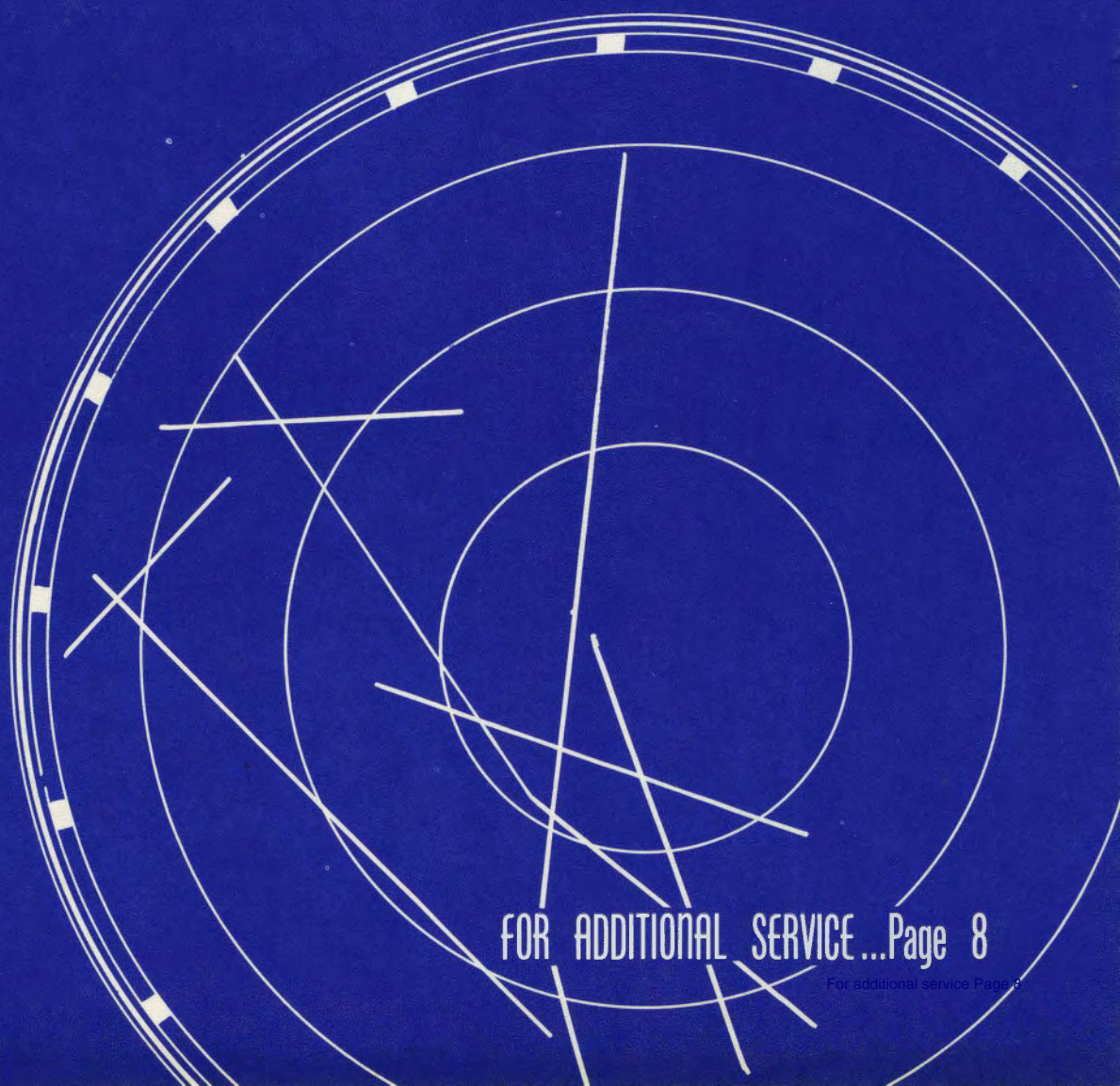


TAC ATTACK

FEBRUARY 1971

February 1971



FOR ADDITIONAL SERVICE...Page 8

For additional service Page 8

for efficient tactical air power

TAC ATTACK

FEBRUARY 1971
VOL. 11, NO. 2

Tactical Air Command

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Jamie sez:

Money can't get you friends but it can bring you a better class of enemies!

current interest

ADDITIONAL SERVICES TO AIR-CRAFT UNDER RADAR CONTROL	Pg 8
EIGHT DOWN — ONE TO GO	Pg 12
BREAKTHROUGH	Pg 16
HOW ABOUT A SYSTEM?	Pg 22
THE LONG REACH	Pg 26

departments

Angle of Attack	Pg 3
Pilot of Distinction	Pg 7
TAC Tips	Pg 14
Crew Chief/Maintenance Man Award	Pg 19
Unit Achievement Awards	Pg 20
Chock Talk	Pg 24
TAC Tally	Pg 31

TACRP 127-1

Articles, accident briefs, and associated material in this magazine are non-directive in nature. All suggestions and recommendations are intended to remain within the scope of existing directives. Information used to brief accidents and incidents does not identify the persons, places, or units involved and may not be construed as incriminating under Article 31 of the Uniform Code of Military Justice. Names, dates, and places used in conjunction with accident stories are fictitious. Air Force units are encouraged to republish the material contained herein; however, contents are not for public release. Written permission must be obtained from HQ TAC before material may be republished by other than Department of Defense organizations.

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Angle of ATTACK



What have YOU done for Blue Four today?

We are currently enjoying a favorable trend in the reduction of accident rates in all functional areas. Obviously, we would like to continue this trend. Some hold that the better you get, the harder it is to get better. I don't think so. I believe there is more merit in saying, "Now that we have the upper hand — let's really get moving."

There are several reasons why we can get better in the accident prevention field. First of all, we spend a great deal of time in early, post-accident reaction, and after-the-fact reporting. While this effort may prevent recurrence temporarily, it doesn't do a thing for prevention of the first time occurrence. It follows then, that the fewer accidents we have, the more time we have for pure, before-the-fact accident prevention.

In place of merely reacting to accidents, we are now afforded the opportunity to place more emphasis on initiating action to prevent that first time occurrence. We can do our reacting to

incidents, not accidents, since we do usually get tipped off before the big bash. The accidents will take care of themselves when they occur, let's spend our time constructively... in the prevention part of safety.

Along those lines, let's take a look at where our accidents are happening. We don't have any aircraft accidents here in the headquarters... and we don't sweat low ceilings on the way to work. The accidents happen where the hardware is... in the world of "Blue Four."

"Blue Four," in my book, is the hypothetical young fighter pilot, airlifter, crew chief, or gun plumber. He's right at the end of the line, the tail of the formation, the "last to know and first to go." He catches everything that flows downhill, and has to find a place to put it in that little five pound bag. He's never heard of the Air Force Register and didn't even make a bet on the next CSAF. He complains about everything that's not right and wonders why "they" don't do something about it. But he wouldn't fill out an

AFTO 847, 22, or EUMR if his life depended upon it (and it sometimes does).

All the same, "Blue Four" is the guy in the arena. Let him miss one item on the checklist, blow the tool count, or get caught taking just one shortcut to get the mission accomplished, and he's the one who "gets it." You see, everyone is covered . . . except "Ole Blue."

If anyone is the backbone of TAC, it's "Blue Four." He can do more with less, he is an innovator, he IS our Strike Force. We owe it to "Blue Four" to give him all the help we can. Make life easier for him and he'll hack the mission without wrecking nearly so many airplanes and vehicles. We were all "Blue Four" at one time . . . some of us forget. It's understandable, but not necessary.

Where do we start? First of all, try reading the incident reports — we actually advertise our coming accidents . . . isn't that interesting? And then there is your daily contact with "Blue Four" and his equipment. And how about the hazards we put in his path?


The daily message traffic is your chance to shine. People all over the world, flying the same equipment as you are, are telling you about all the "near accidents" they have experienced. The information is current and it's useful . . . if it gets a little more than a cursory glance. Things we begin to take for granted, such as the availability of a BAK-12 on the approach end are set-ups for an accident in the future. And we'll have them if the cause of the approach end arrestment isn't solved.

And how about the hardware "Blue Four" uses each day? He looks at an unreliable attitude indicator — and when it fails he must perform a maneuver which may make him completely

disoriented just to switch to his standby equipment. We give him a new aircraft and install the radio as we did in the F-86, twenty years ago. He still needs three hands . . . or he sits on the wing, in weather, waiting for a chance to make the frequency change his leader made two minutes ago. Or, he's smoking down the runway trying to abort and just can't find that hook button in the dark. This area is indeed a fertile field.

Why should we be surprised when "Blue Four" fires a round from an "empty" gun during his sixteenth hour of duty? Why should "Ole Blue" run into that pole two times before you take it down? Seems there's a law against hitting it — but no law against putting it in his way.

"Ole Blue" is in the arena — he's a doer. Let's help him do his job better and more efficiently. If you can't get that light in the tailhook button the first time, try it sixteen times. Put yourself in his place — would you like to have that "life-saving" button lit when you hurl yourself down a dark avenue of concrete in the dead of night . . . you bet you would. On the page to your right we've made some reminders of what it's all about. Coincidentally, they will fit on your side of the nameplate on your desk. So when you sit down to get at it in the morning, the first thing you'll see is . . . WHAT HAVE YOU DONE FOR BLUE FOUR TODAY????


GERALD J. BEISNER, Colonel, USAF
Chief of Safety

Theodore Roosevelt, on the man we now call "BLUE FOUR."
"The credit belongs to the man who is actually in the arena . . . whose face is marred by dust and sweat and blood . . . his place shall never be with those cold and timid souls who know neither victory nor defeat."



