

TAC ATTACK

APRIL 1971



WHEN YOU'RE BEAT IN-THE-FACE...Page 4

for efficient tactical air power

TAC ATTACK

APRIL 1971
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Tactical Air Command

COMMANDER
GENERAL WILLIAM W. MOMYER

VICE COMMANDER
LT GEN JAY T. ROBBINS

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COLONEL GERALD J. BEISNER



editor

Maj Bill Richardson

art editor

Stan Hardison

layout & production

TSgt John K. Miller

managing editor

Mariella W. Andrews

printing

Hq TAC Field Printing Plant

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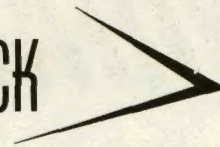
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Angle of ATTACK



A TIME OF CHANGE

From all accounts, TAC had a successful 25th birthday celebration. Congratulations, everyone! Spring also pushed a little further north, and was pushed back pretty hard a couple of times. Now it's time to firm up plans for the vacation trips and PCS moves. It's also time to complete training requirements, to talk of thunderstorms, and generally to be prepared for change.

Changes are inevitable, often desirable. Changes occur in many things, such as people, equipment or mission. There are also changes to people and equipment. Out in Blue Four's world, most of these changes are charged to "they." This is the point I'd like to discuss briefly this month.

It took most of us too many years to find out "how" to change things. And it couldn't be less glamorous . . . or more important. We'll expand on this subject with details in a later issue, but here are some hard core points that need to be made among all our troops, both old and young, experienced and inexperienced, leaders and followers.

Changes are made by people. The people at the Blue Four level, the ones actually performing the tasks or

operating the machines, are usually the first to recognize the need for change. Unfortunately, those people are ones who know least about how to bring about change. Consequently, needed improvements, modifications, and revisions are often not initiated until an accident or some other event highlights the requirement to those higher up. Then, "they," who are one or more levels removed from the operating level, make a change — possibly without inputs from those most directly affected.

You Blue Fours must get involved. Find out how to get things changed. Learn what the tools are; such as AFTO Form 22, AF Forms 457, 847 and 1000, DD Forms 1362 and 1686, and others. Learn how to use the tools. For example, Tech Orders 00-5-1 and 35D-54, AF Regs 127-301 and 60-1, and AF Manuals 60-9, 900-4 and 66-12 cover the forms listed. Though you don't encounter these publications every day, they are available for the asking. Once you know what to do and how to do it, all you need is the will to do it.

Sounds like work. Yes, it is. And it's not always successful. Plenty of good ideas run aground on hard budgetary facts, or sometimes even lose their luster when exposed to competing ideas. But at least they've had a chance, and a surprising number will make it.

Let's all get involved in making the next 25 years of TAC even better than the last. Instead of "Why don't they change that?" let's hear "I started the action that changed that."

Gerald J. Beisner
 GERALD J. BEISNER, Colonel, USAF
 Chief of Safety

the formation *MIDAIR*

REVISITED

In the August 1969 issue of the TAC ATTACK, we took a "Second Look at Formation Midairs." In that article we were primarily concerned with collisions which occurred during air combat maneuvering. Now, another facet of the formation bash has reared its head — we're running into each other during everyday "no sweat situations".

At the turn of the year our message traffic began to include some startling incidents. In one month alone, no less than four midairs were recorded. The following two months brought two more for a total of six. Next came an accident which occurred in another command — it was caused when a wingman was trying to AVOID a midair with his leader on GCA final. They were at 1500 feet, 190 knots when Lead called for full flaps. His came down and he looked back at Two. The wingman was seen to close on Lead, drop back sharply, then roll into a hard left bank. The crew ejected shortly thereafter.

Now back to our incidents. There is nothing new in any of them, these things have been going on for years — and will probably continue as long as we fly airplanes. We're fortunate that these all ended as just "fender-benders." But if we don't learn the lessons

experience has made available to us, the future may not be bright for some. We'll talk about six incidents here, they fall into three general categories:

- Inattention
- Collision on takeoff
- Hang-in-itis

INATTENTION

This one was a flight of three 100s, the mission was local area familiarization for the two wingmen who had not flown from this base before. They were to proceed to their training area, look at various checkpoints, then look over their gunnery range. The flight proceeded as briefed until arriving at the range. It was in use so they headed off in route formation. At this time they were at 15,000 feet. The two wingmen began discussing a point on the ground so Lead started a gentle right turn toward it.

Shortly after beginning the turn, the leader heard and felt a hard thump. He looked over his left shoulder and saw one of his wingmen almost inverted. Radio calls confirmed that Number Two had run into him and had lost his airspeed and altimeter. A visual check of Number

Two revealed that his pitot boom was gone, along with about eighteen inches of his intake. Number Three reported a deformation of the leader's eyelids at the 1230 position. Controllability checks were run and they all went home with no further problems. Number Two landed out of a wing PLP due to his airspeed problem.

When they sorted it all out, they found that Number Two, on the right wing, had been looking down and to his right when the leader initiated his turn. His position was about 240 feet out and 150 feet back from the leader at this point. He looked up just prior to impact, saw a sky full of leader, and pulled his throttle to idle. But it was too late to avoid the collision.

A pair of A-37s got airborne for a navigation training mission. All went well until fifteen minutes after takeoff. Lead had just checked Two's position on his right side, in route formation, then dropped his wing about twenty degrees to visually check his position over the ground. The next thing he noticed was a shadow crossing his cockpit, then the impact.

After Number Two moved out into route formation, he was distracted by what he thought was a fuel flow fluctuation. His position prior to looking into the cockpit was three ship-lengths out from lead and about ten degrees back. After checking all his instruments, Two looked out but could not see his leader. He assumed Lead had turned away, so he rolled into a left bank to catch up. The next thing Two saw was Lead's left tip about six feet from his, at an angle of ninety degrees. He increased bank and back pressure but could not avoid the impact. Damage was confined to the left tip tanks of both birds.

A pair of 84s were refueling from a KC-97 in this one. They were at 20,000 feet when Lead hooked up and took on 2000 pounds. He then moved to the left side to give Two his turn. Number Two hooked up wet and took on 2000 pounds; made one dry hook-up, and was in contact position receiving fuel when he saw a shadow cross from left to right. The KC-97 crew immediately felt a sharp jolt, Number Two executed a breakaway called by the boom operator, and moved back in when the tanker requested a visual check.

The top six feet of the tanker's vertical stabilizer and rudder were bent about fifteen degrees to the right, the lead fighter didn't appear to have any damage at all. The tanker declared an emergency and recovered using aileron and elevator only. Rudder boost remained off to preclude further damage to the vertical stabilizer and rudder.

After the leader moved out to the observation position he noticed fuel venting from his inflight refueling receptacle and leaned forward and down in the cockpit to check the fuel tank shut-off valve position. While he was preoccupied with this task, his aircraft drifted into the tanker.

There really isn't much you can say about the incidents above. We have proven time and again that two aircraft can't occupy the same airspace. The random collision of aircraft will plague us for some time to come — must we add to this toll simply because we don't pay attention? In close formation you stay alert because there's a big wingtip waiting to jab you — and you know it. Then why is it that when we move out a few hundred yards, we allow complacency to set in?

A wingman's tasks don't ever change. One of them is to clear his leader at ALL times, to the best of his ability. When the leader becomes in effect, a wingman, as in the refueling episode, he must automatically clear the flight. It's difficult to do it hanging on a boom or sitting in the front office of a tanker. And it's a fact that it can't be done while looking at the cockpit floor.

Except when in-trail or in close formation, every member of the flight should be able to see all the others. If you can't see your buddies, maybe one of them has his head in the cockpit — get worried and acquire him visually. As for yourself, if you must look in the cockpit for some reason, first place your aircraft in a position where you can watch the man you're flying off of with your peripheral vision.

COLLISION ON TAKEOFF

At first thought we don't get too excited about scratching wingtips on the takeoff roll. But one thing can lead to another as you'll see in these two incidents.

A flight of two F-104s lined up for a dusk, formation takeoff. At brake release the wingman, on the right wing, obtained a burner light earlier than Lead and jumped out ahead. He delayed advancing his throttle to maximum afterburner until Lead caught up — then they continued a normal takeoff roll. About this time mobile control observed what appeared to be smoke coming from the leader's afterburner and called, "31 ABORT, ABORT, ABORT."

The leader aborted and Two pressed on after ascertaining the runway was clear and his engine instruments were indicating properly. Once airborne he noticed that excessive trim was required to maintain level flight. An F-104B was taking off then so he gave the wingman a visual check. Fuel was streaming from a four inch gash in Two's left tip tank. He made a controllability check, then burned fuel down and landed. The right outboard tank fin of the leader's aircraft caused the gash — wingtip clearance was not maintained during the early part of the takeoff roll.

A flight of two Thuds were departing in formation for a refueling mission. The wingman was on the right and fell behind the leader after brake release and afterburner light.

midair

Lead "gave him a few," the wingman regained his wing position just after liftoff and the takeoff continued normally. Then, just after flap retraction, Two noticed his pitot boom out on the left wing was bent up about thirty degrees from its normal position.

Airspeed variations between Lead and Two were ten to fifteen knots and Two's altimeter and velocity indications were erratic. They burned fuel down and landed. After clearing the runway, Two observed his pitot boom hanging by the wires and tubing. Lead had a LAU-69 rocket launcher on his right outboard station — sometime during the takeoff Number Two ran his pitot boom into it.

Both of these incidents ended up in the "happily-ever-after" category, but now let's change a few things. What if the F-104 leader got the abort call about five seconds later . . . and his hook didn't drop . . . or the call came too late and he got airborne and was told he had engine problems. What if the Thuds were going off in two hundred feet and the wingman didn't stay with Lead?

