake did not respond to the switch, the crew chief instructed the person in the cockpit to cycle the AR door. The airman removed the safety pin and pulled the emergency AR door handle which fired the thruster cartridge. Tech data was not available and proper terminology was not used.

F-105 Arresting Gear Explosive Bolt Fired \$353.15

As airman was leaving the aft cockpit, his ear protectors got tangled in left hand console activating the arresting gear switch, firing the explosive bolt. Circuit breakers had been reset. Switch guard was not installed.

F-15 Egress Impulse Cartridge Fired \$337.92

Airman was attempting to retrieve FOD from under the front of the survival kit. He raised the parachute away from the seat, pulling the release lanyard enough to fire the MK-5 Mod 1 cartridge.

F-15 Emergency Air Refueling System \$5,694.00

Airman was pulling the anti-G hose which was lying next to the emergency AR switch. He activated the system firing the explosive components.

A-10 Fire Extinguisher System \$496.00

When performing a functional check of the fire extinguisher system, using local procedures and test fixture, the technician failed to disconnect system properly before pulling control handles which fired the extinguisher bottle.

TOTAL COST \$25,423.13

chock talk

*...incidents and incidentals
with a maintenance slant.*

PLEASE HELP ME, I'M FALLING

While an F-4 was taxiing out for a normal training mission and making a right turn, the left external fuel tank fell off the aircraft. The aircrew smartly aborted the mission and returned to the chocks.

Investigation revealed the impulse cartridges had not fired, and the aircraft tank support contained no defects.

Investigation then turned to the pylon/tank assembly. Examination of the pylon assembly in the shop revealed it was not possible for the bellcrank ejector assembly to lock the support hook in place with normal release spring action due to excessive corrosion around the bellcrank shaft pin. When simulating the loading procedure, the support hook would close; but the release spring would not pull the bellcrank up to lock the hook. Since there were no identifiable defects in the aircraft tank support, it was concluded the support hook closed but did not lock in place during installation.

One tech order checklist states that during installation personnel should insure positive lock by listening for an audible 'click' when hook lock and hook release bellcrank fully engage . . ." (TO-IF-4-2-10) Another tech order (IF-4-35CL-2) does not require this check be made during installation. There is, however, a warning in both

tech orders to visually inspect the locking area through the inspection hole in the pylon to insure metal-to-metal contact. Both of these checks were probably not accomplished.

Hanging external tanks, or any other aircraft store, can be a very tricky business. Following each step in the tech data can save a lot of headaches and an occasional lost piece of equipment.



PENMANSHIP ?

When's the last time that you heard of poor writing as a cause of FOD? Well, it really happened.

Panel F-14 was removed from an A-10 to facilitate other maintenance. Panel F-14 was found to be the wrong panel and panel F-12 was removed and later replaced after maintenance action had been completed. The removal of panel F-12 was not documented in the 781. The removal of panel F-14 was entered, but the entry looked more like panel "F-19" than "F-14." Panel F-14 was replaced, but the fasteners were only hand tightened. And the maintenance supervisor cleared the aircraft for flight after inspection of panel F-19.

When the aircraft returned from its mission, FOD was discovered in the left engine--and 12 fasteners were found missing from panel F-14. Guess where they went?

Next time you make a 781 entry, try and make sure that it can't be misinterpreted.

WHERE'S YOUR PENCIL ?

The A-10 was returning from a range mission overseas at 20,000 feet when the pilot noticed a very slight binding of the control stick. Shortly thereafter, the stick would not move aft of neutral. The pilot unloaded the aircraft and snatched the stick back, breaking the stick free.

The pilot declared an emergency and began his recovery. The stick jammed three more times prior to landing, and each time the pilot was able to free it.

Investigation revealed a U.S. Government mechanical lead pencil in the bobweight area. The pencil had jammed between bobweight mounting bracket and control linkage. The pencil was in an area it could not have reached without a panel being removed. Further investigation still failed to reveal exactly when the pencil entered the white area or how.

It's best to make sure you always have a prompt answer to, "Where's your pencil?"



WATCH OUT FOR THE CHOPPERS

No, I'm not talking about Aunt Sadie's teeth, I'm talking about helicopters--and rotor wash. Those rotating helicopter blades create a great deal of "wind" which can catch you unawares.

Maintenance personnel were accomplishing an engine run on an O-2. The engine cowl had been removed and was placed on the ramp about five feet off the left wing tip. During the engine run-up, a CH-3 was taxiing on the parallel taxiway--115 feet away from the cowl.