What have YOU done for Blue Four today?



What have YOU done for Blue Four today?



What have YOU done for Blue Four today?



What have YOU done for Blue Four today?



What have YOU done for Blue Four today?



What have YOU done for Blue Four today?

What have you done for Blue Four today?



What have you done for Blue Four today?



What have you done for Blue Four today?



What have you done for Blue Four today?



What have you done for Blue Four today?



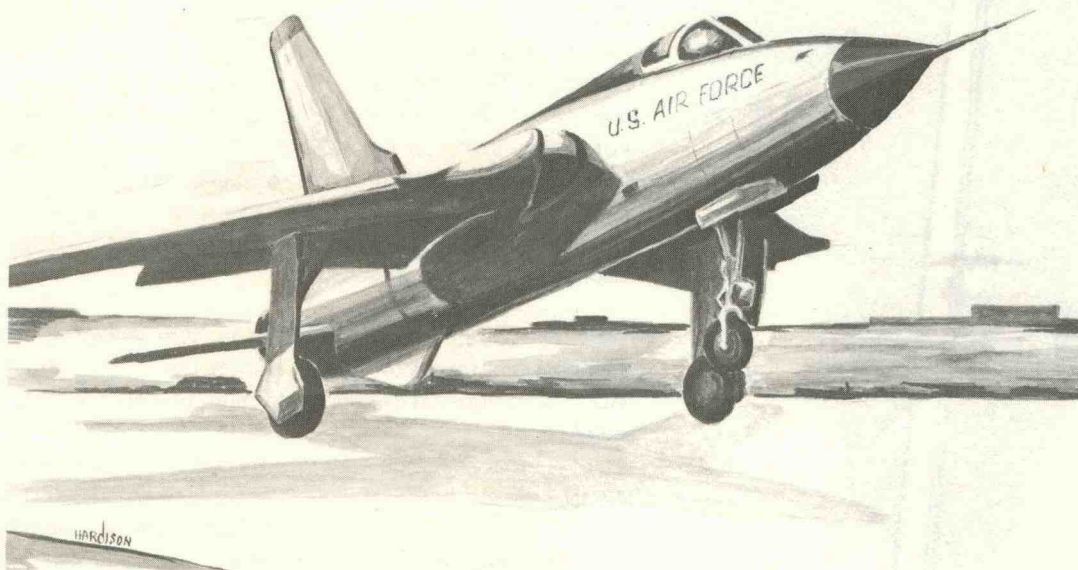
What have you done for Blue Four today?



TACTICAL AIR COMMAND

Pilot of Distinction

Capt Vanderburgh

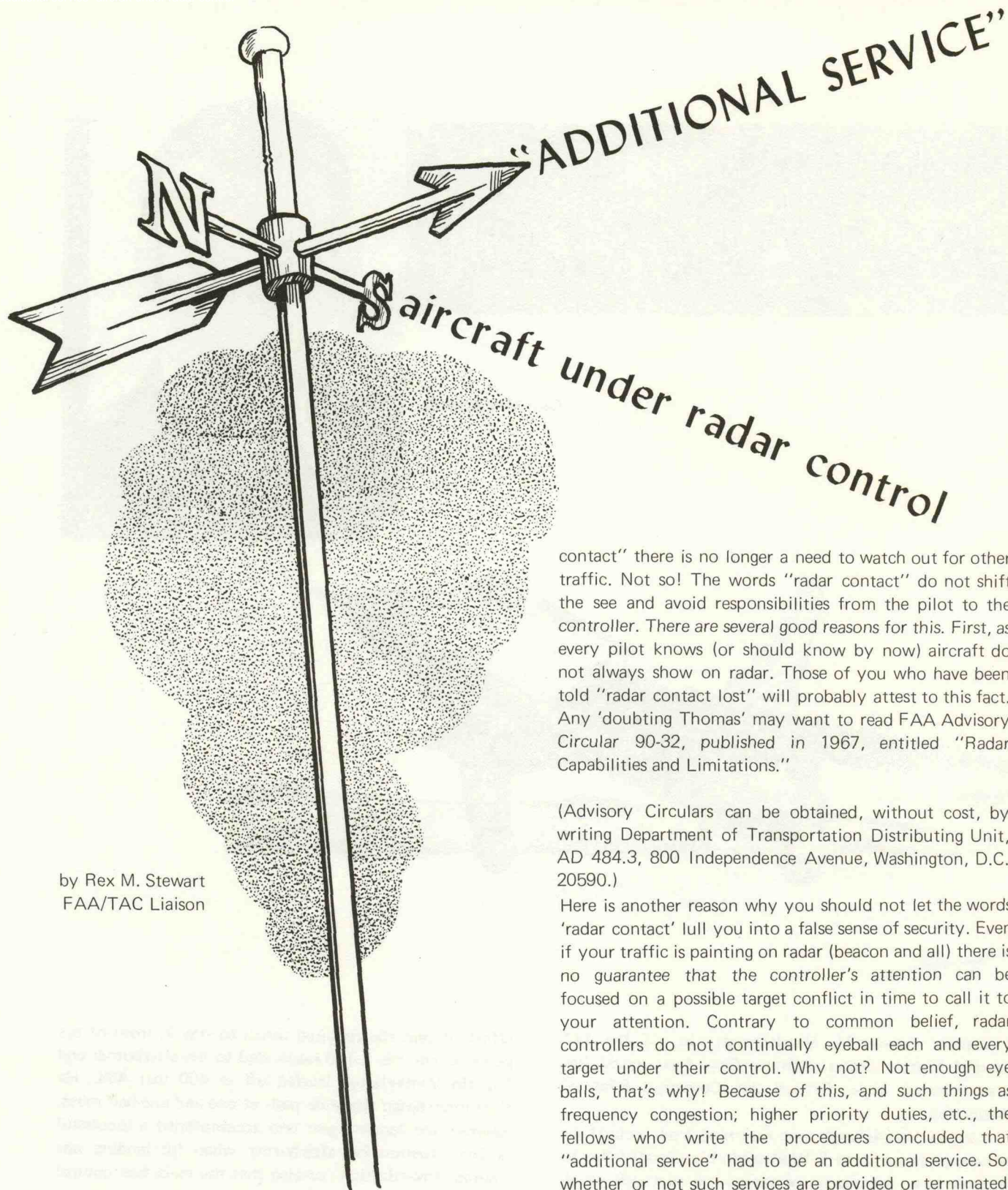


Captain Warren M. Vanderburgh, Jr., of the 177 Tactical Fighter Group, Atlantic City, New Jersey, has been selected as a Tactical Air Command Pilot of Distinction.

Captain Vanderburgh was returning from a night air refueling mission in an F-105B when his aircraft failed to respond to an increase in power on ILS approach. In an effort to reduce drag and keep his aircraft airborne he raised the landing gear, but was unable to keep from sinking below the glide slope at minimum final approach speed. Faced with an immediate decision to eject or attempt to save his aircraft, he selected afterburner in an

effort to gain the required thrust to stay in front of the power curve. His F-105 responded to the afterburner and Captain Vanderburgh leveled off at 400 feet AGL. He then intercepted the glide path at one and one-half miles, lowered the landing gear and accomplished a successful landing, terminating afterburner when his landing was assured. Investigation revealed that the main fuel control had malfunctioned.

This demonstration of outstanding airmanship in a critical inflight situation readily qualifies Captain Vanderburgh as a Tactical Air Command Pilot of Distinction.



by Rex M. Stewart
FAA/TAC Liaison

As brought out in a recent issue of *Aerospace Magazine*, occasionally an OHR has been traced to pilot unfamiliarity with the type and extent of radar service provided by air traffic controllers. Some pilots may be under the impression that once the aircraft is in "radar

contact" there is no longer a need to watch out for other traffic. Not so! The words "radar contact" do not shift the see and avoid responsibilities from the pilot to the controller. There are several good reasons for this. First, as every pilot knows (or should know by now) aircraft do not always show on radar. Those of you who have been told "radar contact lost" will probably attest to this fact. Any 'doubting Thomas' may want to read FAA Advisory Circular 90-32, published in 1967, entitled "Radar Capabilities and Limitations."

(Advisory Circulars can be obtained, without cost, by writing Department of Transportation Distributing Unit, AD 484.3, 800 Independence Avenue, Washington, D.C. 20590.)

Here is another reason why you should not let the words 'radar contact' lull you into a false sense of security. Even if your traffic is painting on radar (beacon and all) there is no guarantee that the controller's attention can be focused on a possible target conflict in time to call it to your attention. Contrary to common belief, radar controllers do not continually eyeball each and every target under their control. Why not? Not enough eye balls, that's why! Because of this, and such things as frequency congestion; higher priority duties, etc., the fellows who write the procedures concluded that "additional service" had to be an additional service. So, whether or not such services are provided or terminated, in a particular case, is left to the discretion of the controller. It all boils down to whether or not he can fit it in with his higher priority duties of separating known aircraft under his control. After the required separation has been insured, the controller may then direct his attention to providing additional services which he

conscientiously does a good deal of the time, but don't rely on it.

In short, "additional services" are just that — services which the controller tries to provide in addition to his required duties. Here are a few typical questions and answers which may shed some light on the subject of controller/pilot responsibilities.

1. What procedures fall within the "additional services" category?

There are several, but the ones most commonly applied (and misunderstood by pilots) pertain to (a) the issuance of traffic information on radar observed targets; weather and chaff areas; and bird activities, and (b) navigational assistance or vectors to avoid such targets. Other additional service procedures involve the monitoring of holding patterns to assist the pilot in remaining within or returning to the assigned airspace.

