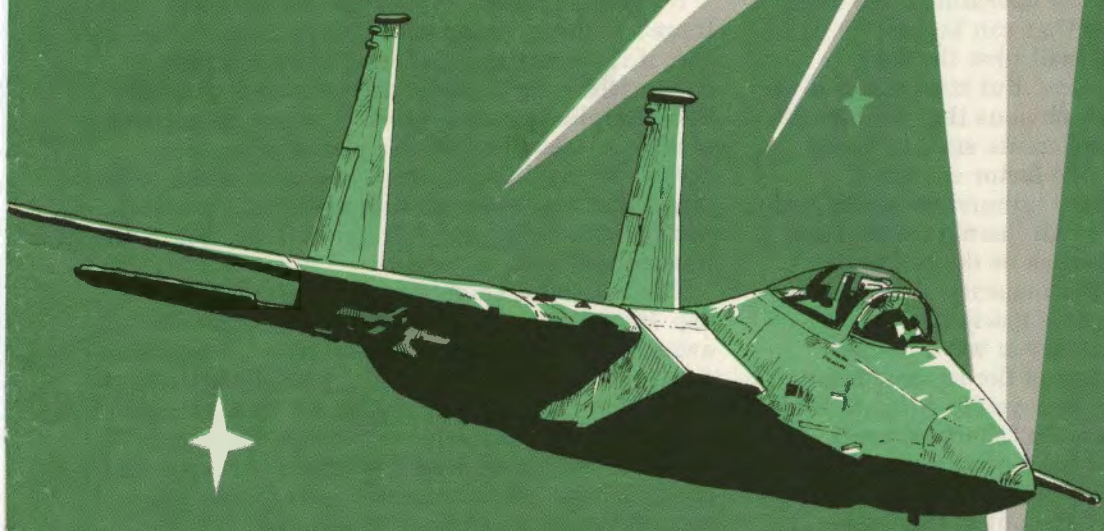


TAC ATTACK

DECEMBER 1986



Season's Greetings

ANGLE OF ATTACK

Historically, the month of October has been a period of transition for most of us. That's the time we begin to prepare for winter and all the hazards and challenges winter operations bring to each unit. It has also been a month where few flight mishaps occurred. That is—until now. For some reason the month of October caught us completely with our guard down. I'd like to believe that we've had our quota (and then some) for the whole winter season. Searching for the causes of these mishaps requires one to sit down and analyze and re-analyze volumes of data from every facet of our operations. We must keep looking for answers that can be used in a prevention program that will turn the tide.

There are no new answers. But then again if we examine the old ones, it's obvious that we haven't invented any new ways to create smokin' holes. As a matter of fact, the one factor entwined within most of our mishaps (ground, weapons and flight) is something we've all heard of since basic training—discipline. There is no doubt in my mind, the key factor in the majority of mishaps that continue to plague us is discipline.

It doesn't matter whether you work in operations, maintenance or any of the support functions. At one time or another you're going to find the "safety pin" pulled on the "shortcut panic button." The system will have put you in a position to hit that panic button; take the quick way out and get the item at hand out of the way—for now. You and some of your co-workers may even be able to continue the operation via the shortcut option for quite a while without any obvious adverse effects. But trust me on this one folks, at the rate of nearly two thousand takeoffs per day and many times that number of critical decisions made within the support functions, it's only a matter of time until we have to pay and



the "return on investment" is terrible.

The one thing that ensures we will do it right no matter what the situation, even if no one will ever find out, is self-discipline. Take pride in doing it right, not fast. Any coach will tell you self-discipline is the number one factor in building a winning team. Without it, you lose. In fact, you don't even have a team.

It's human nature to look for the easy way, and there's nothing wrong with doing things the easy way if it's also the *smart* way. If we continue to do our jobs smart, safety will take care of itself. Self-discipline ensures we do it smart, regardless of who isn't looking. Makes plenty of sense, doesn't it? Well, if you think it makes sense to fly smart and use self-discipline now, just wait until you fly your first combat mission. The "return on investment" **will be terrific.**

The rules and guidelines are there for us to use. It's up to us to ensure that our people are aware of the ROE and abide by them. If someone won't, he or she shouldn't be a part of our team. I think every commander will agree that we need to do it by the book; and if the book isn't doing it the smart or the best way, we need to change the book. Believe me, if a dumb Cajun fighter pilot can get the book changed, so can you.

What's your angle of attack?

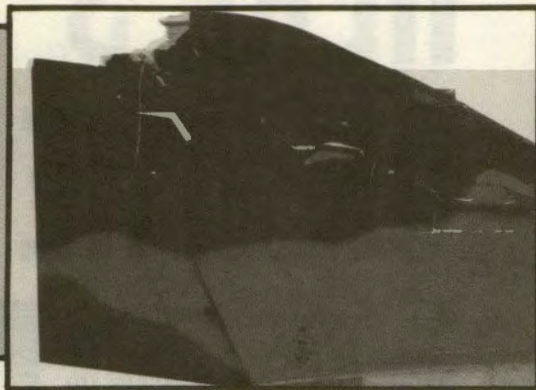
EDSEL J. DE VILLE, Colonel, USAF
Chief of Safety

TAC ATTACK

DEPARTMENT OF THE AIR FORCE



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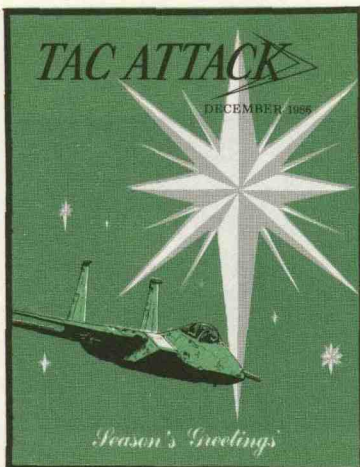
TACRP 127-1

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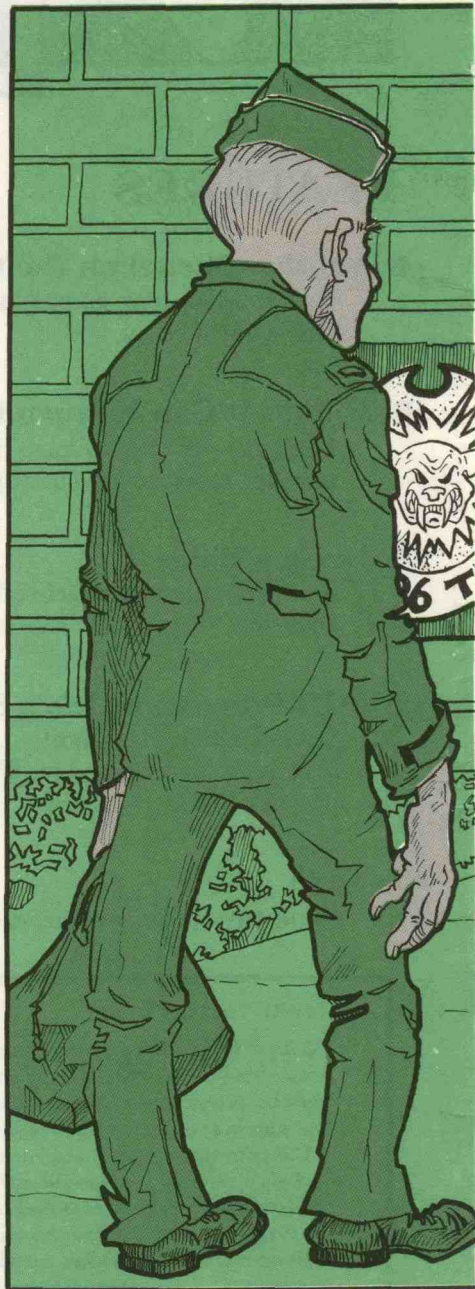
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HERE'S ANOTH ON THE GRASS

Every once in a while I come across a mishap that makes me feel like I backed up to a knee-high alligator grass fire. In fact, I get so flustered I'd like to take a 2x4 and rearrange the pilot's brain cells because he obviously failed to self-align—but then, I ask myself when was the last mishap that had a Whiskey Delta pilot pulling on the pole, I can't think of one. Can you? So for all you experienced jocks that have the A forms filled out from top to bottom (for you old heads, it used to be the letter of X's), here's "a nickel on the grass."

I guess the first thing I remember about going on a deployment was the excitement. Next was the preparation—endless preparation. Check this, check that. It's sort of like signing into your first operational flying squadron. You remember it and the experiences better than any squadron you will ever be associated with. It will always be the best squadron as far as you're concerned, that is, until you command your own. Then and only then will it take second place. The first deployment is much like the first squadron. Let me explain.

The reason you remember your first deployment better than any other is because it's



ER NICKEL

Col Coupe De Ville
TAC Chief of Safety



new, different and you're in the wide-open receive mode. Ever notice what happens to that steel-trap brain when this occurs? Questions—thousands of them—are directed towards doing your best. The ego slips which allows you to ask your flight commander or some other experienced jock things about flying your jet that you would not normally ask. You know, questions about handling the jet with wall-to-wall gas bags, what's the best pattern to fly at high density altitude and so forth. What you are really doing is trying to seek out the best options, and after that first deployment this becomes very important for each succeeding one—because if you don't, complacency will eat

There are ways we can beat complacency and poor judgment.

your lunch. There are ways we can beat complacency and poor judgment. Thinking your way through the maze ahead of time is one of the best.

"I'll never forget the first "what if" session I ever sat through. The old flight commander rattled off the "what ifs" faster than the GAU-8 used

to turn at high rate—and if you had a dumb reply, or worse, no reply at all, he'd fill you with as many holes. So we paid close attention and thought our way through everything. And I mean everything.

