I AM A WINGMAN

by Capt Joel S. Aronoff
33rd Alumni

I'm a new guy and I don't know enough to be anything else
I go where my leader goes
I do what my leader does
I do what I'm told to do
When the going gets tough, I move in a little closer and press on
When my leader goes down the chute, I go down with him
When he breaks, I break
When he's shooting, I cover him
If he gets in trouble, I stick with him
I watch him and try to learn from him because some day I want to be a leader
I expect my leader to be experienced and capable
I expect him to go to the right place
I expect him to do the right thing
I expect him to let me know what I'm supposed to do
When the going gets tough, I expect him to take care of me
When he goes down the chute, I expect him to have the target and a way out
When it's time to break, I expect him to break
When the MIGs are up, I expect him to press the attack
If I'm in trouble, I expect him to stick with me
I expect him to teach me because I must learn to lead
I am going to be the best possible wingman I can, and someday,
With help, I'm going to be the best possible leader.

JANUARY 1970
Learn First, Fight Later

by Capt Alan W. Melvin
33 TFW, Eglin AFB, Fla.

ACM is a unique skill of the fighter pilot. Other pilots drop bombs... and we know what they are called. Other pilots carry large loads... and we know what they are called. And others even concentrate on flying from point A to point B... and we know what they are called. But competency in the techniques of ACM sets the fighter pilot apart from his more mundane brethren. ACM is unique in that two individuals in similar equipment are pitted against one another in a mortal struggle, and the individual's survival is dependent solely on his skill and knowledge: skill in flying his aircraft at maximum performance, and knowledge of aerial combat tactics and his enemy's capabilities.

ACM training more closely resembles actual combat...
than any other type of training we are involved in, for the basic material ingredient of aircraft-versus-aircraft and the basic psychological ingredient of individual-versus-individual is the same. It is this psychological involvement that has led to the loss of aircraft during ACM training. It is the rare Sunday golfer who after ten lessons would even contemplate challenging Arnold Palmer to a golf match, let alone visualize defeating him. But conversely, so great is the psychological involvement in ACM that it is the rare fledgling fighter pilot after ten lessons that does not visualize success over all his adversaries. It is this deep ego involvement that causes him to exceed his physical capability to maneuver the aircraft, and become a needless destroyer of the Air Force's most valuable assets: the fighter and its crew.

This self-destruction is not limited to the inexperienced, because regardless of experience or innate ability, each of us has a certain capability which must be recognized and not exceeded. This deep psychological involvement in ACM training is perpetuated by the fact that learning is too frequently equated with having achieved a favorable position over that of your adversary. This measurement of success has greatly curtailed the learning of many basic ACM maneuvers, for the neophyte's fear of committing an error and losing the engagement, prevents him from experimenting with the maneuvers and developing the skills that are required to master ACM. Just as much at fault is the experienced instructor who will not make a mistake or allow his student to capitalize on a correctly performed maneuver, lest the word that Blue 4 waxed Red 1 will be spread on a national TV special.

To minimize the psychological involvement in ACM training, a specific sequence of maneuvers should be briefed and flown. Even if mistakes occur, the series should continue as briefed so that all crews can become proficient in the wide variety of ACM maneuvers. Once individual aircrew proficiency is achieved in individual ACM maneuvering, the next step is to develop the aircrew's ability to work as a team, first in elements, and finally in flights of four. Only after all these skills are mastered would there be time to indulge in the psychological battles between individuals that have become the hallmark of ACM training. I said "would" because, of the numerous individuals and squadrons I've seen pass through the 33TFW, I have seen none whose ACM skill had progressed to the level that would allow the ego satisfying, but relatively unproductive engagements, that result in, "Bang, bang, I got you!"

Now that we have examined some of the psychological aspects of ACM training, let's define the role of the flight leader, element leader, and wingman during ACM training.

A flight of four aircraft were engaged in element-versus-element ACM when the number four aircraft struck number two. Both aircraft were flying fighting wing positions on their respective leaders. All aircraft were of clean configuration except for an AIM-9 captive missile in the left forward fuselage station on each aircraft.

The incident occurred during the first engagement of a pre-briefed high altitude ACM mission. The engagement was initiated at approximately 30,000 feet MSL when the lead element turned down and into the attacking second element, which was closing from their 7 o'clock position. The engagement progressed through one turn with the second element going high. As the lead element pulled up into the attack the second element turned down into them. This maneuvering caused the fight to develop into a front-quarter attack with neither element gaining the advantage.

Seeing that a stalemate had occurred, the IP in the lead aircraft called to terminate the engagement. At this point, number two, who was in an approximate 130-degree left bank, maintaining fighting wing throughout, lost sight of the attackers. Number three, who was leading the second element, continued downward and passed approximately 3000 feet behind number two. Number four had dropped back and below his leader's fuselage reference line. This placed him on the outside of the turn and at an angle where he did not see number two. As the track crossing angles converged, the leading edge of the right wing tip of number four struck the bottom side of number two's left wing outer panel. Both aircraft recovered without further incident.

This accident and similar ones in the past point up the fact that termination of ACM engagements offers a very real chance for midair collisions. These crews were lucky in that a change of flying suits and sixty manhours were
all that were required to return aircrews and aircraft back to action.

Just as in combat, in the training environment the flight leader is responsible for bringing all four aircraft home. In a training environment this means controlling the flight so that the weakest link is taxed to the maximum of his ability, but not placed in a situation that is beyond his present capability. The flight leader makes this task easier for himself by a comprehensive briefing of the mission's essentials and not the trivia that so often leads to confusion.

On ACM missions, particular emphasis must be placed on how engagements will be entered, flown, and terminated. It would be impossible for the flight leader to brief every situation that could exist when an ACM engagement is terminated. What he must cover is the formation that will be flown after the engagement is terminated, and how the flight will rejoin. Also, if there is any change of flight positions, how and when the changes are to be accomplished. In the air, the flight leader must give careful thought before he terminates an ACM engagement, so that he does not place any of his flight members in jeopardy while they mentally transfer from ACM to rejoining the flight for a second engagement or recovery. To preclude any possible confusion the flight leader should give verbal instructions to his element leader to insure safe separation between the elements when the engagement is terminated.

The element leader is of course responsible for his wingman, and as such must fly his aircraft in such a manner that he does not jeopardize his wingman.

It is the wingman's responsibility to do precisely what he is told... no more, no less.

On the ground, the guidance on ACM training from all echelons of command has been "chiseled in stone." It leaves no room for personal interpretation. But, once the afterburners are lit and the fighter pilot has, "Slipped the surly bonds of earth" it is his responsibility to comply with the letter and spirit of all guidance.

While complying, it is essential that he fly in such a manner that he does not exceed his present capabilities, yet constantly expands and refines his ability as a fighter pilot.

16th Fighter Interceptor Squadron, Naha, Okinawa, in 1961.