We're not trying to give you the "Gloomy Gus" routine — but these are things that happen when men fly. You must be prepared to cope with all manner of emergencies, why make your job tougher? During a formation takeoff each of you has 75 feet for your own personal use. If you are not proficient enough to be able to judge wing-tip clearance, then move out!

HANG-IN-ITIS

This subject falls in the same category as GET-HOME-ITIS, that is to say, from the standpoint that it's a selfish motive. A fighter pilot prides himself on his ability to put the wingtip on the star and press on anywhere the leader leads him. And everyone knows what a blow it is to his personal pride to fall off the wing — or not to fly the position as though glued in place. So to save our own personal ego, many of us hang on when we have no business being there at all.

A flight of two F-100s had just completed a combat mission and were returning in formation. They were to do a TACAN penetration with a GCA pick-up. They entered the clouds at 8000 feet and leveled at 6000 to establish their landing configuration and final airspeed. Descent was continued to the final approach fix in heavy clouds and light to moderate turbulence. During descent, the wingman positioned himself for a wing landing by stacking high on the leader. Then he began to experience

disorientation and began to cross-check the attitude indicator frequently. Due to the disorientation and turbulence he had difficulty holding a steady wing position. At the final approach fix, 3800 feet and ten miles, the GCA controller gave the flight a fifteen degree correction to the left. As Lead rolled level for this correction, the wingman felt his aircraft drifting into the leader — he failed to stop the drift and his left drop tank scraped across Lead's vertical stabilizer. He broke up and to the right to get away, as he did his left nose wheel tire contacted Lead's vertical stabilizer again — on the leading edge.

Stack up for landing over ten miles out? It should be obvious that, in this position, you will have the illusion that your leader is turning into you. It may cause you to become disoriented . . . and have to cross-check your attitude indicator frequently. And if you are on the right wing and Lead makes a left turn, when he rolls out you will be in a perfect position to run into him.

Why should you stack up anytime before minimums on final? Your leader knows you are out there . . . and should take care of you. Another way to avoid this type of bash might be to give all prospective jocks a course in five card stud prior to graduation from pilot training. You will learn very quickly (playing with your own money) that when you're beat in the face, you're beat in the you-know-what. And so it is on the wing. When things begin to stack up against you, evaluate all the hands in the game . . . then get out, if you must, BEFORE you are beaten. Otherwise you won't be playing very long.

For those of you who have not experienced a "fender-bender" such as one of these, or an honest-to-goodness near miss, these incidents can be dismissed easily. There is an old saying you may have heard before that applies very well in these cases . . . "Experience is the best teacher, but the cost of tuition may be prohibitive."

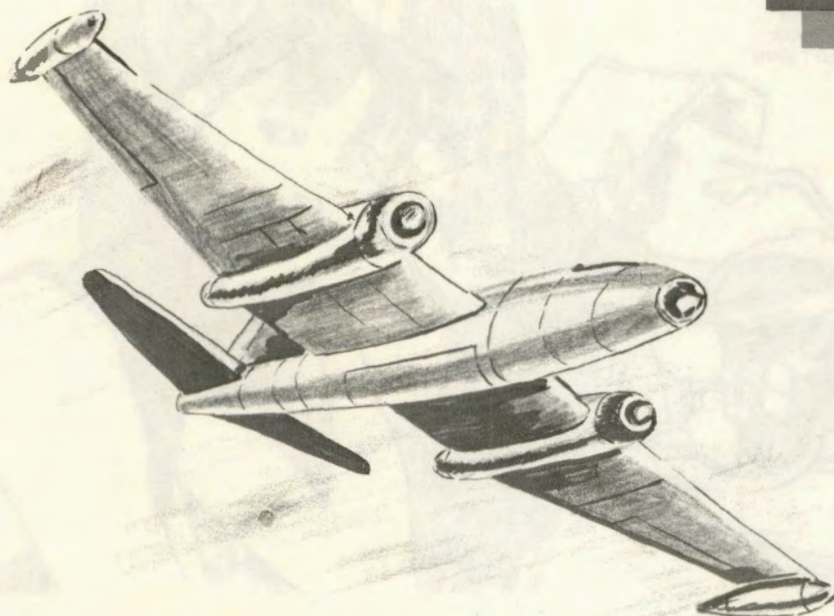
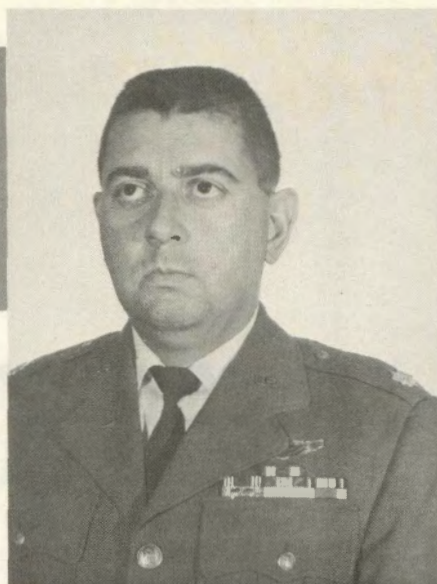
It's difficult for one who has been there to describe the over-whelmingly hopeless feeling that comes as you look at the individual rivets on belly of another aircraft coming at you. You think of many things . . . How did I get here? . . . How could I be so stupid? . . . yes, and you will even wonder how long the pain will last. If you survive, as one did, long after the flight you'll still feel knots in your muscles and remember the streaked pattern of hydraulic fluid and engine oil on that aircraft. It will make you a believer! And it will teach you to drive defensively. ➤

TACTICAL AIR COMMAND

Pilot of Distinction

Pilot of Distinction

Maj Olmeda



Major Edward J. Olmeda, 172 Tactical Reconnaissance Squadron, Battle Creek ANG Base, Michigan, has been selected as a Tactical Air Command Pilot of Distinction.

Major Olmeda departed Goose AFB at 0715Z flying a B-57 in a NORAD night exercise. One hour and ten minutes into the flight Major Olmeda felt a severe jolt. His aircraft lurched violently up and to the right before going out of control. As the jolt occurred Major Olmeda saw a bright flash at the left wing tip and the lights of an aircraft going down and away to the left. Although his aircraft was badly damaged Major Olmeda was able to regain control. He immediately asked ground radar to note his position so the other aircraft could be located and rescue efforts for the crew started if the other aircraft had

crashed. Major Olmeda advised the left tip tank and part of the wing was missing from his aircraft but it was under control. He requested vectors to a nearby costal base. During the descent a controllability check was made. Aileron control was difficult and the left wing was heavy, but it was possible to control the aircraft and a safe landing was made without further damage. Investigation revealed the B-57 had been struck from the rear by an interceptor aircraft which recovered safely at the same base.

Major Olmeda's outstanding airmanship in a serious inflight emergency prevented loss of life and aircraft and readily qualifies him as a Tactical Air Command Pilot of Distinction.

MOTORCYCLE SAFETY

by MR. CHARLES E. MORGAN
GROUND SAFETY OFFICER
313 TACTICAL AIRLIFT WING

HARDISON



The use of cycle clubs to promote safe two-wheel motor vehicle operation has been recognized as an outstanding accident prevention tool. Motorcycle Safety Programs have been tried in various ways at numerous TAC bases. Our problem in this area has been the swing to overly restrictive rules. This reduces the effectiveness of any training given by the club, and eventually leads to disbandment for lack of interest. At Forbes AFB, motorcycle safety has been highly successful due to their realistic approach. The following article outlines how the 313th Tactical Airlift Wing approaches the subject of Cycle Safety. Ed.

During the summer months, members of the Forbes Motorcycle Association get together once a month to discuss safety, swap riding tips, watch movies about cycles, practice riding, and check repair methods. This voluntary membership organization was started by the Wing Ground Safety Office and boasts an average membership of 60 Forbesmen.

There is no set meeting place for the group — a classroom might be used for movies and guest speakers, a parking lot for riding demonstrations, or the Base Auto Hobby Shop for repair demonstrations or inspections. The association holds a yearly self-safety inspection similar to the annual auto safety inspections conducted by the Security Police. In addition, a one mile area scramble

track is available for use during off-duty time. Once a year, Sergeant Richie from the Topeka Police Department Motorcycle Patrol comes to Forbes and puts members through a slow ride obstacle course. His purpose is to point out riding problems and to help solve them. Motorcycle dealers from Topeka also come to the meetings to talk about current cycle information and new products.

The association conducts an effective program, as evidenced by the excellent relation Forbes cyclists have with the Topeka Police Department. That the program has paid off can be seen in our record. Since its formation in August 1966, there have only been three reportable accidents involving members of the association. None of these involved speed, fatigue, or careless driving and no cyclist was issued a citation. Two of the accidents occurred in 1970 at intersections when oncoming vehicles made left turns directly into the cycle riders. The other accident occurred in June of 1967 when, of all things, a rider lost his balance coasting his cycle into a parking stall. The cycle topped over and landed on his leg, causing a fracture. The association averages only two citations a year. One is always for loud or noisy pipes, the other is for some minor violation.

Each person registering a two-wheeled vehicle on base is routed through the Wing Ground Safety Office for an interview. The most interesting aspect and the key to the success of the program is accomplished during this initial visit. Personnel are seated in comfortable chairs and offered a cup of coffee. They are immediately put at ease by being told they will not receive a hell and brimstone lecture... they are not considered stupid because they ride a bike... are considered sharper than the man who operates a vehicle... and that they and their cycles are welcome to the base. It is amazing to see the torqued jaws relax, and the individual becomes interested in what you have to say.