The basic theme was "Guys, when we do something different, we need to think and walk our way through it from flight brief to debrief." And as you walked and thought your way along, you considered all that could go wrong. The best way we found to do this was using "what if" during each phase of the mission. But do you know where we spent most of our time "what if-ing"?—in the traffic pattern. Yep, because on deployments we learned that's where most of the smoking holes were made. Not because it's most difficult—it just offers the most distractions and temptations for poor judgment with little room for error.

The other mission phases are important too, but we fool ourselves into thinking the landing will be nothing more than a showcase. A piece of cake, right? We all want to look sharp no matter what. And there's nothing wrong with looking good if you leave the showmanship to the Thunderbirds and do what we do best—fly and fight—in that order. But, unfortunately, if



HERE'S ANOTHER NICKEL ON THE GRASS

Here's another nickel on the grass.

The flight commander always made sure his troops knew the "what ifs".

you examine past mishaps in the pattern, some either forgot the "what if" session or didn't bother with one at all.

We used to let each flight take a particular phase of the mission, and the flight commander would brief the "what if" options his troops came up with. Guys used to fill out the entire back of the 21A (oops, I mean the Form 70) with these options. The size of the deployment never mattered, whether it was a single-ship for a static or a 24-shipper across the pond. The flight commander always made sure his troops knew the "what ifs." The important fact was we searched out any and all options just in case we needed one. Most of our time was spent figuring out the best way to get the jet on the ground at a variety of locations and for a variety of reasons.

For example, had these "what ifs" been asked during the last 5 years, maybe we'd have a few more jets on the ramp. "What if" I misjudged my final turn and end up too close to Number Three? "What if" I roll out inside lead on downwind? "What if" I'm too fast on final? "What if" I hit some jet wash on final? "What if" I'm heavy and start to overshoot my final turn? "What if" I end up low and slow on final?

If you haven't been saying "my best option is to go around," you need to spend some time in mobile. That's where we used to put guys that let their pride or ego get ahead of their judgment.

The real key was—once we discussed the option of going around, deciding to do it the next time was easy. And Bubba, we went around; because if we were caught flying a shabby pattern (bad) and trying to save it (much worse), we had no problem knowing how we were going to spend the next two weeks. Deployed or not, it was "Coupe, sit down in the mobile house and think about going around and how much sense it makes. If you can't find the skill to do it on your own, I'll give you some more help." There was no question or doubt in your mind as to what was coming next. So, you realigned your priorities and you knew that going around from a pattern that was not up to standards made all the sense in the world. It still does.

We all have the desire to look good. We all have pride. But, damn it, guys, how much pride does it take to fill up a smoking hole made because someone was more concerned about pattern spacing or looking good than flying the jet the

way it should be flown? If you don't consider configuration, gas, gross weight, weather, density altitude and all the other factors that dictate the best way to recover your jet, you may have the velocity but there's no rudder.

As far as I'm concerned, you shouldn't have to discuss the option of going around. Your squadron has set the standards for landing patterns; you meet them or you go around. Flying the pattern at the home drome with only you on initial is very

As far as I'm concerned, you shouldn't have to discuss the options of going around.

different from a 12-ship arriving after a 6+ hour mission or your first time landing at a strange base with an unusual configuration at a high gross weight. So brief and plan ac-

cordingly. I recommend the old "what if" method to evaluate your options. It works.

Another important thing is that it's essential for the leader to make the wingmen comfortable with a go-around decision. It's also his responsibility to hammer the wingmen if they try to salvage a bad pattern. (Remember, leadership by example.) Something else you always need to brief is how to get back into the pattern sequence once you do go around. If you ever find that a go-around will cause mass confusion in your recovery plan, the solution should be easy: You need a new plan. The smart leader always anticipates.

Well, I still go around. Don't like to, but I do. And I still "what if" every mission I fly. Oh, like any other fighter pilot, I still have a lot of pride. Pretty high ego, too. But, I learned a long time ago from pilots a lot wiser than I that the things you take into combat are attitude, self-discipline and the will to win—not pride and ego. So I fly accordingly—do you?

One last nickel—IF you don't use the "what if" technique, don't worry. When you get to combat (if you last that long), you will—I guarantee it. But if you want to get a lead turn on the Amaroungians, I'd start learning the options now. ➤



TAC tips

INTERESTING ITEMS,
MISHAPS WITH MORALS,
FOR THE TAC AIRCREWMAN

Whoops

An F-16 was carrying six BDUs on TERs to the local weapons range for a surface attack mission. On the first pass, a single BDU was released; but on the second pass, two bombs came off even though only a single release was commanded. After four passes, all the bombs on the aircraft were gone.

The aircraft and the suspect TER were tested for malfunctions back on the ground. The maintenance folks detected a bad relay inside the TER that caused the multiple releases to occur.

This incident is just one example why it's a good idea not to arm your weapon delivery system until you're in an area (i.e., the immediate range environment) where you can stand the results. While this incident was a release problem, internal failures of armament suspension systems

have also been known to jettison bombs and entire TERs as soon as the Master Arm switch was turned on. Nothing's assured—always be ready for the unexpected.

Switches safe

An en route attack against a simulated target is one of the best training tools available for practicing realistic tactics and terrain masking over unfamiliar territory. Whether you're a new guy or experienced, such targets provide diversity and instill confidence in your ability to pick up key landmarks such as IPs and targets at low altitude and to carry out a successful attack on the first pass.

An F-16 Falcon attempted a simulated weapons delivery on a utility power substation. Upon arriving at the range, the pilot discovered that a BDU-33 practice bomb was missing; so he flew a direct route to home base and landed.

The pilot had mistakenly selected the left station, loaded with a TER and three BDUs, and turned the master arm on during his en route attack. In the pop, the pilot couldn't find the target so he pickled *on time*. That accounted for the bomb that was never found since he had no idea where he dropped it.

This guy's airmanship left something to be desired in other areas besides his switchology. Mistakes like this could cost us valuable training options. Running through your switches en route to the target is great for procedural training, but on a simulated attack remember to check "switches safe" before your final attack run-in.



It was a what?

An aircrew was flying a night terrain following mission at 500 feet AGL when they experienced several strikes on the wing leading edge and down the intake of one of the engines. Bird strikes? Not this time. These were bat strikes, and the mission was being flown in the Philippines during the time of year when fruit bats were extra plentiful.

Sometimes bird strikes (or bat strikes) are unavoidable, but it pays to be aware of the most likely hangouts so you can steer clear when possible. As this incident points out, the heaviest concentrations of animal activity are a good thing to check out when you go to a deployed location.

Bats can pose a potential for strikes in certain parts of the United States, particularly in the Southwest. Check out your local flying area and low-level routes for such unusual hazards.



TAC Special Achievement in Safety Award

Sgt Phillip W. Poole was assisting an egress specialist during the hands-on portion of egress training when he and a student, Sgt James D. Baker, noticed that a flight line sweeper truck was on fire. They both reacted quickly along with TSgt Stephen D. Cain, the egress specialist.

Sergeant Baker manned a fire extinguisher that was positioned near the F-16 aircraft while Sergeant Poole pulled a Halon extinguisher from the hangar toward the burning truck.

They tried to direct the extinguisher at the base of the

fire, but couldn't; so they decided to use a raindrop effect over the fire. By then the fire had engulfed the auxiliary fuel tank, but the raindrop effect smothered the flames.

The men thought they had extinguished the fire, but continued to watch the sweeper. It was a good thing, because the fire did restart. Again, using the raindrop effect, they extinguished the fire for a second time.

The swift decisive actions of Sergeants Cain, Baker and Poole prevented the destruction of the sweeper truck and possible damage to nearby aircraft.



**TSgt Stephen D. Cain
Sgt Phillip W. Poole
Sgt James D. Baker**

**363 TFW
Shaw AFB, South Carolina**

MIDAIR

IT COULD HAPPEN TO YOU

As of September, the Tactical Air Forces (TAF) have experienced 6 midairs resulting in Class A mishaps, making this one of the worst years in recent memory for USAF pilots running into each other. These mishaps have been particularly devastating because they caused the loss of 9 combat aircraft and 4 aircrew members.

What can we relearn about avoiding midairs? To start with, the big sky theory does not protect us as often as we would like it to. It is startling to realize that of the 64 TAF midairs in the last 15 years, 53 were with aircraft in the same mission. Of those, 36 were members of the same formation who had been aware of the other aircraft's position just prior to the collision. It seems incredible that line fighter pilots are running into their own flight members at such a rate. Why do mishaps occur in a phase of flight that would seem to be routine? We can think of three main reasons: proficiency, distraction, and complacency.

Proficiency. Today's fighter training regimen puts a great deal of emphasis on tactical awareness and realistic combat training. That is only as it should be. But one by-product of this tactical approach is a scant amount of close formation flying. Consequently, basic formation skills erode, pilots get rusty, crosschecks get slower and more

THE AIR: IT COULD HAPPEN TO YOU



errors are made when basic fingertip formation is required. Does this mean that we should go overboard and restrict flights to and from the areas to fingertip? Of course not. What it does mean is that flight commanders have to take into account the experience level of their people and provide them enough time on the wing to stay proficient. Basic formation skills (just like basic instrument skills, BFM, radar sorting or gunnery) are perishable, and they need to be practiced.

