

TAC ATTACK



OCTOBER 1979

TAC's NEWEST
MEMBERS ... Pg 4



READINESS IS OUR PROFESSION



TACTICAL AIR COMMAND

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Angle of Attack

To The People of ADCOM -- Welcome

On the first of October, a new chapter in the history of Tactical Air Command begins as we join with many units of Aerospace Defense Command. Units range from the 57th Fighter Interceptor Squadron at Keflavik Air Base, Iceland, to the 777th Radar Squadron at Klamath AFS, California.

Valuable physical assets include the F-106, T-33, and numerous radar sites from the SAGE system. In addition, new TAC-gained Air National Guard units fly the F-106, F-101, F-4, T-33, and EB-57. This equipment represents a great investment of money and knowledge, but is not anywhere near as valuable as the people who will become new members of TAC.

The F-106 has been in the active inventory for over 20 years. During that time, the aircraft has not become experienced; it does not have a "corporate memory" which can be passed on to others. Only the people who fly and maintain the aircraft have that experience and corporate memory.

The Ground Control Intercept, Early Warning, and Height Finder radars are combined into a radar net covering approaches to the United States and Canada. But again, this equipment is useless without its trained and knowledgeable operators.

No matter where the organization is or what it does, its people make it go and grow.

Our job in safety is to help preserve all resources, both physical and human. The people of ADCOM have been doing just that for many years. You are a welcome addition to Tactical Air Command.

RICHARD K. ELY, Colonel, USAF
Chief of Safety



TAC's

NEWEST MEMBERS

On the first of October, Tactical Air Command will suddenly grow by nearly 17,000 personnel as units of Aerospace Defense Command come under the operational control of TAC. TAC will become responsible for the operations and training of active air defense units and 11 Air National Guard units will assume TAC-gained status. Many supporting radar and communications are also involved in the transfer.

Aerospace Defense Command was first organized as a MAJCOM in March 1946. It was deactivated for a short time in 1950, being reactivated in 1951. ADCOM has been in existence since then. In 1975, it became a specified command under NORAD and JCS control. Interceptor aircraft on alert will still be under the operational control of NORAD.

The following are brief histories of each of the active duty flying units coming to TAC. These histories should give you an idea of the background and accomplishments of these units and the tradition carried on by the personnel of ADCOM. In the November issue, we'll feature histories of the ANG units.

AIR DEFENSE WEAPONS CENTER TYNDALL AFB, FL

The Air Defense Weapons Center is ADCOM's counterpart to the Fighter Weapons School at Nellis AFB. Tyndall is responsible for the training of ADCOM's interceptor aircrews and GCI controllers and also serves as home to the William Tell interceptor competition, held every two years.



2d FIGHTER INTERCEPTOR TRAINING SQUADRON TYNDALL AFB, FL

In June 1947, the 2 FITS was transferred from USAFE to ADCOM. Originally the unit flew P-61s. In succession, the aircraft flown were the F-82, F-86, F-94, F-84G, F-86D, F-102A, F-101B, and F-106. The unit has been stationed at Mitchell Field, McGuire AFB, Suffolk County AFB, Wurtsmith AFB, and Tyndall AFB.



**95th FIGHTER INTERCEPTOR
TRAINING SQUADRON
TYNDALL AFB, FL**

The 95 FIS was transferred from SAC to ADCOM at Grenier AFB in August 1949. The squadron was deactivated several times in its history. Aircraft flown by the 95 FIS are the F-51, F-94, F-86D/L, F-102, and F-106. After Grenier AFB, the unit was stationed at Andrews AFB and Dover AFB before it moved to Tyndall AFB.



**5th FIGHTER INTERCEPTOR SQUADRON
MINOT AFB, ND**

In June 1947, the 5 FIS was transferred (along with the 2 FIS) from USAFE to ADCOM at Mitchell Field flying P-61s. After transitioning to F-82s the unit moved to McGuire AFB in 1949. In 1955 the 5 FIS was transferred to Suffolk County AFB and transitioned to F-102s. In

1960, the unit moved to Minot AFB and started flying the F-106. The 5 FIS has a detachment on alert at Davis-Monthan AFB.



**48th FIGHTER INTERCEPTOR SQUADRON
LANGLEY AFB, VA**

The 48 FIS was activated at Dow Field in November 1946 flying P-47s. The unit transitioned to P-84s the following year and flew them until they were temporarily deactivated in 1949. The unit was reactivated in 1952 at Grenier AFB in the F-47. The unit relocated to Langley AFB in 1953 where they have flown the F-84, F-94, F-102, and F-106. The 48 FIS also has an alert detachment at Charleston AFB.

TAC's newest members



49th FIGHTER INTERCEPTOR SQUADRON GRIFFIS AFB, NY

The 49 FIS was activated at Dow Field in November 1946 flying P-47s. Like the 48 FIS, the unit transitioned to P-48s and was temporarily deactivated shortly thereafter. The squadron was reactivated at Dow flying the F-80 and the F-86. In 1955 the unit moved to Hanscom Field for four years and then Griffis in 1959. Following their arrival at Griffis, the unit transitioned to F-101s and flew them until deactivation in July 1968. In September 1968 the 438 FIS at Griffis was redesignated the 49 FIS. The 49 FIS now flies the F-106 and operates an alert detachment at Loring AFB.



57th FIGHTER INTERCEPTOR SQUADRON KEFLAVIK AB, ICELAND

The 57 FIS was activated at Presque Isle AFB in March 1953 with F-89Cs. In November 1954 the squadron moved to Iceland and was transferred to MATS. In July 1962 the 57 FIS once again became an ADCOM unit flying the F-102. In April 1973, the Deuces were traded for F-4Cs. The 57 FIS converted to F-4Es in the summer of 1978.



84th FIGHTER INTERCEPTOR SQUADRON CASTLE AFB, CA

The 84 FIS was transferred from USAFE to ADCOM in 1947 without personnel or equipment. In 1948 it was moved to Hamilton AFB and began a transition to F-84s. Two years later the unit transitioned to F-89s and then F-86s. In

1953 the squadron received F-94s which were eventually replaced by F-89Ds, Hs, and Js. In 1959 the squadron transitioned to F-101s which they flew until their temporary deactivation in 1968. They were reactivated several months later in the F-106 and moved to Castle AFB in 1973. The 84 FIS operates an alert detachment at George AFB.



87th FIGHTER INTERCEPTOR SQUADRON **K. I. SAWYER AFB, MI**

The 87 FIS was activated in November 1952 at Sioux City Airport with F-51D aircraft. In the fall of 1953 the unit transitioned to F-86s and was transferred to USAFE the following year. The squadron came back to ADCOM in 1956 at Lockbourne AFB. The year 1958 saw the transition to F-102s which were changed to F-101s in 1960. In 1968 the unit was deactivated, but shortly thereafter, the 11 FIS at Duluth was redesignated the 87 FIS. The 87 FIS and their F-106 aircraft then moved to K. I. Sawyer. The 87 FIS has an alert detachment at Tyndall AFB.



318th FIGHTER INTERCEPTOR SQUADRON **McCHORD AFB, WA**

The 318 FIS was activated in 1947 at Mitchell Field. It was later transferred to Hamilton Field where it received its first aircraft, P-61s. In spring of 1948, the squadron received P-82s and moved to McChord later that year. In 1950, the squadron transitioned to F-94s and moved to Thule AB, Greenland, in 1953. The squadron came back to ADCOM in 1954 at Presque Isle AFB flying F-89s. The squadron returned to McChord in 1955, transitioning to the F-86. Following the F-86, the squadron flew Deuces and their current aircraft, the F-106. The 318 FIS operates an alert detachment at Kingsley Field, Oregon.



That completes a rundown of the active duty flying units formerly assigned to ADCOM. There is no doubt the accomplishments of these units have been remarkable. To the men and women of all ADCOM units coming to TAC, we bid you welcome. After all it's a well-known fact that "Fighter Folks Do It Better!" ➔

TIPS

Nothing astonishes men so much as common sense and plain dealing. **EMERSON**

FUEL TRUCK-1 PERSONAL EQUIPMENT-0

Courtesy - Capt Nick Franca
389 TFS/366 TFW

After the second sortie of the day during a four-day surge, the Aardvark crew climbed down the ladders as maintenance personnel, waiting to refuel and quick upload ordnance, descended upon the airplane like locusts on a wheat field. Lights bathed the aircraft in eerie glow as the munitions people scurried about at an almost frantic pace, and the fueler tugged and wrestled with the hose and grounding wires that sprouted like snakes from his machine.

