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TAC ATTACK

DECEMBER 1980

DEC

READINESS IS OUR PROFESSION

TACTICAL AIR COMMAND
GENERAL W. L. CREECH
COMMANDER
LT GENERAL THOMAS H. Mc MULLEN
VICE COMMANDER

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Angle of Attack

Happy Holidays

It seems like only yesterday when I was writing this column for the January issue. Now, we're already into the last month of the year and we're making preparations for the holiday season. It's a time of contrasts. While the pace of life seems to slow down, there isn't enough time to buy the food, presents, and make the preparations to visit friends, relatives and acquaintances. In our efforts to make the maximum use of the holiday season, we often overextend ourselves.

The real holiday season is barely 10 days long. During this period, perhaps the greatest number of military people are on leave at any one time. The same is true for the rest of the country. Short leave periods and holiday school vacations can create an overpowering temptation to try and do too much in too little time. The winter season with its unpredictable weather patterns in most parts of the country, is the wrong time of year to attempt an extended driving trip, but countless people will be trying to do just that.

I urge you to take your time this holiday season, Take time not only during your travels, but during your preparation. Make sure both you and your car are ready to go. Snow tires, chains, shovels, warm clothing and blankets are only a few of the extras you should consider. Many people have been stuck in the snow following blizzards—they can tell you the value of extra clothing.

For those staying closer to home, don't relax. The chances of a serious accident are much greater during those short trips around town than on the highway. Another reminder, many of the drivers you encounter will have indulged—perhaps to the point of intoxication—in liquid holiday spirits. Alcohol impairs driving ability. If you put enough impaired drivers out on the road—accidents are going to happen. Moderation in alcohol consumption and defensive driving can keep YOU out of trouble.

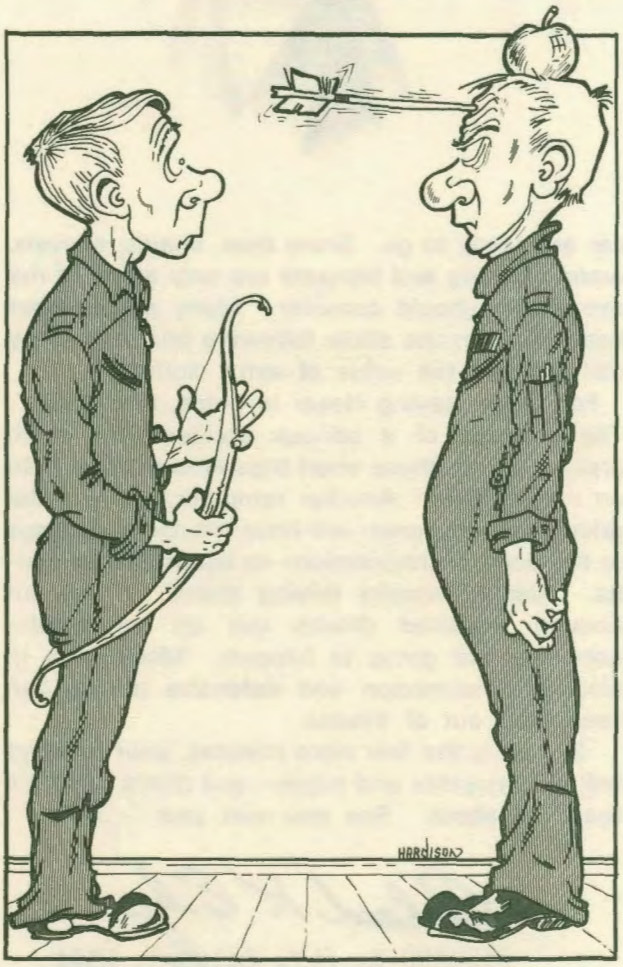
By taking the few extra minutes, your holidays will be enjoyable and happy—and that's what it's really all about. See you next year.

Richard K. Ely

RICHARD K. ELY, Colonel, USAF
Chief of Safety

WILLIAM TELL '80

IN DEFENSE OF FREEDOM'S SKIES



What is William Tell? Well, in our October issue I introduced you to William Tell, but I never really told you what it was. Sure, it's the Worldwide Interceptor Weapons Meet. Everyone knows that. But I'll bet those who have never been in a unit with a pure intercept role don't really understand what the competition actually includes.

The meet creates its own pressure as the aircrews, controllers, and maintenance personnel all strive to be "the best of the best." The meet attempts to simulate actual combat conditions. Each team must fly four different mission profiles demonstrating various techniques of air interception and aerial gunnery against tow targets, drones, and other aircraft. Points are won or lost by each team as both preparation and performance are evaluated by electronic and human judges.

To refresh your memory on the units, aircraft, and controllers who participated in the competition, we'll list them once more.

F-4 Category: (Aircrews and Controllers)

347 TFW, Moody AFB, GA & 507 TAIRCW, Shaw AFB, SC.

119 FIG(ANG) Hector Fld, ND & 24 AD Malmstrom AFB, MT.

191 FIG(ANG) Selfridge AFB, MI & 23 AD Duluth IAP, MN.

F-106 Category: (Aircrews and Controllers)

5 FIS) Minot AFB, ND & 24 AD Malmstrom AFB, MT.

49 FIS Griffiss AFB, NY & 21 AD Hancock Fld, NY

102 FIW (ANG) Otis AFB, MA & 21 AD Hancock Fld, NY.

144 FIW (ANG), Fresno CA & 26 AD, Luke AFB, AZ.

F-101 Category (Aircrews and Controllers)

Canadian Composite Team & 22 NR, North Bay, Canada.

107 FIG (ANG), Niagara Falls NY, & 21 AD Hancock Fld, NY.

147 FIG (ANG) Ellington AFB, TX & 678 ADG, Tyndall AFB, FL.

As I mentioned, teams flew four different profiles. These profiles were:

Profile I (Front Fly-Up). Each interceptor was committed individually on a front fly-up attack against a high altitude supersonic target.

Profile II (F-4 & F-106). Aircraft were committed in pairs against a PQM-102 drone at medium altitude. One interceptor fired a radar missile on the front while the other aircraft positioned for a stern shot with a heat-seeking missile.

Profile II (F-101). Aircraft were committed individually on a towed target at low altitude for attacks with a heat-seeking missile.

Profile III (F-4 & F-106). Aircrews were committed in pairs on a cutoff attack against an unidentified target. The target was an F-101, F-106, or F-4 with a colored panel displayed in the rear canopy. Interceptors were required to identify the aircraft and color before receiving clearance to fire. Scores for simulated infrared missile shots from each aircraft were recorded by the air combat . maneuvering instrumentation (ACMI) range equipment.

Profile III (F-101). The F-101 is not equipped to fly on the ACMI. Consequently, a similar profile was flown against a drone, live firing infrared missiles.

Profile IV (ECM). Each team was given a liability period during which they were required to defend an area against penetrating B-52 bombers. Simulated weapons launches were scored by assessment of recording equipment on board each fighter.

THE WINNERS

UNITS

The "Golden Bears" of the 144th FIW, California Air National Guard, was the first team to emerge as the overall winner, taking the coveted General Daniel "Chappie" James, Jr. Fighter Interceptor Team Award. In past years, only winners in each category were selected. This year, the team won both the F-106 category and the overall competition with a total of 33,871 points out of a possible total of 40,000.

Joining the Californians as category winners are the 347th TFW from Moody AFB, GA who placed first in the F-4 Phantom II and the 147th FIG of the Texas ANG in the F-101 Voodoo. The 347th was making its debut in William Tell while the Texas Guardsmen were the defending champions for the F-101 title. The Texas ANG unit will soon be converting to the F-4, so this was their last competition in the Voodoo.

WILLIAM TELL 1980 FINAL PROFILE SCORES

TEAM/CATEGORY	I	II	III	IV	TOTAL
F-101 Voodoo					
147th FIG (ANG) Ellington AFB, Texas	6,150	7,225	7,588	8,025	28,988
CFADG (Canada) North Bay, Ontario	7,450	5,450	6,402	7,900	27,202
107th FIG (ANG) Niagara Falls, NY	7,250	3,875	6,785	8,250	26,160
F-4 Phantom					
347th TFW (TAC) Moody AFB, GA	8,850	7,250	8,356	8,250	32,706
191st FIG (ANG) Selfridge ANGB, MI	5,875	6,300	9,920	9,200	31,295
119th FIG (ANG) Fargo, ND	7,600	7,550	7,326	8,000	30,476
F-106 Delta Dart					
144th FIW (ANG) Fresno, CA	8,100	8,350	9,046	8,375	33,871
102nd FIW (ANG) Otis AFB, Mass.	8,350	7,900	9,776	7,550	33,576
5th FIS (TAC) Minot AFB, ND	8,000	7,250	7,910	6,550	29,710
49th FIS (TAC) Griffiss AFB, NY	7,475	6,250	6,990	6,100	26,815

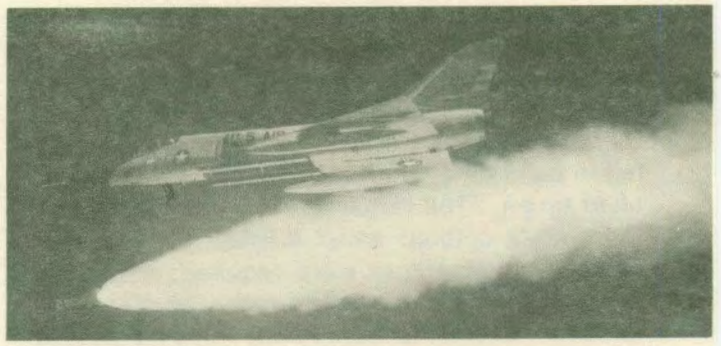
FIGURE 1

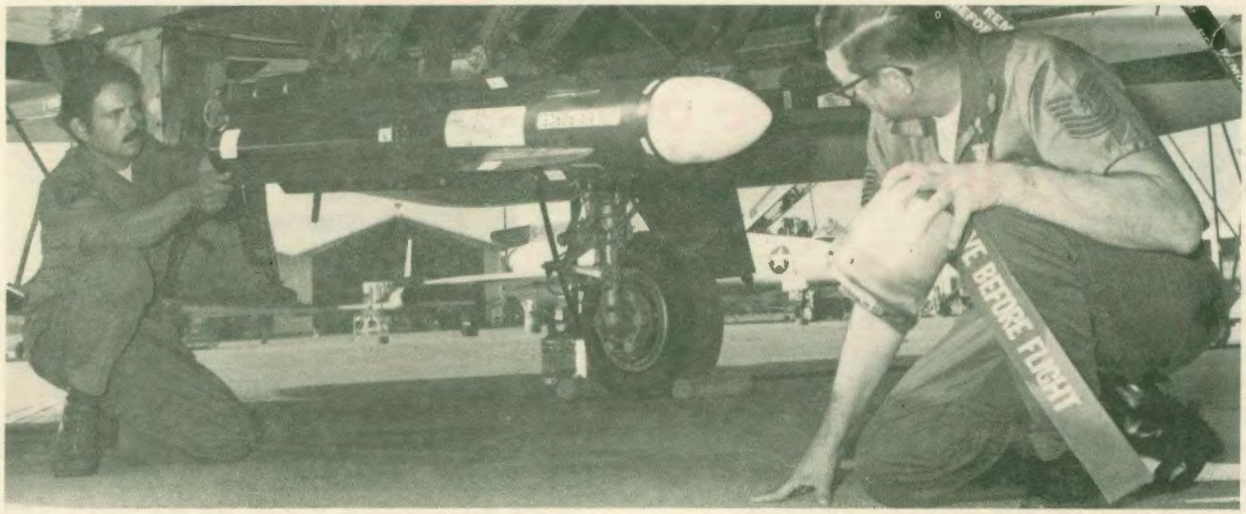
WILLIAM TELL '80
in defense of freedom's skies

