TAC ATTACK

JULY 1978

NIGHT OWLS DO IT In the dark... Pg 10

HARdison

TACTICAL AIR COMMAND TAC ATTACK

JULY 1978 VOL 18 NO 7

COMMANDER GENERAL W. L. CREECH VICE COMMANDER LT GENERAL JAMES A. KNIGHT, JR.

CHIEF OF SAFETY COL RICHARD K. ELY EDITOR CAPT PETE ABLER ART EDITOR STAN HARDISON EDITORIAL ASSISTANT MARY KONOPNICKI

CONTENTS

Angle of Attack	3
The Airplane's Point of View	4
Breathes There a Pilot	6
TAC Tips	8
Night Owls Do It In The Dark	10
Aircrew of Distinction	13
SPO Corner	14
Chock Talk	18
First Things First	19
Maintenance As a Foreign Language	20
Ten Commandments	23
Murder On The Runway Express	24
Safety Awards	27
Fleaglegram	28
F-16 Emergency Situation Training	29
TAC Tally	31



TACRP 127-1

Material in this magazine is hondirective in nature. All suggestions and recommendations are intended to remain within the scope of existing directives. Information used to brief accidents and incidents does not identify the persons, places, or units involved and may not be construed as incriminating under Article 31 of the Uniform Code of Military Justice. Written permission must be obtained from HO TAC before material may be republished by other than Department of Defense organizations.

Contributions of articles and photos from personnel in the field are encouraged, as are comments and criticism. We reserve the right to edit all manuscripts for clarity and readability. Direct communication is authorized with The Editor, TAC ATTACK, HQ TAC/SEPP, Langley AFB VA 23665, Autovon 432-2937. Distribution FX, Controlled by SEPP.

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



Editor:

I am totally dismayed by Maj G. H. Felix's article, "Lessons," which does a great injustice to the five O-2A pilots involved in the three mishaps he so perfunctorily describes ... Tagging the cause of these three mishaps as a "lack of professionalism" is a gross oversimplification which ... I find unacceptable

Maj John L. Bradley III Michigan ANG

Dear Maj Bradley

Many mishaps occur which are the result of a number of interrelated circumstances, causes, etc. Others have resulted from willful violation of flying directives. The most difficult accident to investigate is the one in which a fully qualified aircrew lost control of, or flew, a properly operating aircraft into the ground.

To discuss all the aspects of professionalism as they relate to aviation would take more words than I care to write or you would care to read. Suffice it to say that while professionals are human and subject to error, the costs of our mistakes are disproportionate to the mistakes themselves.

We are engaged in a deadly serious (no pun intended) business. While these individuals may not have lacked professionalism, and the degree of other "eauses" of the mishap are impossible to determine, a lapse in professionalism put them in a position from which they couldn't recover. ED

(Cont'd on page 30)

farewell...

Angle of ATTACK

As I complete my tour as Chief of Safety for Tactical Air Command, I recall the words I wrote for this column two years ago. In that article, I reviewed the challenge which lay ahead for us in TAC. The theme of my first column is as applicable now as it was then...

Each TAC specialist, first line supervisor, squadron commander, first sergeant, group/wing commander, and staff member must work as a team. We have no one on the second team because we don't have a second team. Everyone must do his job right regardless of its scope. When we take positive steps, we conserve precious resources. . .

If you detect a problem that could impact on your mission accomplishment, fix it, or advise your supervisor if the solution is outside your capability. If necessary, surface it to your safety people. They will assure that the problem is solved by the proper agency. If that channel doesn't work, bring it to the commander's attention.

The recently adopted motto of Tactical Air Command, "Readiness is Our Profession," is the driving force behind our efforts today. Every program and exercise we undertake must be committed to one end - - increased readiness. Advances in weaponry made by the Soviet bloc compared to the reduced acquisition of our own new fighter and attack aircraft caused by budget cutbacks make conservation of our personnel and physical resources an absolute requirement to maintain today's level of readiness.

US

We are engaged in some of the most realistic training programs in the world to increase our readiness. We must continue these programs and improve them where possible. I know you share my concern, and we will meet this challenge in the same manner in which you have met the challenge during the past two years.

I thank each and every one of you for your professional support.

GEORGE M. SAULS, Colonel, USAF

THE AIRPLANE'S POINT OF VIEW as told to Pete Abler



Ya' think it's easy being an airplane ? Well, I'm here to tell ya', it ain't ! It's a crime the way the mechanics and aircrews treat ya'; like you're just a dumb machine with no feelings--no heart. I've been kicked, punched, jumped on, beat with chocks, landed so hard I thought I'd bust a gussett, over G'd, overgrossed, and who knows what else. I sure look older than my 1,260 hours.



he proudest moment of my life was when they rolled me off the assembly line and turned on my master switches. As the current went zipping through my wires I knew I was destined for great things. I was taxiing out for my first flight when I caught my reflection in some plate glass windows -- I nearly flamed out on the spot. Everything was clean, shiny, and bright. I was so ecstatic, I didn't even mind it when the pilot jammed my throttles to afterburner so hard my linkage stretched a little. I was happy! Everything went well and all systems were A-OK. My landing gear did ache a little from the strain of those fast turns when we taxied back, but I didn't care. The soreness would disappear in a day or two.



The crew that flew me to my operational unit weren't such bad fellows, but I think they were a bit hung over from their previous night in the "big city." The pilot was kind of shaky on the controls and the nav kept giggling over how beautiful the radar was -- sure gave my antenna a full workout. It would have been nice though if they had secured the 780 gear in the travel pod a little better. The downlocks were loose in there and gave me fits the way they kept moving around. I flew a nice GCA for them anyway, so they'd feel good. It's funny the ache still hadn't gone from my landing gear. Oh well, I proudly became a member of blue section with some other aircraft.

When I woke up the next morning, there was a lot going on around me. Airplanes were taxiing around, taking off and landing. It really was a thrilling sight! I just couldn't wait to be part of it all. About noon, a maintenance crew drove up with a tug and began to tow me somewhere -said something about an acceptance inspection. All I know is they put me in a hangar and started pulling panels so fast my gyros tumbled. I didn't mind it too much except one klutz couldn't use a speed handle and kept stripping the heads of my screws and another guy just dropped the panels when he got them off. Whatever happened to TLC?

A few days and innumerable manhours later I was ready to go again -- with several scratches and dents, but still in good shape. New letters were painted on my tail so everyone knew where I belonged. I found out I was going out on my first mission the next day so I vowed to get plenty of rest. But it was not to be ... about midnite, four guys showed up, ran a few checks,

and hung two bomb dispensers on my pylons. I was going to fly ground attack!

The crew chief showed up at 0400 to do the preflight -- and I had just fallen asleep again. There ain't no justice! Two hours later the crew showed up. They looked like OK guys except the front seater said something about wringing me out -- I wondered what he meant by that -- but not for long. Talk about a guy with "Armour Star" stenciled on his hands. He obviously didn't know the meaning of the word smooth. Jam the throttles, snap the ailerons, jerk the stick. I thought these nurds went to school and knew about temperature and stress fatigue, asymmetrical "G" loading, and stuff like that. The clown even over-G'd the SUU-20s and then punched off the meter. I thought these guys were professionals.