The aircrew, sensing that the immediate area was not the proper place to observe the bustling humanity and machines, recited the litany of the 50-foot fueling rule, and moved to the side of the fuel truck away from the aircraft. They heaped their personal equipment in a supposedly conspicuous pile and went back to accept the load.

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

Meanwhile, the fueler prepared to move his truck to the next aircraft and noted, with chagrin, that another vehicle directly blocked his lane. The last piece of the puzzle dropped into place as the truck began to move away from the area in a hard right turn.

The foam helmet liners emitted an ugly POPI as the rear wheels passed over the pile of gear. The intrepid aviators realized what had happened and turned sadly toward the incident site. While the crew surveyed the scattered helmet and offset box remnants, an equally sad fueler joined other maintainers in discussing the merits of their increased wing visibility.

Morals: (1) Helmets, masks, and ditty bags overflowing with checklists, kneeboards, and other equipment cannot be effectively used as vehicle chocks. Store them in the aircraft or in a support vehicle.

(2) During quick upload training or other times of abnormally busy vehicular movement, safe areas are hard to find.

(3) The interruption of normal habit patterns, coupled with a high degree of activity, increases incident probability. When involved with time-critical activities that combine tasks not routinely accomplished together, think ahead. Expect the unexpected!



GOOD SHOW

An F-4 from another command was on the first sortie of a navigation proficiency mission. The flight was uneventful until the crew prepared to begin the first aerial refueling. Just after stabilizing in the contact position, the aircraft began a 2G pitchup. Although the pilot reacted immediately, applying forward stick, the aircraft continued to climb.



The throttles were retarded to idle and a "breakaway" called by the WSO. The climb continued and the F-4 just barely missed the tanker's tail section. During the climb, the crew used the paddle switch without effect and finally got the bird under control after climbing 500-1,000 feet. It was then that the trim indicator was noticed in the full nose up position.

The crew accomplished the checklist procedures and slowed the aircraft down. Although considerable forward pressure was required to maintain level flight, RTB and landing were without further incident.

Post flight inspection of the trim circuits revealed the manual nose up trim relay contacts were stuck in the energized position. As a result, power was continuously supplied to the trim motor causing full nose up trim. The stuck contacts prevented power from reaching the nose down trim circuits when the crew tried to trim out the pressure.

Runway trim has become almost nonexistent these days. It's funny how these relatively "simple" problems occur at the worst possible time as this one did. This crew was prepared for the problem--would you have been?

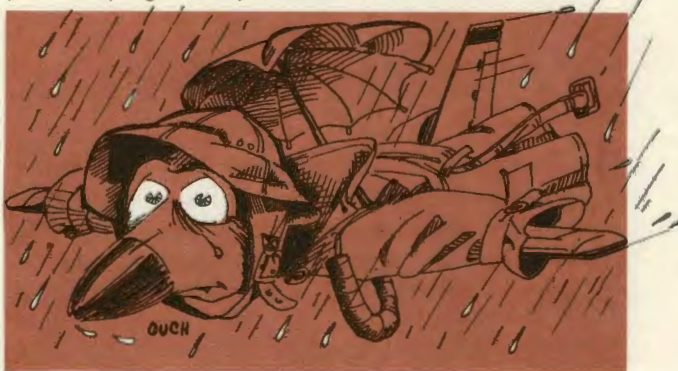
TAC ATTACK



As if birdstrikes weren't enough, now the bugs are getting into the act . . .

During the F-4's weapons system check, the AIM-9 tone was extremely loud and could not be controlled with the volume knob. Upon return to the base, the dearm crew noticed that the seeker head was broken--there was a residue of material resembling dead bugs inside the seeker head.

Watch out for those flocks of bugs while you're flying--today an AIM-9, tomorrow . . . ?



HOW HARD IS A RAINDROP?

Many a motorcyclist can tell you a raindrop feels pretty hard at 50 MPH. At 450 KTS, that raindrop can get a lot harder.

A number of TAC aircrews received minor damage to their aircraft towards the end of the summer. All aircraft had penetrated light rain-showers at high calibrated airspeed. The rain damaged radomes, antenna covers, lights, and paint. The possibility of light hail has not been discounted in these incidents either.

Avoidance would seem to be the best course of action. If that's impossible, maybe you ought to slow down a tad before you peel your bird like a banana . . .

A-10 CANOPY-OFF TESTS



By Mr. Wendell H. Shawler
Deputy Director of Flight Operations
Fairchild Republic Company

The objective of any complete test program is to try everything and change or fix as necessary so that the user is never surprised, especially catastrophically surprised. Unfortunately, this is not possible due to time and money constraints,

but the testers attempt to accomplish as much as possible. In this case, the A-10 canopy-off tests were initiated by Fairchild Republic Company and completed prior to anyone being surprised. Consequently, this article will fill you in on the details and results of the tests.

The preparation for any test requires a significant effort, and this one was no exception. A review of previous canopy losses and tests provided a good starting point. A complete inspection of the cockpit determined what items may depart the aircraft. Those suspected items were further secured so that if they came loose, they would not leave the aircraft. As you can imagine with the A-10 engine configuration, loose items could easily find their way into an engine. Another important area checked was the ejection system to insure the ejection seat had not been compromised by removing the canopy. Other preflight items included tufting the area around and in the cockpit as well as the pilot to determine airflow characteristics; instrumentation of the engines to determine any influence that the disturbed airflow might have on the



engines; camera installation to provide photographic coverage; and a thorough cleaning of the cockpit to minimize debris. This is a good time to point out the importance of cockpit cleanliness because a dirty cockpit could incapacitate the pilot due to loss of vision in case of canopy loss.

In our evaluation of the wind blast effects on the pilot and cockpit equipment, we divided the test into two phases. Two taxi tests were completed to 100 knots and to 145 knots including rotation to eight degrees angle of attack at the higher speed. Secondly, two flights were flown with a gradual buildup in airspeed to 350 knots. Maximum altitude obtained was 12,000 feet. At 20 knot increments, mild maneuvering was accomplished including sideslips and windup turns. Seat height and body position were evaluated at each airspeed. Tufts were used on the pilot's flying suit and helmet, around the cockpit area, and along the fuselage. Photographs were taken by a cockpit camera and by a photo chase aircraft.

TEST RESULTS

The A-10 can be safely flown up to at least 350 knots with the canopy off without any major problem. Noise and buffet increase almost linearly as speed is increased. Engine noise is not a factor in flight. The only time engine noise was noticed was on the ground before brake release with both engines at 90 percent. The engine performed normally throughout both flights.

Normal seat position can be maintained up to approximately 220 knots. Above that speed, a lower position is highly desirable from a comfort standpoint. A lower seat position is better at any airspeed except for landing where better forward visibility becomes a factor.

Normal body position can be maintained up to approximately 220 knots with normal seat position and 260 knots with a lowered seat position. Again a forward body position is more comfortable at any airspeed. Some mild aerodynamic heating was experienced above 320 knots.



A-10 CANOPY-OFF TESTS



Normal communications can be maintained up to at least 350 knots. Increased volume settings are required to compensate for the noise, and above 280 knots background noise is transmitted with normal radio transmissions.

All cockpit equipment remained attached except the map case came open. During the second flight, the forward attachment bracket for the thermos bottle separated from the aircraft and ended up behind the ejection seat in the thruster well.

As a result of our test experience, the following is a recommended write-up for the flight manual under "LOSS OF CANOPY" in Section 3:

If canopy is lost, slow the aircraft, bend forward, and lower the seat simultaneously. Check condition of the engines and aircraft tail. Stow all remaining loose equipment. Flight test has shown no major problem up to at least 350 knots; however, 200 knots or less will greatly aid pilot comfort.

In summary, the aircraft performs well without the canopy. The expected problems of noise and windblast can be handled by changing seat position and slowing the aircraft to a more comfortable airspeed. If smoke or fumes become a definite problem, the pilot can easily handle the aircraft should it become necessary to jettison the canopy.

Wendell H. Shawler is presently Fairchild Republic Company's Deputy Director of Flight Operations; Manager of Experimental Flight Operations; and Operations Manager at the Edwards AFB Test Site.