During the Gulf of Tonkin crisis he was deployed to South Vietnam flying F-102's. He returned in 1964 to Eglin AFB, Florida. He is a jump-qualified Forward Air Controller. Following a check-out in F-4's he volunteered for SEA duty again.

Serving with the 480th Tactical Fighter Squadron at DaNang in South Vietnam, he flew 117 combat missions (100 over North Vietnam). Captain Melvin was awarded the Distinguished Flying Cross, Bronze Star, and the Air Medal with nine Oak Leaf Clusters. Stationed at Eglin AFB since his return in 1967, he is serving as Weapons Officer for the 33d Tactical Fighter Wing. With 2600 hours (2200 in fighter aircraft) he was Wing project officer for the F-4E. He is a graduate of Fighter Weapons School.

Captain Melvin is a University of Wichita graduate (1959) with a BA in Psychology. Following pilot training and advanced interceptor training he was assigned to the 16th Fighter Interceptor Squadron, Naha, Okinawa, in 1961.

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Captain Richard T. Swope and Captain Michael T. Demchak of the 9 Tactical Fighter Squadron, Holloman Air Force Base, New Mexico, have been selected as Tactical Air Command Pilots of Distinction.

Captains Swope and Demchak were number two in a flight of four F-4Ds enroute to Spangdahlem Air Base, Germany. As the formation approached their third air refueling contact point, about five hours from Seymour-Johnson AFB, N.C., the flight leader experienced electrical problems which resulted in the rapid loss of his radio, attitude reference system, and other related equipment. Unable to continue as leader, Captain Swope assumed element lead in preparation for a diversion to the nearest abort base, Lajes in the Azores. A weather check revealed Lajes was weathered in. The alternate abort base was Santa Maria Island, 150 miles to the southeast. An incompatible radio beacon on the island made it necessary for Captains Swope and Demchak to use their airborne radar as primary aid for locating the island and runway; then for their formation penetration, approach and landing through the darkness and weather.

Captains Swope and Demchak, by their professional competence and teamwork, readily qualify as Tactical Air Command Pilots of Distinction.

TAC ATTACK
GOOD INTENTIONS!

This incident reminds you of a sad sign displayed in some small businesses throughout the country. It quietly complains, "This wasn't intended to be a non-profit operation, it just turned out that way." There's a hurt Herky with equal right to bemoan its unintentional fate.

On a wet day preflight (when C-130 wings are slicker than silicone), the flight engineer scanned the overwing area from the forward escape hatch and couldn't see any evidence of missing or loose inspection panels. So, he didn't risk a wing walk-around.

At liftoff an eagle-eyed executor in the eyrie (tower operator!) advised the Herky herder that assorted pieces departed his bird on takeoff.

Base ops types scrambled and policed up chunks of glass and panels so the airlifter could land and reclaim his lost parts. After an okay landing, maintenance investigators found the bird's isolation valve panels torn loose on both wings. The left panel punched the top of the tail on its way, denting the stabilizer and breaking the rotating beacon... 46 manhours and 250 dollars worth.

Who did the dastardly deed? The panels were loosened during phase inspection to help a "Non-Destructive Inspection" team ply their trade. After finishing their innards inspection they didn't secure the "outwards."

There's rumor of a Herky crew shopping around novelty stores looking for a special sign suggesting, "This wasn't intended to be a destructive operation, it just turned out that way."

HONED HOOKWIRE HOLDS!

A max-loaded F-4 neared 100 knots on its takeoff run when the left main tire blew. The aircrew struggled to hold directional control after initiating an abort and as speed slowed, they engaged nose wheel steering to guide the careening Phantom across the BAK-13 cable. It worked!

But had it been a BAK-12, it might have been a different story. The blown-tire wheel stopped rotating about 2000 feet before reaching the 1 ¼-inch cable, slicing the outer layer of wire strands. It was the inner core that remained intact to take the hook.

Relieved observers on the scene figure that had it been a regular one-inch BAK-12 cable, the aircrew may have had a long walk back from the boonies. So men at this particular airpatch are not dragging their feet to get the base's BAK-12s equipped with the larger-size cable, which up to now is standard only on new BAK-13s.

TO FOG OR...

To preclude cockpit fogging during a night scramble, this F-4 jock positioned his cockpit temperature auto rheostat at 5 o'clock (full hot) and set his defog foot heat lever at one-third forward. Just at lift-off, both cockpits began to fill with smoke and the temperature began increasing rapidly. The smoke was so dense that it was difficult to read the instruments and full attention to the gauges was required just to maintain aircraft control.

After gear and flaps were raised and a positive rate of climb established, the temperature rheostat was turned to full cold and the defog foot heat lever was pulled full aft. This had no effect on the cockpit temperature, which by now was extremely high. The emergency vent knob was pulled, it didn't work either. However, as airspeed increased the smoke in the cockpit dissipated some. Ordnance was jettisoned at sea, fuel dumped, and a straight-in VFR landing was made. During the land roll-out the aircraft commander was unable to use the brakes because his feet were so hot -- the pilot stopped the aircraft and they evacuated their oven.

In flight the A/C had asked the pilot to pull the cockpit heat and vent circuit breaker, but he was unable due to smoke and burns he incurred by turning his head. They also thought about jettisoning the canopies, but discarded that idea feeling that a spontaneous fire might erupt from the intense heat being routed into the cockpit. They were never more than twelve miles from the field.
with morals, for the TAC aircrewmam

and felt that they could endure the heat until landing.

The A/C received first and second-degree burns on his right foot; the pilot received second-degree burns on both shoulders. They both felt that wearing gloves and having their sleeves rolled down kept their burns to a minimum. This was a good show by a couple of "cool ones."

WELCOME JERK

A pilot in another command was the lone passenger in his out-of-control bird. Passing through 10,000 feet, he concluded she was not going to respond so he pulled the handle for a fast exit. With chute open and kit deployed he hauled on the two "pull-4" loops. The loops held fast, so he hauled some more. After what seemed like a long series of basic training chinups and feeling no special need for continuing this exercise routine, he fixed eyes on the horizon, and saved his hour of complete futility with a respectable PLF.

Later, a technician checked out the 4-line jettison lanyards. He pulled each loop and two lines released from each rear riser! The only difference between the pilot's hauling and pulling, and the technician's technique was an initial firm jerk preceding pull to full extension. The reason? Pull loops and lanyards are anchored to the rear risers with pieces of cotton cord, which must be torn loose before the lanyard can be extended for canopy line release. So, a firm jerk breaks the cord, but a steady pull may be only a futile exercise of pull-ups.

WOULD YOU BELIEVE?

In another command a student cleared for takeoff decided to abort and obtained clearance to taxi to the end of the runway. A four-ship was cleared on behind him and instructed to hold. An IP in the waiting formation transmitted, "Can't that aircraft aborting turn off on the diagonal?" The student in the aborting aircraft heard only the last portion of the transmission and interpreted it as an instruction from Mobile. He was almost abeam of the diagonal at that time, so he gave it a go. He started a right turn using nose wheel steering and wheel brakes at about thirty-five knots. After turning about thirty degrees he began to skid and that's all she wrote. After the left main collapsed he shut it down and was last seen wandering across the infield shaking his head.

