

TAC ATTACK

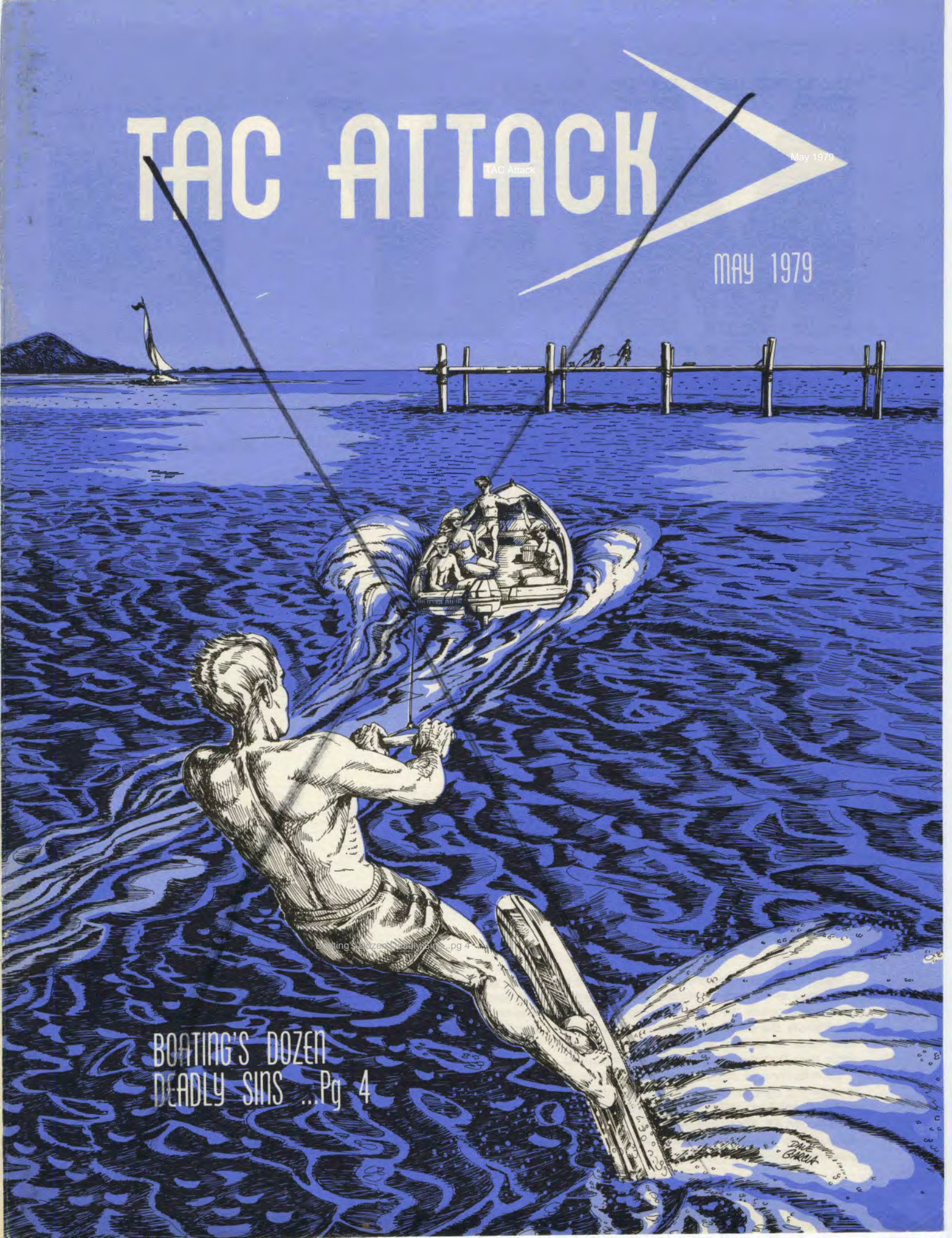
TAC Attack

May 1979

MAY 1979

BOATING'S DOZEN
DEADLY SINS ...Pg 4

DAVE
BARUA



MAY

READINESS IS OUR PROFESSION



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TACRP 127-1

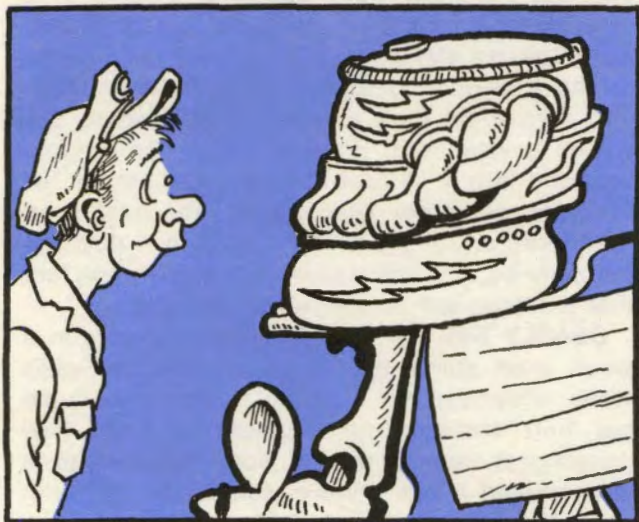
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Authority to publish this periodical automatically expires on 26 Jan 1980 unless its continuance is authorized by the approving authority prior to that date.

DEADLY SIN NO. 2: Buying a boat with too much power. Don't overpower your boat. Consult your dealer on what horsepower, motor it can take. The 16-foot runabout with an 80-HP outboard is a machine looking for something or someone to destroy.



DEADLY SIN NO. 3: Failing to let people know where you are going. Before taking a trip on water, tell someone on shore your destination, when you are leaving, when you plan to get there, and when you're returning. Then if you are overdue, they can give the Coast Guard or police the details. Be sure to call home if you change your plans. Many lost boatmen have turned up in a saloon, having never bothered to tell anyone of changes in plans.

