TAC Attack

VOLUME 31 ISSUE 1 JANUARY 1991

30th Anniversary Issue

ANGLE OF ATTACK

I want to welcome everyone back from the holidays and remind each of us that we are entering a high threat area -- January -- historically, the second most hazardous month for TAC personnel. Now is a particularly appropriate time for supervisors and commanders to practice good visual lookout procedures, not just while flying, but also around the squadron and work areas. Is everyone up to par? Probably not! Here are some of the most common constraints we all have to face: First, many of us have been out of the flying business for awhile because of the Christmas and New Year's holidays. Whether you realize it or not, you're not as "good" as you were when you stopped flying before the holidays. In fact, neither is your wingman, crew chief, tower controller, etc.! Second, many will experience an emotional and/or mental letdown after the holidays. Either we did or didn't get what we expected, or the first monthly payments are arriving sooner than we expected (didn't the advertisement mention no payments 'til next year?). Finally, the weather at most of our bases has turned cold and miserable, increasing the chances that snow or ice will impact our flying, driving, or other outside activities. With those realities in mind, be sure to take the extra time needed to hone those warrior skills -- yours and theirs -- before you try to set any new sortie records!

Speaking of records for achievement, this is the **THIRTIETH ANNIVERSARY** of *TAC Attack* and we have assembled inputs from 1961 to 1991. An early TAC Tally has the 1960 "accident rate" showing 83 Class A flight mishaps and a rate of 14.2. In contrast, TAC ended FY 90 with 20 Class A flight mishaps -- the second lowest number ever -- and a rate of 3.2. During those same years, *TAC Attack* also documented improvements in ground safety which would have been unbelievable in the early 1960s. From 76 off-duty fatalities and five on-duty fatalities down to ten off-duty and one on-duty last year -- the lowest number ever recorded. Last year was also the best ever for weapons safety. What do I attribute this to? The same themes I saw repeated year after year in the pages of *TAC Attack* -- the importance of good leadership, professionalism, taking care of our people, supervisor/commander involvement, and smart mission accomplishment -- properly balancing the risk vs training tradeoffs. We hope you enjoy this issue as much as we enjoyed putting it together.

There is something else we want to put together -- New Year's resolutions. If you have any resolutions that you think we in TAC Safety would be interested in, then send them to me! Is this a contest? No! Is there a prize for the best resolution? No! What do you get out of it? The satisfaction of sharing good advice with others in our chosen field.

Finally, we want to say goodbye to Lt Col Rich Kirkpatrick, our F-15 wonder, who is off to a PCS area that few have ever heard of before. Would you believe -- Saudi Arabia?

Good luck to you, Pardner!

Jack Gawelko

JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC ATTACK

DEPARTMENT OF THE AIR FORCE

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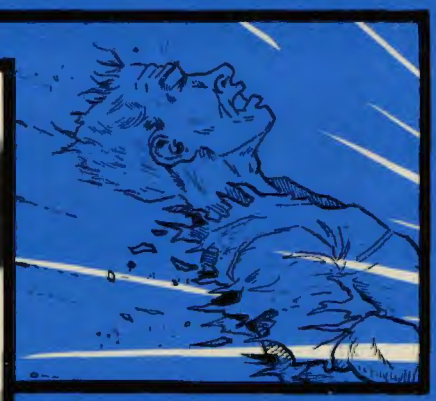

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FEATURES

DEPARTMENTS

TAC SP 127-1

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If you've wondered how to apply safety to the mission read . . .

DEFINITION FOR SAFETY

Author unknown

Reprinted from Oct 61
TAC Attack

To many of us, Flying Safety is little more than a bunch of posters hung on a bulletin board, some magazines to read in the latrine, or being bored for an hour each month down at the base theatre. We read the poop, we listen to the lectures, and go on about our business confident that this has made us safe.

But has it? Let's say the old man tags you with the chore of writing an ops order for a mission which is more complex than the garden variety of missions. He outlines what he wants done and as a parting remark says, "Be sure you include flight safety in that plan."

"Yes sir!" you answer, silently wondering how in thunder you'll ever manage that. Chances are you'll end up writing a short paragraph to the effect that flight safety will not be compromised in order to complete the mission. This sounds good and safe, and seems to satisfy all hands, including the old man. At least he doesn't say anything.

The mission goes off O.K., with no accidents. However, suppose you overhear a conversation such as one we overheard the other day . . .

"We sure had a close one last night . . ." a muscular dark-haired major said to a wiry weatherbeaten fighter pilot we know.

This was enough to bring us to full attention as he continued, "We were taking off over the water, making single ship takeoffs with our 105's well-loaded. In fact, we were carrying both external wing tanks, the belly tank, and bomb bay tank chock full of fuel. Shortly after old Willie Two got airborne, he called and said his AB had gone out. At the same time, he'd lost the air turbine motor and AC generator. So there he was with no flight instruments on a pitch dark night just feet over the water. He lost his navigation lights, so we couldn't even see him, much less help him, and as he told us later, his airspeed had dropped way down to about 190 knots. He was certain that he was behind the power curve, and it was all he could do to keep what little altitude he had. Right off, he tried resetting the air turbine and got it back. Then he reset the AC generator and it came on the line.

But at the low airspeed he was still in trouble. We heard him say that he was going to try and climb out of it, and if it didn't work, he'd eject. What he'd decided to do was to try the AB . . . It lit, and he was soon fat."

The old fighter pilot interrupted, "Doesn't the AB on the 105 act like the 'hundred'? I mean don't you get a momentary loss in thrust before it lights?"

"Certainly," replied the dark-haired one.

"He sure took an awful chance," said the older pilot, "I'd have punched off those tanks."

The dark-haired major frowned and turned a little red. "Well, it was a real good mission," he argued, "and Willie wanted to go awful bad . . ."

The old fighter pilot shook his head as he again interrupted. "To hell with the mission. It couldn't have been worth taking the risk. If he had been over a populated area, I could understand his reluctance to dump the tanks. But in the position he was in, a slow light or no light would have finished him. It just wasn't worth the risk. He should have dumped off all that weight, let the aircraft accelerate, then grab a little altitude before experimenting around with AB. It's just plain common good sense."

The old fighter pilot's automatic reaction to this story hints at the true meaning of flying safety . . . one reason why he's still around. Basically then, he achieves flight safety through his approach to flying. He has a safe attitude. He has learned to weigh available courses of action and, instinctively, select and follow the one with minimum risk. If you are alert, this narrative should give you some other ways to achieve flying safety. For example, the old pilot's decision to dump the tanks was predicated on the aircraft being over a relatively uninhabited area. In setting up a mission requiring heavyweight takeoffs, you should anticipate someone getting into trouble. Whenever possible, wind direction and velocity permitting, specify that max load takeoffs will be made on a runway that directs the aircraft over a sparsely populated area. Also brief your troops to keep the pickle button well in mind should they ever have to abort, have an AB malfunction, or such.

It takes a certain amount of imagination to include flying safety this way. It also takes free exchange of information. Willie Two's scare should have been reported as an OHR, or even as an incident. That way others could profit from his experience.

TRAINING AND AIR DISCIPLINE...

KEY TO MAXIMUM PERFORMANCE

Capt M. A. McPeak
Lead Solo USAF
Thunderbirds

Reprinted from Aug 68 *TAC Attack*

Any fighter pilot worth his flight pay can do low altitude acrobatics . . . with practice. But if he attempts to fly upside down at skip bomb altitude, then the important consideration is his success rate. The Thunderbirds demonstrate sustained inverted flight literally a thousand times a year, at 100 or more different show sites, around varying ground obstacles and with show site elevations ranging from sea level at Langley to about 6500 feet at the Air Force Academy. And, of course, the only acceptable success rate is 100 percent.

Thunderbirds Five and Six are the solo pilots, number Five being the lead solo, and number Six the second solo. While the pilots of the "Diamond" formation demonstrate the beauty and grace of precision formation acrobatics, the solos are in the maximum performance business, flying upside down, doing maximum deflection rolls, or demonstrating low speed handling characteristics, all with minimum terrain clearance. During a routine airshow, the solo pilots make five head-on opposing

passes with a programmed closure rate of 850 knots and a miss distance of 25 feet.

