

TAC ATTACK

NOVEMBER 1990



Bailey '90

ANGLE OF ATTACK

Think back to your last aircrew meeting as you sat there listening to the Wing Commander. What would have happened if he paused and asked for a show of hands of all the "dumb aircrews"? Do you think you would have seen any hands raised? I think the answer is probably no, unless of course times have changed. So if all our TAC pilots, WSOs, and EWOs are smart enough to finish college, make it through pilot or navigator training, and then complete a formal flying and academics course in a front line fighter, why are we still having **dumb accidents**? You know which mishaps they are guys. The ones you read and then you look back at the report and say "that was dumb." Well the accident doesn't happen by itself. Somebody had to fly the airplane and/or work the systems. So if an aircrew caused a "dumb accident," does that mean they are dumb? I doubt it. Misguided, uninformed, or complacent maybe, but **not** dumb. Well, we had more dumb accidents in Fiscal Year (FY) 90 than most of you have fingers to count on. We lost a number of valuable aircraft, but, more importantly, we needlessly lost too many of our fellow aviators. So what can we do, and, a lot closer to home, what can you do to help prevent more of these mishaps?

Waiting for the Human Factors Engineers to come up with "the answers" won't help us for at least another two or three years. But anyone of us during the flight briefing from lead to blue four, should ask ourselves, "Does this make sense?" If it doesn't, then as Major Rightmyer points out on page fourteen, we probably shouldn't be doing that! Or later, if we observe something wrong during the flight, do we bring it up only if it's so critical it demands an immediate radio call? What about those less serious areas, do we discuss them during the debrief, or do we just say, "Nah, that's ok, it's not my place"? If we let it slide, are we not increasing the risk of yet another



mishap? As Brigadier General Ball wrote last month, "Thinking Safety" is not enough; we have to be willing to "Live Safety." We must take that extra step to put that "thinking" into practice, and that will help keep us and our wingman out of the proverbial smokin' hole.

In spite of the losses, TAC ended FY 90 with the second lowest number of Class A/B flight mishaps in the history of TAC. Additionally, it was our best year by a fairly substantial margin for both weapons and ground safety. Overall, I would rate FY 90 as one of the best years TAC has ever had in safety. **Who deserves the "kudos" for this? You do!** Each and every member of TAC and their families who have supported them so well.

Your effort up until this point in support of Desert Shield continues to be slightly above the magnificent level. Keep at 'em, pardner!

Heads up guys! Although November is predominantly known for good clear weather, this is the month when it can turn nasty all too quickly.

Finally, we want to welcome three new replacements who arrived at HQ TAC Safety — SMSgt Arnold J. Byrd, Weapons Safety; MSgt Ralph Mazzuca, Ground Safety; and Mr Ronald R. Smith, *TAC Attack*. These professionals are here to assist you and TAC in achieving smart mission accomplishment.

Happy Veterans' Day, pardner!

Jack Gawelko
JACK GAWELKO, Colonel, USAF
Chief of Safety

TAC ATTACK

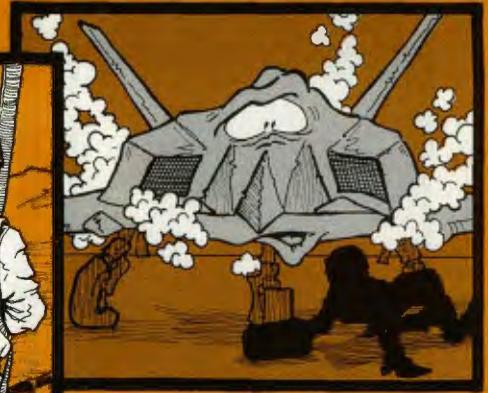
DEPARTMENT OF THE AIR FORCE



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TAC SP 127-1

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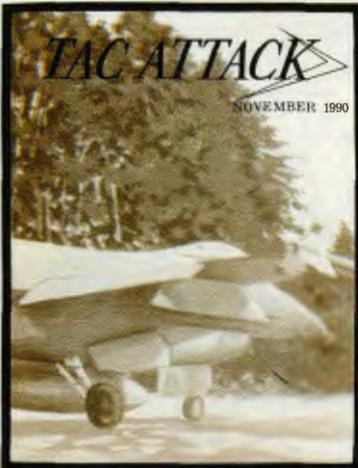
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RESCAP, FOR REAL

Capt Martin J. Valasek
426 TFTS/FSO
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This is not your common headline story of a hero pilot who, at the last minute, saves himself and his jet from spinning out of control. This is a follow-up story about being a wingman watching your flight lead snap out of control, into a spin, never to recover, and the ensuing rescue mission.

The objective of our mission centered on practicing all-aspect basic fighter maneuvers (BFM) over the western Arizona desert, a simple task for two highly experienced instructor pilots. The mission progressed through two

uneventful hard turning, aggressive engagements with the flight lead as the defender. The next set-up, a close-in engagement focusing on air-to-air gun employment, was not so routine.

We had engaged at 21,000 feet and completed approximately a turn and one-half to the left. I stayed in lag behind the flight lead about 2,000 to 3,000 feet striving to maintain my offensive advantage. Then I saw the picture I'll never forget. His nose pitched up slightly into my plane of motion, to the right, trying to jam me and force an overshoot. Suddenly, his



nose violently pitched down and yawed in the opposite direction, which was to the left. His jet seemed to just stop in space. I had a vector away from him that easily avoided his aircraft. By the time I passed him (which only took two to three seconds), his aircraft had already spun completely around (360 degrees) with his nose tracking right through my airplane.

My first thought was “Jink,” then, “Wow, I’ve got to find out how he did that when we get back!” His aircraft continued to move in an abnormal plane of motion. In the split second that followed, the realization set in that I had just had a front row seat to an aircraft departing and then rapidly entering a spin. I had seen this motion only once before, in a

film on how difficult it would be for such an event to happen with the F-15 Eagle. At first, I could not believe what I had just witnessed. After a few explicatives, I got my adrenaline under control and called “knock it off, knock it off.” I started to think . . . he’s probably applying anti-spin controls to break the spin. Nothing happened. Then I thought, well maybe he can’t tell which way he’s turning, so I called on the radio. . . “You’re turning left, you are turning to the left. . .” Still no recovery. I was just about to call “check altitude,” as I watched the Aces II ejection seat rocket away from the flat spinning jet.

I knew it was time to initiate RESCAP operations. The many years of talking about and briefing different RESCAP options

were very well ingrained, as I found out. Several things began to pop into mind at random, yet from hindsight, it wasn’t all that unorganized. My initial contact was with the SOF. It was a little shaky. . . I’d never had to make such a radio call before. The SOF apparently couldn’t believe his radio either, because it took a couple of transmissions to get the point across that my flight lead was down.