DEADLY SIN NO. 4: Not taking proper fire precautions. The fumes from one cupful of gasoline spilled in the bilge pack the explosive power of four sticks of dynamite. Don't smoke while refueling. And be conscious that fire at sea is always a menace.



DEADLY SIN NO. 5: Going out in an underequipped boat. Equip your boat with essential gear -- anchor, oars, boat hook, extra line, life preservers, fire extinguisher, tools, and a first aid kit. Running lights are a must for nighttime operation. Two years ago, a boatload of folks put out to sea from Boston with no radio and only a carrier pigeon for communication. When seas began to rise, the frantic people released the bird. Eventually, the Coast Guard picked them up off the New Jersey coast in possibly the most underequipped boat imaginable. They were lucky to have survived.

Carry a Coast Guard-approved life jacket for everyone aboard. Insist that weak swimmers and nonswimmers wear them at all times, and that others wear them in hazardous weather conditions. Some boaters' reasons for not carrying life jackets are preposterous. During a Coast Guard safety check on Oregon's Willamette River last year, one cabin cruiser owner said he didn't carry preservers because, "They don't match the color of my boat."



boating's dozen deadly sins

DEADLY SIN NO. 6: Ignoring the weather. Check Weather Bureau forecasts before taking your boat out on open water. And take a transistor radio along to keep posted on rapidly changing weather conditions. Call the Coast Guard before casting off; they'll tell you whether it's blowing or not. In the fall of 1967, forecasts for Lake Michigan called for squalls and close to 50-MPH gusts. Despite the warning, hundreds of fishermen were on the lake trying to pull up coho salmon when the storm hit; and the Coast Guard had to pull almost 300 boatmen out of the drink.



DEADLY SIN NO. 7: Not knowing where the boat is. The Coast Guard gets far too many phone calls requesting mileage and sea routes, which only means that operators of small craft either have no charts for reference or don't know how to read them. Says Lt. Cmdr. K. G. Wiman, a Coast Guard officer who has watched many an amateur boatman set sail: "He often doesn't know if the chart is marked in feet or fathoms. He sometimes doesn't even know if there is such a thing as a chart. But off he goes, and we pray we will be able to find him."

DEADLY SIN NO. 8: Not knowing the rules of the road. There are no white lines down the middle of channels. A weekend sailor has to know

just as much about the rules of the road as the skipper of a seagoing freighter, because sometimes their paths do cross and each one has to know what the other is going to do.

DEADLY SIN NO. 9: Overloading. Don't overload the craft. Keep passengers down to a safe number. Despite constant Coast Guard warnings, it's still an all-too-frequent occurrence to see a skipper loading eight or nine children into a rowboat built for three and heading out across a local lake. In June 1967, nine people crowded into a 16-foot outboard and set out for the open sea from York, Maine. The boat soon foundered and eight of the nine died -- doomed not only by the overloading but also by the fact that the boat had no life jackets aboard!

DEADLY SIN NO. 10: Letting passengers in a small boat stand up, or sit on the gunwales while underway. It's amazing how many people get hurt standing up in pleasure craft. Few passengers realize that a boat takes quite a shock when it hits a wave, sometimes suffering a jolt strong enough to break an ankle.

DEADLY SIN NO. 11: Speeding and maneuvering violently in a careless manner. The Coast Guard circulated a lurid poster a few years ago reading, "Wanted: For Murder and Suicide -- Water-Borne Hotrods." The Coast Guard is really out after "Hot-rudders" -- the service's name for hotrodders. Particularly in narrow channels, speeding boats churn up huge washes, swamp small craft, tangle fish lines, and endanger swimmers. Remember, you are legally liable for any damage caused by your wake.

DEADLY SIN NO. 12: Not using common sense at sea. Use your head. Sea water and booze don't mix. Don't horse around. The Coast Guard has actually caught kids playing chicken in outboards. Water skiing is a particular boating activity where more common sense should prevail. Not long ago a boatman on the Lake of the Ozarks, Missouri, had a water skier in tow. Looking back to watch how the skier was doing, he slammed into another power boat at 30 MPH and was decapitated in the collision.

And a baker's dozen final sin for good measure: Failure to respect the sea. Sums up Admiral Morrison: "A car is always on dry land; a boat in the water is in an ever-changing medium. Wind and wave make the rules there. A boat has no brakes; it can't stop on a dime. So, most important, respect the sea. If you don't, she's liable to grab you and make you respect her." ➤



JOE, WHO DA HECK'S FLEAGLE ?

Willie & Joe

By Bill Mauldin

No, Fleagle wasn't around when I started drawing Willie & Joe. But they sure helped me get my Fleagle T-Shirt last month.

TAC ATTACK is one of the best flying safety magazines in the world. One of the reasons it's up there on top is the support of you readers in submitting articles on any aspect of safety or operations---flight, weapons, or ground.

Did you know that your article reaches over 140,000 people in the Air Force, Army, Navy, and Marine Corps, as well as military personnel in

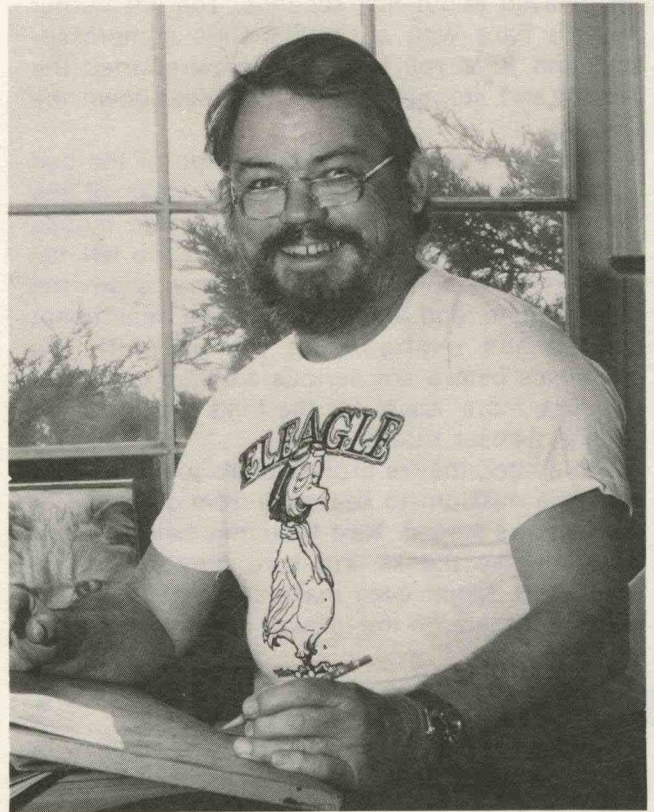
over 20 foreign countries? Not only that---if your article is chosen "best of the month," you'll receive the internationally famous, totally rust-proof Fleagle T-Shirt. This shirt is even recognized as proper formal attire in the most exclusive circles.