To the uninitiated, these and other solo maneuvers seem to be hair-raising "stunts" reminiscent of the old barn-storming days. The truth is that the traditional military concepts of training and discipline are the building blocks of our airshow. How this is so, can be understood by examining some of the "inner workings" of the operation.

TRAINING

The Diamond pilots, lead, left wing, right wing, and slot, fly one position for their entire two-year tour with the team. However, a solo pilot spends his first year as solo wingman and then one year as solo leader. When he graduates to lead solo number Five trains his new number Six. This is an ideal progression, since the year spent as number Six provides the best possible preparation for solo leadership and for the execution of some of the more difficult maneuvers performed by the lead solo singly.

Initially, the new solo pilot learns to fly precision formation. During the first few training sorties, he does very little on his own. This is important because number Six spends quite a lot of time on the wing. During the Calypso Pass for instance he flies a normal wing position on the lead solo who is inverted. Moreover, the solos fly the outside wing positions for six-ship acrobatics. The outside of a six-ship roll or loop is not very comfortable if you can't formate. In addition, as Capt Jack Dickey, our slot pilot, pointed out in the May issue, we feel that formation training is ideal preparation for maximum performance flying.

So, at the outset we emphasize formation proficiency and take relatively short breaks for solo work. During the breaks, number Six will start learning the more simple maneuvers, such as the slow roll or inverted flight. He learns to do these maneuvers at altitudes well above show height while being chased by the solo leader, who calls each maneuver. As his formation proficiency increases, more time can be devoted to solo maneuvers and terrain clearance. These can gradually be decreased, and the more difficult maneuvers, such as the roll takeoff, point rolls and over-the-top maneuvers can be introduced. Only after the second solo has demonstrated mastery of these maneuvers do the solos begin to fly them head-on. Even then the lead solo pilot calls all the shots. The second solo tries to match the altitude and nose rotation rates of the leader for each maneuver. Thus the training process is phased from the relatively easy to the more difficult. Each phase is mastered before the next step is taken.

Equally as important, we train hard. The solos normally fly twice a day during the training season. The missions last one hour, and there isn't much droning around

turning cold air into hot. Although we do only one set of opposed aileron rolls in the airshow, we may spend days doing one set after another up and down our training area. "Train hard, fight easy." It's usually a relief to wind up training and hit the road. Flying official airshows then takes care of most of our training requirement.

During the training period we develop the habit patterns that are used throughout the show season. The importance of developing correct habit patterns cannot be overemphasized. From engine start to shut down we strive to make each Thunderbird performance identical. All radio calls are broadcast in the same way every time. After start checks are made in the same order, every time. Even certain "jokes" are cracked, every time in the same way. They get a little corny but if they weren't said it would affect the rhythm of the show, disrupt the habit pattern or possibly counteract consistent performance. And consistent performance is the name of the game. No matter what the elevation of the show site, or how bad the show line, or who is watching, proper habit patterns protect us from fatal mistakes. It's often the unplanned, unpracticed maneuver that gets a jock into trouble.

AIR DISCIPLINE

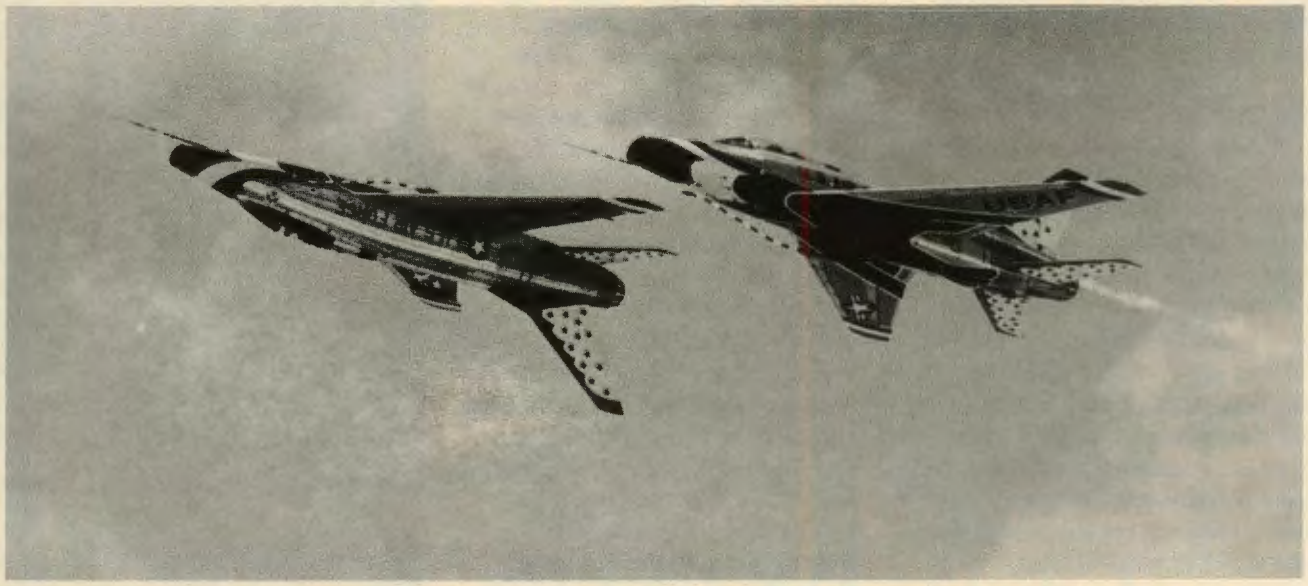
Training insures that each man knows what is required of him and how to accomplish it. Air discipline is based on a grim determination to do the job properly. Pretty close is not close enough. Solo pilots, for instance, never approach a show with the attitude, "Today, I'm really going to show them how low I can fly inverted." We try to show everyone the same inverted pass we were trained to make. We don't get any points for frightening ourselves or the spectators, so we strive to do the maneuvers as programmed. We are required to enter and exit the show maneuvers at some minimum safe altitude; we shoot for that and no lower.

Discipline permeates all of our ground and air operations . . . even those not directly involving the airshow. For instance, on flights between show sites we cruise in "Thunderbird Spread" formation. In spread, the wingmen move from three-foot wing over-lap out to wing-tip clearance where they can help navigate and visually clear the flight. Wing-tip clearance is then held throughout cruising flight. In other words, the fact that no one is watching is not allowed to breed sloppy work.

Air discipline means that we try to fly every maneuver in every airshow perfectly. So far as I know, none of us has ever succeeded. Perfection is an elusive thing. But the airshow is spectacular and crowd-pleasing and **safe** because of this disciplined approach.

CONCLUSION

These ideas about the worth of training and air discipline are based on the contributions made by over fifty pretty good fighter pilots who have flown with the team over the last fifteen years. Each year the accumulated knowledge and tradition is passed on to the new team members, making it possible for us to operate the way we do. Indeed, these concepts are endorsed by successful military organizations everywhere, and the fact that they form the cornerstone of the Thunderbird operation should not surprise the old, and still bold, TAC fighter pilot.



TAC DISTINGUISHED FLIGHT SAFETY AWARD

This award honors an individual who has made significant contributions to an established unit, intermediate headquarters, TAC or USAF Flight Safety Program.

Maj Jerry W. Oney
4 TFW/SEF
Seymour Johnson AFB NC

Capt David M. Robertson
95 TFTS, 325 TTW
Tyndall AFB FL

Capt Steven V. Segond
312 TFTS, 58 TTW
Luke AFB AZ

MSgt Walter S. Cackowski
56 TTW/SEF
MacDill AFB FL

TAC TRAFFIC SAFETY AWARD — CAT I

USAF TFWC
Nellis AFB NV

This award honors a unit with an effective traffic safety program for operators of privately owned vehicles, Air Force motor vehicles and special purpose vehicles.

CHIEF MASTER SERGEANT PAUL A. PALOMBO AWARD FOR DISTINGUISHED GROUND SAFETY NEWCOMER

This award honors a ground safety member who is new to the ground safety career field and has demonstrated exceptional performance.

Sgt Michael A. Luckadoo
507 TAIRCW/SEG
Shaw AFB SC

TAC TRAFFIC SAFETY AWARD — CAT II

This award honors a unit with an effective traffic safety program for operators of privately owned vehicles, Air Force motor vehicles and special purpose vehicles.