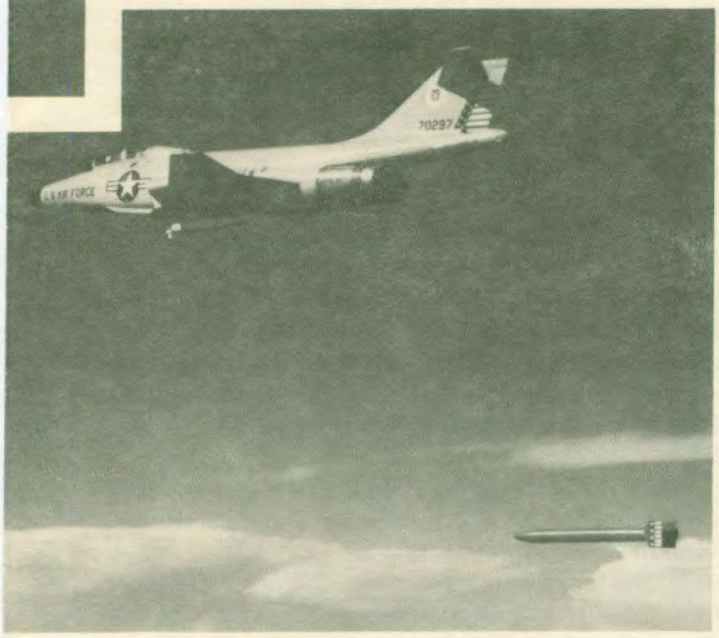
TOP GUNS

The overall TOP GUN award recognizes the aircrew with the best scoring record, and for the first time, this year commemorated Maj Gen James L. Price, a former commander of the Air Defense Weapons Center. The General Price Trophy was presented to Lt Col Maurice Udell, pilot, and Major David Miller, WSO, of the Texas ANG.

Taking the other two category Top Gun awards were Capt Tim Rush and Capt Peter Tulley of the 347th TFW in the F-4 and Maj Greg Beckel of the 102 FIW in the F-106.







TOP CREW CHIEF

Let's face it, the competition wouldn't come off at all if it wasn't for the troops who keep'em running, and spend hours fine tuning the systems to give the aircrews the best possible airplanes. The "Top Crew Chief" award recognizes the vital support of all members of the ground crew. Winning for the Texans was MSgt Joseph Forrest. AIC John Wilson of the 347 TFW and TSgt John Ferrante of 102d FIW also won the category honors for the F-4s and F-106s respectively.

WILLIAM TELL '80
in defense of freedom's skies

AVIONICS AWARD

While the crew chiefs take care of the basic airplane, many of the specialized systems require specialized care. The radars and fire control systems are the responsibility of the avionics personnel. Recognizing their hard work and skill are the awards given to avionics personnel in the overall and individual aircraft categories.

The overall winner was from the Texas ANG. TSgt Jackie Murphy of the 147 FIG took the top award and F-101 honors. TSgt Gary C. Freeman of the 347 TFW won the overall F-4 category and SSgt Lynn L. Hayes from the 102 FIW placed first in the F-106 side.

LOAD CREW

The weapons load crews join the avionics personnel in the specialized fields. The air-to-air missiles require extensive pre-load checkouts. The loading must be done correctly and efficiently, and the weapons release circuits must be checked and rechecked. Everyone else's work is meaningless if the missile doesn't fire or guide properly. So, we also recognize our best weapons load crews. The winners in each category are:

Overall and F-4
191 FIG
MSgt Michael J. Blasky
TSgt Daniel J. McHugh
TSgt Anthony Consiglio

F-101
147 FIG
MSgt Robert H. Heinrich
TSgt William E. Chapman
TSgt Eugene H. Walleck
TSgt Bernardo K. Phua

F-106
5 FIS
SSgt Jeffrey A. Mercier
SSgt Floyd O. Howe, II
A1C Gregory P. Miller

TOP SCOPE AWARD

If the maintenance troops are the backbone of the team, then the "eyes" of the team are the weapons controllers. They direct the aircrews during the intercept until the aircrews can take over on their own and complete a successful mission. Without the weapons controllers, the interceptors would be virtually blind and a successful intercept would be a completely hit or miss proposition.

The outstanding weapons control team came from the 26th Air Division, which was supporting the California ANG fliers. The technicians from Luke were the only all enlisted team participating in the meet and the TOP SCOPE award went to TSgt Mike Quintero and SSgt Dale W. Wise of the 26th.

In the F-101 category, Lt Paul Robinson and SrA James Jordan of the 678th Air Defense Group, Tyndall AFB FL, took the honors. On the F-4 side, the controllers from the 23rd Air Division from Duluth, MN who were supporting the 191 FIG of the Michigan ANG came out on top. Their winning team was Lt Randall Kuehler and SSgt Leslie Slocum.

That's a rundown of the competition, the competitors and the winners. Actually, all the participants were winners—winners of local and regional contests before their final selection. To all the men and women who participated in William Tell '80, our congratulations on their superb performance. We'll see many of you again in '82!

My thanks to Mr. Hank Basham and the other personnel of the ADWC/PA office for their assistance in preparing this article and supplying the photographs.

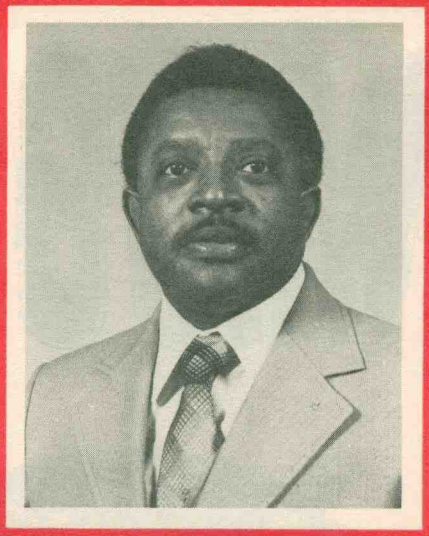
Ed

TAC SAFETY AWARDS

Tac Safety Awards

Individual Safety Award

Mr. James Roberts, 1st Component Repair Squadron, 1st Tactical Fighter Wing, Langley Air Force Base, Virginia, is the recipient of the Tactical Air Command Individual Safety Award for December 1980. In addition to his duties as in-shop production and work scheduler, Mr. Roberts has kept all personnel updated on current safety procedures. He installed numerous safety devices throughout the shop and designed a safety guard for power equipment. His safety consciousness and dedicated work qualify him for the Individual Safety Award.



Mr. James Roberts

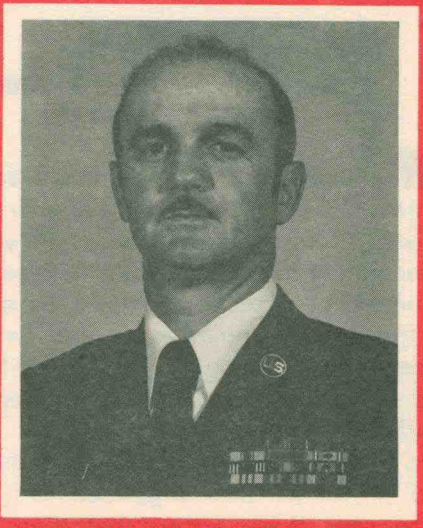
Crew Chief Safety Award

Airman First Class Theodore R. Brown, 479th Aircraft Generation Squadron, 479th Tactical Training Wing, Holloman Air Force Base, New Mexico, is the recipient of the Tactical Air Command Crew Chief Safety Award for December 1980. While conducting his preflight, Airman Brown noticed the sealant on the leading edge of the left wing had separated from the fuselage of the aircraft. After removing a panel from the underside of the fuselage he found a spar bolt backed out of the barrel nut. Airman Brown's thoroughness prevented possible injury to personnel and damage or loss of the aircraft.

AIC Theodore R. Brown

Ground Safety Award of the Quarter

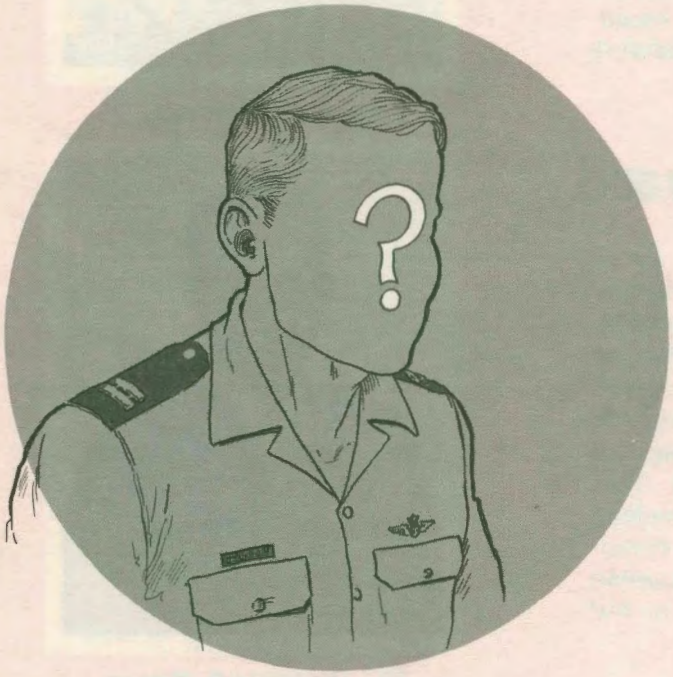
Senior Master Sergeant Charles H. Dooley, 354th Civil Engineering Squadron, 354th Tactical Fighter Wing, Myrtle Beach Air Force Base, South Carolina, is the winner of the Tactical Air Command Ground Safety Award for the third quarter of 1980. Sergeant Dooley's leadership and dedicated efforts have helped make the Civil Engineering Squadron one of the most safety-conscious organizations in the wing. His personal briefings to each new individual in the unit on shop hazards and other safety requirements have had beneficial, lasting effects on the unit safety record.



SMSgt Charles H. Dooley

WHO'S YOUR FLIGH

Who's your flight



By Lt Col Delbert F. Miller
391 TFS/366 TFW

When was the last time you were asked that question? Hopefully it was recently, but I'll bet it wasn't. Chances are, the last time you heard this question, it had to do with OERs or some other paperwork. In recent years many aircrews' view of the flight commander is that he's someone a little senior to them who writes OERs, passes on words from the Ops Officer, handles some admin stuff, and initials leave requests.

Is this as it should be? Of course the answer is "no." After all, he's supposed to be a mid-level supervisor. If you accept that, then what does he supervise—and what is supervision—and why isn't he as good a supervisor as he should be?

We constantly see messages and receive briefings emphasizing the shortcomings of squadron supervision and addressing the need for good, solid supervision. But who do we usually think of when we read and hear these? Do we picture the Commander and Operations Officer? If so, fair enough. They certainly have the responsibility. But are they the only ones? Do we picture the flight leads? Sure we do. There's been a lot of emphasis on them, and we all recognize the importance of a good leader when things get tough and don't go as planned. How about our instructors? Certainly. They're under the gun all the time. But do we think of the flight commander when we think supervision? Unfortunately, probably not. Yet he's the one person who's directly in the position of middle supervisor in the squadron.

We must return the flight commander to the status of being a commander in fact as well as in name, and flight commanders must be selected on their ability to get the job done rather than using seniority as the determining factor. The flight commander must display and demand high standards of leadership and flight discipline, and those that don't measure up will be replaced. A few years ago, a flight commander ignored a scheduling and crew rest problem. Partially as a result, a crew flew without proper rest and preparation and had an accident. The flight commander's attitude was that it was a scheduler's problem—his job was just to write OERs! We can't afford this lack of leadership at the squadron mid-level.