The pilot bought the incident with the IP taking the contributing share for making a "non-standard" radio transmission, whatever that is. How would you standardly say, "Can't that aircraft aborting turn off on the diagonal?"

PITY THE POOR PACHYDERM

"Okay, boomer, disconnect on my count of three. One . . . two . . . three . . . disconnect!"

And off the Phantom phlyer phlys, most times with, and sometimes without his receptacle. And on the rare occasion when his bird's receptacle wins the disconnect struggle with a tanker he carries home an imbedded nozzle as a tug-of-war trophy.

Even if the petrol peddler manages to save its nozzle the boom tube ends up with enough elephant-trunk wrinkles to qualify for peanut feeding on Kid's Day. And at 59,000 dollars a boom tube, you could feed tons of goobers to a circus full of real live elephants . . . in addition to the flying types.

So, how about it Phantom phlyers? Let's not take a chance on poor pachyderms losing their long-established peanut prerogatives to wrinkled tanker booms. How about watching that boom-to-receptacle angle at disconnect? And because your Phantom's toggles sometimes hate to let go of boom nozzles just because you count to three, would you please hang around until it gets away from your receptacle's phond phingers?

Herds of elephants will thank you.
Here are some thoughts we think especially appropriate for this January issue of the TAG ATTACK. In this first month of the new year, we might all take a good hard look at ourselves and how we performed in 1969. Although we can’t know what 1970 will bring, we CAN guide our destiny to some extent. Here is one avenue we can profitably explore.

Have you been in a pilots’ meeting lately and heard the statement, “Let’s look at ourselves and clean up the flying a bit?” That’s a mild statement with a big message for all of us. I’ve probably lost about half of the readers already with the statement “message for all of us.” However, calm down and think for a minute about YOU. Analyze your flying! Not necessarily your capabilities, because we are all good, but rather your own personal philosophy regarding attitude, rules, and execution of the mission.

I’ve heard a lot of hangar talk recently and can readily see why the word is filtering down, “Let’s clean it up.” No matter how new you are to the flying business, you’ve heard a lot of stories about jocks who have done this or done that, and most of the time in direct violation of a regulation. The rest of the time we’ll just call it bad judgment. So there you are with two problems, violations and bad judgment.

The bad judgment aspect is not generally a serious problem and we are all subject to lapses of memory. As such, the main point is to learn from your own personal experiences. When you use
bad judgment, analyze why you fell into the trap and remember it. It doesn’t happen often, but one case of bad judgment may be the “Big-One-Time-Good-Deal.” The next thing to concentrate on is the “other guy’s” use of bad judgment. We all prefer to use this term “the other guy” so we will.

We see others using bad judgment more often than we see ourselves. It’s easy to criticize, isn’t it? OK! Just be objective and see if you have made the same mistakes. Remember his mistakes to keep you out of trouble. Ask yourself why the other guy made these mistakes and how you might have made them. Well, enough is enough — it happens.

Another area I think we are all involved with is violations. Not the formally filed FAA violation, but the informal, everyday breaking of the rules we fly by. Little by little, jocks violating our regulations are costing all of us a great deal of flying freedom. I don’t have any specifics to bring up in this area because we all hear and read about them. Occasionally a serious accident occurs, but more often nothing happens when a rule is broken. However, that one accident costs all of us something. Our integrity is questioned.

Integrity is one of our most valuable possessions because the jock that is questionable does not get the good missions. On the other hand, the jock with a good reputation for executing the mission properly gets the good deals. No long spiels are necessary and no specifics need be mentioned. Just remember what you’re risking and “clean it up a bit.”
Pilot's Printable Poetry Page

An aviator's windfall in the form of a POW's World War II diary crossed the editor's desk the other day. It contained some classic examples of the inspired, brown-shoe-days poetry that sustained the lagging spirits of downed aircrews spending involuntary TDYs in Germany's scattered Stalags. The authors are unknown and we're unable to give them much-deserved credit for boosting morale.

Perhaps some of TAC ATTACK's readers will recall the poet-pilot who authored these nostalgic notes. After you've wiped away that tear, send us his name. And in addition, if you have some not-too-boisterous ballads you've collected during your Air Corps/Air Force tours, send them along. We'll try illustrating them in future issues on our Pilot's Printable Poetry Page.

THUNDERBOLT

Many a pilot who flew the Pursuits Has winged his way into heaven, But I know the jock who led the flight Was a kid in a P-47.

We can point to Mustangs and Lightnings with pride And the Hellcat may claim her votes, But I'll pick the bird I know turned the tide, The deadly and feared Thunderbolts.

As missions grew longer thru death-laden skies Our bomber crews had little to fear; Their best escort and acclaimed by all, Was a squadron of Thunderbolts near.

Many a bomber crew, knocked out of a fight, Forever their praises will sing; While limping home thru treacherous skies, A "White Nose" protected each wing.

How well I remember the beautiful sight Of fighter contrails high in the heavens; And how we grinned at the tail gunner's words, "Here comes the best, P-47s!"

Many the enemy that zoomed thru our flight Discovered his doom he had sealed; A "Jug" quickly followed with all guns ablazing And the enemy's wings soon peeled.

It soon will be over, but they'll never forget The remarkable job you've done; How Thunderbolts fought against terrible odds And all the battles they've won.

Long after the din of battle has ceased, O'er your deeds pilots will gloat; Press onward you heroes, there's more glory ahead For the lads in their great Thunderbolts!
**OIL COLLECTION! !**

The O-1 pilot landed after a visual recce mission and decided to check out a writeup on the emergency fuel system. Switching to emergency fuel, he noted flames and smoke erupt from the engine cowl’s right side. Shutting down quickly, he saw more fire emerging from the cockpit fire wall. While he scrambled out of the burning bird dog, his crew chief knocked out the flames with a nearby fire extinguisher.

Maintenance investigators pinpointed a heavy layer of engine oil on the fire wall behind the right hand muffler as the fire location. When the bird parked and reduced its cooling air flow the hot muffler ignited the “oil collection.”

How did it get there? A metal gasket in the oil filter leaked because it was crushed by overtorquing. And the oil filter wasn’t changed during the last 50-hour inspection. The clogged filter, crushed gasket, and oil accumulation were charged to maintenance “short cuts”... that almost lost it all.

**UNFAIR TO GENERATORS!**

The crew chief completed an engine-runup after his C-130 came out of phase inspection. On engine shutdown number four refused to quit, operating at 10 percent. He pulled the condition lever, feathered the prop, and closed the bleed air valve. Then Four’s engine fire and the master warning lights flashed on. He pulled the emergency fire handle and the extinguisher doused the lights momentarily. He discharged the reserve extinguisher when the fire lights illuminated again. With an assist from the ground crew’s extinguisher, he managed to put out the fire.