I had a lot of time, as I found out, to accomplish all of the essential items to get the rescue operation started. It all seemed to go in a logical progression. My first task, contacting the SOF, happened even before the pilot landed in his parachute. I watched the aircraft impact the ground, an awesome experience I’ll never

RESCAP, FOR REAL

forget. As the chute slowly descended, I was able to mark the location with my INS, update the system, and pass on the coordinates, with a general description relating to key geographic points in the vicinity. In addition, I backed it all up with TACAN cuts. It was actually hard, even on a clear VFR day, to maintain visual contact with the small parachute. I suppose that's why it's imperative to stay above the ejection altitude until it's safe to descend to a lower altitude. The emergency beacon went off right at the time of ejection, which created a lot of comm jam on Guard. Several minutes passed until I was able to establish contact with the downed pilot. I could see the deflated canopy from quite a distance, but not the downed pilot (even after a few low passes). The pilot wasn't able to establish radio contact either, so he popped one of his day flares. What a relief to see that orange smoke. I was so relieved that I did a couple of exaggerated wing rocks to try and signal to the pilot that I had seen him. Eventually, we connected on Guard and then switched over to 282.8. The downed pilot observed a road with some traffic (imagine that, in the middle of the desert!)

and wanted to walk over to it. I had some second thoughts because I had to climb now for fuel and to reestablish radio contact with the SOF. I didn't want him to separate from his chute, but the road wasn't very far away and I knew that it would be an easy point of reference to direct the helicopters to when they arrived. It took a while for the helicopter to launch from a nearby base (90 miles away), so I throttled back to max endurance and used a familiar bingo from the area. During this time, I felt it would have been helpful to have another radio. I wanted to monitor three different frequencies: the SOF, 282.8, and the area frequency. I didn't want anyone else wandering into my airspace and becoming a conflict. As it turned out, I had plenty of offers to help out (which were greatly appreciated), but not needed at the time because I wanted to keep the area clear of traffic. I reluctantly gave command over to another two-ship of Eagles that had just come off a tanker. I wanted to stay, but my fuel gauge was saying time to go. The new flight lead was already in contact with the downed pilot and had a visual with the wreck and the para-

chute. My own recovery was uneventful; the squadron had been monitoring the radio; so recovery operations were already in progress when I landed.

Looking back, the ejection and RESCAP operations all went by the book. There's very little I would change if it had to be done over again. Some key points (lessons learned) walking away from this experience are (a) RESCAP ops is a mandatory briefing item, so use the time in the brief to bring out one or two important items and how they fit into your overall plan for mission execution, (b) if someone jumps out, note the ejection altitude and don't go below it unless you have visual with the chute (and it goes down slowly), (c) use familiar bingos, area references, etc., to keep things simple, (d) other aviators are always more than willing to lend a hand, i.e., when it's time to leave the area (at bingo), leave, and hand off the RESCAP, (e) take your time, there's lots to do but you have adequate time to do it. Lastly, recognize that these events relate to peacetime operations — a combat scenario may significantly complicate the issue.



TAC AIRCREW OF DISTINCTION AWARD



First Lieutenant Mike Fantini was flying as number two on a local F16 Basic Fighter Manuever (BFM) mission. While entering the practice area, Lt Fantini experienced smoke in the cockpit and his jet began trailing smoke. Lt Fantini immediately began to squawk emergency and set the throttle at 83 percent. While setting up the return to Moody, his aircraft experienced total loss of engine oil pressure. He and his flight lead contacted the SOF and climbed to 14,000 feet. During the 5 minute return flight to Moody, Lt Fantini carefully executed all applicable checklist procedures.

At 12,000 feet over the field, he began a right turn to descend to his desired hold key. At that time, he experienced a hard bang and a chug followed by a loss of thrust and, subsequently, loss of all engine RPM. Lt Fantini maneuvered his aircraft to set up the desired base key, performed an alternate gear extension, and executed a flawless flamedout approach. He stopped the aircraft on the runway and egressed normally. Due to his outstanding airmanship, Lt Fantini successfully recovered a valuable TAC asset and earned the TAC Aircrew of Distinction Award.



1Lt Michael A. Fantini
68 TFS, 347 TFW
Moody AFB GA





Try Harder and the great turkey hunt

TRY HARDER AND THE

Jimmy Campbell
1 AF/SEW

It's hunting season. Try Harder could already feel the excitement building. Fall was in the air, the leaves were painted brilliant yellows and reds, and the weatherman was predicting a light blanket of snow. It was time to get that Thanksgiving turkey; and if everything went right, there might even be another one for Christmas. Try was very much an aviation buff; and he figured shooting turkeys would be just like pulling lead to shoot down a Mig, particularly if he got a shot at one trying to fly away. He wanted to show off his low strafe score (read marksmanship); so he planned to invite his neighbor, Jim, to come along as an official

witness. Try would tell him he was inviting him because it was safer to have a buddy along when going into the woods. Since Jim was a safety professional by trade, how could he say no to that?

It was a crisp, cloudy morning with a light dusting of snow as they packed Try's 1966 Mustang convertible with all the required hunting gear — shotguns, plenty of ammunition, hunting licenses and turkey calls. Jim also brought along an orange hunting vest. Try didn't want one because he had heard that turkeys could see colors. Try also brought along his little secret bottle of liquid spirits. Try was sure Jim wouldn't approve of it, but he would be plenty

happy about it after they got to that cold cabin.

They were off. The snow began to fall as they headed west. It was about a hundred miles to a little cabin Try had purchased several years ago. As they left the blacktop to drive the last mile to the cabin, Try noticed the country road was covered with a foot or so of fresh snow. SLIP, BUMP, BANG! He hadn't driven more than a couple of hundred feet when the Mustang slipped off the road and slid into the ditch up to its head lights in snow. The car was stuck, it was getting dark, and they were cold; so they decided to hike on to the cabin. They would leave the car for later



GREAT TURKEY SHOOT

and possibly the help of a passerby with a big four-wheel-drive truck. They arrived at the cabin, built a fire, cooked some grub and settled in for the evening. Try offered to share some of his liquid spirits, but Jim got mad saying that guns and liquor don't mix. Try promised not to get the bottle out again.

The next morning dawned clear and cold, a great day for hunting. After a hearty breakfast, they dressed and headed out. Jim was wearing several layers of lightweight clothing so he could adjust his protection as necessary. Try wore a huge insulated coat he was sure would protect him from anything short of the North Pole.

It wasn't long before Try discovered the error of his way, but he wouldn't admit it to Jim.

The hunting wasn't very good, so they headed deeper into the woods. Try was getting so warm inside the heavy coat, he finally admitted his error and unbuttoned it. It wasn't long before he started chilling with the cold air against his sweaty clothes. Since they hadn't spotted even one turkey, they decided to take a shortcut back to the cabin, so Try could change into some dry clothes. About halfway back, they came across a small pond that had iced over. Jim warned him, but Try insisted on cutting across it. After all, it had been below freezing off

and on for several days, besides the water wasn't over about four feet deep. Crrrack, Splash! Try made it almost all the way across when the ice broke dumping him in over his head. Jim managed to locate a long limb that he pushed out on the ice for Try to grab onto. Between the two of them, they managed to pull Try to shore. Jim gave him some of his layered clothing and helped him back to the cabin.

Try had lost his gun in the pond and neither of them felt much like doing any more hunting that day, so they just stayed around the cabin and warmed up. The next day Try also dressed in layered clothing and borrowed an



TRY HARDER AND THE GREAT TURKEY SHOOT



extra gun that Jim had brought along. They hunted all day, but saw only one wild turkey.

