THAT time of the year, AGAIN!

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And that it is. This is the first of a series of articles we'll run in the next few months to get you "re-pumped" up on the hazardous weather ahead. Although a lot of this may be repetition, don't be lulled into ignoring it. Your continued long life and reputation are of concern to all of us in the Safety Shop here at the headquarters. We'll cover the usual hazards to flight, of course, and we'll also bring you up to date on any new developments that Air Weather Service has come up with. Remember, they can only advise — if you get suckered into a corner by weather . . . without a plan . . . regardless of what was forecast . . . guess who is going to eat the accident. — Ed.

Spring is here — and not far behind will be all those thunderstorms, tornadoes, and other hazardous conditions that we dread so much. However, something can be done by you pilots to reduce your chances of a direct encounter with the stormy wrath of nature.

One valuable source of severe weather information for pilots and weathermen is provided by highly quali’
specialists at the Military Weather Warning Cer.
(MWWC). MWAC provides weather warning support to
authorized DOD agencies by dissemination over USAF communications system. This unit forecasts the following:

- Tornadoes.
- Funnel Clouds.
- Thunderstorms.
- Strong surface winds (35 knots or more and not associated with thunderstorms).
- Heavy rain or snow (2 inches or more in a 12-hour period).
- Freezing precipitation.
- Blowing dust, sand or snow (visibility equal or less than 5/16 miles).

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 you flyers are a little puzzled about the whole scheme. Your role will become more apparent soon.

First, the Military Weather Advisory is issued four times each day (at 0000Z plus every six hours) in a graphic format with a descriptive portion attached (See Fig 1 and Fig 2). The advisory is essentially an estimate of the potential of different air masses over particular areas to produce significant weather. It also provides guidance to the field forecaster in preparing clearance briefings as well as terminal forecasts.

The Further Outlooks provide the same basic information as the advisories except in more general terms. They are designed primarily to give the forecaster a look ahead.

Thirdly, the Point Warnings are issued in plain language and are confined to specific locations. All Air Force
That time of the year, AGAIN!

installations receive this information. The Point Warning serves as an official forecast when a forecaster is not on duty. During duty hours it is primarily an alert and guide for the field forecaster who has final responsibility for warning the base.

Now, looking back at the descriptive portion of the Military Weather Warning, there is a need for some interpretation and understanding. Most of this portion is quite clear. However, some of you may need to refresh your memory on some of the definitions associated with thunderstorm coverage such as the following:

**Isolated** — One in an area or time period; 1 to 2 percent of an area or time period.

**Few** — Several in an area or time period; up to 15 percent of an area or time period.

**Scattered** — More than few but less than numerous in an area or time period; 16 to 45 percent of an area or time period.

**Numerous** — More than 45 percent of an area or time period.

Since each pilot must be briefed when flight planning through or in the vicinity of valid advisories, it behooves all pilots to become familiar with the contents and terminology of these advisories. Each pilot has an obligation to himself and his crew to make the best use of all available information that may pertain to safety.

In order to update and verify this information, it becomes necessary for pilots to be aware of existing pilot forecaster services and weather radar facilities that may be available for enroute contacts. Use these facilities, call ahead. The locations are shown in Fig 3 (from the Enroute Supplement).

This points out another important role where you as a pilot may participate. You can improve this overall service and also help your buddies by simply increasing the quality and quantity of pilot reports. Help the weatherman help you!

**Pilot to Forecaster and WX Radar Facilities**

**Figure 3**

**Legend**
- **PFSV** (less than continuous)
- **PFSV** (continuous)

**Weather Radar**
- **Combination**
  - 339.6
  - 342.3
  - 344.6
  - 375.2

**PSFV Procedure**
- Pilots will make maximum use of "Point forecaster" (PFSV) when requesting a briefing around a thunderstorm area.
- The appropriate FAA facility will be notified before calling PFSV and again upon returning to PFSV and again upon returning their frequency.
- The call for a forecast will be answered by the nearest forecaster of your ETA.
Captain Thomas L. Holroyd and Captain Michael P. Friski of the 336 Tactical Fighter Squadron, Seymour Johnson Air Force Base, North Carolina, have been selected as Tactical Air Command Pilots of Distinction.

Captains Holroyd and Friski were flying a functional check flight after a TCTO modification. While straight and level at 400 knots the F-4D suddenly pitched up in a left skid. Captain Holroyd actuated the emergency and normal stability augmentation disconnect switches, but the oscillations continued. They were able to maintain airspeed but the generators cycled on and off at one second intervals, resulting in the loss of the electrical system and unreliable instrument indications. The engine instruments and airspeed indicator remained accurate and they headed for the nearest emergency airfield. Extending the emergency ram air turbine stopped the oscillations and provided emergency electrical power for the standby attitude indicator. The landing gear was extended by using the emergency pneumatic system; however, a broken seal allowed air pressure to escape and prevented flap extension. The tail hook was deployed and a no-flap approach-end engagement completed safely.

An inspection revealed a broken bus tie relay contact in the AC Power Distribution Panel caused random shorting of various circuits, giving unpredictable inputs to the AC power control and instrument systems.

The coordinated efforts of Captains Holroyd and Friski during this critical inflight emergency prevented a possible loss of life and aircraft, and readily qualify them as Tactical Air Command Pilots of Distinction.
It was 100 degrees in the shade at Sweltering Palms Air Force Base when the pride (?) of the fleet, aircraft 007, was towed back into the parking area. "Double-O's dunnit again," thought Sgt M. D. Fixit, world's greatest (self-acclaimed) F-4 crew chief. "This is the third abort in a month for my Phantom baby. If I don't do something right soon, I might not see her again."

Fixit momentarily had visions of the Materiel Officer dragging him away from his beloved Double-O Seven and putting him on the wash-rack crew. Or worse still, detailing him as NCOIC of the litter prevention patrol out at the bomb dump. Fixit couldn't quite imagine himself as the local sanitation engineer. After all, wasn't he the greatest F-4 crew chief in the Air Force?

He reaffirmed this fact to himself on numerous occasions. These uplifting thoughts faded as his handy assistant, Airman O. J. Tinker, two months out of tech school, yelled to him. Sgt Fixit hesitated briefly and then ambled over to his sick bird to see what his young helper wanted.