It was an unusual “fire, starter,” investigating maintenance troops concluded. One not requiring special preventive action. Number four’s generator turned into an electric motor and “drove” the engine at 10 percent. It was “motorized” by a broken wire in the direct current control panel on the trip side of the field control relay. The confused generator worked itself to fiery destruction. And inspectors concluded that it was just “fair wear and tear.”

Wait until the other generators hear about this!

**TWO IN A CANOE**

The Blue Canoe’s crew chief checked out his left engine after a fuel pump change and decided to increase fuel pressure. During his second engine start a sudden explosion ruptured number one’s nacelle and deformed the wing’s leading edge. Fire broke out, but he stopped cranking and extinguished the flames.

Maintenance inspectors discovered two troublemakers that teamed up to tip the canoe. The fuel source? A neoprene hose attachment assembly that leaked fuel under pressure. The ignition source? The exhaust flames sneaking through a cracked diffuser.

As a result the unit sharpened its inspection procedures on fuel pump installations and av gas plumbing, especially under system pressure. In addition, they’re changing cracked exhaust diffusers before they “point out” fuel leaks.

**WAHOO**

This F-104 pilot was cruising along peacefully on his way home from a trip when he suddenly felt a rapid deceleration, followed by a nose-down attitude change. All engine instruments were normal and flaps, speed brakes, and landing gear were all in their places. Military thrust and nose-up trim were used to counter the rapid rate of descent and airspeed loss. Nothing worked till the pilot moved the drag chute handle to the jettison position. Deceleration ceased immediately. The aircraft began to pitch up due to the previously applied trim; at 250 knots the stick shaker actuated and takeoff flaps were lowered. Recovery was affected from that point. The drag chute had come out in flight. It had been repacked and installed by transient alert personnel at the
departure base. It's a good thing that the chute deployed at thirty-one thousand, instead of on takeoff. As it was, the pilot lost about five thousand feet during this sequence of events — oh yes, and it was a night flight.

**HAMPERED HERKY**

The Herky rolled out of phase inspection with a writeup, "Aileron boost package leaking." Maintenance troops corrected the gig on the following day by resealing the control package. The aileron controls were actuated after re-installation to bleed air out of the system. Two days later the C-130 launched on a cross-country hop. The pilot had no problems with aileron control until he disengaged the autopilot on letdown. He had full aileron control to the left, but only five degrees on the right. He pulled and reset autopilot circuit breakers, but no help. They decided against isolating the utility/boost aileron control packages because of the possibility of uncontrolled flight. With gear down and 50-percent flaps he drove the Herky down a long straight-in approach.

Control specialists discovered a new "Murphy" in their presence. During resealing, the cylinder sleeve was installed backwards, causing the aileron actuator to bind. They wondered how long it takes for a reversed sleeve to freeze in an actuator. So they installed another sleeve backwards and tested it. After 23 activations it moved stiffly; after 27, it froze.

To help any other Murphy-minded specialists, the unit suggests labeling one end of the cylinder to avoid reverse installation in the future. They're also beefing up their quality control procedures and insisting on a seven-level inspection during reassembly of boost packages. They didn't mention anything about Murphy's fate.
Rescuing a pilot from a crashed aircraft cockpit includes facing several hazards. Both pilot and rescuers must consider the possibility of fire, exploding ordnance, and accidental detonation of ejection seat charges. Assuming all three are properly dealt with, another serious hazard confronts the pilot, especially if he is unconscious. His spine may be injured as a result of the crash and his rescuers could unknowingly compound the problem. A device dubbed "the backslider" can take the kinks out of this one.

The backslider was specifically designed for those ejection systems using the back-pack parachute. It can be installed in only a few seconds and practically immobilizes the neck and spine by providing a rigid support during the extraction process. It can be locally manufactured at very little cost.

The device was developed by the life support section of the 140th TFGp, Buckley Air National Guard Base, Colorado. They have equipped their crash/rescue units with the backslider, and conduct training according to the following checklist and photographs.

a. Canopy — raise manually
b. Ejection Seat — dearm
c. Safety Belt — release
d. Survival Kit — disconnect
e. Parachute Chest Strap — disconnect
f. Backslider — insert, tighten visor straps
g. Parachute Chest Strap — reconnect (tighten if required)
h. Remove pilot
The probability of compounding spinal injuries while lifting a crash-landed pilot from his bird has always been a rescuer's nightmare. It's a much safer rescue, even for one man (left), with a backslider installed. Inserted between the pilot's flight suit and back pack parachute (above), the backslider also protects the neck when straps are attached to both sides of the flight helmet (upper right). It can be made locally of .25 x 6 inch T3 aluminum (right), 37 inches long.

Backslider installed (above), rescuer lifts injured aircrewman by chute harness, head held firmly in position with adjustable helmet straps. After placing the injured on canopy rail (right), his back still straight, he can be teetered over the side to awaiting rescuers on the ground.
THE AIRCRAFT SHOULD BE DITCHED ONLY WHEN ALL OTHER ATTEMPTS OF EGRESS HAVE FAILED.

BEFORE IMPACT

1. Canopy — JETTISON (fwd first) (AC–P)
2. Arresting hook — DOWN
3. Leg restraint release handle — PULL AFT (AC–P)
   Pull leg restraint lines and lock pins thru garter rings before ditching to expedite egress from cockpit.
4. Oxygen mask — TIGHTEN (AC–P)
5. Oxygen diluter selector — 100% (AC–P)
6. Shoulder harness — LOCK (AC–P)
7. Fly parallel to swell pattern
8. Attempt touchdown along wave crest

AFTER IMPACT

1. Release parachute riser—shoulder harness release fittings (AC–P)

   WARNING
   Do not pull the survival kit release handle until clear of the aircraft, since pulling the handle with the kit resting on the seat will cause the kit to be left in the aircraft, and pulling the handle while standing up in the cockpit will cause the kit to drop into the bottom of the cockpit where life raft inflation will take place. After block 33, or after either T.O. 15X11–20–505 or T.O. 1F–4–808 the life raft will no longer inflate solely from pulling the survival kit handle while standing in the cockpit, but the kit will still open and remain in the cockpit, and the crewmember will still remain attached to the kit by the dropline.

   WARNING
   If the alternate ejection handle guard is down, rotate the guard up prior to evacuating the cockpit.

2. Pull up on the emergency harness release handle and stand up without twisting to release sticker clips from the seat (AC–P)

   WARNING
   Before block 38 and T.O. 1F–4–808, the bailout bottle will be actuated when the crewmember stands up. Block 38 and up, or after T.O. 1F–4–808, there is no emergency oxygen available once the crewmember separates from the seat.

3. Abandon aircraft (AC–P)
4. Inflate life vest (AC–P)

   WARNING
   To prevent the lungs from bursting, due to differential pressure, the crewmember must exhale while ascending to the surface from substantial depths.