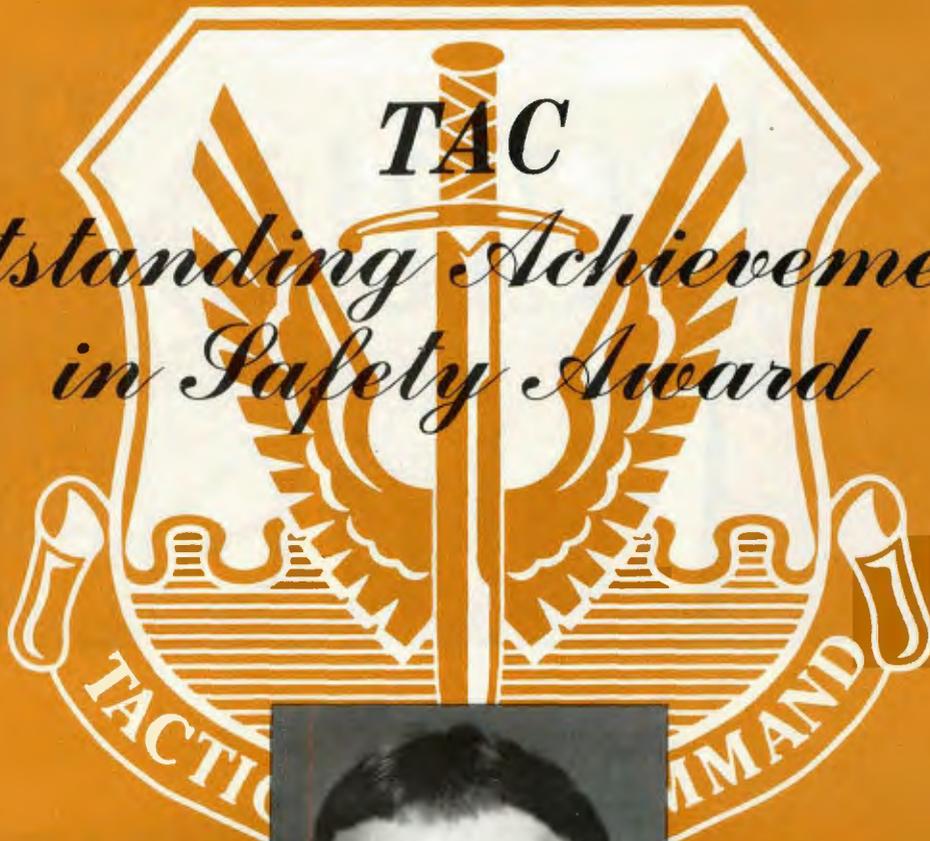
Towards evening with no turkeys to their credit, they decided to check on the Mustang. As Try approached the car, he jumped up onto a fallen log covered with snow. SLLLIP, Boom, BANG! He fell off the log and dropped the shotgun. When it hit the ground, it fired, discharging a full load of shot into the right headlight of the Mustang. That was enough, they headed back to the cabin for the night. The next morning they

packed up to head back home. They flagged down a man in a big pickup truck. He hooked his winch to the rear bumper of the Mustang and began to pull the car out of the ditch. SNAP, BANG the rear bumper of the Mustang came flying off. The guy in the pickup reattached the winch cable to the rear axle and pulled again. This time the car came out of the ditch with only a small gouge in the door where it had been crushed by a rock in the ditch. Try and Jim headed home thankful the turkey shoot was over.

A few days later Try and his wife invited Jim and his wife over for Thanksgiving turkey. Try's wife was heard to say to Jim's wife, "Isn't it wonderful how the boys shot this big fat turkey for Thanksgiving. I understand how it got frozen being out in the cold woods for a couple of days, but I wonder why they placed the neck and gizzard in plastic bags and stuffed them back inside the turkey?" Try and Jim smiled at each other and kept on eating turkey.

TAC

Outstanding Achievement in Safety Award

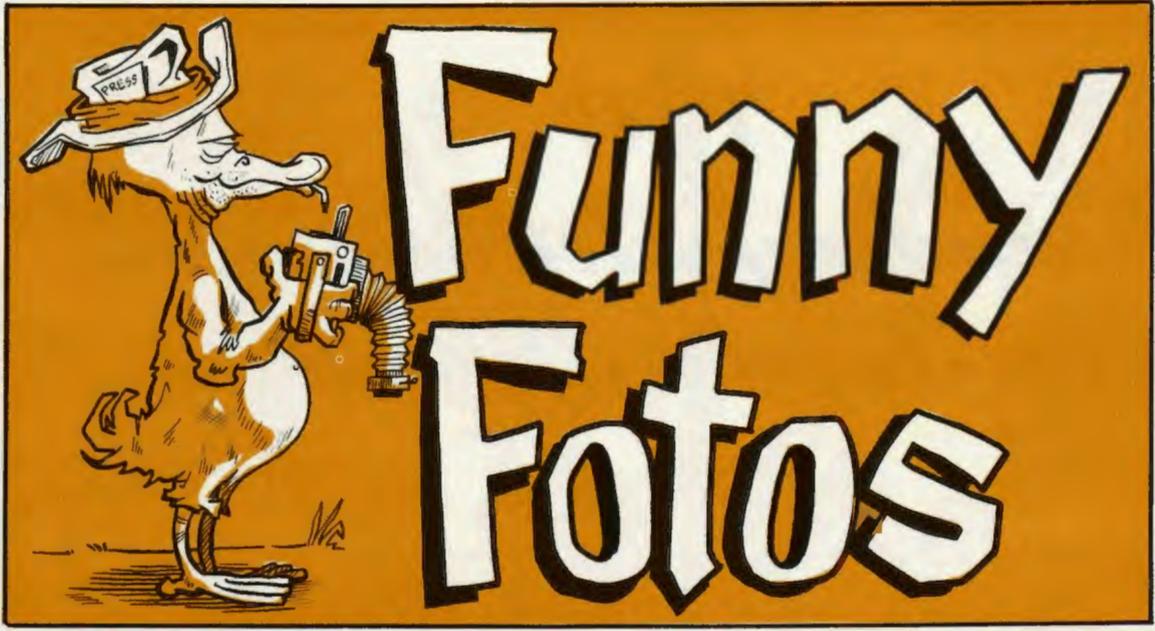


Sergeant Robert M. Keelin was assigned as mid-shift driver in support of the 312th Aircraft Maintenance Unit, 58th Equipment Maintenance Squadron, 58 TTW, Luke AFB AZ. Sgt Keelin, in preparation for his shift, conducted an operator's inspection of the vehicle he was to drive. During this inspection, he noticed the bolts and spacer plate were missing from the left front torsion bar. Sgt Keelin, realizing the potential foreign object damage (FOD) hazard, immediately got in another vehicle and searched the flight line for the missing hardware. After two hours of searching, he had found all of the missing hardware, thereby eliminating possible aircraft downtime due to FOD. Sgt Keelin reported the problem to his supervisors and the vehicle control NCO. Upon further investiga-



Sgt Robert M. Keelin
58 EMS, 58 TTW
Luke AFB AZ

tion, it was discovered that all the 1990 bobtailed munitions handling vehicles of this manufacturer were defective. A material deficiency report (MDR) was submitted and the vehicles removed from flight line use pending the MDR outcome. Because this type of vehicle is also certified for operations involving nuclear weapons, a Dull Sword report was submitted to ensure all users were made aware of this potentially dangerous condition. As a result of the MDR, Chrysler Corporation provided a replacement kit of longer bolts which corrected the problem. Sgt Keelin's quick thinking and use of proper notification procedures prevented a potentially dangerous situation from occurring and earned him the TAC Outstanding Achievement in Safety Award.