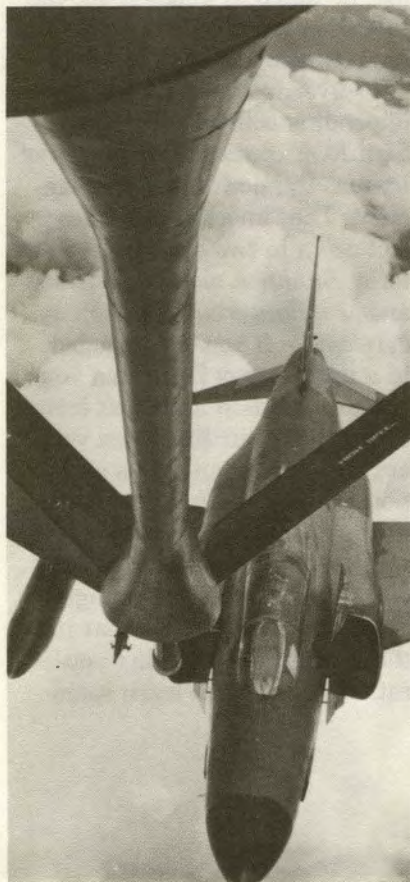
Distraction. Several related areas that may create the potential for formation midairs are pilot distraction, channelized attention, misplaced priorities and poor cockpit management. Today's fighters have a great many gadgets that magnify their lethality; but the price for this increased capability is increased cockpit workload. And while all these gadgets are competing for the pilot's attention, high density air traffic and crowded

working areas require a look outside as well. Proper cockpit management is a sliding scale of priorities based on the particular phase of flight. The workload in the cockpit is certainly manageable and not overwhelming. It is, however, all too easy to become distracted, or to concentrate attention on a low priority item. The classic example is the pilot who tried to lock on to radar traffic while flying close formation. Focusing on the radar, he collided with his leader because his first priority was something other than flying formation. It boils down to proper task prioritization. That's not saying that a pilot cannot use his radar, follow along with

the navigation or help clear the flight visually when in formation, but the number one priority in formation flying is to not hit the other airplane. You can't engage and kill an enemy if your flight runs into each other during the turn out of traffic.

Complacency. Pilot complacency is particularly dangerous because it is insidious. Formation takeoffs, rejoins out of traffic, close formation, weather formation, tactical formation, air refueling, formation landings—no sweat, piece of cake, that's just how we get to and from work. True enough, it should be a piece of cake for any fighter pilot worth his salt. But because of that attitude, instead of concentrating on the present formation activity, the pilot's mind is busy planning upcoming events like air-to-air engagements, pop-up pattern and ordnance parameters, low level route points or whatever the meat of the mission is. Add a little lack of proficiency and throw in some distraction to this normal measure of complacency; then you can figure out why two experienced pilots run into each other doing a cross turn setting up for the next engagement. It sounds incredible, but it has happened more than once.

Except in cases where an aircraft enters the picture in an unplanned or unexpected way—call them "strangers"—the root





MIDAIR: IT COULD HAPPEN TO YOU

cause of tactical fighter mishaps is a loss of situational awareness (SA). Either the pilot lost sight of the aircraft he hit for one of the reasons mentioned previously or he lost sight of the mission objective at the time. This lost SA often parallels a violation of some flight standard. Not flying within the limits established for the aircraft or the maneuver and violations of the rules of engagement (ROE) are prime examples.

The ROE place a great deal of emphasis on adherence to block altitudes. But block altitudes only provide separation of aircraft during the ingress until the actual visual engagement begins. Most participants' SA is relatively high prior to the merge because of radar and GCI information about the opponents' range, altitude and maneuvers. However, the midair threat increases significantly when a turning visual fight starts and new bandits, or even friendlies, enter the arena. Blocks do abso-

lutely no good then. That's not the place to be complacent. Get your head out and clear your flight path. Belly checks are tactically sound as well as conducive to survival in training.

One of the surest rules to live by in air combat is to always do the tactically sound thing. The tactically sound move will also be the safe move. What does it take to do that? Common sense, training, the experience to recognize the correct move and the discipline to train like you want to fight.

All too often analysis of a midair unveils a situation where at least one of the pilots refused to swallow his pride or he let his ego get the best of him. In so doing, he failed to knock-it-off, call "blind" or get clarification on a radio transmission so he could maneuver in time to avoid an impending collision. The standard ROE contain a whole list of reasons to knock off an engagement. The "knock-it-off" rules boil down to two essential criteria: *Situation awareness is lost and/or a dangerous situation is developing.* If you are engaged in a multi-bogey fight, and you become confused and don't have a clue (lost your SA), then you are creating a dangerous situation for yourself and the others in the engagement with you. Do you have the courage to knock off the fight and set it up again? Sure, you'll have some heat in the debrief; but wouldn't you rather do that and learn some-

thing than have a midair. And the next time you're in a scissors and your airspeed begins to get so slow that you're out of maneuvering potential, will you have the tactical sense to do something other than continue?

One last element fits into the midair equation. **Trust.** We have all had the opportunity to fly with outstanding flight leaders and wingmen. But, no matter how good they are, the trust we place in those with whom we fly should never be absolute. Our fellow aviators as a group are skilled, aggressive and highly competent fighter pilots; they are also human beings. We all make mistakes, errors or misjudgments from time to time. When you fly with someone, maintain an edge of caution, a check and balance on what you are doing as a flight. There can, of course, only be one leader in the formation. But the one thing worse than killing yourself because of a mistake is allowing someone else to do it to you.

The point is—good flight discipline and adherence to ROE are the cornerstones of midair collision prevention. Add common sense, attention to the task at hand, awareness of the hazards and the courage to admit it when you don't have SA—now you're ready to strap on that jet.

—Adapted from "The Year of the Midair," by Capt Thomas K. Mascot, *TAC Attack*, June/July 1984.



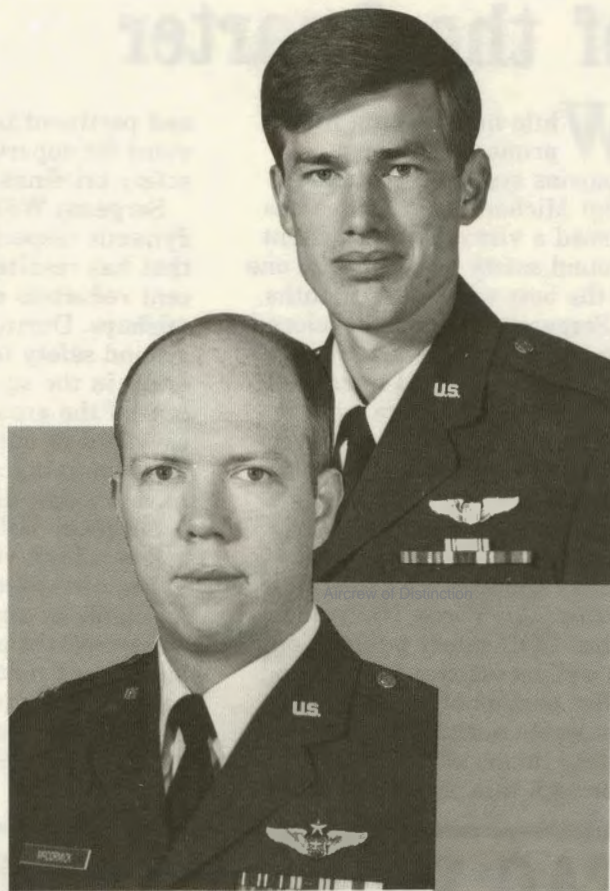
AIRCREW OF DISTINCTION

Second Lieutenant Roy T. Wiering, student aircraft commander, and Captain Gene W. McCormick, squadron instructor weapon systems officer, were flying a night terrain following radar (TFR) upgrade sortie in their F-111D. They were IMC at 1000 feet AGL in the automatic TFR mode when they encountered heavy precipitation. The TFR computer generated an automatic fly-up taking them into dense weather between two large thunderstorms.

As they leveled the aircraft at 16,000 feet MSL, the crew encountered severe rain, hail and lightning. Suddenly, lightning flashed just to the left of the aircraft followed immediately by a loud bang and loss of thrust. Captain McCormick confirmed that the right engine had stalled and the rpm was rolling back through 80 percent. Within 5 seconds, the left engine also stalled and began to roll back.

Lieutenant Wiering immediately established a maximum range descent, maintained 270 knots to ensure sufficient rpm for flight control hydraulics and airstart capability and initiated a cross-check of the standby instruments. He knew that if engine rpm continued to decay, the generators would drop off line, resulting in the loss of all interior lighting and primary flight instruments. Captain McCormick depressed the airstart button to provide continuous ignition to the engines while Lieutenant Wiering moved the throttles to determine if either engine would respond. Both engines had now decayed to 60-percent rpm (idle thrust) and neither responded to their inputs.

The crew then initiated emergency actions for double engine failure. First, the right engine was



2d Lt Roy T. Wiering
524 TFTS, 27 TFW
Cannon AFB, New Mexico

Capt Gene W. McCormick, Jr.
524 TFTS, 27 TFW
Cannon AFB, New Mexico

shut down and airstarted to normal parameters. Now able to maintain altitude and return to a more normal flight condition, the aircraft was leveled at 11,000 feet MSL and the left engine was shut down and restarted as well. With both engines operating normally, the aircraft was recovered without further incident.

Lieutenant Wiering and Captain McCormick accurately and efficiently handled an extremely serious emergency under the most adverse conditions of darkness and severe weather. Their timely decisions and actions prevented the loss of a valuable aircraft. ➤

TAC Ground Safety Award of the Quarter

While maintaining his primary duty as a weapons system coordinator, TSgt Michael L. Williams has turned a virtually nonexistent ground safety program into one of the best within two months.

Sergeant Williams developed extensive lesson plans to ensure that personnel in each of the various shops are well trained. He revitalized the flow of safety information to squadron personnel by publishing a monthly safety information pamphlet. This pamphlet includes applicable articles from various Air Force, Navy and other DOD safety publications as well as articles that he and other personnel in the squadron wrote pertaining to the safety theme of the month. Through this pamphlet, timely

and pertinent topics are provided for supervisors' ground safety briefings.