Prior to joining Fairchild Republic Company in March 1978, he served for more than 26 years in the United States Air Force. He flew combat tours in both Korea and Vietnam. His flying experience includes practically every USAF jet fighter, some US Navy aircraft, and a few foreign fighters.

Hey! pass it along... nine others are waiting.



AIRCREW of DISTINCTION



Colonel Stanton R. Musser
Commander, 602 TAIRCW
Bergstrom AFB, TX

On 1 July 1979, Colonel Musser (then assigned as Vice Commander, 1st Tactical Fighter Wing, Langley Air Force Base, Virginia) was departing Buckley Field, Colorado in an F-15. Because the long runway was closed, Colonel Musser elected to use the afterburner for takeoff on the 8,000 foot runway.

Immediately following liftoff, at approximately 160 knots and 50 feet AGL, Colonel Musser heard loud bangs and felt the aircraft lose a sig-

nificant amount of thrust. Since there was no rolling or yawing tendency, he suspected double engine involvement.

Rather than continue with unknown power capability, Colonel Musser quickly elected to abort the takeoff. He deployed the tailhook and flew the aircraft back to the runway, touching down with 2,000 feet remaining. He successfully engaged the departure end cable at 130 knots and brought the aircraft to a safe stop.

Colonel Musser's quick analysis and timely reactions prevented possible injury to himself and others and the loss of a valuable fighter aircraft.

chock talk

chock talk involves and involves with a maintenance slant.

*...incidents and incidentals
with a maintenance slant.*

RAIN, RAIN, GO AWAY

A tow team was dispatched at midnight to tow an F-15 to the alert barn. During the tow operation, it began to rain quite heavily. In an attempt



to close the canopy, the individual riding the brakes grabbed the canopy jettison handle instead of the canopy control handle. When the handle was pulled, the explosive components fired.

Luckily, no one was injured, and the tow crew got the right people to disarm the rest of the system.

In this case, a slower reaction and a flashlight might have prevented the incident. Think about it the next night you're out there on the dark flightline. Make sure what you grab is what you're looking for.

BREAKER, BREAKER ...

The aircraft was returning from a mission in the local area. The pilot was preparing for landing and lowered the landing gear. The nose gear indicated unsafe and a chase pilot indicated that the nose gear was retracted. The pilot attempted to lower the nose gear using various methods, all of which were unsuccessful. The runway was foamed and the pilot made a nose gear up landing. For the seriousness of the emergency, relatively minor damage occurred.

Although the investigation is still in progress, one fact is known: a tool was found in the nose gear door opening mechanism--a breaker bar which had apparently been used on preflight to open the hooks on the gear door. The doors had been opened to check on work done after the previous flight. Whoever opened the doors apparently left the breaker bar attached to the opening mechanism.

I think the lessons from this one are obvious.

HOW TO LOSE AN AIRCRAFT PANEL

The F-15 was on an air combat training mission, fluid was noted streaming from the aircraft. The speedbrake was not extended until after touchdown; and when it was, a considerable amount of vapor was observed coming from the speedbrake area.

Investigation found that panel 66 located under the speedbrake had departed the aircraft and severed the pressure equalization line between tanks 3A and 3B. The panel had also hit and scarred the speedbrake. The speedbrake had been used twice in flight, and the panel was probably lost on one of these two extensions.

Examination of the area around panel 66 indicated it had not been fastened to the aircraft. This was the aircraft's first flight since maintenance for an emergency boost pump problem. The panel had been unfastened to facilitate access to a cannon plug, but this fact was not entered in the 781. The crew chief left early leaving an electrician to finish the job. After finishing, the panel was replaced but not fastened.

A supervisor was informed that the panel was unfastened, but again no paperwork was done and the panel forgotten once more—until the flight that is.

It's pretty easy to see why incidents such as these keep happening. It's also easy to see how they can be prevented. It's going to take everyone's effort to cut down the number of these mishaps. Can we count on you?

PANELS, PANELS, PANELS ...

No. 1--Prior to takeoff, panel FF-50 was opened by the runway launch team to investigate a suspected hydraulic leak. None was discovered so the mission was flown as programmed. Panel FF-50 was missing after landing. The airlock fastener receptacles were not damaged.

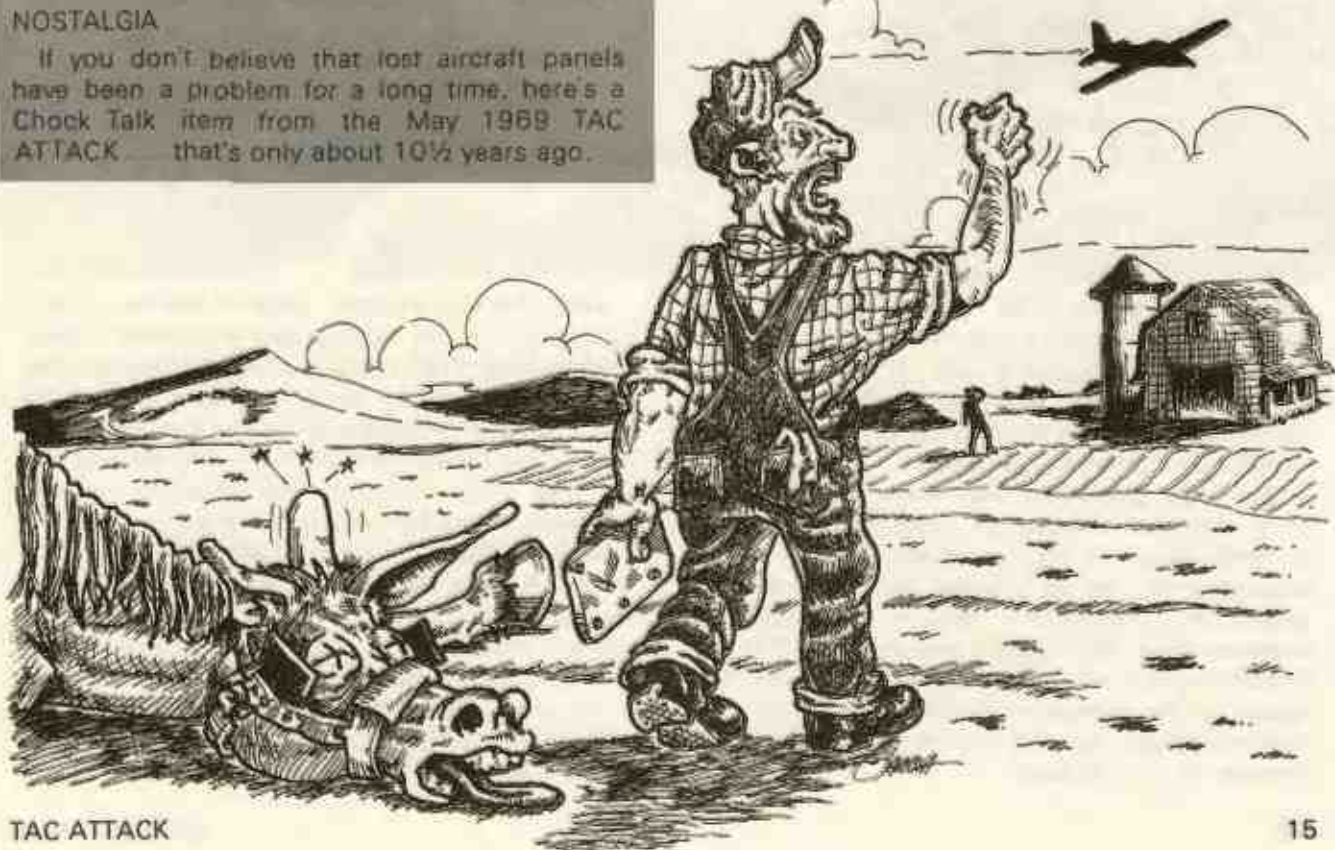
No. 2--Pilot felt a "bump" just after landing away from his home base. Aft access panel from baggage pod missing.

No. 3--Panel R-139 torn off in flight. The R-139 door was improperly secured after engine start.

These are just three cases of insecure panels which constantly clutter up the message traffic. We say clutter because they are so unnecessary. Most of these panels are never found, obviously they landed in unpopulated areas. Let's get on it before someone shows up at the gate with one of our missing pieces of sheet metal ... and claims he's been "panelized."

NOSTALGIA

If you don't believe that lost aircraft panels have been a problem for a long time, here's a Chock Talk item from the May 1969 TAC ATTACK ... that's only about 10½ years ago.