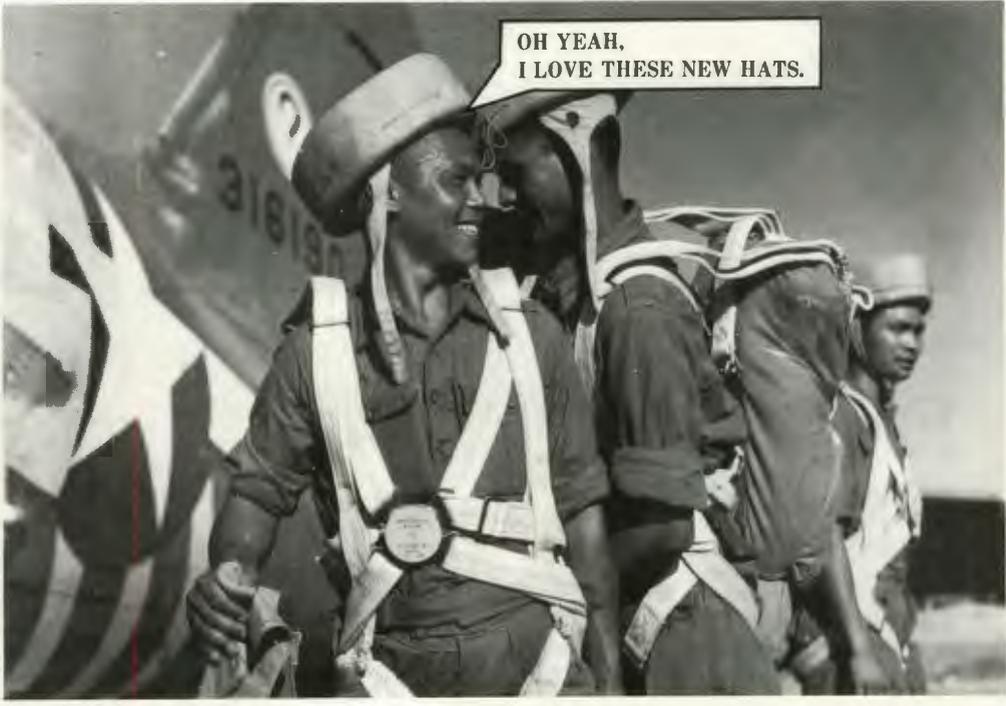
Funny Fotos





THE COLONEL. LOOK AT THE SIZE OF THIS BIRDY.

YEAH. IMAGINE WHAT THE RACKET LOOKS LIKE.



OH YEAH, I LOVE THESE NEW HATS.



ASK IF THEY DELIVER.

YES, I'D LIKE 2,156 CHEESEBURGERS, HOLD THE MAYO . . .

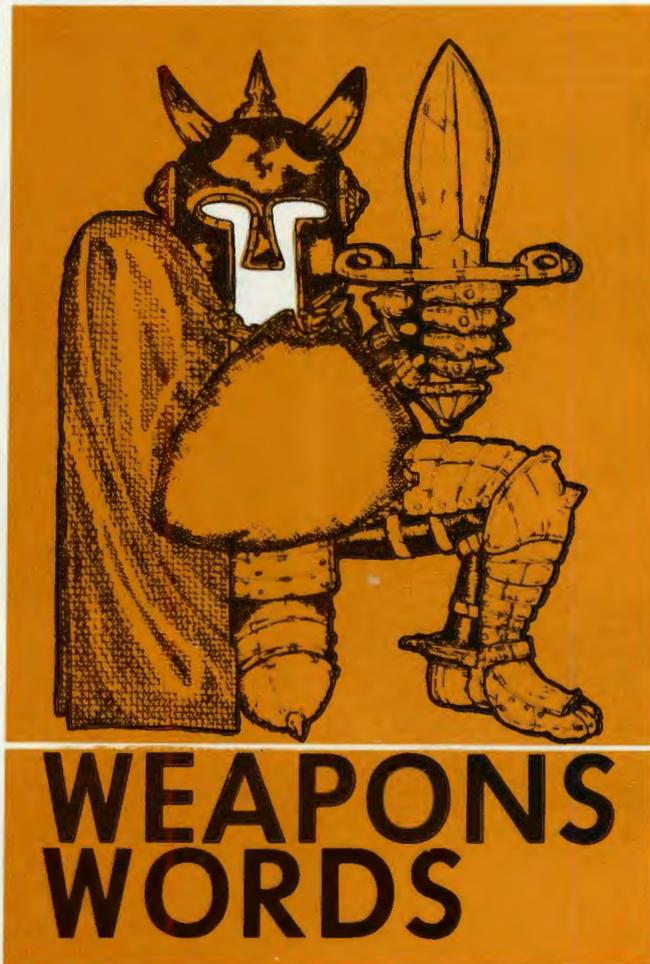


EXCUSE ME SIR, THIS ISN'T THE COCKPIT.



JUS' TELL OPS SHE'LL BE READY IN 5 MINUTES!

EXPLOSIVES AND THE ENVIRONMENT



MSgt James M. Aust, Jr.
HQ TAC/SEW

The crash site had been secured. The aircrew members were shaken, but glad to be alive. The rescue helicopter had already taken them back to the base. Charred trees and a blackened fuselage marked the final resting spot of the former fighting machine. EOD had safed the live MK 82 bombs which had been torn from the plane during the impact. Those bombs had been declared unserviceable, but safe for transport, and were loaded onto an appropriate government vehicle. But the driver was not allowed to depart the scene. The state police who had been such a help in securing the area earlier were saying the vehicle containing the damaged MK 82s would not be permitted on the public highway without a "hazardous waste manifest." The on-scene commander called his weapons expert over to help

resolve the impasse...

It wasn't until recently the Environmental Protection Agency (EPA) redefined toxic and hazardous waste to include unserviceable munitions or explosives and began enforcing those new requirements on Air Force personnel. When munitions or explosives can no longer perform or be used for the purpose of their original design, they are treated as hazardous wastes (i.e., items declared unserviceable). Our explosives community has taken on a more formal role and legal responsibility for protecting our environment from contamination caused by any unserviceable munitions. The following information provides some of the basics for understanding these newly enforced requirements for transporting explosives hazardous waste.



Explosives waste are considered "reactive hazardous waste" and are given the identity number of D003 under the Resource Conservation and Recovery Act (RCRA); a complex law and accompanying regulations that are enforced by both federal and state regulators. We in the Air Force must comply with both the law and regulations. Transporting such waste requires your base environmental coordinator to notify federal and state regulators of your activities and to acquire an official transporter's identification number. Transporting such waste on public highways (unless the transportation involves merely crossing a public highway to get to the "other side") requires a hazardous waste manifest

completed in accordance with AFR 19-11, Hazardous Waste Management and Minimization. Personnel engaged in explosives hazardous waste transportation activities must have adequate hazardous waste training. In most cases, the present training syllabus you receive will satisfy these requirements, established by EPA laws.

There are many federal laws and regulations controlling our actions with explosives hazardous wastes. The above information isn't all inclusive, but it provides you with enough information so you can ask the right questions. Your base environmental coordinator is the best source for answers to your specific situation.