Soon, if the individual has ever registered a cycle at another base, he relates what a harrowing experience it was being told he was stupid for riding a cycle... that he will undoubtedly be involved in an accident which will, in all probability, be his fault and result in a serious injury, or death... that he can expect no sympathy or favors when it happens... that he will be under constant surveillance... and that one misstep will result in the loss of base riding privileges.

A rap session follows on how, when, and why the association at Forbes was formed... its objectives... and its many accomplishments. The three most significant achievements of the club are discussed in detail: the low accident and moving traffic violation rates; lack of a harassment program on the base; and the fact that they, the cyclists, are not considered a problem but

have a responsibility to maintain our outstanding rapport with the City of Topeka Police Department.

As a result of their professional approach to motorcycling, Forbesmen are not subjected to being stopped unless they have violated a traffic regulation. There have been instances where Forbes personnel were stopped and in the process of having their license checked or their cycle safety-inspected, it was found they were from Forbes. The officer then stated that he did not observe the decal or he would not have stopped them.

We then reiterate that we do not have a motorcycle problem and are confident that he will not create one. This normally concludes the incoming visit and the majority of the time the individual elects to remain and further discuss motorcycle safety.

The monthly safety meetings are conducted on a very informal basis. Every attempt is made to make the session both interesting and informative. The quickest way to get a session off to a bad start is by quoting national statistics. If there has been an accident or incident involving Forbes personnel, they are interested and eager to learn the details and discuss ways of preventing a similar occurrence. A film which depicts only death and mayhem to people draws negative response. On the other hand, a film on hill climbing, scramble races or riding tips is always enthusiastically accepted. Motorcycle riders are easily motivated when the speaker is a person who is recognized as being competent and knowledgeable on all aspects of motorcycling. An officer from the motorcycle patrol division, a professional hill climber, or a racer is always well received.

If a meeting is held just for the sake of filling a square, it is better to cancel the meeting than present a dull and uninteresting one. The formal part of our meetings generally lasts no more than ten minutes. The remainder of the time is spent in bull sessions and riding on the track. If you have a track or riding area, do not impose a set of unrealistic rules. Restrictive rules will defeat the purpose of the association in providing an area for cycle riders to burn off steam in a sodded area instead of on a highway.

We have no tables of offenses and penalties. If an individual persists in riding his motorcycle like a clown, he is introduced at a meeting by name, rank, and offenses committed. This has proven an effective way to deal with problem riders.

We find that most people ride motorcycles for economy rather than pleasure. Those who ride for pleasure by and large are a great bunch of guys who ride and act like professionals. Tell both groups what your problems are, know what their "hang-ups" are, and they will try hard not to disappoint you. I have found most people act exactly as you expect them to act. ➤

TAC TIPS

...interest items, mishaps

Taxi Accident

A C-130 at an air base in another country was cleared to taxi out for takeoff. The normal taxi route, a taxiway parallel to the runway was closed so he had to detour through another parking ramp. He did this successfully and reached a point where the ramp exited onto another taxiway. On his left were parked aircraft and on his right was a row of trees which paralleled the taxiway and came up to the edge of the ramp he was on.

About this time two men from the host country air force began directing him past the parked aircraft on the left and the trees on his right. The man on the right signaled a left turn and then straight ahead. At that time the copilot, worried about the clearances, signaled him to go slow. The man on the right was still motioning the pilot forward. He eased ahead, checking his clearance on the left (which was adequate). Suddenly the copilot yelled, "STOP!". But it was too late — the right wingtip struck one of the trees. You can't win.

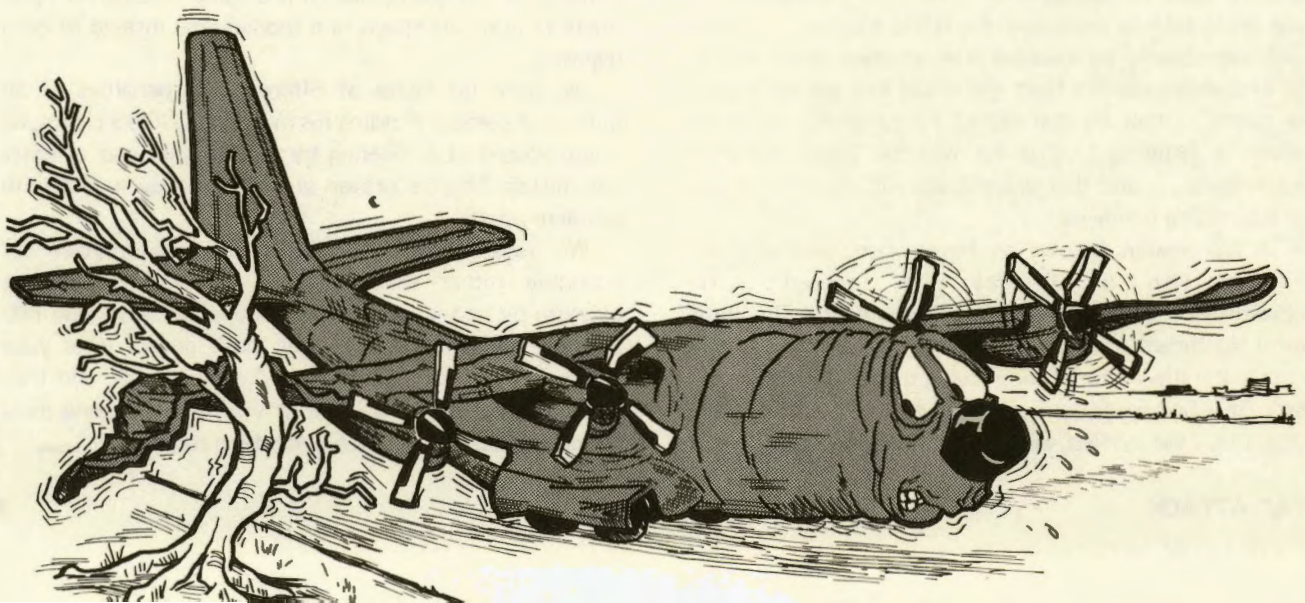
Check Those Kits

An F-4 squadron submitted an operational hazard report following the return of two aircraft from IRAN. They performed a 780 check and found the following discrepancies in the survival kits of both aircraft:

- Lanyard drop lines improperly installed and crossed (could prevent proper kit deployment).
- Life rafts improperly placed in kit.
- PRC-90 radios removed and replaced with the RT-10.

In addition, one aircraft kit did not have the CO₂ cylinder actuator lanyard adapter installed. This could have caused the lanyard to fall out and prevent the raft from inflating on deployment.

The unit is now missing seven PRC-90s. They recommend that you all check your survival kits when the birds get home. You wouldn't want your pilots flying with any survival kits except those properly packed and known to be reliable. Aircrew survivability IS important!



with morals, for the TAC aircrewman

Birdstrike

The incident aircraft was doing formation tactics at 15,000 feet, airspeed — 450 knots when the birdstrike occurred. (That's right, a birdstrike.) The right inboard leading edge flap and gear door received damage.

This incident falls in the Miscellaneous Unsafe Condition category. We suspect that the bird at 15,000 feet was suffering from hypoxia, sighted the F-4, mistook it for its mate, and expired making his last pass.

F-4 FOD

Start, taxi and end of runway check were uneventful. The aircraft took the runway as number two for a night, formation takeoff and off they went. Ten seconds after coming out of burner, the crew felt and heard a loud explosion — and the left engine immediately flamed out. They completed single engine procedures and climbed to 2500 feet to investigate. They were still flying so they dumped fuel and made a single engine landing.

Investigators found that an object had impacted the leading edge of the left intake at the 12 o'clock position, and again in the twelve o'clock position on the left engine front frame. It left a smooth imprint one half inch by a quarter inch at these two points. Subsequently, it was ingested by the engine damaging all visible stages of the compressor and tearing a hole in the engine casing at the first stage rotor.

Neither the object nor its source could be determined. This incident proves again that foreign object damage can strike most any time during F-4 operations. Each time we think we have experienced them all, a new one crops up. And since we can't stop these incidents, the best defense is to stay ready — all the time.

F-4 Turbine

Following a ground attack mission and level off at 16,000 feet, this F-4 crew heard and felt a vibration. It sounded like organ piping in the cooling system so they turned it off. The vibration continued with all engine instruments indicating normally. Then, by throttle movement the crew determined that the left engine would vibrate between 80 and 85 percent. The left throttle was retarded to idle and a precautionary landing was made.

They found seven missing blades in the first stage turbine rotor. All other blades were burned and chipped. All second and third stage blades were damaged. This unit has had twelve failures of this type since January.

The Worm Squirms

As we watched a big fat robin pull a worm from the ground and eat it for his lunch on this beautiful spring day...it reminded us that once more it is time for us...and you, the Base Safety Officers...to start digging!!! No, not for worms...but for the reminder notice we sent you several weeks ago. Spring is the time when we are required by Air Force regulations to make an annual survey to verify distribution requirements of TAC ATTACK magazine. It is up to you to coordinate the requirement needs of your base with your servicing PDO in order to assure adequate coverage and eliminate overlapping distribution. Be certain your base is receiving adequate copies of TAC ATTACK, which is a vital part of your safety education program, so that you too can have the same satisfied expression on your face as our robin did when he finished his worm.