I know you've got something important to say to the other readers, so don't delay. Write that article today and send it to:

Editor, TAC ATTACK
 HQ TAC/SEPP
 Langley AFB, VA 23665
 Atvn 432-2937/3373

Good Luck

*and my friends at TAC ATTACK
 are waiting to hear from you.*



TIPS

TAC tips

An obstinate man does not hold opinions; but they hold him.

Pope

GOOD SHOW!

Everytime you get ready to slip the surly bonds, I'm sure you notice the fire department vehicles on standby near the runway. The thought occasionally runs through your mind that it's a waste of time to have them out there--after all, nothing serious ever happens, Right? Not necessarily.

An F-4 was on takeoff roll. After AB was selected, the right AB lit normally, but the left AB delayed about five seconds. The left burner then lit hard with a simultaneous compressor stall and RPM roll back. The crew aborted the takeoff and stopped about 1500 feet down the runway.

Since all appeared normal, except for the bad engine, the crew elected to taxi clear of the runway. After about 1500 feet of taxi, mobile notified the crew of a small fire in the left tail pipe. They stopped the aircraft, shut down the other engine, and egressed. The fire department arrived and extinguished the fire with dry chemicals before any serious damage could occur. One more "save" for the folks in the big red (or chartreuse) trucks.

Remember, they're professionals just like you--with one mission--to keep you from getting your tail feathers singed. Next time they help you out, why not say thanks; I'm sure they would appreciate it. Might even make some of those hot hours out there on the taxiway seem worth it!

SCORE: DASH 60s 1
PHANTOMS 0

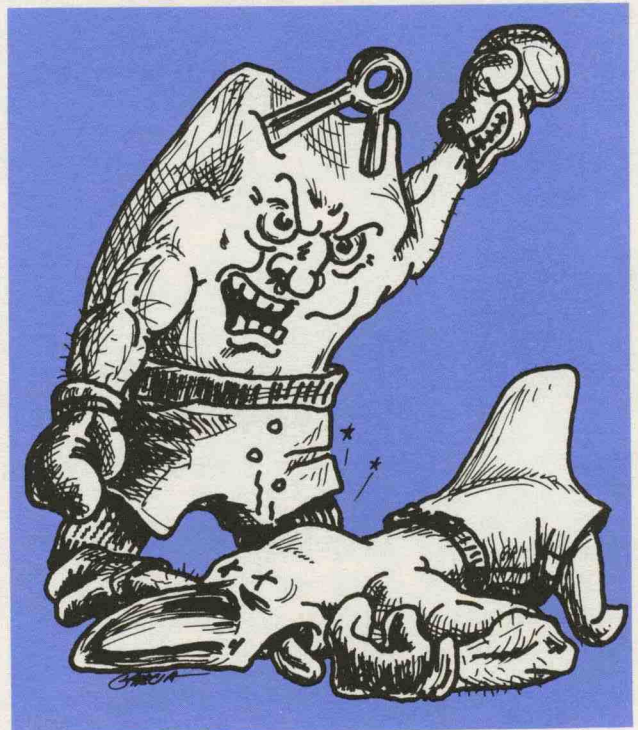
The F-4 mission had proceeded normally. After RTB, the pilot made several patterns and finally full stopped. After landing, the right engine

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

was shut down and the aircraft taxied back to the parking area. Halfway through the turn into its parking spot, nosegear steering and brakes were lost. The Phantom was stopped when it struck a Dash 60. Prior to shutting down the number one engine, the pilot noted the utility hydraulic pressure was zero.

A small hydraulic leak was found at the down port of the nosegear drag brace actuator. A leak that would not have been noticed on preflight or in the quick check area because the hydraulic fluid had not warmed up by then.

With the right engine shut down, the right utility pump and PC-2 system fell to zero. This



activates the "Check Hydraulic Gauges" and "Master Caution" lights. A subsequent failure in PC-1 or the utility system will go unnoticed until something quits--unless of course you look at the gauges.

Now I'm a firm believer in the "if they wanted me to look at the gauge they would have put it where I could see it" philosophy--to a point. With the design limitation in the hydraulic failure warning system, you've got to look at the gauge whenever one system has had a "failure." Whether that "failure" is real or induced by an engine shutdown, a look now and then is necessary. It might also be a good idea to keep your taxi speed down--it takes time to analyze and react to a problem. The slower you're going, the more time you have.