2. Under what conditions will traffic information on observed targets, weather areas, etc., be provided?

This information is routinely provided, on a workload permitting basis, to all IFR aircraft and to any VFR aircraft participating in formal terminal Radar Programs. (See Question 4 below). Such service must be requested on other occasions.

3. If I am furnished traffic, and do not spot it, will the controller automatically vector me around it?

No. This is a common misconception. The controller will inform you when the traffic is no longer a factor; however, he will not vector you around the target unless you request it. Here again the provision of the vectoring service will depend upon whether the controller believes he is in a position to accommodate your request.

4. What is meant by Stage I, Stage II, and Stage III Radar Service?

These are progressive stages of the National Terminal Radar Program for VFR aircraft where radar is used for control and sequencing of VFR traffic, as well as IFR. VFR pilot participation is urged but is not mandatory. Under this program, pilots of arriving VFR aircraft are requested to establish initial contact with approach control rather than the tower. At the present time all terminal radar facilities provide Stage I (Radar Advisory Service) and 37 locations provide Stage II (Radar

Advisory and Sequencing Service.) Stage III (Radar Sequencing and Separation Service) is currently provided at only one location — Castle AFB, California. The main difference between these services are:

- a. Under Stage I, VFR arrivals are vectored only when requested by the pilot or with pilot concurrence when suggested by the controller.
- b. Under Stage II and Stage III controllers will vector VFR aircraft as required for spacing and sequencing purposes. VFR pilots need not specifically request this vectoring service since their participation in this program constitutes such request. Additionally, controllers provide a separation service between all participating Stage III aircraft.

It is the goal of the FAA to implement at least Stage II services at all terminal radar locations as soon as resources permit.

5. What is the difference between the Stage III Services, discussed in Question 4, and the recently adopted terminal control area (TCA) Program?

Since Stage III procedures and separation minima are also applicable within TCAs, the main difference is in pilot participation and equipment requirements. TCA involves regulatory action, making pilot participation mandatory. Also, at the higher density TCA locations aircraft must be beacon equipped to operate within TCAs. (See FAR 91.90 and FAA Advisory Circular 91-30). Therefore, TCA rules and procedures provide for a much safer terminal environment than the Stage II/III voluntary programs. TCAs are presently in effect at three locations: Chicago, Atlanta, and Washington, D.C./Andrews AFB, and are planned for several other high density locations. Pilot participation in the Washington/Andrews TCA is voluntary until Feb 4, 1971.

PILOT REMINDERS:

.. Don't place too much reliance on radar advisories for collision avoidance. Keep your head out of the cockpit and on a swivel when operating in VFR weather conditions, even though you may be on an IFR clearance or under radar control.

.. When flying VFR and transponder equipped, squawk the appropriate VFR codes. This enhances the controller's capability to see you and alert other pilots of your presence.

.. Know the airspace and operational environment in which you intend to fly. Refer to FLIP, Special Notices, etc., for current information.

STAGE II—LOCATIONS

ABILENE, TEXAS	GT. FALLS, MONTANA	*MINOT, N.D.
BALTIMORE, MD.	HOUSTON, TEXAS	NEW ORLEANS, LA.
BOSTON, MASS.	INDIANAPOLIS, IND.	NORFOLK, VA.
BRISTOL, TENN.	JACKSONVILLE, FLA.	PORTLAND, OREGON
CHARLESTON, S.C.	KENNEDY, N.Y.	SALT LAKE CITY, UTAH
CHARLOTTE, N.C.	KNOXVILLE, TENN.	SAVANNAH, GA.
CHATTANOOGA, TENN.	LA GUARDIA, N.Y.	*SEYMOUR JOHNSON, N.C.
DALLAS, TEXAS	LAS VEGAS, NEV.	SPOKANE, WASH.
DES MOINES, IOWA	LITTLE ROCK, ARK.	ST. LOUIS, MO.
DULLES, D.C.	LOS ANGELES, CALIF.	TAMPA, FLORIDA
DULUTH, MINN.	NASHVILLE, TENN.	WICHITA, KANSAS
EL PASO, TEXAS	OGDEN, UTAH	
FT. WAYNE, IND.	OMAHA, NEBRASKA	

* = MILITARY RADAR FACILITIES

NOTE: Above list frequently revised. Check FLIP Enroute Supplement or AIM for current listing.

TRAFFIC ADVISORY SITUATION (RADAR) from NEAR MIDAIR COLLISION REPORT OF 1968

(1030 INCIDENTS)

RADAR COVERAGE EXISTED		
YES = 837	NO = 187	UNKNOWN = 6



AIR TRAFFIC SERVICE	NUMBER OF INCIDENTS	TRAFFIC ADVISORY ISSUED	NO TRAFFIC ADVISORY ISSUED						
			AIRCRAFT NOT OBSERVED	CONTROLLER WORKLOAD	FAILURE TO REQUEST	RADAR LIMITATION	EQUIPMENT FAILURE	UNKNOWN	SYSTEM ERROR
BOTH AIRCRAFT IN CONTACT W/FACILITY	90	15	—	—	—	—	4	43	34
ONE AIRCRAFT IN CONTACT W/FACILITY	464	151	96	18	7	67	2	190	—
NEITHER AIRCRAFT IN CONTACT W/FACILITY	476	—	—	—	—	—	—	—	—



RADAR LIMITATION FACTORS				
CLUTTER	BLIND SPOT	WEATHER	BEACON LIMITATION	AIRCRAFT OBSERVED LATER
4	19	6	3	35



EIGHT DOWN—

MSgt D.G. Hassell

Chief, Industrial Safety Br

Hq TAC

With only nine lives available in this dangerous world, what cat in his right mind would purposely disregard known safety practices? What cat would fail to use caution when it's spelled out on a label of a container?

Being a cat who values life rather highly, I now consider every accident as one strike from the final nine. Keeping that in mind, I'll tell you my story before it's too late . . . you see, I'm 8 down, and 1 to go!

"It all started in January 1970. I was on an aircraft maintenance crew out at the base and was tasked with changing a low pressure fuel filter on this F-100 bird. When I disconnected the old filter some residual fuel ran down my fatigue sleeve. It didn't appear to be a lot of fuel, so I completed my job and didn't bother to change clothes. Shortly after that, I took a cigarette break. Boy, did I light my fire!! This accident investigator cat came around to see me at the hospital and said I was lucky to only lose five days with first and second degree burns. I told him that I just didn't have any good luck and that there was only a little JP-4 on my sleeve.

Well, after I was released from the hospital, I went to the barracks. I noticed a friend was having trouble starting his car. So, being the good-natured chap that I am, I offered to assist. We traced the trouble, it appeared to be fuel starvation. I came up with a great idea . . . let's pour fuel into the carburetor to start it. I grabbed a peanut

butter jar and filled it with gasoline. While this other cat cranked the engine, I poured. The engine backfired and W-H-O-O-F!



-ONE TO GO!

The gasoline in the jar ignited so I threw it away from me. There was only one problem, the flaming gas splashed on me causing second degree burns to my left shin and foot. You guessed it! Back to the hospital for ten days. How unlucky can one cat get?

Then came February. After a long day at the base, I went to work at my off-duty job in a service station. Things were pretty quiet, so I decided to clean the paved entrance to the grease rack. I grabbed an open can and filled it with gasoline from one of the pumps. I dipped a broom in the gasoline and began scrubbing. Then this guy came by and threw a lighted cigarette out of his car. This much bad luck just can't happen to one guy! If that clown had been more careful, I wouldn't have been in the hospital for seven more days.

I don't mind taking my licks like all the other cats, but enough is enough. I decided that on my first 48-hour break, I would go to a friend's farm to help out and to enjoy that good country living. After arriving, my friend asked me to clear the brush and weeds from a hole 15-feet deep and 12-feet square. I broke out my trusty matches and used them all before I decided that I wouldn't get a fire started that way. Then I poured gasoline into the hole, "those weeds won't get the best of me!" Once again, my rotten luck showed itself. Just as I struck the match, the wind shifted and blew the flames right toward me.

When I got to the hospital the Doc had the gall to say, "Boy, you sure have a thing with gasoline, don't you?" Now that burnt me! Couldn't he see I was just having a string of bad luck? Doesn't he know an unfortunate cat when he sees one? What nerve!

This time I was in for 60 days. I kept remembering this investigator cat's comments. He had counseled me about the hazards of gasoline after every accident. Could be that he was right! Never again, would I use gasoline for anything other than the ole buggy!

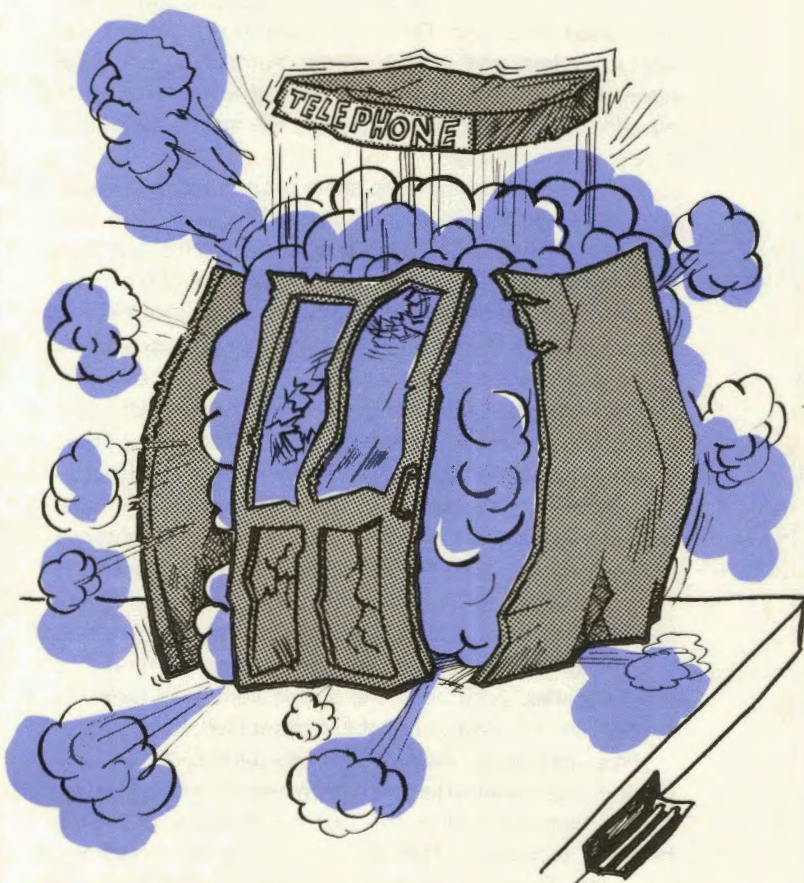
I was released from the hospital with a fresh outlook on safety. I returned to the barracks, only to find that a major cleaning operation was taking place. I heard this buffer being operated in the latrine. I poked my head

through the doorway and W-H-O-O-F! In the hospital bed I learned that two cats had been using acetone to clean up paint spots with a buffer from the floor. I was beginning to be thankful that I had nine lives.