33 TFW
Eglin AFB FL

TAC DISTINGUISHED WEAPONS SAFETY ACHIEVEMENT AWARD

This award honors a weapons safety member who has made a significant contribution to an established unit, intermediate headquarters, TAC or USAF weapons safety program.

Capt John A. Neely
12 AF/SEW
Bergstrom AFB TX

MSgt Charles M. Keeney
347 TFW/SEW
Moody AFB GA

TAC ANNUAL UNIT GROUND SAFETY AWARD — CAT I

56 TTW
MacDill AFB FL

This award honors a unit with an effective mishap prevention program.

TAC EXCEPTIONAL PERFORMANCE IN GROUND SAFETY AWARD

This award honors a ground safety member who has made meaningful contributions to the unit's mishap prevention program.

MSgt Gary D. Hale
USAF TFWC/SEG
Nellis AFB NV

SSgt James C. Mullis
347 TFW/SEG
Moody AFB GA

John D. Brand
56 TTW/SEG
MacDill AFB FL

Harold P. Knepper
NW Air Defense Sector/SEG
McChord AFB WA

TAC ANNUAL UNIT GROUND SAFETY AWARD — CAT II

This award honors a unit with an effective mishap prevention program.

507 TAIRCW
Shaw AFB SC

TAC DISTINGUISHED GROUND SAFETY ACHIEVEMENT AWARD

This award honors a ground safety member who has made a significant contribution to an established unit, intermediate headquarters, TAC or USAF ground safety program.

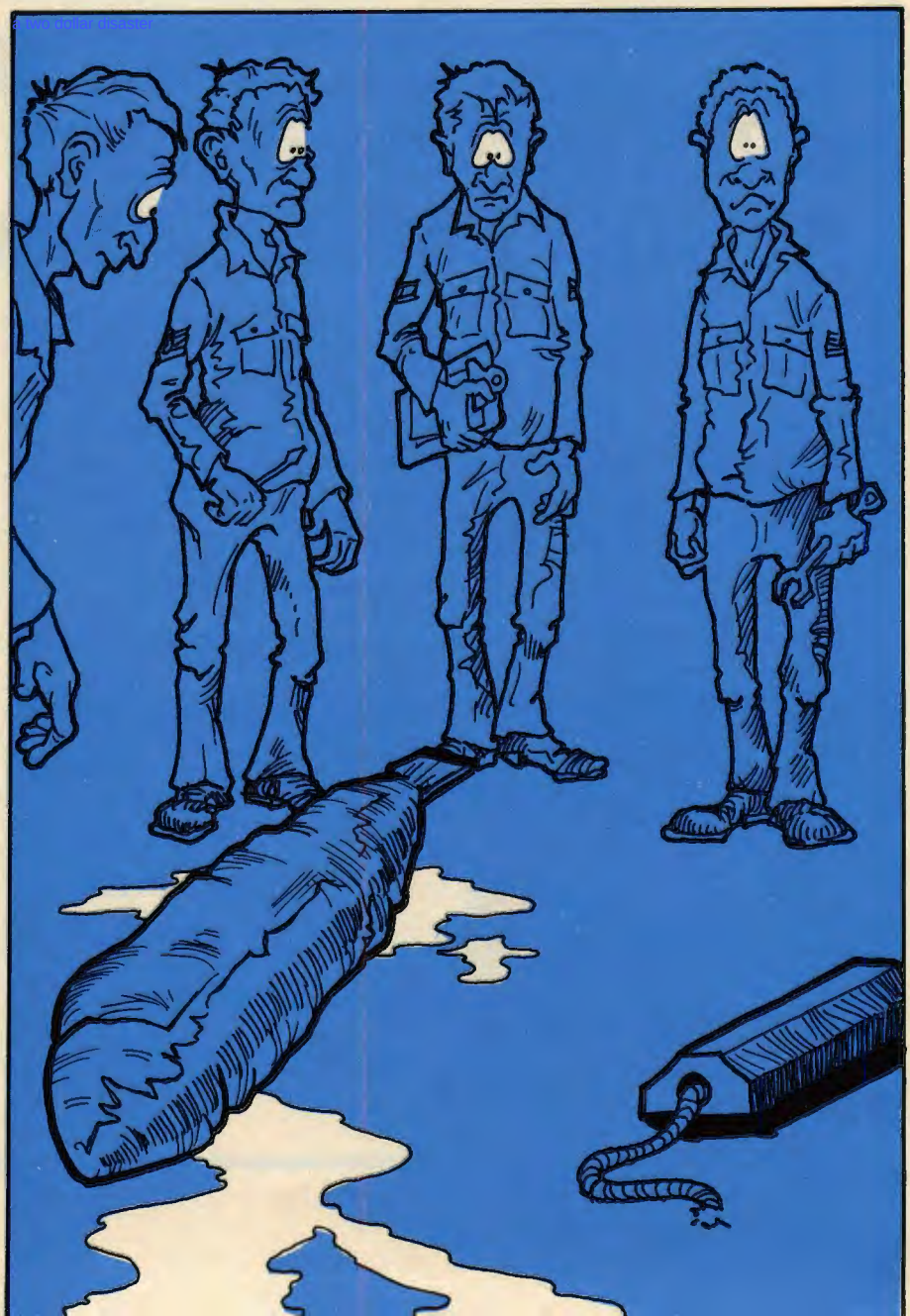
MSgt Joseph Bell
12 AF/SEG
Bergstrom AFB TX

Mr. Kenneth G. MacLeod
347 TFW/SEG
Moody AFB GA

A TWO DOLLAR DISASTER

TSgt Francis S. Gore
67 TRW/SEW
Bergstrom AFB TX

Reprinted from Aug 89 *TAC Attack*



Nothing could be done. It was all over in 30 seconds. A centerline fuel tank was dropped and a serious explosion resulted. How could this have happened? What could have been done to prevent this disaster? Who was at fault? The sequence which finally ended in the explosion started two months prior. The armament shop improperly performed a scheduled maintenance inspection of a bomb rack and sent it out to be installed on aircraft 480. What nobody realized, at the time, was that a very important safety switch was out of adjustment.

Two months later during the employment phase of a locally generated wing exercise, on a dark, cold, windy and rainy night, a weapons load crew was dispatched to perform an external fuel tank jettison check on aircraft 235 which was parked on spot 30. When the crew arrived at the aircraft, they started preparations for the check, but were unable to complete it because the

crew chief was not finished installing the fuel tank. Rather than waste precious exercise time, the crew went to the next aircraft on their list.

A short while later, the crew was notified that aircraft 235 was now ready for the check. The NCO in charge of the crew drove to the area and parked in front of aircraft 480 which was parked next to the correct job. The crew disembarked and went to work on what they assumed was the right aircraft. The aircraft forms had been checked earlier, so the crew decided there was no logical reason to repeat the check. Since they knew exactly where they had stopped in the checklist earlier, they elected to start again at that point. This was their first opportunity to realize that they were working on the fully loaded, fueled and armed aircraft number 480. One man went to the cockpit and the other went to the right external fuel tank. Neither looked at the tail number. There went the second chance to break the rapidly developing chain of events. The individual at the tank set up his equipment before looking at the cartridge breeches and nodded to the individual in the cockpit to energize the system, thus missing the third chance to break the chain. He turned to the tank, saw the cartridges installed and realized the tank was armed. He scrambled to notify the individual in the cockpit, but the button had already been pushed. The improperly adjusted safety switch did not break the circuit and the electrical impulse reached the jettison cartridges installed in the centerline tank bomb rack. The resulting explosion caused the damage described in the paragraph above.

Sounds unreal, doesn't it? The sequence of events described above actually happened. The only difference is that we were extremely lucky. The important safety switch that was out of adjustment allowed the electrical impulse to reach the cartridges and they functioned as designed. The explosion did not take place because the safety pin was installed and the tank did not jettison. These cartridges, at a relatively low cost of $1.79 each, could easily have caused the millions of dollars of damage and fatalities.

