

TAC ATTACK

DECEMBER 1974



TAC Attack December 1974

HARDISON

DEAC

FOR EFFICIENT TACTICAL AIR POWER



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Angle of ATTACK

PLAN YOUR TRIP

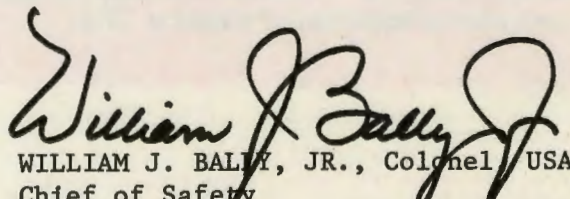
The holiday season is upon us, but unfortunately death never takes a holiday. When people take holidays, especially during the Christmas/New Year season, death is working time-and-a-half. Last year seven TAC people lost their lives in automobile accidents between 20 Dec. and 5 Jan. Several conditions combine to make this the most hazardous time of the year for highway accidents. First of all, more people travel during the year-end holidays to be with friends and relatives. Combine this with increased alcoholic consumption (involved in six of the seven deaths referenced above), the increased hours of darkness and dangerous winter weather, and you have all the "makings" of an accident.

But wait — we have one more factor added this year — the nationwide 55 mile-an-hour speed limit. Although the lower speed has saved many lives, there is a simple fact you must contend with before starting that trip: if you have the same distance to travel this year, it's going to take you longer. For example, if you took a 650-mile trip home last Christmas at a 65 MPH average, it took you 10

hours — a long but reasonable day's driving. This year if you average 45 MPH, the same trip will take you about 14-1/2 hours. If you are driving through the middle latitudes of the U.S., about four and a half hours of the trip will be during hours of darkness. It's a long one-day haul.

You can't do much to protect yourself from the drinking driver — except stay sober yourself and drive as if nobody else is. Neither can you do much about the unpredictable winter weather, except take a common sense approach to winter driving. You can, however, plan your driving schedule to allow for fatigue-free motoring. Your life depends on it.

Happy Holidays!


WILLIAM J. BALY, JR., Colonel USAF
Chief of Safety



THE ACCIDENT

by Maj Joe Tillman

Scene: Squadron commander's office
Time: 0815, 6 January.

The squadron commander leaned back in his chair and balanced a pencil between his forefingers.

"Sam, the old man wants us to get some night missions on the board this week. The weather is killing us . . . we cancelled eight lines last week and we only got about half our missions off during our last night-flying phase."

"Sir, we're in a real bind." The scheduling officer leaned forward in his chair. "I don't think we can get three turnarounds a day. Maintenance is in a bind to give us two. This cold weather has put a bunch of the aircraft down with hydraulic leaks. One-three-six has been down for a week with a fuel leak. I don't know if maintenance can support us with another turnaround."

The colonel had turned away from his chief scheduler and pressed a key on the squawk box. "Mary, get me Colonel Birch." He swivelled back around and faced the major. "Sam, I'll talk to maintenance. You go schedule the missions . . . get those guys on the board for their night requirements!"

The autopsy conducted by the Flight Surgeon listed under "injuries incurred during mishap:"

Body Part: Vertebral Column

Diagnosis: Multiple Fractures and Dislocations

Cause: Ground Impact

The AF Form 711 put it more simply:

"Royall, James J., Jr., Captain, 920901171, FP, Pilot, F."

Captain Royall, for all practical purposes, was dead two days prior to the accident of 8 January, 1975.



Scene: Maintenance line shack

Time: 1330, 6 January.

The NCOIC stood in front of six young sergeants.

"I can't help it, Willis. Colonel Birch called me and told me we'll turn four more birds for night missions on Wednesday and Thursday. I've cancelled Hooker's going away party until next week. Now, I know we're short-handed. It's going to take all of you haulin' together to get these birds off on time."

Sergeant Willis, rubbing his red eyes, spoke up, "Sarge, we can't turn those birds for an 1800 go! No way!"

The senior master sergeant pointed at him, "Willis, I didn't ask you to do it. I told you to do it. That's all I have . . . let's go."

Scene: The scheduling counter

Time: 1245, 7 January.

"Dammit, Sam, you told me I had tomorrow off. I've already made plans!"

"Whoa. Slow down, Jim. I had to add some night missions. The old man told me to fly the guys who need the night requirements. Sorry."

"Sam, you know I've got some personal problems at

home. Tomorrow I've gotta take the kids over to my sister's place. It's an eight-hour round trip. Can't you get someone else to take it?"

"Sorry, Jim . . ." The scheduler picked up the phone on the third ring. Captain Royall slammed his hand down on the plexiglas countertop, turned around and walked out.

Scene: Parking spot echo two

Time: 1715, 8 January.

"Hey, Chief, let's go! I'm gonna be late."

Sergeant Willis glared at Captain Royall and turned back to his problem — a hydraulic leak. His Tech Orders were laying at his feet, closed. His attempts to get a specialist to his aircraft had failed . . . Maintenance Control told him it would take at least thirty minutes to get a man out to the aircraft. Captain Royall walked over to his formations lead aircraft as the pilot was strapping in. Standing on the kick-step, he advised his leader he might be late, and since there were no spares, might cancel out altogether. He secretly hoped they would canx, since he had been on the road since six o'clock that morning — after a night with very little sleep and a lot of soul-searching. Divorce seemed the only solution.

THE ACCIDENT

"Damn!" he thought to himself, "I'm gonna miss those kids..."

He was shaken out of these thoughts by the chief, who was signalling him that his bird was ready. He made a quick walkaround and strapped in. By the time he got the engine cranked up, he heard lead call for taxi. Signalling the chief to pull chocks, he ran up to about eighty percent and turned out on the taxi lane. Sergeant Willis turned his back on the jet blast and held onto his cap. The searing blast engulfed him, then subsided. He threw his cap down on the ramp in disgust.

Scene: En route to the range

Time: 1835, 8 January.

"Tuck it in, two... you're too far back."

Captain Royall thought to himself, "In your ear, you SOB... I can fly rings around you and you know it... how the hell am I supposed to keep any kind of position with you bobbing around..."

About that time, he caught a flickering light in his peripheral vision. "Lead, two... I think I got a problem. I'm gonna move out and check it."

"Rog, two."

Captain Royall checked the warning panel, but there were no lights. Glancing at his engine instruments, he noticed the hydraulic pressure was right at the lower limits and fluctuating slightly.

"Lead, I think I've got a hydraulic problem. I'd better take this pig back."

"Jim, I had that bird a few days ago. It's OK, the pressure will stay at the lower limit all day long. But if you don't think you can hack it, I'll lead you home."

Captain Royall bristled a little at the last comment. "Press on," he said.

Scene: The range

Time: 1905, 8 January.

As he was pulling off from his first pass, Captain

Royall thought to himself, "I knew as soon as I pickled, it was going to be a bad pass. I knew it."

His radio crackled.

"Vego two, I had your score... unbelievable at six."

Captain Royall suppressed an invective and rogered the range officer. He thought to himself, "C'mon, Jim, you can do better than that!" He was cleared in for his second pass and rolled in tight and steep. As he was about to pickle, he again caught a warning light out of the corner of his eye. He looked over to see which light it was. It was to be the last thing he ever did.

The accident report best described the impact. "The aircraft impacted the ground approximately four hundred feet from the target at the eleven o'clock position. The Range Control Officer stated it was traveling at a high rate of speed (approximately 300 to 350 KIAS), 20° nose low, 10° right bank on a heading of about 015° magnetic. The terrain was flat and the impact area was on a slight upslope. The aircraft was not in a yaw condition. The crater dimensions were approximately 20 to 50 feet and 10 feet deep at the lowest point."

Scene: The Base Ops Snack Bar

Time: 1155, 9 January

Sergeant Willis was cupping a styrofoam container of coffee between his hands. The steam from the coffee did little to warm his numb fingers. His NCOIC sat across from him. It was evident he had not slept the night before.

"Willis, are you sure there was nothing seriously wrong with the hydraulics on your bird? You know, Captain Royall's leader said there might have been some kind of problem with his hydraulic system."

"Well, there was only that small leak I caught on preflight and I fixed that. If you ask me, that guy shouldn't have been flying at all yesterday."

The old senior master sergeant looked up from his clipboard, "How's that, Willis?"

"Well, hell, Sarge... the guy was all screwed up. He jumped all over me because the bird wasn't ready to go. He looked... you know... preoccupied with something. When he pulled out of the chocks, he damned near blew me over... he didn't seem to realize what was going on..."

The NCOIC rubbed his neck, "Well, after talkin' to the guys this morning, they said he was one of the best pilots in the squadron... I guess you never know..."



Scene: Officer's Club Casual Bar

Time: 2230, 9 January

"You know, Fred, when I told Jim he had to fly that mission day before yesterday, he was pretty upset. Said he had to drive somewhere . . . I never thought he would go ahead and do it with a night flight scheduled. Jeez, he musta' really been beat. I should have scheduled someone else . . ."

"Hey, Sam, don't blame yourself. You and I both know Jim could fly that mission in his sleep. It was a damn maintenance malfunction! I should have led him back when he first told me he had a problem. I guess I would have, but I flew that same bird a couple of days ago and told Jim not to worry about the low pressure. I guess the damn hydraulic system just gave up . . ."

Scene: Wing Commander's Office

Time: 1600, 10 January

The commander sat behind his desk, studying a message. He looked up at the Maintenance Officer, "Well, that's it. I'm sorry I can't tell you more, but there wasn't much left of the wreckage."

"Yes sir, I guess so. I'll pass on what we've got so far to the troops."