SCORE: PHANTOMS 0 (still)

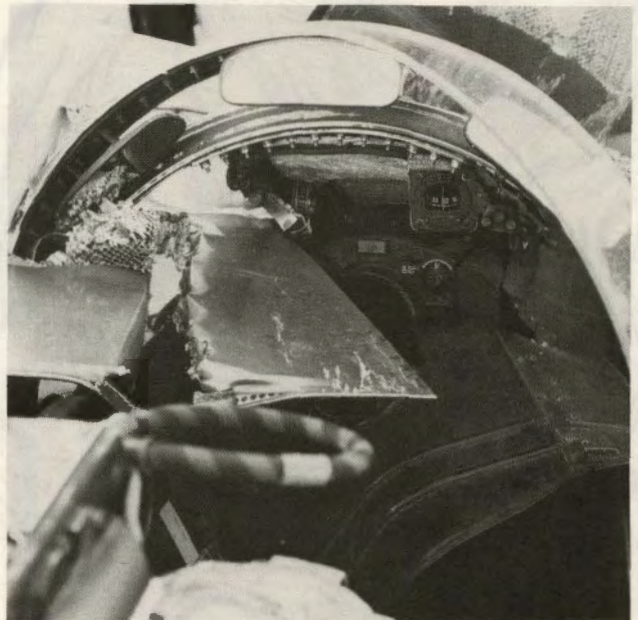
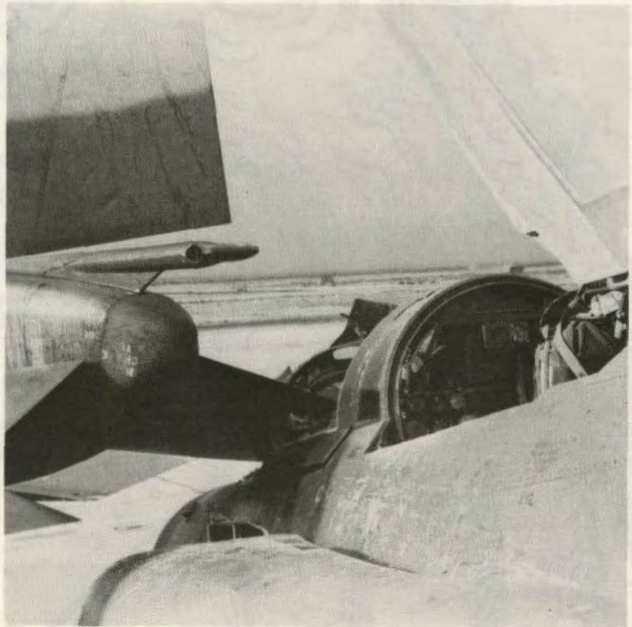
What's your particular technique for pulling out of the chocks? Run'em up 'till the engines can be heard two miles away or just barely add enough power to get the bird moving at a snail's pace? Most everyone probably uses a technique that lies in between these two extremes. Whatever method you do use, have you ever stopped to think of what might happen if the brakes and nose gear steering don't work? The photos at right show what happened in one incident.

After pulling out of the chocks at a speed estimated to be 5 MPH, the pilot checked the nose gear steering and brakes---neither worked. Utility pressure was normal, and there weren't any warning lights illuminated. The pilot pulled his emergency brake handle and got no response (beginning to look like it wasn't his day). The pilot then asked the backseater to pull his handle and apply the brakes---brakes were still inoperative.

The aircraft continued a slow roll forward and impacted another aircraft in the next parking row. Before the collision, the pilot had shut down the engines. The left side of the radome contacted the right stabilator of the parked aircraft. The stabilator slid up the radome of the aircraft and sliced through the left windscreen. The aircraft stopped with the stabilator about three inches from the pilot's chest---sometimes it pays to be skinny.

The steering failed because of two broken wires in the system, and the normal brakes failed because an inoperative anti-skid control valve prevented utility pressure from reaching the brakes. A design deficiency in the brake control valve also prevented the emergency brakes from working.

The whole sequence was probably a one-in-a-million happening, but the results of this incident are just more reasons for you to keep your taxi speed to a minimum at all times.



ELECTRICITY



If you have ever passed close to a high tension power transmission line, a quiet pause near one of the support towers would serve to make those "Danger -- High Voltage" signs more meaningful. The crackling and buzzing sound from the wires where they pass over the insulator will set the hair on end across the back of your neck. Most of us have seen movies where great monsters have been destroyed when the "hero" trapped them between high voltage electrical towers. We've been conditioned to respect the dangers of high voltage electricity but too often ignore household electrical current and its dangers.

Most of the time we deal with "low" voltage electrical equipment, which operates on power stepped down by transformers. We often disregard the hazards of 220 or 110 volt alternating current because it doesn't bring forth the picture of "high voltage arcing" that we have become familiar with. Low voltage current is something we live with every day around our work place and home. It provides power for

AND YOU !

operating tools and office machines. We and our families use low voltage to wash and dry clothes, make coffee, or trim our bushes and shrubs. Yet, someone who feels "safe" from "harmless low voltage" gets injured almost every day because he or she failed to follow the basic law involved in working with electricity. "Never allow your body to offer a path for electrical current flow."

Many of us do home repairs involving the replacement of electrical wall switches and receptacles without even considering the danger of the material we are working with. When an electrical system is energized, with the human body in a position to offer a path for the flow of current, the amount of current which will move depends upon only two factors: the resistance offered by the body, and the voltage available to push current through that resistance. (The human body offers little resistance.) The amount of "electrical shock" the body can resist without severe or fatal injuries depends on many conditions, and the severest results occur when current passes through vital body organs such as the heart. To get an idea of the effects of so-called "low voltage shock" let's examine what happens when 60-cycle alternating current at 110 volts passes through a person from hand to hand or hand to foot. As current flow gradually increases, the following effects become apparent:

● 1 to 8 MILLIAMPERES (A milliampere is one one-thousandth of an amp.) -- A sensation of shock, not very painful. A person can still let go because muscle control is not lost.

● 8 to 15 MILLIAMPERES -- Painful shock, but still the person can let go. The hazard up through this amount of current flow often comes from the so called "fright reaction" when the shock occurs -- falls from high places or

bumped heads causing unconsciousness are not uncommon.

● 15 to 20 MILLIAMPERES -- Loss of muscle control begins, and the person cannot let go in spite of the painful shock. At 25 MILLIAMPERES the person will be frozen at the point of contact.

● 20 to 50 MILLIAMPERES -- Severe muscle contractions including those muscles controlling breathing. In addition to difficulty in breathing, the victim may become unconscious.

● 50 to 75 MILLIAMPERES -- Almost certain unconsciousness.