INDIVIDUAL

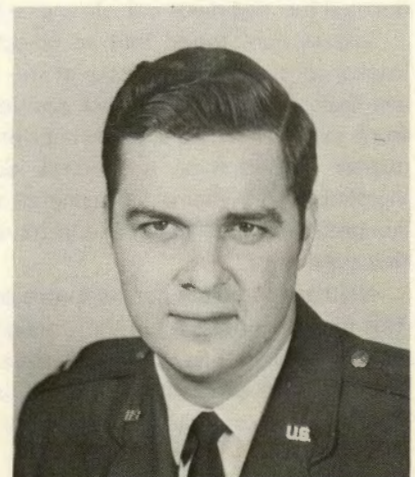
We are proud to present the Tactical Air Command Individual Safety Award winners on these pages. The contribution to our mission made by these five men will never be known...we have no way of counting accidents that have been prevented. Selection for the highest Tactical Air Command Award in their individual field is our way of recognizing outstanding efforts in behalf of accident prevention. I wish to add my congratulations to the many they have already received.

GERALD J. BETZNER, Colonel, USAF
Chief of Safety



Outstanding Flight Safety Officer (second half 1970)

Captain Fred N. Larson
179 Tactical Fighter Group
Mansfield Lahm Airport, Ohio



Outstanding Nuclear Safety Officer

Captain Phillip D. Munson
23 Tactical Fighter Wing
McConnell AFB, Kansas

Safety Awards for **1970**

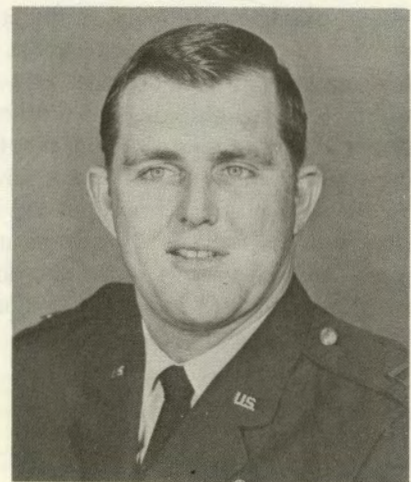


Outstanding Missile Safety Officer

Captain Joseph A. Pappe, Jr.
23 Tactical Fighter Wing
McConnell Air Force Base, Kansas

Outstanding Contributor to Nuclear, Missile or Explosives Safety

Captain James E. Ivy
354 Tactical Fighter Wing
Myrtle Beach Air Force Base, South Carolina



Outstanding Ground Safety Man of the Year

Technical Sergeant Russell E. Wheale
4453 Combat Crew Training Wing
Davis-Monthan Air Force Base, Arizona

CHOCK TALK

Chock Talk

...incidents and incidentals

Surprise!!!

While setting up for his first strafe pass, the Thud pilot got the surprise of his life when his M-61 cannon began to fire. He immediately turned the switch off but 164 rounds fired in that short time. All rounds impacted on the range.

They found a faulty trigger detent switch during trouble-shooting and replaced the stick grip. But they didn't stop there . . . pressing on with the investigation to find out WHY, they found that the wiring for the 4-way trim switch was misrouted and pressing against the trigger detent switch, causing a fire signal to be present when the other safeties in the system were removed.

The stick grip had been replaced four months earlier but there was no way to trace the man who did it. So somewhere out there is a man who doesn't know how to route the trim wires in a B-8 stick grip. Little thing? You bet . . . unless he's in your outfit . . .

F-5 FOD

The left engine was stabilized at 85 percent for run-up when the operator heard an unusual sound resembling a compressor stall. He looked back over his left shoulder and observed red lint being exhausted. They found foreign object damage to the engine; it had ingested the streamer, lanyard, and wire ring from the centerline drop tank pylon ground safety pin assembly.

The incident came as a surprise since normal precautions were taken prior to run-up. The streamer had been wrapped around the centerline tank sway brace and checked for security. Checking a little further, investigators found that the safety pin assembly was the wrong part number and not listed or specified in the TO,

as aircraft 780 equipment. It seems that the length of the safety pin assembly used in this incident was 30 inches. From its installed position, the streamer will extend six inches into the aircraft's intake. The correct safety pin assembly is 23 inches in length and will not reach the intake lip.

There is a double moral to this story. First, if a streamer will reach the engine air intake — guess that something is wrong somewhere and find another. And second, check all external safety pins before the aircraft begins taxiing to the end of the runway for arming and End of Runway Inspection. If a streamer becomes loose in the wind, its length may not matter — where it goes will be anybody's guess.

Set the Brakes

This O-2 was scheduled for a run-up to attempt to duplicate a write-up on the rear engine, reported the previous flight. Sgt. A was to perform the prop check and Sgt. B, a prop specialist, was to observe the check to determine the cause of the malfunction. It was night and NF-2 lighting was being used. Both engines were started and after they reached operating temperature the rear engine was accelerated to max power (front engine at 1800 RPM to provide cooling airflow for rear engine), reduced to 1800 RPM, accelerated to max power, and again reduced to 1800 RPM. Each acceleration lasted about five seconds.

As the rear engine RPM was reduced the second time, the aircraft began moving forward. Sgt. A, in the pilot's seat, did not reduce engine power to idle until the aircraft had moved forward ten feet. He then tried to turn the aircraft to avoid a row of aircraft parked 75 feet ahead.

with a maintenance slant.

with a maintenance slant

The aircraft turned 45 degrees right, traveled an additional 65 feet, and struck another O-2. Sgt. A was trying to apply brakes through all this — just prior to contact with the parked O-2, the mixture levers were moved to cutoff.

Investigators found that the parking brake had not been set and that the aircraft was not chocked properly. When Sgt. A accomplished the pre-start portion of the checklist he had indeed pulled the parking brake knob out — but hadn't depressed the brake pedals! The investigation also brought out a training deficiency in that the Sgt. had been checked out by a pilot using the pilot's abbreviated checklist. Training was not accomplished in accordance with AFR 60-11 as required.

F-4...No Brakes

As the aircraft was moving out of the chocks, the aircraft commander discovered that he had no brakes! Nose gear steering worked so he elected not to shut-down due to the congested parking area. The crew tried emergency brakes as they taxied but that didn't work either. Engine shut-down on the taxiway was considered but they felt that the bird might run off into the dirt and damage the gear. They called tower and advised them of their plight and their intention to taxi onto the runway and engage the BAK-9. Clearance was received and they took the active for this unusual event. When the tail hook lever was placed in the down position, nothing happened... the hook remained stowed. At this point the engines were secured and the aircraft stopped on the runway.

The cap on the end of the anti-skid control valve torque control motor had been damaged. This caused all brake pressure to be routed to the return system. The

damage to the cap was not readily apparent, the arresting hook failure could not be duplicated.

If you think about this one a little, the ramifications take you far out. No normal braking, no emergency braking, and a hook failure that couldn't be duplicated. Transpose those malfunctions to another phase of flight. Or perhaps we ought to give three cheers to the utility system... it's usually the one that quits first. This time it saved the day.

T-Bird Controls

T-bird Controls

The first twenty-five minutes of the T-bird test flight were uneventful. Then, during pull-out from the high speed dive portion, the aircraft began to roll right. The roll could be controlled by holding hard left stick. To roll left required full left aileron trim and application of hard left stick. While holding the aircraft in level flight, it would intermittently roll to the right but control could be maintained. Then the pilot disengaged the aileron boost. When he did, the aircraft began to roll, out of control, to the right. All available stick would not stop the roll. The pilot re-engaged aileron boost and recovered. Full left aileron trim and left stick had to be maintained to landing.

The FCF was for an engine change and completion of the 11 and 14 phase inspections. During the inspection, the aileron booster cartridge and feel spring cartridge assemblies were lubricated in accordance with instructions. When the left cartridge was reassembled, the retaining snap ring was not properly seated. During the test hop, the feel cartridge separated allowing the bell crank to rotate, this caused the control difficulties.

SUMMER FLYING

(some are not)

Hq 5th Weather Wing, Langley AFB, Va.

Spring is here — and not far behind will be all those thunderstorms, tornadoes, and other hazardous conditions that can make summer flying a nightmare in certain parts of the United States. However, there are some things that you, as pilots, can do to reduce your chances of an encounter with Thor and his cronies.

One valuable source of severe weather information for pilots is provided by highly qualified specialists at the Air Force Global Weather Center (AFGWC). This center provides weather warning support to authorized DOD agencies by disseminating their warnings over the USAF communications system.

At the Air Force Global Weather Center located at Offutt AFB, a staff of highly qualified meteorologists continually monitor severe weather patterns. Hourly radar reports and many other weather parameters are monitored to detect significant changes in hazardous weather. Every six hours they transmit a specialized weather warning to field units — these warnings identify current and forecast severe weather areas for a twelve hour period. Amendments are issued when a weather warning area moves or changes significantly from its forecast pattern. Warnings may cover fairly large geographical areas as in the case of thunderstorms, but areas of more extreme weather such as tornadoes and severe thunderstorms are

usually described in more limited terms of time and space. The AFGWC forecasts the following:

- Tornadoes
- Funnel Clouds
- Waterspouts
- Thunderstorms
- Strong Surface Winds (35 knots or more and not associated with thunderstorms)
- Heavy rain or snow
- Freezing precipitation
- Blowing dust, sand or snow (visibility 5/16 of a mile or less)

This weather support is provided in one of three ways: the Military Weather Warning Advisory, Further Outlooks, and Point Warnings. These are familiar tools to the field weather forecaster but, perhaps, not so familiar to you pilots. Let's run over them quickly.

First, the MILITARY WEATHER ADVISORY is

Maximum Instantaneous Coverage will define the percent of area to be covered by cumulonimbus cells at the time of maximum activity; Total Area Affected is the percentage of the area which will experience one or more thunderstorms sometime during the valid period of the area. As you can visualize, two areas may have the same max instantaneous coverage but the total area affected by the end of the period may be different depending on whether the activity is frontal, squall line, or of the air mass type. Following are examples of the old and new format.