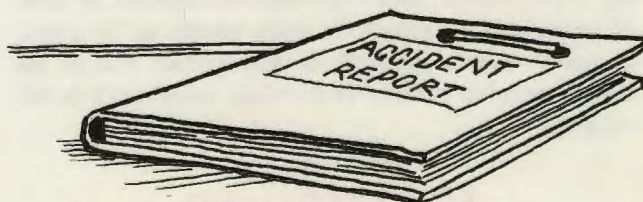
The squadron commander cleared his throat. "Damn shame. Captain Royall was one of our best pilots. I'm gonna have to bite a portion of the communal bullet too,

I guess. I shouldn't have put him up for night range work without checking to see how long it had been since he last flew a night mission."

The wing commander looked over at the squadron CO, "Don't feel too badly, Robbie. It's out of our hands, now . . . You better get back to your squadron. Your boys are briefing for their 1800 go in 15 minutes. You might want to let them know what we've got so far."

The two men left the office. The colonel looked back down at the accident progress report message. He took a red pencil and very slowly underlined, "An exhaustive, but unsuccessful, effort has been made to find evidence of hydraulic failure, jammed flight controls, FOD, disconnected control linkage, malfunctioning trim controls, or materiel failure which would explain this accident. Capture marks indicate stabilator and rudder positioning were normal. The pilot made no attempt to eject."

He put the report back into a folder and left his office.



PHYZ-BIZ
PHYZ-BIZ
PHYZ-BIZ
PHYZ-BIZ



STILL MORE ON HYPOXIA

LtCol Harold Andersen
Hq TAC Physiological Training Coordinator

In this, the fourth article in this series on hypoxia, let's take a look at the problems associated with such entities as blood loss, anemia and drugs. We have already discussed the role of carbon monoxide (CO) in the hypoxia picture, and this discussion adds three more mechanisms, or ways, of generating the type of hypoxia known as "Hypemic Hypoxia." Any mechanism or agent which reduces the oxygen carrying capacity of the blood would fall into this category.

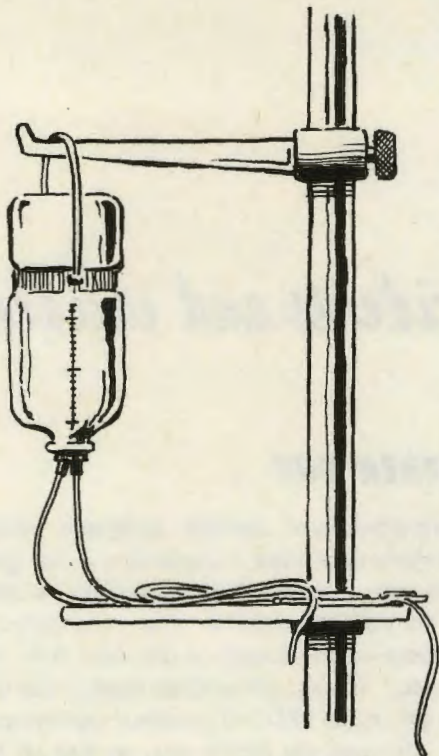
BLOOD DONATIONS

When there is a loss of circulating blood from the vascular tree, as occurs in hemorrhage or blood donations, there is a sudden, sharp reduction in the number of

circulating red blood cells. Normally, the RBCs are saturated to about 98% of their oxygen carrying capability and the loss of a pint of whole blood (which is about 45% RBCs, with 14–18 grams of hemoglobin in each 100 milliliters) significantly reduces the total amount of oxygen circulating to the tissues. If, following such a blood loss, there is a need to engage in heavy exercise, as in escape and evasion of an enemy, or a malfunction in oxygen equipment which reduces the breathing oxygen supply, the crew member's survival capability may be seriously jeopardized. For these reasons, the following restrictions are placed on blood donations by air crews:

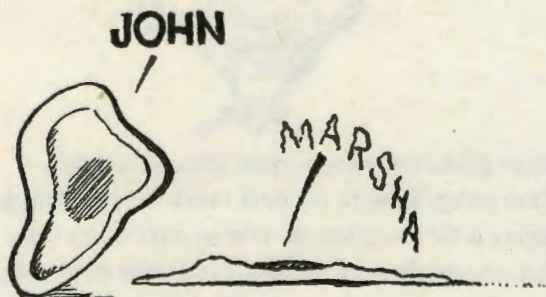
1. Aircrews of high performance or combat aircraft, and persons occupying cockpit positions in an on-call status to perform essential flight duties, will not donate blood.
2. Loss of 200cc or more of blood is disqualifying for at least 72 hours following its loss (includes blood donors). The disqualification may be continued for a longer period at the discretion of the responsible flight surgeon.

The qualifications underlined in the first restriction (above) may be open to interpretation. Your friendly local flight surgeon can provide you with an official reading. In any case, the prohibition is absolute if you fall into one of the classes enumerated. The second restriction applies to all aircrews who donate blood — it is apparent that consultation with the flight surgeon prior to donation is mandatory. Grounding for longer than 72 hours is sometimes necessary in individuals with slower recuperative powers.



ANEMIA

The most common type of anemia encountered in the general population is "iron deficiency" anemia (or "tired blood"). The iron in the hemoglobin molecule is the point of attachment of the oxygen. If the diet fails, for a prolonged period of time, to contain sufficient quantities of iron, the concentration of hemoglobin in the RBC will be below normal (it becomes a point of concern for the flight surgeon when a male crew member shows 12mg per



100 ml of blood on his annual physical, especially so if it dropped from 14 – 15 gms on his previous physical). Iron deficiency anemia is a relatively infrequent occurrence in aircrews, but it can happen. A balanced diet of fresh fruits, salads and lean meats is the way to avoid problems. One sure way to get into a bind is to switch to a "Happy

Hour" menu of booze, pretzels, popcorn and "doovers and canapes." These kill the appetite and provide only empty calories – a little goes a long way!

DRUGS

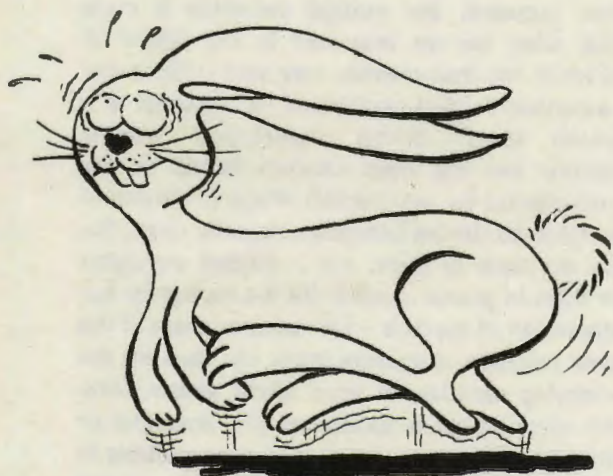
In recent years, the term "drug" has become synonymous with substances like heroin, cocaine, marijuana, etc., and we hear a lot about "drug abuse." The pharmacologist views as a drug, any substance which exerts an effect on the body. This is the broadest definition of the word – The medical definition is more exclusive, being limited to any substance used as a medicine or as an ingredient in a medicine. (Under the medical definition, substances like heroin and marijuana are not drugs, since they have no medical use or application – but they are drugs under the pharmacologist's definition!)

For our purposes, the medical definition is more appropriate, since we are interested in the effects of medicines which the crew member may take without any medical supervision. "Self-medication" is discussed as a "self-imposed stress" during physiological training indoctrinations and the main concern should be the adverse, unsuspected (or unexpected) effects of the patent medicines taken to combat headaches, sinusitis, colds, flu, etc. There are many of these, and a detailed discussion will cover them in greater depth in the future, but for our present discussion of hypoxia – let's become aware of the effect some common drug store items can have on the oxygen-carrying capacity of your blood stream. Any compound which contains substances like acetanilid or phenacetin will reduce the amount of oxygen available in the body. They do so by changing the iron in the hemoglobin to a form which cannot carry oxygen. If you are in the habit of treating illnesses, which you consider minor, yourself, then you should read the label carefully and discuss the usage of such items with your flight surgeon. APCs are generally considered as rather innocuous medication, but the "P" stands for "Phenacetin" and you should be aware of its potential high-dosage dangers, as related to hypoxia.

If you begin to look at the potential of the combination of things we've talked about so far, consider that the aircrewman who just lost his cabin pressurization and experienced a regulator malfunction at high altitude (these things seem always to occur at high altitude) may be a heavy cigarette smoker, a heavy drinker on a poor diet, a blood donor, and be dosing himself with cold medications, etc. When you put them all together, they don't spell M-O-T-H-E-R, they may spell D-E-A-T-H!

CHOCK TALK

...incidents and incidentals



THE SKY IS FALLING....STILL

Someone did it again. Another dropped object, this time the left rear (and half of the right rear) hoist access panels from an A-7D. The missing panels were discovered on postflight after the Sluf flew an instrument training mission. It didn't take long to find out what caused the inflight loss of these panels.

The panels had been opened when a fuel seep was discovered on preflight. The fuel systems specialist didn't enter the unsecured panels as a red-x nor did he properly secure the panels after the work was completed. Unfortunately, he did close the panels and they weren't noticed prior to takeoff since the studs only protrude 1/4 inch.

The solution, both simple and obvious, could save more dropped objects than any other maintenance rule of thumb: NEVER, NEVER CLOSE OR ATTACH A PANEL WITHOUT SECURING IT! Nuf said.

THE OTHER GUY

A bent-wing from another command successfully landed single-engine after experiencing a left generator light and oil pressure loss. Postflight investigation revealed the CSD oil outlet to filter hose assembly "B" nut was loose which allowed oil depletion from the CSD and generator. The aircraft records revealed that two days prior the left engine CSD and generator were removed and replaced. Although the people who worked on the bird said that static priming was accomplished, it is suspected that someone loosened the "B" nut – a requirement only if motor priming is accomplished. Inflight, normal airframe vibration caused the "B" nut to back off and resulted in the loss of oil. We've been saving a poem we stole from the "Mechanic's Bulletin" for this unknown "fixer." It goes like this:



When safety is the topic, most folks sit and sigh,
They barely listen to the rules meant for the other guy.
Safety is for knuckleheads who go around in a daze,
But you are always wide awake and never reach that phase.
Who keeps on taking chances after going scot-free once,
But never heeds the warning? Not you – the other dunce.
We all know the rules of safety so, why bother to discuss,
Rules that apply to the other guy but never apply to us.
The moral of this story as you can plainly see:
To me, you are the other guy, to you that guy is me.

with a maintenance slant.