Look at your day-to-day operations. "After the fact" is never a good time to "close the barn door." Complacency is extremely insidious and seems to be the bane of the experienced. No one would ever be complacent by choice, but no one has a natural immunity to this incapacitating disease. There is no existing inoculation to prevent it. There are usually no obvious visual symptoms for an outsider to detect until a mishap occurs. The effects are almost always long lasting.

How comfortable are you with your job? If your answer is "very comfortable," then you are a risk. Always look at your coworkers with a critical eye. Can you detect complacency in others? The answer is a resounding "yes." But you can only see it when you actively look for it. Don't ever let your guard down and don't ever allow your coworkers to let theirs down either. If anything out of the ordinary happens during a routine job, be extra vigilant and follow the checklist from the beginning. Train your subordinates, watch your coworkers, and observe your supervisors. You might not get a second chance. Good luck involves superb planning.

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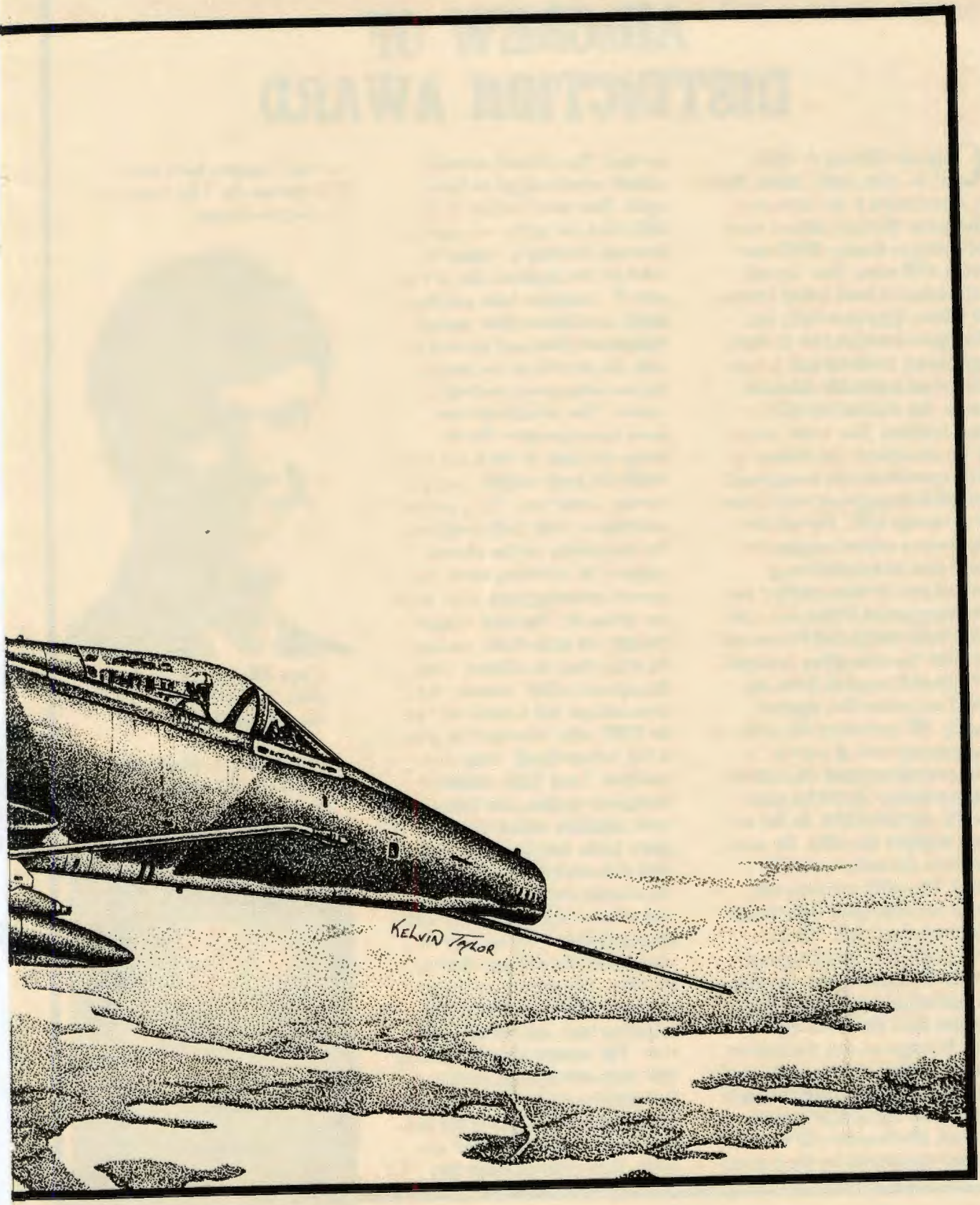
F-100D SUPER SABRE


KELVIN TAYLOR

TAC AIRCREW OF DISTINCTION AWARD

Captain Michael A. Sully, F-4G pilot, and Captain Mark A. Buccigrossi, F-4C Instructor Electronic Warfare Officer, were returning to George AFB from Nellis AFB when their aircraft experienced a total utility hydraulic failure. Captains Sully and Buccigrossi declared an in-flight emergency, reviewed and accomplished all applicable checklist items, and notified the SOF of their problem. Due to the nature of the emergency, the mishap aircrew coordinated for an approach end cable engagement on runway 17 at George AFB. The aircrew discussed a missed engagement game plan and decided to go around and attempt another barrier engagement if that occurred. Capt Sully configured the aircraft and flew the emergency approach. The aircraft touched down on-speed, on center line, approximately 500 feet before the cable on the approach end of runway 17. The aircraft engaged the cable at approximately 38,000 lbs gross weight and 150 KIAS. As the aircraft engaged the cable, the east side tape connector assembly failed. The cable subsequently broke and entangled with the aircraft arresting hook. The aircraft's nose was forced approximately 45 degrees right, causing the aircraft to begin fishtailing left and right down the runway. Capt Buccigrossi saw the broken cable and advised Capt Sully to go around. Capt Sully used the flight controls for directional control, selected afterburner, and was able to keep the aircraft on the runway surface. The aircraft attained takeoff speed and got airborne again. Now short on fuel, Capt Sully then set up for an opposite direction landing to engage the cable on the approach end of runway 35. Captains Sully and Buccigrossi coordinated their missed engagement plan and decided to keep the aircraft on the ground and use emergency braking for control. The aircraft touched down approximately 700 feet before the cable at 140 KIAS and 34,000 lbs gross weight, on the runway center line. Upon aircraft touchdown, Capt Sully deployed the drag chute. As the aircraft engaged the arresting cable, the aircraft arresting hook shaft failed and broke off. The hook ripped through the drag chute, causing the drag chute to collapse. Capt Buccigrossi called "missed cable" intra-cockpit and a radio call over the UHF radio informed the pilot of the "streamlined" drag chute condition. Capt Sully called for emergency brakes, and both aircrew members pulled their emergency brake handles. Capt Sully used differential braking to keep the aircraft on the runway and was able to stop the aircraft with approximately 1,000 feet of runway remaining without blowing the tires. The damage to the aircraft was limited to the broken arresting hook and the two main tires. The outstanding airmanship and crew coordination exhibited by Captains Sully and Buccigrossi prevented possible loss of life and the loss of a valuable USAF aircraft. This superior effort has earned Captains Sully and Buccigrossi the TAC Aircrew of Distinction Award.