TAC PROFESSIONALS



E-3A Aircrew Saves T-33 Aircraft in Iceland

By 2Lt Ross Lampert
552 AWACW

The crew of an E-3A "Sentry" aircraft from Tinker AFB, Oklahoma, recently had a hand in the dramatic rescue of a T-33. The "T-Bird" was on an interceptor training mission over the North Atlantic when most of its instruments and navigation equipment went out.

The T-33, piloted by Maj Kevin Mullen of the 57th Fighter Interceptor Squadron, departed Keflavik Naval Air Station, Iceland, in a heavy snowstorm to act as a target for fighter aircraft practicing intercepts. Before reaching the exercise area, Maj Mullen was notified that the fighters could not participate in the mission because of the worsening weather. He entered a holding pattern to wait for the weather to clear enough for him to land.

While he was waiting, most of the navigation equipment in the two-seater jet aircraft failed. Reykjavik Air Traffic Control Center directed Maj Mullen into another holding pattern so that he could attempt an approach using his Tactical Air Navigation equipment since the TACAN was still working. The situation was growing critical, however, as his fuel was running low.

As he entered the pattern, Maj Mullen spotted an E-3A from Detachment 2 of the 552d Airborne Warning and Control Wing (AWACW) several miles ahead of him in the pattern.

Maj Mullen asked Reykjavik Center to have the E-3A crew change radio frequency so he could inform them of his situation and ask their help.

With radio contact established, Maj Mullen

asked the pilot Maj Ron Steffen for permission to take up a position in formation lined up with the left wingtip of the larger aircraft so he could make his approach dependent on the navigation instruments of the E-3A.

With no more than 30 minutes of fuel remaining, Maj Mullen was advised that the search-and-rescue force at Keflavik would be unable to launch a helicopter in the existing weather conditions if the T-33 was forced to ditch.

Hearing this, Maj Mullen brought the T-33 up alongside the E-3A's wingtip and flew that position as the E-3A attempted an approach using the Instrument Landing System (ILS) at Keflavik. Midway through the approach, however, the snowstorm caused the ILS equipment on the ground to malfunction temporarily forcing the two aircraft to break off the approach.

"The clouds were so thick at this point," Maj Steffen said, "I thought we'd lost him, but when visibility improved there he was--stuck to us like glue." And with good reason. The T-Bird was now down to 18 minutes fuel remaining.

The two aircraft circled the field for one more try. Ground crews were frantically cleaning the snow off the ILS equipment and putting it back in commission for the second attempt.

The unusual formation started down toward the runway again with the ILS fully operational. Approach control advised the pilots that the cloud ceiling was now 400 feet above the ground, visibility was one mile at best, and the wind was at about 45 miles per hour. These conditions were just within the allowed limits for the E-3A's approach.

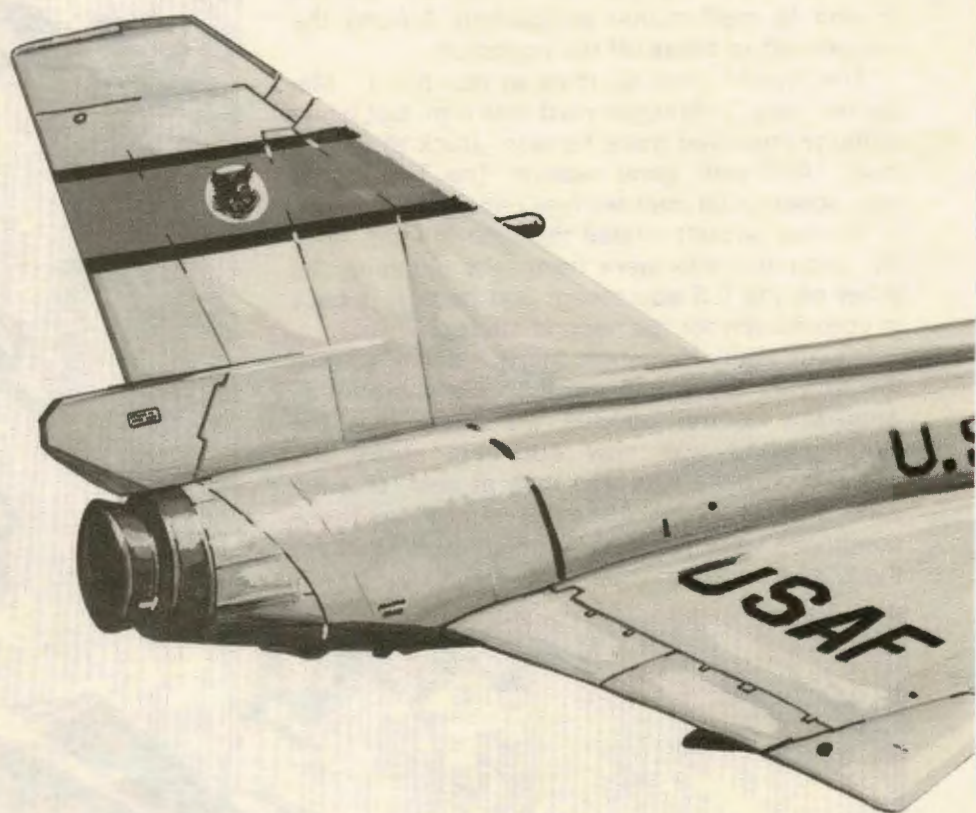
It looked like no-go when the "Sentry" reached its MDA and the lights along the runway still couldn't be seen. Reluctantly, Maj Steffen began adding power to go missed-approach.

Just then, the runway lights suddenly came into view. Maj Mullen transitioned to final approach, landing safely with only about eight minutes of fuel left.

Pulling away, the "Sentry" regained altitude and on notification that conditions were now too poor for a landing at Keflavik flew on to its divert base, Royal Air Force Base Lossiemouth, Scotland.



F-106 Delta Dart



Long and Jones 1993

[illegible]

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UNUSUAL ATTITUDE VS OUT OF CONTROL

By Major Tom Tilden
AFFTC/SEF

The Phantom felt good . . . solid, powerful, and quick to respond. "How much better could even an F-15 or F-16 feel? Sure, the aircraft handling academics had emphasized the possibility of sudden departures; but a true fighter pilot would never hamfist his aircraft into a departure! The low angle of attack roll would be an easy confidence maneuver. At low AOA there would be no adverse yaw--flies just like a T-38."

"Minimum 300 Kts...military power...nose up...hold pitch...200 Kts--unload to 3 to 8 units...aileron in for nice steady roll." The Phantom responded with a smooth roll at a comfortable 1/4 G. But now the roll rate slowed down...that comfortable 1/4 G became 0 G! Airspeed dropping...nothing but sky in sight...roll rate slowing...hanging in the straps a bit! "Something's wrong! It's not responding like it should! It's uncomfortable hanging like this! Shouldn't pull back at low airspeed!" "I'M OUT OF CONTROL!" "STICK--FORWARD." "AILERONS AND RUDDER--NEUTRAL."

The negative G increased, the airspeed dropped faster, and the horizon was nowhere in sight. It was uncomfortable...frightening. All was confusion, disoriented except for one thought--MAINTAIN FULL FORWARD STICK AND DEPLOY DRAG CHUTE.



The usual tug of the drag chute was hardly noticeable, but the G became more comfortable. Soon the horizon was visible and airspeed began to increase. The drag chute panels failed and dive recovery was simple.

These events were fictional, but there have been many similar situations in the Phantom. The "dead bug" inverted recovery confidence maneuver was added to the confidence maneuver series after some aircraft were lost attempting the low AOA roll confidence maneuver.

It is obvious that the pilot's decision to push the stick forward while already in a negative G situation aggravated what should have been a routine maneuver. It is obvious now; but it was not obvious to the frightened pilot who suddenly lost airspeed, the horizon, and his situational awareness.