**LOCALLY DAMAGING WIND STORMS ...
ISOLATED...THUNDERSTORMS SCATTERED...
FEW SEVERE WITH 1½ INCH HAIL AND WNW GUSTS
TO 65 KNOTS...MAX THUNDERSTORM TOPS
520... VALID 2000Z to 0300Z.**

[illegible]

summer flying

NEW:

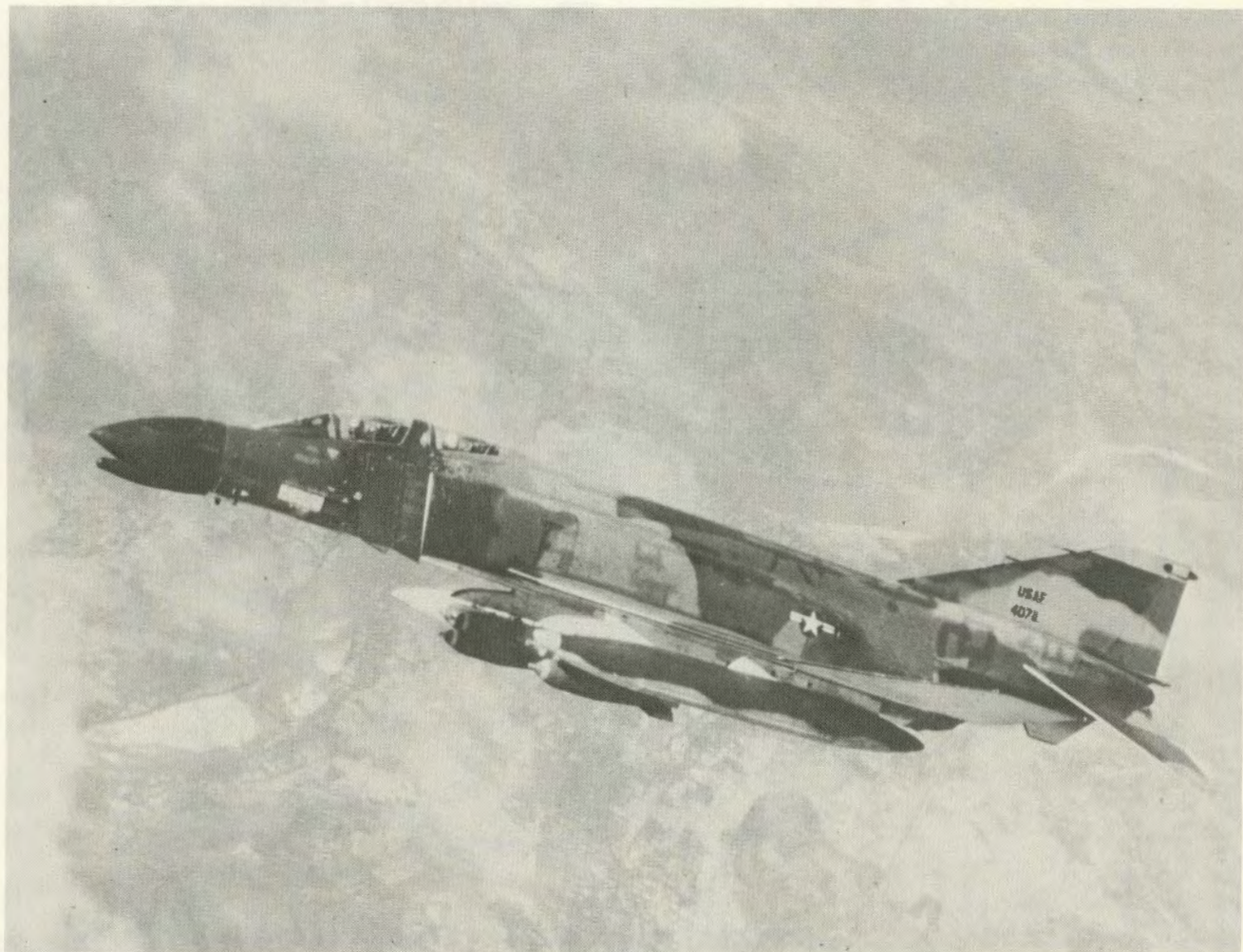
VALID 1900-0500Z . . . LOCALLY DAMAGING WINDSTORMS . . . SEVERE THUNDERSTORMS . . . 10 PCT MAX INSTANTANEOUS COVERAGE . . . 70 PCT TOTAL AREA AFFECTED . . . 1½ INCH HAIL . . . WNW GUSTS TO 65 KNOTS . . . MAX TOPS 520.

(NOTE: Only some of the thunderstorms will reach severe intensity; "severe" will not apply to the whole 10% Maximum Instantaneous Coverage or the 70% Total Area Affected. Also, instantaneous coverage in this example is

forecast to be zero before 19Z and after 05Z, reaching 10% sometime in between.)

And as you press on to your destination, don't forget to exercise the other arm of the Air Weather Service. The United States is literally covered with weather stations which provide Pilot-to-Forecaster Service around the clock. They'll keep you up to date and issue any amendments to severe weather warnings that have come in since your takeoff. And they'll do something else — they will pass your pilot reports on to me. Mother Nature has a habit of whimsically changing her atmospheric conditions without alerting our forecasters, there is no substitute for an airborne report.

On your next visit to Base Ops, take a few minutes to get briefed on these new terms and exactly what these advisories can do for you as a pilot. You have an obligation to yourself and your crew to make use of all information that will make your flight safer. ➤



Tactical Air Command

Crew Chief of the Month

Staff Sergeant Bobby J. Brown, 4408 Combat Crew Training Squadron, Lockbourne Air Force Base, Ohio, has been selected to receive the TAC Crew Chief Safety Award. Sergeant Brown will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.



SSgt Brown



Tactical Air Command

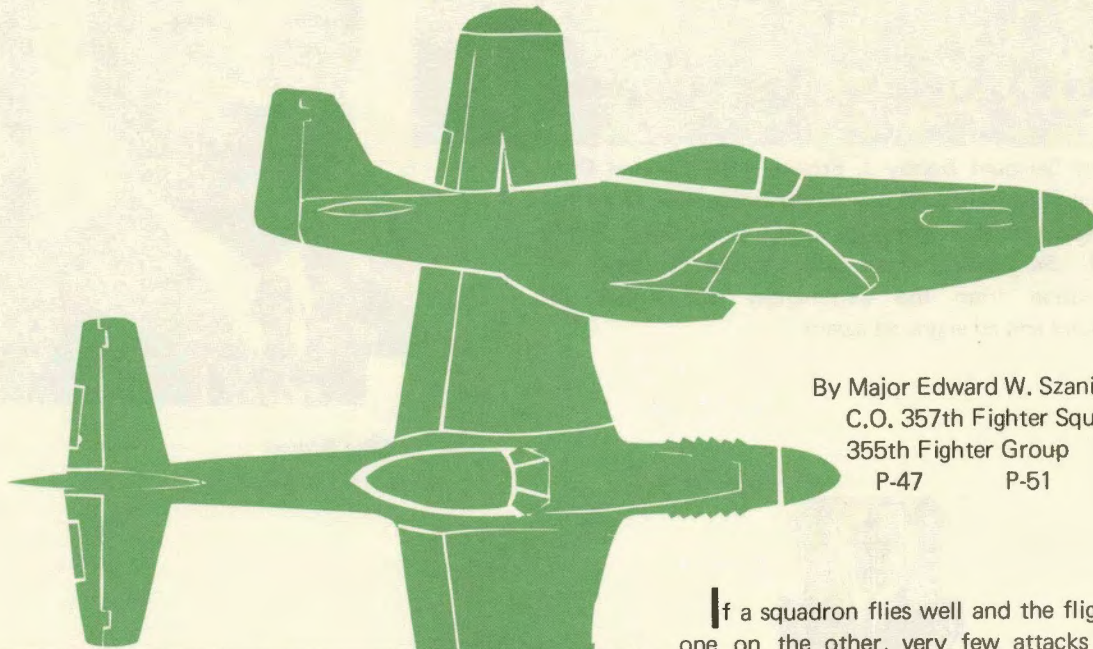
Maintenance Man of the Month

Staff Sergeant Chester J. Gaulton, 834 Field Maintenance Squadron, Hurlburt Field, Florida, has been selected to receive the TAC Maintenance Man Safety Award. Sergeant Gaulton will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.



SSgt Gaulton

THE LONG REACH



By Major Edward W. Szaniawski
C.O. 357th Fighter Squadron
355th Fighter Group
P-47 P-51

You reach out and pick up this VIII Fighter Commander tactics "Manual" dated 29 May 1944 with a respect bordering on reverence. You scan pages eagerly and recognize pictures of the fighter pilot contributors, names and faces ranking among our country's greatest World War II aces. The acronyms KIA and MIA appear all too often in their brief "biogs." You marvel at the obvious youthfulness and their friendly smiles, realizing that they have learned much about flying and compressed a lifetime of air battles into a time period of months, not years. They are trying to "reach," to teach, to impress those follow-on generations of fighter pilots who must follow them, and are as yet untrained in aerial combat maneuvering. They recount experiences, tactics, and pilot techniques proven in aerial battles beginning as mass formations in crowded skies and ending in single-ship or element versus element hassels. Not all of their tactics and techniques still apply, some are now impractical. However, they do present and show surprising agreement on some fighter pilot fundamentals. We think you will learn much in reading their personal accounts about flying "into the wild blue yonder," and respect the contribution they have made to a proud profession: the fighter pilot!

If a squadron flies well and the flights stay compactly one on the other, very few attacks will occur. If the enemy is foolish enough to stick his neck out under these conditions, the attacks can be easily dispersed. If less than a squadron is involved, it goes back to the same old story — a good lookout and a break into the attacking planes.