Capt Michael A. Sully
561 TFS, 35 TFW
George AFB CA

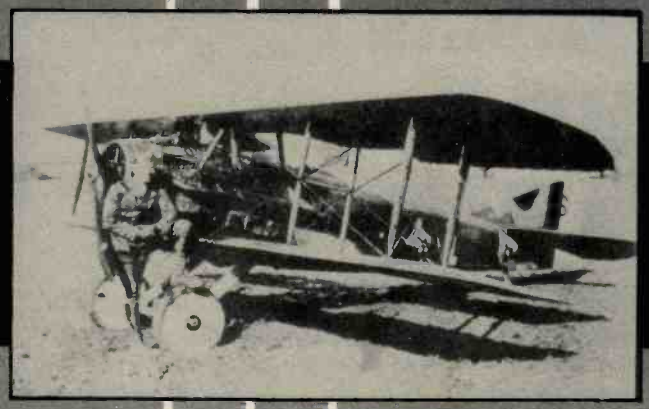
Capt Mark A. Buccigrossi
561 TFS, 35 TFW
George AFB CA

TAC OUTSTANDING ACHIEVEMENT IN SAFETY AWARD

For the first time in Red Flag's 15-year history, an entire year of Red Flag sorties was flown without a Class A mishap or a Class B command controlled mishap. This achievement represents 17,587 sorties and 30,530 flying hours in the most intense and demanding exercises in Tactical Air Command. This outstanding safety record was achieved during the most complex and difficult schedule yet flown. During Red Flag 90-1, the 4440th Tactical Fighter Training Group organized the largest Red Flag flown to date. Over 130 diverse aircraft were deployed to Red Flag including participants from the USAF, Navy, and Marines as well as the air forces of the United Kingdom, the Federal Republic of Germany, Italy, and Singapore. These aircraft flew over 240 sorties each day, an increase of 30 percent over a normal exercise. In Red Flag 90-2, the 4440 TFTG scheduled the first night Red Flag in 8 years and simultaneously conducted day close air support and interdiction scenarios. This exercise included the first F-117A, F-15E and F-16 Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) aircraft and participants from 33 additional units. Red Flag 90-3 was the largest air-to-air Red Flag ever. During the exercise, the scenario built up to as many as 20 F-15s in the airspace facing an equal or greater number of adversary aircraft in addition to air-to-ground assets from Great Britain and France. Later this year, the Red Flag staff worked closely with the Canadian Air Force and other NATO forces to conduct the largest Maple Flag exercise. Innovative, realistic combat air tasking orders were developed that compressed the time available to aircrews for planning in a Central European scenario and produced over 3,000 mishap-free sorties. In Green Flag 90-4, the 4440 TFTG integrated the latest electronic assets into the exercise. The electronic threats on the range were enhanced with the implementation of mobile HAWK missile batteries and Stinger missiles. Members of the Red Flag staff worked closely with members of PACAF, USAFE, and the TAC staff to create a safe, challenging air tasking order. The Red Flag 90-5 schedule was modified on short notice due to the requirements of Operation Desert Shield. Typical scenarios consisted of 8 F-15s against 16 bandits. The 1,100 sorties flown in this exercise completed the mishap-free year.

The completion of the first mishap-free year in Red Flag history, among the most demanding and challenging exercises, is a testament to the safety conscious professionals of the 4440th Tactical Fighter Training Group and the Red Flag participants. This accomplishment earned the 4440 TFTG the TAC Outstanding Achievement in Safety Award.

4440 TFTG (Red Flag)
Nellis AFB NV



Eddie Rickenbacker ....on SAFETY

EASTERN AIR LINES
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NEW YORK 20

MEMBER OF THE NATIONAL SAFETY COUNCIL

OFFICE OF THE CHAIRMAN OF THE BOARD

December 10, 1962

Colonel James K. Johnson
Tactical Air Command
United States Air Force
Langley Air Force Base
Virginia

My dear Colonel Johnson:

I regret the delay in answering your letter of November 26, due to my absence from the city. Naturally, I am delighted to have contributed in my humble way a lifetime of experience in developing safety, not only in military aviation but also aviation transportation.

Through the hard way I have learned that human nature is the same the world over, from one generation to another, and there were always four major projects in my activities with reference to safety in the cockpit. Number one, the elimination of financial worries; number two the elimination of sex problems; number three, to reduce the paper work in the cockpit to a minimum, and number four, constant training and refresher courses brought up-to-date since, here again, human nature is the same - prone to forget.

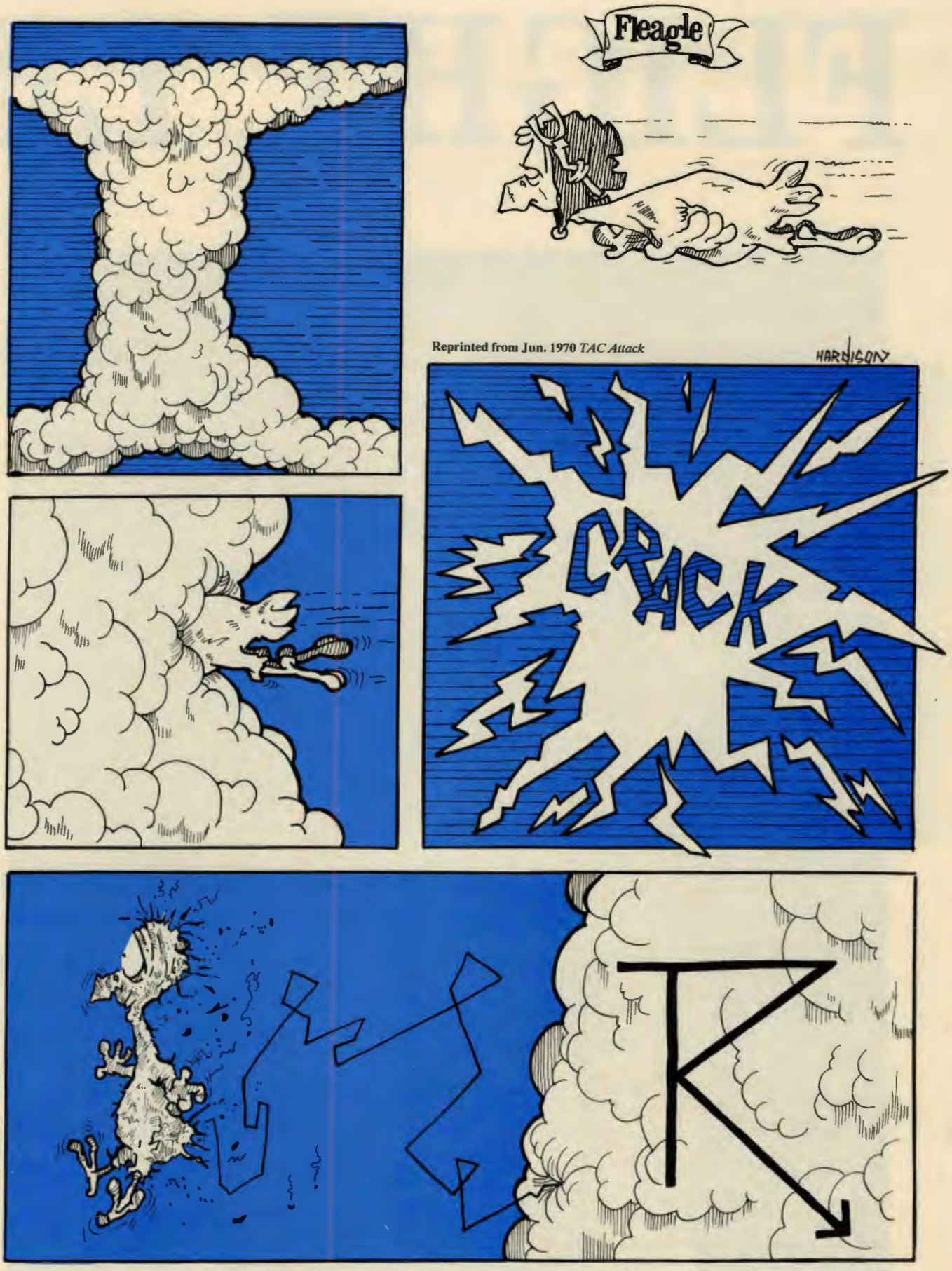
I hope the above will be of some value in your approach to such a worthy effort.