● 75 to 100 MILLIAMPERES -- As current nears 100 MA, the person is almost certain to die. Ventricular fibrillation sets in, the heart no longer circulates blood in the body, and even after the current is cut off, no pulse can be detected. Emergency treatment must be started to restore the rhythmic action of the heart.

● .2 to 2 AMPERES -- This intensity of flow will paralyze the nerves near the diaphragm or the nerve center at the base of the brain. Breathing will be cut off.

● 2 AMPERES and over -- The person will suffer severe burns due to "frying" of the body fluids and to the external arcing at the point of contact. Also, internal burns of the slow-healing type occur. A peculiar thing sometimes happens when current flows above 10 amperes occur for very short periods. The severe muscle contractions the person experiences may prevent ventricular fibrillation; and after the shock ceases, if proper first aid is administered soon enough, the individual may survive if the heart rhythm is restored. The information above is only a general guide. There will be variations due to individual circumstances and the physical condition of the victim.

Some significant points of information you should know are:

electricity and you !

- If your body becomes part of an electrical circuit, you will get an electrical shock.

- Your body will become part of the circuit if you come in contact with both a source of electrical current and a ground while your total resistance is low enough to allow current flow.

- Current flow is what injures or kills you -- voltage only pushes the cur-

rent through your body resistance.

- Body resistance varies because of the changes in skin resistance from one body part to another. This is due to the skin thickness and surface moisture.

- The seriousness of electrical shock depends on several things. The voltage, body resistance, amount of current flow and its path through the body, duration of contact, and the condition of body organs in the current path.

- Low voltage can be more dangerous to you than high voltage. The current required to operate just one 100-watt light bulb is eight to ten times the amount that is needed to kill you.

Now, how do you protect yourself and others from electrical shock?

Your attitude! Respect the power of electricity. If you don't know what you're doing, leave electrical repairs to someone who does.

Don't work on an energized circuit! Shut off the power to the area where you're working and confirm that it is off.

Follow instruction or repair books.

Keep yourself and your equipment dry. Moisture is your enemy when you work with electricity.

Use the right tool for the job. Use insulated tools. Don't try to "fool" a circuit by using a larger or heavier fuse than the one needed. Also, don't attempt to "bridge" a burned out fuse with heavier conducting material.

Be familiar with first aid procedures.

If someone else becomes a shock victim, don't join them. Don't become part of the circuit yourself. Turn off the power or manipulate the wire or victim with something you're sure is a nonconductor, for example, a solid wood pole.

●●●●●●●●●●

These preventive methods are for general information. More technical procedures are required and followed by professional electrical workers. If you aren't qualified to do the job, it's best to find someone who is. Sure it costs more, but what are you saving yourself if you end up flat on your back? ➔



CBers HAVE SHOCKING STATISTICS

Breaker, breaker one-nine. Got your ears on? Important advice from the Consumer Product Safety Commission (CPSC) could save you from a big 10-33, good buddies. (That's an emergency in case you didn't know).

More than half of all electrocutions reported to the commission involve CB or TV antennas. The electrocutions usually occur when the antenna contacts high-voltage power lines while being put up or taken down. In 1976, more than 100 deaths were associated with CB base station antennas. In many of the more severe injury cases, victims lost an arm or a leg.

To help reduce such accidents, the CPSC suggests these safety measures:

- Avoid putting antennas anywhere near power lines.
- Don't assume power lines are insulated. Most are not.
- Never work alone. Always have someone nearby, preferably a person who knows first aid for electric shock.
- If it is windy, or if the lawn is wet or muddy, don't install an antenna. Wind can blow an antenna into nearby power lines.
- If you must use a ladder, use one of wood, plastic, or fiberglass only.
- Unless you know how to install or remove the antenna yourself, it is best to get a professional for the job.

INSTALLATION TIPS

- Put the antenna together carefully and accurately.
- Tie off the antenna by wrapping a rope around the mast 8-10 times and secure the free ends to an immovable object located so that the rope will prevent the antenna from falling onto power lines.
- To raise a mast longer than 30 feet, mount a rope-threaded pulley on top of the antenna and loop the free ends of the rope over a tree



limb or a long 2x4 to pull the antenna up.

- Once the antenna is standing upright, securely fasten it to the side of the house with guy wires to reduce any sideways movement.

FIRST AID TIPS

- Learn how to treat electric shock injuries in case an accident occurs.
- Never touch a person suffering from electric shock because his or her body could conduct electricity to you. Instead, try to pull or pry the person away from the electrical source with a length of dry wood, rope, blanket or other non-metallic object.
- If breathing has stopped, use mouth-to-mouth resuscitation until a doctor or ambulance arrives.
- When calling an ambulance, tell the hospital that someone is suffering from electric shock so they bring the right equipment.

For additional information about safe installation and removal of antennas, get a copy of "10-33 CB Alert Sheet" by writing to CB Alert Sheet, Consumer Product Safety Commission, Washington, DC, 20207. →

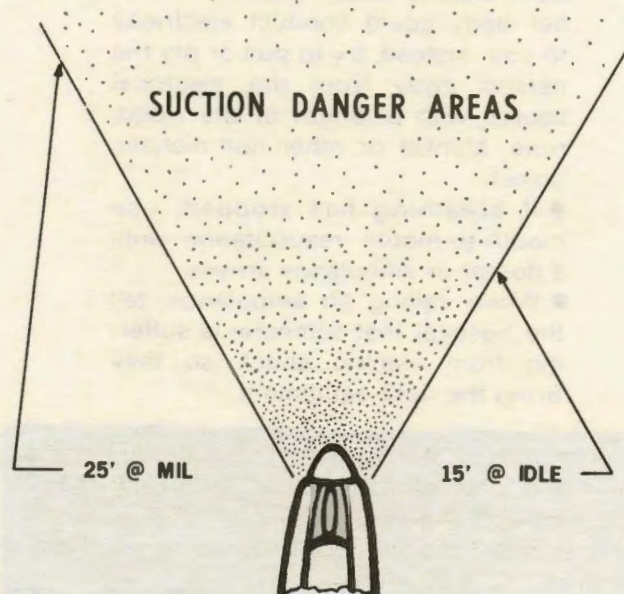
chock talk

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

DANGER AREAS

Ever since the jet engine was first installed on aircraft, the danger areas associated with the intake have been emphasized and reemphasized. Several incidents in the past months indicate that we may not be as cautious as we once were.