Sergeant Williams also has a dynamic inspection program that has resulted in a 20-percent reduction of industrial mishaps. During the last ground safety inspection of 68 areas in the squadron, 75 percent of the areas were rated excellent or outstanding and the remaining areas did not have a major discrepancy.

Sergeant Williams has made safety a high visibility program, always making himself available at any time to handle safety related problems. Our significant reduction in ground safety incidents is a direct result of Sergeant Williams' dedication to a safe work environment.



TSgt Michael L. Williams
4477 TES, USAFTFWC
Nellis AFB, Nevada

TAC Weapons Safety Award of the Quarter

MSgt James F. Miles has become one of the leading contributors to the mishap prevention program for the 354 TFW. He developed and implemented a training program in which maintenance personnel actually observe the ill effects of mishandling explosives. The munitions demonstrated are the same munitions handled by the maintenance personnel on a daily basis. Sergeant Miles describes the effects of complacency and mishandling for each demonstration. However, Sergeant Miles' safety awareness program does not stop with on-base personnel.

Frequently, marine markers wash up on the local shores. Sergeant Miles has educated both the military and civilian populace on the dangers of handling these markers. The markers frequently contain hazardous residue. His education program has enhanced the response time by qualified explosive ordnance disposal (EOD) personnel as well as warning souvenir hunters of the apparent dangers of handling these markers.

Sergeant Miles' accomplishments and dedication to the safety of military and civilian personnel have earned him this award.



MSgt James F. Miles
354 TFW
Myrtle Beach AFB, South
Carolina

TAC Flight Safety Award of the Quarter

Capt Joseph A. Eichelkraut has created an innovative, yet simple, system to track aircraft malfunction trends. His program enables all squadron pilots to quickly review complete up-to-date aircraft maintenance records just prior to flight. Awareness of aircraft system trends allows pilots and squadron supervisors to more successfully analyze and evaluate inflight performance. Maintenance fix rates have improved significantly with improved pilot write-ups, resulting in safer aircraft, higher mission accomplishment, reliability and better student training.

The uniqueness of this system comes from its use of the existing maintenance centralized data system which produces a very user-friendly product that can be easily interpreted. Captain Eichelkraut's computer accessing system has been instituted wing-



wide by the maintenance analysis branch and other squadron flight safety officers. His system will save about 1000 man-hours per wing per year.

Captain Eichelkraut has instituted a program in flying training which interfaces with students in air-to-air and air-to-ground briefings. His short, hard-hitting briefings backed by video tapes stress doing the tactical mission safely.

Whether he is briefing a student pilot on F-16 tactics or researching options to prevent recurrences of a complicated aircraft malfunction, Captain Eichelkraut is constantly striving to make our business safer. His safety program is totally



Capt Joseph A. Eichelkraut
310 TFTS, 58 TTW
Luke AFB, Arizona

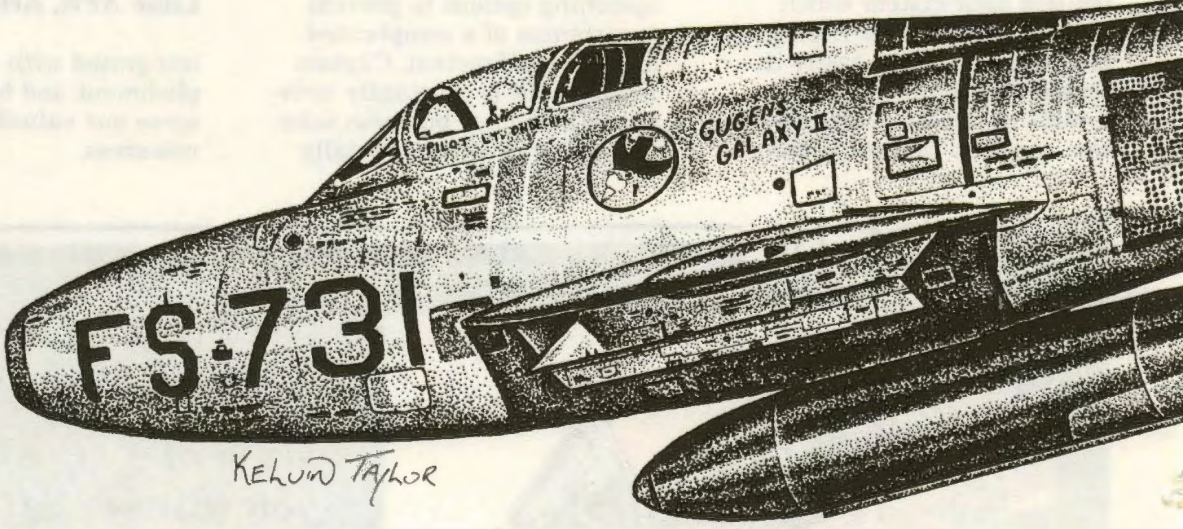
integrated with mission accomplishment and has helped preserve our valuable combat resources.

HEADS UP

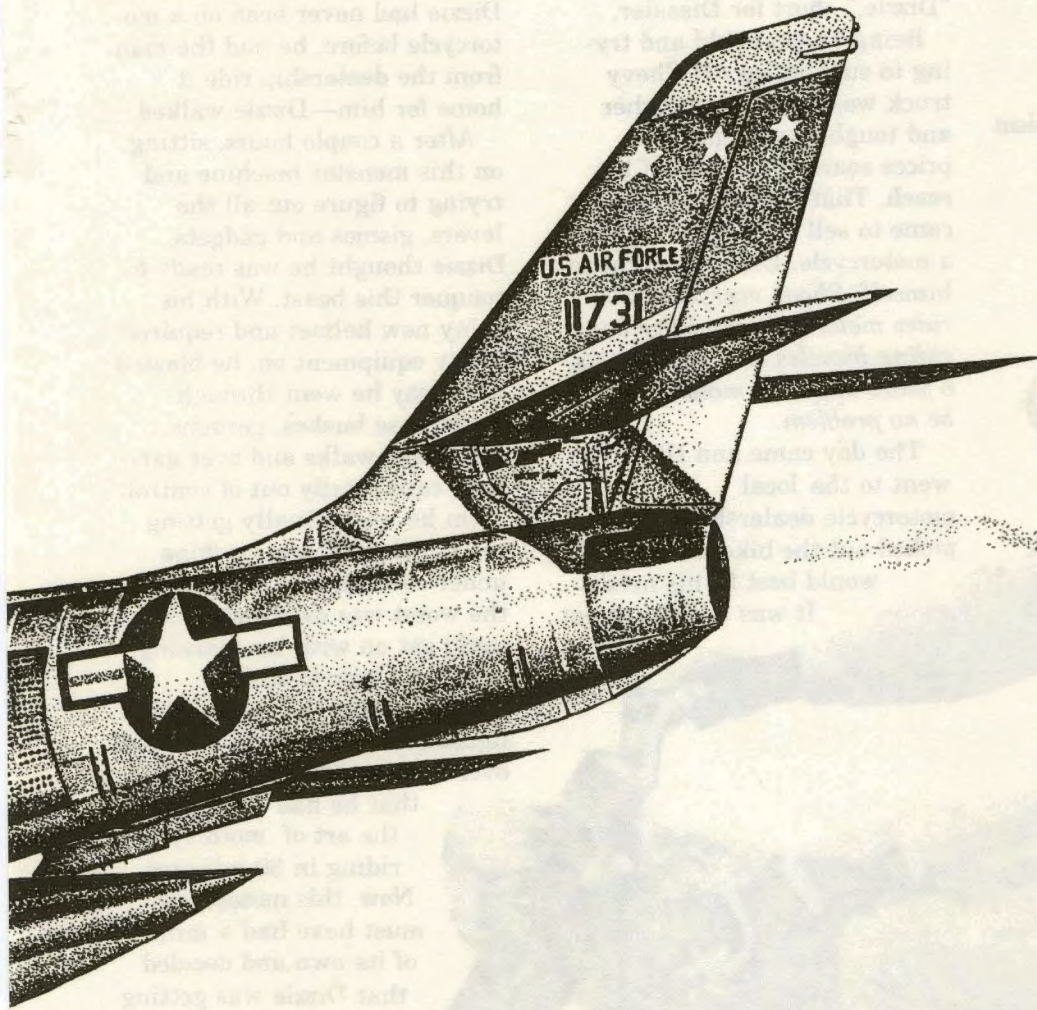


Next month, in the
JANUARY
issue of *TAC Attack*,
you will see Sgt Kelvin
Taylor's stipple
drawing of the F-86
Sabre **IN THE CENTER.**

F-84F THUNDERSTREAK



KELOWN TAYLOR



UNEASY
RODER

the Deputy
of A
Division
The A.B. Oklahoma

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The day
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UNEASY RIDER

Sgt Jamie Robey
28 AD Ground Safety Division
Tinker AFB, Oklahoma

Imagine yourself streaking blindly the wrong way down

a one-way street. I'm not talking about streaking as being naked in a crowd; I'm talking about being on a runaway motorcycle and not knowing what to do about it. Well, I know of an incident where this really happened. To preserve his real identity, let's call this guy "Dizzie," short for Disaster.

Being 19 years old and trying to support an old Chevy truck was becoming tougher and tougher with gasoline prices soaring well out of his reach. That's when the idea came to sell the truck and buy a motorcycle. Dizzie thought to himself: *Shoot, everybody else rides motorcycles and I've been riding bicycles ever since I was 6 years old; so a motorcycle will be no problem.*

The day came and Dizzie went to the local motorcycle dealership and picked out the bike he thought would best fit his needs.