"Sarge, this is exactly the same item that caused Double-Os two previous aborts," said the anxious Tinker, "I think that we oughta submit an EUMR."

"An EU .....?" replied Fixit with a puzzled look on his face.

"Yeah! An Emergency Unsatisfactory Materiel Report, you know ..."

"You mean an EUR," Fixit interjected sharply, cutting Tinker off in the middle of his sentence. "You young troops don't even know the right tech order terminology."

"No, not an EUR, Sarge. That used to be correct, but the new 00-35D-54 changed the EURs to EUMRs, and URs to....."

"EUR, EUMR, URE or whatever-they-call-it, I've tried them before, and it's a waste of my time. Now forget those tech school ideas. Our name will be M. U. D. if we don't fix old Double-O," exclaimed Fixit.

"But Sarge!" protested Tinker, as Fixit slapped
in his hand and told him to get Double-O Seven for an afternoon sortie.

It took a couple of hours to get their airframe OR and launched on the afternoon schedule. Between the sun and Airman Tinker's persistence about submitting that EUMR, the temperature seemed to rise another 15 degrees for M.D. Finally, as perspiration reduced the last batch of pocketed AFTO 349s to paper pulp, the world's greatest (still self-acclaimed) F-4 crew chief consented to go with O. J. to the Tech Order Library and investigate the matter. "Mussn't stifle youth," snorted Fixit as he and Tinker walked off the ramp, "and besides, the library is air conditioned."

Once inside the TO library, Fixit slumped in a chair while Tinker went to get 00-35D-54 off the shelves. As Fixit pondered his bird's plight and worried about the Materiel Officer taking him away from Double-O, a familiar voice aroused him, "If it isn't the world's greatest crew chief, old M. D. Fixit. I haven't seen you since the last ORI. Remember? — that was when 007 led the fleet with two major and nine minor discrepancies. What is a man of your extensive experience and exceptional expertise doing in these hallowed halls of learning?" M.D. turned half around and saw CMSgt I. C. All, NCOIC of the Quality Control Section, the Head Beagle himself.

"Well, Chief, I'm... or... er in the process of aiding one of my aspiring young assistants resolve a slight conception in terminology concerning the USAF Materiel Deficiency Reporting System. Being my protege and recognizing my superior know-how, he asked for my guidance. However, I suggested that we come to the TO Library so he could research these archives and answer his own question. As you know, Chief, I'm a firm believer that you achieve more fruitful results if you seek knowledge yourself rather than have it done for you. Of course, I always attempt to impart this maintenance philosophy to my young troops."

As Fixit was explaining his profound approach to the Chief, Airman Tinker returned, "See, Sarge, I told you it was EUMR instead of EUR. It's in this revised 00-35D-54, dated 1 January 1970, which supersedes the previous 30 January 1969 edition."

M. D. coughed and sputtered, attempting to change the subject as Chief All listened intently.

Fixit was still in the middle of a coughing spell when the Chief interrupted, "Perhaps, I can explain the system a little. Headquarters just sent us a message about discrepancies being found by the IG and Resident Auditors concerning understanding of the system. As a result, QC is trying hard to get the correct poop out to the masses by establishing a unit training program, so I might well begin with you. The way your aircraft has been flying lately, Fixit, it would behoove you to pay close attention."

"The audacity of Chief Scripto," M. D. muttered to himself, "the last of the big-time pencil pushers is going to explain to me — the world's greatest crew chief — the Air Force materiel deficiency program. Why, back in the old days, I was considered an auth..."

Fixit's self-inflating thoughts were rudely interrupted as Chief All commenced his explanation, "First of all, the purpose of the USAF Materiel Deficiency Reporting System is..."

"To provide a lot of paperwork to give you pencil pushers something to do between strolls on the flight line," retorted Fixit.

"You're partially right, Fixit. There is paperwork to be accomplished; however, it all serves to benefit the individuals initiating it: namely — you and the other members of the maintenance profession. If you will just sit down and give your mouth a rest, I'll continue. I'm sure your protege is interested."

"Yes sir, I am," replied Tinker.

"Now, the purpose of the system is simply to prescribe procedures for reporting deficiency data on Air Force equipment." These procedures are geared to let all echelons or levels of management identify serious equipment deficiencies and allow them to expedite any fixes. However, I can't emphasize this point enough — the crew chiefs, specialists, and other support personnel at the working level who have direct contact with maintaining the equipment must start the ball rolling. My section, pencil pushers if it makes you feel better, Fixit, serves only as a monitoring and advisory agency. The responsibility for initiating the action lies with the individual on the line, or in the shops."

"Many people feel that there's some sort of negative stigma attached to submitting unsatisfactory materiel reports," Chief All continued, "Let me dispel that theory immediately. It works just the opposite. By submitting these reports, you're not only showing the boss that you're doing a complete job, but more importantly, you're contributing to the Air Force's overall safety program. The action that you take today will reap future dividends for all of us by purging the inventory of unsatisfactory material and correcting ineffective operating procedures."

"But, Chief, I always give 100 percent, and the boss realizes just how fortunate he is to have a man of my caliber on the flight li..."

"We don't need to discuss your relative merits right now, Fixit, I think young Tinker is more interested in hearing about 00-35."

Chief All took the TO from Airman Tinker and as he...
thumbed through it made several comments, and pointed out certain sections to the interested Tinker and not-so-interested Fixit. “In conclusion, gentlemen,” continued the Chief, “there have been some changes in terminology, use of forms, and routing of exhibits, but we advise each troop to read the revision personally for full understanding of the system.”

“Okay, Okay, I agree there’s a materiel deficiency reporting system. Tinker and I both understand the TO, but what has the system accomplished?” inquired Fixit. “Chief, I don’t dig filling out a bunch of paperwork for nothing. Besides my job is to keep the birds flying — I ain’t no paper shuffle. Why, a crew chief of my abil . . .”

“Hold it, M.D. Before you go off on another one of your tangents, let me ask you this. Remember the problem we were having with our main landing gear wheels failing?” asked the Chief.

“Sure!” answered M.D., “We had that problem several months back — just about the time I first arrived from SEA and took command of Double-O Seven. Those darn wheels caused more excitement than the day ‘Charlie’ rocketed our base during the Great War. Did I ever tell you about that?”