I don't even like to talk about the next three but here they are... I went to a friend's apartment, he was cleaning paint brushes with gasoline. Being extremely nervous around that stuff nowadays, I was about to say — "Don't you know gasoline is haz---" "W-H-O-O-M!" You guessed it! It seems the hot water heater was a little too close.

Then there was the time I observed another cat cleaning an automobile engine with gasoline. I ran to warn him about the hazards. While he was assuring me the engine was cold and that there was no danger, the nozzle of the gas can came into contact with a battery terminal. This was just too much to expect one cat to endure!

Oh yes, I can't forget the topper! I had filled my lighter and put it in my shirt pocket. The lighter fluid leaked from the lighter and saturated my shirt. While making a phone call in a booth, I attempted to light a cigarette, and W-H-O-O-F again! ➔



TAC TIPS

...interest items, mishaps

WINDMILLING WANDERER

The C-130 instructor pilot briefed his students on windmill taxi start procedures before taking the active runway. Then he shut down number four and aligned the prop cuff with the island base. With Four's throttle in flight idle, they completed the before takeoff checklist. After lining up, the condition lever was placed in run, flaps set at 15 percent, and the abort procedures to be used after engine start briefed to the student. Brakes set, he pushed Two and Three to max power, released the wheel binders and rolled. When number four engine reached 40 percent after a normal lightoff, the student retarded its throttle to ground idle; the engine continued accelerating normally.

At 95 knots he initiated abort procedures, pulling all throttles to ground idle, then yanked Two and Three into maximum reverse. The Herky swerved to the left and didn't slow down as quickly as it should with two engines in full reverse. In short order, the nosewheel lost traction and skipped, so the IP told the student to ease up on nose steering and applied full right rudder. Taking over the throttles, the IP used differential reverse thrust. One and Two were described as "nearly" in flight idle, Three located between ground idle and max reverse, and Four in full reverse open range. In spite of his throttle positions, the bird continued to circle left and the radius tightened as speed slowed. Full right braking didn't help the IP and Herky rolled off the runway's left side. It stopped finally and the instructor tried to taxi back onto the concrete, but the balky air machine wouldn't budge. So he pulled the T-handles, positioned the engine condition levers to feather, and climbed out of the hesitant Herky.

Prop specialists couldn't find any deficiencies in their product's behavior after inspection and ground operation. The investigator didn't theorize on the pilot's throttle handling technique after the initial swerve in reversing Two and Three. He did suspect that number four was pitchlocked, or the low pitch didn't retract when its

throttle was pulled to ground idle. He recommended that aircrews be reminded that pitch lock can occur, or the low pitch stop may not retract when the throttle is placed in ground idle during a windmill start. That's number four engine they're talking about . . . the one that ended up with its throttle in max reverse range through most of the abort attempt.

LET 'ER RIP...

Thought you readers might be interested in the following bit we ran across. Looks like an 87 word sentence . . .

"Decisions made as a result of this exchange are to be considered solely those of the contractor and accepted as such by the contractor. Accordingly, the contractor agrees that the above commentary shall not constitute approval or disapproval and shall in no instance be considered as varying the terms of, or incurring additional cost on, said contract, authorizing any change in specifications or the addition or deletion of any work thereto, permitting the degradation of any system performance requirement incorporated therein, as extending government approval or disapproval to the contractor's final end item called for thereunder, nor as relieving the contractor in any degree of full management responsibility under the contract."

F-100 ABORT

Here's an old one . . . but worth retelling. The aircraft was number two in a flight of two on a combat scramble. All pre-takeoff checks, including run-up were accomplished. Number two rolled in fifteen seconds and made his line speed of 116 knots at 7000 feet remaining. At 160 knots he began to apply back pressure to rotate at 164 but the nose didn't come up. At about 170 knots and

with morals, for the TAC aircrewman

3000 feet remaining, he decided to abort. He got the tail hook down too late to catch the BAK-12 which was located 1000 feet from the end so he steered for the center of the MA-1. He got a good catch and used all of the 925 feet of overrun, pulling 400 feet of chain along with him.

It seems he did his abort procedures "by the numbers." That's all well and good but look at it another way — why not do first things first. The pilot's unit briefed their outfit on the necessity to begin the abort sequence at the earliest possible time and discussed the desirability of dropping the hook prior to deploying the drag chute when aborting under this condition. It's nice to be standardized — but don't let it kill you . . .

NO CHECKEE—NO LAUNDREE—TIMES TWO

Following an RON, the F-4 crew loaded up their travel pod and proceeded to press on for home. Sometime during takeoff, part of the contents of the pod were strewn along the runway. The travel pod hatch had not been secured.

That one was sort of "no sweat" compared to what this A-37 crew ran into. They broke ground about 3000 feet down a 7600 foot runway. At that point the gun compartment door opened, spilling miscellaneous items. The pilot aborted the takeoff and shut down number two to prevent damage to that engine. During roll-out the right brake faded so the left engine was shut down and the bird was braked into a left turn. It departed the runway with 200 feet remaining and came to rest with no further damage. The right tire failed ten minutes later. The cause was listed as a malfunction of the gun compartment forward latch. This was followed by a recommendation that aircrews be briefed on proper use of the gun compartment as a storage area.

We get spoiled at home, both of these crews were on cross-countries. It pays to pay very close attention to your bird when you're away — not because of the quality of

the transient crews . . . but because they may not know your aircraft as well as you assume.

F-4 CIRCUS

As he attempted to strap in, the back seater found that his inertia reel wouldn't unlock. But he decided to go anyway since he could still sit erect in the chair. After engine start, he couldn't find his upper right garter clamp so he proceeded to unstrap . . . then climbed out of the bird to allow the crew chief to look for the missing clamp. The aircraft commander didn't shut the engine down (because the starting unit arrived late?) and advised the crew chief to be careful of his headset extension cord.

Well, they found the garter clamp and our intrepid back seater climbed back in his office. Meanwhile, the inertia reel had withdrawn further so he had to scoot down considerably to fasten the shoulder harness. The crew chief was still there helping. In an attempt to get more slack in his headset cord, he gave it a tug and a flip. Yup, the connection came loose and the cord was drawn into the intake . . . about five feet of it. The crew chief jumped down and signaled for shut-down but the show was over . . . and so was the flight. It's a shame because it was obviously the most important flight in this back seater's career.

Why else would he accept a condition that could jeopardize his life . . . and the aircraft? Can't you just see this picture . . . back seater drops checklist or knee-board, in flight. Back seater unhooks shoulder straps (parachute risers?) and bends forward to retrieve foreign object. F-4 has: a. double generator failure, b. ADI failure, c. double engine flameout, or d. flight control oscillations. You take it from there. Sound too far out? Would you bet your life?

Oh, and incidentally, the primary cause of this mishap was maintenance personnel in that the crew chief allowed his headset extension cord to enter the intake of a running engine.



FAKTHROUGH!

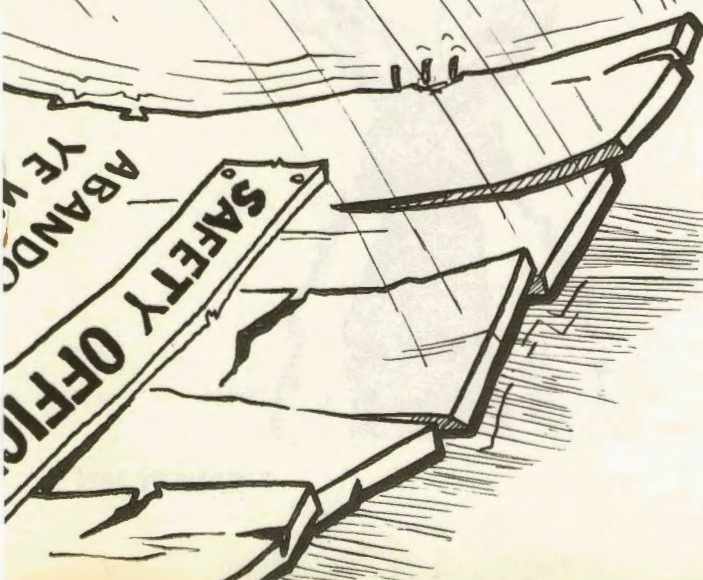
Lt Col R.E. Darlington
Chief, Safety Survey Div
Hq TAC

TAC Regulation 36-1, "Chief of Safety/Flight Safety Officer Assignments," is now in print and on the way to the field. This regulation directs the selection of officers for safety duties whose records reflect the highest professional accomplishment and potential for advancement. It limits involuntary tours in safety to three years in TAC. It directs priority consideration for proper reassignment of officers successfully completing safety tours. It establishes that safety officer experience will be considered a positive asset when selecting candidates for assignment to commander duties.