5. Inflate life raft (AC–P).

   Note
   Before block 34, or before either T.O. 15X11–20–505 or T.O. 1F–4–808, the life raft inflates after the survival kit release handle is pulled. After block 33, or after either T.O. 15X11–20–505 or T.O. 1F–4–808, to inflate the raft the handle must be pulled, then the CO2 bottle cable in the kit must be pulled.

Figure 3-15
Here's one we thought we'd never see. And since the procedure on the opposite page happens to be the last one in Section III of the F-4 Dash One, perhaps there are some who haven't seen IT for a long time. The odds against a Fantom ditching are remote but all Fantom Phlyers should take note of the narrative which follows — and perhaps, heed the message? Ed.

Both crew members had difficulty evacuating the aircraft after it came to a stop in the water. Procedures require that emergency egress be accomplished with the survival kit attached after ditching. But both crew members' main difficulty in getting out of the seat can be attributed to the survival kit. The following constitutes a list of steps taken and the difficulties encountered.

The aircraft commander rotated his emergency harness release handle to the lockup position, opened his canopy and attempted to evacuate the aircraft. Being unable to free himself from the seat, he pulled his survival kit release handle and attempted to evacuate. Still unable to get out of the seat and thinking his legs were being held, he unbuckled his leg garters, took off his harness and helmet and then successfully egressed the aircraft. Since the life preserver is fastened to the harness, he ended up in the water without flotation gear.

The IP released his parachute risers, rotated his
F-4 WATER EGRESS

emergency harness release handle to the locked up position, opened his canopy and attempted to evacuate the aircraft. Unable to free himself from the seat, he unbuckled his leg garters and lap belt and attempted evacuation. Still being unable to get out of the seat, he pulled his survival kit release handle and made another unsuccessful attempt to egress. Then he released his survival kit straps from his harness by punching them off with his thumbs at the quick release clips and was able to leave the aircraft and inflate his life preservers.

The following day, the ejection seats were removed from the aircraft by egress specialists and examined in detail. The specialists confirmed the ejection seats and life support equipment functioned properly. In both seats the guillotine blade severed the personal parachute withdrawal line; the shoulder harness fittings released; the lap belt released on both sides; and both leg restraint lines released. Neither survival kit was released at the junction of the kit and harness strap. Instead, both kits were deployed.

The conclusion was that when the crewmembers made their first attempt at evacuation they raised the survival kit enough to allow the plunger to extend. Thus, the survival kit was deployed instead of being released as the handle was pulled. In the front seat, one sticker clip was still fastened. The members of the board witnessed and tried egress from the ejection seat in an attempt to duplicate the actions taken by the pilots. After several tests were made the board determined that it is extremely difficult, if not impossible, to get up out of the seat and free the sticker clips with the survival kit attached, unless the crewmember holds onto something in front of him and pulls himself out of the seat. The board also determined that it is not difficult to get free of the sticker clips by pushing or pulling out of the seat when the survival kit is not attached. Both crewmembers, when attempting to evacuate the aircraft with the survival kit, pushed themselves up by placing their hands on the side consoles or side of the seat, instead of pulling themselves up and out.

In the board’s opinion the aircraft commander was unable to get out after pulling his survival kit handle because his survival kit deployed instead of being released. The inability of the IP to get out after pulling his survival kit handle can be explained by the fact that his survival kit also deployed rather than being released and because he had suffered a back injury during impact.

We have no comments concerning the problems that beset these two F-4 jocks. They occurred following an unplanned ditching which occurred in another command. The message though is loud and clear! When the chips are down, there is no greater confidence builder than the knowledge that “you’ve been there before,” through realistic practice. Let’s face it – the F-4 egress procedures are not difficult, or complicated. That is, not if you know them. Ed.

From the day TAC took delivery on its first F-4 we have been faced with the prospect of ditching... intentional or otherwise. You can’t avoid flying over water, so why not be ready if you’re to be next?
Tactical Air Command

Crew Chief of the Month

Airman First Class Charles R. Welborn of the 524 Tactical Fighter Squadron, Cannon Air Force Base, New Mexico, has been selected to receive the TAC Crew Chief Safety Award. Airman Welborn will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.

A1C Welborn

Tactical Air Command

Maintenance Man of the Month

Sergeant Brian T. Evers of the 4407 Combat Crew Training Squadron, Hurlburt Field, Florida, has been selected to receive the TAC Maintenance Man Safety Award. Sergeant Evers will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.

Sgt Evers

TAC ATTACK

21
A puzzling paradox is causing TAC serious concern ... and some TAC explosives technicians serious injury. The puzzler? Low-energy training munitions are causing greater personnel injury than those munitions which have the highest-level destructive capability!

On entering Munitions School at Lowry AFB, munitions technician trainees become aware of the extensive explosive weapons inventory used by the Air Force, some extremely complicated, and others quite simple in design. They soon learn that all explosives demand great respect because of their destructive energy. They also are introduced to a block of munitions used to maintain proficiency training for both aircrews and ground support personnel called "training munitions." Although there are
similarities in function when compared with combat munitions, the training types have greatly reduced explosive forces.

On completion of training, a munitions technician assigned to TAC will more often than not be involved initially in training-munitions handling. There are several types of practice munitions in the Air Force inventory, but one, a 25-pound cast iron bomb containing a small spotting (smoke) charge, heads the list of "accident prone" munitions. The question arises, "Is the problem the bomb, or the unthinking technician who handles it as if it's really not a bomb at all?"

First, let's look at the practice bomb. Called the BDU-33, it carries a circular fin assembly for stabilization, and has a cavity in the center to hold the spotting charge. There are two models, the A/B and the B. The difference between the two is that the spotting charge is installed in the aft end of the A/B model and in the forward end of the B. Component parts required to make a complete round are an MK-4 Mod 3 signal (spotting charge), firing pin assembly, cotter key, lug, and in the A/B model only, an inertia tube.

On comparing the size of the bomb and the minimal components required to fully assemble it, one would think that few problems or circumstances could arise which would cause explosive accidents. In fact, it is a very simple bomb to assemble and proper procedures are adequately depicted in TO 11A1-1-37. So the earlier question on "bomb or technician" still holds. Why has this single piece of ordnance caused more personal injury than any other explosives item in TAC?

Now, let's look at its use. The BDU-33 is used more in tactical training than any other munition, therefore, increasing its accident exposure rate. Faulty firing pin assemblies and over-sensitive signals were contributing factors, but the fact still holds that personnel error during assembly is the major reason for TAC's 1969 accidents which led to personal injury.

Because of the 25-pounder's simplicity, perhaps the technician tends to falter in his respect for the small explosives content... which then leads to carelessness, followed eventually by an accident. The truth is that the checklist and other assembly procedures are designed to prevent injury if a mechanical malfunction occurs, but history shows that this prime safety tool is too often ignored by the assembly crew.