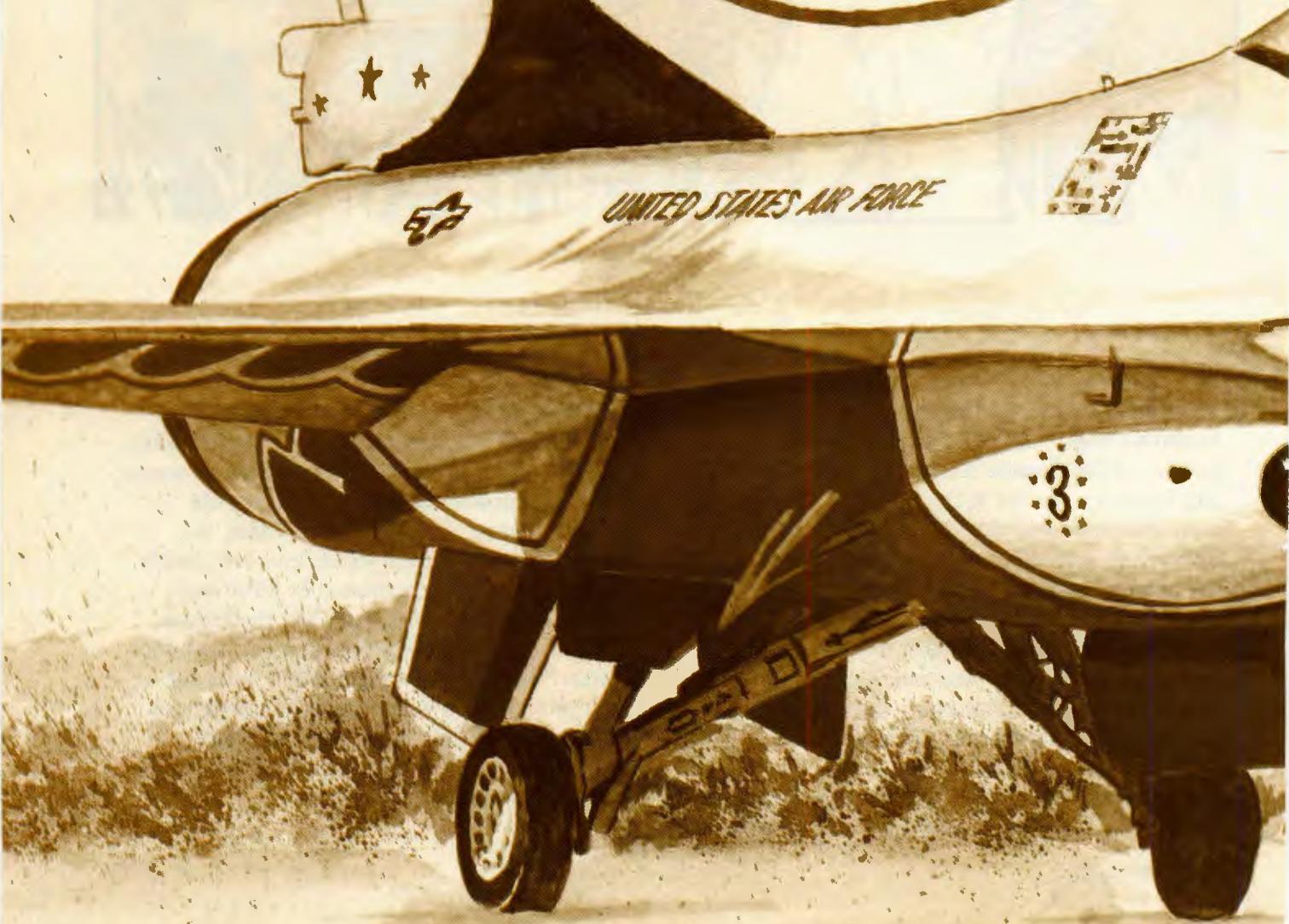
USAF



UNITED STATES AIR FORCE



3





Bailey '90

BEEN THERE, DONE THAT



Been there, done that

Lt Col Richard A. Kirkpatrick HQ TAC/SEF SPO-15

Night, weather-intercept alternate mission, an inflight emergency and an inexperienced crew combined to produce one of the most amazing mishap stories in recent history. Place yourself in the crew's position during each phase of this story and determine what you would have.

It was the second mission of the day. The night range mission was scrubbed for weather and a backup mission of intercepts in the over-water range was planned. Weather was layered clouds from 2,000 to 8,000 feet, clear above. The mission went as briefed until completing the last intercept. The lead aircraft directed a rejoin and entered an easy left turn. The wingman went blind and re-

quested a "burner flash" from lead. Almost immediately, the wingmen experienced dual generator failure. The wingman turned toward land when he spotted a flashing red position light at the approximate location they expected lead and began a rejoin, using afterburner. The crew was using the standby ADI, DC powered floodlights, and standby compass to navigate with, and had no radios other than Guard receiver. The VOR/ILS still worked, but the crew did not realize this and did not attempt to use it. Each generator control was reset once during the rejoin attempt but neither one reset. Fifteen minutes after the dual generator failure the crew completed the rejoin on

what ultimately turned out to be an airliner. Because of afterburner use, they had significantly reduced the fuel remaining. Additionally, the rejoin removed them a significant distance from the scheduled airspace and kept them over water. After two minutes on the airliner's wing, the crew realized they were not going to attract his attention and turned for land. By now they did not have sufficient fuel to make the shoreline and made a controlled bailout over water.

The mishap pilot was never found, but the WSO made a successful ejection and entered his life raft. After a short rest the WSO pulled his rucksack into the raft and emptied the contents,



including a significant amount of water, into the raft. He bailed the water out of the raft using his helmet, at the same time he dumped most of the rucksack contents overboard also since nothing was secured. He attempted to use the PRC-90 survival radio, but it had gotten wet because the cover was not properly attached. He spent the next several days trying to contact a variety of ships and aircraft he had seen, but did not have any luck. Finally, six days after ejecting, he spotted a fishing boat passing nearby. Desperate to contact it, he stood up in the raft, waving his arms and yelling, and then fell in the water. The fall cost him his jacket, space blanket, helmet, and most of the remaining

survival items, but luckily the fishing boat had seen his splash and picked him up. This occurred one day after search operations had been suspended. The final result of the investigation attributed this mishap to the wingman's lost visual on lead, the failed generators, and the mishap crew's failure to adhere to NORDO procedures and general loss of situational awareness (SA). This was a worst case scenario. There would not have been a mishap if: 1) the crew had kept the visual on lead; 2) the crew had accomplished the NORDO procedures; or 3) if the mishap crew had turned towards land rather than chasing an airliner 140 miles out of their assigned airspace.

Changes were made as a result of this mishap to both the aircraft and the survival equipment. But those changes won't prevent the loss of SA that caused this crew to run out of gas while rejoining on an airliner. Only preparation, knowledge, and practice will keep this type of mishap from occurring in the future to you or your wingman.