The selection and assignment of top quality officers to safety duties is an obvious asset to commanders in their accident prevention efforts. The duties of a safety officer are challenging, interesting, and sufficiently varied to provide a full opportunity for the intelligent, aggressive young officer to demonstrate his worth. The assignment has inherent career broadening potential since investigation into materiel as well as operational areas is required. Unfortunately, several factors now reduce the desirability of the safety assignment for the career conscious young officer. These factors are correctable and TAC is leading the way in accomplishing this goal.

The designation of safety as a primary AFSC has resulted in a career stagnation problem for some safety officers. Unless unusual efforts are made to break the chain, the qualified safety officer rotates between CONUS and overseas commands in safety assignments. Such consecutive assignments can result in a loss of mission skills and orientation which were primary considerations for initially selecting the officer for safety duties.

Our young officers are now urged to participate in



BREAKTHROUGH !

their own career development, which they logically equate to duty assignment. They recognize the "locked-in" feature of the safety field, they note that only a very few "colonel" authorizations exist, and consequently, they regard a safety assignment as a poor one from the "career" viewpoint. As a result, many excellent interested officers shy from safety duties and those who remain in it against their desires frequently feel frustrated and may produce less than their full capability.

The solution to the problem lies in the effective management of the careers of those officers assigned to safety. By rotating a sufficient number of officers in and out of the safety career field, we would also insure that future commanders and senior staff officers have safety background. Hence, TACR 36-1 was published as a point of departure.

Because of intercommand assignment factors and the overseas demand for qualified safety officers possessing certain weapon system skills, certain other actions will have to follow. Accordingly, TAC has asked the Air Staff for changes in USAF directives which would put some teeth into achieving the goals for safety officer career management, as outlined in AFM 36-23, "Officer Career Management."

We specifically asked for the following:

That AFM 36-1, "Officer Classification," delete 19XX AFSCs as primary specialties and convert to appropriate rated or functional AFSC.

That AFM 36-1 identify safety-skilled officers with an AFSC prefix, such as, X 1115F, X 1435, X 4625, etc.

That safety positions in manning documents be converted to X 1115F, X 4625, etc.

The response has been gratifying. In fact, USAF already had a study underway to develop a plan and timetable to convert the safety officer AFSC 19XX to functional AFSCs. The study is also exploring the need to revise safety training and education concepts to fit the new AFSC concept.

The target date for safety officer AFSC conversion is now July 1971. TAC has also urgently requested that AFM 36-11, "Officer Assignments," be amended to require stabilized tours in safety with mandatory reassignment periods out of safety, along the same lines established for IG team duty. Unless this is done concurrent with the changes in safety officer classification, it is feared likely that short-range assignment demands will perpetuate the "locked-in" feature of a safety-skill identifier. This request is currently being staffed at Military Personnel Center.

In a letter to the field, subject "Safety Officer

Selection," dated 24 Dec 1970, the Commander TAC said the following about the new TACR 36-1:

"It is recognized that a unilateral, major command directive cannot change overnight a system of such long standing. Nevertheless, a start must be made. The purpose of this letter is to ask your earnest assistance in seeking a smooth and early transition to elevate the status, effectiveness, and career potential of our safety officers. The great majority of safety officers in TAC are trained, experienced, and dedicated individuals with more than three consecutive years in safety assignments. We obviously cannot afford to reassign these officers as a group should they not volunteer for continued safety duty. They should, however, be put into career-broadening positions as rapidly as practicable. Those officers not producing at the highest standards must not remain in safety. I do expect you to immediately man any existing and future flight safety officer vacancies with pilots of the highest qualifications. I want no flight safety officer slot to remain unfilled because a fully qualified safety officer is not available.

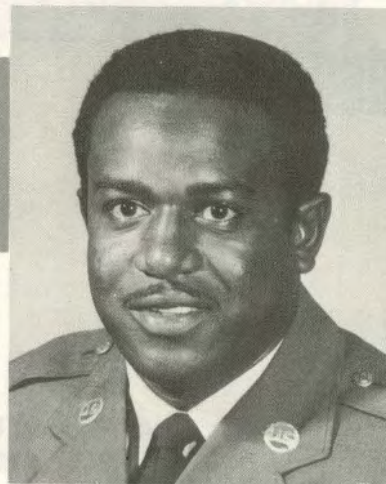
"Above all, I want our safety officers, who have contributed so much to our unprecedented accident rate reduction, to know that their careers are no longer closed at the top."



TACTICAL AIR COMMAND

Crew Chief of the Month

Staff Sergeant Sephus J. Campbell, Jr., 478 Tactical Fighter Squadron, Homestead Air Force Base, Florida, has been selected to receive the TAC Crew Chief Safety Award. Sergeant Campbell will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.



SSgt Campbell



TACTICAL AIR COMMAND

Maintenance Man of the Month

Technical Sergeant John W. Saltzgaver, 1st Tactical Fighter Wing, MacDill Air Force Base, Florida, has been selected to receive the TAC Maintenance Man Safety Award. Sergeant Saltzgaver will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.



TSgt Saltzgaver

Tactical Air Command

UNIT ACHIEVEMENT AWARD

Our congratulations to the following units for

**47 Tactical Fighter Squadron, MacDill Air Force Base, Florida
3 July 1969 through 2 July 1970**

**39 Tactical Airlift Squadron, Lockbourne Air Force Base, Ohio
30 August 1969 through 29 August 1970**

**560 Tactical Fighter Squadron, Homestead Air Force Base, Florida
17 September 1969 through 16 September 1970**

**777 Tactical Airlift Squadron, Pope Air Force Base, North Carolina
24 June 1969 through 23 June 1970**

**6 Special Operations Squadron, England Air Force Base, Louisiana
15 July 1969 through 14 July 1970**

**778 Tactical Airlift Squadron, Pope Air Force Base, North Carolina
16 August 1969 through 15 August 1970**

**186 Tactical Reconnaissance Group, Key Field, Meridian, Mississippi
19 June 1969 through 18 June 1970**

**334 Tactical Fighter Squadron, Seymour Johnson Air Force Base, North Carolina
21 June 1969 through 20 June 1970**

**177 Tactical Fighter Group, Atlantic City, New Jersey
21 August 1969 through 20 August 1970**

**188 Tactical Reconnaissance Group, Fort Smith Municipal Airport, Arkansas
21 September 1969 through 20 September 1970**



completing 12 months of accident free flying:

**317 Special Operations Squadron, Hurlburt Field, Florida
3 September 1969 through 2 September 1970**

**424 Special Operations Training Squadron, Hurlburt Field, Florida
7 August 1969 through 6 August 1970**

**156 Tactical Fighter Group, Muniz Air National Guard Base, Puerto Rico
20 June 1969 through 19 June 1970**

**907 Special Operations Group, Clinton County Air Force Base, Ohio
10 August 1969 through 9 August 1970**

**121 Tactical Fighter Wing, Lockbourne Air Force Base, Ohio
26 August 1969 through 25 August 1970**

**913 Tactical Airlift Group, Willow Grove Air Reserve Facility, Pennsylvania
1 October 1969 through 30 September 1970**

**436 Tactical Fighter Squadron, Homestead Air Force Base, Florida
5 October 1969 through 4 October 1970**

**117 Tactical Reconnaissance Group, Birmingham Municipal Airport, Alabama
20 October 1969 through 19 October 1970**

**4 Tactical Fighter Wing, Seymour Johnson Air Force Base, North Carolina
2 October 1969 through 1 October 1970**

**335 Tactical Fighter Squadron, Seymour Johnson Air Force Base, North Carolina
2 October 1969 through 1 October 1970**

HOW ABOUT A SYSTEM ?

Editor, TAC ATTACK
Hq TAC (SEP)
Langley AFB, Va

The attached article concerns a problem area about which I feel compelled to write. I feel that a new approach is necessary to simplify the existing manuals, regulations, and directives concerning aircraft operation to a more palatable and workable source of information.

The problem is not a new one but solutions of the past have been left behind under the heels of growth. I feel that now is the time to attack the problem again to up-date the solution.

TIM BRADY, Captain, USAF
Flying Safety Officer
4442CCTWg
Little Rock AFB, Ark 72076



The young captain stood nervously at loose attention in front of the squadron commander. The commander glanced up at the captain then looked at the daily flying schedule lying on his desk and pointed an accusing finger at an ugly red splotch underlining a takeoff time.

"You were late!"

"Sir?"

"Late . . . late . . . you were twenty minutes late for takeoff."

"Yes sir, I know," the captain managed to mumble.

"Did you have some problem with the airplane?"

"No sir."

"Were you held up by ATC?"

"No sir."

"You started engines on time; taxied on time; completed your engine run on time . . . that's it! Some problem with the run-up?"

"No sir, the airplane checked out just fine."

"Well then, what the hell was it?" said the commander now beginning to turn slightly crimson in the vicinity of the face.

"Safety, sir," said the captain confidently.

"Safety, huh?"

"That's right sir, safety."

"Would you care to explain?" the commander intoned in a barely audible whisper.

The captain inhaled deeply, "Well sir, this was the first time I had flown with this crew so when we reached the crew briefing item on the checklist, I thought that I'd better brief . . . in the interest of safety, of course . . . all of the Air Force manuals including major air command supplements, numbered air force supplements, base supplements, and wing supplements pertaining to aircraft operations."

"Do you mean to say you quoted them verbatim?"