It turned out that most of them are. After I had been there a few weeks I got to know the good fliers and the bad. Ya' know, when a guy treats ya' right -- knows what you're capable of and takes good care of you -- you'll do anything for him. I enjoyed flying for them. But those other turkeys -- you've never seen a circuit breaker pop as fast as when one of them showed up. I really had the troubleshooters baffled 'cause they never could find out why it popped. If they only knew why everything cleared up when the crew decided to ground abort.

The maintenance guys and gals were pretty good too. They did have their exceptions just like the aircrews, but they sure worked hard. When they went into POMO (Production Oriented Maintenance Organization), it was the best thing that ever happened. I got to see the same crew chiefs and the same specialists day after day -- the "regular crew chief" really does exist: and when they all worked together, we really got a lot done.

But ya' know, the years -- the bad aircrews -and the maintenance personnel who didn't care -- have all taken their toll. I wonder sometimes if the taxpayers got their money's worth. I didn't do anything to deserve being over-G'd, dented, gouged, and having my engines fodded. I can't stop people from hurting me. It's up to ya'll out there. I'm nothing without you and you're in the same boat without me, so let's take care of each other. I'm just an airplane with a heart -- my only wish is that you'll treat me that way. Just do that and I guarantee I'll take care of you!

"BREATHES THERE A PILOT...

... with a soul so dead who never to himself has said. "Whoo ! I'm glad I got away with that one".

By Maj Kenneth E. Krause HQ TAC/SEP

he inspiration for this article has come slowly but relentlessly over the past few months. Having read scores of mishap reports, it has become evident (and I'm not telling you anything new) that we aircrewmembers make the same mistakes over and over. TAC, SAC, MAC, Navy, civilian, and all other aircrews are out there each day, every hour, making mistakes. I've made more than my share; you've probably made a few yourself.

Why then, are you sitting there reading and I'm sitting here writing, and others are remembered by overturned mugs on the mantle? I don't want to sound melancholy, but there must be a good, or at least acceptable and understandable, reason for this. Let's see what we can put together.

Accidents are the result of a series of events -mistakes or failures. "Big deal," you say, "I made some mistakes last year, but I didn't have an accident." Rog, that's the point.

As hard as it is to accept (especially for fighter pilots), we are not perfect -- close perhaps, but we haven't made it yet. As I said before, we, our sister services, and civilian jocks are out there flying around and making mistakes. The vast majority of those mistakes do not result in accidents. The mishap reports are replete with mistakes -- again, the majority of which would not by themselves have resulted in an accident; but when they all happen on the same flight, in the same airplane, to the same crew, when the sun is just right and the tree frogs are croaking -an accident results.

The investigators then start picking up the pieces and analyzing the mistakes or failures. The errors made by the supervisors and crewmembers, if any, are assessed by comparing the guys with that mythical, perfect pilot/crew. This turkey does everything right (may he roast in hell). He has 20-20 foresight, golden hands, gobs of experience, keen judgement, and a humble demeanor. This is the guy against whom we compare our hapless mishap aviator who just had a bad day and it all balled up on him/ her. So be it. I can't think of another way to make comparisons. The lessons to be gleaned from the foregoing are: We are not perfect; we make mistakes continuously; too many mistakes/failures packed into a given situation will lead to an accident.

The solution then (are you ready for this) is to make fewer mistakes/have fewer failures. We can't do much about the failures. The mistakes we can do something about. It starts first with a critical self-evaluation. Think back over the past few sorties you've flown. What were the mistakes you've made? Write them down. Not just the big ones, but the little ones as well. Then ask yourself: What were the circumstances under which you made them? How did you correct the mistakes? Was it obviously effective or could you have done better? What could you do to better prepare yourself to prevent the mistakes or deal with them more effectively in the future?

If the answers are something like: I was tired from watching the late movie; I threw the wrong switch, then the right one; YGBSM; I need a trip to the simulator, or a review of the Dash One, etc; then you have taken one step the guy next to you reading PLAYBOY hasn't.

The next step after deciding what needs to be done is (give me a drum roll) ... to do it.

It may be you made a mistake because the directives or T.O.s were not clear. Another fighter crew may be in that situation some other day



without a clear understanding of that same directive or T.O. Do them a favor. Try to get it changed.

How about throwing the wrong switch? Was it a spring loaded toggle when it should have been a lift-lock? Submit a Hazard Report or modification proposal. Let's face it. there's a lot we can do to lessen the number of mistakes we make on every mission. You don't make them intentionally ... neither do I. But we make them. The fewer we make and the more we keep others from making, the less chance we have of getting "into a position from which recovery was impossible."



... interest items,

WHAT GOES BOOM...BOOM ?

A bass drum? Could be. Cherry bombs? Yes, but not in this case. An engine compressor stall? You're getting warmer. A couple of blown tires? You win the kewpie doll!

The F-4 was on the wing during a formation landing. Alignment looked good at one-half mile. Touchdown was slightly after the lead aircraft, with the right main tire only 5 feet from the right edge of the runway -- with a slow right drift. The tire rolled onto the asphalt edge of the runway shortly after touchdown, passing over two runway lights before correcting back towards the center of the runway. The pilot perceived excessive closure on the leader and applied the brakes. Feeling no deceleration, he applied full brakes and right nose gear steering, with no noticeable effect. The pilot directed the GIB to pull the emergency brake handle, and the aircraft went boom! ...boom! The aircraft then did a Tasmanian Twist and stopped, pointed in the direction from whence it came.

Wha' hoppen ...? The right anti-skid plug was knocked out of the wheel assembly by a runway light. With the circuit broken, the system sensed a locked wheel; ergo, no brake pressure. The pilot didn't try manual braking (does the paddle switch sound familiar?), and it was proven once more that you will blow the tires if you pull the emergency brake handle with the brake pedals depressed.

LOW PRESSURE...LOW ALTITUDE

Due to stress from a heavy and complex traffic load, an ATC controller mistakenly assigned an unusable flight level to a TAC aircraft recently.

A flight of three was split up in the holding pattern and assumed altitudes of 17,000' MSL, FL 180 and FL 190. When the aircraft at FL 180 noted that the flight member below him seemed to have less than 1,000' altitude separation, he realized that FL 180 was unusable due to the low altimeter setting. Current altimeter was 29.53.

It was an obvious mistake by the controller which probably would not have been caught by the aircrew had they not seen the other aircraft and realized their close proximity. When you're flying in low pressure areas, with a local altimeter less than 29.92, FL 180 is unusable. One more item to program into your on-board computer for retrieval when it's needed.

HOW FAR CAN YOU GO ..?