OIL SYSTEM CONTAMINATION

The A-37B restarted number two engine after cruising single-engine to save fuel. After the engine was started, the oil pressure rose above the max limit and began to fluctuate. The pilot declared an emergency, shut the engine down, and made a precautionary landing. Maintenance examined the number two engine and found small particles in the oil, oil filter and gear box. During the investigation, it was noticed a 2-inch piece of the Teflon dipstick was missing. Assuming this piece of dipstick had disintegrated and contaminated the oil, the system was drained, flushed and refilled. An engine run was performed and the oil system checked out OK. The bird was then cleared for flight and returned to the home drome.

After the aircraft returned, wing safety and QC conducted further investigation. It just didn't seem possible for the oil to reach the 1100° F temperature required to melt the dipstick. The second investigation

found a piece of plastic, distorted by heat, on the oil screen. The shape of this piece seemed to be the remains of a plastic cap used on an oil sampler tube. The investigators then removed the oil filter and found it full of very small pieces of plastic which reinforced the team's belief that the culprit was the cap from an oil sampler tube. After discussion with the depot, the engine was changed.

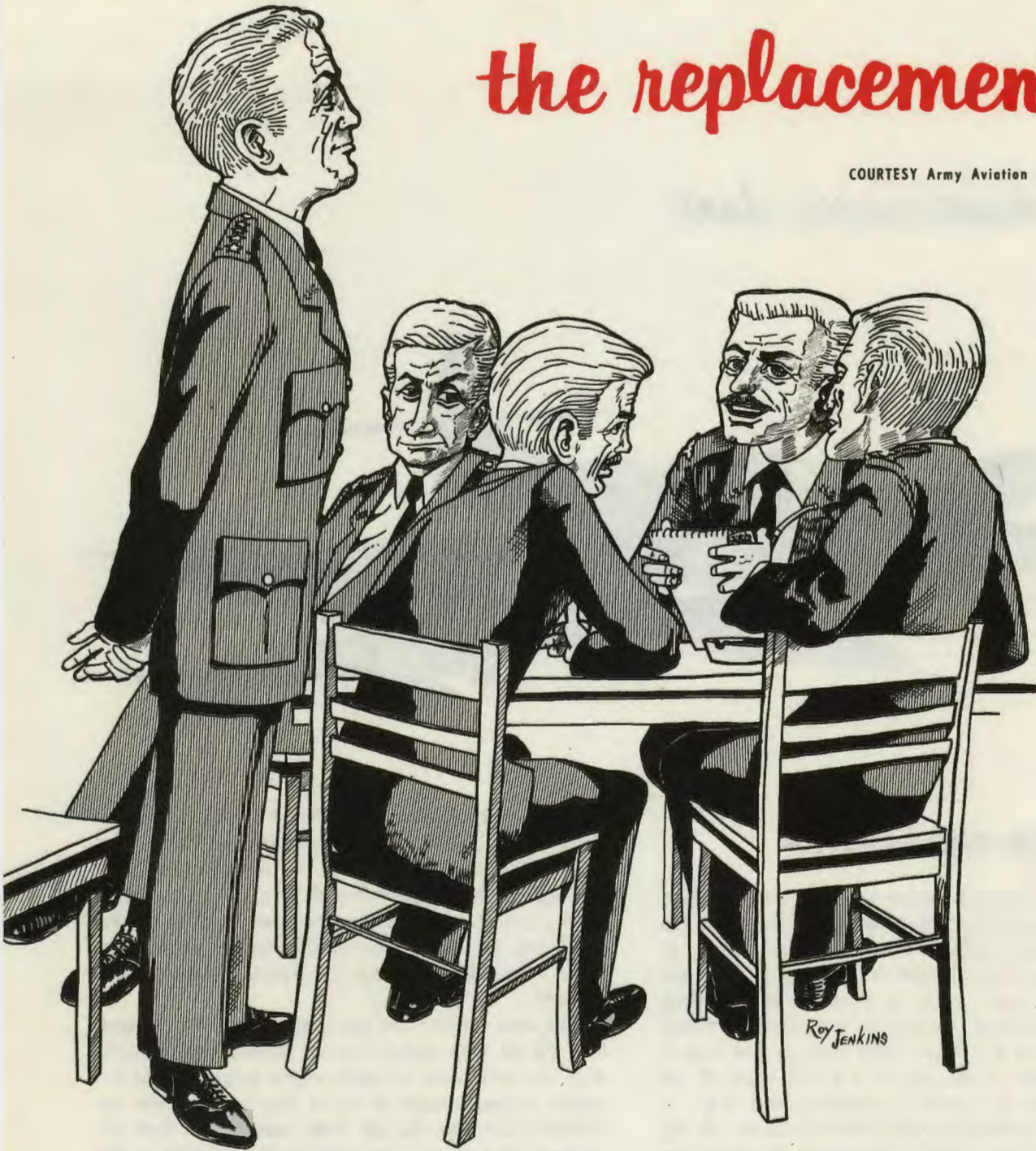
The final verdict? The cap was inadvertently dropped into the oil tank during the last oil sampling. Inflight, after the pilot went to single-engine operation, the oil system cooled enough to allow the melted plastic to harden and block the oil filter, causing the high oil pressure after restart. The dipstick? Not a factor — the piece had been missing for a long time and was not a part of the problem.

The solution? All personnel should be especially careful when working around an open tank, whether it be fuel, oil or hydraulic. If you do lose or drop something, 'fess up. An admission to being human is not nearly as bad as the smokin' hole that might result if you don't.

AN UNUSUAL BOARD SELECTS A CANDIDATE. COULD IT BE YOU?

the replacement

COURTESY Army Aviation Digest



The room was veiled in silence. Only the occasional whisper of small talk was heard exchanged between two of the men who surrounded the conference table. All the seats were filled except the head. The ash trays,

memo pads, water glasses and name plates were symmetrically arranged. A man entered from the door behind the empty chair and all the other men stood.

"Keep your seats, gentlemen," he

said quietly. "We've convened today to choose a replacement for Lieutenant Colonel George R. Egroeg who was killed in an aircraft accident yesterday. I've asked you all to be ready with your recommendations."

by CW2 David R. Katz,
United States Army

The man sitting behind the name plate that simply read "PO" drew on the memo pad as he slowly raised his hand.

"Yes?" the chairman said.

"Sir, I feel that the position is too important to be filled again by a lieutenant colonel. I would like to suggest a brigadier general."

A youthful looking man at the end of the table interrupted.

"No, no sir!" Identified only by the plate that he was now glaring over as "I," he wore the latest style clothes and was very neat and well groomed. "I feel that the rank of the individual is secondary to the qualifications he must hold. There's no need . . ."

The chairman interrupted, "I agree with you. The rank is basically immaterial. In 1968 the position was filled with a brigadier general and, while his performance was excellent, the prestige gained by his rank faded very rapidly after he completed the job. We will, therefore, confine our support of our recommendations to the qualifications of the individuals."

The first man, still looking at his memo pad, said, "Sir, under just the consideration of personal qualifications, I place before this committee the name of Brigadier General Howard C. Feldniel."

There were several nods around the room and murmurs of approval.

"He has an outstanding military record, highly decorated and graduated third in his class. His only negative quality, if you want to call it that, is that he gets so involved in his work that he is not aware of what is going on around him."

He was sure that his nomination would win and that would be good for his own career.

The young man at the end of the table stood up and with a raised, rapid

voice said, "Sir, I place before this committee the name of Captain Charles X. Neerg."

"Sit down," the chairman said. "This is not a high school class election and you will all have a chance to express your preferences and dislikes. Now continue."

Sitting, the young man said, "The captain is a graduate of Massachusetts Institute of Technology, with a master's degree in mathematics, has two tours in the Republic of Vietnam — the first with the 5th Special Forces when he won the Distinguished Service Cross."

One of the other men at the table broke in saying, "He is relatively young. It is hard to project the proper image at 26."

The younger man replied, "Age is not what I call a qualification. If it were the limiting factor, it should not be the lack of it, but the overabundance of it!"

"Gentlemen," the chairman again interrupted, "I would like us all to be civil so we can expedite the selection as much as possible. So far we have two names placed before us. Are there any others?"

The meek looking man behind the name plate "IE" simply said, "I think Warrant Officer Joseph E. Navills would be good for the position. He is not well educated like the other two gentlemen, but he has a lot of enlisted time and I think we all know that he could fit the requirements of the position quite adequately."

There were murmurs of concurrence.

"Are there any other names?" the chairman questioned. "Shall we put it to a vote then?"

The slips of paper were neatly folded as, one after another, they were passed to the chairman. As he opened each one, he marked the vote on his memo pad.

"Gentlemen," he said rising, "the majority of the votes cast are for the captain to replace Lieutenant Colonel

Egroeg. I'll leave it to the three persons nominating the replacements to notify the captain tomorrow. This committee will remain on call of the chairman. Good day."

All the men rose and after the chairman left the three men agreed to meet at the airfield operations the next afternoon to notify the captain of his selection.

The next day was clear and the three had arranged to be on the flight in which Captain Neerg was to fly the post commander to a conference several hundred miles away. The takeoff was delayed by slow refueling. This upset the captain, who was anxious to impress the commander. He skipped through his preflight in an attempt to make up lost time. This was observed by the committeemen. They agreed that indeed they had made a good selection.