“Never mind your war stories,” interrupted Chief All, “just tell Tinker what happened.”

“As I said,” Fixit reiterated, “that wheel problem really caused a lot of concern, but come to think of it, we haven’t had a wheel failure for some time.”

“Well, Fixit, it wasn’t just a coincidence that those wheels suddenly stopped failing. EUMRs submitted from Sweltering Palms and other F-4 units throughout the Air Force enabled the depot to determine that wheel failures were caused by over inflating the tires. The depot subsequently lowered the main landing gear tire inflation pressure requirements, hence eliminating the source of the problem.”

“Is that right?” queried Fixit.

“That’s what happened,” answered Chief All. “Here, let me give you another example of how the system helped correct another hazardous condition. Remember the time that your own 007 made an emergency landing because of an unsafe gear indication? You haven’t forgotten that one have you?”

“Shades of Phantom-fours, how could I!!! Your QC snoopers impounded my poor bird and went over her with a fine-tooth comb. You wouldn’t even let me, her proud protector, get near to comfort her. Finally, your blood hounds discovered the problem to be just an erroneous nose gear indication in the cockpit — a very minor thing. It brings tears to my eyes every time I think of how my shy Phantom was divested of panels and parts in front of unfamiliar faces.”

“My heart bleeds for you, Fixit; however, I’m your boy, Tinker, wants to hear the conclusion of 007’s landing gear indicator problem.”

“Yes sirl! Did they ever find what caused the malfunction?” asked the thoughtful Tinker.

“Affirmative,” replied Chief All, “the electricians trouble shot the system, discovered a temperamental nose gear limit switch and submitted an EUMR. Their EUMR along with those from other units exposed this fleet-wide deficiency. The depot then issued a TCTO replacing the deficient switch.”

“What about that!” Fixit exclaimed, eyes gleaming. “I knew that a TCTO had been issued which alleviated the condition, but I never realized the important role my faithful Double-O played. See, Tinker, didn’t I tell you that you were working with the best air machine and finest crew chief in the wing. Why, under my superior tutorage and guid . . .”

Fortunately, Chief All again intervened. “If you had the time, M.D., I could give you several more examples of the effectiveness of the system when it is used promptly and accurately. However, I realize that you, as a man of superior intellect, have already digested all the pertinent facts concerning the materiel deficiency reporting system and comprehend its application.”

“Huh! Sure, Rog, Chief, I’ve known about this EL business all along. Like I said in the beginning, I want Tinker to discover the facts for himself. Yes Sir, Bea . . ., er, Chief, I couldn’t have said it any better. And your examples illustrated precisely what I’ve been saying to Tinker about the value of the system, Right, Tink?”

“Er, right, Sarge,” said Tinker, his face showing some signs of dismay (and nausea!).

Fixit figured this was an opportune time to make his break. He glanced at his watch, grabbed poor Tinker, and exclaimed, “Holy Red X, Tink! Get your hat; we gotta hurry back to the line. Double-O’s due back any minute, and that line chief of ours doesn’t have any sympathy when his crew chiefs are late for a recovery.”

As they scurried out the door, Tinker panted, “Thanks for the info, Chief.”

“Hurry up, Tinker, we’ve no time for pleasantry now.”

Before Chief All could ask if they were going to attend QC’s formal training program, Fixit and Tinker were long gone. Shaking his head, he returned to his research.

The two Phantom fixers arrived on the line just as Double-O was touching down. “How’s that for timing, Tink, just as I planned it,” panted Fixit. “The line chief probably never even missed us.”

Fixit and Tinker exhibited academy award worthy
performances as they marshalled 007 to its parking place. Before Double-O could roll to a complete stop, the conscientious Tinker was already accomplishing the initial phases of his postflight inspection.

Fixit waited a couple of minutes and then began to debrief the flight crew. "Yes sir, Colonel, isn't Double-O the greatest you've ever flown? Did you feel that surge of power and quick stick response? I often fly in the back seat on FCFs, when my exceptional expertise and technical judgments are required. So, I know exactly how my baby performs. I remember the time when the squadron commander personally requested that I...

"That's all right, Sgt Fixit, you don't have to tell me - your reputation is well known throughout the wing. As for 007, it has only one write-up."

The AC finished his debriefing and as Fixit started back towards his bird, he heard Tinker's yell, "Hey Sarge! Come over here and take a look at this."

Fixit looked and mumbled, "@$%^*%@... this would happen just before quitting time. Let's get hopping - it's getting late."

"It looks like another case of materiel failure; we'd better submit an EUMR," Tinker replied.

"An EUMR!!" Fixit fumed, "Tink, my lad, where did I go wrong? How many times do I have to tell you that we're airplane fixers. it's our responsibility to keep the fleet flying - not to generate fuel for the bureaucratic papermill. Now take this wrench in your grimy paws and get busy on our baby. I have to be at the club for happy hour in 15 minutes - old Sgt Panelpuller of "C" Flight is buying the beer. Now I can't pass that up, can I, Tink, old buddy?"

"But, Sarge, I still think ..."

Tinker's pleas fell on deaf ears. Fixit's thoughts had zeroed in on a foamy, frosty mug, and he didn't hear a single "but." In about ten minutes, Fixit turned his last nut, put away his tools, and started toward the club. "Button her up before you go, Tink," he directed.

Left in soul-searching solitude, Tinker applied the finishing touches and affectionately tucked in Double-O for the night. Picking up the deficient part, he headed toward OC to see the Chief Beagle and feed the papermill with his first EUMR.

Thankfully, Tinker is a thinker!
MORE ON THROTTLE RIGGING

A few months ago we received a message cautioning pilots about "ham handing" F-4 throttles to the idle position. It was suspected that the jocks were pulling the throttles off, accidentally. The message went on further to state that even though throttle movement is not restricted by the manufacturer, smooth and sensible throttle movements should be practiced at all times.

It makes sense for more reasons than one. First of all, below 90 percent you have very little thrust — even with two J-79s — so why smash the stop? Secondly, decide for yourself if you are just playing for "funsies" during training flights. Why look forward to restarting an engine in Package One, or, think of how stupid you'll feel fumbling around the cockpit to restart an engine with a MIG pulling in on your you-know-what? The place to "Yank" the throttles back is during step 7, under BEFORE TAKEOFF in your little yellow book.