Every instructor pilot sooner or later comes face to face with the, "how far can I let this guy go?" dilemma. Unfortunately, the only way that question can be conclusively answered is to let someone go too far ... an obviously unacceptable way of finding out ... unless you're at 30,000

mishaps with morals, for the TAC aircrewman

ft in totally sterile airspace, and even that doesn't guarantee success.

An F-4 on a normal RTU syllabus mission was over-G'd by the student in an attempt to stay above the 10,000 ft AGL BFM altitude restriction. The mission was normal until a "slice back" was attempted during advanced handling. The student failed to apply the proper amount of "G" loading. With the sharp end pointed down and the power up, the airspeed went up as fast as the airplane went down. In an attempt to keep above 10,000 ft, the student pulled approximately 10 Gs. The aircraft sustained minor structural damage.

The student bent the airplane, but the IP bit the bullet for failure to adequately monitor the maneuver and terminate it when it should have been apparent that the aircraft was going to descend below the minimum recovery altitude.

As an IP, you have to make innumerable, splitsecond decisions on when to take the aircraft, and when to let the student go and recover on his own. As always, the credit for being right doesn't come close to the penalties for being wrong. It's your decision -- be prepared to make it when the time comes. Anticipation of what the student will do next should go a long way in keeping you out of the penalty box!

00PS...

In 1977, the Air Force experienced 17 fighter/trainer mishaps involving aircraft over-G. While over-G mishaps are costly in terms of dollars and inspection manhours, the potential for catastrophic failure that they create is far more serious.

Even a momentary excursion above an air-

craft's design limit load factor, symmetrical or asymmetrical, can cause permanent structural deformation. Operation between the design limit load factor and the ultimate strength load factor (nominally 150% of the design limit load factor) is expected to cause permanent damage.

Nobody likes to write up an aircraft for over-G, yet allowing undetected structural damage to progress long enough will result in catastrophic airframe failure. Fly your aircraft within design limits to the best of your ability. If you exceed the design parameters, write it up. Who knows? You may be the next guy to fly it.



NIGHT OWLS DO IT IN THE DARK

By Capt Pete Abler

Fly at night?? You gotta be kidding me -- birds don't even fly at night, and they oughta know a whole lot more about the subject than I do!! I'll fly my 6 hours each half. After that, forget it.

As a firm believer in flying after dark, I find the attitudes of those who "do it while it's light" a bit disconcerting. After all, since there are fewer aircraft airborne at night, there must be more lift available to those that are. Right? Ergo -- it must be inherently safer to fly at night.

Both opinions are obviously overstated. Flying at night is not dangerous, nor is it as easy as flying during daylight. Night flying requires more attention to instruments and slightly different procedures to compensate for the lack of visual cues. Consider the following condensed from the FAA publication, GENERAL AVIATION NEWS, April 1978 issue. Keep in mind that the material is applicable to all aircrews -- not just the general aviation fliers. Following that, we'll talk a bit more about some night flying considerations.

The huge L-1011 jetliner with 163 passengers on board was in the landing pattern at Miami International Airport when the flight crew observed that one green light (indicating the nosewheel was down and locked) had not come on. The aircraft was vectored away from the airport to the northwest at an assigned altitude of 2,000 feet while the crew attempted to determine whether they had a wheel mechanism failure or simply a light bulb failure. The next 4 minutes has become a classic "horror tale" in aviation circles, via newspaper headlines and the art of the novelist and television dramatist. While the crew was grappling with the problem, the aircraft, after initially being placed on autopilot, somehow was deflected from its intended flight path and slid imperceptibly toward the ground. A last-second effort by the captain to pull up failed, and the aircraft crashed with a devastating impact into a northern corner of the Florida Everglades. Ninety-four passengers and four crewmembers died. The date was December 29, 1972. The time was 18 minutes before midnight.

In the 6 years that have elapsed since this accident, important improvements have been made in ground and cockpit instrumentation for alerting pilots when an aircraft of this type is dangerously close to the ground. However, the lessons that could be learned from this catastrophe -- which was well documented, thanks to surviving cockpit voice and flight recorder tapes and a painstaking investigation by the National Transportation Safety Board -are still applicable to the general aviation pilot, who usually flies without the protection of sophisticated ground/proximity warning devices, and who often flies alone. (Not to mention TAC fighter aircrews.)

In night flying, there is no direct connection between the visibility range and visual reference to the ground. On moonless nights, the only objects that may be seen from the cockpit are those which are illuminated sufficiently to stand out from the background. If any of the flight crew of the ill-fated L-1011 had glanced out of his windows, he would have seen nothing below to warn him that the aircraft was dangerously low.

Many pilots are unaware of how much we depend on visual references to the ground -even in highly sophisticated aircraft. Through long ingrained habit, we have learned to make instant approximate calculations of our elevation above ground by the size of a tree, a building, a person, etc. When the terrain becomes shadowy or indistinct, visual reference is reduced to guesswork -- which makes for risky navigation -or dependence upon instruments which must be monitored continuously and maintained in ac-



curate calibration. In a very real sense, night flying is always a form of instrument flight.

The importance of the light factor can be seen in that the great majority of night accidents take place under conditions described as "dark "night" (moonless). In 1975, for example, NTSB reported 419 nighttime accidents; of which, 64 occurred under a bright moon, and 355 took place in dark night conditions.

Ordinarily, such factors as the amount of moonlight are not considered by pilots in flight planning. In fact, many flights that culminate in a night landing so happen only because of a delay enroute. The prospect of arriving at the destination airport an hour or so after sundown may not seem to present any inherent difficulties as long as weather and visibility remain good. But for the inexperienced, non-IFR rated pilot, the abrupt loss of visual clues in flight can lead to disorientation and loss of control. The

night owls do it in the dark

"experienced" aircrew is not immune to these problems either.

Human beings are not blessed with instant visual adaptation to the dark. Almost everyone has had the experience of walking into a darkened movie house and having difficulty identifying people in nearby seats for the first few minutes. Human eyes require at least 8 to 10 minutes to achieve a significant degree of dark adaptation. (As much as 30 minutes to an hour to achieve full adaptation.) At dusk, a rapid descent from altitude where the sun is still visible down to an airport already in shadow can reduce the light level faster than some individual's eyes can accommodate to the change. The pilot may have difficulty in reading his panel instruments as well as in picking out terrain features.

Exposure to bright sun glare can reduce night vision (temporarily), especially in conjunction with fatigue. Do not expect good night vision after a day on sunny ski slopes or beaches -unless your eyes have been carefully protected with effective glasses.

Drowsiness and fatigue are two threats to flight safety which lie in wait for the careless pilot at all times, but at night they are particularly dangerous. The absence of visual stimulants, the drone of the engine, the warmth of the heated cockpit, and the natural tendency to seek rest at night are all highly conducive to dozing at the controls -- especially when the pilot is flying alone, and for long hours; such as pilots who fly cargo runs at night.