After they were airborne the young man, proud that his nominee had been selected, handed the captain a letter that read:

Greetings:

You have been selected by the Accident Causation Committee to be the replacement for Lt Col George R. Egroeg. You are dead!
Chairman of the Board
DEATH,

MEMBERS
Preoccupation
Impatience
Inexperience
Inattention
Overconfidence
Childishness
Neglect
Irresponsibility
Self-medication
Cockiness
Self-reliance
Ego

There will be a replacement for each death in an aircraft accident and one of these board members may have a hand in selecting the "replacement." Don't let one of these members be the cause of your selection! ➤

SPO COR

BENT ROD CAUSES ACCIDENT

by Lt Col "Doc" Ply
HQ TAC/SEF

After 50 minutes of flight on a proficiency training mission, the C-7 landed and taxied back for takeoff. Immediately after liftoff, with the gear coming up, number 2 engine began backfiring severely. Power was reduced on the failing engine, but the backfiring continued. Shortly thereafter, the flight mechanic reported fire trailing behind the engine from the upper wing and flap area. The engine was shut down and both fire extinguisher bottles discharged. A return to the departure airfield was initiated from an altitude of 300 feet AGL and a successful single engine landing was accomplished. The engine fire, which went out prior to touchdown, caused extensive damage to the augmentor tube and wing flap area resulting in minor accident classification. Flight duration was approximately 4 minutes. Teardown of the engine revealed massive failure of the front cylinder row most probably caused by initial bending of the upper portion of the engine master rod. Severe damage to the front row pistons and cylinders permitted a large volume of fuel and oil to be expelled from the exhaust into the augmentor tube. Engine ignition ignited the mixture, producing an uncontrolled fire which was fed as long as the damaged engine was in operation. The fire was extinguished only after the engine was shut down as the fire extinguishing agent was not directed into the affected area. Failure of the master rod is believed to have been caused by a previous hydraulic (liquid) lock which bent the rod. Recip jocks are well aware that lower cylinders on reciprocating engines are susceptible to liquid lock. On the C-7 R-2000 engine, the forward row master rod is located on the number 6 cylinder which is at the 7 o'clock position. Stresses inherent in a liquid lock are sufficient to bend the master rod. Depot teardown report data for the past six years

indicate liquid lock damage to master and link rods occurred in four percent of engines examined.

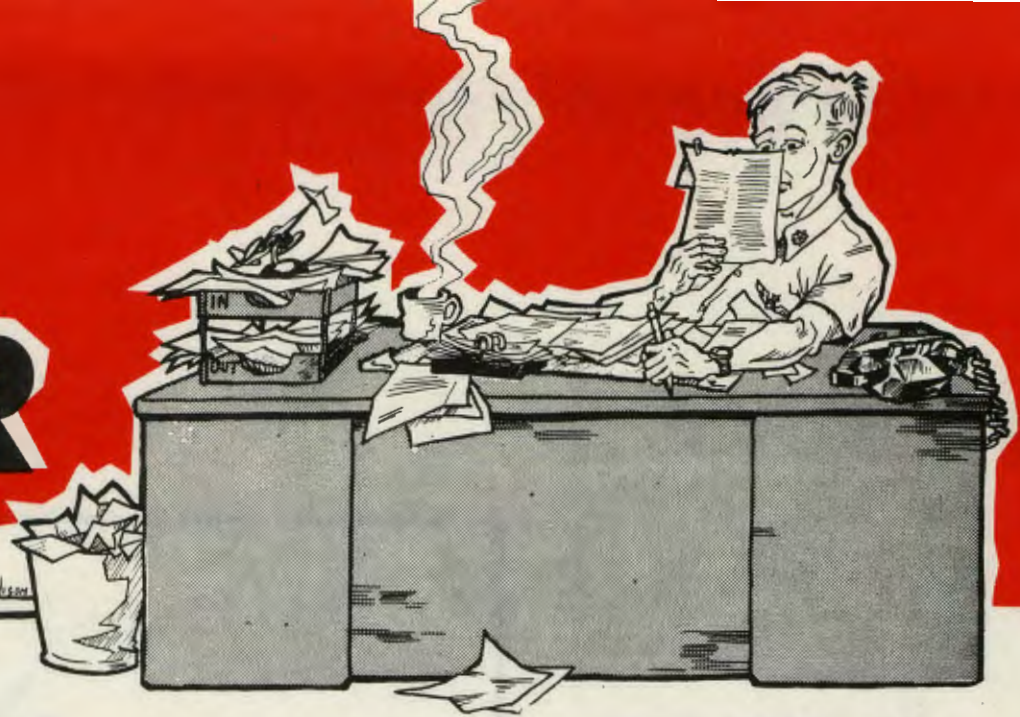
Ample guidance for detection and correction of liquid lock during engine start is provided in all recip aircraft Dash Ones. Damage from a liquid lock may not be detected for a considerable period, then suddenly manifest itself at a most inappropriate time. We can help each other avoid such unpleasant surprises by following tech data. Flying around with a bent rod could prove to be no fun at all.

UNCLEAR "CLEAR"

by Lt Col "Doc" Ply
HQ TAC/SEF

The fact that many common words are subject to misinterpretation was demonstrated during a recent T-29/C-130 confrontation. As the C-130 taxied across the runway to join a T-29 on the runup pad, the T-29 was requested to reduce power. The C-130 then taxied behind and pulled abeam the wing tip of the T-29 for runup. The T-29 completed engine runup and requested the C-130 to move forward to enable access to the runway for takeoff. The C-130 acknowledged, taxied forward, and requested the T-29 to call when clear. The T-29 proceeded to taxi and as the wing tip passed the C-130, the T-29 pilot called "clear," meaning the C-130 was clear to return to its previous runup position. The C-130 aircrew interpreted "clear" to mean it was clear to the rear of the aircraft and that runup could be resumed. The C-130 resumed engine runup, causing the T-29 to experience severe flight control buffeting. A flight control check performed by the T-29 crew disclosed binding of the ailerons. A later inspection discovered this binding was caused by failure of the right inboard aileron hinge bolt and aileron skin damage. Incidents such as this occur because we fail to communicate our intentions or hesitate to question the intent or terminology of others. Misinterpretation in this

NER



instance is particularly distressing as it wholly involved members of the airlift fraternity who comprise the literate element of the aviation community. If you can't trust another airlifter, who can you trust?

MONDAY MORNING QUARTERBACK

by Maj Aman – HQ TAC/SEF

What the pilot does when confronted with an inflight emergency is generally easy to Monday-morning quarterback. In many mishaps, it is apparent that what was done or not done made the occurrence inevitable. Obviously, it is not always a simple solution for the pilot at the time of the emergency. This, despite the fact that Dash One emergency sections are written to allow Monday-morning quarterbacking BEFORE the ill-fated play happens to you.

Basic Dash One guidance to the aircrew is straightforward:

1. Maintain aircraft control.
2. Analyze the situation and take proper action.
3. Land as soon as practicable.

The obvious question then becomes, what is the "proper action?" Section III of the Dash One lists "procedures to be followed to correct an emergency condition. These procedures will insure maximum safety for the crew and/or aircraft until a safe landing or other appropriate action is accomplished." Still, the situation may dictate modification of these procedures, and common sense and sound judgment must be exercised.

Within the past year, many incidents and at least one major accident revealed deviations from checklist emergency procedures. For example, we've had F-4 pilots

correctly react to a BLC malfunction light, but subsequently raise the flaps. In another example, an aircrew failed to lower the hook for an approach-end barrier engagement. This crew also failed to lower flaps which were available. As a result, the rollout was considerably faster and longer (all the way into the departure end MA1A).

Although there is no substitute for common sense and good judgment, the checklist and Dash One will normally provide you with the "proper action." Use it so you'll be around to Monday-morning QB the other guy.

MAINTAINING YOUR CONTROL

by Capt Dan Brown – HQ TAC/SEF

Recent accidents have brought out the importance of that note in the Dash One – Maintain Aircraft Control.

In one accident during an air maneuvering mission, the defending pilot concentrated so much on the attacking aircraft that he allowed his airspeed to deteriorate and he lost control of the aircraft.

In another accident, the pilot experienced a major emergency. In dealing with the emergency at hand, he failed to notice a fuel transfer problem and flamed out due to fuel starvation.

Have you ever seen the attitude indicator purposely failed in the simulator while the crew was involved in corrective procedures for some minor emergency? Ever seen them crash?

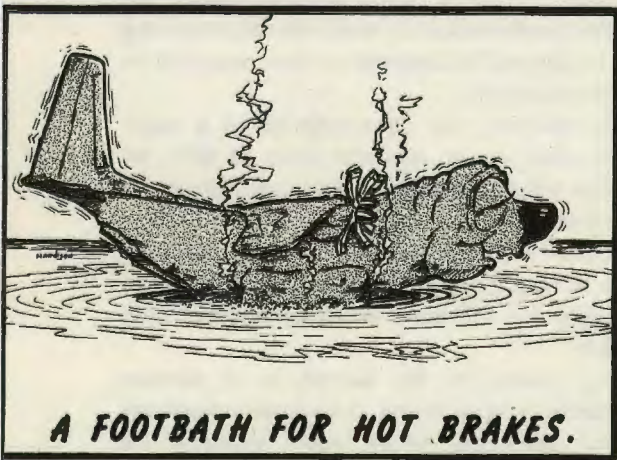
Maintaining control of the aircraft is of obvious importance during routine flying. It becomes paramount in emergency situations where habit patterns are interfered with. If you let aircraft control slide into a secondary role, we'll probably be hearing about you.