Another reason is that you may be in an airplane with throttle problems such as the four incidents that follow:

○ During an FCF, the rear cockpit right throttle was pulled rapidly to idle and the engine flamed out. It was airstarted and the crew went home. The right throttle was rigged with a twist that loosened, making the cable longer.

○ Throttles were snap decelerated at 38,000 feet, left engine flamed out. Throttle re-rigged and aircraft checked out okay.

○ Aircraft was number four in a flight practicing fluid four formation. As aircraft was being repositioned after a turn the throttles were brought to idle due to excessive overtake. As throttles were advanced, pilot noted that left engine had flamed out. Left throttle out of rig, throttles had been re-rigged prior to this flight.

○ Pilot in rear seat snap decelerated right engine from 100 percent at aircraft commander’s direction. Fuel flow dropped to zero and engine flamed out. After restarting engine the aircraft commander could not duplicate the malfunction. Rear seat pilot then snapped the left throttle to idle and it also flamed out. The crew dumped fuel and went home; the throttles were out of rig.

WATCH THOSE PINS

The mission was normal in all respects through landing. Following dearming, the aircraft was "hot" refueled. As the F-4 jock added power to taxi, he felt engine vibrations and saw no RPM or EGT rise with throttle movement. It seems that his ejection pin bag became unstowed during ACM and fell overboard into the left intake when the canopy was raised during taxi. The unit involved will now secure the pin bag in the thermos bottle holder with velcro tape.

FIRE IN THE HOLE…AGAIN!

The fire light on number two engine illuminated on takeoff roll at about 150 knots. This F-4 jock elected to press on since he was fully loaded with bombs and fuel and was passing his refusal point computed for 56,000 pounds. After gear and flaps were retracted he attempted to bring the right throttle out of burner, but couldn't budge it. After reaching a safe altitude and airspeed he shut it down with the master switch. At this time the
fire light illuminated but went out in about thirty seconds. The right fire light remained on as they proceeded to the jettison area to drop their ordnance and all external fuel tanks. Shortly after leaving the jettison area the right fire light went out and a successful single engine approach was made into the BAK-13 on the approach end.

The cause was internal failure of the afterburner on/off signal line fuel tube. The line failed during afterburner operation spraying the engine bay with fuel which ignited. The line showed no evidence of crimping, chafing, or damage. The throttle loop failed due to heat damage, causing the throttle to jam in the full afterburner position.

**IF YOU DON'T SEE IT...**

A flight of four F-84s set out to get a dart... and did. After Lead completed his first pass number two rolled in, but overshot. The leader told him to reposition to fire on the next target turn, this was acknowledged. Two rolled in again but dropped his nose too far... Lead transmitted that his cut-off angle would put him too far in front of the target and asked if he had a visual on the dart. Two replied that he did and the leader broke him off. As Two pulled off he struck the tow cable in front of the dart and tore it loose from the low aircraft. He had some difficulty controlling his aircraft until the dart and cable fell off, then made a precautionary landing.

**I'VE GOT IT!**

A C-130 copilot was flying an orientation shuttle run in the left seat in preparation for his upgrading to aircraft commander. Earlier in the day he made several satisfactory landings at enroute bases. A 100-percent flaps, maximum effort landing was planned at the next airfield. High terrain and forecast gusty surface winds from varying directions were briefed hazards on this approach; a thunderstorm was moving towards the field. His final approach was higher than normal and he crabbed into the left cross-wind. When the copilot reduced power and aircraft sink increased rapidly the instructor pilot took control, adding power and correcting pitch and yaw. He was a little late, however, and the Herky touched down short, tearing down the perimeter fence.

What went wrong? You might say that conditions weren’t suited for a transition ride, or a high final approach and a high gross weight are a risky combination, or the maximum effort threshold airspeed wasn’t increased by the full gust increment, or the earlier landings generated too much IP confidence in the student’s ability, or there may be a reason known only to the crew. In any case, the reason got a head start on the instructor pilot, but he recovered in time to hold it at incident level.

Knowing how far to go with a student is an IP’s toughest decision. The “I’ve got it” call comes easier and much sooner after an IP suffers through his first incident!

**“KNUCKLE SANDWICH”**

The RF-84 pilot onloaded his briefed 5000 pounds of JP-4. During disconnect the tanker’s bouncing basket hit the top left center section of his canopy. Part of the outside layer of glass shattered and the jock experienced moderate buffeting, but completed the formation refueling. He landed without serious difficulty.

If the probe and basket aren’t properly aligned with the tanker’s boom at disconnect your canopy may catch a “knuckle sandwich.”
a second look at...

"Passing about ten feet above a tanker trailer truck, the AT-33 impacted thirty feet west of a highway less than thirty minutes after takeoff. Neither occupant of the airplane attempted to eject. When last seen by witnesses, the aircraft was descending in an approximate 20 to 30 degree dive. The aircraft was clean and experiencing no apparent difficulty."

So reads the report of a lost aircraft and crew. The Accident Investigation Board found the primary cause to be: operator error in that the pilot erred in judgment when he failed to recover his aircraft from an unauthorized maneuver. Contributing causes were: violations of regulations and directives concerning the safe conduct of the flight and insufficient crew rest on the part of the crew.

The flight was to be an instrument training mission, the first for the student in the rear cockpit. It would be a standard instrument mission consisting of the cockpit check, basic instrument maneuvers, unusual positions, DF procedures, and GCAs. The manual specifies that the student will be under the hood during these maneuvers.

It had been decided, apparently prior to the flight, that this crew would do some other mission since the rear cockpit hood was left in the stowed position behind the rear seat headrest. It would be impossible to get the hood after the canopy was lowered. Takeoff was at 0934. Six minutes later the local departure control cleared them to leave their frequency. At this time the aircraft was 30 miles southeast at 15,000 feet, their instrument area is located 55 miles to the northeast.