The question -- is one more likely to have an accident when flying at night? -- cannot be answered on the basis of statistical evidence because the evidence is incomplete. We know that about one-tenth of all general aviation accidents take place at night and common observation suggests that less than 10 percent of the flying is done after dark. But it would be erroneous to infer that night flying is dangerous. Still, it is important to realize that the conditions of night flight are different from daytime flying, and to prepare yourself to cope with them before setting out after dark.

OK, we've defined the problems -- how about

the solutions? Unfortunately, the solutions are not always easy to come by since we are all humans with different capabilities. The following are some general rules that ought to be helpful.

• Be consistent. Don't change your flying significantly for nighttime. Do everything basically the same way you do it in the daytime, only slowly and carefully. Don't trust outside references as readily -- use your instruments to crosscheck what you see outside -- frequently.

• Plan more thoroughly. You can't see as much at night, so you have to know your position in relation to obstacles at all times. Have a plan for all emergencies -- you may not be able to navigate VFR to your destination or alternate.

• Fly smoothly and precisely. If you tend to be sloppy during the day, you're going to be much worse off at night and you'll be giving yourself fits trying to fly the aircraft. Smooth control techniques will also lessen your chances of vertigo -- you know how hard it is to control the aircraft when your mind keeps saying you're inverted. Take the easy way out -- be precise.

• Make sure all internal and external lights are working properly. Lack of good instrument lighting makes your job harder, increasing fatigue. A clean windscreen and canopy are mandatory.

• Be alert. Get the proper amount of crew rest and then some! Most of us don't fly at night on a regular basis, so you're upsetting your normal cycle. If you're too tired to fly -- don't be ashamed to admit it -- and above all, don't fly!

For my part, night flying is much more enjoyable than many daytime missions. It's quieter, and all the people who don't like night flying are on the ground out of your way. However, it also increases the penalty for carelessness. If you approach night flying with the respect it deserves, you will have a safe, enjoyable flight. If you aren't prepared, you're gambling; and the odds are always with the house

JULY 1978



AIRCREW OF DISTINCTION



Captain Matthew W. Earl, Jr Instructor Pilot

Captain Norman C. McCaslin Pilot

Captain Kenneth L. Stroud Navigator

MSgt Carl D. Graham Flight Engineer

MSgt Richard A, Roberts Airborne Radar Technician

SSgt John L. Christopher Prop Specialist

sparks. The aircraft was safely recovered and the crewmembers successfully egressed from the aircraft.

The calm, professional reaction demonstrated by Captain Earl and his crew during this critical emergency is exemplary and qualifies them as the TAC Aircrew of Distinction for July 1978

Un 24 February 1978, Captain Earl and crew were performing a full functional check flight of a DC-130A. At 17,000' during the check of the pressurization safety valve, the crew heard a loud "boom." MSgt Roberts scanned the cargo compartment and realized that the internal fuel tank had imploded and was leaking fuel into the cargo compartment. The crew immediately went on oxygen and performed appropriate emergency procedures.

Realizing the danger of having the fuel run forward in the cargo compartment where the electrical racks and transformer rectifier unit are located, Captain Earl established a nose high attitude to allow fuel to flow towards the back of the aircraft. MSgt Graham and MSgt Roberts opened the escape hatches to allow flow-through air to remove explosive fumes from the aircraft. Sound proofing insulation was wrapped around the leaking tank to slow the fuel flow. Radio and interphone communications were cut to an absolute minimum and other electrical switches were left untouched to prevent any electrical

TAC ATTACK



PHYSIOLOGICAL INCIDENTS

By Maj G. H. Felix HQ TAC/SEF

They don't happen often; but when they do, darned if they don't get your attention. We've recently had three physiological incidents that deserve your attention.

Two involve A-7s and green apples. In the first, the pilot encountered strong oil fumes in the cockpit causing dizziness and a burning sensation in his eyes. Not being certain of the source of the fumes, he turned the oxygen regulator off and pulled his trusty green apple. The recovery was uneventful. The engine was subseguently rejected during ground run for fumes and excessive oil consumption.

The second pilot became hypoxic at FL 250. Cabin pressurization failed, and the regulator showed a negative flow and zero pressure. The pilot pulled the apple, made an immediate descent to 10,000 feet, and the hypoxia symptoms disappeared. Investigation revealed an improperly seated LOX connector that had vibrated loose, disconnecting the LOX supply.

The third wasn't as routine as the first two. The A-10 pilot was in a climb to FL 350 on an acceptance flight. Passing FL 220, the chase pilot noted a degradation of aircraft control. At FL 270, the aircraft stalled, recovered, then went into a series of climbs, stalls, and dives. The hypoxic pilot did not respond to chase pilot transmissions; the chase kept urging idle power and appropriate turns. Luckily, at 12,000 feet, the hypoxic pilot regained full consciousness and complete aircraft control.

Two hose disconnects contributed to this near-disaster. The pilot discovered his oxygen mask hose disconnected from his CRU/60-P connector; postflight inspection revealed a disconnected canopy seal hose, preventing normal cabin pressurization. Sucking cockpit air when the cockpit is at FL 250 doesn't get it.

The lesson, one that's harped on at each physiological training session, is: As soon as you recognize hypoxia symptoms, do something. Check the regulator, connections, pull the apple, descend. Do what you have to do to regain full consciousness. If you find yourself floundering around the sky like the A-10 driver, brother, you've waited too long. He was lucky.

NOTE: Several units have initiated corrective action by leaving the CRU/60-P connected to the oxygen hose in the aircraft. Hopefully, this will cut down problems with alignment and security of the connection. Your unit might consider trying the same "cure."

ALONE, UNARMED AND IFR

By Capt Garry S. Mueller TAC/SEF

Did you hear the one about the guy who rented an Aero Club airplane for a cross-country? Well, he made it to his destination base but had a few problems getting home.

His story starts one foggy (IMC) morning. Takeoff was normal, but preparation lacked a few essentials. He neglected to file a flight plan, failed to get a weather brief, and took off in IMC weather without a valid instrument rating.

Anyhow, he managed to establish radio contact with Tamsville municipal tower. They politely informed the pilot that Tamsville, (close to Valrida) weather was 300 foot overcast, 1mile visibility, winds calm, with fog and haze. He pressed on. After another 20 to 30 miles, he found the proverbial "sucker hole," so down he went, hoping to establish his actual position. As expected, he wasn't where he wanted to be, which is usually the case.

After wandering around trying to find Valrida, and being low on gas, he found a plowed field. With gear down and welded, he landed in the field. During "landing rollout," the nose gear dug into the mud and flipped the aircraft inverted. Damage to the aircraft was minor; damage to the field was negligible. Embarrassment to the pilot was substantial. FAA action could be considerable.



BOATING SAFETY IS NO ACCIDENT

By TSgt James O. Bunkley, Jr. ATC SAFETY KIT

AIC SAFELT NI

Many Air Force members and their dependents are killed or seriously injured in boating mishaps every year. The majority of accidents would not have happened if the victims had taken time to learn proper small boat operating procedures.

If small boat enthusiasts observe the following rules, they will be nautical miles ahead in personal fun and safety.

Know your boat -- what it can and can't do.