If you fly an F-4 or any other aircraft, how will you know when to use your out-of-control recovery procedures and when to use an unusual attitude recovery? WHEN ARE YOU OUT OF CONTROL? The answer is not stated explicitly in the F-4 Dash 1, but we can find it indirectly through two steps:

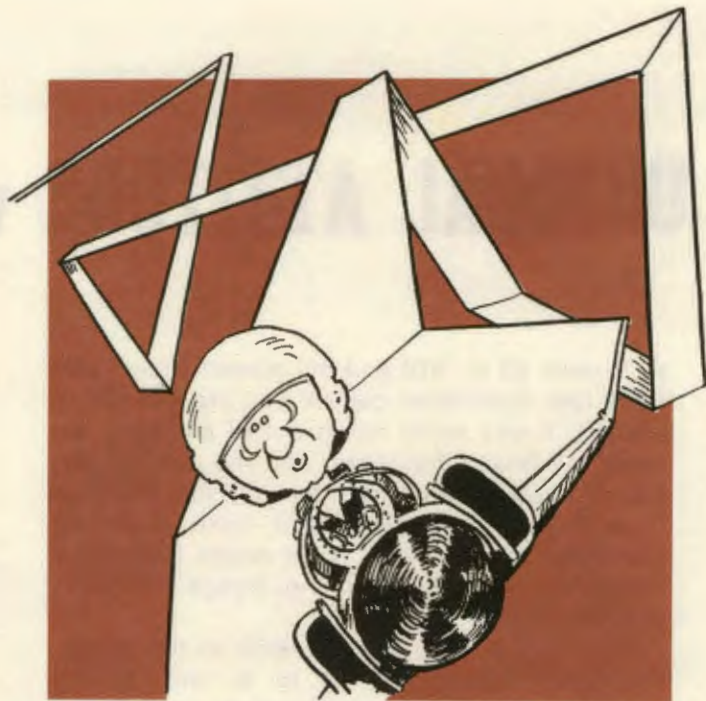
1. The out-of-control recovery is used after departure from controlled flight (Section III of Dash 1).

2. Departure is a loss of directional stability (Section VI of Dash 1).

Therefore: WHEN DIRECTIONAL CONTROL IS LOST (AN UNCOMMANDED YAWING), YOU ARE OUT OF CONTROL.

Stated another way, the out-of-control recovery should be used if the aircraft has stalled. Note from Section VI of the Dash 1 that: "A stall, as discussed in the Flight Manual, is defined as a breakdown in directional stability (i.e., nose slicing)." When we practice approaches to stalls we use the familiar parameters of an AOA limit, or 30° of wing rock, or nose rise, or nose slice. But only one of these, nose slice, is a stall. Nose slice, loss of directional stability, an uncommanded yaw, are all synonymous and in the F-4 represent stall--the departure from controlled flight. KEEP IN MIND THAT DURING HEAVY MANEUVERING, YOU CAN HAMFIST THE AIRCRAFT INTO A DEPARTURE WITHOUT ANY OF THESE INDICATIONS.

I have asked many Phantom drivers what they use to determine that they are out of control. One popular answer is: "If the aircraft doesn't respond as it should, I am out of control, and I start the stick forward." This kind of gut feel



works well for most jocks when maneuvering at high AOA. If I am trying to go right and the aircraft is going left, I ease the stick forward while neutralizing the ailerons, and I am out of trouble. But notice that our friend in the low AOA confidence maneuver applied this rule and got into trouble. Over and over somebody in a Phantom puts the stick full forward in a negative G situation. Yet, under negative G, it is actually very difficult to get a departure (loss of directional control). Since the airflow to the rudder is not blocked by the wing and fuselage when in negative G flight, loss of directional control is much less likely than in positive G flight.

Our friend in the low AOA confidence maneuver was not yawing, had not departed, and therefore, was not out of control. He was disoriented and therefore, should have used the NOSE HIGH UNUSUAL ATTITUDE recovery:

1. Maintain 3-8 units AOA.
2. Ailerons and rudder neutral.
3. Military power.

This would have kept him at a more comfortable 1/4 G until the horizon was in sight and enough airspeed was available to complete the recovery. Note that in the F-4 no attempt is made in the prescribed nose high unusual attitude recovery to roll the aircraft even after unloading to 3 to 8 units. Nor does the pilot fight any roll; he simply maintains 3 to 8 units and takes what he gets for roll attitude and rate.

Suppose you are looking at all blue sky and the airspeed is heading toward zero. Maintain 3

UNUSUAL ATTITUDE vs OUT OF CONTROL

to 8 units (0 to .5G) and mil power! Unless you have lost directional control you are not out of control. If you really run it out of airspeed, the nose will finally flop down and the aircraft may roll. No sweat! Don't fight the roll, just maintain 3 to 8 units. A roll is not nose slice and therefore, is not a stall. Your whole concern is maintaining 3 to 8 units until things start looking familiar.

To maintain 3 to 8 units, look at the gauge. The stick position for 3 to 8 units is not constant as our friend learned during his low AOA roll. Until flying speed is regained, attitude is not important. Power should be at military. Terrain should not be a concern unless the whole thing started low and slow. So the pilot needs to have only one concern, to look at the AOA gauge and maintain 3 to 8 units.

The pilot could also maintain 3 to 8 units by maintaining about $\frac{1}{4}$ G with "seat of the pants" feel. Since the stick position to maintain $\frac{1}{4}$ G will change as airspeed changes, this will require constant reevaluation and appropriate stick movement. In a panic situation, following the AOA gauge is the easier method; but don't ever discount what your posterior is telling you!

The point is that many times pilot inputs aggravate the problem. If the pilot would just let the airplane go (which is essentially what 3 to 8 units with rudder and ailerons neutral does) the pointy end will go down and the airplane will fly.

This aerodynamic fact of life is acknowledged in an "alternate" out-of-control procedure that used to be popular among Phantom Flyers. I don't know the source of the procedure for sure, but I have heard it attributed to Irv Burrows, former Chief Test Pilot at McDonnell Douglas. The "alternate" out-of-control procedure stated:

1. Place left hand on drag chute handle and right hand on defog/foothat lever.
2. If not recovered, pull left hand.

I am not suggesting that we change our present out-of-control bold face procedure. I do think that all pilots (not just Phantom drivers) should realize that the procedure only applies

when the aircraft has departed, i.e., LOSS OF DIRECTIONAL CONTROL. In other situations, the nose high and nose low unusual attitudes learned before T-37 solo in pilot training still apply and will apply for as long as you fly airplanes.



Maj Tilden went thru F-4 RTU at George AFB in 1971. He has flown F-4s at Ubon, Kadena, Homestead, and Edwards. He is current in the T-38, F-4 and RF-4 and is now serving as test pilot safety officer at Edwards AFB.



TAC

SAFETY AWARDS

INDIVIDUAL SAFETY AWARD

Lieutenant Colonel Donald P. Adeo, 363d Tactical Reconnaissance Wing Shaw Air Force Base, South Carolina, is the recipient of the Tactical Air Command Individual Safety Award for October 1979. Lt Col Adeo identified a deficiency in the built-in-test (BIT) function of the RF-4 radar. The BIT could be adjusted such that the aircrew would not be aware of a malfunction of the forward looking radar. He initiated a Form 847 which resulted in an interim safety supplement and eventual change of the aircraft's Dash 1.



Lt Col Donald P. Adeo

CREW CHIEF SAFETY AWARD

Airman First Class David A. Gillin, 31st Aircraft Generation Squadron, 31st Tactical Fighter Wing, Homestead Air Force Base, Florida, is the recipient of the Tactical Air Command Crew Chief Safety Award for October 1979. Airman Gillin has displayed an exceptional level of dedication and safety consciousness in his duties. During preflight of an F-4, Airman Gillin discovered that the stabilator moved excessively. Further investigation revealed structural damage to the stabilator which could have had serious consequences if it had gone undetected.



A1C David A. Gillin



22 STEPS TO SAFE HUNTING

By Carl D. McColman

Photos courtesy of TSgt Robert Shippey and SSgt Henry Walker, Cannon AFB, NM

As winter approaches, many men and women will devote their free time to hunting. This is an enjoyable sport, but one that carries with it many responsibilities. Hunting safety may seem to be a trite subject, but as long as there are hunting accidents it cannot be emphasized enough. Below are twenty-two concepts basic to hunting and fire-arm safety. They are not to be viewed as comprehensive, but rather as a practical introduction to the responsibility that hunting entails.

1. DECIDE TO BE SAFE. Safety doesn't just happen. You have to make up your own mind to be safe. Learning these twenty-two steps--or any set of rules--doesn't make a bit of difference. Being safe is a state of mind, and it is up to you to adopt that state of mind.