It was a 250cc street

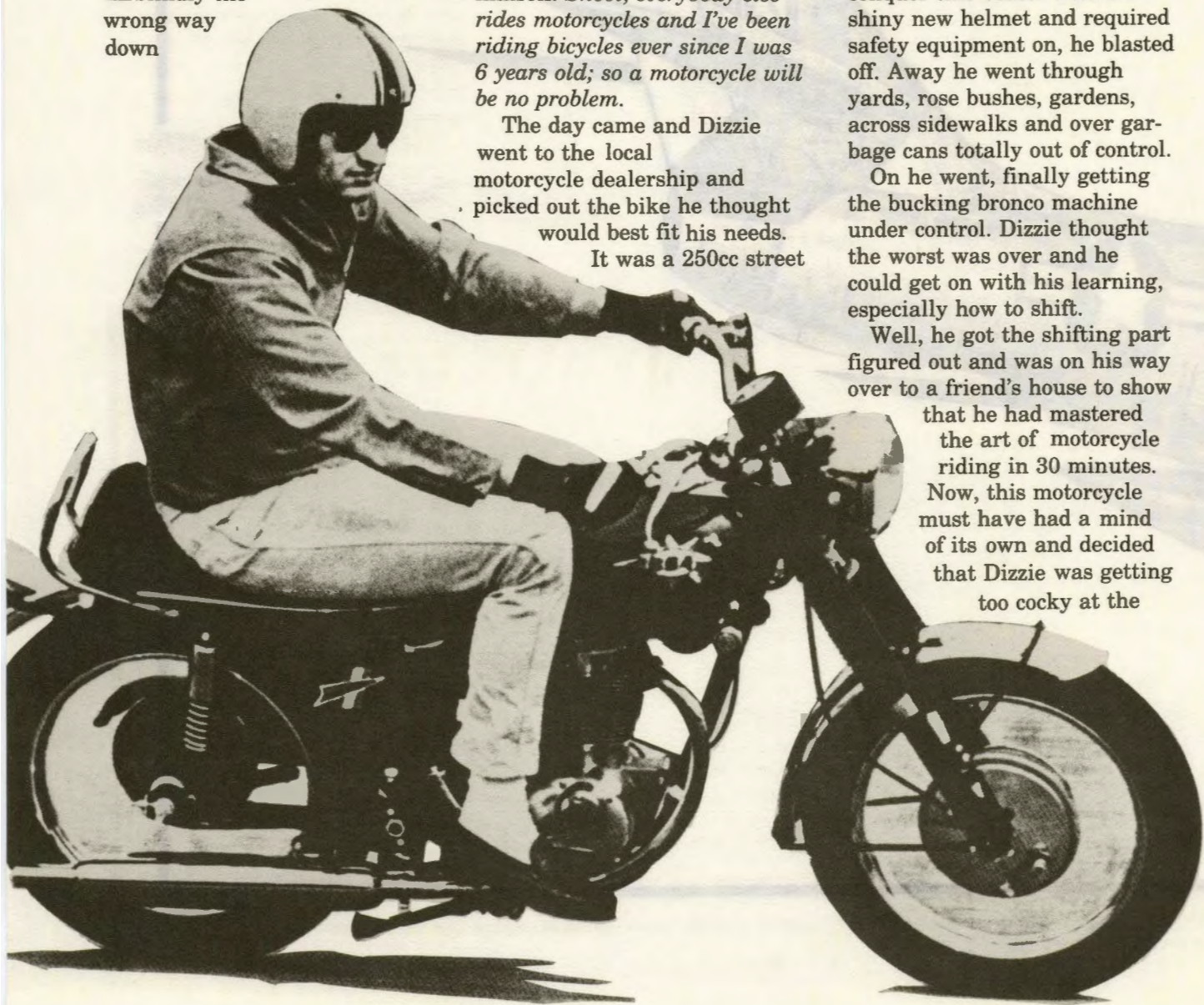
bike with two exhaust pipes. So what? you say. Dizzie thought the two pipes made it look like a "mean machine" and he couldn't wait to get out and terrorize the general public. Little did he know that's what would be happening later.

The deal was made; but since Dizzie had never been on a motorcycle before, he had the man from the dealership ride it home for him—Dizzie walked.

After a couple hours, sitting on this monster machine and trying to figure out all the levers, gismos and gadgets, Dizzie thought he was ready to conquer this beast. With his shiny new helmet and required safety equipment on, he blasted off. Away he went through yards, rose bushes, gardens, across sidewalks and over garbage cans totally out of control.

On he went, finally getting the bucking bronco machine under control. Dizzie thought the worst was over and he could get on with his learning, especially how to shift.

Well, he got the shifting part figured out and was on his way over to a friend's house to show that he had mastered the art of motorcycle riding in 30 minutes. Now, this motorcycle must have had a mind of its own and decided that Dizzie was getting too cocky at the



controls; so it decided to put the fear back into him. While stopped at a busy intersection, waiting for a break in traffic, the motorcycle planned its strategy. A small break in traffic was coming and Dizzie was primed for blasting across the street.

When he gunned the throttle and let loose of the clutch, the fun began. Instead of shooting straight across the street, this merciless machine took him down the middle of a one-way street, the wrong way. Dizzie had no idea what to do about the situation he was in.

The problem was suddenly solved for him when he was stopped by the front end of a pickup truck. Dizzie didn't remember seeing anything except the speedometer climbing past 30 mph. The effect of the impact was greatly reduced because the pickup truck had come to a complete stop and was backing up in an effort to

get away. But that didn't work. Dizzie and his monster machine parted the pickup truck's radiator right down the middle.

Dizzie flew over the handle bars, slid up the hood of the truck, kissed the windshield and landed in the street behind the truck. As bad as all of this sounds, the old brain bucket (helmet) did its job and kept him from losing his head. Dizzie immediately stood up, not realizing fully what had happened until he saw the damage to the truck and the mangled motorcycle.

The fire department responded to hose down the fuel that was spilled, the wrecker came to haul away the mess and the ambulance came to take Dizzie to the hospital to check him out.

Before he could get away from the scene, the police arrived with a couple of presents for Dizzie. If crashing his brand new bike, messing up someone

else's only means of transportation, creating work for the fire department and creating a massive traffic jam at quitting time wasn't enough, he was handed two traffic citations from the police. Dizzie had no motorcycle operator's license or any kind of formal training or instruction for operating a motorcycle.

* * * *

Dizzie learned his lesson. I know because I'm Dizzie. I've been through many open fields learning on a not-so-mean motorcycle, a 125cc; I've even had a couple of motorcycle rider's courses and received my motorcycle operator's license. But how many other Dizzies are there on the road? Don't learn the way I did. Play it smart. Obey traffic laws, learn to operate your vehicles safely and please consider that you may just save more than one life. ➤

*Courtesy Eyes of the Eagle,
May 86*

WANTED STAFF ARTIST

Our military staff artist is leaving us next spring. We're looking for a volunteer, AFSC 231X3, to replace him. The person in this position needs to have a high degree of artistic ability, coupled with professional working knowledge of offset printing, layout, color separation and photography. He or she will work directly for the art editor and will be expected to prepare renderings of all types of aircraft, figure drawing, hand lettering, cartoons and story illustrations.

If you feel you are qualified and would like to be considered, send samples of your best work to HQ TAC/SEP, Attn: Art Editor, Langley AFB VA 23665-5001.

Your samples will be returned. For more information, call AUTOVON 574-3658.

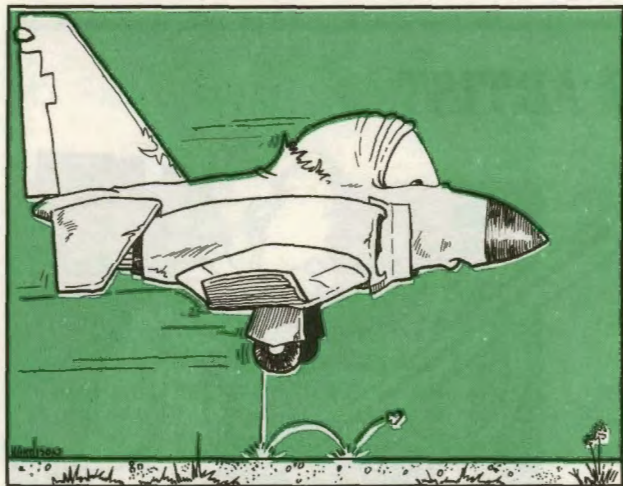


CHOCK TALK

Incidents and Incidentals with a Maintenance Slant

It looked OK

An F-4E pilot was on the wing during a formation takeoff. When he tried to deselect afterburner, the number two throttle wouldn't move. After several unsuccessful attempts to pull the right throttle out of afterburner, the pilot shut the engine down with the master switch. After burning down fuel, the crew set up for a single-engine landing. At 5 miles on final, the landing gear was lowered and the wingman noticed something fall from the aircraft.



Back on the ground, maintenance found that the number two cartridge breech cap was missing and that the right throttle moved easily. The day before this incident, maintenance had performed an engine starter oil level inspection. To do that, the cartridge breech cap was removed to allow access to the starter. When the jet engine mechanic was finished, he didn't tighten the breech

cap. Neither the crew chief nor the pilot noticed the breech cap was loose. The result was a serious problem during the formation takeoff and an unnecessary dropped object.

Hidden cost?

The jet engine was installed on the test stand for an operational check following completion of some maintenance work. The test was stopped at 40-percent power because of an "A" sump leak. Technicians on the engine shop's day shift were called out to the test facility to remedy the problem, and the work was finally finished by personnel on the swing shift.