• Don't overload -- check the boat manufacturer's capacity plate. Keep a good lookout for other boats and objects.

• Operate at safe and legal speeds -- watch your wake.

• Know and respect the weather -- heed weather warnings.

 Take sufficient fuel -- in proper containers -know your cruising radius.

• Keep your boat in shape -- check safety equipment.

• Take necessary equipment -- fire extinguishers, personal flotation devices.

Secure the boat properly -- stow loose objects.

Learn boating laws and obey them.

Never operate a boat while intoxicated.

All "boaters" are encouraged to take part in formal small boat training programs offered by the U.S. Coast Guard, Coast Guard Auxiliary, U.S. Power Squadrons, and the Red Cross.







... incidents and incidentals with a maintenance slant.

EENY-MEENY-MINEE-MOE, IN WHICH HOLE DOES THE GASOLINE GO ?

An MJ-1 hydraulic mule was discovered recently with gasoline in the hydraulic reservoir. Luckily, the discovery was made before the whole unit came apart at the seams; not to mention what might have happened to an aircraft had things gone a little farther

For reasons unknown, the access door to the gasoline filler was labeled "Fill reservoir with Mil Spec 5606" (hydraulic fluid). The individual who serviced the unit may have assumed that the gasoline went elsewhere and put it into the hydraulic reservoir which has a gasoline type filler neck.

Further investigation revealed other MJ-1 units with the identical improper markings, but none had been improperly serviced. Other types of ground equipment have identical filler necks for gas and hydraulic fluid next to one another. Poor design? You bet. Until a fix can be implemented, the potential for disaster exists. When you're servicing AGE, take a second look to make sure the proper receptacle is being used.

JET BLAST

A security police flightline guard recently spent several days in the hospital due to eye injury caused by aircraft jet blast. Fortunately, no permanent damage was incurred.

The airman was on duty at his entry control point which was close to the aircraft taxi route. An aircraft was taxiing back to its assigned spot; and as it turned to proceed up the row of aircraft, the exhaust reached the SP who was looking directly at the aircraft. The SP was relatively new at his post and wasn't prepared for the blast.

The exhaust blast from each aircraft is different due to engine size, placement, etc. Power settings also cause large variations in exhaust force. Experienced crew chiefs and maintenance personnel have seen ladders, Dash 60s, and other heavy maintenance equipment blown over by jet blast. New people may not be aware of this hazard.

Jet exhaust is hot and extremely uncomfortable at the least, and highly dangerous at its worst. All personnel should be made aware of the hazards of jet blast. Also, if you see a pilot using too much power in the parking area, mention it to him (nicely, of course) when he returns. He may not realize the hazards he is creating.





Portions taken from TIG BRIEF #10 12 May 78

he mission has gone well. The low level to the range was perfect and the "splash" call came right on your TOT. Your CEA was 30', strafe percentage was 65, and you can hear the quarters jingling in your pocket. Now to just complete the perfect joinup off the range to show these guys some more of your stuff

What's that? Master Caution Light! Let's see -telelight panel -- check hydraulic gauges. Damn, why did they put those gauges down there! PC-1 is less than 1,000 psi. Better tell lead.

Those were the last thoughts that passed through his mind before the midair ... Factual situation? No, but easily probable.

Between Jan '77 and Feb '78, distraction and/or channelized attention were factors in 16 Class A or B mishaps. The results were 9 fatalities and 12 destroyed aircraft. Ten of the sixteen mishaps occurred during the last 6 months. The trend is up.

Under normal conditions, no task a pilot is required to perform has a higher priority than maintaining aircraft control. All too often, however, other tasks, real or imagined, are inflated in importance and priorities are drastically rearranged. This can occur when a pilot's task saturation point is reached during a particularly demanding phase of a mission. Task saturation can induce intense concentration on the task perceived to be most important at the time (channelized attention). For example, two mishaps involved pilots trying to visually score their own toss bomb impacts. Both failed to realize they had waited until it was to late to initiate recovery from the escape maneuver. Two other lost control while looking for obscure around targets.

Priorities can also be rearranged when a pilot's task load suddenly increases unexpectedly due to an aircraft problem or malfunction. An unexpected task load increase can cause attention to be totally diverted to identifying/coping with the cause of the unwanted load increase (distraction). Four pilots flew into the ground and two others lost control while devoting their attention to an aircraft malfunction.

As new tactics often dictate unfamiliar or more difficult tasks, it may well be time to reflect on the basics. No mission-related task is so important that it makes forgetting about the ground at low altitude tolerable. Nor is any aircraft malfunction so time-critical that it makes losing control desirable. Especially in the heat of battle, we must remember: "FIRST THINGS FIRST!"

TAC ATTACK

MAINTENANCE as a



By Capt Duane C. Tway 4502 CAMS/Quality Control Bergstrom AFB, TX

You know the old cliche that goes, "Last yer I cudn't spel Mantenance Ocifer, and now I are one"? Well, after many years of stick and rudder time, now I are one. And just about the first thing I found out was that "Maintenance" is a foreign language. If you don't believe it, pick up a set of aircraft forms and turn to the 781A.

"So what if maintenance is a foreign language," you say. "I fly for a living. Amen and the Klong don't rise, I won't have to worry about the Rated Supplement in maintenance." "Aha," say I, "Gotcha!" Because you fly for a living, you need to be able to speak "conversational maintenance." There are quite a number of abbreviations used in the maintenance language that will help you understand the care and feeding of your trusty steed.

As anyone who hasn't been PCS to the South Pole for the last few years can tell, the Air Force is changing. Our young airmen in maintenance are the finest products we have ever received from Tech School. But there's also a challenge -- there are so many of them. We are critically short in some areas in the staff sergeant and tech sergeant ranks, and they are our first-line supervisors, responsible for training our new troops. Also, under Project Able Chief, because of limited training funds, our young troops are taught only the basics in Tech School; and get their "hands-on" training right here at River City airpatch. Now, don't get me wrong, these new personnel are good maintenance folks; and they do safe work. But our experience level is going

foreign language

down. Because of this, the chances for documentation foul-ups on our 781s are obviously greater. We in maintenance realize this, and we're working to keep it from happening. But Murphy is still alive and well

So if you are anything like me, you've seen some things written in the 781A that you didn't understand -- like "ARN-52 ETR to shop due NCW TCTO." And, again like me, you probably were embarrassed to ask what it meant. Well, guys, these days it could be very important to know what that stuff means. Don't misunderstand, our maintenance is better than it's ever been; but the potential for errors -- especially documentation errors, is increasing. So another knowledgeable pair of eyes on our forms is even more important.

The following is a list of some common abbreviations used in our aircraft forms; kind of a vocabulary of the maintenance language. You are not expected to speak it fluently -- and there will not be a test.

AGE - Aerospace Ground Equipment -- equipment to support the aircraft, powered AGE are power carts, bomb lifts, etc.; nonpowered AGE are maintenance stands, jacks, etc.