Maj Leonard C. Broline
 (Narrator)
 37 TFW/SEF
 Nellis AFB NV

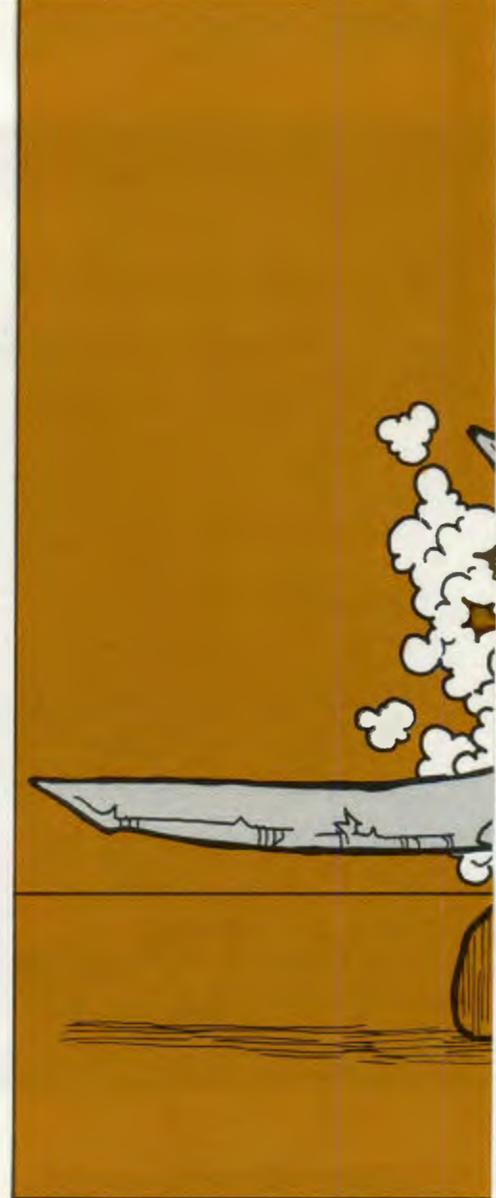
Late at night Tonopah Test Range is a tiny oasis of light in an otherwise black expanse of Nevada desert. After a couple hours aviating through the blackness, it's a small, but welcome relief to ease down final approach into the lights of runway 32. Not exactly the Las Vegas strip, and a long way from Mama and the kids, but a pretty good place to be if your intent is to land an F-117. One by one you accomplish the familiar litany of items that make up a successful recovery: Gear down, intercept glideslope, get on

speed, hold the aim point, flare, touchdown, deploy the chute, check the brakes, slow to taxi speed, and jettison the chute. You've pretty well got it knocked for tonight. Now to button this black jet up and taxi back in. A guy doesn't let down now, but let's be real! The flight's over! You're ready for the sack!

There is a master caution light that has other ideas. Punch it off (How bad can this really be? You're on the ground!). Check the problem: Environmental Control System (ECS) overheat light. Prob-

ably no big deal. The environment is well under control, thanks. Kill the bleeds, and take a peek at the checklist for helpful hints. Unlucky! There's black smoke rolling out from under the jet! Looks like it's time to become a pedestrian!

Okay, ground egress, here we go! Good thing you always practice this "1-2-1-2" business when unstrapping from the Aces II; . . . quick radio call to wake up the ground controller and fire department; . . . and Holy Cow! It gets dark in here when you shut down the engines!





Over the side (this is gonna hurt), and **THUD!** No style points, but nothing broken either. Well, now you **know** you're done for the evening. There's your own private parade of red lights headed down the parallel taxiway, but for now you're really alone among the taxi lights looking at a black jet that's . . . that's . . . is that thing starting to roll down the inclined taxiway towards the security fence? You need a chock, ole' buddy!

Check g-suit: no chocks.
Check dirt: no rocks. **Check**

guts: no glory, and no desire to place pink bod or appendage thereof in front of potentially careening airship. Um . . . harness! Yeah! You weren't gonna fly again tonight anyway. Out of the harness faster than the kid gets out of his Sunday suit; roll it up tight (life support's gonna hate this), shove it under the nose wheel, and motor back out of the way 'cause this beauty is still smokin'. Not bad—looks like it'll hold. **Now you're done, right?** Please?

Sure—just get out of the way,

because it's dark, and those fire trucks are coming on strong.





TAC AIRCREW OF DISTINCTION AWARD

Captain Douglas H. Dal Soglio, an AT-38B Instructor Pilot (IP), was leading a formation takeoff of a Lead-In Fighter Training (LIFT) syllabus mission at Holloman AFB NM. Following rotation at 150 knots, he experienced catastrophic failure of the left main gear scissors and a blown tire. Electing to continue his takeoff, Capt Dal Soglio accomplished the boldface procedure for tire failure on takeoff and left the landing gear extended. Not knowing the extent of the damage to his aircraft, he also left the flaps down. Once both aircraft were safely airborne, number two assumed a chase position. Declaring an emergency, the flight proceeded to the local holding fix and changed over to the local single frequency approach channel to discuss the situation with the supervisor of flying (SOF) and formulate a game plan for recovery. Surveying the damage to Capt Dal Soglio's aircraft, number two reported that the left main gear tire was shredded; the wheel rim chipped, cracked and no longer round; several hydraulic lines and electrical cables were severed; and, most significantly, the left main wheel assembly was now turned perpendicular to normal alignment. The



Capt Douglas H. Dal Soglio
436 TFDS, 479 TTW
Holloman AFB NM

next forty-five minutes were spent in holding as Capt Dal Soglio discussed possible recovery options with the SOF, wing supervision, and aircraft contractors. The scissor torque link connecting the wheel strut to the main gear trunion had failed allowing the wheel assembly to freely rotate. From the contractor's and flight manual guidance, it was obvious that landing on such a stub main gear was not possible. In addition, flight manual guidance stated that ejection was preferable to landing gear up without an external store. However, despite the recommendation of the flight manual, all were aware that at least one AT-38B had previously been successfully landed gear up on a pylon without an external store. With no decidedly "best" option available, the choice was left to Capt Dal Soglio. He could either fly the jet to the controlled bailout area and eject or attempt a gear up landing. Weighing all options, Capt Dal Soglio chose the latter and attempted to raise his landing gear. Examining the aircraft to evaluate the final landing configuration, number two noted that the nose and right main gear fully retracted, while the left main only retracted to within four inches of closed.

Additionally with all gear not up and locked, all three gear doors remained extended. This caused concern as to how the extended doors might affect touchdown stability, and the SOF was asked to confer with the contractors. In accordance with the flight manual, Capt Dal Soglio then selected both full flaps and full speed-brakes to offer increased directional stability after touchdown by having more surface contact than just the partially extended gear and center line pylon. Having intentionally reduced his fuel state, Capt Dal Soglio then departed holding with just enough fuel for one practice approach to

get the feel of his aircraft, followed by two actual landing attempts. Setting himself up for a shallow, power-on low approach to Holloman's widest runway, Capt Dal Soglio found no unusual handling difficulties throughout the flare of his first practice approach. While setting up for his first landing attempt, Capt Dal Soglio received word that the contractors had determined that the gear doors, previously thought to be a problem, would simply shear off on touchdown and not be a factor. Confident with his decision, Capt Dal Soglio flew a flawless final approach, 10 knots above computed normal speed, to a five point

landing on pylon, flaps and speed-brakes and touched down on center line approximately 1000' from the runway threshold. Using only his rudder, Capt Dal Soglio was able to maintain control while on a 2300' slide down the runway, coming to rest only ten feet from center stripe. As had been briefed, both he and his student then performed an emergency ground egress after coming to a stop. The flight discipline, teamwork, creative problem solving, and superior airmanship of Capt Dal Soglio saved a valuable aircraft and earned him the TAC Aircrew of Distinction Award.



TAC Personnel Who Have Made Noteworthy Accomplishments To Unit Effectiveness

MSgt Leo D. Beaucage
37 TFW
Tonopah Test Range NV

MSgt Robert D. Reid
SSgt Randy G. Greenwood
132 TFW
Des Moines MAP IA

Lt Col Scott Stephens
Capt J. T. Yelle
479 TTW
Holloman AFB NM

SrA Eric B. Miller
4 CRS, 4 TFW
Seymour Johnson AFB NC

TSgt Michael Carter
SSgt Brian Ketcham
49 TFW/EMS
Holloman AFB NM

A1C Jeffery A. Brueck
41 ECS
Davis-Monthan AFB AZ

Maj James S. Logan
HQ TAC/IG
Langley AFB VA

Capt Richard J. Dennee
436 TFTS/479 TTW
Holloman AFB NM

Lt Col James B. Smith
Capt John E. McNeil
94 TFS, 1 TFW
Langley AFB VA

Maj William G. Polowitz III
Capt James A. Grahm
336 TFS, 4 TFW
Seymour Johnson AFB NC

1Lt Grant G. Rutlin
21 TASS, 507 TAIRCW
Shaw AFB SC

Situational Awareness

A Viewpoint

Capt John S. Clark
21 TFTS/FSO
George AFB CA

“Two Nieuports were flying at a great height on the far side of their lines, but I did not attack them . . . Then I saw two Caudrons that had hitherto escaped my notice wandering about below. When I went for one of them and began to shoot, I saw one of the Nieuports diving down on me . . . I broke away from the Caudrons and bore northward, with the Nieuport behind me in the belief that I had failed to notice him. I kept a sharp eye on him until he was within two hundred meters of me — then I suddenly went into a turn and flew at him.”