the best of the HURT HERKYS

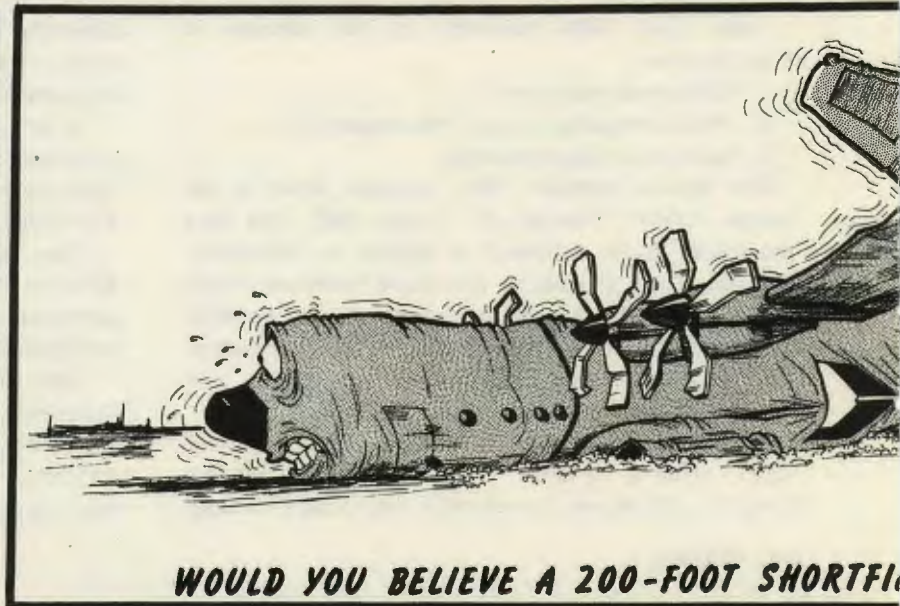
Stan Hardison dug out this portfolio of "Herkys" used in past issues to illustrate articles, Chock Talks and Tac Tips. For your enjoyment, here is the best (read: the only ones we could find) of the "Hurt Herkys."



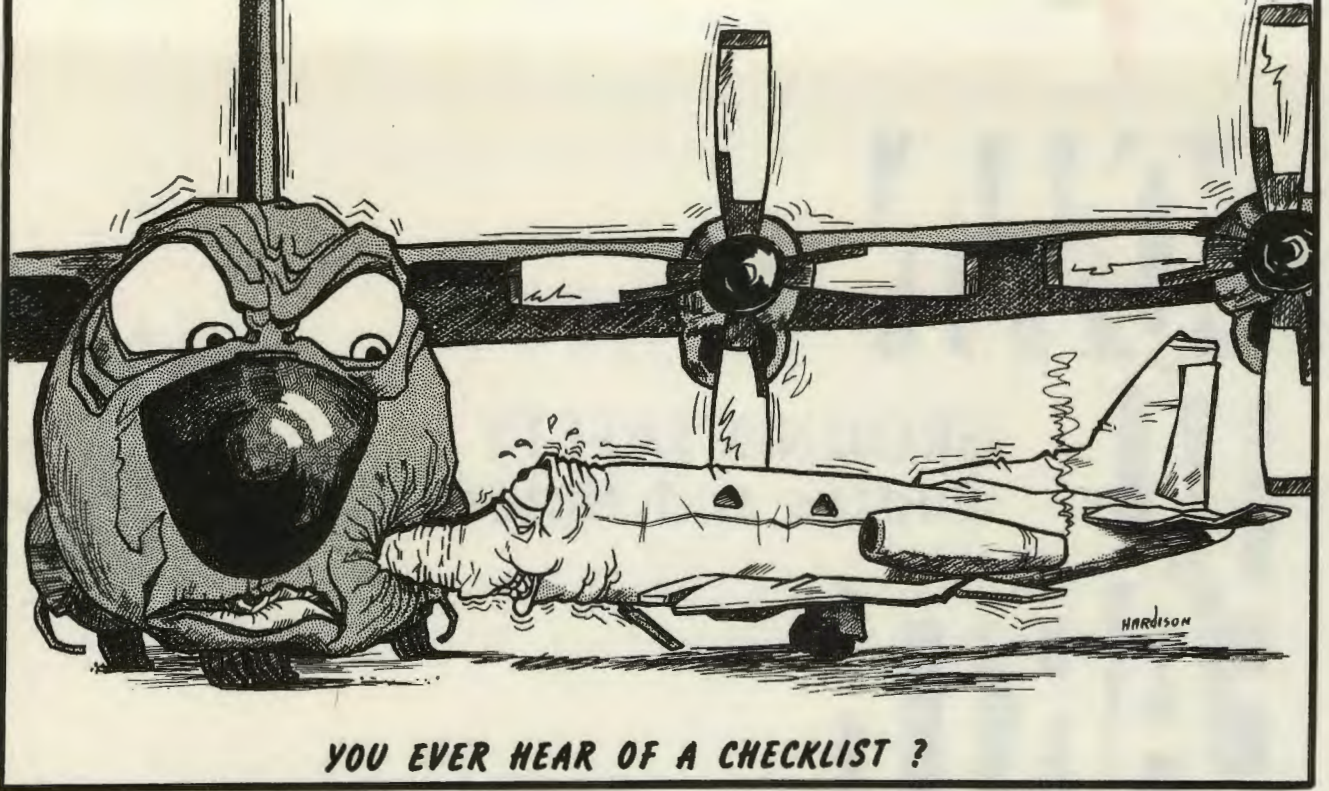
IF THEY DON'T GET YOU ON THE GROUND...



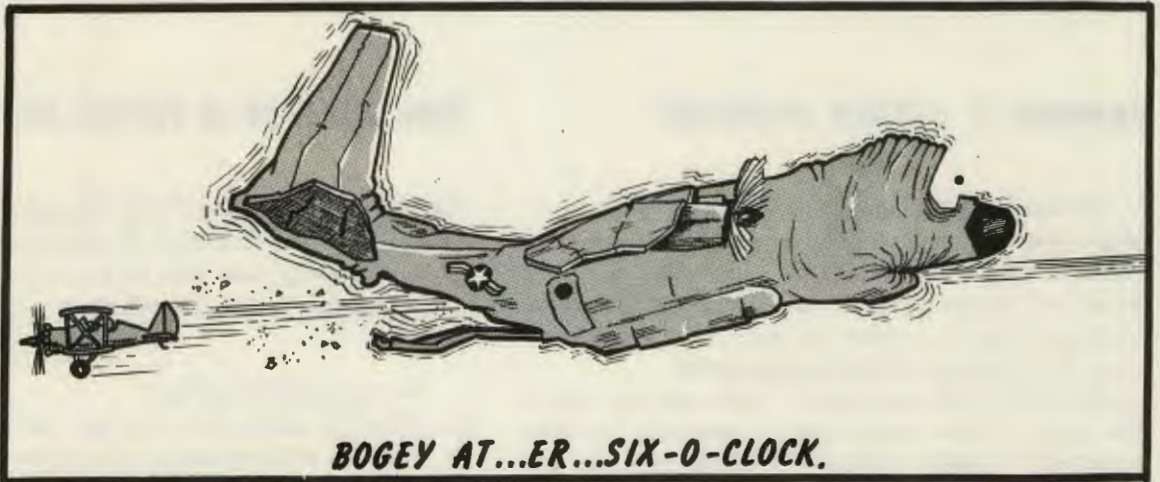
A FOOTBATH FOR HOT BRAKES.



WOULD YOU BELIEVE A 200-FOOT SHORTFI



YOU EVER HEAR OF A CHECKLIST ?



BOGEY AT...ER...SIX-O-CLOCK.



...FIELD LANDING ?



...THEY'LL GET YOU IN THE AIR.

DOWN TO EARTH

GROUND SAFETY Quotes and Notes



CAMPING & CARBON MONOXIDE

The real outdoorsman, whether hunter, fisherman, or simply one who loves camping, doesn't let a small thing like cold weather keep him at home. This guy (and sometimes his family) is out there every weekend doing his thing. If you're a winter camper, let us pass on one small tip — watch out for carbon monoxide!

During the past year, six Air Force members died at the hands of this silent killer — and four of these happened in tents, campers, and trailers. Since the exposure to CO is even higher during the colder months due to the addition of catalytic heaters to the long list of camping gear, it'll pay off to take a few precautions:

1. Never use a heater, stove, or lantern without proper ventilation.
2. Never burn charcoal in a confined space. The lack of smoke and flames may fool you, but charcoal fires can be deadly killers.
3. Check propane tanks closely to make sure no leaks exist. Don't leave unnecessary gas or propane tanks inside your tent, camper, or trailer — especially before you turn in for the night.
4. Don't leave your car or truck engine running unless you plan to drive it. Carbon monoxide can seep into your truck cab, car, or camper from exhaust leaks.

Don't let the silent killer invade your campsite — his visit is usually fatal.

HOW TO SPOT A DRUNK DRIVER

The California Highway Patrol Manual, "The Drinking Driver," lists the following 13 deviations from normal driving. You might use these flags to spot drunk drivers — not to apprehend, but to avoid them. It could save your life.

1. Unreasonable speed (high).
2. Driving in spurts, slow, then fast, then slow, etc.
3. Frequent lane changing with excessive speed.
4. Improper passing with insufficient clearance, also taking too long or swerving too much in overtaking and passing; i.e., overcontrol.
5. Overshooting or disregarding traffic control signals.
6. Approaching signals unreasonably fast or slow and stopping or attempting to stop with uneven motion.
7. Driving at night without lights. Delay in turning lights on when starting from a parked position.
8. Failure to dim lights to oncoming traffic.
9. Jerky starting or stopping.
10. Driving unreasonably slow.
11. Driving too close to shoulders or curbs, or appearing to hog the the road or continually straddling the centerline.
12. Driving with windows down in cold weather.
13. Driving or riding with head partly or completely out of the window.

NEW BUMPERS, PART II

There's another hitch in the new energy-absorbing auto bumpers. We reported in an earlier issue the hazard of attaching trailer hitches on these bumpers. TIG Brief recently pointed out another dangerous aspect of the new bumpers.