The pilot must stay calm and take advantage of all breaks. He must try to stay together if possible and disperse the enemy. Once they are broken up they fight as individuals, which under ordinary conditions gives us quite an advantage.

When attacked, fight like hell, try to stay together, and work toward the coast. If a last resort is necessary, hit the deck and go like hell. When caught on the deck, there is not much one can do except fight it out or try to run.

Generally, I would hit the deck only when attacked by vastly superior forces, or gas or ammunition are low, or in case of engine trouble or lack of oxygen. It is always advisable, however, to try to maintain some altitude when coming out.

In most of my encounters the enemy always went for the deck, thus turning the flight into a plain old rat race until the enemy pulled out. In all encounters, it is absolutely essential that the wingman cover the leader. If the leader can give his wingman a chance to shoot, by all means let him join in the fight. This type of team work is surely good for morale.

Unless the enemy is surprised he usually breaks into

"The average enemy will make a wrong move and get his pants burned."

the attack, or half rolls and heads for the deck. If the enemy planes hold their altitude, the pilot should pick out one and concentrate on him until he is destroyed. If he heads for the deck, the same holds true. The pilot should always pick out one and follow through. He should always attack if gas and ammunition are sufficient. If the enemy is hit hard, even by fewer numbers, it usually results in his dispersion. From then on pilots must stick together and get the individuals.

By concentrating on the individual attacked, under normal conditions overshooting can be avoided. However, under certain conditions and with the P-47, it's very hard to keep from overshooting a good enemy pilot who knows the ropes. The best way is to plan ahead and use discretion until he is destroyed.

In general most young pilots are just fair shots. This can be overcome by a dead astern approach and closing as near as possible before one opens fire. However, I believe snap deflection shots are justified if one is unable to get into astern position. I try not to shoot unless the range is favorable. It is foolish to waste ammunition. A little study now and again on this subject never hurt anyone.

As for formation, en route from enemy coast to rendezvous point, the three squadrons fly abreast, built up away from the sun in two steps of a thousand or two feet. Each squadron covers the others. Squadron formation is two flights of four, one section flying abreast with the second section one to two hundred yards behind it and five hundred to a thousand feet above.

The dispersion of squadrons depends usually upon the mission involved. Under present conditions I favor one squadron behind the bombers, one in front, and the third as high cover. I like the flights within the squadron in a trail formation during escort, each flight 3-400 yards behind the other. In the flights I like elements and wingmen 25-50 yards apart and well up in an abreast formation. This affords mutual cross cover protection and maneuverability.

Squadrons should attempt to maintain close contact with one another at all times although it is not always possible if many enemy aircraft are present. I require my flights to keep very close contact with the squadron. This is accomplished by R/T announcing bounces, etc. The

range around bombers is very elastic, depending on type of mission and activity of enemy aircraft in the vicinity. If the bombers are happy, the range or area is of course much greater than otherwise. Victories pay off it seems — so we go hunting.

On normal escort missions any flight in the squadron is allowed and encouraged to make a bounce. Flight leaders call in their bounces and get cover from the nearest flight, as the situation demands. For example, if the second flight makes a bounce, the first flight can cover or vice versa. If a section is required for a bounce, one section should cover the other as long as possible.

Flights should try to stick together and at the same time be flexible. It is perfectly all right for the second element to make a bounce, but in such cases the first element should cover the bounce. There is strength in numbers, and sticking together pays off in the long run.

Our four flights fly in trail formation during escort, 3-500 yards apart. This gives good protection to bombers, provides cover over a large area, the flights offer each other mutual protection and the squadron has great maneuverability. Furthermore, this formation is easy on all pilots involved and encourages a good look-out. For sweeps two flights fly abreast, about 500 yards apart, with the other two flights abreast 500 to 1000 yards behind them.

With new pilots joining the organization constantly, certain rigid rules must be established for efficient operation. Under present conditions the type of formation we fly is very satisfactory in this theater. It is flexible and maneuverable enough if pilots are trained properly and enables flight leaders to maintain good air discipline.

If flights and the men in them are in proper position and on the ball, most defensive situations with the enemy in position to attack, can be handled effectively and without loss. In fact, the tables are often reversed, and one or more victories result. The enemy seems reluctant to pick on flights or sections, but God help the stragglers. This seems to apply even when he has a definite advantage.

The size of the enemy formations influences all bounces. If a flight is all that is necessary, it is dispatched

THE LONG REACH

with top cover. If the situation requires more, a section or even the whole squadron makes the bounce. It is always desirable to seek numerical advantage. However, even without numerical superiority a bounce should be made at every opportunity and in most cases the average enemy will make a wrong move and get his pants burned.

We drop belly tanks only when attacked by the enemy or when an attack is being made by us. In all cases try to hold tanks as long as possible on penetration. That 20 or 30 gallons saved looks good on the long flight home.

Some of the enemy can really make a 190 talk, but in general it's the same old stuff in new equipment.

Pilots should circle area of combat and climb gently until men have chance to reform and rejoin the squadron. If still with the bombers, use of the radio to state one's immediate position makes it easier for men to rejoin.

After group briefing I again brief the squadron. We go over our part of the picture, the type of formation for the mission, weather conditions, and all other little facts of immediate importance. This makes it easier on all concerned for everyone then knows what to expect of the leader. I find this only takes a few minutes and is very helpful.

I would order a formation to hit the deck only if attacked and the squadron were very low on gas or ammunition. If a member or members of a flight are in trouble and cannot maintain altitude, the flight should stay together and help them home. If coming out under a solid overcast at low altitudes and in the vicinity of large towns, flights like to come out on the deck in order to avoid the heavy flak. In this case leaders usually allow men to decide by radio whether or not to go down to the deck.

Leaders should try to give bounces to men who are in the best position to bounce. Of course it's hard to see everything and so flights are most often dispatched. After that it's up to the flight leader involved as to who ok's the bounces.

The enemy aircraft involved and also the type of mission determine the number of our aircraft sent down on a bounce. On escort, if one flight can handle the situation, it's foolish to use the whole squadron and leave the bombers unprotected. On sweeps, a squadron can more easily work as a unit under all conditions.

When the enemy has advantage of altitude and position, pilots must try to stay close together, gain altitude and turn the tables. By all means they must keep

close watch on all his movements and wait for him to make a move. All the while they should try to obtain a more favorable position. Often times, even if the enemy attacks from above, the tables can be turned in short order if he has been watched carefully. This is especially so with P-47's; for the enemy doesn't like head on attacks with this ship.

We try to pursue attacks until a victory is obtained. If necessary, and usually it is, we pursue from the bombers right down to the deck.

By all means, pilots should try to make an attack before the enemy can get set on the bombers. They should keep the enemy dispersed and away from the bombers as much as possible. If they range around bombers 10 miles or so in either direction, most attacks can usually be stopped before they are started.

Pilots should range in all directions away from the bombers; leaders should keep the squadron together as long as possible, and they should sweep their area to both sides. For example, if the pilot is in the front squadron, he should sweep this area from side to side always keeping close tabs on the bombers by vision or R/T. Often by keeping escort elastic, many planes can be engaged in the general area, and still provide good escort. This also keeps the enemy from hanging around outside the escort until attack is possible.

If possible, all flights call in bounces to the squadron leader before leaving the squadron formation. They are then dispatched. However, if time does not allow, flights can make bounces and announce their intentions on the way down. Elements can make bounces also, but when possible I try to keep the flight together, one element covering the other. Never break the squadron down into less than elements if possible.

The best offensive is in keeping together and hitting hard. The best defense is also maintained by sticking together and by trying to disperse the enemy and turning the tide. The best tactic in any case is trying to maintain altitude, but if this is impossible, take the action to the tree tops if necessary.

Flight leaders always make the bounces if time permits. If an element leader bounces he must notify his flight leader at once.

If necessary to drop down to the deck or to low altitude to evade an attack or because of mechanical difficulties, re-climb to 8000 feet as soon as possible in order to avoid light and heavy flak. ➔

UNIT SAFETY AWARDS



1970 TAC GROUND SAFETY AWARD:

Category I 4500 Air Base Wing

Category II USAF Tactical Air Warfare Center

1970 TAC TRAFFIC SAFETY AWARD:

Category I 464 Tactical Airlift Wing

Category II 71 Tactical Air Support Group

SEMI-ANNUAL TAC DRIVE SAFE AWARD:

Category I 4500 Support Squadron

Category II 71 Tactical Air Support Group

Note:

Units with more than 1000 assigned military personnel compete for Category 1 awards. Those with 1000 or less compete in Category 2.



KILLER

WAVES

By CDR Charles H. Zilch
Courtesy of FATHOM

BENEATH rapidly moving groups of sun-pierced clouds the grey frothy waves blasted the craggy California cove. It was December, late afternoon, and a strong northwest wind still blew from a predawn storm. To seaward the crescent bay was open, and only near the narrow beach did a single jagged rock rise above the white caps; a clenched fist atop a thick forearm to split the rushing seas. Churning and boiling, spray would climb the pillar. When the wave was a great one, spume would be thrust outward at the base of the closed hand, forming a misty rainbow across barren knuckles.

To this savage inlet came the two midwestern sailors with their cameras. They had heard of the spectacle from a friend aboard their San Francisco-based carrier, and knew that to photograph the area would not only enhance their slide collections but would show the folks back home what the Pacific was really like. They came for the unusual shots, not the postcard variety, and realized full well that exceptional photographs generally require greater effort and possibly greater risk.

Parking their rented auto in a roadside observation lot, the pair moved down a well-worn foot path to a rocky outcrop enclosed by an arc of iron railing. They passed a sign suggesting that viewing and photography be done at that level and not below, then crawled over the rail. By helping each other drop from ledge to rock to ledge they soon stood on the sand between precipice and sea. The grandeur was what they had anticipated; a low perspective

of the rock tower; a meeting with the raging ocean. They commenced shooting immediately to take advantage of the waning sun.