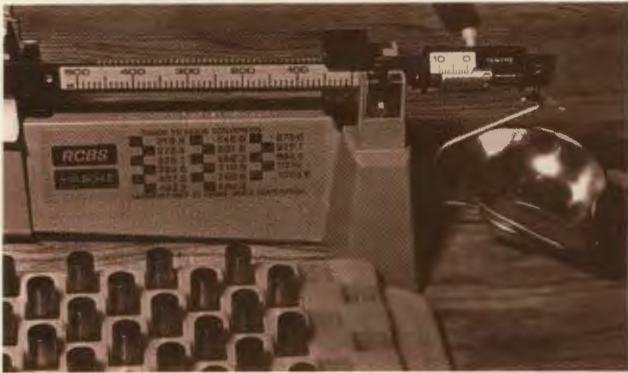
2. BE FAMILIAR WITH YOUR WEAPON. Of all your hunting equipment, your gun is the most important--and the most lethal. Know what kind of ammunition your gun uses--wrong ammunition can become lodged in the bore, making it possible for the gun to explode when correct ammunition is fired. Always practice with a new or unfamiliar gun before taking it hunting. Know how it shoots. Not only is this measure safe, it also will give you a better chance of scoring. A recent trend has been a "back to the basics" approach to hunting. Bow hunting,



crossbows, and slingshots have become increasingly popular, exotic, and deadly. Every precaution which relates to a firearm can also be applied to these weapons.



Carl D. Mc Colman
is this month's
Fleagle T-shirt winner



3. HANDLE AMMUNITION WITH CARE.

Keep your powder dry. Also, keep it from extreme heat and store it in the original container. If you load your own shells, don't be tempted to give your powder a little extra "boost." That extra could blow the breech right out of your gun and into your face.



4. WEAR PROPER CLOTHING.

Dress so that you will be comfortable. Dress warmly, but take into consideration the amount of walking you'll be doing. Red and orange fluorescent clothing is a good idea, but avoid white articles of clothing during deer season. That white handkerchief or cap can easily be mistaken for the tail of a deer.

5. KNOW THE AREA YOU'LL BE HUNTING.

Don't be a trespasser--if you want to hunt on private land, secure permission first. A basic knowledge of the land, along with the position of roads, will cut the possibility of your getting lost.

6. BE CHOOSEY ABOUT YOUR COMPANIONS.

A wise choice of a hunting partner can reduce the possibility of an accident and can also pave the way for a more enjoyable outing. Hunt with a companion who places value on the same things you do--if you're determined to bag a trophy, don't hunt with someone who will want to quit after two hours. Steer clear of over-excited or nervous hunters, and make sure your partner is safety-minded.



7. USE PROPER EQUIPMENT.

Make sure your car or truck is in good condition. Carry a knife you can use, not one that looks good. If you are planning a longer trip, make sure your food, cooking utensils, and camping facilities are appropriate. Carry a compass--a watch--a hatchet--matches.

8. CARRY A FIRST AID KIT.

This can be very important for any accident, large or small. In it carry band-aids, bandages, antiseptic. A few chocolate bars will come in handy, especially if you get lost. A snakebite kit might be a good idea--but know how to use it.

TWENTY-TWO STEPS TO SAFE HUNTING



9. KEEP YOUR GUN CLEAN. An unclean gun is not only unpleasant to look at, but also not as safe as a well-cleaned firearm. Something important to remember here is the bore--check it frequently, both in and out of the woods, to make sure that it is clear. A foreign object lodged in the bore can bring disaster!

10. TRANSPORT UNLOADED GUNS IN CASES. The case protects the gun and keeps it clean. Make sure that the gun is unloaded before putting it in the case. Also, keep the case out of sight, especially when you are absent from your car--this will reduce the possibility of theft.

11. TREAT YOUR GUN AS IF IT WAS LOADED. *Always* treat the gun in this way! "I didn't know it was loaded," is a feeble excuse. If you don't know whether it is loaded or not, check. Even if it is unloaded, still treat it as if it was. Don't *ever* play around with a gun or handle it carelessly. Open the action before handing the gun to your companion. When resting or eating, unload the gun. If duck hunting, never set a loaded gun down in the bottom of the boat.

12. WATCH THE MUZZLE. Be careful where you point your gun! Never point it at a person, dog, car, or anything that you don't want to shoot. Likewise, always make sure that your companion doesn't point his muzzle at you (or anybody else).



13. USE THE SAFETY. The safety isn't on a gun to look pretty. Keep it on until you are ready to fire. Also, keep your finger off the trigger until you're ready to shoot.



14. BE CAREFUL WHEN CROSSING A FENCE. Trying to climb over a fence with a loaded gun in your hand is asking for trouble. When you reach a fence, unload your gun, and pass it under the fence. Then climb over the fence and load the gun.



15. DON'T FALL OUT OF YOUR TREE STAND. Don't laugh, it's happened. Several years ago, a hunter dropped his gun from the tree. When the gun struck the ground, it fired, fatally injuring the hunter.



16. KNOW WHERE YOUR COMPANION IS. Decide ahead of time what direction each of you will take and what area each of you will cover. Also, be sure to determine when and where you will meet. Planning like this will prevent you from competing with each other and will also be a precaution against getting lost.

17. KNOW WHAT YOU'RE SHOOTING. Again, this is very important. Never shoot at a noise. Make sure you know what is making a noise. Likewise, don't shoot at an unusual movement unless you can tell it is game. Also, the

absence of red or orange clothing does not mean that a movement or noise is not made by a person. Some hunters do not wear fluorescent clothing.

18. BE CAREFUL WHEN SMOKING OR COOKING. Fire is as dangerous as it is useful. Dry wood and leaves are a definite fire hazard. Double check to make sure that your cigarette butt or that fire is completely out.

19. DON'T DRINK WHEN HUNTING. This goes without saying. Drinking and hunting are as dangerous a combination as drinking and driving.

20. KNOW WHAT TO DO IF LOST. By following the above rules you have taken several precautions against getting lost, but it is still possible for you to lose your sense of direction. If you are lost, hurt, or otherwise in need of assistance, stay where you are until help arrives. Light a smoky fire (and keep it under control)! Firing three evenly spaced shots will attract attention to you, especially after dark. Never hunt alone without letting someone know where you will hunt and the time you plan on returning to camp or home.

21. IN FALL, THE WATER IS COLD. When you're duck hunting, it's easy to fall into the water from your boat or the duck blind. If you get wet, you must change clothes. The combination of cold and wet can cause hypothermia before you dry out.

22. USE YOUR HEAD. This is really the same as number one, but it is a fitting conclusion. Nearly all hunting accidents can be avoided--all it takes is being careful and taking time to think.

What Everyone Should Know About Hunting Safety.
Scriptographic Booklet, Channing L. Bete Co., Greenfield,
MA, 1965.

The Hunter. HQ TAC/SEPP, Langley AFB, VA.

Carl D. McColman is an avid hunter and sportsman from Hampton, Virginia. A member of a local hunting club, Carl was also an honor student in high school. He is currently enrolled at James Madison University majoring in Journalism.

TAC ATTACK

SURVEY RESULTS



As many of you know, we included forms for our biannual survey in the July issue. Although this survey is required by the regulations governing publication of TAC ATTACK, it gives us a chance to get some feedback, both positive and negative, from our readers.

Each magazine contained two survey forms. Since we mailed out 13,800 issues, we had a potential return of 27,600 forms. (If that had happened, I'd be writing this article sometime next year.) As of the 5th of September, we had received 102 forms--for a return of .36 percent. While this wasn't exactly a resounding participation, we still received many useful comments from those who sent in forms. I would also like to congratulate those who figured out how to fold the forms so they could be mailed; you overcame the fact that we had put the dotted line in the wrong place.

Figure 1 is a replica of the survey forms. The numbers in each block correspond to the individual ratings taken from the forms. Don't expect each subject to add up to 102, or that all subjects will add up to the same number--they don't. Some forms were blank in this area; others only rated some of the subjects.

We use the top section of the form to give us an idea of the relative importance of various features and types of articles. For example, if we had a choice, we would run an article on survival or life sciences before a ground safety article or SPO corner feature. Other choices appear to be less obvious, which is probably good since we try to achieve an overall balance between flight, weapons, and ground safety. This section also gives us an idea of the types of articles you want to read. If a potential author is undecided as to the type of article to write, we can use the survey results to steer him or her towards a particular subject.