Apparently the high-use rate compared to the low-fatality rate, and the fact that a malfunction will not blow the airdrome apart, eventually leads too many technicians "down the bomb dump path" to complacency. But one thing is sure: an explosion can hurt a lot! A look at a few of TAC's BDU-33 accidents will illustrate the problem:

- A technician attempted to swing BDU-33s onto a table with one hand. One bomb struck the table's edge, causing him to lose his grip on the bomb fin. Now free falling, the bomb dropped 36 inches to the floor and ignited, lacerating the technician's eye and hand and damaging the building.
- While a technician assembled a BDU-33A/B in an improper vertical position, the signal ignited as the inertia tube was installed. He received second degree burns on his face and right arm, and sustained an eye injury.
- When a munitions supervisor working alone inserted a MK-4 Mod 3 signal in a BDU-33, the signal exploded. He received multiple abdominal injuries which required removal of portions of his liver and kidneys.
- A technician used excessive force to install the MK-4 Mod 3 signal into the BDU-33 practice bomb body, igniting the signal. Approximately one-and-one-half inches of his right index finger was amputated.

A field modification approved by 00AMA now calls for a safety pin to be installed in front of the firing pin before the signal is inserted in BDU-33A/Bs. This should make accidental discharge almost foolproof. That is, until complacency uncovers another loop hole.

When you feel that your job is getting too routine and it becomes a very simple task to assemble a practice bomb, give yourself a work break. Don't ever become so involved with a particular operation that checklists and other technical guidance become a handicap to quick completion. If and when this happens, you may as well call the hospital and reserve a bed... you'll need it when the inevitable happens!
Flying the F-4 is probably the most enjoyable experience a fighter pilot can have, especially if he’s going to instruct in this sophisticated aerospace vehicle. Here at the F-4 Central Instructor School, we specialize in upgrading F-4 front-seaters to instructor pilot status. Some of our experiences with pilots that come through this TAC-sponsored course are quite rewarding. And some quite alarming!

Naturally, the alarming experiences seem to remain fixed in my mind, more so than the rewarding. Some of these might be of interest to the rest of TAC’s Phantom Phlyers.

For instance, yesterday afternoon, I was walking past one of the squadron briefing rooms and happened to overhear one of our young instructor-pilot upgraders (these troops are some of the sharpest stick and rudder jocks that ever strapped a two-million dollar F-4 to their tailbone) make the comment, “Who needs to memorize...”
At first, the remark didn’t catch my attention; he was correct in his statement. The F-4 Dash One no longer states: "BOLD FACE letters contained in the various emergency procedures will be subject to memory by aircrews." But, after sitting down at my desk and thinking about it for a few minutes, I decided how totally wrong this statement can be.

Why? Well, in my moment of meditation on what was said, I remembered the time a BOLD FACE procedure saved me from punching out and learning desert survival the hard way. This occurrence goes back quite a while and the aircraft involved is hanging in the Air Force Museum. Nevertheless, maybe you’ll see the correlation between an old fighter and a modern one when it comes to common sense, and knowing BOLD FACE letters verbatim.

It happened on my first solo ride in that beloved P-51D known to Korean War veterans as the old “Spamcan.” This torque-machine is a lot of horses to handle when you’ve got less than a hundred hours flying time. As a matter of fact, it’s a lot of horses to handle anytime. Well, to get on with it, I was really having a ball doing every acrobatic maneuver in the books. Then it happened. On top of a loop (which I entered at too low an airspeed) the old “Mustang” snapped into the most beautiful inverted spin you’ve ever seen. It was all my own fault; I had cross controlled at a low airspeed and was now a passenger instead of a pilot.

Immediately, I applied the spin recovery procedure only to reenter a spin in the opposite direction. This happened twice so I decided I better hit the nylon and “save the body for the board.” As I reached for the canopy jettison handle, I hesitated a second and thought to myself, “Wait a minute, settle down, maybe there’s something you forgot.” Sure enough, in my panic to break the spin, I had forgotten to cut the throttle.

“Okay dummy, you don’t have much time, get with
it!” This time I used the correct spin recovery and before I accomplished the last step in the procedure, the bird was flying and I was back to pilot duty.

Now, what does this hairy tale of goofing-up prove? It’s obvious. You don’t have time to get the checklist out, turn to the page on inverted spin recovery, and start reading. Whether it’s a P-51 or an F-4, the BOLD FACE emergencies have got to be firmly established in your mind, in the correct order, and reviewed periodically so they’re not forgotten.

In regard to the use of common sense in the old and new fighters, let me give you a few quotations from the P-51 Dash One. That’s right, I still have the old manual and some of the logic that applied then, applies now. The following are excerpts from the page on spins:

“Remember these tips on spin recovery:
1. Don’t get excited.
2. Don’t be impatient. Leave the controls on long enough for them to take effect.
3. Fix in your mind the altitude at which to bail out, and bail out before it is too late.
4. Never make an intentional power-on spin.
5. In making an intentional power-off spin, start in with plenty of altitude. Be sure you can recover above 10,000 feet.”

Sound familiar? Well there it is; it was no different in the old Mustang than it is now in the modern Phantom when it comes to common sense and BOLD FACE procedures. Combine these two factors and you not only have money in the bank, but additionally, a good safe flying operation.

Everything I’ve said has been heard by most of us sometime during our flying careers. The main point is, BOLD FACE procedures should be committed to memory as long as we commit men to the sky, or for that matter, beyond the sky.

As I pointed out to our young instructor-pilot upgrader: The F-4 Dash One may no longer state that these procedures will be memorized, however, page E-3 of the checklist states, “Procedures appearing in BOLD FACE are considered critical. These steps must be performed immediately and should be committed to memory.”
Like the venerable "Douglas Racer," the trusty old T-33 is still with us and may be for quite a while longer. Although more than twenty years old, this two seat, single engine, all-metal jet airplane is one of our most reliable performers. Many years ago we began cautioning each other about its age and how we should go easy on the old lady, now another area is opening up in the saga of our "old-enough-to-vote."

The area we want to talk about is complacency. This human foible can strike from two directions, the flight operation and the maintenance operation. The flight part speaks for itself. The airplane is reliable and honest but some of us tend to forget that the T-33 can pick up a sink at any base in the world and dig up a qualified maintenance man to work on the bird. Not so any more...do you realize that some of our younger troops may only have seen the bird at a distance?

We selected four of our most recent incidents to illustrate that the old girl is still in the running for honors in the accident rate area, here's our sampling.

Eighteen minutes after takeoff while cruising at FL260, the left wing was noted to be heavy. Procedures to start the tip tank feeding were tried but unsuccessful. While enroute and off airways, a "zoom controllability" (we don't know what that is) maneuver was attempted from flight conditions of 26,000 feet and 275 knots to see if that would get the tank feeding. Back pressure was applied and as the nose came up to 15 degrees, the left wing snapped under. Recovery procedures were ineffective and after two turns of a rolling spiral both tip tanks were jettisoned, and impacted in an open field. The reason for the fuel feeding malfunction has not been determined.