AME - Alternate Mission Equipment -- munitions items like MERS, TERS, launcher rails, camera equipment, etc.

AWI - Awaiting Installation -- a part that is fixed but not installed.

AWM - Awaiting Maintenance - the status of the aircraft or component when waiting for maintenance and during maintenance.

AWP - Awaiting Parts.

BPO - Basic Postflight Inspection -- a thorough inspection performed after the last flight of the day.

CAL - Calendar or calibrate.

CF - Carried Forward -- when a 781A write-up or inspection is transcribed to new set of forms rather than cleared by fixing the problem.

CND - Cannot Duplicate -- a write-up in the 781 that could not be duplicated by maintenance troubleshooting. A production inspection is required to sign off a CND.

CR CH - Crew Chief.

CW - Complied With.

DN - Document Number -- the supply document number for a part.

EOR - End of Runway Check.

ETIC - Estimated Time in Commission -- maintenance's best guess when the aircraft will be operationally ready.

ETR - Equipment Temporarily Removed.

FOM - To Facilitate Other Maintenance.

HPO - Hourly Postflight Inspection -- a major inspection normally performed at intervals based on operating time.

1&C - Installation and Checkout.

JCN - Job Control Number -- a number assigned to each write-up in the 781A by maintenance control.

JEIM - Jet Engine Intermediate Maintenance -- the base engine shop if authorized to change major engine components.



LM - Local Manufacture.

LRU - Line Replaceable Unit -- a black box that can be removed and replaced on the aircraft.

MDS - Mission, Design and Series -- the series designation, as F-4E, CH-53C.

NCW - Not Complied With.

NDI - Non-Destructive Inspection -- X-ray, ultrasonic, magnetic flux and die penetrant inspection for internal cracks, FOD, etc.

NFE - Not Fully Equipped.

NFG - No Frappin' Good -- not an authorized abbreviation.

NSN - National Stock Number -- replaces most FSNs in supply system.

OD - Overdue.

OP CK - Operational Check.

PCW - Previously Complied With.

PE - Periodic Inspection -- a major inspection due after a set number of operating hours.

PH - Phased Inspection - a major inspection conducted in segments at specified intervals.

PR - Preflight Inspection.

QC - Quality Control - the Stan Eval of Maintenance.

R&R or R2 - Remove and Replace.

R, R&R, or R3 -- Remove, Repair, and Replace.

SOAP - Spectrometric Oil Analysis Program -- a system to sample oil for metal content to predict failures.

SRU - Shop Replaceable Unit -- normally something inside a black box that can only be replaced in the shop.

TCI - Time Change Item -- a part with a specified operating life.

TCTO - Time Compliance Technical Order -- a technical order (normally to change, modify, or inspect) that has a required completion date after which the aircraft is grounded.

TH - Through Flight Inspection -- an inspection required between flights during the same flying period.

In addition to the above symbols, TO 00-20-1 states, "any readily identifiable abbreviation may be used for any word or term frequently used in making entries on documents." So ask if you aren't sure what something means.

Now for the commercial. TOs 00-20-1 and

00-20-5 contain more than you ever wanted to know about the aircraft forms. The next time the weather is down or the aircraft is broken, stop by your friendly maintenance QC section and leaf through the books. The better look we all take at the 781, the safer our aircraft will be. COMMANDMENTS OF SAFETY for supervisors By SSgt Alan R. Koester 1965 CIG/OI Norton AFB, CA

As a supervisor, are you aware of your responsibilities for the safety of your workers? Your job in management places you in a unique position. Not only does your unit rely on you as the direct representative of management to apply its policies wisely and fairly, but you are also obligated to safeguard the well-being of the workers in your charge. By following the ten commandments of safety for supervisors, you will take a giant step toward assuring the safety and well-being of your workers.

You are a supervisor; and thus, in a sense, have two families. Care for your people at work as you would care for your people at home. Be sure all your personell understand and accept their personal responsibility.

Know the rules of safety that apply to the work you supervise. Never let it be said that one of your persnnel was injured because you were not aware of the precautions required for the job.

Anticipate the risks that may arise from change in equipment or methods. Make use of the expert safety advice that is available to help guard against each new hazard.

Encourage discussion of work hazards. No job should proceed where a question of safety remains unanswered. When you are receptive to the ideas of your workers, you tap a source of firsthand knowledge that will help you prevent needless loss and suffering.

Instruct your personnel to work safely as you would guide and counsel your family at home -- with persistence and patience. Remember, during peacetime there is no operational requirement so important that we must compromise safety. Follow up your instructions consistently. See to it that workers make use of the safeguards provided them. If necessary, enforce the safety rules with disciplinary action. Do not fail the unit which has sanctioned these rules -- or your workers who need you.

Set a good example. Demonstrate safety in your own work habits and personal conduct. Do not appear as a hyprocrite in the eyes of your personnel.

however slight. Where minor injuries go unheeded, crippling accidents may later strike.

Cooperate fully with those in the organization who are actively concerned with member's safety. Their dedicated purpose is to keep your personnel fully able and on the job, and to cut down the heavy personal toll of accidents.

Remember, not only does accident prevention reduce suffering and loss, but from a practical viewpoint, it is good business. Safety, therefore, is one of your prime obligations -- to the Air Force, your fellow supervisors, and to the workers in your charge.

Leading your personnel into "thinking safety" as well as working safely will win their loyal support and cooperation. More than that, you will gain in personal stature.

SOLVE THE MURDER

he suspects filed into the deputy commander for operations (DO) office. Everyone appeared cheerful while tension filled the air. Was it the supervisor of flying (SOF)? He had told the pilots to land by 2000 hours so they wouldn't cut into their crew rest. Was it the tower operator? He had cleared an aircraft for an intersection takeoff while another aircraft was taking off. Was it Red 74? He swerved to avoid another aircraft on his takeoff roll. Was it Blue 11? He knew another aircraft had been cleared for takeoff. And what about the RSU officer, was he in this plot?

Perhaps the Wing was at fault. They had scheduled two squadrons to night fly in the local IFR pattern. But why had everyone decided to do full stops and taxi back, overloading Approach Control and Tower? Could the DO solve the mystery? And what about the tapes -- what secrets would they reveal?

Everyone was seated. The wise DO scanned the room to make sure everyone was there. The

SOF and the squadron commander sat on the right. The wing safety officer had AFR 127-3 in hand. Flight members were scattered here and there.

The SOF was the first to speak. He had talked to the tower operator, a grizzled and experienced master sergeant who had admitted that it was his fault. However, he had been told by Base Ops to turn the runway lights to full intensity. Did these lights blanket out the small lights of the aircraft? And who else was at fault.?

The crew of Red 74 was the next to talk. Due to aircraft maintenance cancels, all aircraft had an extra pilot on board and each one wanted a night landing for sortie requirements. Thus, all aircraft were doing full stops and taxiing back for second takeoffs. Red 74 had held off the main taxiway while getting his clearance from tower. This was to prevent their engines from burning the asphalt taxiway and the nearest concrete was 600 feet from the end.