"No sir, just the publication number, date, and title."

"Well certainly that didn't take twenty minutes."

"No sir."

"You mean there's more," said the commander open mouthed.

"Oh, yes sir," said the captain beaming, "then I briefed all of the Air Force regulations as supplemented down the line that have anything to do with flying an airplane."

"Is that all?"

"No, sir."

"Somehow I didn't think it would be; continue."

"O.K. sir, then I briefed all of the numbered Air Force manuals and regulations as supplemented, the base regulations as supplemented by the wing and the wing regulations as supplemented by the squadron, then I briefed the applicable tech orders"

"STOP!"

". . . . the operations directives" . . .

"STOP!"

". . . . the stan/eval directives" . . .

"Dammit, I said stop," the commander shouted as he began to hover about two feet above his desk.

"That's no excuse . . . that's ridiculous and son," said the commander finally cooling down to a more paternal posture.

"Yes sir?" questioned the captain in beaten bewilderment.

"Son, it wasn't very smart to do all that."

"I beg your pardon, sir?"

"Not smart, boy, poor judgment . . . and besides . . ." the commander paused to set the stage for the full impact of his next statement. "It's against squadron regulations."

This scene is of course a fabrication and a satirical approach to a basic, unsolved problem which has its roots imbedded deeply in human actions and ultimately . . . safety.

The preponderance of manuals, regulations, and directives that a crewmember is responsible for in the operation of an aircraft has reached the extreme. The decision making process that confronts pilots numerous times during the conduct of a mission is clouded by uncertainty. This uncertainty springs from the feeling of the pilot that somewhere, in some obscure regulation, lies a baited trap, a paragraph or sentence wrought from experience and inserted to cover the situation being confronted. Perhaps the pilot may have accidentally stumbled across it at one time or another. Nevertheless, the nagging feeling of uncertainty is there and it affects, sometimes detrimentally, the logic sequence in decision making.

Over-supervision? Possibly, but a more accurate description would be complexity. We live in a complex environment, operate complex machinery, and produce complex directives to achieve our goals. We aren't going to change our environment or make our aircraft less complex but we can do something to simplify our directives.

What should be our goal in simplification? A single source document written from the pilot's point of view combining all of the wheat and none of the chaff contained in all Air Force manuals, regulations, etc., that have anything to do with aircraft operation

Can we achieve this goal? Probably not, but we can go a long way toward achieving it if we confront the task and leap into the fray. We can reduce the tons of verbiage to salient facts and put it all in a fewer number of baskets.

There is an approach that is current vogue within the Air Force and can help us in the clean-up task. It is known as the "systems approach" and has been used successfully in many areas within the Air Force. The "systems approach" is a planning and program design technique that addresses the component functions of a process in an interrelated manner. The process is looked upon as an entity having an input and an output. (TIG Brief, 11 Dec 70.)

The task is incredibly monumental, but not impossible. Within the "systems approach" philosophy lies the seeds of accomplishment. So, how about it? How about a system?

CHOCK TALK ...incidents and incidentals

chock talk

DEADLY BATTERIES

This T-bird was on the trim pad for phase inspection engine conditioning. The run was aborted twice due to minor fuel leaks. After the third start, an electrician checked the generator voltage at 28.5 since it had been changed during the inspection. At this time the operator noticed that the loadmeter followed throttle movement, reading maximum at full throttle. Then the main inverter failed. The operator turned it off, and selected the standby inverter. At that instant an explosion occurred that blew the nose compartment doors open. The engine was secured, there was no fire.

They gave this one to the operator because he didn't take action to investigate the funny loadmeter reading before pressing on with the run-up. It is suspected that when the main inverter failed due to a seized bearing, it induced an excessive load and caused overheating and gassing of the batteries. Switching to the standby inverter provided the spark needed to cause the explosion.

The explosion broke two hinges on the left gun bay door and one on the right. That will give you some idea of the power of the gasses generated by the T-bird battery—they'll command respect in the end, if you don't show some in the beginning.

F-4 FOREIGN OBJECT

The aircraft had just completed an FCF. Near the end of the landing roll, the pilot attempted to use right rudder — but it wouldn't move! They found a three-eighths universal socket lodged under the rod system bellcrank inside panel 21L. All available records were researched, they indicated that no maintenance had been performed in this area by unit personnel.

Checking further they found that the screws on panel 21L had been put on with an air gun. Since the paint was still intact they deduced that this panel had not been

removed since the last IRAN (8 months previous) or Pacer Wave (9 months).

That leaves us with the thought that an "undetermined" accident had been looking at us for some time. We have enough problems without incidents such as this. Doesn't everyone count their tools???

F-4 JAMMED STICK

On the third dive bomb pass, the stick could not be moved to the right of center. The aircraft was returned to straight and level flight and the aircraft commander performed a controllability check — no more problems were encountered on the way home. Investigators found a 3/8th hex nut, one inch long, in the stick well. The bolt was loose when they found it but the control malfunction could be duplicated by placing the bolt between the stick and torque tube, in a manner that matched the marks on the bolt. Isn't that interesting?

HURRY HURRY HURRY

The flight of two Huns was scrambled at 0545. During the end of runway check, the wingman noted a flight system fail caution light and requested assistance through the Command Post. The alert launch supervisor responded and two crew chiefs began to work on lead's aircraft rather than the sick one. They began to unfasten panel F-54 before they could be put on the other bird. They switched to the wingman's aircraft and had to remove panel F-49 to service the flight control system.

The leader lost F-54 on takeoff and the wingman lost three quarters of F-49 sometime during the flight. There is no question of the importance of the mission — but is that a reason not to finish the job? If the aircraft didn't need the panels, we wouldn't install them in the first place.

with a maintenance slant.

BLOCKED PEDAL

A flight of Huns were doing a navigation mission and all went well till a turn over a checkpoint half-way through the mission. It was then that number three discovered that he couldn't depress the right rudder pedal... and all attempts to free it were in vain. They burned their fuel down and went home — three made an approach end arrestment.

They found two screws missing from the left console panel adjacent to the LEFT rudder pedal. The missing screws allowed the console panel to shift, blocking aft movement of the LEFT rudder pedal past neutral. Thus, the left pedal was blocking forward throw of the right rudder pedal. The missing screws and nut plates couldn't be found in the cockpit. It's assumed that they were not installed.

BANG BANG

Just after midnight, a load crew was dispatched to an A-1 to perform a basic post flight inspection and to upload the aircraft. During the inspection and clearing of the 20 mm cannon, it was discovered that the left outboard had fired sixty rounds less than the right outboard. Gun shop personnel were called to inspect the left outboard gun in about ten minutes and the load crew chief explained the problem. The gun plumbers requested that the load crew run the bolts forward so they could check the firing pins. The load crew chief assumed that all guns were cleared and climbed into the cockpit to run the bolts forward. He called down asking if the guns were cleared and to remove the gun blocks — he received an all clear. The airman on the left wing removed the gun block but didn't check the gun. The load crew chief then ran the bolts forward and fired one round from the left outboard. Anyone for checklists??

A FIRST???

The F-4 aborted after his centerline failed to feed. He taxied back to the hardstand and was chocked but the crew chief didn't want him to shut down. He came up on interphone and requested 85 percent for a pressurization check. After about ten seconds at this thrust setting the pilot felt and heard a sudden thump. He thought it was an explosion and immediately shut the engines down and egressed.

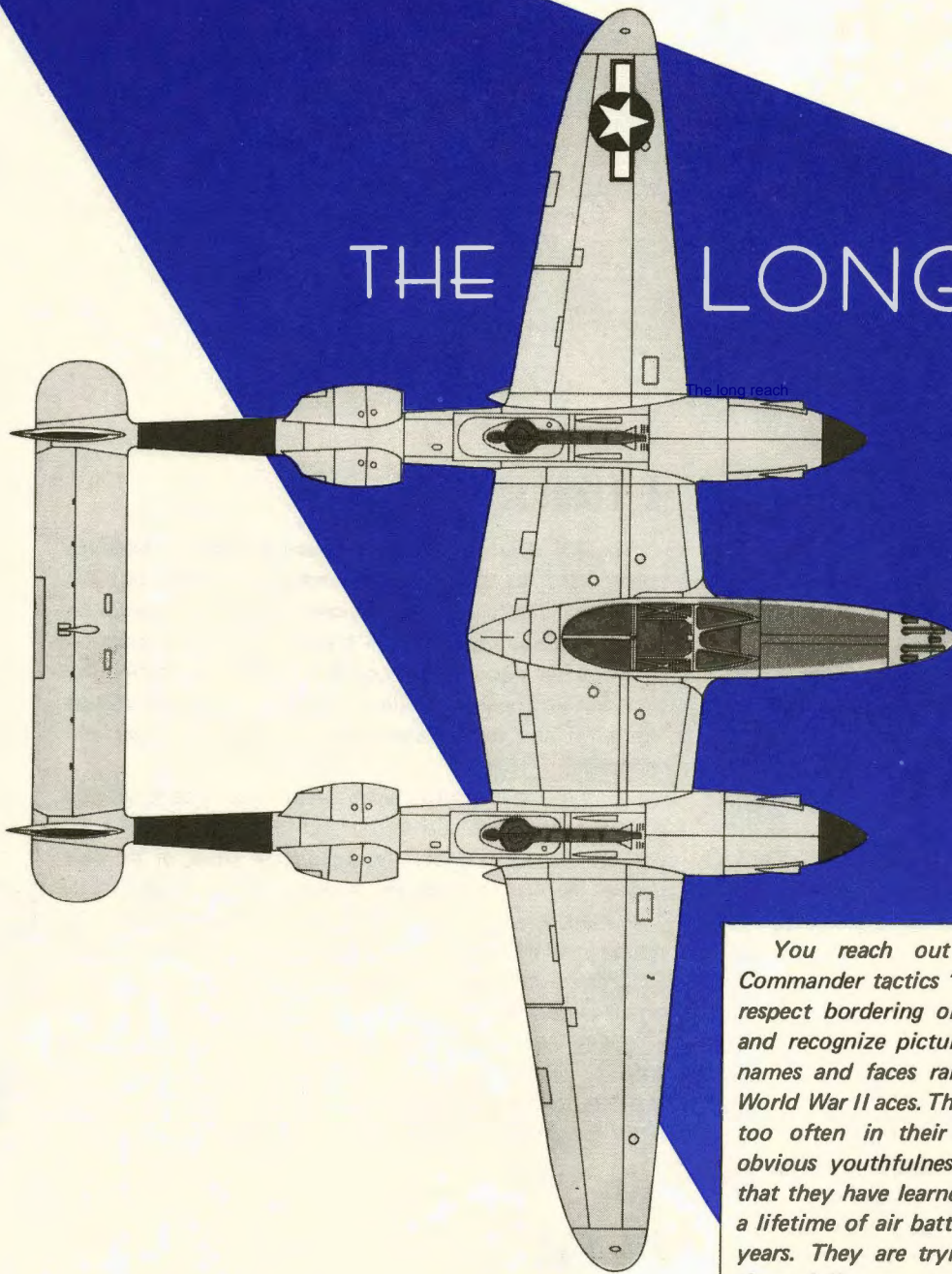
A fuel cell maintenance man was checking the pressurization of the centerline and for a reason unknown, walked out from under the aircraft in front of the left intake. He was immediately sucked into the intake duct. The man was wearing a field jacket and weighed 165 pounds. As he was pulled in, he got stuck on the bellows air probe — this saved his life. His glasses and other items on his person were ingested by the engine.