Okay then, the flight commander is a middle level supervisor and leader. But supervise and lead who (or whom for you purists)? The obvious

IT COMMANDER?

answer: members of his flight—each and every member of his flight. But how does he do this? By flying with them—frequently. Sounds good, you say, but it won't work. After all, we have all those training squares to fill, we have duties (SOF, Mobile, Range Officer, etc.) to fill, we have requirements for IPs to check people out, we have additional duties, and so on and so on.

Well, nobody said it was going to be easy. But think about it. We all have the same training squares, so if the flight flew together all the time, we'd all fill the squares together. We all have duties, so that should work out evenly too. Additional duties? We always work around those anyway. IPs required for checkout programs? How about the flight commander being in that same flight—and how about the IP being from the flight commander's flight. It can be done. We just have to think about it and put some emphasis on it to make it work.

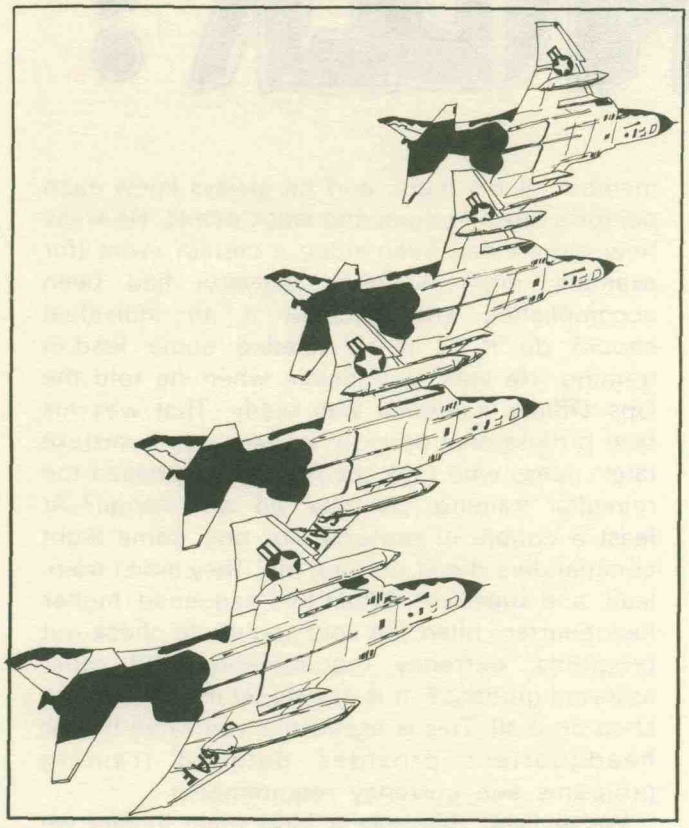
But wait, you say, our flight doesn't come out even, so we can't fly as a flight all the time. True, but while someone is pulling mobile, other members of the flight fly together. While the flight commander is pulling SOF, his assistant is flying and supervising. I'm not saying that the flight commander flies all the time; he flies when he can and he sets the example when he's lead two, three, or four. In debriefing he provides guidance, both positive and negative. That's part of leadership.

Okay, you say, but if it really works, why haven't we been doing that all along? Good question. There once was the time the flight commander did just that. He took the new guy, monitored his progress, worked him down to lower altitudes on formation low levels, monitored his progress in the gunnery pattern and then supervised his flight lead checkout. He did the same for every member of his flight, and he always knew each person's strong points and weak points. He knew how long it had been since a certain event (for example, night weapons delivery) had been accomplished and decided if an individual should do it or if he needed some lead-in training. He was responsible when he told the Ops Officer someone was ready. That was his best professional opinion. If there was a mistake later, guess who took the hit and supervised the remedial training. So why did we change? At least a couple of reasons. For one, some flight commanders didn't do their job. They didn't train, lead, and supervise. When this happened, higher headquarters filled the void and wrote check-out programs, currency requirements, and other assorted guidance. It is easy to let the scheduling shop do it all. This is especially true when higher headquarters provides detailed training programs and currency requirements.

We've lived this way a long time. In fact we have had Operations Officers and Commanders who had never seen a flight commander lead and supervise. We can't afford this. Higher headquarters check-out programs and requirements are not supervision, and just filling the squares to insure compliance is neither supervising or leading. And an Ops Officer can't supervise every crew member. It's just too big a job. That's why the flight commander has to get back to doing his job.

A popular catch phrase now is to say that we train the way we fight. Without going into all the ramifications of that, are we planning to fight with guys from the same flight flying together? Is there an advantage to doing that? I think there is. In combat it's especially important for each member of a flight to know the relative strengths of each one in the flight. As lead, you have to

Who's Your Flight Commander ?



know so that you can judge how much of a bite to chew off and where you may expect to have problems and have to render some extra help and guidance. Every other member of the flight should also have a good feeling of how much support he can expect from the flight. It comes down to knowledge of strengths and weaknesses. A squadron is too big a group to know these things about each individual. A flight is not, and the flight commander is responsible for insuring each person knows the capabilities of those in the flight and for constantly upgrading those capabilities.

Have I convinced anyone? I hope so. If not, read no further and thanks for coming this far. If so, let's talk about making it work.

If you're a flight commander, visit the Ops Officer and discuss it with him. Chances are he'll welcome the help. Then visit the schedulers often and consistently. Tell them you want your flights to fly together. When you see a schedule where you could have flown together as a flight but weren't scheduled that way, point it out. Be persistent—a pest if you have to. When the Ops Officer gets on you for bugging the schedulers, remind him that he welcomed flight commander supervision. Every time the Ops Officer sticks his hand into your flight and taps one of your folks, let him know you would've liked to have had a say. Most importantly, when you fly with your flight, lead and supervise. Give detailed guidance in briefings and good critiques and recommendations in debriefings. Monitor progress. Know each individual's strong points, weak areas, and real currencies. If someone is not ready for something, insure he gets the training before he does it. Don't depend on square filling to monitor progress. You're the Commander. Act like one.

If you're the Ops Officer, demand that your flight commanders supervise and lead. You have enough to do without monitoring every Blue Four in the outfit. Tell your schedulers to schedule as a flight when at all possible. Have deviations from this cleared through you. But be careful: there's always a good reason not to do it. Lean on your flight commanders. Their job is to know their people. Ask about them. Ask about progression, bomb scores, flight lead ability, air discipline. Depend on them and demand results.

And how about Blue Four? You need to keep after your flight commander too. Ask him the question. If he doesn't know, he'll find out or point you to the unit expert. If you feel he's pushing you too hard, say so. If you feel he's not challenging you enough, say so. He's your immediate supervisor and his job is to make you better and more professional. He should set the example and teach you how to do it.

Okay then, who's your flight commander? If you don't have one, help him become one; and when you have the chance, become the guy that gets looked at as they say, "He is." ➢

Lt Col Miller, a USAF Academy graduate, completed UPT in 1964. He flew the F-105 in Japan and Thailand where he completed 141 combat missions. He transitioned to the F-111 in 1969, serving in TAC and USAFE. Lt Col Miller is currently Assistant Operations Officer with the 391 TFS.

By Lt Col Stephen Altick
188 TFG/AFA

"You gonna fly em', you gonna break em'," is a famous old saying in aviation, especially tactical aviation involving realistic training versus accident rates within TAC and TAC-gained units. The avoidable accident is where we need emphasis in the management of our aircrews and training programs. As I reflect on my years in TAC since 1963, I remember the many different things we did. We fired "bo-pups," (Bullpups for you real youngsters) AIM-9s, fired on the dart, did nuclear deliveries, conventional bombing, and rockets, deployed a couple of times each year and still found some time for cross countries. It seems as though we're more "specialized" today. Anyway, that added up to around 300 hours of flying time each year and over 120 sorties for us young guys. It was a demanding mission, but we had flight commanders and assistants with four to eight years of TAC "mission experience," not flying time, but mission experience, and they held our hand for a couple of years and watched us learn. That's what I want to offer in this brief epistle, a theory that our lowest control level of aircrews, our flight commanders, need to get back to the basics. Our ORI and exercise scenarios are more demanding today than ever before, yet we fly them with a less experienced aircrew being supervised by a less experienced flight commander. What used to be our minimum proficiency sortie number has become our training standard. That's a challenge for you flight commanders and higher level managers in today's TAC.

Flight Commanders, listen up and see how you do on the following questions about your troops:

1. What's the flying mission experience of your guys?
2. Who is your best air-to-air guy?
3. Who is best in each air-to-mud event?
4. Who is your best tactician for the big ORI or Red Flag mission?
5. Who needs help in instruments?
6. Who has the best hands? Who has the sound judgement when things get tense?

If you could answer these questions, then you are a long way down the road of hacking your job. I might also ask the Ops Officer the same questions about his flight commanders; maybe ask the wing DO the same ones about his Squadron Commanders, then the Numbered Air Force Commander the same questions about his Wing Commanders, and so on.

We can all sit around over a cup of coffee and offer ideas about the state of things in tactical flying, and why it's like it is, things that bother us like the aircraft conversion turbulence, problems in maintenance, too many additional duties, lack of pay raises and on and on. You know the folks who control most of our accident rate and our readiness to fight a war are the aircrews! The folks who have the most direct contact and control over those aircrews are you flight commanders! The way things look, y'all need to get back to basics in this business and insure your guys can hack the mission better than the other guy, and get the job done right the first time out. Press on!

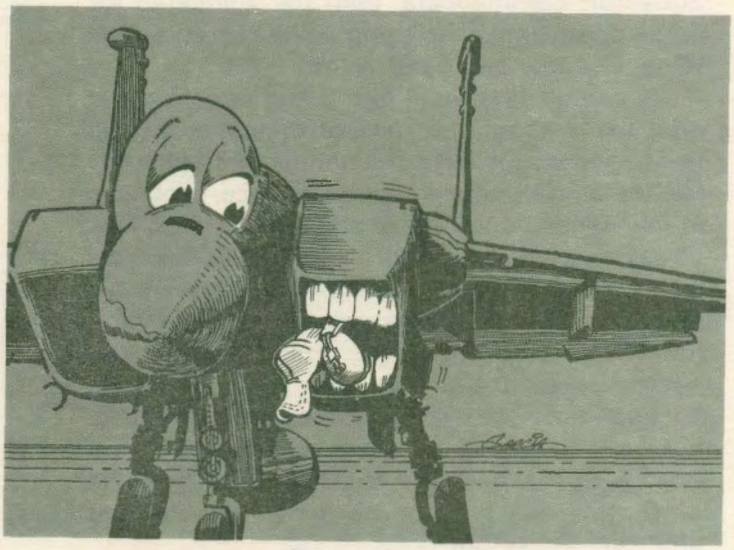
chock talk

...incidents and incidentals with a maintenance slant.

fod

There is such a thing as trying to do a job too well, or too quickly. Anxiousness can cause you to make as many mistakes as plain carelessness. Case in point.

An F-15 had taxied into the dearm area following an uneventful dart firing mission. Because their arrival was earlier than expected, the gun safing pins had not yet arrived from the arming area. The two-man dearm crew was on their first hot dearming. The crew felt a sense of urgency to chock the aircraft and inform the aircrew of the reason for the impending delay.



Instead of following the established procedure of chocking the left main wheel and then connecting to the intercom, the crew chief chocked the right main wheel and then plugged in. After establishing contact with the pilot, he then realized he had chocked the wrong wheel. He crossed under the aircraft in front of the centerline tank, and in the process his cap and headset were ingested into the left engine intake.

Investigation revealed that although the crew chief had been properly trained, he had never dearmed an aircraft in an actual situation. Coupled with a perceived urgent situation that in fact did not exist, he rushed to perform the job without proper consideration for the hazards involved.