Most sincerely,

Eddie Rickenbacker

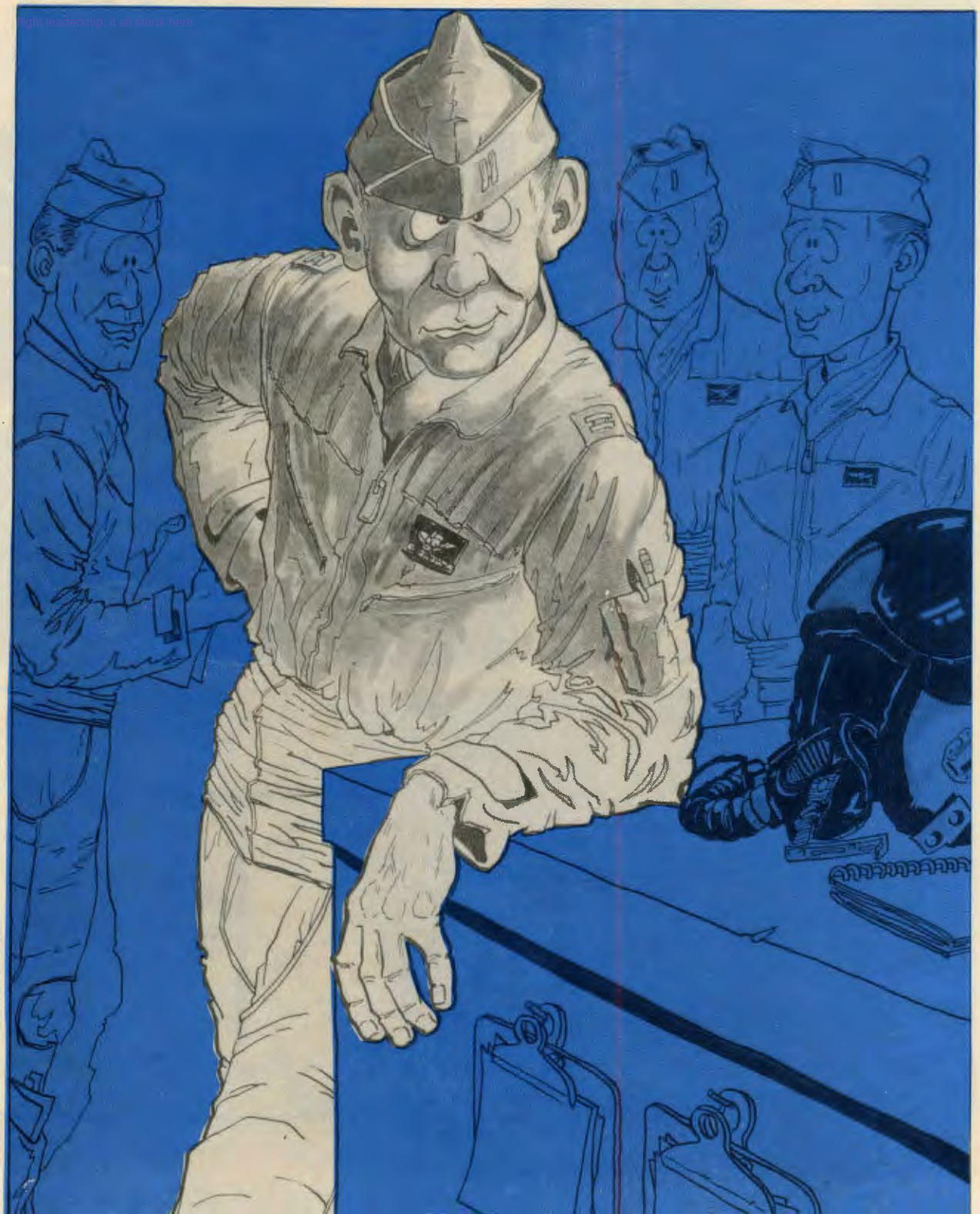
E. V. Rickenbacker
Chairman of the Board

EVR:bm



Reprinted from Jun. 1970 *TAC Attack*

FLIGHT LE



ADERSHIP: it all starts here

Lt Col Hank Goddard
33 TFW
Eglin AFB FL

Reprinted from Oct 87 *TAC Attack*

Well, it's your big day. Your flight commander just told you you're finally going into FLUG (Flight Lead Upgrade). After months of suffering on the wing of flight leads (most of whom weren't doing nearly as good a job as you could, right?), it's your turn to shine. Doubtless, you are highly qualified and experienced, and your peers will soon stand in awe of your prowess. Maybe. Let's talk for a few minutes on what it all means—this flight lead business.

First, why have you been selected? TACM 51-50 says your squadron commander selected you from "the most highly qualified and experienced pilots available." I hope that's really true. Your experience better be 350 hours and not 35 hours repeated ten times. If you haven't used every minute of that time to learn something, we're in trouble. If you've used that time effectively, then you fill the "qualified" part of the equation. If you've been selected because it's "your turn" or your squadron "needs flight leads," and not because you're the best wingman in the squadron, you've got a long, hard row to hoe ahead of you.

What is the most important characteristic in a wingman that reflects his potential as a flight lead? Discipline. Plain and simple. A wingman who's always where he's supposed to be, when he's supposed to be there, doing what he's supposed to be doing is a wingman who has gone a long way toward being a good flight lead. This includes being in the right formation, sanitizing your radar search responsibility, being on time when you've got mobile and pulling your load in the squadron without whining. All of these things indicate you've got the amount of self-discipline needed for yourself and your wingmen.

When you pull a four-ship onto the active, you've got several million dollars worth of machinery and a group of highly trained college graduates under your command. The least of your responsibilities is to ensure that the taxpayers' dollars you're spending to go fly are used efficiently. You have to squeeze every drop of effective, realistic training you can out of every gallon of JP-4 and every quart of oil. The greatest responsibility you have is for those aircrew lives and the aircraft under your control. This responsibility is shared, of course, by the other members of the flight, each of whom is responsible for his own jet, but your responsibility is "first among equals." The responsibility for accomplishing effective, realistic training is yours alone. If the training your flights receive is inadequate or, worse, unrealistic and doesn't relate to the threat, you are wasting money and time.

So, how do you meet that responsibility? Before you fly that first upgrade sortie, get a grip on the written guidance that's out there. Saying, "I read all that stuff just last year, and I hear it all the

FLIGHT LEADERSHIP:
It all starts here

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time" won't hack it. Read it again from the perspective of a flight lead. *You* now have to decide what is and is not legal, what does and does not meet the letter and spirit of the regs, and what you can and cannot do in most circumstances. Nobody's going to hold your hand in this—you either know it or you don't. If you don't, and you screw up, ignorance is no excuse.

Another important mental exercise in preparation for flight lead upgrade is a little soul searching. You are being checked out as a flight leader, with heavy emphasis on *leader.* The guys on your wing are looking to you to lead them out, bring them home, make the right decisions and provide positive guidance when needed. You have to be mentally prepared to make that leap from being told what to do to making the decisions and telling others what to do. As the leader, it's on your shoulders.

Well, now you've mentally and academically prepared yourself for FLUG. Successful flight leads don't ad lib. Everything is planned well in advance, including a hip pocket full of fallback options. So, let's talk about the first major part of leading a mission—planning.

Planning The Mission

The easiest place to start is by filling out a lineup card, of course (Check the board against the printed schedule so you're not surprised by the differences, if any). Now you've got the initial hack at who, where and why. The first thing to look at is *who.* What's the experience level of your wingmen? That doesn't necessarily boil down to stars on the sleeve, either. What's each pilot's recent experience been? Is he just coming back from SOS? Just out of MQT? Low GCC pilot in the squadron for the last two months? Is he a wing staff puke? Basically, you've got to look at the lineup and tailor your scenario to the lowest common denominator. That doesn't mean he shouldn't be challenged, but you've got to keep mission events below his saturation level. (This is especially critical at night.) Confirm their weather categories and currency for planned events (LOWAT, AAR, Dart).

Last, you need to check training squares. If it's the fourth month of the half, and #2 still needs 18 instrument approaches, perhaps you should reconsider the "four-ship-up-initial" option. The bottom line is to know all you can about your wingmen and tailor the flight to meet their needs and abilities. In short, be a leader.

The *why* is the mission. You've got to think about that also, along with who you've got on the wing and what the weather is. Now is the time to change things if something doesn't add up, rather than trying to ad lib it at 450 knots. You've also got to decide on alternative missions and fallout. This is an issue you don't want to address while you burn up gas and area time. Remember, if you didn't brief it, don't fly it. So, you need to think through the alternatives *before* you brief.

The bottom line is to know all you can about your wingmen and tailor the flight to meet their needs and abilities.