Since everyone had decided to land about the

on the runway express

By Capt Robert M. Cockey 706 TFS/926 TFG NAS, New Orleans, LA

same time, the radar pattern was full and there was much confusion. Red 74 requested takeoff, holding number 1. Red 74 was told by tower to hold short, then asked, "Do you have a clearance?"

Red 74 was told to change to departure frequency; they ran up their engines. The left engine didn't look right, so they ran up the engines again, and a third time just to make sure. They looked down the runway to see that it was clear.

In the glare of bright lights, a truck appeared to be near the runway by taxiway 2; but the runway looked clear. They released the brakes. Suddenly, they realized that another aircraft was on the runway by taxiway 2 trying to take off. They used all their pilot skills and successfully avoided it. But wow! -- what happened?

The crew of Blue 11 was next to talk. They had decided to use taxiway 2. There was already congestion in the panel check area for taxiway 1. The pilots of Blue 11 had thought they had heard someone cleared for takeoff; but while checking their switches, they heard an aircraft fly down the runway. Actually, it was a transient aircraft doing a low approach, but it appeared to have satisfied the tower operator and Blue 11 that someone had just taken off. Blue 11 was told by tower that they were cleared on to hold.

As they took the runway, they looked down the approach end, but because of the strobe lights and full bright runway lights, they couldn't see any aircraft. They were then cleared to take off. The Base Operations Officer then stated he had requested the runway lights be turned to full bright because he had hoped that the lights would help melt the 3 feet of snowdrifts from the night before.

Finally, it is the Runway Supervisory Officer's chance to talk. He explained that the RSU is barely the size of a closet; room for only one chair and radios that were always being repaired. He had been listening to the final controller so he could know if the aircraft would land or low-approach.

He was also listening to tower and to ground

control. Within a couple of minutes, he had recorded a takeoff, a full-stop landing, a low approach, heard three aircraft request takeoff clearance, plus heard ground control tell Blue 12 that he did not have a clearance. The RSO was writing the takeoff and landing times on his RSU sheet and phoning the information to the SOF.

The RSU is situated between taxiway 1 and 2, so he cannot see both taxiways at once. He was listening to four conversations going on at once, but he heard Blue 11 cleared on to hold. He also heard Captain B say that he was taxiing back. The RSO thought that Captain B was Blue 11 because that was what was on his flying schedule.





What the RSO didn't know was that Captain B had been changed to Blue 12. He was looking at taxiway 2 because that is where Blue 11 was. He never saw Red 74 which had just now completed taxiing 600 ft to the runway. When Red 74's takeoff came into view, he grabbed the mike; but he saw that Red was swerving to avoid Blue 11, who was now accelerating. An abort call might have caused a worse situation if they had both tried to abort. It all happened in a flash.

The RSO stopped talking and sat down. The pilots agreed that an abort call would have been worse, and the tower operator later explained that this was the same reason why he hadn't made a call. In the investigation, it would be found that the phone number to the tower hadn't been changed in 3 years. They were getting as many as 50 calls a night asking anything from "what time is it?" to "when does the BX close?" It would also be found that there was a truck on taxiway 2 that was a SOF truck, and it had a red rotating beacon just like the aircraft.

The RSU had already been found to be grossly inadequate. A larger, modern unit had been requested that would be built on a truck so it could be located in a better position. Concern over the expenditure of funds had delayed the project.

Like the murder on the Orient Express, everyone was involved. Given enough of a chance, fate can make a combination of many events add up to one big accident. Even if everyone is doing his job, there are many little areas that are often overlooked or considered unimportant which become major factors in the right circumstances.

Consider how each of the events in this story became an important factor and how the correcting of just a few of them could have prevented this accident.

Consider, the evidence at your base. Is there a murder mystery waiting for you? Start looking for the clues and remember, "The accidents of tomorrow are the results of the crimes of today."



TAC SAFETY AWARDS

INDIVIDUAL SAFETY AWARD

Mr. George J. Cashman, Base Fire Chief, 366 Civil Engineering Squadron, 366 Tactical Fighter Wing, Mountain Home Air Force Base, Idaho, has been selected to receive the Tactical Air Command Individual Safety Award for July 1978. Mr. Cashman will receive an engraved desk set and a letter of appreciation from the Vice Commander, Tactical Air Command.



Mr. George J. Cashman

CREW CHIEF SAFETY AWARD

Airman First Class Jan W. Noppen, 834th Organizational Maintenance Squadron, 1st Special Operations Wing, Eglin Air Force Auxiliary Field No: 9, Florida, has been selected to receive the Tactical Air Command Crew Chief Safety Award for July 1978. Airman Noppen will receive an engraved desk set and a letter of appreciation from the Vice Commander, Tactical Air Command.



A1C Jan W. Noppen

PERIONAL BUSINESS



FOL D-

POSTAGE AND FEES PAID DEPARTMENT OF THE AIR FORCE DoD 318

EACLEGR

U.S.MAIL

HE WHO HESITATES.

A few days ago, we had a "close one" and learned - a few things that you might want to pass along. It happened during recovery of a two-ship flight of A-- 7s at Des Moines MAP. The weather was M9V11 -OVC5 R -- with a 15-knot direct crosswind. The - wingman was first in on the ILS and made a normal - priority handling. landing; however, braking was not normal due to either hydroplaning or braking technique. As the end of the runway approached, turnoff appeared questionable, so the hook went down; and the BAK-12 stopped the bird. Lead was on a short final; and when advised of the situation, went around. Expecting the runway to be opened soon, he did not im-FOLD- mediately divert to the alternate. Problems were encountered in extricating the arrested SLUF; and after 10 minutes, lead advised that he was

"emergency fuel" and would divert. Five minutes later, the runway was reopened; and when advised, lead decided to land at home which was closer than

the alternate. A fairly expeditious recovery was accomplished requiring another 12 minutes. At touchdown, about 10 minutes of fuel remained.

The lessons learned are as follows:

1. An immediate divert is the best course of action. It reduces traffic at home and insures arrival at the divert base in the best fuel state. 2. If for some reason there is insufficient fuel to divert, the pilot should hold and plan to land when the runway opens or when he approaches "emergency fuel."

3. The term "minimum fuel" means essentially the same to both AF and FAA facilities. In this state, remember NO traffic priority is required or assured. "Emergency Fuel" is not part of FAA standard terminology. If you are, or will be "emergency fuel" by USAF definition, declare an emergency for low fuel. This will insure understanding and assure priority handling.

Maj James M. Fredregill 132 TFW/SE (Iowa ANG) Des Moines, IA

The purpose of the Fleaglegram is to aid in accident prevention. Although it is intended for use by TAC personnel, anyone with a gr war story or idea that could prove helpful in preventing unsafe or hazardous situations is encouraged to participate. If you choose to rer anonymous, the form need not be signed. Simply fold the form so that the address is on the outside and staple or tape and mail at military installation. The Fleaglegram is not designed to replace or augment the Hazard Report Form (AF Form 457) in any way submissions will be considered for publication in TAC ATTACK magazine.