We've never heard of this happening around an F-4 before. That's a pretty good record...but in this business, records don't last. We've been through almost every source of FOD with the F-4... what's next?

F-4 FOD

While in the arming area prior to takeoff, the crew was told to stopcock the engines. The aircraft commander shut them down and turned the master switches off. He egressed normally, the back seater used emergency procedures without blowing the canopy. An MMS Arming Technician dropped an AIM-7 safety pin when he removed it from the missile. The pin fell to the ground, unnoticed and was drawn into the intake. When sparks were seen coming from the exhaust area the command to shut down was given. The unit involved is going to remove the safing pins before start from now on.

THE LONG REACH



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!

February 1971

FEBRUARY 1971

"...90% of all fighters shot down never saw the guy who hit them."

*Lt Col Mark E. Hubbard
20th Fighter Group
P-38*

In answer to your letter here are my personal comments on fighter tactics. Before answering some of your specific suggestions, I'll put down what I believe to be general tactics. Leadership, formation, and control of the unit are all important: Leadership, to plan on the ground and direct in the air; formation, to see the enemy, attack him and defend yourself; control, to attack in force at the proper time.

I won't attempt to explain leadership here as that would take several pages in itself. Suffice it to say that it can only be acquired through experience and constant thought.

Formation is the line of battle which can be offensive or defensive as the situation requires (and the situation can change almost instantaneously). I am flat out for a line abreast formation with flights spaced far enough apart for mutual aid. This spacing would vary from 800 – 1500 yards depending on the airplane maneuverability. Squadrons should be within good visual distance, meaning not more than 2 – 3 miles apart. Line abreast formation is as offensive as any other type and defensively the best. You must see before you hit or are hit.

Control can be maintained with R/T if squadrons or units are within eyesight. No mission can be planned to the finest detail on the ground and so the group leader must have control to use his force to the best advantage

when the situation is met. On the other hand, a well defined plan should be made and understood by each pilot to aid in performing the mission and maintaining control in event R/T should fail which is always a possibility.

A most important consideration is "know your airplane." Use its advantages against the enemy and keep those advantages by knowing its disadvantages. Every plane is superior or inferior in some respects to the enemy airplanes. Thank God, ours are more superior than inferior. To know your airplane, training must be continuous.

Superiority in numbers is all important. That is where control comes in. Use your force as necessary but always dispatch enough.

Now to put down a few distracted points without regard for their order of importance as all are important.

A wingman should always stay with his leader. Under no circumstances should there be less than two airplanes working together as one man cannot protect his own tail, and 90 percent of all fighters shot down never saw the guy who hit them.

It is preferable that the minimum number of aircraft working together is a flight of four.

Each pilot should know what is expected of him in no uncertain terms. Leave no room for doubt.

Instrument training is essential, both individual and as members of a flight. Emphasis should be placed on recovery from spirals, spins, and stalls, and smooth straight and level flying.

Now to get on to answering some of your specific suggestions. The specific aircraft in this case is the P-38J.

the LONG REACH

INDIVIDUAL COMBAT TACTICS

DEFENSIVE

The P-38 will out turn any enemy fighter in the air up to 25,000 feet, so we wait until he is about $\frac{1}{2}$ to 1 mile in back of us and then turn into him. Flights on either side may be dispatched to attack if time permits.

After the turn we generally can attack him. If he zooms up, we climb until he breaks down, then we attack. If we cannot out climb him we continue on our course (opened up, line abreast) and let him make another pass if he so desires. Eventually he will break down and we attack.

We always approach on the up sun side. Use cloud cover for defense only, which is damn seldom except with a cripple.

When the enemy attacks we out turn him and continue on course always in line abreast opened up formation so we support each other. We hit the deck only as a last resort because then you are combating enemy fighters and light flak. Personally I'll take the fighters as I can see them and fight them. Hitting the deck is a good maneuver in open unprotected country but not in well populated, well protected country as "Festung Europa." On the deck you never know when you'll bust right over some well protected target or airdrome. I believe light flak has accounted for one-half of all missing fighters who hit the deck.

My wingman stays as close to me as possible while maneuvering. When straight and level he moves out to one side, line abreast, about one-half mile.

I would hit the deck when heavily outnumbered, or on one engine and under attack by enemy aircraft.

OFFENSIVE

The wingman moves out to the side so we can protect each other's tail. He only attacks an enemy aircraft if

directed by me. Then I cover him. We do not attack the same airplane under any circumstances.

The enemy will try turning with us and then invariably half rolls. We spiral after him as we cannot follow him in a prolonged dive due to buffeting in the P-38, although we can initially outdive him.

The force with the greatest altitude does the attacking. We attack any numbers when we have altitude. We zoom back up unless we are able to follow him when he half rolls or turns. We always try to get on his tail and get a minimum deflection shot. We always leave a portion of the force for top cover.

It is inadvisable to attack the enemy when he has top cover above us and superior numbers also. Unless we can attack the top cover first, we try to avoid combat.

To avoid overshooting, dive below him and pull up after him to kill speed. Throw down combat flaps and retard throttles. We stay until buffeting starts.

Wingmen should be out to the side at least $\frac{1}{4}$ mile.

I try to fire in line dead astern but will fire at any deflection if range is under 500 yards.

To break off combat, outclimb him if under 20,000 feet. Out turn him and head for some help. We can outrun him up to 25,000 feet with an even start.

FORMATION COMBAT TACTICS

GENERAL

If the R/V is reached with full 16 ship squadrons stack one squadron on each side of the leading half of the bomber division with the leading squadron 10 miles in front of the leading wing. Squadrons are opened up to about 10 miles between extreme aircraft, always trying to maintain flights line abreast. If squadrons have 12 or less aircraft, we "S" over the top of leading half of bomb division in column of squadrons, flights line abreast.

Control is delegated to squadrons when better than 3 — 4 miles apart. Squadrons control flights until flights attack.

Flights can call out an attack and request cover. Squadron leader gives decision to permit attack. Permission to attack is generally understood as affirmative.

Flight leader always starts attack but many times he tells element leader to do so if element leader is in a better position after a few turns, etc. Wingmen don't attack

except rarely when they might be in the best position. Whoever attacks is always covered by the other half of the flight or element.

After taking position with the bombers from $\frac{1}{2}$ to 1 mile should be the distance between any two units whether it be individuals, elements, flights, or sections.

Flights fly fairly tight if there is more than one flight. Always half of the force is at least $\frac{1}{2}$ mile from the other half.

Thru R/T and giving position with respect to the bomber formation it is generally quite easy for flights to join up with the squadron after combat.

I believe twelve or more ships can range anywhere within sight of the bombers. So long as the bombers can be seen you can request aid by giving position from bombers. A group should be the minimum dispatched into enemy territory and they should always be within sight of each other or a good reference point visible to all.

DEFENSIVE

Our standard line abreast formation is always in position to beat off any attack.

A small enemy force will be engaged by a portion of our force so the rest may continue on their mission. If the enemy force is large and we are defensive it will wind up into a free-for-all. We definitely try to keep our force within supporting distances thru R/T.

The attack has to be determined and prolonged to force us to drop tanks. This airplane handles very well with belly tanks.

Almost all enemy attacks are still from dead astern and

start from above. Occasionally a head on pass is made but we can shoot as well as he and our fire power is superior.

In briefing I tell the pilots all I know about power settings, rate of climb, courses, desired position of squadrons, tactics for today (usually depends on bomber force, our force, other fighters with us).

I would never order a formation to hit the deck if there were two or more aircraft, until we were over water.

OFFENSIVE

I delegate an attack to the flight in the best position.

I send twice the number of the enemy for two reasons: we are operating over their territory and need superior numbers to guard against a trap, and he will always split up so we will never have to break down into less than two aircraft working together.