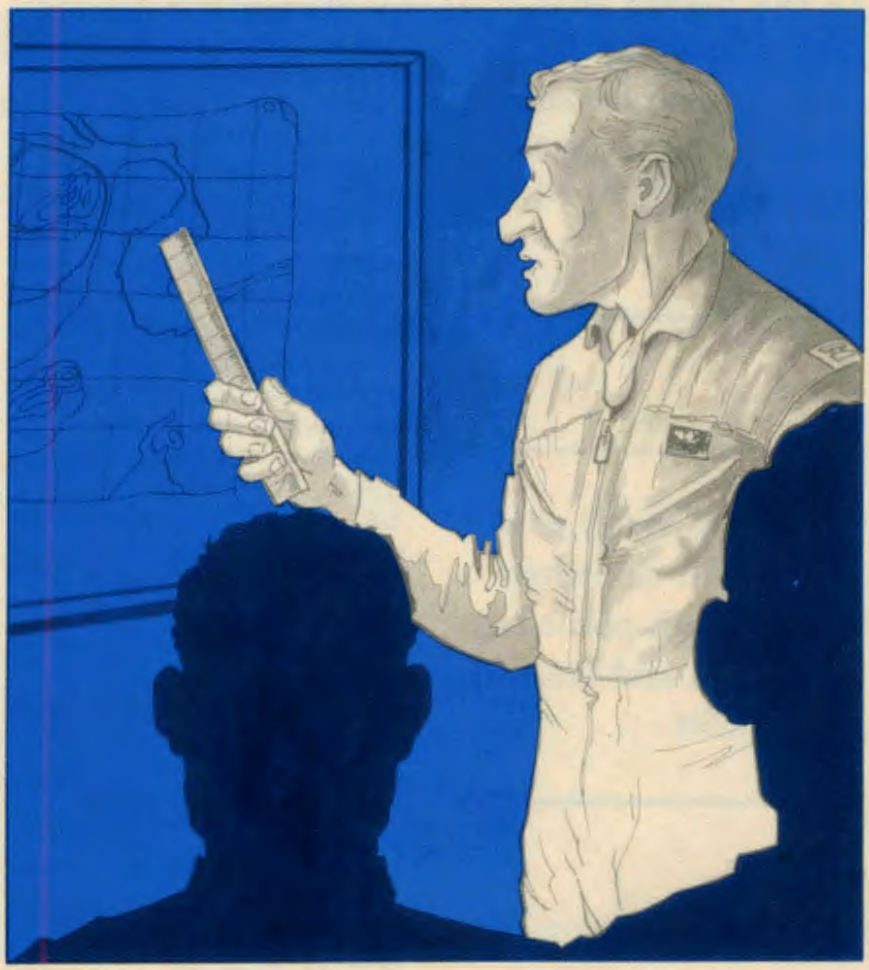
Last, review applicable documents as a part of your preparation. That may be as simple as running through your CAP (combat air patrol) versus sweep briefing notes, or it may entail a trip through TACR 55-79 and your local regs if it's a LOWAT, and you haven't led one recently.

Now you're prepared. You've built a logical, realistic scenario which meets the needs and capabilities of your wingmen, makes sense given the environmental conditions and has do-able, well thought out backups. It's time now to tell your boys what you're going to do and how you're going to do it.

Leading The Briefing

You're the commander from the time the briefing room door closes. Look and act the part, or you're going to lose them early. Preparation is a big part of that. It's tough to inspire respect and awe when you're tap dancing. You must inspire discipline in your wingmen by showing them you have it yourself. Start on time, keep up a good flow and be professional about *every* briefing item. This is where a disciplined flight starts. Here's the balance you ought to achieve: At the end of the brief, when you ask for questions, your wingmen ought to be concerned that you'll be displeased that they missed something in the brief, but they ask the question anyway, because they know if they screw it up in flight, you'll tear their face off.

In your briefing, emphasize mutual support. A four-ship employing against numerous adversaries is no place to entertain thoughts of free-for-all tactics. It's your job to make sure the wingmen understand their roles, and it's your job to use their abili-



FLIGHT LEADERSHIP:
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Respect for you as a leader will diminish if you don't point out mistakes, and training will suffer.

ties and firepower effectively. Sometimes the best form of mutual support is to reduce the number of bandits—but if it were the wingie's choice to engage, he'd be the leader, not you. Stress mutual support in the brief, and make sure its direct connection to discipline is clear.

Keep it simple. Train like you plan to fight. Anybody who tells me they're going to do some cosmic maneuver en route to their first real merge is a fool, a liar or both. If your plan is too cosmic for your wingman to understand it in the brief, it'll fall apart in the air. If aspects of the mission are standard, say so. (Make sure that you and your wingmen are operating from the same set of standards, however. If in doubt, brief it.) Take a look at what you intend to say beforehand and get an idea of how much time you need. If it's going to take you up to step time to brief, you need to reconsider what and how much you're saying—or maybe you need to move the brief time up. Set definable objectives which relate to the scenario. Remember them or write them down to use in the debrief. Leave enough time between brief and step for each pilot to comfortably prepare, mentally and physically, for the sortie.

Heading Out To Fly

Step on time. Every facet of the mission is an opportunity to strengthen or weaken your position as the leader. If your flight's still mucking about aimlessly at step time, you've started to lose it and immediate corrective action is needed. A flight that is going to turn into a can of worms usually shows the symptoms early. The first one might be a wingman missing step time. The next might be sloppy radio check-ins. If that happens, do it over again until it sounds right. You have got to show your flight through actions as well as words that you won't tolerate any lapses. If Red Balls and aborts start to cause problems, take charge, make decisions and give directions. Don't waffle and leave your wingmen hanging, waiting for direction and wondering who's in charge.

Be A Leader

As the leader, it is your responsibility to take immediate action any time a wingman fails to perform as briefed. Don't let anyone chip away at your foundation of discipline; otherwise the entire edifice will fall down around your ears. It is your responsibility to know where everyone is at all times. You have to know what every flight member's fuel is all the time. And you've got to be the most disciplined member of your flight. You have to know when it's time to call "Uncle" and pack it on home. And, you've got to be the hammer who makes the decision. It's the toughest part, especially when you're comfortable, but you know that four is wheezin'. But, that's why you got the job—you're tough. You simply cannot stand idly by and watch things deteriorate.

Debriefing It All

The debrief is the payoff for the mission. Here's where the learning takes place. List the objectives from the brief, and compare them to the flight's performance. You don't have to relive every detail, but as a minimum, you ought to play a tape from each side to assess command look at each shot taken by your flight members. Any glaring errors, unusual developments or exceptionally good details of the mission must be thoroughly analyzed. Leave your own thin skin and tender sensibilities about your wingmen's feelings outside the door. It's not a time to pull your punches. Be patient with guys who made mistakes, admit them and learn from them—but show no mercy to a whiner. Respect for you as a leader will diminish if you don't point out mistakes, and training will suffer. This applies to senior wing leaders as well. If they screwed up, they know it, and they expect to be debriefed. 'Fess up to your own mistakes as well, but don't turn the debrief into a session of *True Confessions*. If you were that bad, maybe you shouldn't be up there in the first place.

Are you ready? Probably so, or your squadron commander wouldn't have put you in the upgrade program to begin with. Go in with confidence founded in your knowledge, be aggressive and demand the best from your wingman. Discipline is the key—have it yourself and demand it from your wingman. If you do, you'll do great, and our combat capability will increase as a result.

DARE to CARE

SSgt Steve Schultz
TAC Ground Safety

Reprinted from Feb 88 *TAC Attack*

An acquaintance of mine was recently enrolled in the Air Force alcohol rehabilitation program. We had the occasion one evening to talk about his progress in the program. He said, "I don't know why they're trying to change me. This is what I am; *who* I am. Why can't they just accept me for *me* and leave me alone?"

Obviously he didn't understand that while his strong sense of individualism might have been impressive, we sometimes become so obsessed with our desires and self-perceived destinies that we need help from others to stay on the right track. His self-fulfilling prophecy was killing him and eventually made him undesirable for retention in the Air Force. Try as I might to make him understand that "they" were intervening only for his own good, he refused to accept anyone's help. In retrospect, I'm not sure that his supervisor was even aware of just how deeply his troubles ran. Otherwise, the supervisor surely would have seen to it that he got all the help that he needed. I suppose I also fell down in my job as an NCO because I, one of his confidants, didn't alert his supervisor to the depth of this young man's troubles.