F-15

Emergency Situation Training

BY Capt Ray L. Marcum 555 TFTS Luke AFB, AZ

SITUATION: Entering your assigned area and altitude block for a DACT mission, lead informs you that you appear to be dumping/venting fuel. Closer visual inspection confirms that fuel is leaking from the panel 96R area. You then notice that your right engine fuel flow is higher than the left engine at normal power settings. Also your total fuel state is 2,000 pounds lower than the leader's. (#1-9,6000; #2-7,500) What ya' gonna do?

OPTIONS:

A. Perform a fuel gauge BIT check.

- B. Land ASAP at the nearest suitable field.
- C. Place right throttle in cut-off.

D. Shut down the right engine using the fire button.

DISCUSSION:

Fuel leakage problems caused by failure of the CIVV controller and the afterburner fuel pump would indicate your most immediate concern is Option B. As you turn your aircraft towards the nearest suitable emergency airfield, you should analyze your fuel situation. If fuel is critical, you are going to shut down the engine.

In this situation, the difference in aircraft fuel remaining and the higher fuel flow on the right engine indicate that the culprit is the right engine. Option C is partially correct in that the engine can be shut down with the throttle. However, fuel will continue to leak unless you also close the airframe mounted fuel valve, Option D. If your fuel quantity continues decreasing due to the leak, you'll want to "expedite" your recovery. It is not the time to zoom to high altitude for a minimum fuel descent unless the leak is stopped.

If you cannot determine which engine fuel system is leaking, both engine fire buttons should be used to shut the engines down AFTER LAND-ING. Moving the throttles to cutoff 5-10 seconds after depressing the fire buttons will insure that the engine driven fuel pump doesn't cavitate. Option A, of course, will do nothing except waste time. Remember, if you can confirm which engine is the culprit, shut down the affected engine using the engine fire button and then the throttle. In any event, if both engines are left running, after landing, shut down both engines using the fire buttons and then the throttles.



ED NOTE: The following was taken from a letter inspired by Colonel Jones' article, "The Dangerous Art of Doing Nothing," which appeared in the May '78 TAC Attack. The words speak for themselves.

"... I remember after putting in 8+ months of training at Mather and pinning on my very own set of wings, I showed up at my RTU base and met my contemporary pilots. I got this peculiar feeling at the time that something wasn't right. Like, pilots received, on the average, 100 hours in RTU, backseaters 50; or when everyone called, what I had worked so hard for, 'Funny Wings,' or that out of an entire squadron of instructors there were some 20-30 pilots and one WSO. It's weird how a young second lieutenant will pick up negative vibes like that. So what if I had one IP tell me he'd rather have 1,000 pounds of gas rather than me in the airplane. Or the one who'd rather have a flight surgeon or his crew chief. Or the one who said, 'Turn on the radar and INS and go cold mike."

"Well, RTU was a rude awakening and definitely an ego bruiser. Oh yes, I did have an ego. I was flying in what I thought to be the most impressive airplane around. I grew to be proud of myself and love that 15 ton monster. And I read and believed little cliches like 'I'd rather be a fighter-gator than an ordinary pilot,' and 'If you ain't a fighter-gator, you ain't (whatever).' And the first thing I hear out at my operational squadron is 'Rotate the command selector valve.' You mean that I am considered capable and responsible enough to have the option of ejecting my pilot? Wow. I was impressionable. And, when I have a briefing, people listened, even pilots. Surprisingly somewhere along the line I discovered that pilots were human beings, picked their noses and passed wind just like normal people.

"It's funny what pride will do for you. I changed suddenly into a cocksure, aggressive, knowledgeable someone. There were those who called me a fighter pilot, others called me a fighter-gator, and others still called me a navigator. None of those names really fit. But I still knew who I was, what I could do, and knew I did it better than anyone else ...

"But you know, I have a sneaking suspicion that the old feeling about me is still there. People still look at my name tag to see what type of wings I wear before they read my name. I read an interesting article in the May 78 issue of TAC ATTACK on WSOs doing nothing and leading an aircraft to accidents. The colonel suggests that WSOs get lulled into complacency in the aircraft by 'old habit patterns (i.e., specialization), a varying reliance on WSOs by pilots, and/or an unknown quality called stress testing.' Colonel Jones is very correct and very observant ...

"Look gang, it is a two-way street. Yes, the WSO has a harder road to follow and needs to be superb to be considered just good. But, to operate in the F-4 to its maximum you need both crewmembers functioning as a team. A superior-than-thou attitude of a pilot is felt, and even that simple feeling, inhibits. From putting his helmet bag on the top ladder step to ignoring a GIB in a debrief to making scathing remarks in the bar all facilitate that bigotism, and that inhibits crew coordination. You don't 'use' your backseater - - you may 'use' a tool or even a dog, but not a man. You function as a team, act as a crew. You wouldn't do to your wingee what you do to your backseater because you need your wingman as part of the team. The crew concept is the best thing going today, but it won't be here long. Enjoy it now and see if 'the aircraft doesn't perform better, the missions go smoother. See if you, the Aircraft Commander, can prevent forcing someone to write an article that never should have been written to begin with."

Capt Jim Hazen 43 TFS/ Elmendorf AFB, AK

TRC	States and	The state	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Support of the second s				
	-	FAC			ANC	3	AFR			
		thru M			thru May			thru May		
	May	1978	1977	May	1978	1977	May	1978	1977	
CLASS A MISHAPS	0	12	11	3	7	4	0	1	1	
AIRCREW FATALITIES	0	9	4	3	4	0	0	0	0	
TOTAL EJECTIONS	.0	13	10	3	5	3	0	1	1	
SUCCESSFUL EJECTIONS 🔶	0	11	10	2	4	3	0	1	1	

TAC'S TOP "5" thru MAY

	me	2	10					1/ 1 1			
TAC FTR/RECCE		TAC GAINED FTR/RECCE						C/GAIN	ED Ot	her U	nits
class A mishap free mon	ths	class	A mis	shap fi	ree mo	nths	class	A mi	shap	free m	onths
25 474 TFW		40	156 T	FG	(.	ANG)	130	182 T	ASG		(ANG)
23 56 TFW		29	434 T	FW	(AFR)	99	193 1	EWG	-	(ANG)
17 347 TFW		21	184 T	FTG	(.	ANG)	91	110 1	ASG		(ANG)
15 1 TFW		20	123 T	RW	(.	ANG)	86	USAF	TAWC		(TAC)
15 388 TFW		13	132 T	FW	(.	ANG)	82	919	SOG	a lite	(AFR)
25 20- 20- 15- 100 LAUNCHES 10-		R	PV	1973	(8.6)	MISH	IAP	RATE			
5-	1976 (1.0)										
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CUM RATE 0.0	2.6	1.8	3.0	2.1							
NO OF ACDTS O	1	0	1	0			-			-	

☆ U.S. Government Printing Office: 1978 735-074/2