Here's another interesting one. On the go, from the second touch-and-go, the aircraft became airborne at 115 knots. Suddenly, the front seat pilot saw bright sparks in a three-inch solid stream coming from the bottom of the instrument panel near the bomb salvo switch. He immediately called "FIRE" over intercom to the IP and simultaneously initiated abort procedures. They had about three-thousand feet remaining as the pilot retarded the throttle and maneuvered to land immediately. The IP instructed him to stopcock and they both got on the binders. The right main blew during the final portion of the landing roll. Just before the aircraft stopped, the IP opened the canopy electrically and ordered the battery switch turned off. As the aircraft came to a stop, both tip tanks jettisoned, neither pilot had jettisoned them.

During the investigation it was determined that the bomb salvo switch in the front cockpit had shorted internally. This, in turn, caused both tip tanks to jettison and burned out the tip tank jettison solenoids.

And then there's the maintenance side. Crossed wires in the fire/overheat circuits have popped up again. Normally, an overheat light on climb at a low airspeed doesn't get much adrenalin pumping in a T-bird jock. But this "Murphy" activates both lights when the overheat circuit is triggered. That causes all kinds of consternation in the cockpits.

Here's another one, and this must be a first. While dearming the seats to do a TCTO, the rear seat canopy ballistic hose was found to be improperly installed. The quick disconnect end of the hose was connected to the SEAL PRESSURE UNION!! The hose from the M3A-1 initiator was not connected at all. If the rear seat armrests had been raised, the initiator would have fired releasing its gas toward the top of the canopy in the area of the rear seat occupant's right shoulder and face. How about them apples?? Transient personnel had installed this hose after the original had been written up as being crimped. Would have been a funny ejection sequence too if they had been in a hurry and the back seater went first.

So you see, the trusty "T" is still in the running to cause accidents. And speaking of accidents — as of this writing we have had three majors in 1969. They accounted for three of TAC's fatalities, and of course, three birds destroyed. One of the accidents was a material failure and surprised no one since the cause factor was not new. The other two didn't have new cause factors either. One involved simulated air-to-ground maneuvers during an instrument ride and the other crashed in the landing pattern after going out of control in the final turn.

So those of you who still strap on a T-bird, think about these things. The airplane is reliable and honest...to a point. It still flies by the laws of physics and will bite you just as fast as some of our more famous "weapon systems." Take a second look at your aircraft knowledge...and even your proficiency. You might be surprised at what you find — you might even want to study a bit in '70.
BARRIER CONFUSION

I have read your interesting article on barriers in the October issue of TAC ATTACK. I am enclosing an incident that occurred to me which may help highlight some of the problems encountered by the Fire Service. We are generally first on the spot when it comes to engagements.

It is not my intent to make waves or to rattle anyone’s cage. I am interested in the ultimate goal we all have of keeping some person from getting wiped out because of something that can be corrected. I believe in striking while the iron is hot and as you do not publish names, dates, or places I believe this information may be of some value to the Air Force and the Command, and I would appreciate your treating it as such.

Thank you very much for the fine magazine you publish. Outside of the Flying Safety magazine I believe it is the best.

CONCERNED FIRE CHIEF

First of all, Chief, thanks for the kind words, we’ll keep trying to be number one. Secondly, we appreciate the fact that you took the time to pass this incident on to us. It’s a perfect example of what we’re looking for and why the back cover reads as it does. The Chief’s narrative follows. Ed.

A call was received from the Control Tower on the primary crash intercom notifying us that an F-4 had declared an inflight emergency for loss of hydraulic pressure. The tower advised that the pilot had requested an approach-end engagement. The landing runway was 03-Right to the north and the firefighters responded to predesignated positions, with one crew assigned to “rip out” the MA-1 webbing. This would give us an operational BAK-9, and a BAK-12. (We have a BAK-9 and MA-1 interconnect at each end of our two runways, plus a BAK-12 at 1,050 feet from the BAK-9.) The tower advised that the aircraft was a Navy bird and was making a straight-in approach from the north.

This is where the fun started!!! What was actually involved was a downwind engagement on 21-Left and not an approach-end engagement on 03-Right.

The “rip-out” was cancelled for the 03-Right runway and accomplished on the 21-Left runway which did not present any real problems as we still had a BAK-9 and a BAK-12 capability on 21-Left. However, the arresting barriers on 03-Right were NOT hooked up as the MA-1 webbing was removed, BAK-9 and BAK-12 cables are disconnected on the landing ends to prevent inadvertent approach-end engagements. The BAK-12 cable is actually removed from the runway on the landing end.

The tower advised that the aircraft was on a 10-mile final for 21-Left and requested me to visually confirm that the tail hook was down . . . I had a nagging thought in the back of my mind that I should check with the tower to be sure that the Navy people were familiar with our barrier systems but I was involved in assuring the required preparations were accomplished and trucks were spotted for rapid recovery.

I made a visual check as the aircraft came in sight and advised the tower that the tail hook was down. The aircraft was on a high final approach which did not present too much of a problem as the F-4 is usually landed like it had a load of bricks on the tail assembly. This aircraft was too high! Missed the BAK-9 like it was never there, and floated about 150 feet over the BAK-12 missing it completely. The aircraft continued down the runway with crash trucks in hot pursuit. As the pilot ran out of runway he went to the binders. A large volume of white smoke came up as both main tires blew. The tail hook completely wiped out the lowered, disconnected BAK-9 and MA-1 on 03-Right, on into the overrun, veered

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off the runway, and into the desert where it came to a stop amid a cloud of dust. Fortunately, still in a normal configuration as it did not groundloop. There was no fire and actually no major problems other than two blown tires and hydraulic fluid leaking all over the place. And, two very disgruntled Navy pilots.

I asked the pilot about what had happened, and why he had missed our BAK-12. He told me that he had been looking for MIRRORS to guide him to the location of the barrier as this was the way it was set up on all Navy bases. Our barriers are identified by two large yellow balls on boards at each side of the BAK-12.

The aircraft was cleared and turned over to aircraft recovery personnel, and the firefighters spent the better part of four hours replacing the BAK-9 and MA-1 barriers. The cables had been cut by the wheels of the aircraft and had to be replaced.

After close analysis of the entire operation I arrived at some conclusions that may be of some value to other bases.

Is it going to be an APPROACH-END or DOWNWIND engagement????

It should be firmly established as to which engagement is called for. If a normal approach-end engagement had been established we would have had the BAK-9 and BAK-12 set up on 03-Right and the BAK-12, BAK-9, and MA-1 would have been in normal operating position at the other end, 21-Left.

I was not aware of the fuel situation on the aircraft or whether it would have been possible for the aircraft to maneuver to line up for an approach-end engagement...to come in on 03-Right would have brought him over populated areas...I do not fly airplanes so I am not going to attempt to second-guess the pilots or tower.