Before they attempted another run on the engine, the test cell folks performed both an inlet and tailpipe inspection. When the engine was started and running at idle power, one of the men heard loud, unusual noises coming from the engine. They shut down the engine and accomplished a borescope inspection. Serious damage was found on several stages of the compressor rotor, and the washer portion of a spinner dome nut was found lying between the high- and low-pressure turbines. The nut portion had apparently been carried downstream inside the engine, causing more damage before it exited.

It was impossible to determine exactly when the hardware that caused the damage was left lying inside the engine. Unfortunately, this is the leading cause of FODed engines—hardware and work debris left behind or unaccounted for after repair work is completed. The offending piece of hardware may be small enough to escape detection, but the resulting damage and repair costs aren't.

One size doesn't fit all

Following the first flight of the day, an F-4 crew chief found a fastener missing from door 504L. During the subsequent intake inspection, damage was found to the number one engine; engine teardown revealed extensive compressor damage due to the missing fastener.

The panel had been removed for other maintenance, and the red-X was cleared by a 7-level supervisor when the work was completed. The inspection following discovery of the missing fastener and FOD found that a number 4 fastener, which doesn't have the required number of threads, had been substituted for the necessary number 6 fastener. Further investigation of the door found 8 other incorrect fasteners, nearly half of all the fasteners weren't torqued sufficiently.

Identifying and using the correct fasteners to secure a panel is part of the job. Making sure they're torqued down according to the TO will ensure that they withstand the stress and vibrations of flight along with whatever they're holding.

Help, don't hinder

Two technicians were sent out to remove the ACES II ejection seat from an F-15 so other maintenance could be performed. The seat came out without any problems. But as one technician was lifting the catapult and stepping onto a maintenance stand, the other technician stepped onto the bottom step of the stand. The technician holding the catapult lost his balance and stepped onto a safety streamer attached to the catapult. The catapult was pulled from his hands and it fell about 9 feet to the ground. Fortunately the



man on the ground wasn't injured; but the drop didn't do the catapult much good.

Teamwork means using our combined talents and efforts to perform a job better than we could individually. How would you and a co-worker have done this task differently to ensure a better ending?

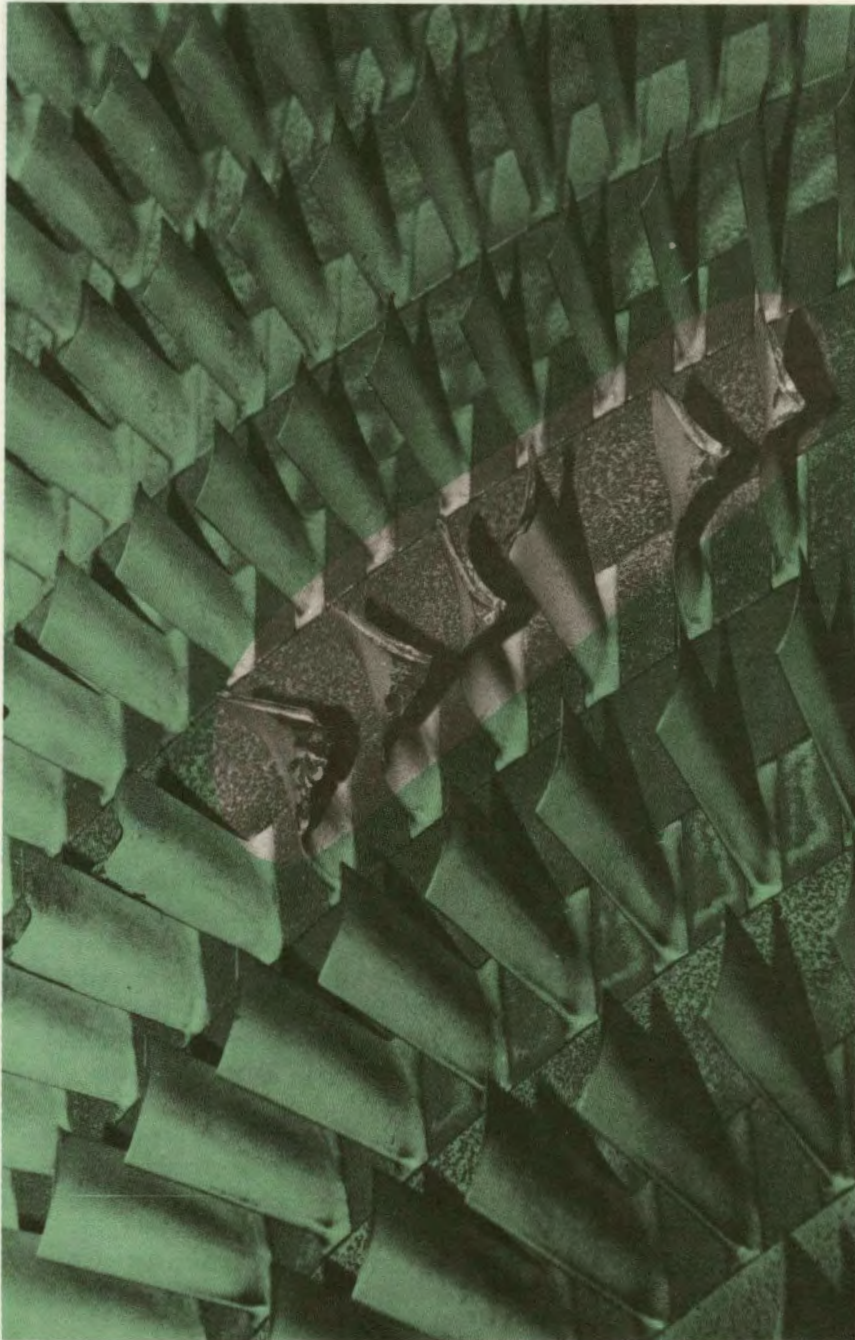
Wind's up

An APG technician went out to an F-4 to service the liquid oxygen. He placed the drip pan under the lox servicing door and proceeded to ground the lox service cart.

The wind was blowing at about 20 knots with occasional gusts even higher. When the technician returned to the servicing area underneath the aircraft, he noticed that the drip pan had moved several feet and there was glass lying on the ramp. The wind had blown the unsecured drip pan into the glass dome of a TGM-65 Maverick missile mounted on the aircraft.

Consistent strong winds and gusts are an everyday factor at many TAC bases, particularly in the West. You're usually not going to stop work because of them, but you do need to ensure that everything you're working with is secured sufficiently to prevent stuff from flying around striking vehicles, aircraft or other people.

FOD PREVENTION:



SMSgt Richard E. Alford
TAC/LGMSA

An F-4 was scheduled for an early morning launch and the crew chief conducted his preflight in the dark with a flashlight. He checked the intake for FOD, then signed off the 781. Continuing his preflight, he found a possible hydraulic leak. Following appropriate run-up procedures, he started the engine, with only one mistake: he forgot to inventory his tools. After engine start, the ground man noticed sparks coming from the exhaust. When the engine was shut down, the crew chief found compressor damage from (you guessed it) the flashlight he left down the intake. The result was a needless FOD.

Whether big or small, foreign object damage adds up to a serious money problem that we simply cannot afford. TAC lost \$1.7 million due to foreign object damage in 1985. Another

TAC lost \$ 1.7 million due to foreign object damage in 1985.

major operating expense, premature engine removals, was also primarily caused by FOD. With good housekeeping practices, common sense and hard work, these costs to our

it's a state of mind

mission readiness can be greatly reduced.

Where does most of our FOD come from? One of the primary sources is general debris from the ramp, runway cracks or expansion joints. Unfortunately, the most common day-to-day cause of FOD is the mechanic who drops or leaves tools and small pieces of work residue in the engine area while performing maintenance. That's a problem that we can get a handle on. In order to prevent that type of FOD, technicians must account for *all* their equipment and remove/tighten loose hardware from jet engines and aircraft. Another source of FOD is foreign matter, like rocks and mud, carried onto the ramp area by motor vehicles. These vehicles frequently travel off hard surfaced roads, then deposit the foreign matter on the ramp where it has the potential for causing FOD.

The most deadly type of FOD is you. That's right—you. You can become a foreign object to an operating jet engine. Several incidents have occurred where maintenance personnel (and even a firefighter) got careless around the intakes of an aircraft and were sucked down the intake. Make sure you're familiar with the hazard areas of any aircraft that you'll be working around and give jet intakes their due respect.

Statistics show that FOD

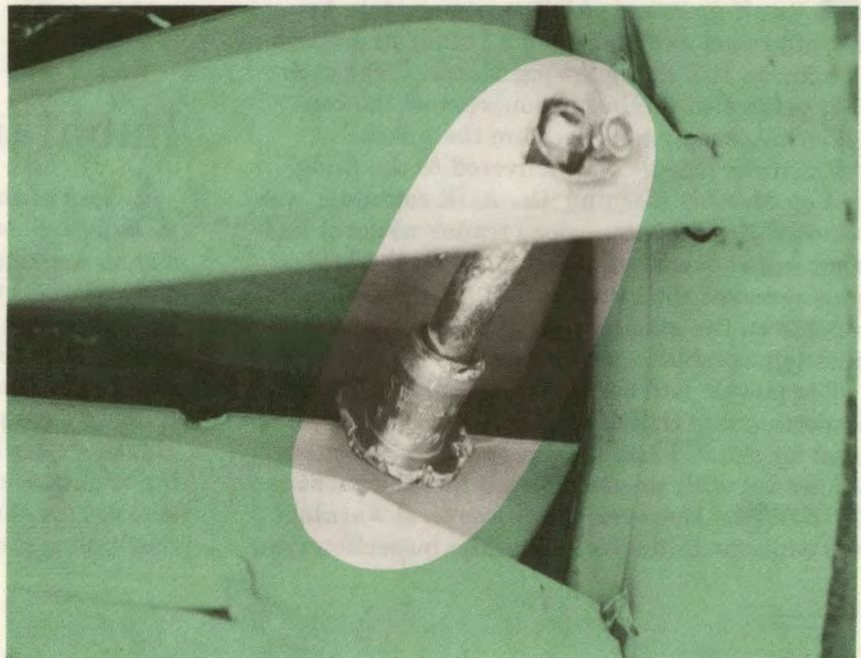
occurrences differ considerably between squadrons using identical aircraft and flying similar missions. So what? The obvious

There is no firm formula for eliminating FOD, but there is a key to preventing it.

conclusion is that FOD can be controlled. There is no firm formula for eliminating FOD, but there is a key to preventing it. The secret is to "get involved." Everyone must do their part to eliminate the source of FOD on the ramp by picking it up and putting it in the proper place. Everybody's got to follow their checklists and ensure that FOD walks are

conducted daily. Another good way to remove potential FOD from the ramp is by using vehicle-mounted magnets or vacuum sweepers. After you've gathered the foreign objects, take the time to investigate what was found and determine the source. The final step is to take corrective actions and follow up to ensure that those sources of FOD dry up.