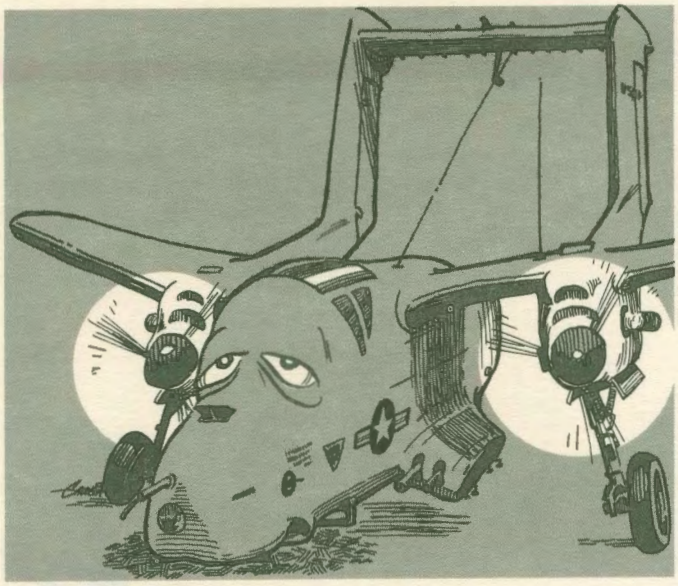
Never be in such a hurry that you forget the normal precautions you take every day.

how not to handle ammunition

A three-man munitions maintenance crew was tasked to delink two "light" boxes of 20mm TP ammunition and consolidate them. Upon arriving at the storage building, the crew chief attempted to delink and consolidate the ammunition there rather than taking the boxes to the maintenance bay. After removing the first round from the link, he "tossed" it into the empty can. The round apparently struck the edge of the can and detonated. The cartridge case exploded spreading shrapnel throughout the area. The crew chief received a shrapnel wound to his foot, as well as superficial flesh burns on both arms and eyes.

Due to primer damage, it cannot be determined if the primer was struck when the round was tossed. Since no grounding apparatus was available, static electricity is a suspected factor.

The old adage "Familiarity breeds contempt" is always applicable to our operations. An individual was so "familiar" with handling 20mm ammo that he forgot how dangerous it can be when treated with contempt. How many other hazardous substances do you handle every day? Do you follow the necessary precautions, or do you treat these substances with "contempt?" Remember, the consequences.



collapsed gear

Meanwhile, an OV-10 from another command had the nose gear collapse during landing rollout. The nose gear trunnion pin was apparently improperly installed during gear maintenance on the aircraft.

The nose gear trunnion pin is a hollow shaft secured to the trunnion with a bolt that passes through two holes in the trunnion and trunnion pin. The bolt was not installed through the pin holes and the failure eventually occurred.

The simple matter of missing two holes when the trunnion bolt was installed caused about $25,000 damage. And it could have been a lot worse.

self locking?

An F-5 had been airborne for about 10 minutes and the power was set at 100% RPM. The pilot then discovered the right engine wouldn't respond to throttle movement, so he brought the aircraft back to the base shutting the engine down during the landing roll using the fuel shutoff switch.

The aircraft had flown only 11½ hours since the right engine was changed. During the engine change, when the throttle linkage bolt was installed, the wrong type nut was used. A self-locking nut rather than a cotter key-type nut was used. The nut vibrated loose and the bolt backed out.

Someone didn't read the TO or didn't care—the results were still the same.

another engine problem

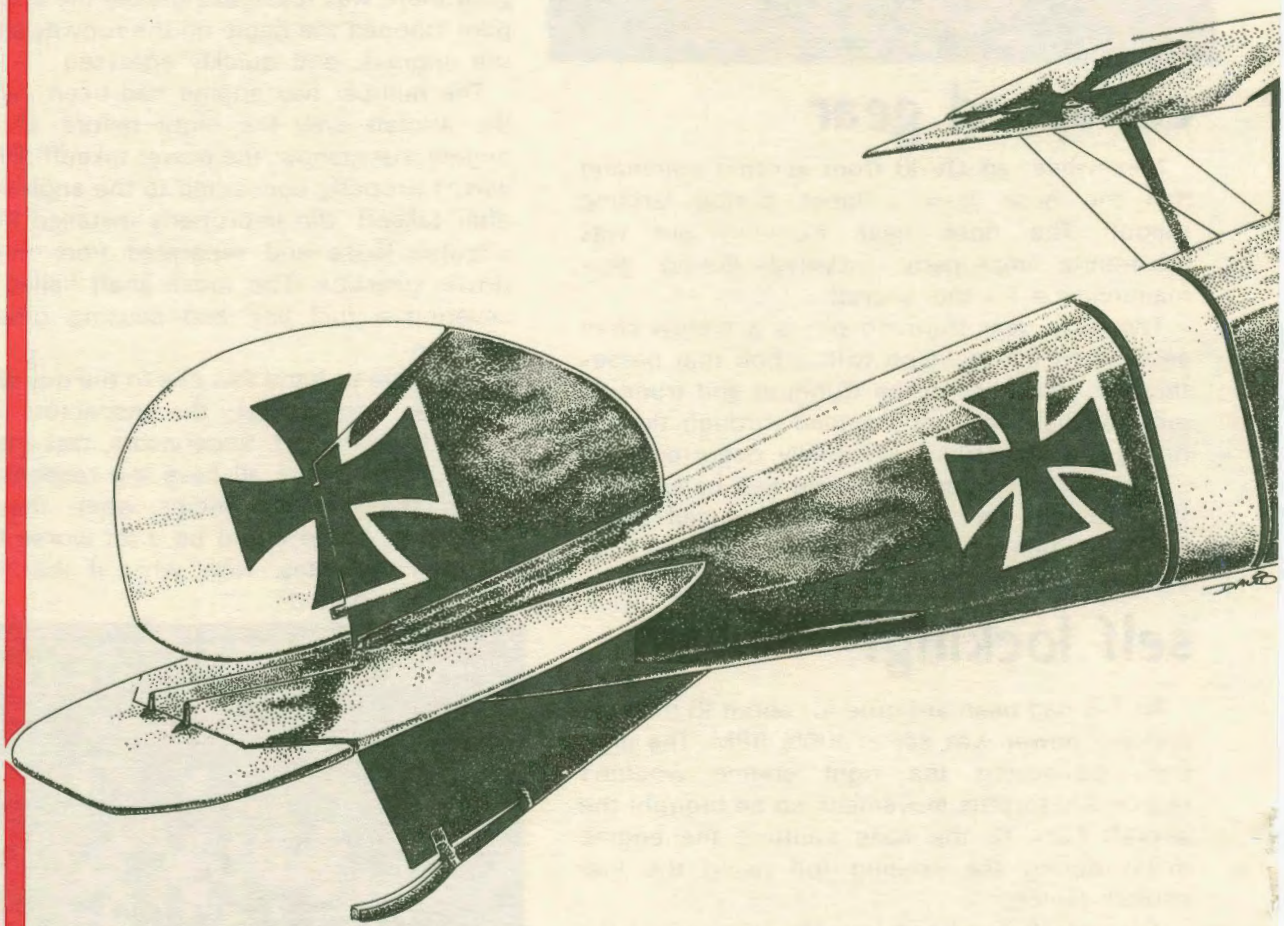
A few days before the F-5 we just talked about had its problems, an F-15 at another base had some problems of its own.

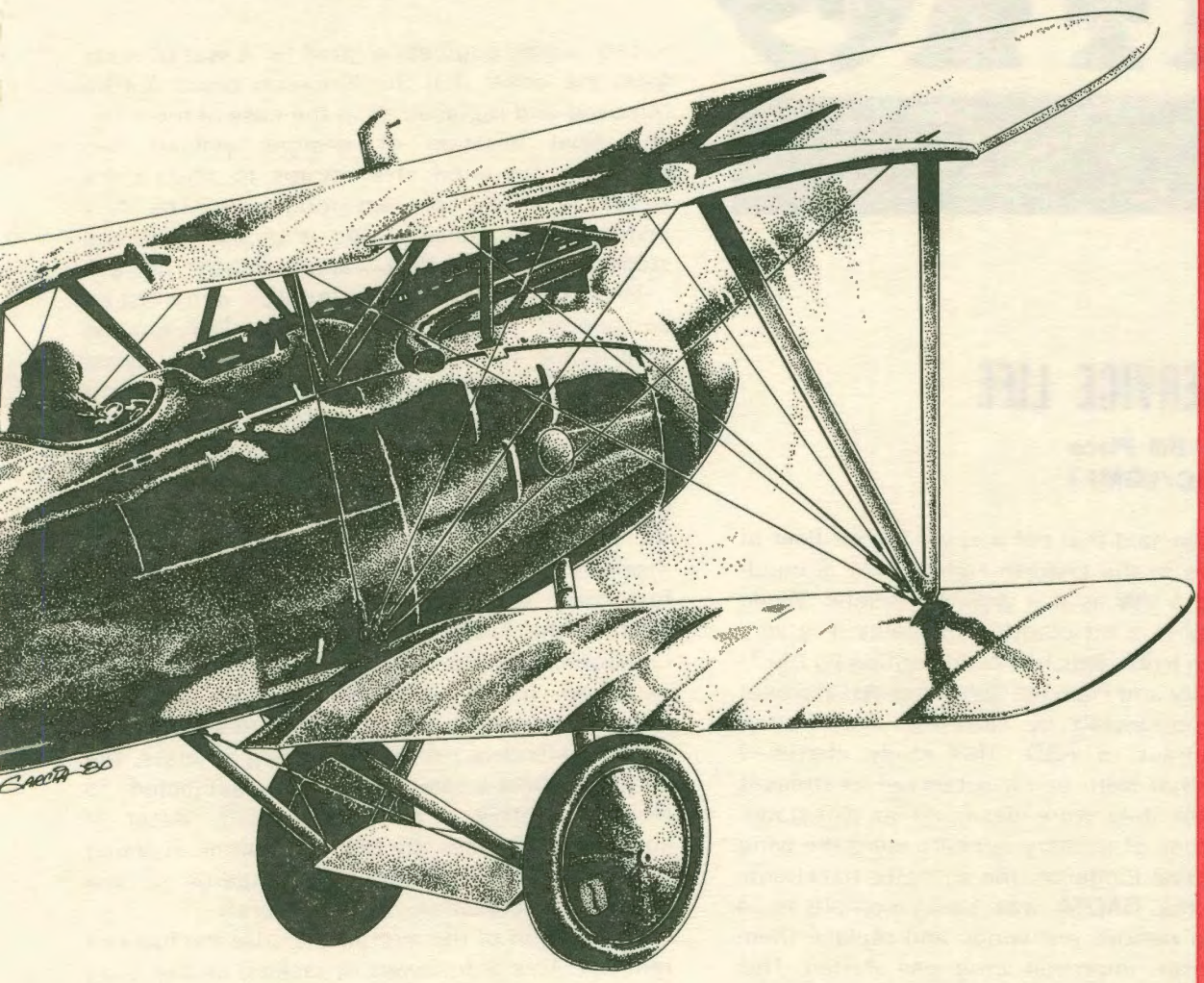
As the pilot retracted the gear after takeoff, he noticed the Master Caution Light illuminate. He then noticed the PC 2A, PC 2B, Right Utility Pump and Right Generator lights were all on. The number two engine RPM increased to 110% RPM, and the FTIT climbed to 1020 degrees. The pilot climbed to investigate and retarded the right throttle. The pilot then dumped fuel and returned for landing. On landing rollout, tower told the pilot there was fuel leaking from the aircraft. The pilot stopped the Eagle on the runway,shut down the engines, and quickly egressed.

The number two engine had been installed in the aircraft only the night before. During the engine installation, the power takeoff (PTO) shaft wasn't properly connected to the engine. Shortly after takeoff, the improperly installed PTO shaft vibrated loose and separated from the engine driven gearbox. The loose shaft flailed around, severing a fuel line and causing other minor damage.