The wind velocity from the taxiing CH-3 in conjunction with the 10 knot crosswind lifted the panel and blew it into the prop of the O-2.

Fortunately, no one was injured and damage to the aircraft was minimal.

No one expects an aircraft that's over 100 feet away to hurt them. Believe me, prop wash, rotor wash, and jet blast can be harmful well beyond 100 feet. Keep your eyes open and be aware of these hazards on your flight line.



ZAAAAP !

Although this incident happened to a C-130 loadmaster, the implications for all maintenance personnel are obvious . . .

The loadmaster was outside the 130 while the aircraft was making a self-contained start. The ground was wet and the loadmaster's interphone cord was lying in a puddle of water. The weather in the area included rain showers, and a weather warning for lightning was being disseminated when lightning struck in the area. The loadmaster was not struck, but a static discharge traveled through the wet ground, interphone cord, and headset. He was not severely injured, but did suffer a temporary hearing loss. He later regained his hearing with no further complications.

As I stated, the weather warning was being transmitted, but didn't reach the flight line until five minutes after the loadmaster was struck. The weather notification was obviously late, but a little bit of personal "weather watching" might have helped. It also helps to remember that lightning doesn't have to hit you to hurt you!

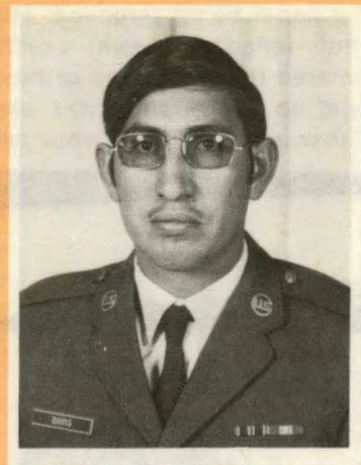


TAC

SAFETY AWARDS

Crew Chief Safety Award

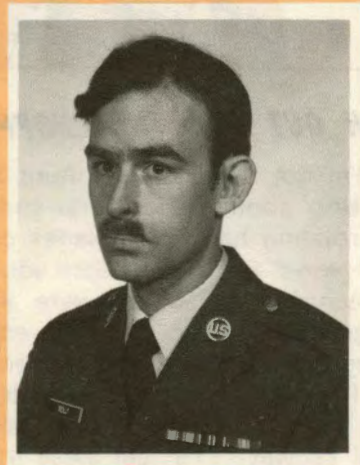
Staff Sergeant Eustacio M. Davis, 8th Aircraft Maintenance Unit, 49th Tactical Fighter Wing, Holloman Air Force Base, New Mexico, is the recipient of the Tactical Air Command Crew Chief Safety Award for January 1980. Sergeant Davis has an outstanding record as a crew chief, maintaining his aircraft in a clean, combat ready condition at all times. His aircraft is consistently one of the "high flyers" in the wing. Recently, during engine start, his aircraft experienced a central gear box failure and fire. Sergeant Davis was instrumental in aiding the aircrew during egress, removing other aircraft from the danger area, and directing efforts to extinguish the fire. His prompt actions prevented possible injury to personnel and held aircraft damage to a minimum.



SSgt Eustacio M. Davis

Individual Safety Award

Staff Sergeant James P. Reilly, 474th Component Repair Squadron, 474th Tactical Fighter Wing, Nellis Air Force Base, Nevada, is the recipient of the Individual Safety Award for January 1980. Sergeant Reilly is the NCOIC Pneudraulic Shop. In this position, he has become personally involved in all aspects of his unit's operations. He conducts daily inspections of all shop functions to insure that a high level of safety awareness is maintained. His attention to detail recently prevented an aircraft with an improperly installed spoiler actuator from taking off on a mission. Sergeant Reilly's safety consciousness is a credit to himself and his unit.



SSgt James P. Reilly



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Dear Editor,

The attached letter was written by a crew chief in the 479 AGS. I concur with his objection to the printing of such derogatory implications of a crew chief. [Nov issue, "A Crew Chief"] I believe the TAC Attack owes all conscientious crew chiefs in TAC an apology for publication of the article.

The rationale for publication could be many; however, it comes over to many as branding the crew chief as a "goof off."

JOHN B. STEELE, Major, USAF
Commander
479 AGS

Dear Editor,

I am writing to you in reference to the poem "A Crew Chief" in the November 1979 TAC ATTACK.