The civil police department of one western city reported several patrolmen were injured while trying to separate vehicles with locked bumpers. Several police

officers lost fingers and one lost a part of his foot when the bumpers shot out like a "spring-loaded ram."

Don't try to separate vehicles which have locked bumpers or attempt repair on a compressed energy absorbing system. Call a towtruck or have the system repaired by a mechanic.

One final tip: since most of these bumpers have a sealed system, give them lots of room in the event an accident results in a fire near the bumpers. The hot oil could cause the strut to explode and you may get hit with flying fragments. Good grief — fragged by a Ford!

DON'T BE A DUMMY

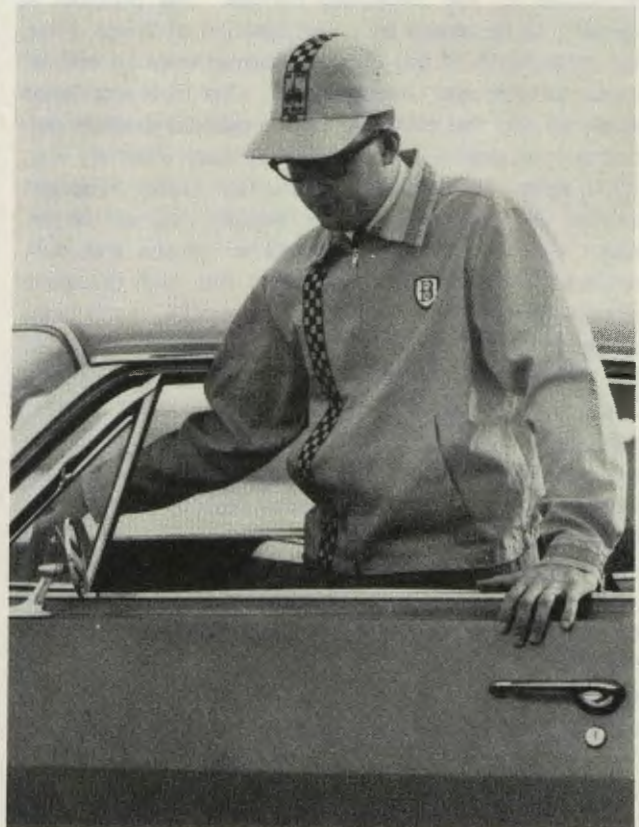
Courtesy SAFETY BULLETIN

In a recent study, researchers placed four foot high, black cloth covered dummies along the edge of a road. The drivers who took part in the night time study didn't see 14 percent of the dummies at 20 mph, and at 60 mph, they didn't see any of the dummies.

When the dummies were draped in gray, all drivers saw

them at speeds up to 30 mph, but at 40 mph 53 percent were not seen. Wearing white, the dummies were seen by all drivers going up to 50 mph, by 97 percent at 70 mph and by 53 percent at 80 mph. When the dummies were equipped with reflectorized tape, all were visible at speeds up to 80 mph.

The point of the research is clear, and if you have driven at night the gross results of the study were predictable. Night pedestrians who must walk where pedestrian and motor vehicle traffic is not well separated (such as on country roads) should wear light colored clothing banded with reflectorized tape.



F-100D/F EGRESS SYSTEM UPDATE

By Lt Col Jesse J. Henderson
HQ TAC/Asst Chief of Safety for Reserve Forces

Back when the active force still owned the F-100s, USAF began a program to upgrade the F-100 egress system to a zero-zero escape capability. The requirement was set for a system that provided a fast-opening, positively deployed canopy, coupled with a snubbed seat and larger rocket. In 1969, the active force transferred all of its F-100s to the Air National Guard. The parachute development proceeded as scheduled, but somehow the priority for the improved rocket development slipped, so the system could only be certified for ground level/120 KIAS capability — the same as we had before with the old BA-22 system. The new system did, however, provide some distinct advantages. With the snubbed seat, we no longer have aircrews tumbling prior to seat/man separation. We also have positive seat/man separation, which eliminates seat/man/chute involvement. There is one problem, however. We're experiencing injuries attributed to the parachute harness. This problem is thought to be caused by a combination of things. First, the adjustments of this standard harness leave us with an uncomfortable and undesirable fit. This fit is aggravated when we add the bulky, six-pound ballistic spreader gun device to an already stuffed parachute pack assembly (i.e., 7000 series HiTec timer, riser-cutter knife, minimum survival kit, personnel locator beacon, bail-out bottle, riser, and C-9 canopy). The added weight and bulk rendered the pack assembly so stiff that with the chute adjusted properly by the life support troops, it still tends to loosen to the extent the shoulder strap will come off the shoulder in an "over-the-shoulder" look situation. This presents an extreme hazard at opening shock. A 1973 conference hosted by San Antonio ALC did not result in any concrete solutions to the problem and the subject was closed out in a Life Support System Program Management Report in July 1974. But wait — before you start cursing the *@#! bureaucratic system — read on. It may work yet.

Recent accidents have prompted the system manager to take another look at improving the system. At the Worldwide Life Support Conference, 4-6 September 1974, the NGB Life Support Officer requested that San Antonio reopen the subject. The new Deputy Chief/Life Support System Program Manager readily agreed. A conference was held at San Antonio on 23-24 October 1974. Mr. Morris Ezell, San Antonio ALC/MMDT, presided and

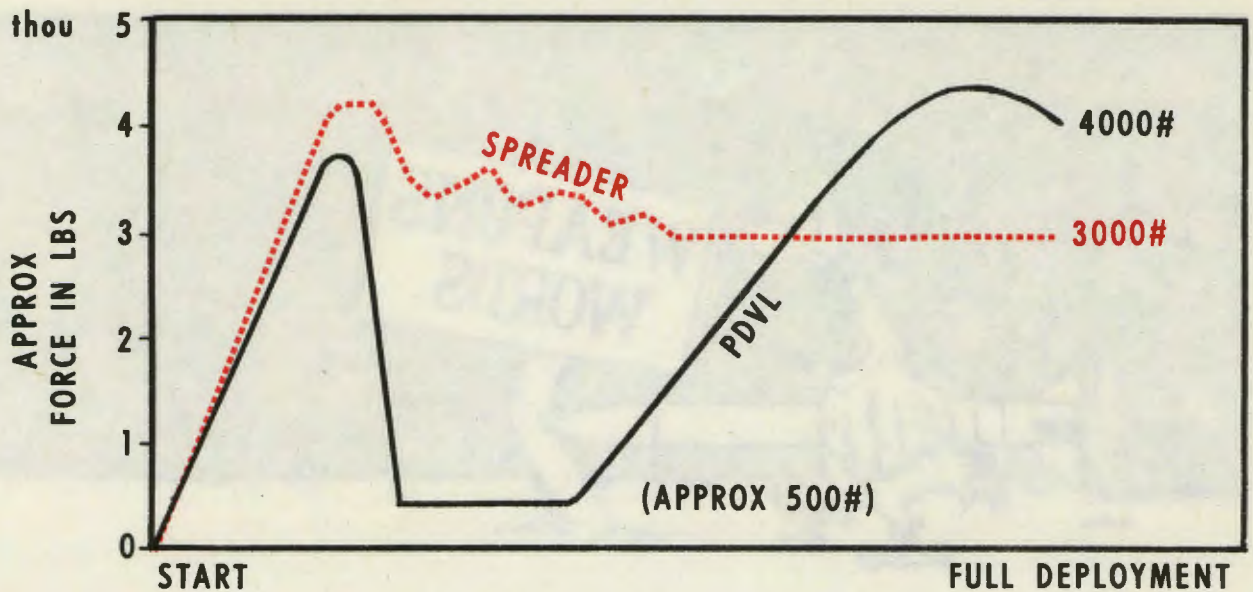
established the tone of the meeting by stating that, insofar as possible, San Antonio ALC would give the user what he wants. He stated that every decision that could be made at that level would be made during this conference.

The following agenda items were discussed:

- a. Removal of the ballistic spreader gun.
- b. Installation of the Pull Down Vent Line (PDVL) system.
- c. Reevaluation of the harness modification previously provided to determine whether these changes could be adopted.
- d. The possibility of removing some of the equipment previously installed in the parachute to reduce stiffness, which would render a better harness fit.
- e. The possibility of removing the ejection seat armrests.
- f. Review of status of the seat stabilization program.
- g. Need for testing the F-100 ejection seat using the new proposed CKU-6 rocket and PDVL.

The discussion progressed in a logical sequence with the idea of establishing a realistic course of action to reduce the injury threat and effect the improvements desired.

Since we cannot improve on the ground level/120 KIAS capability without the rocket being developed, the panel decided to go forward with a Class IV/A (Safety precedent) modification request to remove the ballistic spreader and replace it with the PDVL system. The performances of these two systems are, for practical purposes, the same except for the manner and severity in which the opening shock forces are applied to the pilot. The ballistic spreader initially forces the canopy into a flat circular configuration that has speedbrake characteristics. The PDVL system has short lines that hold the apex of the canopy down, allowing the canopy to inflate from the top down. This reduces the severity of the opening shock. The illustration below roughly depicts the difference in forces applied from initial opening shock to maximum force obtained during opening. It was concluded that most injuries occur due to all ill-fitting harness combined with the sustained force applied while the man is in transition from the unpredictable, undesirable position at the beginning of opening shock to the normal



fully-deployed position. With PDVL and regular C-9 canopy opening, the relaxation of force allows this transition to a more desired body position to accept the maximum force (i.e., feet into relative wind). The target date for getting the modification request before the CCB (Configuration Control Board) was 27 November 1974. Once approved, funding is required within 90 days, at which time the PDVL kit will be manufactured and the TCTO written. My best wag for modification to begin is the summer of 1975.

The proposed modification to the basic harness has been evaluated and the conclusion is there is no quick, simple modification that can be made. Any modification would affect the entire Air Force inventory. The panel acknowledged the adjustment problem and ASD/SML agreed to investigate the harness fit problem with the intent of developing acceptable solutions.