We've all got to work together toward a FOD-free environment. FOD prevention is a state of mind. It's not allowing the proper order of things to get "out of order." Your involvement out in the field is critical to ensure that FOD incidents continue to be curtailed. To do that, each technician must have the "pick it up" attitude. It's up to you and the folks in your unit. ➤





WEAPONS WORDS

Handle with care

A TGM-65 Maverick missile was inspected in its all-up-round (AUR) container late Friday afternoon and loaded on a trailer in preparation for an ICT the following Monday. The crew that performed the inspection, opened the container lid, noting no defects on the missile.

When the missile was delivered to the flight line on Monday morning, the AUR container was removed from the munitions trailer where it had been stored over the weekend. When the load crew removed the container lid, they found the radome on the guidance section broken and the missile unusable.

The missile had been properly treated during inspection and transport. All of the containers used for the ICT had been properly secured on the trailer with tie-down straps for movement to the ICT site. However, despite several warnings and cautions in the tech data, the inspection crew

had caused the resulting damage to the radome when the container lid was reinstalled.

The AUR container was designed and built to make movement of munitions easier and to lessen the chance of damage during handling and transportation. Unfortunately, the protective containers don't do much good if their improper use results in damage to the munition inside.

Did you see that?

A missile crew was tasked to move two stacked containerized missiles from outside the missile shop to the storage bay, using an MHU-83 bomb lift to do the job. The crew chief prepared the lift for use but didn't notice that the forks were iced over. With two crew members acting as spotters, the lift driver positioned the forks under the missile on top of the stack and lifted it. While the spotters moved to secure the missile with a tie down strap, the missile slid off the forks and fell to the ground.

The crew should have fastened the missile container down securely before ever lifting it. But even more important during these winter months, keep your eyes open for slippery conditions on both your equipment and the area where you are planning to transport munitions.

Imbalanced load

A load of six MK23 rocket motors was being delivered on a munitions handling trailer. The motors were stacked three across and two high on a wooden pallet. The left outside motor on the pallet was removed first followed by the motor in the center. That left the one on the right; and its weight caused the pallet to tilt, allowing the motor to roll off the pallet and hit the ground.

Take a close look when you're loading or unloading munitions or other bulky materials to make sure you're not creating an imbalanced condition that's going to start a sudden avalanche.

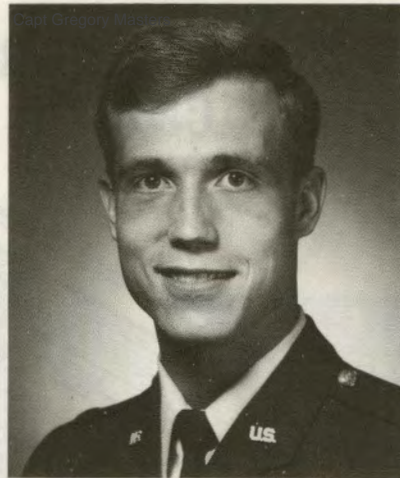
TAC Special Achievement in Safety Award



Capt Dereck Meyer



Lt Larry Troyer



Capt Gregory Masters

Captain Dereck Meyer was the flight lead/IP for a 4-ship of F-15s on an MQT upgrade sortie for Lieutenant Larry Troyer (#2). Lineup on the runway was briefed as echelon with Captain Gregory Masters as #3 and Captain Tom Schnee, #4, in the slot. During runup, #4 noticed hydraulic fluid leaking from #2's aircraft. He notified #2 to pull his power back to idle. At the same time, #2 felt his jet pull left and pulled his power back to idle. The aircraft started creeping forward. Number 2 noticed a UTL A light and immediately turned the antiskid off and pulled the emergency brake/steer handle which stopped the aircraft. Lead cancelled takeoff clearance and instructed #2 to maintain his position while #3 and #4 taxied around him. As the other aircraft were clearing #2, he noticed the UTL B light fol-



lowed immediately by a right pump light. The aircraft now had total brake failure and started to roll forward. Number 2 alerted all other aircraft to taxi clear, preventing a possible collision. Lead took control of the situation and instructed #2 to drop his hook and take the approach-end barrier.

Quick thinking on Lead's part prevented #2's aircraft from rolling any further forward and possibly off the runway. Number 2 took the cable and waited for the crash crew to chock and pin the aircraft. Total loss of brakes in the F-15 is rare. The heads up call by #4 of the hydraulic leak pre-



Capt Tom Schnee

**59 TFS, 33 TFW
Eglin AFB, Florida**

vented #1 and #2 from releasing brakes and getting airborne which would have compounded the problem for #2. The quick thinking and coordinated efforts of all the pilots in this flight prevented a serious mishap.

TOYS

what the consumer can do



The Consumer Product Safety Commission (CPSC) has set safety regulations for certain toys and other children's articles. Manufacturers must design and manufacture their products to meet these regulations so that hazardous products are not sold.

Some of the CPSC's regulations set safety specifications for specific kinds of products, while others deal with hazards such as sharp edges or points that can occur on a wide variety of toys or children's products.

Not all toy-related injuries can be prevented by government regulations or voluntary industry standards. Some older toys, manufactured before standards became effective, may not have recent safety improvements. It is important to check both new and old toys around the house for possible hazards.

The CPSC has the following suggestions for toy safety:

Explain to your child how to use toys properly and safely.

Teach children to put their toys safely away on shelves or in a toy chest after playing so that no one trips or falls on them.

Check toy boxes for safety. At least 21 fatalities and 2 cases of permanent brain damage have resulted from toy chest lids falling on children's heads or necks. If the toy chest has a hinged lid and opens vertically, make certain the chest uses a lid support that will hold the lid open in any position in which it is placed. If a toy chest or other box or trunk used to store toys does have a freely falling lid, the CPSC recommends that consumers completely remove the lid, or install a lid support that will hold the lid open in any position. For extra safety, make sure the toy chest has ventilation holes for fresh air. Watch for sharp edges that could cut and hinges that could pinch or squeeze.

Look for labels that give age recommendations such as "Recommended for Children Three to Five Years of Age," and heed the recommendation. Toys should suit the skills, abilities and interests of the child. Some toys are recommended for older children because they may be hazardous in the hands of a younger child. A toy that is recommended for a four- or five-year-old, for example, may not be safe for a younger child because it contains small parts.

Avoid hand-me-down toys with small parts for children under three years of age.

Avoid toys that shoot objects that can injure eyes.

Arrows and darts used by children should have blunt tips made from resilient materials such as rubber or plastic suction cups. Avoid those dart guns or other toys that might be capable of firing articles not intended for use in the toy, such as pencils or nails.

For infants and very young children, avoid toys with long strings or cords. The cords may become wrapped around an infant's neck and cause strangulation. Never hang toys with long strings, cords, loops or ribbons in cribs or playpens where children can become entangled.

See that toys used outdoors are stored after play—rain or dew can rust or damage a variety of toys and toy parts creating hazards.

Examine toys periodically; watch out particularly for sharp edges and points that may have developed. Repair broken toys and discard toys that cannot be fixed. ➤

—CPSC Fact Sheet

DROPPED OBJECTS

the aircrew side

Dropped objects. It's not just up to maintenance to correct the problem; pilots can do a lot to eliminate them too.

Panels are one of the most frequent dropped objects. During your preflight inspection, pay special attention to panels and associated fasteners. They're frequently opened for routine through-flight inspections. Check the forms. Have any panels been opened before your sortie to perform some maintenance? Those are excellent candidates to be dropped sometime during your sortie, so give them an extra close inspection. Fasteners can appear to be tightened when they actually aren't. Before one sortie, a crew detected a large panel that had been opened to work on some avionics but hadn't been refastened or noted on the forms as having been opened.

Take a close look at any weapons load. Pylons and bomb racks should be checked to make sure they're securely fastened to your airframe.

Dropped objects increase during deployments. (Says something about those x-c preflights, perhaps.) A frequent problem is travel pods that aren't checked secure, resulting in downlocks, pins and personal baggage strewn all over the countryside. Never rely on transient alert to make sure your travel pod is really fastened.

That's certainly not everything there is to check on your specific airframe, but at least they should get you thinking about areas that might get overlooked during your preflight. Ask your local maintenance folks what specific parts are causing the most dropped object problems for your unit. They can use your help.

A good onceover after the mission is also important. Take a few seconds after your sortie to make a quick examination of your aircraft to make sure everything you launched with is still there. Despite your efforts before the mission, something might be missing. Knowing you've lost something en route will ensure that it's documented and replaced before the next sortie.