At 0950 a witness observed the aircraft 37 miles southeast of the base in a climbing attitude doing a series of rolls. Following this first observation, the aircraft was seen by several witnesses making low passes from east to west across a north-south highway. On both occasions the aircraft approached the highway from the east at an estimated altitude of 100 to 500 feet AGL. On the first pass the aircraft pulled up over the highway to the north into an apparent race track pattern. On the second pass, the aircraft pulled up steeply to the north in a climbing right turn. It continued around to the right at approximately a thousand feet in a level turn. It then started a descending right turn heading toward the highway from southeast to northwest on a heading of 310 degrees. Two witnesses observed the aircraft approaching...
The instructor pilot had every reason to abort the flight, yet didn’t. He had barely four hours sleep the night before and it was known that he was planning to meet a friend just after 1100 at the civilian airport that morning. His student did not show up for briefing at the scheduled time of 0730. At approximately 0745 the instructor pilot was on the phone trying to contact his student. At 0800 he left Ops to pick him up and was back by 0830. They got to the aircraft at 0900 and were out of the chocks by 0915. The student had been awakened that morning at 0600 but evidently fell asleep again. He had attended a party the night before, and was known to have been awake at 0035.

The reason that this crew flew that day will probably never be known. Although they would have filled a square, as an instrument mission it was a complete waste of time. The events that followed are hard to substantiate. The instructor pilot’s gross violation of the then AFR 60-7, AFM 51-33, AFM 60-16, and the Dash One are 180 degrees off his conduct during the previous nine months at this base. Nor did his actions on this morning indicate why rules were bent or broken.

His intent may have been simply to remain at low altitude to burn out fuel so he could land early, then make his appointment at the airport nearby. The other events could have followed on a whim.

But let’s take this accident back a little further. Before the acrobatic maneuvers, with fuel in the tips, and before the passes on the highway with the heavily laden T-bird, let’s go back to the point where the pilot decided to get down on the deck. We’ve probably all done it at some time in our careers — it’s not illegal. Assuming the crew had adequate rest, was briefed properly, and was operating in an isolated area, what then?

What is this flirtation we pilots have for the ground? The accidents caused by the big, fat ego are easy to explain when the jock is putting on a show for his family or friends. But when he’s alone, what is the driving factor that sends him down to within feet of the ground? We don’t deliver ordnance in that fashion, nor is there any other current mission in the Air Force that requires a man to get below fifty feet for any reason.

This type of accident cannot be prevented by briefing, and obviously, material written on other accidents of this type has been ignored by some. We all know the rules set up for us to fly by — so why don’t we follow them?

One answer to this problem is, of course, to identify the pilots who cannot be relied upon to carry out their duties within the framework spelled out by current directives — and relieve them before the accident occurs. This is a difficult task, and it is virtually impossible to carry it out. The alternative belongs to each of us. We might consider the rules and regulations that we fly by, our conditions of employment. If they seem distasteful or you don’t especially like them, your next move is obvious. Or you can follow the guidelines set down for the conduct of your flying and perhaps, live happily ever after.

It’s your choice. In any event, low altitude, unauthorized flight, buzzing, or whatever you choose to call it — will not be tolerated. The word is out and there should be no question in your minds about the consequences if you should choose to ignore the warning. You are responsible for the aircraft you fly, and you are also responsible for the lives of the people on the ground below you. It’s as simple as that!
If he nickel on the grass.

Hurry with that turn-around, he's filing now.
OPENS THAT CLIP, I'M GOING TO RAP HIM.

"HELLO...ALLSTATE?"

I LOVE YOU, COLEMAN....
Toggle Juggling for 84’s

The F-84 jock made his first live pass over the range, pressing the button to fire a rocket. It fired, and so did the jettison system for both 450-gallon external tanks. He called it a day and went home.

The inboard three-position bomb select switch was still covered and safety wired when investigators began their check. But each check led back to the switch. They found that the switch jamnut had loosened slightly allowing the cover to move forward toward the ‘All’ position. This placed the toggle in an intermediate position between ‘Off’ and ‘All,’ allowing current to flow when the bomb release button was pressed.

Read That Torque Meter

The F-4’s landing gear and flaps were extended on landing approach. Flight control required more than normal left stick, and the flap indicator read unsafe, so the pilot made a no-flap landing — without incident.

Maintenance troops found a broken bolt, the one which connects the right inboard leading-edge extension arm to the leading-edge flap. But the break was peculiar in that the bolt’s function called for shear stresses only, though the kind of break could only have been caused by over tension. The only tension ever imposed on the bolt was when installed, nutted, and torqued to 107 inch/pounds, +13 or -12. No evidence of fatigue or case hardening existed so over-torque is a fair conclusion.

And to top it off, the larger portion of the broken bolt showed signs of polishing and brinelling indicating it had performed its function long after breaking. The installer can be glad it finally separated during cruise flight instead of two seconds before touchdown . . . the pilot sure is!

Chafing Chaff

About to land, an F-4D lost utility hydraulic pressure. The pilot decided on an approach-end arrestment. He used the emergency system to lower the gear, but the left main failed to drop. He tried the alternate methods, but no dice. So at half flaps, he dropped the hook and took the wire okay.

Loss of the utility system was blamed on a leaking accumulator and it was properly EUMR’ed. But the failure of the left gear to function was a real hair-raiser. The aluminum pneumatic emergency gear down line door 130L was chafed completely through. Had chafing point not been detected it was only a matter of time before the opposite portion, another metal line, would have been worn through, causing loss of the PC-1 hydraulic system.

This unit inspected every bird in their wing and suggests it’s a good idea for other Phantom Phlyers.

Unsked Phantom

An F-4 taxied onto the parking ramp after an uneventful landing. But the ground crew noted that one of the dual nose wheels was missing. It was recovered off the end of the runway where it had dropped, fortunately, in an open area.

The axle nut had simply backed off after the lock screw sheared. Why? Possibly because of confusion stemming from different installation procedures required for the wheels, which are manufactured by two different firms and stamped with one of seven vendor’s part numbers. Add to this the possibility of missing a recent change to tech order instruction, and maintenance personnel may have problems.

Tech Order 1F-4C-2-5 was changed 1 Jan 70 to speci...
with a maintenance slant.

separate installation procedures for the two wheels, and it requires a thorough reading and understanding to eliminate the possibility for confusion. In short, it includes the following:

Nose wheels manufactured by General are stamped with one of the following vendor part numbers: 212A71M, 218A835, 219A466-1, 219A466-2, or 220A123. But the wheel is more easily recognized by its ten bolt construction. To install the General wheel requires torquing the axle nut several times to set the bearing, spinning the wheel between each application of torque. Finally, back off the nut, reset to 20 to 30 foot-pounds, and set the lock screw.