This quote from Michael Spicks in his article in the Winter 89 issue of **MHQ: The Quarterly**

is attributed to Oswald Boelcke, German fighter pilot and WWI ace. Boelcke finished this engagement with a kill as the Nieuport pilot found the tables turned on him. Clearly, one can see that Boelcke's situational awareness in this air-to-air engagement was superior to his adversary. Situational awareness is one key to a pilot's survival. It can be defined as the ability to know what is occurring in one's own aircraft and also the situation of other aircraft and ground threats that may have an impact on his own fate. Furthermore, it is the ability to process various information in a rapid and accurate fashion while focusing on the task at hand.

According to Michael Spicks in his article on Boelcke, this air-to-air engagement illustrates two important points about situational awareness. First, “. . . even while shooting at the Caudron, an activity that takes every ounce of concentration Boelcke was still able to remain aware of the potential threat posed by the two Nieuports and to react as soon as one made a move against him.” Second, “Boelcke was able to present to

the French pilot a picture of the situation as it was not. The Frenchman thought he had the advantage of surprise, and appears to have been so disconcerted that he made an elementary error - and paid the supreme price for it. Boelcke was master of the situation at all times, whereas the French pilot only thought he was.”

In wartime, the result of lost SA is clearly described in the above quote. In peacetime, mishap reports repeatedly document a loss of SA as a contributory factor to the mishap. Ironically, the nature of SA is such that one often doesn't realize he has lost SA until the result is already determined. The aircrew often feels relatively confident until shocked into reality. For example, I recall a Dissimilar Combat Training (DACT) sortie off the west coast of South Korea. A flight of two F-4s squared off against two F-16s. The sortie was a DACT upgrade ride for the Viper wingman. As the “fightson” call came across the UHF radio, the Phantoms' WSOs watched as the contacts drifted apart on the radar scope. The



Phantoms swung hard south to outflank the southern jaw of the Viper pincer. Within a minute the F-4s were engaged with one F-16 and shortly thereafter a "knock-it-off" call came across the GCI frequency. Why a knock-it-off call so soon after the merge? It turned out that the Viper wingman was also engaged 2v1 with Phantoms. Only this engagement was north of the airspace and the other two F-4s had ROKAF markings and were carrying live missiles. The wingman had engaged the ROKAF air defense cap with the confidence of one with total SA. Clearly, the wingman was overwhelmed by events which led to his degraded SA.

In this case one can learn to improve his SA by training. Flight leads should train to a wingman's experience, ability, and proficiency. The training should be as intensive as possible without exceeding the wingman's capability. This philosophy is shown to be effective in combat exercises such as Red Flag and Cope Thunder. These exercises use a building block approach and increase the level of difficulty until the aircrews are performing

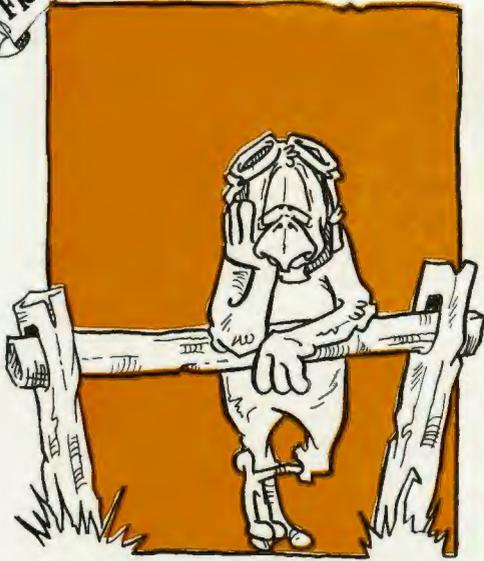
at a higher level of skill with a significant increase in situational awareness. Everyday training should attempt to challenge the aircrews to operate at a higher intensity during a flight. Only through frequent and intense training can you improve one's SA.

Another facet of losing SA occurs not when the aircrew is overwhelmed, but when the aircrew becomes overconfident to the point that complacency sets in. An example of this phenomena occurred when a four-ship flew a 2v2 similar ACM sortie. After a bingo call was made, the flight lead rounded up the troops to close in order to penetrate a deck of weather. They shot the Hi-TACAN approach to the home-drome and flew a flawless approach. At least he thought it was flawless until he broke out of the weather at 5,000' AGL and was staring at a very wide, but incredibly short runway. The entire four-ship flew the approach with the wrong TACAN channel dialed in. They still had the TACAN channel dialed up that was used for area orientation, and there are many 5,000 ft peaks in

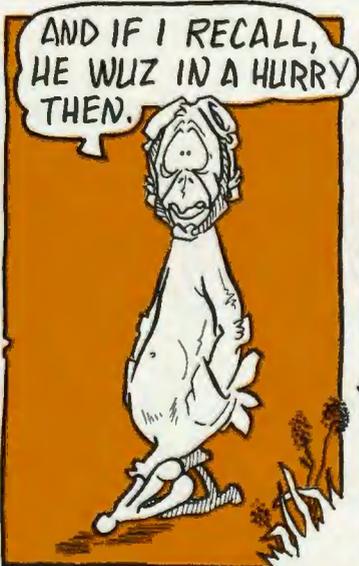
the area of this particular overseas base.

Obviously, the flight lead and wingman thought they knew where they were, and the lost SA in this case can only be countered with flight discipline, good habit patterns and admitting to oneself that one is capable of committing errors regardless of your experience, ability or proficiency. Don't allow yourself to take the basics for granted and, above all, ensure compliance with standard procedures.

Furthermore, intense training can improve one's SA and increase both combat capability and decrease the probability of a mishap. It should be every flyer's goal to strive for the high level of SA that Oswald Boelcke so aptly displayed over 74 years ago.



I SEEM TO REMEMBER THAT GUY LAST YEAR 'BOUT THIS TIME.



AND IF I RECALL, HE WUZ IN A HURRY THEN.



HEY! GREAT OUTFIT. WHAT'S THE OCCASION?



YOU FERGOT 'BOUT THANKSGIVING, DIDN'T YOU?



SO?



YOU A BIRD, AIN'T YOU?



MIND IF I JOIN YOU?

TAC

Outstanding Achievement in Safety Award

Technical Sergeant Curtis M. Thompson, 169th Consolidated Aircraft Maintenance Squadron, 169th Tactical Fighter Group, McEntire ANGB SC, had been dispatched with his tow crew to move an F-16A aircraft from the wash rack to the maintenance hangar. The crew arrived and began preparing for the towing operation in accordance with the TO. As Sgt. Thompson was making a visual inspection of the MD-1 aircraft towbar, he noted an area of the flange tube which appeared cracked. Upon closer inspection of the flange area, Sgt. Thompson discovered the crack extended two-thirds of the way around the tube flange. Had this towbar been used, failure would have surely occurred and could have resulted in property damage and possible injury to personnel. (Note: This aircraft towbar had been inspected for this condition with Urgent Action Time Compliance TO 35B5-1B-508 on 16 April 1990 and did not reveal any cracks at this time.)