Get to know the outside of your aircraft as well as you know the inside so maintenance and ops folks can cut down on that unpleasant name for aircraft parts—DROPPED OBJECTS. ➤



HARRISON



DOWN TO EARTH

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

Play it again, Uncle Sam

Last year, TAC lost 40 very valuable people—16 of those deaths involved alcohol. That's almost half the total TAC fatalities. Whether you take to the road to visit friends or relatives or to attend a party, know your physical limitations and don't drink and drive.

If you're going to travel to be with friends or family during the Christmas and New Year holidays, beware: road conditions could be poor due to snow and ice. There are fewer daylight hours—driving at night affects vision. And many other drivers are also traveling which results in crowded highways. Some of those travelers will be driving under the influence or they may be pushing to get to their destination and will be tired or just irritated at the amount of traffic on the road. You must be ready to react.

Your best defense to prevent injury is to wear seat belts and to use child safety seats. Your second best defense is to plan ahead. Be sure your car is in good running order and is ready for the weather conditions you are in or are going to be traveling in. Items to check are the ignition system, battery, lights, antifreeze, wiper blades and

wind shield washer, fuel and exhaust systems, oil, brakes, defroster/heater, air conditioner and tires.

Keep your gasoline tank as full as possible. This will minimize water in the tank and will provide the maximum advantage in case of trouble. Consider using a CB radio on long trips, especially if you will be traveling in snow country.

Carry a winter storm car kit: sleeping bags or blankets, matches and candles, winter clothing—wool caps, socks and gloves—first aid kit, flashlight with batteries, sand or kitty litter—to get traction if you get stuck on snow or ice—tire



chains, shovel, small food supply, tools, wind-shield scraper, transistor radio with batteries, battery booster cables and several of the latest issues of *TAC ATTACK* magazine so you can read about winter driving and what you should have done to prepare for the unfortunate event of becoming stranded on the road.

Merry Christmas and Happy New Year!

The perfect party

Most party hosts carefully plan the elements that make an enjoyable and successful holiday party. This holiday season TAC Safety is asking everyone to join in a *holiday campaign* to plan ahead so parties have happy endings. An alcohol-impaired guest could become the agent of death or injury to other people as well as to him or herself.

Consider these suggestions:

- Serve food first. This shortens total drinking time and helps block alcohol's absorption into the bloodstream (especially high-protein foods, like meat and cheese).

- Use a bartender. Guests are likely to drink less if they have to go to a stranger. Hosts who serve as bartenders tend to overpour.

- Have nonalcoholic drinks readily available.

- Refrain from pushing alcoholic drinks; put your guests at ease about selecting the non-alcoholic drinks.

- Provide chairs. People who stand up tend to sip their drinks more often than if they were sitting down engaging in conversation.

- Bring out a nonalcoholic drink (coffee, tea) about 1 hour before the party should start break-

ing up. Caffeine doesn't sober a person up, but the time allows the body to get rid of the alcohol.

- Remember: *Friends don't let friends drive drunk.* Convince guests who have had too much to drink to stay overnight, to ride home with someone else or to go home in a taxi—a taxi that you call.

- Support other guests who may be trying to get an individual to give up the car keys, to ride home with them or to call a taxi.

- And consider suggesting carpool arrangements to your friends as part of the invitational process so one person in each group becomes the designated driver and stays sober for the evening.

We work smart—let's play smart.

TAC Special Achievement in Safety Award

On 28 October, the 549th Tactical Air Support Training Group celebrated 15 years of mishap-free operations in O-2 and OV-10 aircraft. This remarkable safety record has been achieved in the demanding and challenging role of tactical air control operations and training.

Originally operating from Hurlburt Field, Florida, the 549 TASTG began both the development of forward air control tactics and the training of forward air controllers. During 1971-72, group activity was at its highest level in meeting the need for forward air controllers for the Vietnam War. Training included multinational students and recent UPT graduates with no tactical experience.

Following consolidation and a move to Patrick AFB, Florida, in 1976, students and instructors have continued their enviable safety record. The O-2 Skymaster, now removed from the inventory, accounted for 33,477 sorties involving 66,021 hours. Their

OV-10 Broncos have flown mishap-free for 48,403 sorties and 91,970 hours. With delivery of the T-37, the 549 TASTG continues to develop new operations with flying smart an integral component of mission accomplishment.

Forward air controllers from the 549 TASTG have participated in every type of major exercise within the continental United States and Canada. Over 2600 students have graduated from formal training in the replacement training unit. Although many students have no experience beyond UPT, with little over 40 hours instruction, solo students are ready to control live airstrike missions. With the commander's belief that every instructor is a safety officer, students graduate with a firm understanding of self-discipline and mission accomplishment.

Safety efforts of the group have been lauded in areas of bird avoidance and G-induced loss of consciousness. A video tape developed by the 549th Chief of Safety on mis-



549 TASTG, 507 TAIRCW
Patrick AFB, Florida

orientation is now used Air Force-wide. Numerous aircrew of distinction awards and individual safety awards attest to the safety efforts of 549 TASTG personnel.

As of 31 July 1986, the 549 TASTG completed 150,991 hours and 81,880 sorties. To the 549 TASTG, safety is "sustained mission accomplishment." They believe in doing it right the first time, everytime.

TAC INDIVIDUAL SAFETY AWARD

A1C Robert V. Frank, an aircrew egress systems mechanic, discovered a potentially dangerous condition when he was installing a parachute on an OV-10 aft ejection seat while it was in the egress shop. He was connecting a manual ripcord cable to the release handle and noticed that the cable appeared to be too long. Airman Frank immediately notified his supervisor, and a check of the cable travel was conducted. They discovered that after the release handle reached full travel, the cable had not yet begun to pull out the ripcord pins that allow the parachute to open. Thus, in the event of emergency, the manual deployment of the aft seat

parachute would not operate.

Airman Frank suggested that the other OV-10 aircraft be checked for the same condition; so a one-time inspection of all assigned OV-10s was conducted. Of the 30 aircraft inspected, the aft seat cable on 23 aircraft was found to be too long. A message was sent to all bases possessing OV-10 aircraft to advise them of this potential problem.

Airman Frank was paying attention to detail when he realized the cable appeared too long. His discovery and follow-up actions prevented the loss of an OV-10 aircrew member in the event the manual parachute deployment handle had to be used.



A1C Robert V. Frank
35 CRS, 35 TTW
George AFB, California

WANTED

F-15 PROJECT OFFICER

The HQ TAC Flight Safety Office will be hiring an F-15 pilot to report June 1987. We're looking for a major or major-selectee who "needs" a staff tour, wants to continue flying status and cares about F-15 operations and systems. He'll fly with TAC units, work with TAC, USAFE, PACAF, AFSC and AFLC staffs (plus MCAIR, Pratt and Whitney and other contractors) and never be bored. If you know someone who fills the bill, ask him to write TAC/SEF, Langley AFB, VA 23665-5001 or call AV 574-7031.





TAC TALLY

CLASS A MISHAPS
AIRCREW FATALITIES
TOTAL EJECTIONS
SUCCESSFUL EJECTIONS

TAC		
OCT	THRU	OCT
	1986	1985
5	24	14
3	10	9
4	19	11
3	18	8

ANG		
OCT	THRU	OCT
	1986	1985
1	6	12
0	1	7
1	9	8
1	8	8

AFR		
OCT	THRU	OCT
	1986	1985
1	2	1
0	0	1
1	2	0
1	2	0

TAC'S TOP 5 thru OCT 1986

1st AF	
class A mishap-free months	
179	84 FITS
74	318 FIS
24	49 FIS
20	325 TTW
9	57 FIS/5 FIS

9th AF	
class A mishap-free months	
44	33 TFW
17	507 TAIRCW
16	23 TFW
15	56 TTW
14	1 TFW

12th AF	
class A mishap-free months	
42	366 TFW
26	355 TTW
24	479 TTW
24	27 TFW
23	37 TFW

ANG	
class A mishap-free months	
207	182 TASG
191	110 TASG
166	138 TFG
148	177 FIG
143	114 TFG

AFR	
class A mishap-free months	
74	482 TFW
73	301 TFW
64	924 TFW
52	906 TFG
48	442 TFW

DRU's	
class A mishap-free months	
187	USAFTAWC
121	28 AD
66	24 COMPW

CLASS A MISHAP COMPARISON RATE

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

TAC	1986	4.8	6.8	5.4	4.4	4.1	3.7	3.6	3.2	3.4	3.9		
	1985	3.2	3.4	2.7	2.4	2.9	2.7	2.5	2.6	2.5	2.3		
ANG	1986	4.3	2.4	3.1	2.3	2.7	3.0	2.5	2.2	2.5	2.6		
	1985	4.8	4.8	3.0	4.3	4.2	4.9	5.4	5.2	5.1	5.0		
AFR	1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	4.5		
	1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.4		

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



IT SEEMS T'ME, THAT IN THESE TIMES OF UNREST IN SO MANY PARTS OF THE WORLD...



WHEN OUR MINDS IS OCCUPIED WITH THOUGHTS OF WAR AND THE

HARRISON



POSSIBILITY OF TOTAL DESTRUCTION OF LIFE AS WE KNOW IT, WE COULD TAKE JUST A FEW MOMENTS



DURING THIS FESTIVE AND VERY SPECIAL TIME OF THE YEAR TO THINK OF FAMILY, FRIENDS, NEIGHBORS AND THE BIRTHDAY WE CELEBRATE THIS MONTH.

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HE WOULD LIKE THAT.



MERRY CHRISTMAS FROM ALL OF US HERE AT HEADQUARTERS TAC SAFETY.



WE'LL SEE YOU NEXT YEAR. RIGHT GUYS?

SURE, LOOK FORWARD TO IT.

I FEEL IT'S GONNA BE A GOOD ONE.