During an engine run on the trim pad, one of the outside observers was ingested by the engine---at military power. The individual suffered fatal injuries before the engine could be shut down. In another incident, an individual was sucked up by an engine just prior to shutdown. This man was luckier---the engine was shutdown before he was severely injured. In a third incident, a maintenance technician lost his headset, hat, and nearly his head when he walked in front of a running engine.



The jet engine requires vast amounts of air when it's running. The faster it's running, the more air it requires. Stay away from the forward areas of aircraft when the engines are running if at all possible. Above all, avoid the danger areas peculiar to each aircraft. It's bad enough to lose a wrench or a screwdriver in an intake, but we sure can't afford to lose good people this way.

DON'T LOSE YOUR HEAD

I'm sure most of you are cautious enough to stay clear of turning helicopter rotor blades. Well, what about when the rotors are not turning but the helicopter engines are still running? A recent mishap occurred when a rotor blade suddenly started rotating and killed a ground crewmember.

On some helicopters, a rotor brake allows the engines to be run at minimum power without having the rotor turning. But the rotor brake is effective only to a point. Should the engine(s) speed be increased above minimum power, the rotor brake will not hold.

The ground crewmember, in the above mentioned mishap, was standing just inside the rotor diameter with a parka hood pulled over his head to ward off a cold wind. Another crewmember increased the engine speed, the rotor brake pressure was overcome, and the rotor system began turning. Because of the abrupt, excessive torque, one of the blades flapped down as it turned. The ground crewmember, his eyes shielded by the parka hood, failed to see the blade coming. He was struck on the head and killed.

When engines are running, always approach a helicopter so the pilot can see you. Also, always wait until a helicopter crewmember signals you prior to entering the area covered by the rotor blades. Don't be complacent because the blades aren't turning. They can begin turning in an instant.

HANDS FULL?

A munitions technician was participating in the downloading of BDU-33 practice bombs from an aircraft. As the bombs were downloaded, the technician was taking them back to the transporting trailer. During one of his trips to the trailer, he was trying to check the lot numbers on two different bombs and lost control of the situation. One of the BDUs fell, striking the transporting trailer, then the ramp. When the bomb hit the ramp, the spotting charge fired.

The discharge of the spotting charge caused the technician's shirt to catch fire. He suffered second and third degree burns to his arm and back before the fire could be extinguished. His injuries required 15 days hospitalization. Luckily, he didn't receive any permanent injuries.

The technician was current and qualified to perform his duties. Just a few seconds of inattention with an unpinned BDU-33 caused him a lot of pain and suffering. Like I said, just a few seconds of inattention...

LIMP STICK

The photos at right point out what can happen when a ground heater is applied directly into the cockpit of an F-4D in an attempt to dry out components saturated by rain.

Photo #1 is a normal F/C/P stick grip. Photo #2 shows a stick grip which partially melted and bent over when the excessive heat was applied. You can also note the sealing wax oozing from the adjustment points on the motion pickup transducer.

The ground crewmember responsible for this was either not aware of what had happened, or was too embarrassed to own up to it. Even stranger, is the fact that a pilot flew the aircraft in this condition and then made an entry in the 781 which read, "FCP stick grip bent--suspect F-106 model installed."

Contributed by MSgt Richard Showers
363CRS, Shaw AFB, SC



PHOTO 1.

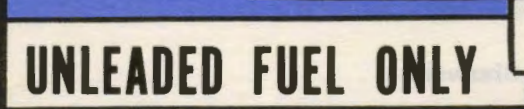
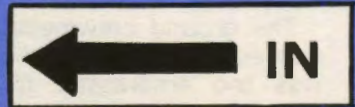
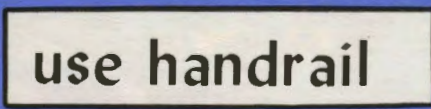
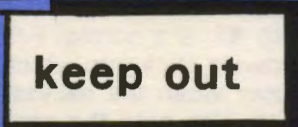
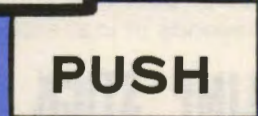
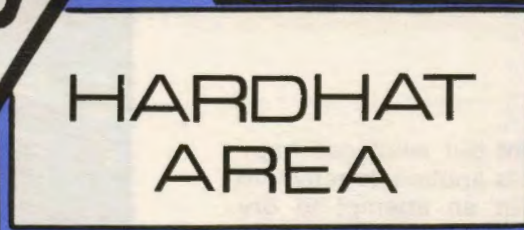
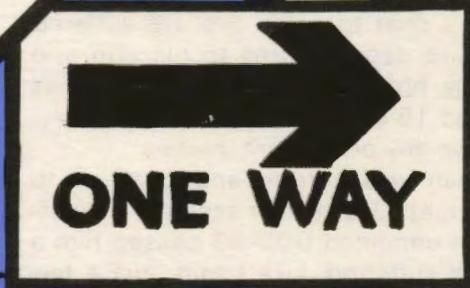
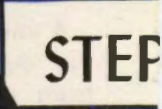


PHOTO 2.

SIGNS OF OUR TIMES



Signs of our times



with established procedures and instructions being enforced by all levels of supervision at all times, or only when convenient to do so? Can procedures outlined in the directive be efficiently and safely followed? Are procedures operationally feasible in terms of manpower, time, and cost? Is guidance provided too restrictive? Is there enough flexibility to allow the unit commander to select the best mode of operation from several options? The answers to these questions are not in AFR 127-100, AFR 127-4, TACR 127-1, or any safety directive.