It should be firmly established between the services as to what identification is provided for the barrier configurations. Suppose one of our Air Force types has to land at a Navy base??? Will he have the same problem??

This incident took place on a Saturday. On Saturday and Sunday we have mainly transient types and no scheduled flying training other than test flights. On weekdays the RSU unit would have been manned and the approach may have been corrected. As it was the fire department had the whole ball of wax and, unfortunately, an abnormal situation developed. Fortunately, it was not any worse than it actually was... As far as a designator for the barriers, arresting gear, etc., it is our OP to have the pilot call, “Barrier, barrier, barrier,” that gets everyone’s attention real well...

Some definite and distinctive code is needed, as is obvious in your article in the October 1969 edition. I will be looking for what others write in.

WET RUNWAYS

I have been assigned to give a brief to my Phantom squadron on wet runway landing techniques in the F-4. I was advised that your magazine had done some articles on this subject and probably had some information that could be of value to me in my presentation. I would be greatly appreciative if you would send me any articles you might have on this subject.

1st Lt Michael C. Cesarano, USMCR
Fighter/Attack Squadron 312
MCAS, Beaufort, S.C.

The 1968 June, November, and December issues of the TAC ATTACK are on the way. Each has an article concerning wet runways. Hope this will help you. And don’t forget the primary aid to a successful landing on a wet runway— an on-speed touchdown with no drift. Ed.

DISTRIBUTION

Being in the business of flight testing F-4 aircraft after completion of rework and overhaul, our aircrews devour each and every issue of TAC ATTACK. Unfortunately, these issues are generally liberated while passing through various TAC bases while on cross-counties.

It would be greatly appreciated if we could be placed on distribution for two copies per issue addressed to:
Flight Test Department
Naval Air Rework Facility
U.S. Marine Corps Air Station
Cherry Point, N.C. 28533

Capt C. J. Conlon, Jr., USMC
NARF Flight Test Officer
MCAS, Cherry Point, N.C.

Your contact for TAC ATTACK distribution at Cherry Point is the Wing Aviation Safety Officer, 2nd Marine Aircraft Wing. He is presently receiving 50 copies, you could probably “liberate” the two mags per month from him. Budget and manpower shortages prohibit us from honoring your request directly. Ed.
The Old Man bit the rest of his cigar in half and complained to his youngest staff man, “I’ve got to make a pitch to a safety meeting at the Pentagon and I want you to go out and find something for me to say.” “Right Sir, about how long will you be on the platform?”

“Look, I’ve got 20-minute feet, but not over a half-hour at the outside. So get going and bring me something that’s different.”

What to do? So damned much has been said about safety that it’s tough to keep the message alive. Why not look at some figures in the Ground Safety Office: maybe there’s something new there.

The NCOIC of Ground Safety was curious. What was this guy from operations doing asking all these questions? Yes, the sergeant knew where most auto accidents occurred on the base. They happen at the West Gate. He didn’t know why they happen there. Maybe the Air Police would know.

Next stop, the West Gate. A lot of traffic poured thru that place. Big peaks at shift changes. To top it off, civilian traffic from down-State barrelled thru at 70 plus, heading north to the Federal highway. Good visibility all around. Flat prairie country. Not a tree in sight. Drivers can see forever. But wait a minute, what’s that one big sign over there? It’s one of those “thermometer” jobs that says “172 days since the last fatal, etc.” But, wow, it’s ten feet wide by seven high. Look how it hides the north-bound guy from Joe Smith exiting the Base. No wonder 28 pieces of Detroit iron were out-dated here in the last four-and-a-half years. It had to be that big safety sign. Boy, this place was really loaded against the tired shift man who’d been crawling up T-bird tail pipes all day.

Any other hot spots on the base? Nothing to compare with the West Gate. There was some activity at the entrance to Capehart where some crusader had put a “Go to the PTA” sign right where all the kids cross the street. Two knock-downs and a few near-misses there, but the PTA sign was young. Give it time.

Back to the second floor office via the ice-coated iron stairs. This obstacle course had been called in to Base Safety, but the answer was too much work on overdue reports to worry about a little ice. Will catch it later.

The safety meeting was top level. Excellent speakers. Astounding totals of dollar savings, especially critical in view of Viet Nam war requirements. Then came the Old Man’s turn. He was no safety pro, just an old ops type. He started slowly, “Gentlemen, I know you’re pressing a good cause, and you deserve the cooperation of everybody, but today I want to talk with you about signs.”

by Lt Col W. L. Anderson

Hq TAC

JANUARY 1970
## TAC TALLY

### AIRCRAFT ACCIDENT RATES

*Estimated*

#### MAJOR ACCIDENT RATE COMPARISON

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(See Angle of Attack)
This issue of TAC ATTACK marks our 109th "monthly installment" since old "TAT" started the presses rolling back in January of 1961. Tactical Air Command has come a long way since then, and our pages have reflected that progress... you need only to scan back issues of TAC ATTACK to read a history of sorts. Our safety progress is there, our technical advances; our old and new aircraft, and their problems, and the changes in our operational thinking. The old magazines also point out too frequently one of our human frailties—our inability to learn from history.

The purpose of TAC ATTACK is to prevent future accidents through reader education, not just to rehash the ones still smoking. And here is where you, Dear Readers, come in... We need your inputs to air the circumstances that may cause our NEXT accident... the circumstances that haven’t reached the incident-reporting stage as yet. You do not fully appreciate how much valuable accident prevention information you have at your fingertips—information as yet unpublished that others need to hear about. Don’t worry about its being old info. Look around and count the new faces in your flying club.

A good example along this line is the October input by Squadron Leader Hart of the Royal Air Force. He put us on to a situation that’s been around for several years— the confusion "in the trade" that exists surrounding the terms barrier and arresting gear. If you sat down with a group of pilots and tried to brainstorm a more needless way to lose an aircraft and crew... you would be hard pressed to come up with a substitute for barrier/arresting gear confusion. Our early response to this story in the October magazine doesn’t indicate that we have set any fires in this area but at least the word is out. No doubt, your ideas will fare better—but there is no way to tell if you don’t get them to us.

It's not mandatory that we receive complete, polished stories, or even a story at all. How about our short features, TAC TIPS and CHOCK TALKS? Just jot down a paragraph or so about something of interest to other jocks or maintenance men. Remember, accident prevention begins out where the action is! We haven't seen anyone at Langley spin in a desk yet... nor do you see much excitement generated by a "desk flyer" as he looks out the window at rain and fog masking one-hundred-and-one-quarter.

So, as TAC ATTACK enters its tenth year of publication, we want it understood by all TAC types that this is your magazine. It's your safety vehicle and your means to reduce TAC's accident rate even further this year. If we don't get your inputs from the field, YOU only get outputs from the headquarter's types... and that's yesterday's news. So let's hear from you working troops, tell us like it is! Ed.