In the Goodrich wheel, which has eight bolt construction and is identified with stamped vendor numbers 3-1119 or 3-1185, installation procedures require axle nut torque to a minimum of 20 foot-pounds, then tighten to the next set screw lock position.

These are the main differences, but check the revised tech order for the full “nine yards.”

**Beware of Wheels**

The RF-4 taxied to the quick-check area and had to wait while another bird was being checked. Cleared on, he made a right turn to line up. Then, when about one hundred fifty feet away from the maintenance crew, an explosion occurred. The right side of the aircraft dropped and it was brought to a stop immediately. The quick check team signaled the crew to shut-down and get out. They did, posthaste. The right wheel sub-assembly broke on the inner flange allowing the retainer ring to come off. Following that, the tire exploded damaging the gear door beyond repair and puncturing the right drop tank.

The unit involved was the last to receive their shipment of “unstressed” wheel assemblies. But the moral of the story goes further than the F-4 problem - treat ANY tire with respect. The pressures carried in fighter tires make lethal weapons out of rubber and metal when they let go.

**Fare Wear??**

After pulling out of a dive bomb pass, this F-4 crew noticed that the left engine had flamed out. Exact aircraft attitude and throttle position are not known. Aircraft attitude varied from plus to minus thirty degrees in pitch and plus to minus sixty degrees in bank. Altitude varied from one to seven-thousand feet, and airspeed was between three hundred and four hundred knots.

The flameout malfunction was attributed to normal wear and tear! The throttle had been re-rigged five weeks earlier and twelve flights had been flown prior to this incident. They say that normal stretching of throttle cables can move the MFC cam to the low or high side. In this case normal cable “unwind” caused the setting on the MFC cam to be brought to the low side.

**Supercrude Bronchitis**

An F-100C jock made several live rocket passes on the range. Each rocket was long even though he noted after each pickle that the altimeter read higher than his computed release altitude. And most any fledgling gunnery student could tell right off that a high release usually means short hits, not long. At this point, one would suspect altimeter problems, except the enroute altimeter check had shown all aircraft in the flight to be registering an altitude within 100 feet of each other.

Back at the airpatch, a sharp maintenance man found that the low pressure flex hose between the static air source and the altimeter was twisted, causing a collapsed bend in the hose. Straight and level, the altimeter read OK, but it lagged in direct proportion to the rate of climb or descent because of the partially blocked hose.
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.

VIRGIL K. MERONEY, Colonel USAF
Chief of Safety

Outstanding Flight Safety Officer
(second half 1969)

Captain Dwight F. Wilson
4406 Combat Crew Training Squadron
England Air Force Base, Louisiana

Outstanding Nuclear Safety Officer

First Lieutenant James H. Weidler
316 Tactical Airlift Wing
Langley Air Force Base, Virginia
Outstanding Missile Safety Officer

First Lieutenant Mack R. Atkinson
4 Tactical Fighter Wing
Seymour Johnson Air Force Base, North Carolina

Outstanding Contributor to Nuclear, Missile or Explosives Safety

Master Sergeant Donald D. Hammock
23 Tactical Fighter Wing
McConnell Air Force Base, Kansas

Outstanding Ground Safety Man of the Year

Mr. Charles E. Morgan
313 Tactical Airlift Wing
Forbes Air Force Base, Kansas
Our congratulations to the following units for completing:

174 Tactical Fighter Group, Hancock Field, Syracuse, New York
   3 May 1968 through 2 May 1969

192 Tactical Fighter Group, Byrd Field, Virginia
   18 May 1968 through 17 May 1969

524 Tactical Fighter Squadron, Cannon Air Force Base, New Mexico
   1 September 1968 through 31 August 1969

4408 Combat Crew Training Squadron, Lockbourne Air Force Base, Ohio
   4 September 1968 through 3 September 1969

108 Tactical Fighter Group, McGuire Air Force Base, New Jersey
   1 January 1969 through 31 December 1969

193 Tactical Electronic Warfare Group, Olmsted State Airport, Pennsylvania
   1 January 1969 through 31 December 1969

126 Air Refueling Group, Chicago-O'Hare International Airport, Illinois
   1 January 1969 through 31 December 1969

182 Tactical Air Support Group, Greater Peoria Airport, Illinois
   1 January 1969 through 31 December 1969

4 Tactical Reconnaissance Squadron, Bergstrom Air Force Base, Texas
   1 January 1969 through 31 December 1969

927 Tactical Air Support Group, Selfridge Air Force Base, Michigan
   1 January 1969 through 31 December 1969

928 Tactical Airlift Group, Chicago-O'Hare International Airport, Illinois
   1 January 1969 through 31 December 1969

47 Tactical Airlift Squadron, Forbes Air Force Base, Kansas
   1 January 1969 through 31 December 1969

313 Tactical Airlift Wing, Forbes Air Force Base, Kansas
   1 January 1969 through 31 December 1969
12 months of accident free flying:

130 Special Operations Group, Charleston, West Virginia  
1 January 1969 through 31 December 1969

834 Combat Support Group, Hurlburt Field, Florida  
1 January 1969 through 31 December 1969

4416 Test Squadron, Shaw Air Force Base, South Carolina  
19 July 1968 through 18 July 1969

61 Tactical Airlift Squadron, Sewart Air Force Base, Tennessee  
31 October 1968 through 30 October 1969

64 Tactical Airlift Wing, Sewart Air Force Base, Tennessee  
31 October 1968 through 30 October 1969

Tactical Airlift Squadron, Sewart Air Force Base, Tennessee  
21 November 1968 through 20 November 1969

136 Air Refueling Group, Hensley Field, Dallas, Texas  
1 July 1968 through 30 June 1969

907 Tactical Airlift Group, Clinton County Air Force Base, Ohio  
10 August 1968 through 9 August 1969

910 Tactical Airlift Group, Youngstown Municipal Airport, Ohio  
15 December 1968 through 14 December 1969

906 Tactical Airlift Group, Clinton County Air Force Base, Ohio  
1 January 1969 through 31 December 1969

403 Tactical Airlift Wing, Selfridge Air Force Base, Michigan  
1 January 1969 through 31 December 1969

31 Tactical Reconnaissance Training Squadron, Shaw Air Force Base, South Carolina  
3 January 1969 through 2 January 1970

75 Combat Support Group, Bergstrom Air Force Base, Texas  
1 January 1969 through 31 December 1969

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

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

An Escort of P-38s

Hedy Lamar is a beautiful gal And Madeline Carroll is too, But you’ll find if you query A quite different theory Amongst men of a bomber crew. For the prettiest sight In which airmen delight This side of the pearly gates Is no blonde or brunette Of a Hollywood set But an escort of P-38s.