So, why am I here? Am I spinning my wheels? I think my function is to provide a service which should be primarily concerned with trying to accommodate rather than enforce compliance. Maybe, before I go further, I should have a clear idea of what "accommodating" means.

Accommodating compliance does not necessarily mean changing standards; however, it does mean that we should enable compliance. That which we expect of our people should be congruent with our goals and mission; what people are required to do should be the most efficient with minimal amount of risk involved; and at times, changes to the standards may be required. Armed with these general definitions, how do I implement what I've said? (Well there's really nothing to implement, but it does establish a premise from which everything I do should be examined.) Perhaps now instead of merely writing up the munitions storage area for incompatible storage, exceeded explosives and personnel limits, or fire extinguishers not available during operations, I should go one step further and ask, "Is there sufficient storage space/compartments to handle small amounts

of special explosives items; is the available storage cubicle accessible; what makes it so difficult to store these components elsewhere; are adequate numbers of fire extinguishers available at the fire department?"

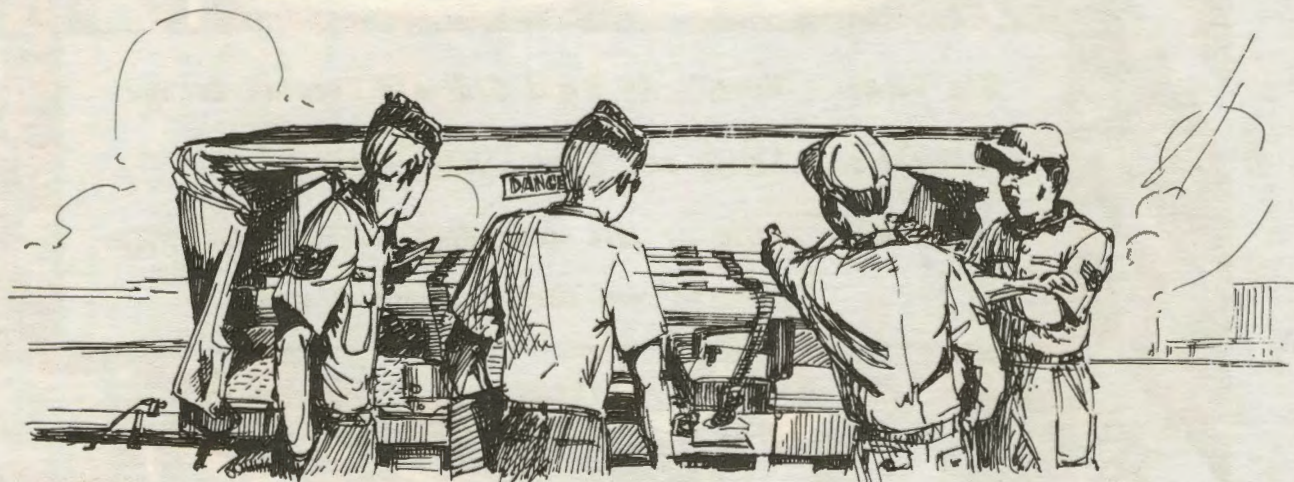
When the egress shop exceeds the amount of explosive components it is licensed for, do I try to find out if we can license another facility to store the spillover during TCTOs or inspections?"

When I find loose carts in the back of the Line Expeditor Van or loading supervisor's truck, do I just write those discrepancies up or do I help by: (1) getting them (or helping to get) some ammo cans or other closing containers that can be secured on the vehicle and (2) recommending how they can transport carts on the flight line "legally."

Do I continually write up a shop for not having the proper fire symbol placard, or do I tell them which shop has some extras which can be borrowed or obtained by just asking?

In other words, when I find a discrepancy or problem, am I willing to put in 110% to find a solution? If not, then perhaps I am part of the problem.

This premise I've established gives me a different perspective on the inspection program. I review OIs differently. My mind is no longer closed to looking for that elusive better way, even though the book says to do it the way it's been done for years and mishap investigation is not limited to what wasn't done. Perhaps I won't make a dent in reducing the number of mishaps, but I do know what I'm trying to do and how I fit in this mishap prevention scheme. Do you know where you fit in? ➔



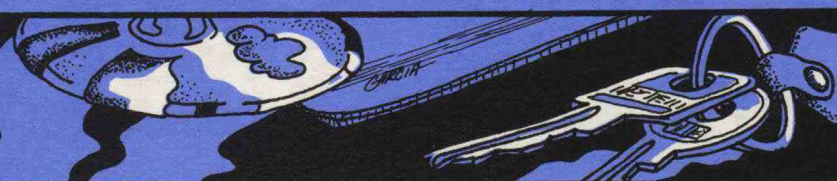
DWMI



DWI

By:
Capt Eric M. Petersen
834 CSG/SPS
Hurlburt Fld, FL

The Scene: Harry's All Night Grill and Cocktail Lounge.
The Players: Fill in any appropriate name(s).
The Time: Early or late depending on your definition.
The sun will rise in about 4 hours.



As the curtain rises, we see the members of the regular crowd. Most of the people are gathered around tables in groups of three or four. Just about everyone is engaged in his own personal reverie. The band is close to wrapping up this gig, and the last of the Travoltas has finally called it quits. As the enthusiasm of the evening wears down, the participants make their way to the door. Some walk--others stumble, bob, and weave in a style that would make the best prizefighter humble--while others do all but crawl to the number one means of transportation in the US--the automobile.

No, I'm not going to sit here and tell you about all the physiological effects of alcohol on the human body. Nor how those effects prevent you from operating your car in a safe and sensible manner. If you aren't convinced by now that two or three beers affect your motor skills, this article for sure isn't going to do it. Nor am I going to sit here and go over all the other reasons why you shouldn't drink and drive. If you drink and drive, now there's very little I can say which will change your mind. Also, there are some folks out there who will put themselves into that situation just to prove that they can hack it. What I am going to do is to speak a bit about the cost of getting caught driving under the influence or while intoxicated.