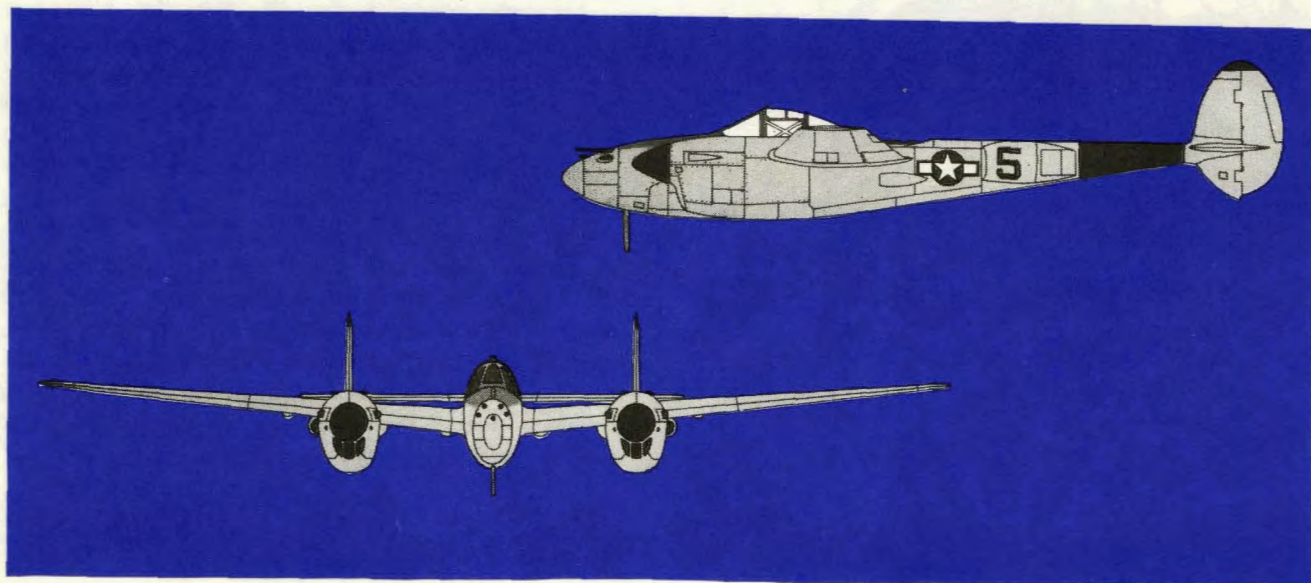
When the enemy has the advantage of position we let him attack, turn into him, keep going on with our mission or pursue him if our mission is to do so.

The enemy will try to dive away from P-38s. We follow him to the deck if we think we can catch him.

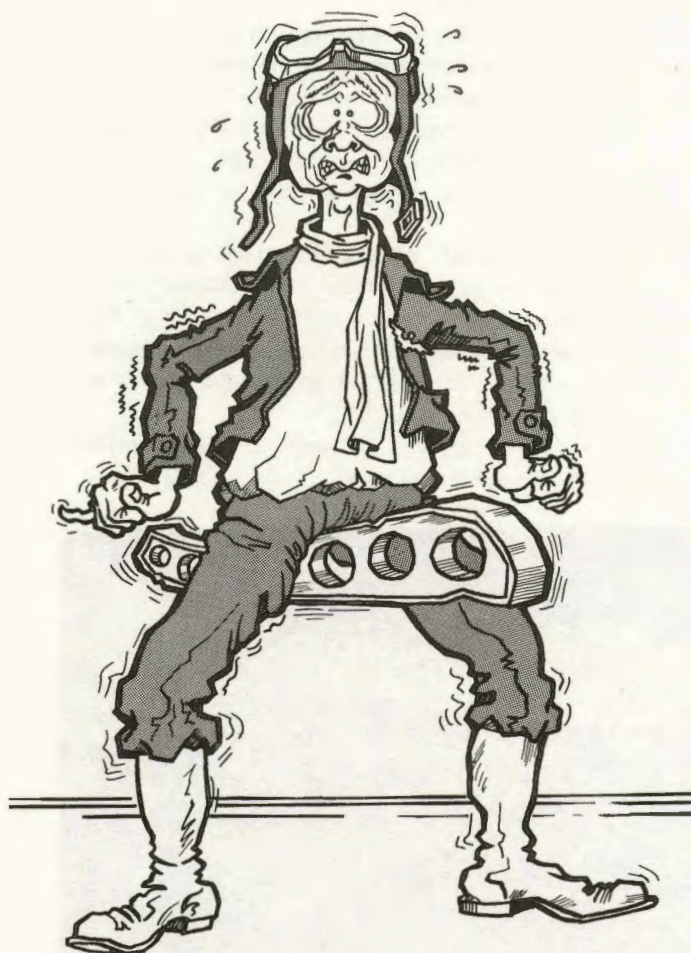
We always try to engage before he attacks the bombers.

We always approach the bombers from up sun side. Clouds cannot be used offensively as it is too difficult to keep the fighters together on instruments. Thin high clouds above the bombers can be used as a screen between you and bombers. I do not think the bombers can screen fighters due to our having to "S."

Our policy of trying to keep a flight together (minimum) does not hinder attack. ➤



GROUND EGRESS ALA 1918



(Adapted from
a report
dated 1918)

"It was conceded by all that the pilot had accomplished a brilliant piece of airmanship in landing his disabled machine without damage. It is not the intent of this report to reflect less credit on his skill, but it must be noted that he is a well-experienced aviator with over 40 total hours in the air, embracing a wide variety of machines, and this was his seventh forced landing due to complete failure of the engine.

"It was doubly unfortunate that upon alighting from the machine he missed the catwalk on the lower airfoil and plunged both legs through the fabric, straddling a rib, from which he received a grievous personal injury.

"Some of the board thought that there should be a means of identifying wing-traversing catwalks to assist aviators in disembarking from their various machines . . ."

Stolen from 7th AF COMBAT SAFETY

TAC TALLY

AIRCRAFT ACCIDENT RATES

* Estimated

UNITS

MAJOR ACCIDENT RATE COMPARISON

	TAC		ANG		AFRes	
	1969	1970	1969	1970	1969	1970
JAN	6.8	4.8	28.9	5.9	0	0
FEB	6.2	3.9	12.8	2.6	0	0
MAR	6.8	4.6	12.6	1.7	0	0
APR	7.4	4.9	15.1	2.4	0	0
MAY	7.5	6.2	12.9	3.6	0	0
JUN	7.2	5.5	12.6	3.6	0	0
JUL	7.4	5.1	11.3	6.1	0	0
AUG	7.3	5.0	11.5	6.9	0	0
SEP	6.9	4.7	10.5	6.6	0	0
OCT	7.1	4.5	9.9	6.8	0	0
NOV	6.6	4.6	9.4	6.7	0	0
DEC	6.8	4.6	9.5	6.6*	0	0

	THRU DEC			THRU DEC	
	1969	1970		1969	1970
9 AF	2.2	2.3	12 AF	10.4	7.0
4 TFW	3.8	4.1	23 TFW	21.2	3.9
1 TFW	2.0	5.2	27 TFW	3.3	7.0
33 TFW	12.3	0	49 TFW	15.1	9.4
31 TFW	3.3	4.1	479 TFW	8.4	9.4
354 TFW	0	0	474 TFW	25.5	0
4403 TFW	—	0			
363 TRW	6.0	5.7	67 TRW	3.7	11.8
			75 TRW	3.7	3.3
316 TAW	0	0	64 TAW	0	0
317 TAW	0	0	313 TAW	0	0
464 TAW	0	0	516 TAW	3.5	0
			71 TASG	—	0
68 TASG	—	0	58 TFTW	12.0	14.2
			4442 CCTW	0	6.0
			4453 CCTW	6.5	9.6
TAC SPECIAL UNITS					
1 SOW	3.6	6.3	2 ADG	0	0
4409 SUP SQ	0	0	4500 ABW	17.2	0
4410 CCTG	8.4	0	57 FWW	3.9	0

TAC SUMMARY

	DEC 1970	THRU DEC	
		1969	1970
TOTAL ACCIDENTS	4	70	43
MAJOR	3	59	37
MINOR	1	11	6
AIRCREW FATALITIES	3	45	33
AIRCRAFT DESTROYED	3	48	34
TOTAL EJECTIONS	1	38	29
SUCCESSFUL EJECTIONS	1	26	23
PERCENT SUCCESSFUL	100	68	79

FLEAGLE



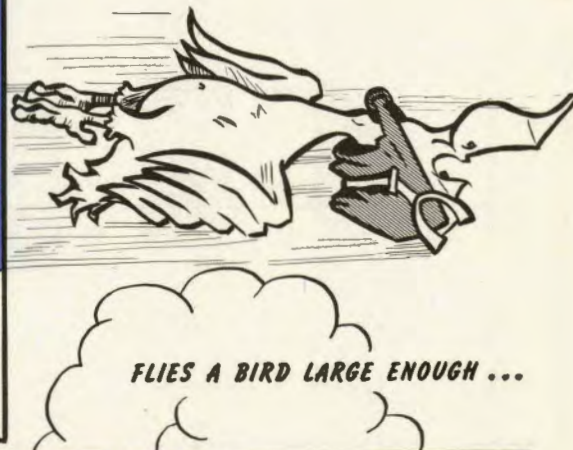
THOSE WHO SOAR
THROUGH ENDLESS SKIES ...



AND THINK THERE IS NO POWER GREATER
THAN THEIR OWN WILL FIND AT LENGTH, ...



THAT SOMEWHERE IN THAT FLEECY
OR JUST OVER THAT CUMULUS ...



FLIES A BIRD LARGE ENOUGH ...



TO KNOCK YOUR COTTON-PICKING SLAB OFF !!



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