I am also a "Crew Chief" and my contemporaries and I are upset about the impression it would leave in the minds of young, inexperienced pilots or others not familiar with the overall outstanding support given by crew chiefs to the flying mission. The attitude of myself and the vast majority of my friends is that "I won't launch anything I wouldn't fly myself." My personal pride and integrity are the insurance policies that bring the jet jockies home safe to a warm bed everytime I pull their chocks. That and my own conscience cannot be bought for any price, and I am very disturbed that

TAC ATTACK would publish a poem that impugns the hard work and dedication of us all. It is especially disturbing at a time when TAC is working hard to sell the policy and concept of one man, one airplane, under the dedicated crew chief concept.

We all make mistakes in the flying business. It happens on both sides of the house. Maintenance makes their share and operations is not lily white either. It is my sincere hope that those mistakes we make are all small enough to be part of the learning process and not the ones that cause the loss of an aircraft or human life.

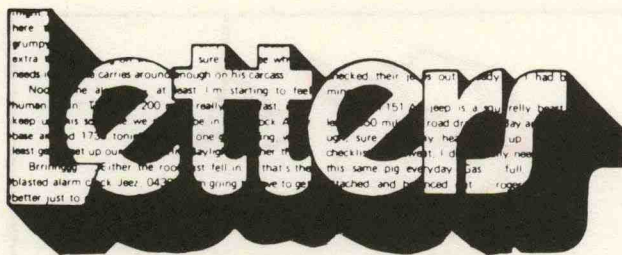
In the next issue, please print the forward that should have preceded the poem.

BENNY LEONARD, SSgt, USAF
479 AGS

Dear Maj Steele and SSgt Leonard,

I'm sorry you, and others, took offense from the poem in our November issue. No intent existed to slander any maintenance personnel. This poem was written by a crew chief who felt he had something to contribute. His poem was inspired by an earlier poem, "Pressin," which appeared in our April '79 issue. In that poem, a pilot performed in somewhat the same manner as our fictitious crew chief--with the same results. We don't point fingers, we only try to help folks remain aware of the importance of their jobs and how easily complacency and carelessness can cause a mishap.

Ed



F-4 Drivers

The November 1979 issue had a TAC TIP entitled "Goicha" which contained an inaccurate statement. This item stated that the "BAK-9 is not compatible with the F-4 for approach-end arrestments." That statement is false. What the editor really meant to say was that at higher F-4 gross weight/airspeed combinations, the BAK-9 is stressed to the limits of its performance. The BAK-9 is compatible with the F-4 under the parameters listed in the Dash Ones. I hope our mistake didn't cause any of you too much confusion.

Ed

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Ed

Dear Editor,

Was very sad to see that Fleagle had joined the ranks of the MIA's. What happened? Looking forward to hearing a hearty "Three's in" call from our feathered wingy.

Maj Tom Floyd
602 TAIRCW/SEF
Bergstrom AFB TX 78743

Major Floyd,

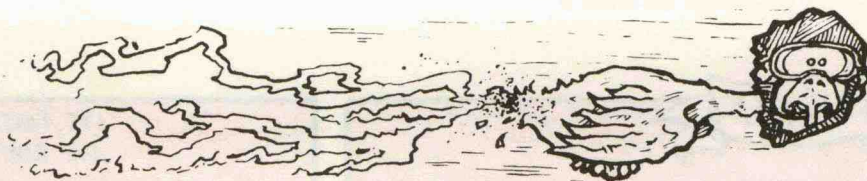
When we were putting the finishing touches on the November issue, we had to delay publishing a story. Unfortunately, Fleagle was tied into the particular story so we had to replace him at the last moment. Besides, even Fleagle needs a rest now and then.

Ed

Hey! pass it along... nine others are waiting.



TAC TALLY



CLASS A MISHAPS	▶
AIRCREW FATALITIES	▶
TOTAL EJECTIONS	▶
SUCCESSFUL EJECTIONS	▶

TAC		
NOV	THRU	NOV
	1979	1978
1	35	28
1	26	17
1	37	31
0	23	25

ANG		
NOV	THRU	NOV
	1979	1978
0	7	13
0	6	9
0	4	9
0	2	8

AFR		
NOV	THRU	NOV
	1979	1978
0	3	3
0	2	1
0	3	2
0	1	2

TAC'S TOP 5 thru NOVEMBER '79



TAC FTR/RECCE	
class A mishap free months	
35	347 TFW
22	479 TTW
21	33 TFW
17	56 TFW
14	1 TFW

TAC AIR DEFENSE	
class A mishap free months	
96	84 FIS
82	57 FIS
35	5 FIS
32	48 FIS
18	318 FIS

TAC GAINED FTR/RECCE		
class A mishap free months		
39	184 TFTG	(ANG)
38	123 TRW	(ANG)
23	121 TFW	(ANG)
23	108 TFW	(ANG)
20	162 TFTG	(ANG)