The stiffness of the parachute pack contributes to the fit problem, so the panel recommended the removal of some items now carried in the pack. This raises the obvious question: What is required? For instance, do we need to carry the oxygen bottle in our parachute today? Opinion from the Safety Center at Norton is that it could be removed from the parachute pack, but should be retained in the cockpit for emergency use. I solicit your recommendations from the field. Put them in writing, please, and mail them to me at HQ TAC/SER, Langley AFB VA 23665. All these items will be discussed at TAC and the NGB, and instructions will be forthcoming from the NGB.

The panel held reservations about removing the armrests, because of the hazard of exposing the unguarded striker plate that initiates ejection when the armrest is

raised. It was pointed out that this plate should be guarded regardless of whether or not the armrests are removed. A Class IV/A modification request is being prepared to cover the striker plate and remove the armrests.

The development of the new rocket that was discussed at the beginning of this article is nearing completion. Since the decision was made to remove the ballistic spreader, there was some discussion of cancelling the sled testing. However, it was agreed by the panel that the test should be accomplished with the following objectives in mind. First: determine whether the improved performance of this rocket would justify retrofitting the F-100 fleet. Second: incorporate a drogue chute on the seat to determine if this device would correct the yaw problem we now have prior to seat/man separation since this yaw contributes to undesirable body position at opening shock. Third: gather more data on the PDVL performance as it applies to the F-100 system. It was suggested that half the test be conducted with the present rocket and half with the new CKU-6 rocket.

The above action items were agreed to by all conferees as requiring expeditious action. A letter from the NGB citing their requirements for the foregoing items was provided. To assure the modifications progress on schedule, a follow-on "How-Goes-It" meeting will be held during February 1975.

While these mods are in the mill, it's up to all of us to think about our current egress system. Know the system and its limitations. Know your procedures. Bailout in the Hun (or any other aircraft for that matter) is not a comforting prospect — but, except for very rare exceptions, it beats the hell out of your alternatives. ➤



IDENTIFICATION AND MARKING OF INERT/EMPTY MUNITIONS

By SMSgt Willie C. Buckholts
Hq TAC/SEW

We, as 461XOs, have an inherent responsibility to implement positive measures that will insure all munitions used for displays, training, mementos, etc., and all munitions residue capable of being saved are thoroughly inspected and identified as being inert or empty.

To be specific, the responsibility for inspecting and certifying munitions as being "inert" or "empty" lies solely on authorized munitions inspectors assigned to the Inspection Section. So let's review personnel for qualification before assigning them as inspectors. "ONLY THE BEST QUALIFIED WILL SUFFICE."

Our guidance toward these safety goals is derived from TOs 11A-1-53 and 11A-1-60. Any munitions which are not specifically manufactured and stocklisted as inert or empty, must comply with the procedures of TO 11A-1-53. Briefly it states: "When explosives are removed from munition

assemblies or sub-assemblies by field units for the purpose of training or simulation, the words 'Empty or Inert' will be stenciled/stamped on the item. Additionally, 1/4" holes will be drilled through the item 90° apart."

The importance of these procedures and the obvious consequences had they not been accomplished, cannot be over-emphasized. It would chill the spine of Hercules if we only knew how many desk plates, souvenirs, etc., are proudly displayed in homes and offices that have not been properly inspected and marked. I wonder just how many of them are live and potentially dangerous.

How many times have we handled

a dummy cartridge, 20 MM, M51A1 series? Well, by implication of noun and tech order, it is an inert round used for ballast and training. But did you know that it may rupture violently under heat? LAMINAC plastic is the culprit. The cartridge case is filled with it and it expands under pressure. TO 11A-1-60, paragraph 4-4 gives specific guidance on how to treat these items prior to turning them into Property Disposal Office for sale.

Let's all take a close look at our program. Are we in full compliance? If not, we need to take immediate steps to expand and improve our procedures. "To err is human - and in many cases fatal!" ➤

TAC			WEAPONS MISHAPS			ANG				
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1	0	0	MISSILE							
3	23	33	NUCLEAR							

TACTICAL AIR COMMAND

AIRCREWMAN of DISTINCTION

aircrewman of distinction



CAPTAIN JACK E. BEAM
6th Special Operations Training Squadron
England AFB LA



Captain Beam was flying in the right seat of an A-37B as instructor pilot on a ground attack tactical sortie. During pullout from the third rocket delivery pass, the red light in the gear handle illuminated. Captain Beam assumed control of the aircraft and slowed to below the gear limit speed. He requested assistance from the wingman who reported that the gear appeared to be fully retracted. Captain Beam instructed the foreign student pilot to recycle the gear in an attempt to obtain a fully up and locked gear indication. The student, however, found that the gear handle could not be moved from the up position.

Although numerous checklist procedures and suggestions from the Supervisor of Flying were followed, the landing gear could not be lowered. Faced with a choice between ejection and a gear-up landing, Captain Beam elected to attempt a landing. He directed the student to read the checklist to insure all items were

completed prior to the gear-up landing. Particular emphasis was placed on insuring that the low-time student pilot fully understood the importance of correct and expeditious ground egress after the landing. Because of a low fuel condition, little time was available to foam the runway. A narrow strip of foam, only three feet wider than the distance between the A-37B pylon fuel tanks, was hurriedly prepared.

Captain Beam executed a perfect landing on the empty pylon fuel tanks and extended speed brake. Precise aircraft control kept the aircraft on the foam strip during the 1500 foot slide. Both crew men evacuated the aircraft without injury. Because of Captain Beam's superb aircraft handling, damage was limited to the pylon fuel tanks and speed brake.

Captain Beam's precise handling of this emergency qualifies him as this month's Tactical Air Command Aircrewman of Distinction.

TAC TIPS

Engage brain before starting mouth

CAUTION: WET PAINT

Everyone who flies the T-39 is aware of its "Dr. Jekyll/Mr. Hyde" personality. Its gentlemanly conduct in the air belies its monsterlike performance on a wet runway. You can almost see it grow hair while you're on short final. Reasons? Skinny hard tires, touchy brakes, no antiskid and no thrust reversers, to name four. A two-thousand-hour IP might know how to handle the Sabreliner on a wet runway, but those of us who fly it once a week equate Sabreliner slippery runway landings with practice bleeding — to be avoided at all costs.

Situation: Takeoff on a wet runway. At about 100 knots, multiple birdstrikes (seagulls) and immediate ground abort. Five thousand feet of runway remaining... throttles to idle then left engine shut down to decrease roll. Brakes. Bam! Right main tire blown. Twenty-five hundred feet remaining. Right engine shut down. Aircraft finally stopped with 800 feet remaining. Whew! Why did the tire blow? Heavy-footed pilot, you say? Not necessarily. The right main skidded on the centerline stripe and blew when it contacted the bare runway.

Just to jingle your memory a little, a note in the T-39 dash one says:

Painted areas on ramps, taxiways and runways are significantly more slippery than nonpainted areas. Painted areas serve as condensation surfaces, and it is possible to have wet, frosty or even icy conditions on those areas when the overall weather condition is dry. Therefore, use caution when taxiing over these painted surfaces and when lining up for takeoff because of the possibility of skids and loss of control occurring.

...interest items,

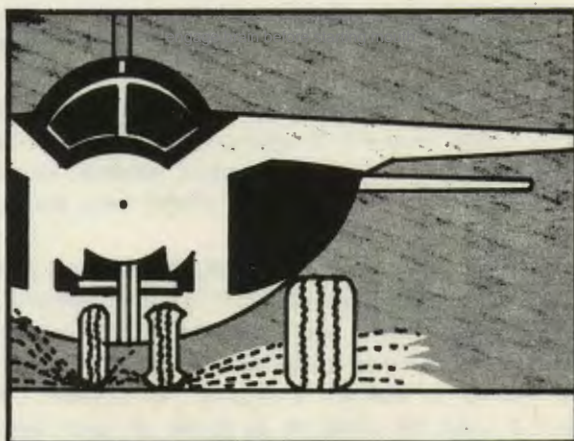
This little tip applies to all aircraft drivers, but especially you "Mr. Hyde" operators. Watch that wet paint.



TIRE TALK

Aircrew and maintenance personnel may soon be talking about tires that provide a second dimension in safety. "Chined" tires are molded with a flange on the sidewall near the tread and are designed to deflect water sideways at low angles. This may not sound good to pedestrians; but to F-111 drivers it may mean a solution to many aborts and runway flameouts.

When equipped with conventional aircraft tires, the F-111 nose gear sprays water from wet runways into the engine inlets during takeoff roll. In a recent test, a chined



mishaps with morals, for the TAC aircrewman

tire was mounted beside a conventional tire on a nose gear assembly, and eight high-speed runs were made on a water-covered runway.

No troubles occurred with the engine on the same side of the aircraft as the chined tire. However, the engine on the side with the conventional tire experienced compressor stalls or afterburner blowouts on six runs.

Chined tires may still be many months away, but they will help tame the wet runways.

Courtesy Airscoop

WINDSCREEN RAIN REPELLENT

Winter's here, and with it, lower visibilities. Ground fog, low ceilings and blowing snow all gang up on the poor pilot to throw off his ability to see during takeoffs and landings. And if that's not enough, there's another hazard to flight visibility our intrepid airman faces — water on the windscreen.

Besides just cutting down on forward visibility, a wet windscreen induces a refraction error that can make things appear lower than they really are. The reduced transparency causes the eye to perceive a horizon below the true one. The shape and pattern of the ripples on a wet windscreen can also cause objects to appear lower than they really are. The cumulative error can cause the unwary pilot to visualize a horizon as much as 5 degrees lower than actual. (AEROSPACE SAFETY, Feb 1972).

Conventional methods of clearing the windshield aren't completely effective. Just like your car, windshield wipers can streak and the max airspeed for wiper operation can sometimes leave you with a rain-streaked windscreen and resulting low visibility.