When the lower edge of the sun began to lap at the horizon, one of the shutterbugs started moving back up the stone face. His partner, perhaps in an attempt to frame the fist-like rock exploding against the orange ball, moved further down the beach. The man on the cliff yelled that he was going up, heard an acknowledgement that his friend too would be along in a minute, and turned to climb. When he reached the level with the warning sign he turned. His partner was not behind. Yelling again toward the beach he thought he heard a return cry, but the roar of the breakers made him unsure. Then he saw it. A solitary dark figure with arms waving, half crouching and thrashing about in the surf just off the beach. The man on the ledge started down, but the lower rockface was now almost black with shadow and dusk. When he looked again a moment later the man in the water was gone. Neither man made it back to the narrow beach that night. The man in the surf never made it.

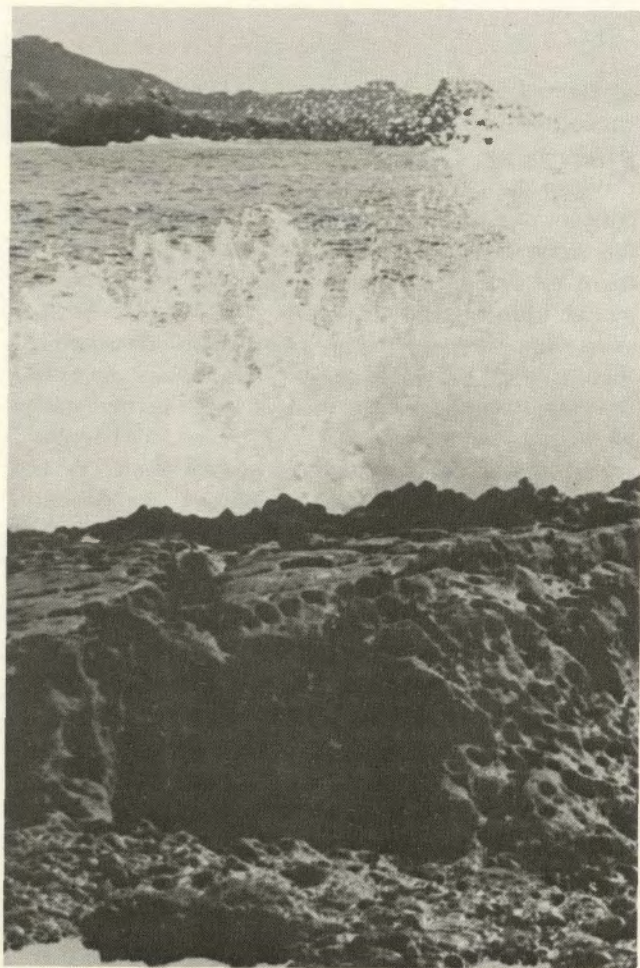
Most likely the fellow who disappeared had walked only to the edge of the foam line. There, while the sea licked its last at the dry sand, he may have focused on an image far beyond the rollers ending at his feet. He probably completed shooting and started back to the cliff with his back to the water. Whatever the circumstances, he obviously never saw the wave that suddenly surged past

KILLER WAVES

the others and swallowed him as a tree frog flicks out its long tongue and swallows an insect off a leaf.

The surviving member could only say that he had not seen his buddy enter the water, and had seen him for only seconds after he was trapped. It is doubtful that either man was aware the breakers were running as high as they were.

Incidents of people being swept to their deaths from shore are not uncommon. They have generally taken place on isolated stretches of beach and involved individuals who were unfamiliar with the area. The Navy has a particular



problem when it comes to occurrences of this type because its men visit many ocean ports with scenic but dangerous beauty spots. The lovely coastlines of California and Hawaii are probably among the most tempting to Navy tourists, but drowning instances of the type discussed here have been reported from such isolated locations as Iceland.

How do these dangerous waves develop?

In nature, waves form in a variety of ways. Basically they are called either by the names sea or swell, depending on their appearance, point of origin and distance from that point. Waves formed and observed locally are called seas. Waves that originate as sea and move out of the area of origin become swells. Seas are formed by wind blowing over the water's surface — the higher the wind velocity, the higher the sea. Seas working over a long reach cause swells, and, as shallow depths are encountered very heavy swells develop (the San Francisco coastal area with seas sweeping out of the northwest after many miles travel is one location where this occurs). Finally, these seas "break" — to the delight of surfers.

To the observer the appearance of each is considerably different from the other. Seas observed in their places of origin are shaped like sharp crested mountains with short distances between crests. They can be visually followed for only two to three times the initial distance between crests. Many small waves are superimposed on the larger waves and the heights of these waves are very irregular. In fact, irregularity (of height, distance between crests and orientation of succeeding crests) is the rule with seas.

Swells differ considerably from seas by having rounded tops and regularity in appearance and characteristics. Tops or crests of swells can be followed for a considerable distance and are usually about the same height.

Another wave, not generated by wind but nevertheless well known, is the tidal wave, or tsunami (pronounced: "soo-no-m-ee"). Named by the Japanese, tsunamis are generated by submarine earthquakes, land slides or volcanic eruptions. These waves are exceptionally dangerous. The seiche (pronounced "saysh") is yet another wave which may be caused either by seismic or atmospheric disturbances. All of these waves are potential killers.

How fast do such waves travel?

In deep water, theory states that wave speed in knots is approximately three times the period of time (seconds) between succeeding wave crests. This means that if you note the elapsed time in seconds between wave crests as they pass a given point you can multiply this time by three to obtain the speed of the wave in knots. As the wave approaches shallow water it tends to slow down and increase in height. Table One gives approximate values of shallow water breaker speed versus breaker height.

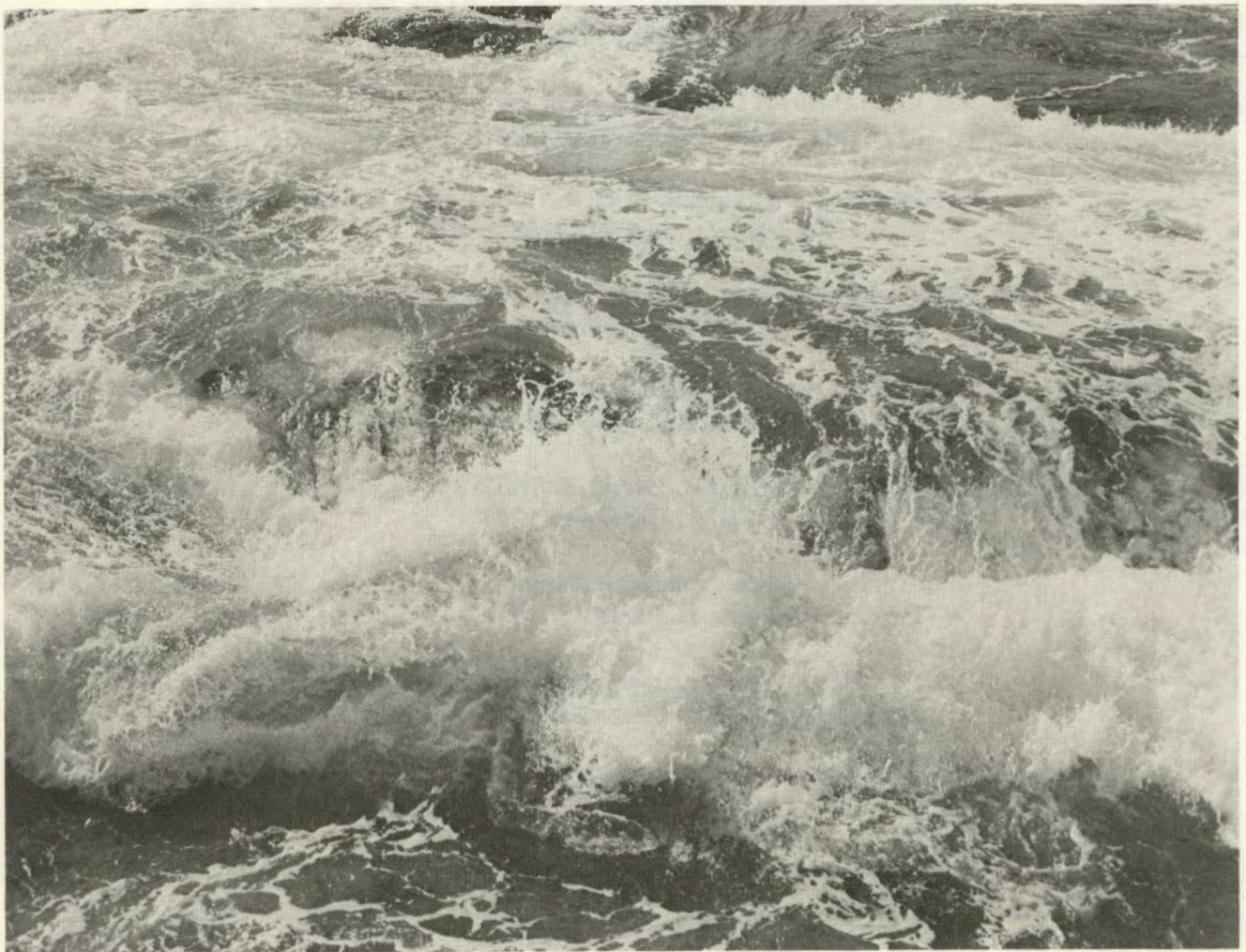
Table One

Breaker Height (Feet)	Breaker Speed (Knots)
4	9
6	10
8	11
10	12
12	13

In the open sea some waves travel at speeds which would do credit to commercial jet airliners. For example, waves caused by seismic disturbances may race across the ocean at 500-600 mph. On board ship such a wave may be indiscernible because it is small and the period between

succeeding crests is great. For a wave traveling at 450 mph the time between each crest would be about 150 seconds or 2½ minutes, and the height only a few feet. This sort of wave is especially dangerous to people and property close to the sea shore because the effect of tidal waves in shallow water may be overwhelming.