You have to hand this one to the guy who put it together wrong. But, the inspectors certainly could have helped. Supervisors, task inspectors, and QA personnel all have the responsibility to catch these discrepancies when they occur. Failure to do so could be a lot worse than this incident indicates. Now what if that fuel had somehow ignited?

Albatros D III




GARCIA 80

TIPS

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

Men are seldom blessed with good fortune and good sense at the same time.
LIVY

T-38 SERVICE LIFE

By SMSgt Bill Place
HQ TAC/LGMF-I

It has been said that the way we fly our fleet of T-38 Talons in the Lead-In-Fighter role is much like driving a VW as if it were a Porsche. While the analogy is a bit colorful, in reality it is very close to the truth. This has been verified by the T-38 Durability and Damage Tolerance Assessment (DADTA), conducted by Northrop Corporation under contract to ASD. This study identified structures that were being subjected to stresses greater than they were designed to withstand. The two areas of primary concern were the wing and the dorsal longeron, the aircraft's backbone.

Just as the DADTA was being completed, a program to remove our wings and replace them with a thicker, improved wing was started. This was necessary because our wings were at, or fast approaching, the service life predicted by the study. Just after the wing change program began, our sense of urgency was increased when we experienced an aircraft loss due to wing failure. Fortunately, the aircrew managed to escape serious injury. The wing change program will be completed in about another year, but all of the high risk wings have now been removed and this program is manageable.

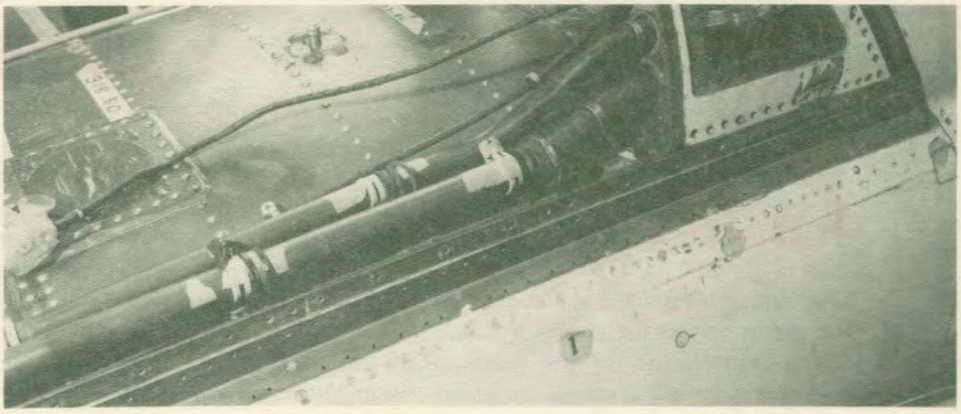
The predicted service life for the dorsal longeron was about three times greater than that for the wing. This allowed some breathing room to thoroughly engineer a good fix. It was obvious from the onset that the longeron could not be removed and replaced as in the case of the wing. The final iteration of designs yielded two externally mounted steel straps to absorb the stress from the present longerons. The first installation of these straps is in the prototype stage at Northrop Corporation, Hawthorne, CA.

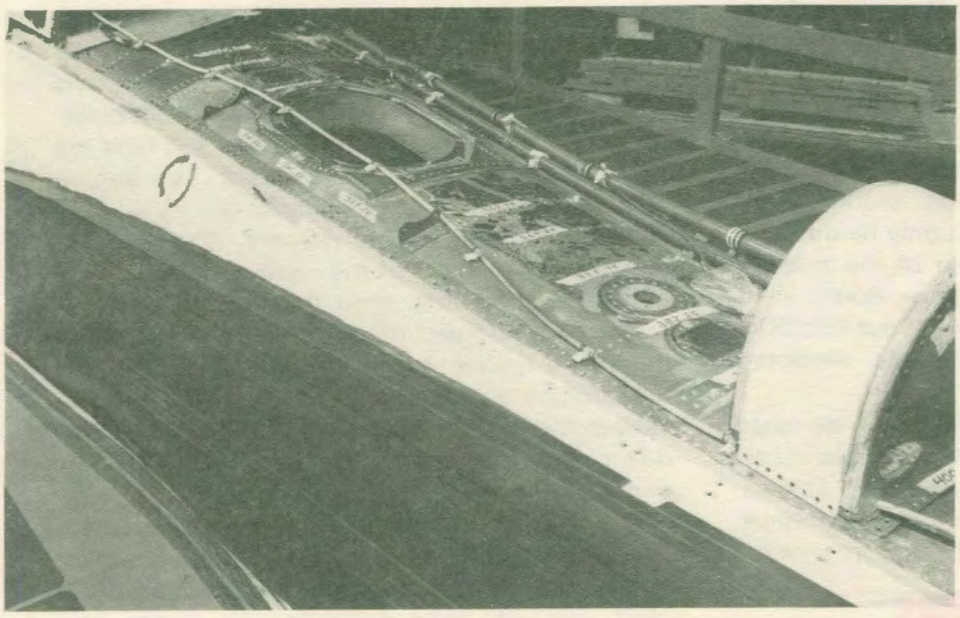
The prototype is progressing well, and must be considered an overall success. The biggest contributor to this success is the new dorsal longeron itself. The greatest expenditure of effort was placed on designing and manufacturing these 14 foot-long steel straps.This has paid off. The longeron is milled from a 970 pound steel billet. It is machined down to a weight of about 44 pounds on a computer controlled milling machine. The final product is, as stated before, 14 feet long with numerous complex bends to contour the T-38 fuselage perfectly. (This type component would normally be produced as an extrusion, but because of the long lead time required and relatively small buy, this would not be cost effective.) After the milling process, the strap is heat-treated and then subjected to Nondestructive Inspection (NDI). After it successfully passes the NDI, it is cadmium plated for corrosion prevention. The longeron is now ready for installation on the aircraft.

Preparation of the aircraft includes the fuel cell removal. This is followed by jacking and leveling the aircraft and cutting of the present dorsal longeron uprights. This is the most critical task of the entire modification. Therefore, Northrop has designed and built a sophisticated set of tools. They include slotted jigs that guide the router used to cut the longeron and a set of fastener hole index (memory) tools.

The longeron uprights must be cut one at a time (to prevent the aircraft from being distorted), so a complex and expensive aircraft holding jig is not needed. On the prototype aircraft, the cutting of the first longeron took about 3 days. With the knowledge gained on the

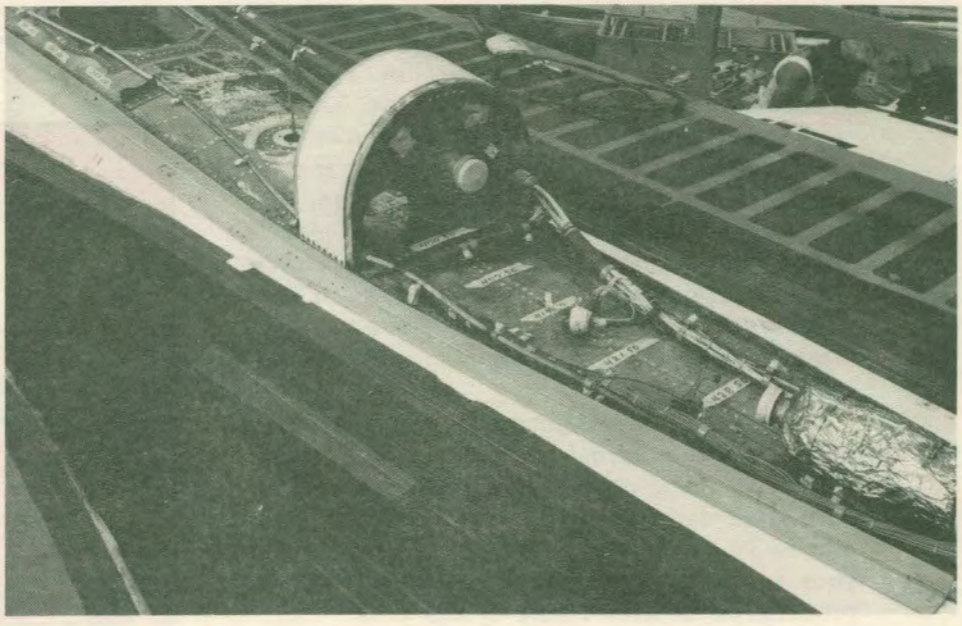
AIRCRAFT BEFORE OLD LONGERON IS CUT





AIRCRAFT WITH OLD LONGERON REMOVED

AIRCRAFT WITH NEW LONGERON INSTALLED



TAC TIPS

T-38 SERVICE LIFE (con't)

first, the technicians were able to cut the second longeron in about eight hours.

The installation of the steel strap consists of laying it on the fuselage, locating the attachment fastener holes, applying a liquid shim between it and the fuselage, and fastening it in place. Then the dorsal cover panel holes are located and the sequence can be repeated on the opposite longeron. Finally, the aircraft can be put back together and rolled out.

Obviously, the above step-by-step procedure is an oversimplification of this modification. Certain aspects of this job must only be done by certified people; i.e., the cutting of the present longeron upright. A mistake here would yield enough scrap aluminum to make about 192,000 beer cans. The aircraft would be rendered permanently unserviceable.

As long as the T-38 continues to be cost effective in the Lead-in-Fighter role, we must continue to find ways to extend the Talon's economic service life. The unattractive alternative is to discontinue the Lead-in-Fighter program.

THESE FUELISH THINGS

The Photo Phantom was returning to its home station following a training mission. The pilot noticed the difference between the fuselage readings and total fuel was 2,000# and remaining constant. The right wing felt heavy and the pilot figured the fuel was trapped there. Fuel transfer failure emergency procedures failed to remedy the situation. Fortunately, the aircraft was close enough to home station to make it back with a max range descent. Even when the automatic low level transfer system activated, the fuel remained trapped.

Maintenance investigation found a malfunctioning right internal wing pressure/vacuum valve was dumping pressure. The lack of pressure prevented transfer of the internal wing fuel. This ought to serve as a reminder to keep track of your fuel and don't count on the emergency procedures to work 100% of the time.

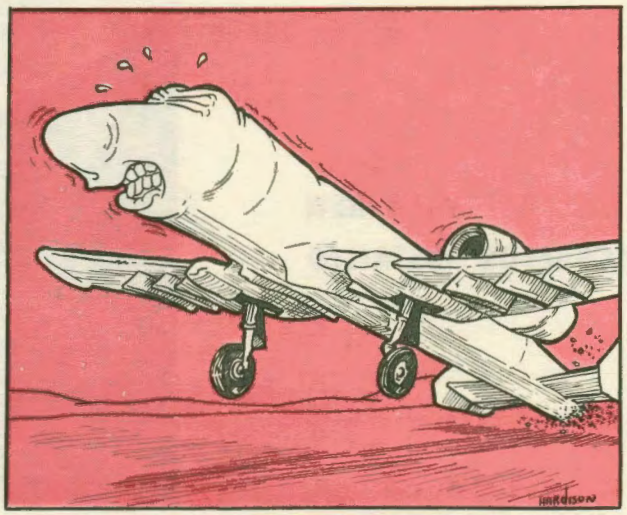
SHOOORT

A pair of A-10s were flying an IP upgrade mission, the wingman was chasing the IP through a number of overhead traffic patterns at the aux field. On the second pattern, the IP flew a normal overhead with 40% speed brakes, gear and flaps down. The mishap pilot failed to notice the IP had his flaps down and attempted to chase him with his aircraft's flaps up. Unfortunately, the IP momentarily allowed his airspeed to decay 10 knots low.