The next part of the form was for you to rate our layout, use of photos, artwork, etc. In many cases, the article layout will affect how the words are received by the reader, and we wanted your feelings on this aspect of the publication. We also included a "better than/worse than" comparison with other magazines in the safety field. All magazines differ in content and layout and really are separate entities. Since each magazine, MAC FLYER, COMBAT CREW, AEROSPACE, etc., is directed towards a specific audience, we don't expect their readers to find us as interesting as their command publication or vice versa. We don't try to be like one magazine, or unlike another. We simply try to publish safety and safety-related material applicable to the tactical air forces. The survey results indicate we're doing that job for the most part.

Reader Response Form

HOW WOULD YOU RATE THE
FOLLOWING **TAC ATTACK** MATERIAL?

TYPE OF ARTICLE/FEATURE		YUCK	50-50	GOOD	SUPER
REG FEATURES	ANGLE OF ATTACK	23	27	40	10
	CHOCK TALK	6	20	50	24
	TAC TIPS	7	21	41	31
	WEAPONS WORDS	9	35	40	11
	SPO CORNER	11	43	44	6
	AWARDS	16	26	33	25
	LETTERS	12	32	46	10
	FLEAGLE	10	7	20	63
TYPE ARTICLE	EMERGENCY SITUATION TNG	6	17	39	38
	LIFE SCIENCES/SURVIVAL	6	12	45	37
	AIRCRAFT OPERATIONS	6	21	42	31
	WEATHER	12	31	42	15
	MAINTENANCE	12	30	34	24
	GROUND SAFETY	20	29	30	21
	HISTORICAL	6	32	32	26
	FUNNY PHOTOS	6	19	30	37
	CURRENT DEVELOPMENTS (AIRCRAFT)	1	22	37	35
	WAR STORIES	8	19	36	28
	CENTER SPREAD ARTWORK	10	14	26	50

MAGAZINE LAYOUT CAN BE IMPROVED 50-50 GOOD
20 16 55

ARTWORK, PHOTOS, ETC 15 15 56

HOW MANY ISSUES OF **TAC ATTACK** HAVE YOU SEEN IN THE PAST YEAR? _____

HOW SOON AFTER THE FIRST OF EACH MONTH DO YOU SEE A COPY?

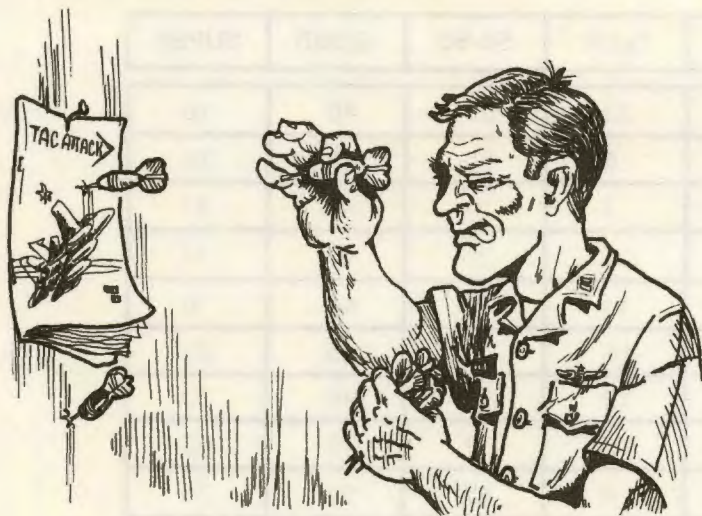
- A. THE SAME MONTH C. TWO MONTHS LATER?
 B. ONE MONTH LATER? D. OVER TWO MONTHS?

HOW WOULD YOU COMPARE **TAC ATTACK**
TO THESE SAFETY MAGAZINES?

	BETTER	WORSE	ABOUT THE SAME	DON'T KNOW
AEROSPACE SAFETY	45	11	33	10
MAC FLYER	34	14	13	38
USAFE AIRSCOOP	25	4	20	41
APPROACH	30	19	23	27

HAS **TAC ATTACK** HELPED YOU IN YOUR PRESENT DUTIES? 24 NO 68 YES

TAC ATTACK SURVEY RESULTS



The most revealing section of the survey was the space for your comments, and we regret not making it bigger so you could have written more. Many of the comments were predictable--aircrews wanted more flying articles and less dealing with maintenance and safety. Maintenance troops wanted more flight line and maintenance articles, and so on. Of more importance is that the ratio of people who were helped by the magazine to those who weren't was almost 3 to 1. We're still working on the other 25 percent.

A significant number of people suggested that we cut down on illustrations and use more current photos. We've already taken some steps to update our photo library, and we will try to use more real-time photos when they're available.

Even more readers were interested in articles dealing with real-life situations; "there I was" articles and war stories were especially popular. This one request was voiced by almost 20 percent of those who responded. Though these stories are the most popular, they are also the most difficult for us to obtain.

Our sources here are rather limited. The safety staff does have a number of stories to tell, but what are our stories compared to those that could be told from all the people in the field? Our stories might be five or ten years old--you know what's happening today.

What I'm really saying is that if we're going to have any more war stories or others of that type, they're going to come from you. An article in the July issue, "So Ya' Gonna Work On Aircraft," is an excellent example of a real life, lessons-learned type of article. It contains an individual's personal experiences and is a story just about

all of us can relate to. This type of story or article is not difficult to write--a good story tells itself.

In the past few years, TAC has received four new aircraft, the F-15, F-16, A-10, and the E-3A AWACS. The number of stories which have been featured concerning these aircraft is very low compared to their level of operations. Why? Because the folks out there in F-15, F-16, A-10, and E-3A operations have been too busy coming on line to drop us a note.

If you want to see a particular type of article in TAC ATTACK, why don't you try writing one? It can't hurt. It would help us out a lot and our readers would get to see more of what they want to read. I would also like to ask all the new members of TAC, the former ADCOM personnel, to submit articles on your operations. Many TAC personnel are not aware of the various facets of ADCOM and the scope of air defense operations. The missions of TAC and ADCOM have never been mutually exclusive, and we know you have your stories to tell. We look forward to hearing them.

Figure 2 is a breakdown of the people who responded to the survey by job and rank. Since we try to reach a cross section of the TAC population, especially those in operations and maintenance, we were happy to notice that we seemed to be doing just that.

FIGURE 2

AIRCREW	MAINT	OTHER	NOT LISTED
30	34	32	6
OFFICER	ENLISTED	CIVILIAN	NOT LISTED
45	43	5	19

The only facet of the survey which was really disappointing was the level of participation. A rate of return of two percent is usually considered excellent for a survey--we had our sights set on one percent; and only achieved a bit over one-third of that figure. Remember, this isn't my magazine, Fleagle's magazine, or Safety's magazine--it's your magazine.

To those who responded to the survey, our thanks. To those who didn't, I have one question, "Why not?"

AIRCRAFT RECOGNITION

How sharp are your eyes and how quick are you? Identify these aircraft and time yourself. These should be easy. How do you rate? Answer on page 34.

1.



2.



3.



4.



5.



6.



6 correct in 6 seconds or less :
 6 correct in 6-10 seconds :
 4-5 correct in 10 seconds or less :
 3 or less correct no matter how long it takes :

Ace Material
 Above Average
 Air-to-mud Only
 Stay home if a war starts

DOWN TO EARTH!



CAUTION: CIGARETTE LIGHTERS CAN BE HAZARDOUS TO YOUR HEALTH !

Here are some examples which should be taken as a warning to users of disposable lighters. Butane lighters can turn into fire bombs.

A welder suffered third-degree burns across his chest when a butane lighter he was carrying in his shirt pocket exploded due to the intense heat from a burning operation.

Another case involved a millwright who was burning scale from an oxygen lance when a spark entered his shirt pocket. The spark ignited the shirt fabric and the pocket which contained a disposable lighter. The heat caused the lighter to explode. Fortunately, the force of the explosion was absorbed by a package of cigarettes which was between the lighter and his chest, and the millwright was not injured.

HALLOWEEN

Help make this Halloween a safe one!

- Never let small children go trick-or-treating alone. They should be accompanied by older children or adults.
- Suggest that trick-or-treat rounds be confined to their own neighborhoods. Give children factory-wrapped or sealed treats only--no loose or uncovered candy, popcorn, fruit, or other goodies.
- Urge children to wait until they get home to taste their "treats" so that parents can first inspect them.