In response to the problem, Sacramento Air Logistics Center's Service Engineering Division tested rain repellent products on many aircraft windscreens under various conditions.

Their final selection was REPCON (Rain Repellent and Surface Conditioner), Federal Stock Number 6850-139-5297. REPCON uses an isopropyl alcohol

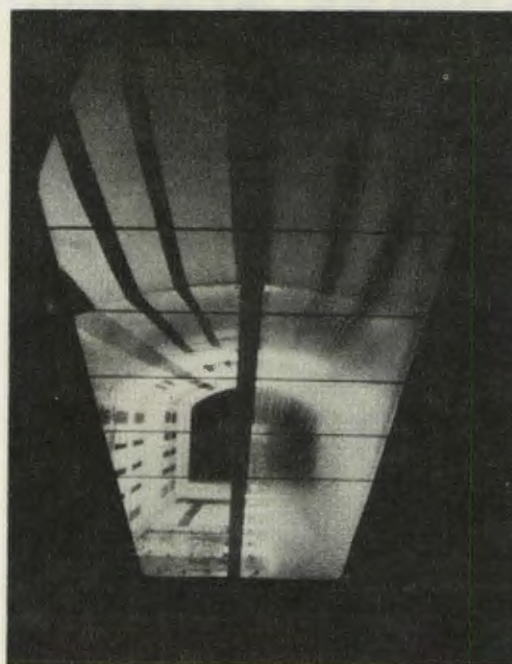



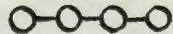
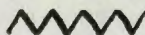

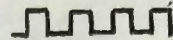
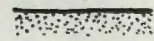
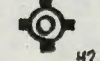
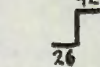

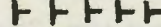










Photo taken during A-10 windtunnel tests. This shot, taken at zero airspeed, shows the increased visibility through the treated left side of the canopy.

carrier with a silicon wetting agent. It is applied manually with a soft cloth. The alcohol evaporates and the wetting agent remaining is then polished with a clean dry cloth. The windscreen is left very smooth and water beads on its surface. The slope of the windshield and a small amount of wind over the screen blows these "beads" off. Windshield wipers enhance its performance even more. Normally, one application is good for about 50 flight hours, but during continuous rainy weather, REPCON should be applied each 25 hours. The stuff is cheap — about ten cents per application, and is approved for all aircraft windshields and canopies made of either glass, plexiglas, or polycarbonate.

If you haven't heard of REPCON, you might look into it. It could even the odds up a bit for our foul weather fliers.

nbols**symbols**symbolssymbol

The following quiz is designed to test your familiarity with Flip document symbology. The first 11 symbols are found in the en route charts, 12 through 14 are from the IFR en route supplement and 15 through 20 may be found in the approach books. Draw a line from the symbol to the answer in the right column that best describes the function of the symbol. If you get less than eight, you must be due your annual instrument refresher course. Eight to twelve correct answers gets you a grey instrument card. If you manage to WAG 12 to 16, you're cleared for takeoff. More than 16 right? What are you doing this dumb test for – you should be working on a real test for publication in TAC ATTACK. Any takers?

- 1 
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- Substitute route structure
- Published ILS available
- FIR boundary
- VOR changeover point
- DME fix
- Air route traffic control center
- Military IFR route
- Airfield radar capability
- Lighted obstruction
- VASI lights
- Standard touchdown zone lighting with sequenced flashers
- Rotating airfield beacon
- Non-compulsory reporting point
- Joint civil-military aerodrome
- Weather radar and less-than-continuous PMSV (pilot to metro service)
- Aerodrome covered by and maintained USAF/USN NOTAM file
- Helicopter landing areas
- Unusable or closed route segment
- Minimum crossing altitude
- VORTAC



TAC SAFETY AWARDS

Crew Chief Safety Award

Airman First Class, Dennis E. Allen, 35th Organizational Maintenance Squadron, 35th Tactical Fighter Wing, George Air Force Base, California, has been selected to receive the Tactical Air Command Crew Chief Safety Award for this month. Airman Allen will receive a certificate and letter of appreciation from the Vice Commander, Tactical Air Command.



Maintenance Safety Award

Master Sergeant Crittenden L. Guthrie, 130 CAMRON, 130 Special Operations Group, West Virginia Air National Guard, Kanawha Airport, Charleston, West Virginia has been selected to receive the Tactical Air Command Maintenance Safety Award for this month. Sergeant Crittenden will receive a certificate and letter of appreciation from the Vice Commander, Tactical Air Command.



Ground Safety Award of the Quarter

First Lieutenant William B. Beechel, 366 Avionics Maintenance Squadron, 366th Tactical Fighter Wing, Mountain Home Air Force Base, Idaho, has been selected to receive the Tactical Air Command Ground Safety Award for the third quarter 1974. Lieutenant Beechel will receive a certificate and letter of appreciation from the Vice Commander, Tactical Air Command.



TAC ATTACK INDEX

1974

1974 TAC attack Index

ABBREVIATIONS:

CT - Chock Talk
 DE - Down to Earth
 PB - Phys-Biz
 SC - SPO Corner
 TT - TAC Tips
 WW - Weapons Words

TITLE	MONTH	PAGE
ACCIDENTS		
JUST 200 FT MORE . . .	MAR	13
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TT - TRUE OR FALSE?	JUN	16
TT - I ₈ BEWARE!	SEP	10
SC - F-100 - WE SHALL OVERCOME	SEP	24
TT - F-4 SPLIT FLAPS	SEP	11
TT - FLY THE AIRPLANE	SEP	24
BACK COVER - FLEAGLE	OCT	22
BACK COVER - FLEAGLE	OCT	23
THE REPLACEMENT	OCT	BC
	NOV	BC
	DEC	12
AERO CLUB		
SC - AERO CLUB - LET'S HEAR IT FOR THE SHOULDER HARNESS	JAN	14
AIRCRAFT		
A-1		
SKYRAIDER	NOV	18
A-7		
SC - A-7D WING LEADING EDGE DAMAGE	MAR	7
FRONT COVER	JUL	FC
AIRCREW MEN OF DISTINCTION	SEP	29
AIRCREW MAN OF DISTINCTION	OCT	16
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THE A-36 DIVE-BOMBING MUSTANG	AUG	24

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CT - C-130 DROPCLOTH	FEB	18
CT - C-130 ELECTRICAL GHOSTS	MAR	10
CT - FUEL CONTAMINATION	MAR	11
JUST 200 FT MORE . . .	MAR	12
TT - PARACHUTES FOR ARMY JUMPMASERS	APR	12
TT - USE YOUR SENSES	APR	13
SC - C-130 FLAMEOUT/POWER LOSS	APR	21
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SC - TWO, THREE, FOUR ONE . . .		
THEN THERE WERE NONE	MAY	8
TT - C-130 TAXI ACCIDENT	MAY	20
CT - C-130 UNCOMMANDED CPI DEPLOYMENT	JUN	14
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SC - MORE ON BLOWN TIRES	JAN	15
SC - 16 LB OVERBALANCE (TO 1F-4-978)	JAN	15
SC - GET IT ON THE GROUND	JAN	15
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SC - F-4 UTILITY FAILURE PLUS	FEB	13
CT - F-4 FUEL FIRE	FEB	18
CT - DOUBLE JEOPARDY	MAR	10
TT - THIS ONE'LL WATER YOUR EYES	APR	12
TT - F-4 ALPHONSE & GASTON	APR	13
TT - F-4 FOD	APR	13
CT - YOU NEVER KNOW	APR	18
SC - F-4 FUEL CELL RUPTURE	APR	20
SC - F-4 FUEL WEBB FOLLOW UP	MAY	8
CT - F-4 FOD	MAY	14
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TAC TALLY



TOTAL ACFT. ACCIDENTS ▶
MAJOR ACFT. ACCIDENTS ▶
AIRCREW FATALITIES ▶
TOTAL EJECTIONS ▶
SUCCESSFUL EJECTIONS ▶

TAC		
OCT	Thru Oct	
	1974	1973
1	19	36
1	15	24
0	9	15
1	14	22
1	12	14

ANG		
OCT	Thru Oct	
	1974	1973
2	16	16
2	16	11
1	8	1
0	6	8
0	4	7

AFRes		
OCT	Thru Oct	
	1974	1973
0	6	1
0	4	1
0	2	2
0	2	1
0	1	0

TAC'S TOP "5"

FIGHTER/RECCE WINGS		
ACCIDENT-FREE MONTHS		
79	33 TFW	TAC
46	4 TFW	TAC
31	127 TFW	ANG
28	31 TFW	TAC
26	121 TFW	ANG

AIRLIFT/REFUELING WINGS		
ACCIDENT-FREE MONTHS		
112	440 TAW	AFRES
111	136 ARW	ANG
75	316 TAW	TAC
64	126 ARW	ANG
63	463 TAW	TAC

SPECIAL UNITS		
ACCIDENT-FREE MONTHS		
142	130 SOG	ANG
122	2 ADGP	TAC
103	143 SOG	ANG
91	DET 1, D.C.	ANG
67	135 TASG	ANG

MAJOR ACCIDENT COMPARISON RATE 73-74

TAC	73	5.0	5.1	5.1	4.2	4.3	5.0	4.8	4.4	4.2	4.1	4.2	4.1
	74	4.5	5.4	5.6	4.5	4.0	3.6	3.0	3.1	3.0	2.9		
ANG	73	8.5	8.6	6.8	5.0	4.7	5.1	4.3	4.2	4.6	4.2	3.9	3.7
	74	7.2	8.6	8.2	5.7	6.9	7.0	7.6	6.6	6.3	6.4		
AFRes	73	14.9	6.7	4.1	3.2	1.8	1.5	1.3	1.1	1.0	.9	.9	.8
	74	0	16.4	8.9	8.8	6.7	5.3	5.8	5.0	4.3	3.8		
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

FLEAGLE