The mishap pilot first perceived a problem when he rolled out on final and noticed an excessive rate of descent and low airspeed at idle power. He advanced the throttles to max and pulled back on the stick to control the descent. He immediately felt the stick shaker and held the stick aft to the stick shaker point. The engine response was slow due to normal fan lag and the pilot couldn't stop the descent. The airplane touched down short of the runway—the tail section contacting first, then the landing gear.

The pilot retarded the throttles to idle, opened the speed brakes, found the runway and guided the airplane onto it. Once under control, the pilot slowed the aircraft, cleared the runway, and shutdown the engines. Fortunately, damage was minor.

The traffic pattern is one of those places where things are so commonplace and routine that everything seems to happen "automatically." We can't rely on habit patterns and things that happen "automatically" to keep us out of trouble. This is another one of those incidents which proves habits are just habits—nothing more.



Aircrew of Distinction

58th TTW
Luke AFB, AZ

On 3 September 1980, Major Kenneth A. Frey was the flight lead of a two-ship F-4 flight on a Dissimilar Air Combat Maneuvering mission. Occupying the rear cockpit was Second Lieutenant Charles J. Maurer, a student Weapon Systems Officer. The mission went as briefed until 10 miles on final when lead put the landing gear handle to the down position. As the gear came down, the Master Caution and the Check Hyd Gauges lights illuminated. A quick check of the gauges indicated the Utility Hydraulic Pressure was zero and the nose gear was unsafe. The wingman also reported fluid was streaming from the nosewheel area; however, it appeared the nose gear was down and locked. An emergency was declared and an approach-end arrestment was planned.

Because the situation had developed so rapidly, Major Frey elected to make a missed approach in order to further analyze the problem. All emergency checklist procedures were accomplished including pulling both front and rear emergency gear handles, but the nose gear remained unsafe. Following a discussion of the problem among Major Frey, the SOF, and other supervisory personnel, it was decided that the best course of action would be to make a normal landing using emergency brakes for directional control and stopping. The main reasons for this decision were (1), the possibility of the nose gear collapsing immediately upon touchdown and having the barrier cable ride up and over the radome and canopy and (2), an approach-end arrestment would cause excessive downward pressure on the nose gear increasing the possibility of collapse.

In a final attempt to "jolt" the nose gear into a safe indication, one touch-and-go on the main gear was accomplished without success. Following this, a straight-in final was flown with the aircraft touching down 500 ft down the runway; the drag chute was deployed and Major Frey gently lowered the nose to the runway. Emergency braking brought the aircraft to a stop with 1500 feet of runway remaining.

Inspection revealed that the nose gear had actually overextended and did in fact partially collapse forward. The only thing supporting the nose gear and preventing total collapse was the sheet metal around the gear well bulkhead.

Maj. Kenneth A. Frey

Lt. Charles J. Maurer

Major Frey's professional competence and superb flying skill and Lt Maurer's superior crew coordination combined to prevent major damage to the aircraft and possible loss of life. Their professional handling of this serious emergency qualifies them as the Tactical Air Command Aircrew of Distinction.

Three Strikes And You're OUT

By Major John W. Lapointe
33TFW/DOV
Eglin AFB, FL

There I sat at the pilots' meeting listening to a safety incident report being briefed by the operations officer. During his presentation, I was totally amazed at the reaction displayed by some of the guys in the squadron. The "it'll never happen to me" syndrome was so prevalent. I couldn't believe that both a Lieutenant just out of RTU with 75 hours in the bird and a seasoned flight lead with many times that experience could be so self-assured. I was amazed that they felt immune to these misfortunes and pitfalls. For myself, I can remember that everytime I have felt that same complacent, self-assurance—the very next time I flew I was often jolted back to reality by one of flying's unforgettable lessons.

Here we go again talking about the pilot's favorite word—but "complacency" still rears its ugly head at every opportunity. It attacks new guys and flight leaders and plagues old heads and even whole wings. It becomes so insidious in its onset that we often don't recognize the affliction. I think I saw a symptom the other day at the pilots' meeting. I sure have started to evaluate my own habit patterns and mind set, and I encourage you to do the same.

Complacency exists in a slightly different vein as well. When you take a thorough look at any accident or incident, a very characteristic sequence of events often emerges. These events had to transpire in a definite order for that particular event to have occurred. Sometimes it is a series of misjudgements by the pilot alone. Sometimes it's mistakes by several people, each compounding the situation. Sometimes it is our procedures that become so honed and polished through habit that their efficiency masks their inherent dangers. It could be the distractions, the inattentions, the omissions, neglect, or whatever. The sum total is all the same. It's some degree of complacency, it results in accidents and it can

happen to you. But what does all this have to do with three strikes and baseball?

The anatomy of any accident and its characteristic chain of occurrences are analogous to the plight of the baseball batter with two strikes against him. His challenge is to protect the plate so that the third strike will not sneak by. He must be extremely cautious as any pitch that is close could strike him out. That third strike is vital in our game too. The trick in our business, though, is to train ourselves to see a precarious two strike condition when it arises. We, too,have to guard the plate against that third strike. We must break that potentially dangerous string of events long before it runs its devastating course.

Meanwhile . . . back to the pilots' meeting, the most important job for the "it'll never happen to me" types is to realize what constitutes a strike. For our jovial Lieutenant, unexpected weather,

Maj John W. Lapointe
is this month's
Fleagle T-shirt winner

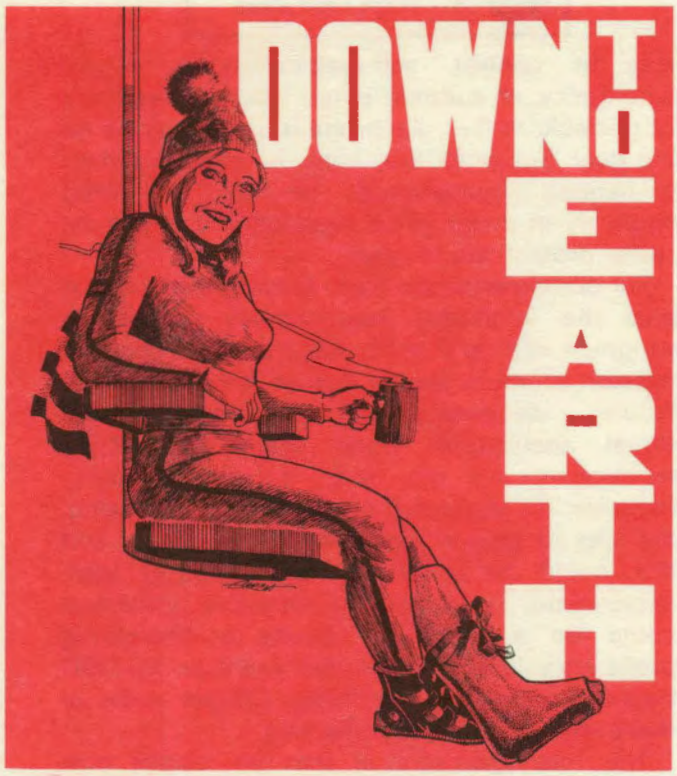
loss of control, self-medication, a critical emergency, or sudden "bingo" fuel are examples of possible strikes. Each one in itself may be no big deal. But when they come coupled together, or happen simultaneously, he may find himself suddenly in a two strike situation and now must really protect home plate.

For our experienced flight leader,these hazards plus the additional responsibility of leading wingmen can be a strike. A particularly complex mission scenario can be a strike, so can materiel failure, a weapons system malfunction, or high threat acquisition. Once again, in and of themselves, no big deal, but when strung together, it's strike two again. For a fighter wing, the loss of several experienced flight leads and IP's could be a strike. An aggressor visit, deployment, or a new maintenance procedure could be a strike, or maybe a decreasing proficiency level or even two years or 30,000 hours of accident free flying. Couple some of these and again, it's strike two.

The message here is that no matter how conscientious you are or how keenly aware you are of your surroundings, the two strike situation is often present. Regardless of your experience, intentions, or personal desires, there appears to be no exemption from these circumstances. This is what makes complacency so deadly. We find ourselves so frequently in this realm that we become de-sensitized to it and its warnings. We stop seeing the second strike and the third one is on the way.

We have to be suspect of the anesthetic effects of flying airplanes with two strikes against us. We need to assess every flying moment, evaluate the umpire's count, and proceed. Safe missions can be, and are flown everyday with two strikes on the books. Plan your flying activities as if you were a rookie in the world series and are facing the most skillful, experienced, and clever pitcher of all time.

Of course in the real world, it could take ten strikes to actually strike you out, but the analogy is still applicable. This may be an over-simplification of the problem but nonetheless a true one. The overwhelming point to remember is that with enough strikes—you're out. And in our game you only get one final strike. You don't have the luxury of a bad year, a sore arm, or a batting slump. In fact, in flying, unlike baseball, one out and it's a new inning and you are not a player.



THE LAST FALL

Sometimes, people just won't pay any attention even when it's for their own good. . . .

Several Air Force members were visiting a National Park in the southwest U.S. They trespassed in a prohibited area and were given a citation by the park rangers who directed them to leave since the park was closing. After the rangers left, the men walked back to the area, stepping over a chain marked "Keep Out." After following a trail, they came to a guard rail which they climbed over and walked down a steep slope. The group stopped, but one man wanted to continue. Despite his companions' warnings, he continued along a ledge for about another 20 feet. Suddenly, the ledge collapsed under his weight. He slid down the slope 15 feet and fell over a 65 foot cliff. He was pronounced dead at the scene.

He'd be alive today if he and his friends had only decided to "Keep Out."

HELMETS HELP

A Chief Master Sergeant was riding his 1979 model 750cc motorcycle to work. Approaching an intersection, he noticed the car ahead of him was stopped and he began to slow down, preparing to stop himself. Unfortunately, the following car ran into him. He was thrown several feet, with his head striking the bumper of the stopped car. Because he was wearing protective equipment, he received only minor injuries.

This mishap illustrates several facts very clearly. Protective equipment works. No, it won't necessarily keep you from getting killed in a really bad smashup; it will reduce the number and severity of your injuries in the majority of cases.

More importantly, until the automobile driver becomes a lot more educated than he is right now, the two-wheel operator is at the mercy of just about every other vehicle on the highway. Although you have only half as many wheels as an auto, you have to be doubly defensive when you ride.

HIGH PRESSURE

In another command, two workers were opening a shipping container. The container was a standard type reusable container which was about 14½" in diameter and 14 ¾" in height. The container held two one-gallon size petroleum ether containers. The workers were loosening the nut from the bolt on the lock ring that held the lid in place. As soon as there was a little slack in the lock ring, the lid blew off the container and the lock ring flew about 20 feet.

Neither of the individuals was injured, but they could have been had either one received a direct hit from the lid or the lock ring. Whenever volatile materials are placed in airtight containers for shipping or storage, the potential for incidents such as these is high. It would pay to use care whenever you open any airtight container.

AN OUNCE OF PREVENTION

By Mr. R.S. West
Fire Protection Inspector
Langley AFB

The holiday season is upon us, and some will not be singing songs of joy. There are thousands of fires and fatalities every year due to faulty Christmas decorations. Here are several simple things to look for that will help all of us keep out of the statistics during the 1980 Holiday Season.

1. Cut a fresh tree; or when buying a tree, check for signs of dryness, such as dropping needles and dry, brittle branches. Always store

the tree in a cool place with the base in water. Before setting the tree, saw the trunk off at an angle at least one inch above the original cut. Use a tree stand that will hold plenty of water, check the water level every day. When the tree shows signs of drying out, it's time to take it down.

2. Only purchase electrical decorations certified by the Underwriter's Laboratories (UL). These products must be used according to the manufacturer's instructions to be safe. Check all electrical cords and light sets each year for frayed wires, loose connections, damaged plugs and broken sockets. Follow the manufacturer's instructions on the number of light sets that may be plugged into one socket. Don't use indoor light sets outside; they aren't properly weatherproofed. Remember to turn off lighting sets before going out or retiring for the evening.