It’s quite true in the past, When tables were massed With glasses of scotch and champagne. This beautiful sight, Was a thing of delight To us, intent on feeling no pain. Now not the same,

Nowadays in this game When we head North from Messina Straits. You can have your sparkling wine Just always make mine An escort of P-38s.

Now Shelley and Keats Ran a dozen dead heats Describing the views from the hills. Of the flowers in May When the winds gently sway An army of bright daffodils.

Take your flowers and sweets, Take your poems by Keats, And pages from books of the greats. Just reserve me those cuties, Those American beauties An escort of P-38s.
"Hey, Orv, I need some brotherly bolstering. My guardian-angel-for-flyboys spirit do saggeth sorrily. In fact, I'm about to try for "unscorable at twelve o'clock" in some secluded stag bar if Standboard Supreme goes TDY for a few days."

"Don't do it, Will. You know his rules on alcohol and 'angeling. Besides, hovering with a hangover isn't healthy. C'mon, cheer up. All guardian angels have bad days once in a while. You can't save them all, and some guys won't be helped. Just won't listen to old greybeards. You know, we did a little of the same when we switched from bicycles to heavier-than-air machines."

"Oh, it's not that, Orv. I managed the save okay, and this jock really cooperated. He was the most appreciative guy I've hovered over and helped since winning my real wings. It's some other guys easing in on my rescue and taking credit for it that bugs me."
"Will, you know the celestial code requires that angels perform without pay or public plaudits. It isn't easy, but SKYCINC laid it on the line when they gave you a choice: either this, or join your fighter pilot friends in that "other place." You're a volunteer, Will. But, I suppose that assignment down-under is still open, if you really want it."

"I'm not that unhappy, Orv, but at times I do envy their freedom from freezing. Outer space does get cold at times, but that's a personal problem, I guess. Anyhow, I'm torqued. I worked hard on this one and somebody else is taking bows for it."

"Okay, Will, unload. Get it off your chest. How'd you get your tail feathers tweaked?"

"I thought you'd never ask. Well it begins with two pilots on a Stan/Eval ride over hostile territory..."

"Whoo, Will. A what over where?"

"You know, Orv. It was a spot recurrency check in a combat area. They do that sorta thing regularly."

"I don't get it, Will. I thought aircrews were combat-ready before starting flying over there?"

"Oh, they are, Orv. It's just that he'd been flying combat missions for quite a while and they were worried about his losing flight proficiency for stateside flying later... you know, back where things are really rough."

"Oh, I see, Will. You've got to be both combat-ready and CONUS-ready. It's a sort of advanced degree in..."

That's right, Orv. So, during his check ride some bad guys start shooting at them with malice aforethought. Well, that's no way to treat guests, so, they do some retaliating. While working the "baddies" over they take a hit in the right wing. As luck would have it on a standboard ride, a slug ruptured a hydraulic line and started a fire."

"Hydraulic-fluid-fed fires aren't fun, Will."

"That's right, and they didn't care for it either. That's when I picked up their emergency squawk and homed in on them. While they were putting some airmiles between themselves and the hostiles, the old bird's aileron control got a little sloppy. Wing skin started melting away and ribs peeked through. That's when they decided to jettison the airplane and nylon the rest of the way."

"What? And not complete the Stan/Eval ride? How could he observe landing technique? Sorry I interrupted, Will. I couldn't resist the temptation. Go ahead. Don't leave me and them hanging."

"Touche, Orv... I picked that up in a French movie, Will, the flight examiner led off. He reached for the handle, pulled, and rocketed away... just like the egress commercials say."

"I suppose he wanted to be down first to observe the captive's landing procedures. That'd make it a complete check ride, wouldn't it?"

"Orv, your Stan/Eval hangup is showing."

"Okay, I quit. Will. How'd our pilot come out?"

"The hard way, Orv. He reached, pulled, and ended up with a handful of handle and not much else."

"Wow! How high was he?"

"About a thousand feet and still climbing with full power on. And now the bird's rolling right while he's trying to crawl over the left side... his side of the cockpit. After bumping his head on the canopy he remembers that's still around and jettisons it. Now he's back to scrambling left out of a bird rolling right, trying to regain control, and fighting wind blast while altitude's getting scarce and fire's getting plentiful."

"Where'd he get all the wind blast, Will? How fast was he?"

"It's mainly prop blast, Orv. He was climbing at full power and forgot it when his seat failed, the canopy got in the way, and his bird insisted on rolling into a near-skinless wing. He had too much to do and not enough hands and feet available each time he tried for the side. Finally found the right combination though, and made it. His chute popped open about 800 feet AGL and buddies covered him until beautiful Jolly Greens arrived. That's when he found time to remember that full throttle is the source of obnoxious wind blast. Figures he could've made it easy, if he had yanked throttle before stepping over the side."

"I'm glad you were around to support him, Will. That was a hairy manual bailout. I can't resist asking, Will. Did he finish his recurrency check?"

"I knew you'd ask, Orv. So, I peeked at the remarks on his AF Form 8. The writeup was, 'It should be noted that we were shot down on this flight... a landing was not observed.'""

"How about that for a new twist in flight checks. Is that what tore you, Will?"

"Naw, Orv. That was tongue-in-cheek. The flight examiner had a little fun with his paperwork routine."

"What was it then?"

"What threw me was a letter from the egress system manufacturer that reached our 'manual bailies' about six months after he crawled over the side."

"What'd it say?"