We in the Air Force have become more cognizant of the fact that our people can do better quality work when their minds are untroubled. The better equipped they are to handle their

personal stresses, the better workers they will become, the greater their chances of returning to work safe and sound, and of having fewer mishaps. We are becoming more people-oriented and are learning to take interest in our peoples' troubles—real and perceived. By showing genuine interest in our workers' troubles and worries we can help them to become better workers. A worker who seems obsessed with drinking himself into the ground or who is having money problems is bound to carry some effect of those problems to work with him. A supervisor or commander who is willing to lend a friendly ear and help the worker in solving the problem or getting over the trouble is bound to be respected and seen as a good leader.

You're going to be reading and hearing a lot about TAC's "We Care About You" initiative in coming months. It reinforces our "we take care of our own" philosophy and is designed to foster greater commander and supervisor interest and concern in subordinate activities off the job. The initiative was started because we realized that TAC was losing a great number of its most important resources—*its people*—each year. The majority of these people were being killed in off-duty mishaps. Mishap investigations often revealed troubles or problems that might have contributed to the mishaps but which were not known by commanders or supervisors. In several cases, supervisors and commanders were aware of such troubles or problems but failed to recognize the potential result. I'd like to tell you what the initiative means to me through some real mishaps that have occurred within our command. There are lessons to be learned from each of these mishaps, and you might see some similarities between the people involved and some of your fellow workers. You might even see where other folks fell down in their responsibilities and how you can avoid similar pitfalls.

We all appreciate a gung-ho worker who only wants to get the job done and please the boss. But that can often lead to problems. A young airman was killed when the aircraft tire he was servicing with compressed gaseous nitrogen became over-pressurized and exploded with great force. The mishap investigation board determined that the airman attempted to perform a tacitly accepted tire servicing shortcut that he had observed being done by someone else. Unfortunately, the airman was not totally familiar with exactly how to do the short-cut. It seems that the airman, described as a conscientious, eager worker, wasn't able to obtain the necessary tools to properly service the tire. His character probably dictated that he do whatever it took to please his supervisor, so he elected to attempt the shortcut. The unauthorized method left out several crucial pieces of equipment that probably would have saved the airman's life, no matter how improperly he had done the rest of the task. The point in this mishap is that we need to encourage our young people to stand up and be counted. They need to realize that they do not have the authority to continue performing a task

DARE TO CARE

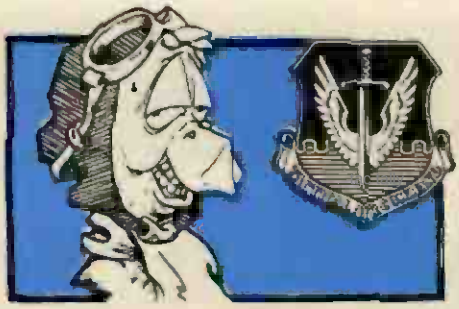
when the necessary tools aren't available. In fact, they must let their supervisors know when necessary tools continually cannot be obtained over a period of time. Just telling workers that they need to bring such matters to your attention isn't enough. Supervisors and commanders have inherent responsibilities here as well. The supervisor must make the decision to continue the task without the required equipment or hold up the job until it can be obtained. The supervisor must then find out why the equipment is not available. Is there a sufficient quantity on-hand? Is the on-hand stock broken?

Each and every supervisor and commander has one more responsibility: they must make sure workers feel comfortable coming to them about such difficulties. Workers need to know they can bring problems to the boss and that they will get help. If the workers perceive that we're talking a good game but, in reality, don't follow through, we lose. It's the old problem of two-way communication and setting the example.

Commanders and supervisors also need to show they care by considering the life stress levels of their workers. Several years ago another young airman was tasked with being the spotter for a munitions handler who was moving all-up-round (AUR) containers with a forklift. After moving a stack of AURs, the forklift operator neglected to lower the tines and the spotter failed to notice that, because of the raised tines, the forklift upper mast assembly would no longer pass under an unused overhead crane track assembly. The mast struck the I-beam and it fell, striking the spotter who sustained permanent totally disabling injuries. Investigation of the mishap revealed, among other things, that the spotter had two stressful life experiences shortly before the mishap: he had just returned to work that morning after taking leave to attend his grandfather's funeral, and he had just purchased his first car two days before the mishap. While neither of these life stresses were listed as causes of the mishap, it makes you wonder exactly where the spotter's mind was just before the mishap. Was he distracted? Saddened by the loss of his grandfather? Elated over his new car? Certainly supervisors and commanders should be aware of their workers' mental states and abilities to perform assigned tasks. If a worker has experienced one or more life stresses and the mission will allow it, that worker should probably be assigned to light administrative tasks for a couple of days. This protects the worker and it's a good leadership decision.

Many of the Air Force personnel killed each year through mishaps give danger signals long before making their fatal mistake. We have many mishap reports on file showing clear histories of DWIs, letters of counseling, traffic citations, alcohol and drug problems, past involvement in mishaps, and disciplinary actions. It's easy to dig all of this up while investigating a mishap and to point the finger while saying the supervisor should have known. **But it's too late then!** The plain truth is nobody is in a better position to spot danger signals and take action to correct inappropriate or undesirable attitudes **before** the fatal mishap than the person's supervisor. The supervisor sees the worker almost every day, should notice any changes in the worker and will most likely be aware of any troubles in the worker's life. A worker's home life, hopes, ambitions, values, physical well-being and almost every facet of the worker's life should be of utmost concern to the supervisor. It might seem harsh to recommend enrollment in an alcohol evaluation program when you suspect an alcohol problem. But how would you feel if you, as a supervisor, let the worker slide, only to have him killed in an alcohol-related incident?

The point of all this is simple caring. Everyone suffers and so does our ability to do the mission when a mishap occurs. Commanders and supervisors have inherent responsibilities to their workers. It's easy to care, but taking the time to make it happen takes a bit more effort. Those who do will reap both the rewards and the hardships that go along. But isn't that what success is all about?



TAC TALLY

	Total			TAC			ANG			AFR		
	NOV	THRU NOV		NOV	THRU NOV		NOV	THRU NOV		NOV	THRU NOV	
		FY91	[illegible]		FY91	FY90		FY91	FY90		FY91	FY90
CLASS A MISHAPS	0	1	4	0	0	3	0	1	0	0	0	1
AIRCREW FATALITIES	0	2	3	0	0	1	0	2	0	0	0	2
• IN THE ENVELOPE EJECTIONS	0/0	0/0	2/0	0/0	0/0	2/0	0/0	0/0	0/0	0/0	0/0	0/0
• OUT OF ENVELOPE EJECTIONS	0/0	0/0	1/1	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0

• (SUCCESSFUL/UNSUCCESSFUL)

CLASS A MISHAP COMPARISON RATE

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

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TAC	FY91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	1.8	2.8	2.7	3.0	2.4	2.7	2.8	2.9	2.8	2.7	2.8	3.2
ANG	FY91	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	0.0	0.0	1.6	1.2	0.9	0.8	1.3	2.2	2.4	2.2	2.0	2.2
AFR	FY91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	20.4	11.2	8.2	5.9	4.7	7.7	6.4	5.5	4.8	4.4	4.0	3.6
Total	FY91	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	2.4	2.5	2.7	2.6	2.1	2.4	2.6	2.9	2.8	2.7	2.6	3.0

TAC'S TOP 5 thru NOV 1990

"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"

1st AF		9th AF		12th AF	
133	48 FIS	66	507 TAIRCW	54	388 TFW
58	57 FIS	41	1 TFW	43	479 TTW
18	325 TTW	22	363 TFW	35	355 TTW
		20	56 TTW	34	366 TFW
		12	31 TFW	29	27 TFW

"COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS"

ANG		AFRES		DRUs	
454	119 FIG	152	301 TFW	170	552 AWACW
430	147 FIG	115	482 TFW	61	28 AD
234	110 TASG	112	924 TFG	40	USAFTAWC
214	177 FIG	100	906 TFG	32	USAFTFWC
214	138 TFG	75	507 TFG		

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