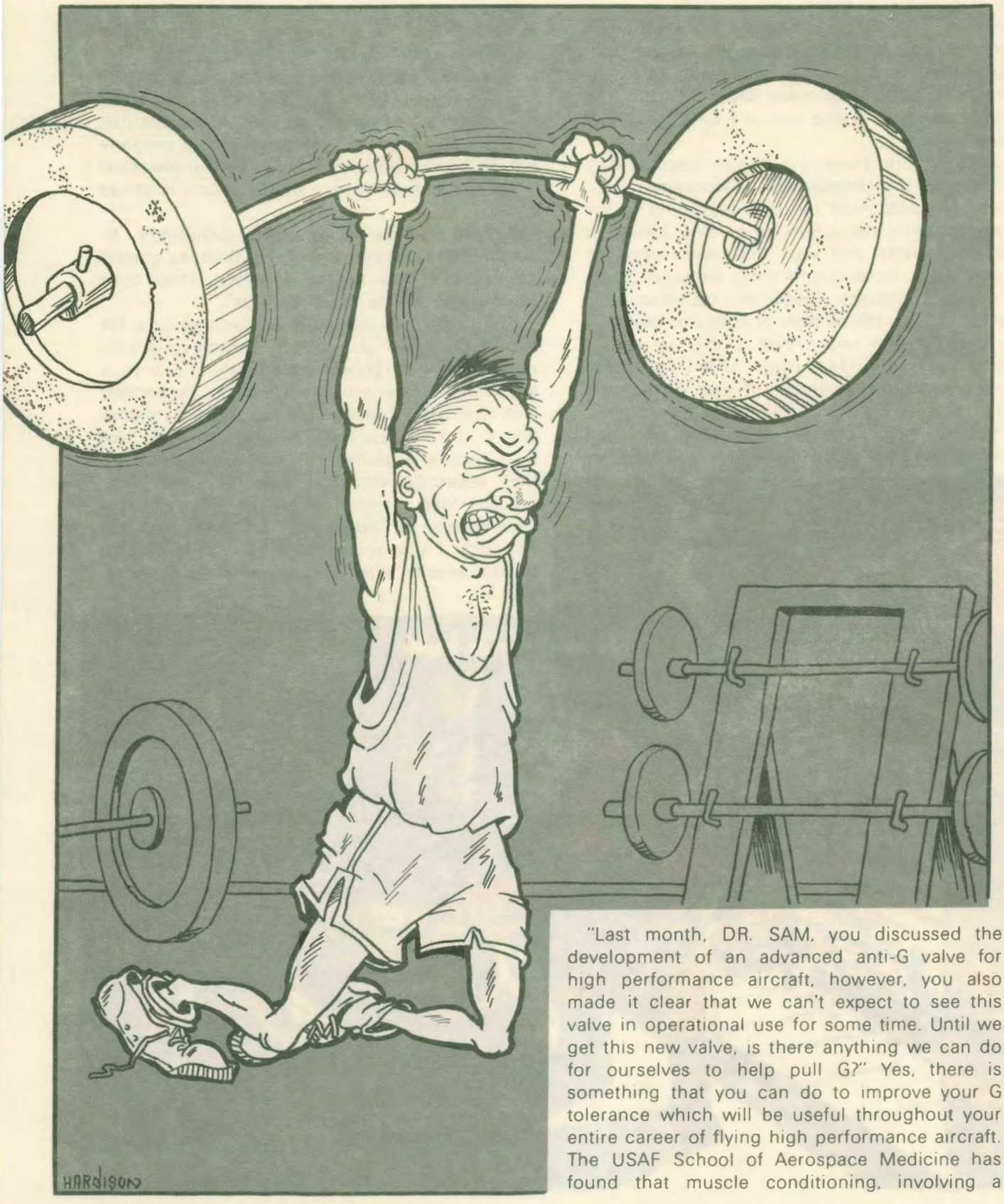
3. Open flame/candles should be protected and not used too close to evergreens. Whenever possible, use noncombustible materials to decorate for Christmas. Any combustible decorations should be "Flameproofed."

4. When buying gifts, especially toys, always look for the UL label. This will tell you that they have been tested for fire and shock (if electrical) hazards and may be considered safe if properly handled and maintained. Don't set up electrical or gasoline fueled toys under your Christmas tree.

5. Don't allow Christmas wrappings to accumulate; properly dispose of them as quickly as possible—not in the fireplace. They burn rapidly and create other hazards.

6. The holiday season is an exciting time for small children and they normally cannot recognize or ignore potentially hazardous situations. Supervise them closely, especially with new toys. Consider the age of your children when you purchase toys; follow the manufacturer's guidelines on the age group for toys, especially electrical products.

If you follow these few, simple tips and use a commonsense approach to your holiday activities, I guarantee you'll have an enjoyable holiday season. After all, that's what it's all about, isn't it?



"Last month, DR. SAM, you discussed the development of an advanced anti-G valve for high performance aircraft, however, you also made it clear that we can't expect to see this valve in operational use for some time. Until we get this new valve, is there anything we can do for ourselves to help pull G?" Yes, there is something that you can do to improve your G tolerance which will be useful throughout your entire career of flying high performance aircraft. The USAF School of Aerospace Medicine has found that muscle conditioning, involving a

Dr. Sam

Muscle Your Way Through G

combination of resistance exercises including isometric contractions, is a promising means to improve G tolerance. Such a conditioning program involves both conventional isotonic weightlifting and isometric exercises. Either free weights or machines can be used for the conventional exercises and the isometric exercises are performed both with and without weights using only body weight resistance in the latter case.

The specific exercises most useful in improving G tolerance are: sit-ups on an incline bench; arm curls; bent rowing; bench press; leg press; and arm pull down ("lat" exercise). Supplementary exercises which will help the pilot perform during G but will probably not change his G tolerance include: upright rowing; and neck flexion/extension. The sit-up and neck flexion/extension exercises are best done isometrically, whereas, the other exercises should be performed isotonically, through the range of joint motion.

Exercises that use weight (sit-ups, arm curls, bent rowing, upright rowing, bench press, leg press, and arm pull down) require that the specific amount of weight to be used in the training program be determined for each individual. This is accomplished by using the maximum strength test (1-RM) for each exercise. However, different exercisers use different methods to determine the 1-RM. In all cases, however, the 1-RM test should be repeated for each exercise on at least two separate occasions when the exerciser is fresh and after a period of warmup with stretching exercises.

The sit-up on an inclined bench is considered the most important exercise for improving G tolerance. This exercise is performed from a head down, knees bent position on an incline bench of 18-20°. From This position, sit up to a position of about 20° from the vertical (gravitational axis) and sustain a static contraction for 30 seconds. If you are able to do this, rest, then repeat the sit-up test holding 10 pounds of weight on the chest under the chin. If you are again successful and after adequate rest, repeat this procedure with added weight until you cannot hold the position for 30 seconds. This is the 1-RM weight for sit-ups. Fatigue during this test may become a factor in measuring an accurate 1-RM. Consequently, this test may need to be repeated on subsequent days, beginning at the end point of the previous day's test.

Initial 1-RM testing for the other lifts is not as difficult nor fatiguing as for the sit-up. The starting point for arm curls may be about 80% of one-half of body weight, for bent rowing about 60% of body weight (knees bent, head supported), for upright rowing 50% of body weight, for bench press 80% of body weight, for

Dr. Sam

leg press 100% of body weight + 20 pounds, and for arm pull down 75% of body weight. After the 1-RM is determined, the muscle conditioning program should begin for three weeks, at 50%-60% of the 1-RM. During the second three weeks you should use weights that are 70% of 1-RM and thereafter increase poundage to 80% of 1-RM for the duration of the program. At the end of the third week, and every three or four weeks thereafter, retest for 1-RM and readjust the poundage. If a lift seems particularly easy, during the interim between 1-RM testing, increase the lower body exercises by 10-20 pounds weekly, and upper body and trunk exercises by 5-10 pounds weekly.

Workouts should be done every other day (or 3 times per week). More frequent workouts will not be beneficial and could slow progress. Each workout should always be preceded by stretching and 5 minutes of general warm up. Alternate upper body exercises with trunk and leg exercises in the lifting sequence to avoid undue fatigue of a specific body area. Ten repetitions of three sets for each exercise are completed before beginning with your next exercise. Keep a workout log of progress and review it weekly.

The arm curls, bent rowing, upright rowing, bench press, leg press, and arm pull down (high pulley "lat" exercise) are done in the conventional weightlifting way. Remember to bend your knees and support your head when doing bent rowing.

The neck flexion/extension is done with hand position on four surfaces of the head: back, front, and two sides. Attempt to nod your head forward against interlocked fingers held against your forehead, then repeat on back of your head, and finally tilt head sideways against the base of your hand, assisting with the other hand (interdigitated); repeat on the other side of the head. This exercise may also be done with a partner holding resistance. Sustain maximum contraction for 10 seconds at each position and perform 3 sets with 30 to 60 seconds rest between sets. One set of this exercise is constituted by four positions of resistance on the head moving moderately fast from one surface to another until the four positions are exercised. The wrestler's bridge is another excellent exercise for the neck. These exercises will develop the neck muscles for improved head movement with less muscle fatigue during high G exposure.

A conscientiously applied program should show improvement in G tolerance within 3 to 4 weeks. We, at USAFSAM, measure tolerance relative to the rate of the development of fatigue resulting from G exposure to aerial combat maneuvers. This rate of fatigue was reduced on an average of approximately 50% in those persons who actively participated for 11 weeks in a weight conditioning program.

If you are interested in developing a weight training program, more detailed information regarding methods and techniques of weight lifting will be useful and available in the following two publications:

Stone, William J. and William A. Kroll, Sports Conditioning and Weight Training (chapter 4), 1978; Allyn and Bacon, Inc., 470 Atlantic Ave., Boston, MA 02210. Hooks, Gene, Weight Training in Athletics and Physical Education (chapter 5), 1974; Prentice Hall, Inc., Englewood Cliffs, NJ. These books are available at your library or can be purchased at some bookstores and most sporting goods stores.

DR. SAM eagerly solicits questions, ideas, and comments (both friendly and unfriendly) from aircrewmembers. All letters will be considered confidential and will be used as the basis for future articles.

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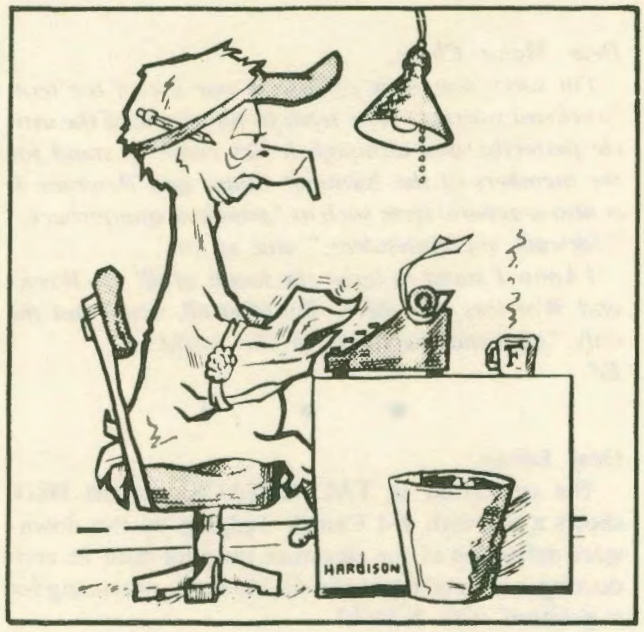
LETTERS



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Dear Editor,

Major Johnson's article, the "Phantom Vari-Ramp," hits the spot in reminding the force that vari-ramps are more than just walkways for the WSO and the crew chief, and that they (the ramps) can bite you at the most unauspicious time. Moreover, the article highlights a discrepancy in the Dash One. On page 2-21 under Normal Takeoff, the procedure called for is for the WSO to check the ramps after the throttles have been advanced to full military power. Or, as in just about all cases, check them after the burners light since there is minimal time between pushing the throttles to mil and then to the stops. This procedure vice the scramble checklist procedure, i.e., checking the ramps at 85%, makes more sense for obvious reasons.