"Our records show that you successfully used our Brand X escape system. However, we have no record of having sent you one of our lapel pins to commemorate this event... It is with a great deal of pleasure that we enclose one of these pins for you... Our number of successful egressions is now..."

"Did he keep the pin, Will?"

"Yes, he did, Orv. He figures that some day with it and a dime..."
Staff Sergeant Arthur S. Docs, 58 Organizational Maintenance Squadron, Luke Air Force Base, Arizona has been selected to receive the TAC Crew Chief Safety Award. Sergeant Docs will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.

Technical Sergeant Charles L. Hartronft, 319 Special Operations Squadron, Hurlburt Field, Florida, has been selected to receive the TAC Maintenance Man Safety Award. Sergeant Hartronft will receive a letter of appreciation from the Commander of Tactical Air Command and an engraved award.
UNIT SAFETY AWARDS

1969 TAC TRAFFIC SAFETY AWARD:
Category 1
4554 COMBAT CREW TRAINING WING,
MYRTLE BEACH AFB, SOUTH CAROLINA
Category 2
USAF TACTICAL AIR WARFARE CENTER,
EGLIN AFB, FLORIDA

1969 TAC GROUND SAFETY AWARD:
Category 1
313 TACTICAL AIRLIFT WING,
FORBES AFB, KANSAS
Category 2
USAF TACTICAL AIR RECONNAISSANCE CENTER,
SHAW AFB, SOUTH CAROLINA

SEMI-ANNUAL TAC DRIVE SAFE AWARD:
Category 1
516 TACTICAL AIRLIFT WING,
DYESS AFB, TEXAS
Category 2
USAF TACTICAL AIR WARFARE CENTER,
EGLIN AFB, FLORIDA

1969 TAC EXPLOSIVES SAFETY AWARD:
33 TACTICAL FIGHTER WING,
EGLIN AFB, FLORIDA

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

Reference article “Hot Herky,” page 12 of Dec 69 issue. Your statement “… 900 degrees tail inlet temperature…” is somewhat misleading, if not impossible. My Herky Dash One says it should be “turbine inlet temperature.” I feel quite sure you were not referring to the fire.

We get the TAC ATTACK over here, and as you can see, read it quite thoroughly. We think it’s a fine informative publication and a real contributor to safety in flight.

Colonel Raymond C. Bird
Vice Commander, 513 TAW
APO New York 09127

You’re so right, Colonel Bird, and we overlooked the obvious difficulty involved in measuring inlet temperatures at the tail end of a turbine. As usual, your Dash One is right.

Thank you for softening the blow with paragraph two… and we’ll try harder… Ed.

MUSTANG

In response to the poem, “Thunderbolt” on “Pilots Printable Poetry Page,” January issue of TAC ATTACK, I recall seeing same on the bulletin board of Stalag Luft III during my internment there from May 1944 thru Jan 1945. However, being a Mustang pilot it didn’t impress me too much at the time so consequently did not keep it in my “Wartime Log.” Mighty glad to have it now for my log.

You might be interested in printing one I did keep, in one of your future issues. It is from the same bulletin board and is also anonymous. I enjoyed the poem very much and am looking forward to more of the same. Thank you.

Major Paul R. Maxwell, AFRES
71st SOS
Grissom AFB, Indiana

We received Major Maxwell’s letter and poem after our March issue had gone to press featuring the P-51. The two versions are very similar. Major Maxwell’s version follows. Ed.

Back in the days of the 2nd World War,
Many of Uncle Sam’s sons
Began to write Air Corps history anew,
With God and the P-51s.

The bombers went out on their everyday tasks,
The sergeants were fondling their guns.
And high up above, churning contrails sc
Were those boys in the P-51s.

Then in raced the fighters from high in the blue,
Mid the crescendo of our top turret guns.
We’ll surely need help! and it’s already here,
There comes the P-51s.

Down they dive like great birds of prey,
The shrill whine of these engines we hear.
The fight is all over, ere its hardly begun,
With our protection hovering near.

The target’s destroyed, we’re back at the base,
And the sun slowly sinks in the west.
The boys trudge off like weary old men,
To seek a much needed rest.

As we sit by the fire and think of those days,
And tell the old tales to our sons.
We’ll pray for the American eagles who flew,
With God and the P-51s.

—Anonymous
In February we experienced our best month since last November. Tactical Air Command had two major aircraft accidents; Air National Guard and Air Force Reserve units were accident free. TAC suffered two fatalities, it appears that neither crew member attempted ejection.

Our first accident was an F-104. The aircraft crashed in a near vertical dive, possibly supersonic. The pilot got out around 8000 feet and received major injuries from wind blast and seat-man involvement. From the time he pulled the D ring he was in the hands of the seat maintainers, and they had done an outstanding job. All automatic functions performed as advertised.

Our other accident involved an F-4 that went in during a low level training mission. The cause is undetermined and probably will remain so; there were no witnesses and little could be gleaned from the wreckage.

In the “look out” department, we ran onto another near spin. Happily, the crew brought this one home. Everything was normal prior to entering the hairy maneuver which developed during a left, angle-of-attack rudder roll. It was entered with thirty degrees of pitch, and as the airspeed bled through 200 knots the rudder roll was initiated. Seventeen units angle of attack was attained about one-quarter of the way through the roll. About three-quarters of the way through the rate of roll increased, then the airplane snap reversed to the right. The aircraft commander attempted to obtain 5-10 units but there was no response to his control inputs. As the nose came through the horizon, wings vertical, at about 110 knots the drag chute was deployed. The nose dropped to near vertical and the right roll stopped. The aircraft then stabilized in an extremely nose-low attitude at 19,000 feet and 200 knots. The drag chute separated at 15,000 feet passing thru 250 knots, and the bird was leveled off at 12,000 feet.

On the way home the crew noticed the right aileron drooping about an inch and a half. Two trim potentiometers in the auto pilot control amplifier were out of adjustment. With this malfunction and roll aug engaged, the right aileron would droop. It’s like pro-spin controls, gents. So the moral of the story is . . . don’t be afraid to expend a 115 dollar drag chute to save your pink bodies and the two million dollar airplane that got you there.
BOMBS ARE SMARTER THAN PILOTS....
they always know where the ground is....

STOLEN FROM THE 46 TFS