Most people living near an ocean shore are aware of the dangers involved when the big water is breaking. For the surfer, danger is overshadowed by thrill, although surfers with any experience are usually quite capable of handling themselves in most kinds of surf. The swimmer or surfer who is sucked into the sea unexpectedly at least has the advantage of being free from heavy outer clothing, a major problem to the unwary beach stander who is only admiring or photographing. The wave big enough to reach out and pull you in may be the next one you see; you'll never know until too late if it is. Since the interval pattern of big surging waves is unpredictable and irregular at best, be ready when you are near the breaking water. Don't turn your back to the ocean!



Tactical Air Command

UNIT ACHIEVEMENT AWARD

Our congratulations to the following units for

**516 Tactical Airlift Wing, Dyess Air Force Base, Texas
5 July 1969 through 4 July 1970**

**348 Tactical Airlift Squadron, Dyess Air Force Base, Texas
1 January through 31 December 1970**

**18 Tactical Airlift Training Squadron, Dyess Air Force Base, Texas
1 January through 31 December 1970**

**64 Tactical Airlift Wing, Little Rock Air Force Base, Arkansas
31 October 1969 through 30 October 1970**

**61 Tactical Airlift Squadron, Little Rock Air Force Base, Arkansas
31 October 1969 through 30 October 1970**

**429 Tactical Fighter Squadron, Nellis Air Force Base, Nevada
13 November 1969 through 12 November 1970**

**62 Tactical Airlift Squadron, Little Rock Air Force Base, Arkansas
21 November 1969 through 20 November 1970**

**907 Tactical Air Support Group, Selfridge Air Force Base, Michigan
1 January through 31 December 1970**

**481 Tactical Fighter Squadron, Cannon Air Force Base, New Mexico
1 January through 31 December 1970**

**522 Tactical Fighter Squadron, Cannon Air Force Base, New Mexico
1 January through 31 December 1970**

**27 Combat Support Group, Cannon Air Force Base, New Mexico
1 January through 31 December 1970**

**931 Tactical Air Support Group, Grissom Air Force Base, Indiana
1 January through 31 December 1970**



completing 12 months of accident free flying:

**126 Air Refueling Group, Chicago-O'Hare IAP, Illinois
1 January through 31 December 1970**

**428 Tactical Fighter Squadron, Nellis Air Force Base, Nevada
1 January through 31 December 1970**

**474 Tactical Fighter Wing, Nellis Air Force Base, Nevada
1 January through 31 December 1970**

**924 Tactical Airlift Group, Ellington Air Force Base, Texas
1 January through 31 December 1970**

**922 Tactical Airlift Group, Kelly Air Force Base, Texas
1 January through 31 December 1970**

**926 Tactical Airlift Group, New Orleans NAS, Louisiana
1 January through 31 December 1970**

**446 Tactical Airlift Wing, Ellington Air Force Base, Texas
1 January through 31 December 1970**

**440 Tactical Airlift Wing, General Billy Mitchell Field, Wisconsin
1 January through 31 December 1970**

**933 Tactical Airlift Group, General Billy Mitchell Field, Wisconsin
1 January through 31 December 1970**

**33 Tactical Reconnaissance Training Squadron, Shaw Air Force Base, South Carolina
15 March 1969 through 14 March 1970**

**136 Air Refueling Wing, Dallas NAS, Texas
1 July 1969 through 30 June 1970**

**29 Tactical Reconnaissance Squadron, Shaw Air Force Base, South Carolina
15 June 1969 through 14 June 1970**

LETTERS to the EDITOR

Letters to the Editor

STANDARDIZATION

I have just received our February copies of your outstanding magazine. Being an "Old TAC Troop" I really enjoy TAC ATTACK and it gives me a source of pride to see the way my troops relish reading the magazine. One reason your publication is so popular is the excellent articles that tell it like it is; an example is, "How About A System?", in the February issue. Please keep up the good work, but let's not allow bits to appear such as "F-100 Abort" in TAC Tips in the same issue. I can't believe TAC Safety is condoning or even implying that accomplishing procedures "By the numbers" is not an operational necessity.

--- "It's nice to be standardized — but don't let it kill you . ." Are you kidding? Standardization has probably done more to aid and improve the Air Force's overall safety posture and reduce fatalities than any other single item. If procedures are incorrect there are proper ways to correct them. The individual, whether he be one person or a squadron, that takes it upon himself to deviate from standard operating procedures is who creates the need for our career field. For years we have preached, "Use your checklist." How many accident cause factors have been operator/maintenance personnel failed to use checklist/technical data?

I request you print a retraction on the F-100 Abort item and restate your position for standardization. It is not "nice" to be standardized but in the Air Force you must be standardized. Non-standardized procedures, "They can kill."

Major John D. Mitchell
603 DASS Flying Safety Officer
Osan AB, Korea

We thank you for your kind words and look forward to your continued support of TAC ATTACK. However, after reviewing "F-100 Abort" in the February issue, we don't feel a retraction is in order. We feel, rather, that a breakdown in communications has occurred.

This jock aborted with 3000 feet to go — at his speed

he had about ten seconds of concrete under his tires. To read the bold face procedures straight out of the book takes approximately seven seconds, it would be very difficult for a pilot to accomplish the five steps in that time. As you are aware, ARRESTING HOOK — RELEASE is Step 5 and the bold face is followed by a notation that says the hook should be released approximately 2000 feet before the pendant cable to allow hook bounce to dampen.

In this case, the pilot didn't have to worry about his speed brake, and didn't jettison his external stores. By deploying his drag chute first he forfeited his chance to catch the BAK-12 with his tailhook . . . he could have lost much more.

TAC Safety's position on standardization has not changed. We go along with the program all the way . . . to include the introduction to the emergency procedures on page 3-2A in the current TO 1F-100D(1)-1. It says, among other things, "Even though the procedures in this section are considered the best possible, the pilot must use sound judgment when confronted with multiple emergencies, adverse weather, terrain clearance, etc." Ed.

DISTRIBUTION

Our University has an active program in aviation safety. In addition, we are under government contract to train U.S. Military personnel in the field of Aircraft Crash Survival Investigation. In order that we may keep our student and staff personnel aware of current safety problems, we wish to be placed on your mailing list. If possible, we are also desirous of obtaining back issues through January 1, 1970.

There is a limited budget in the Investigation School to help defray any costs which may be incurred by this order. Please advise us if there is a charge so that we can take the proper action.

Thank you for your assistance with this matter.

Sincerely,

S. Harry Robertson
Assistant Director
Crash Survival Investigators School
Arizona State University
Tempe, Arizona

There is no charge for the TAC ATTACK. It's our privilege to add you to our mailing list. Your back issues are on the way. Ed.

TAC TALLY

AIRCRAFT ACCIDENT RATES

* Estimated

MAJOR ACCIDENT RATE COMPARISON

	TAC		ANG		AFRes	
	1971	1970	1971	1970	1971	1970
JAN	1.6	4.8	16.7	5.9	0	0
FEB	1.6	3.9	11.6	2.6	0	0
MAR	3.1	4.6	7.7*	1.7	0	0
APR		4.9		2.4		0
MAY		6.2		3.6		0
JUN		5.5		3.6		0
JUL		5.1		6.1		0
AUG		5.0		6.9		0
SEP		4.7		6.6		0
OCT		4.5		6.8		0
NOV		4.6		6.7		0
DEC		.6		6.6		0

UNITS

	THRU MARCH			THRU MARCH	
	1971	1970		1971	1970
9 AF	1.6	2.8	12 AF	2.1	6.1
4 TFW	0	0	23 TFW	0	0
1 TFW	0	0	27 TFW	0	0
33 TFW	0	0	49 TFW	0	20.7
31 TFW	0	14.6	479 TFW	0	8.9
354 TFW	0	0	474 TFW	0	0
4403 TFW	23.9	0			
363 TRW	0	11.4	67 TRW	0	14.6
			75 TRW	0	0
316 TAW	0	0	64 TAW	0	0
317 TAW	0	0	313 TAW	0	0
464 TAW	0	0	516 TAW	0	0
68 TASG	0	0	58 TFTW	7.6	11.6
			4442 CCTW	0	0
			4453 CCTW	13.2	0
			71 TASG	0	0
TAC SPECIAL UNITS					
1 SOW	12.7	10.7	2 ADG	0	0
4409 SUP SQ	0	0	4500 ABW	0	0
4410 SOTG	0	0	57 FWW	0	0

TAC SUMMARY

	MAR 1971	THRU MAR	
		1971	1970
TOTAL ACCIDENTS	6	10	9
MAJOR	4	6	9
MINOR	2	4	0
AIRCREW FATALITIES	3	5	6
AIRCRAFT DESTROYED	3	4	8
TOTAL EJECTIONS	4	4	8
SUCCESSFUL EJECTIONS	4	4	4
PERCENT SUCCESSFUL	100	100	50

FLEAGLE

FLEAGLE, THIS IS
PEA ISLAND METRO WITH ADVISORY.
LANGLEY REPORTS THUNDERSTORMS
IN VICINITY...WIND VARIABLE
AT 30 KNOTS, GUSTS TO 45...



...SUGGEST YOU DIVERT...OVER...



"I'VE DONE THIS
A THOUSAND TIMES."