TAC GAINED AIR DEFENSE		
class A mishap free months		
88	191 FIG	(ANG)
69	102 FIG	(ANG)
65	177 FIG	(ANG)
44	158 DSEG	(ANG)
31	125 FIG	(ANG)

TAC/GAINED Other Units		
class A mishap free months		
117	193 TEWG	(ANG)
104	USAFTAWC	(TAC)
100	919 SOG	(AFR)
92	105 TASG	(ANG)
73	1 SOW	(TAC)

CLASS A MISHAP COMPARISON RATE 78/79

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

TAC	1978	16.0	12.4	8.3	7.5	5.8	6.3	6.1	6.7	6.5	6.3	5.9	
	1979	6.9	7.0	5.9	6.6	7.4	6.2	7.2	7.1	7.8	7.3	6.8	
ANG	1978	0	3.4	4.0	5.9	8.1	7.4	7.9	6.9	6.7	6.6	6.6	
	1979	0	11.4	9.0	9.7	7.6	6.2	5.4	4.6	4.1	4.1	3.7	
AFR	1978	0	0	10.9	7.8	6.0	4.8	8.1	7.1	6.3	5.7	7.8	
	1979	0	0	19.9	23.1	17.0	13.4	11.6	9.9	8.7	7.8	7.1	

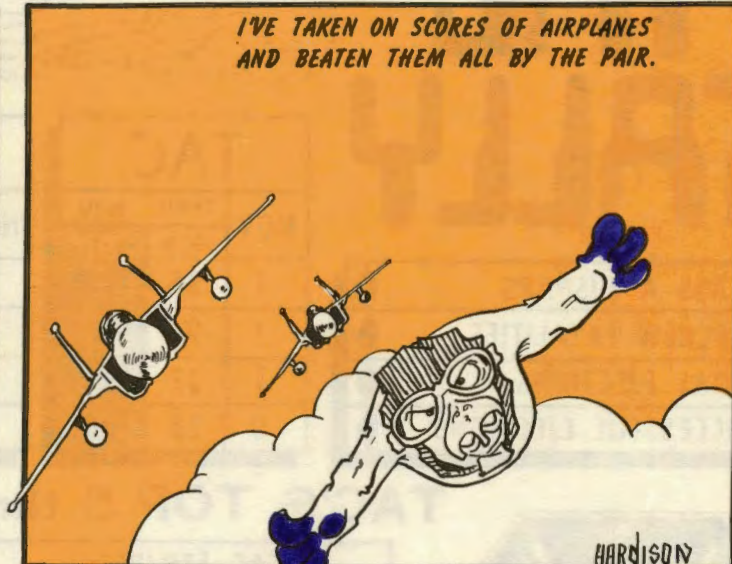
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

FLEAGLE



I'VE FLOWN THE WORLD UPSIDE DOWN
AT 50 FEET IN THE AIR.

I'VE TAKEN ON SCORES OF AIRPLANES
AND BEATEN THEM ALL BY THE PAIR.



HARDISON

ON THE WEAPONS DELIVERY RANGE
I'VE NEVER COME CLOSE TO DEFEAT.

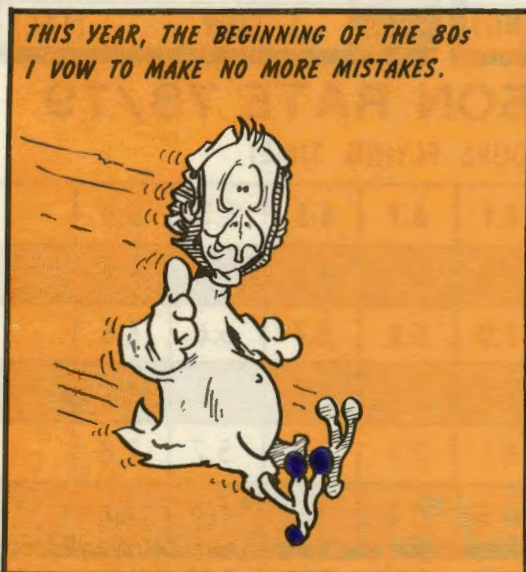


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AND EVEN OUTLASTED THE F-16
WHICH THEY SAID THAT NO ONE COULD BEAT !



THIS YEAR, THE BEGINNING OF THE 80s
I VOW TO MAKE NO MORE MISTAKES.



TRUNK!

SAFETY'S AN EASY WAY OF LIVING,
COMMON SENSE IS ALL THAT IT TAKES.