This is not to say that I do (or that someone else should) disregard the ramps at 85%. It's just that my most thorough inspection of them occurs after the burners light and just after I have given the RPM gauges and the Master Caution light a quick glance then it's ramps and airspeed/groundspeed.

Major Johnson makes mention of the ramp control CBs. One habit that I have forced myself into while taxiing prior to flight is that of checking, via the "look and touch" method, the positions of various CBs that I consider more time critical. In other words, find the whiteheads that we as GIBs are responsible for pulling rather than pushing.

I disagree with Major Johnson on putting the ramp check into the normal takeoff checklist. The ramp check, along with a host of other things, is one of those items that you are responsible for knowing. If, however, it does get introduced into the yellow pages, it should reflect doing the check at mil/max power. As for the bottom line, the scramble checklist should be changed to reflect this also (the 847 is on the way). I was somewhat dismayed with myself for not having noticed the Dash One discrepancy before reading the article, but then that's why I look forward to TAC ATTACK . . . a wealth of good mind joggers.

Major Paul E. Morrow
18 TFS Fightergator
Elmendorf AFB, AK

Dear Major Morrow,

Thanks for your suggestions and the kind words. Glad to see we're reaching you folks up there in the arctic northwest!
Ed

• • •

Dear Editor,

Over the last year I have read a lot of articles concerning BDU-33 practice bomb incidents. Most appear to have happened because the safety device between the striker and the bomb had been removed or was improperly installed. A recent uneventful incident in our wing may help to highlight the importance of that little piece of metal.

A SrA and AlC were loading BDU-33's into a SUU-20 dispenser. The load was going along well until they attempted to load the last bomb into the dispenser. The bomb would not lock into the SUU-20 rack. On the second attempt the bomb appeared to have locked in. As the SrA reached for the safety pin for that station the bomb released from the rack. The AlC still had his hands under the BDU but the sudden release of the bomb surprised him and the BDU fell from his hands. The bomb struck the

LETTERS

ground, breaking off the striker plate. The safety device was properly installed and worked as designed. EOD was called to safe the bomb and pick up the pieces. Although a little shook up, neither man was injured. Safety devices do work. Make sure they are properly installed and not removed until the time prescribed by Tech Data.

MSgt Edward A. Hartman
Chief, Weapons Safety
366th Tactical Fighter Wing

Dear Sergeant Hartman,

Thanks for the additional "ammunition" in our fight against explosive mishaps. I'm sure there are many other "saves" each year thanks to our safety devices. We like to hear about the good things as well as the bad.
Ed

• • •

Dear Editor,

I take personal exception to your use of the term "Weekend Warrior," to describe "A conscientious member of the do-it-yourselfers who defends family and home from the ravages of inflation and energy eaters, and from professional repair personnel."

Every good editorial assistant should know that a "Weekend Warrior," is the cornerstone of this nation's defense. He is a citizen who is superbly qualified in his field and devotes at least two days each month to the defense of his country. He has served in every war and military action from the revolutionary war to Vietnam. Contrary to your example the modern "Weekend Warrior" is a professional and very well equipped. His morale is extremely high and he is a volunteer!! The minuteman of Concord is the "Weekend Warrior" of today. A real "Weekend Warrior" is a member of the National Guard and Reserve programs.

Incidently the TAC ATTACK is a very fine magazine, and now that you have your "Warriors" straight, I am sure it will continue in its fine tradition. Keep up the good work!

Major Roy C. Chase, COANG
138 TCF, Commander

Dear Major Chase,

I'm sorry you took offense at our use of the term "weekend warrior." The term fit the theme of the article perfectly, and although it has come to stand for the members of the National Guard and Reserves, it is also a generic term such as "armchair quarterback," "sidewalk superintendent," and so on.

I know I stand to incur the wrath of all you Weekend Warriors out there. But after all, you're not the only "weekend warriors" in the world.
Ed

• • •

Dear Editor,

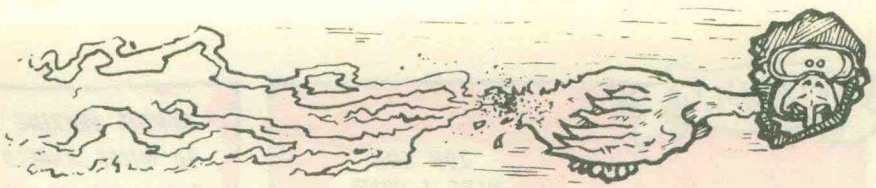
The centerfold in TAC ATTACK, August 1980, shows a Sopwith F-1 Camel. Judging by the downward deflection of the elevators, the pilot must be conducting a zero 'g' parabola. Could he be practicing for a position with NASA?

Captain James W. Green
437 Transport Squadron
Canadian Forces Base Trenton

Dear Captain Green,

Actually, he's performing an extension maneuver prior to a pitch back into the fight against two F-15s. We assumed that would be clear to all our readers.
Ed

TAC TALLY



	TAC			ANG			AFR		
	OCT	THRU OCT		OCT	THRU OCT		OCT	THRU OCT	
		1980	1979		1980	1979		1980	1979
CLASS A MISHAPS	4	26	34	1	11	7	0	3	3
AIRCREW FATALITIES	1	17	25	2	10	6	0	1	2
TOTAL EJECTIONS	5	29	34	0	8	4	0	2	3
SUCCESSFUL EJECTIONS	5	22	23	0	5	2	0	2	1

TAC'S TOP 5 thru OCTOBER '80

TAC FTR/RECCE	
class A mishap free months	
32	33 TFW
25	1 TFW
17	67 TRW
15	58 TTW
14	405 TTW

TAC AIR DEFENSE	
class A mishap free months	
107	84 FIS
93	57 FIS
46	5 FIS
43	48 FIS
24	49 FIS

TAC GAINED FTR/RECCE		
class A mishap free months		
140	152 TRG	(ANG)
102	188 TFG	(ANG)
94	138 TFG	(ANG)
93	917 TFG	(AFR)
90	116 TFW (128 TFS)	(ANG)

TAC GAINED AIR DEFENSE		
class A mishap free months		
99	191 FIG	(ANG)
80	102 FIW	(ANG)
76	177 FIG	(ANG)
42	125 FIG	(ANG)
25	119 FIG	(ANG)

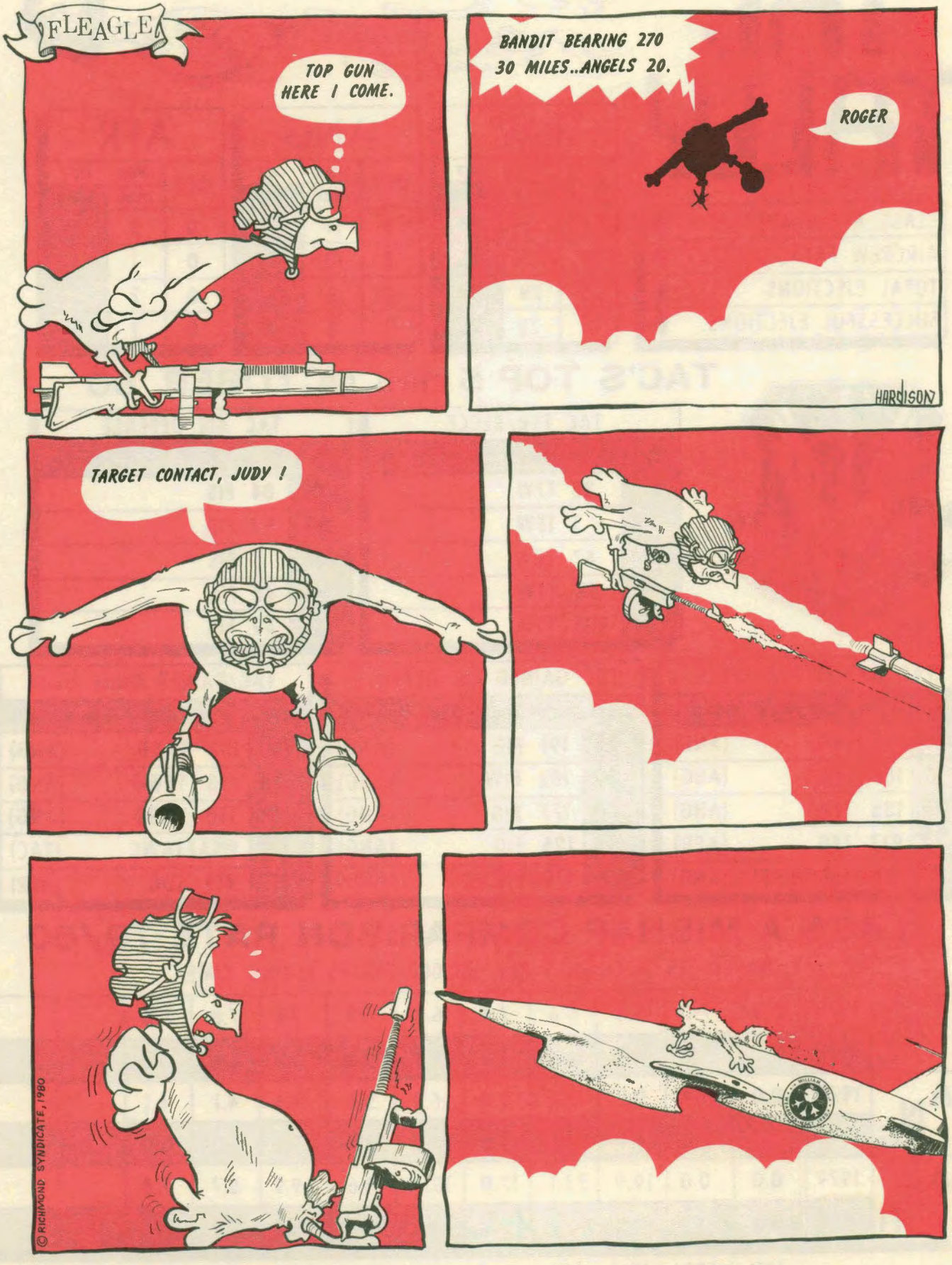
TAC/GAINED Other Units		
class A mishap free months		
135	182 TASG	(ANG)
128	193 TEWG	(ANG)
119	110 TASG	(ANG)
115	USAFTAWC	(TAC)
111	919 SOG	(AFR)

CLASS A MISHAP COMPARISON RATE 79/80

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

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TAC	1979	6.9	7.0	5.9	6.6	7.4	6.2	7.2	7.1	7.8	7.3		
	1980	2.0	4.0	5.2	4.4	4.7	5.2	5.3	5.2	4.8	5.1		
ANG	1979	0.0	11.4	9.0	9.7	7.6	6.2	5.4	4.6	4.1	4.1		
	1980	5.0	7.6	6.6	7.1	6.5	6.2	5.8	5.1	5.0	5.0		
AFR	1979	0.0	0.0	19.9	23.1	17.0	13.4	11.6	9.9	8.7	7.8		
	1980	0.0	0.0	0.0	0.0	0.0	4.5	3.7	6.5	8.9	7.9		

☆ US GOVERNMENT PRINTING OFFICE: 1980—635—083/7


FLEAGLE
TOP GUN HERE I COME.
BANDIT BEARING 270 30 MILES..ANGELS 20.
ROGER
HARDISON
TARGET CONTACT, JUDY !
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