- Warn against the wearing of vision-restricting Halloween masks or other head coverings by youngsters. Use colorful facial makeup instead.
- Keep your exterior or porch lights on during trick-or-treating. Clean up your sidewalk, etc., so there's nothing for children to fall over.



- Have your children wear costumes which are light in color, short enough to prevent tripping, and nonflammable. Costumes can be covered with reflective tape or "glow" spray paint so they pick up the beams of auto headlights and other lights.
- Children should carry flashlights after dark.

OUT IN THE COLD

When the ole "bod" begins to lose heat faster than it can produce it, a condition called hypothermia begins to develop. The symptoms become very apparent and include:

- Uncontrollable shivering.
- Vague, slow, slurred speech.
- Memory lapses; incoherence.
- Immobile, fumbling hands.
- Frequent stumbling; lurching gait.
- Drowsiness and exhaustion.

Often the person will not realize the seriousness of the situation and may even claim to be in no difficulty.

The causes of hypothermia during the winter months are fairly evident--not being properly dressed for the temperature. How about you bike riders who continue to ride during the fall and winter? Do you have any idea what you're up against? The wind-chill chart below gives the equivalent temperature for the combined effects

of wind and temperature--realize that you are still OK as long as you're properly clothed. If you're shivering cold--you're not properly clothed.

More importantly, if you notice any of these symptoms in yourself or a companion, follow these steps in treating hypothermia:

- Get the individual into dry clothing and if possible into a warm bed or sleeping bag with a hot water bottle, heating pad, warm towels, or some heat source.
- Concentrate heat on the trunk of the body first--the shoulders, chest, and stomach.
- Keep the head low and the feet up to get warm blood circulating to the head.
- Give the person warm drinks (no booze, sedatives, pain relievers, etc).
- Keep the individual quiet. Do not jostle, massage, or rub.
- If symptoms are extreme, call for professional medical help without delay.

One more point. If you examine those symptoms closely, you'll find that they also point to one who has overindulged in demon rum! Don't assume that a person is simply intoxicated. He or she could be close to dying. The combination of alcohol and cold is even more serious than either one alone.

WIND SPEED		EQUIVALENT CHILL TEMPERATURE CHART									
KNOTS	MPH	TEMPERATURE (°F)									
CALM	CALM	40	35	30	25	20	15	10	5	0	
EQUIVALENT CHILL TEMPERATURE											
3-6	5	35	30	25	20	15	10	5	0	-5	
7-10	10	30	20	15	10	5	0	-10	-15	-20	
11-15	15	25	15	10	0	5	-10	-20	-25	-30	
16-19	20	20	10	5	0	-10	-15	-25	-30	-35	
20-23	25	15	10	0	-5	-15	20	-30	-35	-45	
24-28	30	10	5	0	-10	-20	-25	-30	-40	-50	
29-32	35	10	5	-5	10	-20	-30	-35	-40	-50	
33-36	40	10	0	-5	-15	-20	-30	-35	-45	-55	
WINDS ABOVE 40 HAVE LITTLE ADDITIONAL EFFECT		LITTLE DANGER						INCREASING DANGER (Flesh may freeze within 1 min)			

LETTERS



Dear Editor,

While reading through the July issue of TAC ATTACK, I came across the article, "So Ya' Gonna Work on Aircraft." In one of his "Phantom Bite" examples SSgt Cruz wrote about a crew chief that was changing the LOX bottle, hydraulic power was applied to the aircraft and the oxygen bay door "jerked upwards." I believe SSgt Cruz may have the LOX bay door confused with the AUX AIR DOOR as the LOX bay door is raised and lowered by hand and secured in place by 17 Dzus fasteners. The application of hydraulic power has no effect on the LOX door.

I thought the article itself was excellent, as I myself have been working Phantoms for the past five years as an INS/WRCS repairman and have had my fair share of Phantom bites in various places, from many different sources. The F-4 is an excellent aircraft but it will get you if you're not careful.

I enjoy reading TAC ATTACK, when ever there is a copy to be had. Keep up the good work!

One of those "Phantom Phixers" at Nellis/57 TTW,

Sgt Scott F. Davidson
57 AGS/414 AMU/MAAB

Dear Sgt Davidson

You're right. I contacted SSgt Cruz and asked him about this incident. Apparently the story of what actually happened was relayed to him third or fourth-hand, so the LOX door was substituted for aux air door.

Thanks for writing and the kind words about the magazine. Your squadron should be getting one magazine for each ten assigned personnel. If they aren't, get to the pubs people in your orderly room and have them order the right amount.

All you readers out there—quit hogging the magazines! Pass them around so everyone has a chance to read them.

Ed

Dear Readers,

October is the last month in which INTERCEPTOR magazine will be published. TAC ATTACK will be mailed to all former air defense units and all addressees on the INTERCEPTOR mailing list.

TAC ATTACK is distributed on the following basis:

(1) Active Units: One-per-ten population of those actively involved in aircraft operations, i.e., operations, maintenance, wing staff, etc. For those not involved in direct support of flying operations, distribution will be on a one-per-20 basis.

(2) TAC-gained ANG and AFR Units: One-per-20 for those actively involved in air operations and one-per-40 for those not directly involved in air operations.

Initially, former ADC units will receive the same number of TAC ATTACK magazines as they were receiving copies of INTERCEPTOR. Any units requiring changes in distribution should forward their request for TACRP 127-1, through their servicing PDO to HQ TAC/SEPP, Langley AFB VA 23665.

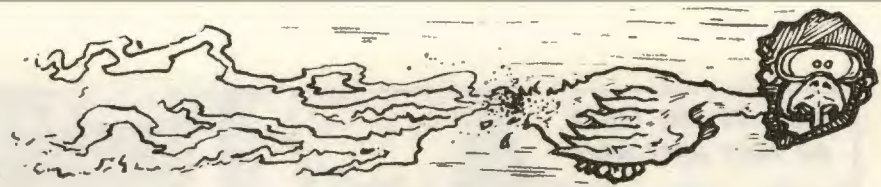
Editor

ANSWERS TO

AIRCRAFT RECOGNITION

- | | |
|------------|-------------|
| 1. BEAR | 4. BACKFIRE |
| 2. FISHBED | 5. BADGER |
| 3. FARMER | 6. FIDDLER |

TAC TALLY



CLASS A MISHAPS	▶
AIRCREW FATALITIES	▶
TOTAL EJECTIONS	▶
SUCCESSFUL EJECTIONS	▶

TAC		
AUG	THRU	AUG
	1979	1978
4	27	23
3	23	17
5	29	24
3	17	18

ANG		
AUG	THRU	AUG
	1979	1978
0	6	10
0	5	7
0	4	5
0	2	4

AFR		
AUG	THRU	AUG
	1979	1978
0	3	2
0	2	0
0	3	2
0	1	2

TAC'S TOP 5 thru AUGUST '79



TAC FTR/RECCE	
class A mishap free months	
32	347 TFW
27	363 TRW
19	479 TTW
18	33 TFW
11	1 TFW

TAC AIR DEFENSE	
class A mishap free months	
93	84 FIS
79	57 FIS
59	46 AERODW
32	5 FIS
29	48 FIS

TAC GAINED FTR/RECCE		
class A mishap free months		
55	156 TFG	(ANG)
36	184 TFTG	(ANG)
35	123 TRW	(ANG)
20	121 TFW	(ANG)
20	108 TFW	(ANG)

TAC GAINED AIR DEFENSE		
class A mishap free months		
85	191 FIG	(ANG)
66	102 FIG	(ANG)
62	177 FIG	(ANG)
41	158 DSEG	(ANG)
28	125 FIG	(ANG)

TAC/GAINED Other Units		
class A mishap free months		
114	193 TEWG	(ANG)
101	USAFTAWC	(TAC)
97	919 SOG	(AFR)
89	105 TASG	(ANG)
70	1 SOW	(TAC)

CLASS A MISHAP COMPARISON RATE 78/79

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

TAC	1978	16.0	12.4	8.3	7.5	5.8	6.3	6.1	6.7				
	1979	6.9	7.0	5.9	6.6	7.4	6.2	7.2	7.4				
ANG	1978	0	3.4	4.0	5.9	8.1	7.4	7.9	6.9				
	1979	0	11.4	9.0	9.7	7.6	6.2	5.4	4.7				
AFR	1978	0	0	10.9	7.8	6.0	4.8	8.1	7.1				
	1979	0	0	19.9	23.1	17.0	13.4	11.6	10.1				

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