Sgt. Thompson's keen observation and attention to detail prevented an otherwise costly mishap. His dedication to smart mission accomplishment has earned him the TAC Outstanding Achievement in Safety Award.



TSgt Curtis M. Thompson
169 CAMS, 169 TFG
McEntire ANGB SC



PASSING THE

COMMON SENSE TEST

Major Don Rightmyer
16 AF Readiness Support
Center
Torrejon AB SP

Have you ever been part of a scenario such as this? Your unit has an exercise wing recall and the scenario involves numerous people processing in order to mobilize to a distant location. No problem. Those who are to mobilize are identified and told when to report to the base processing line.

PASSING THE COMMON SENSE TEST

A group of people who will be transported in one aircraft load is sent through the various stations of the mobility line and then segregated in order to receive various briefings on the culture, intelligence, and other factors of the upcoming deployment. Again, no problem. Now the story gets interesting. Remember, this is a local exercise, and it just happens to be occurring in February or March; the temperature is lingering below freezing; and the roads are covered with snow and ice. Driving conditions are treacherous. When the mobility processing folks are finally finished with this aircraft load of people around 1500, they're told to report back after a simulated flight time of 12 hours at 0300 in the morning.

Now, common sense test. Do you see any red lights here? Well, the point was raised by one participant in this exercise group that it was basically unsafe to have nearly 100 people drive 10 plus miles (one way) in the middle of the night from the local community to the base over slippery, ice-covered roads merely to show up at the simulated deployment site (mobility processing center) and check in. However, no one in the mobility processing center could see that there was a problem. The individual who had originally brought up the potential problem continued to press the issue until it was finally elevated up to the

wing commander. His response? "That sounds like the dumbest thing I've ever heard. Let's use our heads." In other words, apply the common sense test.

Our failure to use the common sense test in our day-to-day job performance may be one of the key reasons for many of the mishaps which we experience on a continual basis, whether major or minor. We (the Air Force) certainly take a lot of formal measures to help our people avoid problems on the flight line, in the maintenance shops, and around the base support areas through providing extensive training, detailed technical data, repeated safety briefings and meetings, mishap prevention newsletters, and various other means. All of that is important and we need to be exposed to it on a continual and periodic basis in order to keep our mishap prevention "antennas" tuned to the situation around us. However, all of that added together may not be enough to prevent a mishap and either equipment damage or personal injury if we don't "use our heads."

How do you go about applying the common sense test? A first step is by stepping back from a particular situation and taking a look at the famous "Big Picture," i.e., making sure you can see the forest as well as the individual trees that are around you.

Another cliché that seems appropriate is "stepping back from the alligators that are nipping at your heels in order to see the herd of elephants that is bearing down on you." This can especially happen when you get involved in a time-pressure situation. Then it's easy to allow the crush of the moment to override our ability to keep everything in perspective.

Another way to apply the common sense test is to work together with our fellow workers as a team. When we isolate ourselves from others, it's easy to get our own slanted perspective on a situation. However, if we're open with others about the work we're doing and what's going on in the workplace, we can help each other apply "the best."

Take a close look at the way you accomplish the tasks that you're assigned. The directives and rules may prescribe one method of getting the job done, but there may be other methods which are also smart. I'm not suggesting that you break or disregard the rules, but you can take actions to get the rules changed on a long-term basis if what you're doing doesn't make sense. Don't allow the pessimists to discourage you. It may be you that can prevent a mishap, lost resources or save a coworker's life—by applying the common sense test.





DOWN TO EARTH

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

down to earth



A PAIN IN THE B . . .

Maj Robert W. Sadowski, BSC
836 MED GP/SGHT
Davis-Monthan AFB AZ

It's not only a pain to the worker, but it's a pain to the unit. It accounts for the most preventable lost work time in TAC and the entire Air Force. But it doesn't have to be that way. One unit refused to take it just sitting down. They initiated a new program which reduced "it"—lower back injuries as much as 70 percent! If you are a supervisor or worker who's contribution to the mission requires you or your troops to lift heavy items, then you will want to check this one out for yourself. Major Robert W. Sadowski, Chief of Physical Therapy at the 836th Medical Group, Davis-Monthan AFB, worked closely with the 836th Air Division Safety Office to develop the program. It consists of educating the work force, redesigning the work sites, and requires lifting belts for workers in high risk jobs. The program also emphasized the fact that most back injuries can be prevented by following a few simple rules:

When lifting—keep your back straight, bend your knees and hips, keep object close to your body, feet apart, don't bend or twist.

Think before you lift—remove obstacles in your path. Use a step ladder if a load is above your shoulders. Don't hurry. Use a hand truck or fork lift if a load is too heavy. Get help. Change stressful positions often.

Keep fit—being overweight, out of shape and under stress contribute to making your back prone to injury.

Do you want to know more about this program which "works" and how it can help you reduce back injuries in your unit? Then give Major Sadowski a call at DSN 361-3335 or drop him a letter at 836th Medical Group/SGHT, Davis-Monthan AFB AZ 85707-5000.



TAC TALLY

	Total			TAC			ANG			AFR		
	SEP	THRU	SEP	SEP	THRU	SEP	SEP	THRU	SEP	SEP	THRU	SEP
		FY 90	FY 89		FY 90	FY 89		FY 90	FY 89		FY 90	FY 89
CLASS A MISHAPS	5	29	25	4	20	16	1	6	9	0	3	0
AIRCREW FATALITIES	5	18	6	3	10	4	2	6	2	0	2	0
• IN THE ENVELOPE EJECTIONS	3/0	23/0	21/4	3/0	15/0	10/2	0/0	6/0	10/2	0/0	2/0	0/0
• OUT OF ENVELOPE EJECTIONS	0/0	1/1	1/1	0/0	1/1	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)

	FY 89	MONTH											
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TAC	FY 89	1.7	2.7	3.0	3.2	2.6	2.4	2.3	2.9	2.6	2.5	2.6	2.4
	FY 90	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	FY 89	0.0	0.0	1.5	2.3	2.8	3.1	3.2	2.8	3.0	3.6	3.2	3.3
	FY 90	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	FY 89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY 90	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	FY 89	1.2	1.8	2.5	2.8	2.5	2.5	2.4	2.7	2.5	2.6	2.6	2.5
	FY 90	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 SEP 1990

1st AF		9th AF		12th AF	
"COMMAND CONTROLLED CLASS A MISHAP FREE MONTHS"					
131	48 FIS	64	507 TAIRCW	109	58 TTW
56	57 FIS	39	1 TFW	52	388 TFW
16	325 TTW	20	363 TFW	41	479 TTW
		18	56 TTW	33	355 TTW
		10	31 TFW	32	366 TFW

ANG		AFRES		DRUs	
"COMMAND CONTROLLED CLASS A MISHAP FREE MONTHS"					
452	119 FIG	150	301 TFW	168	552 AWACW
428	147 FIG	113	482 TFW	59	28 AD
232	110 TASG	110	924 TFG	38	USAFTAWC
212	177 FIG	98	906 TFG	30	USAFTFWC
212	138 TFG	73	507 TFG		