It's been estimated by insurance companies that the cost of a single conviction runs in excess of \$10,000! You can sure buy a lot of beer for those hot summer days with that much money. You don't believe me? Well let's look at a few things. First, there's your court appearances. You will need a lawyer. Have you priced one lately? Secondly, if you're convicted, there will probably be a fine---a big one. Why? Remember the emotional reaction you had the last time you read of a child killed by an intoxicated driver? The judge, jury (if needed) and prosecutors feel the same way.

If you're lucky, you'll be allowed to keep your license so you can still drive; but your insurance will go outa sight for many years. This is where the bulk of your cost will be. Even if you've never had an accident or citation, once you're convicted of DWI/DUI you are an assigned-risk driver and you're going to pay! Suppose you lose your license? You'll have to let your wife or friends drive you everywhere. You might be near

some public transportation to get to work and back. That will last a year and when you get your license back, you'll still be facing those insurance premiums.

But you won't get caught. After all, it always happens to the other guy. Besides, you never drink enough to where you're unsafe and you keep a roll of breath mints handy in case you ever get stopped. I've known a lot of folks who thought the same things until they got stopped. One other consideration, what if you get caught on base?

On base, the rules are much the same as in the local community; but instead of civil fines, the military has fines, forfeitures, reprimands, reductions in rank, and the like to go along with the increase in insurance premiums plus it's a federal offense. In either the civil or military environment, it's a no-win situation.

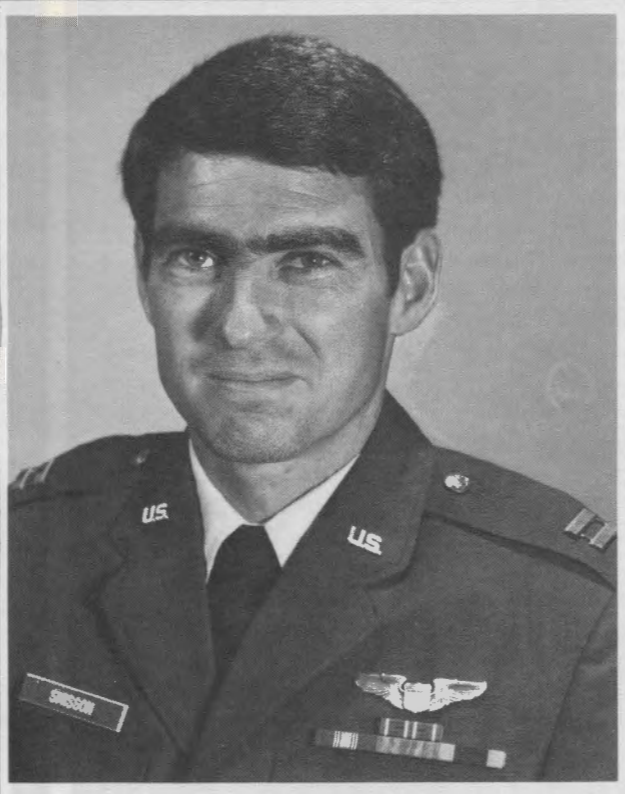
Sounds like I'm trying to scare you into staying away from alcohol? Not really. I just feel that if you are really aware of the total risks involved every time you turn the key in the ignition switch after you've been to Happy Hour at your local watering hole, you might just get a ride from a friend (sober, of course) or from someone else.

One last word---in this whole article, I never mentioned the increased chances of having an accident because you've been drinking. It's dark, everyone's tired and probably 50 percent of the drivers on the road with you have also been drinking. Which one has had too much? The one next to you, the woman behind you, or the guy coming at you from the opposite direction? You probably won't know until it's too late... ➤



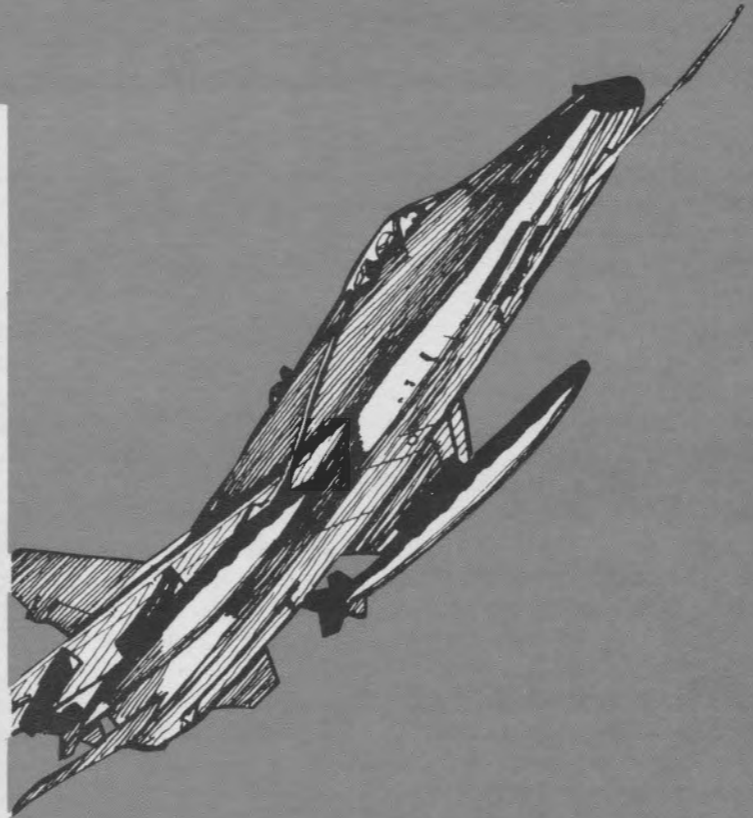


AIRCREW of DISTINCTION



Capt. Christopher B. Smisson
128 TFS / 116 TFW(ANG)
Dobbins AFB, GA

On 19 December 1978, Captain Smisson was flight lead for a flight of two F-100s scheduled for a night instrument flight. The takeoff was normal until the flight entered an overcast cloud layer at approximately 2,000' AGL. Shortly thereafter, the number two aircraft experienced a utility system hydraulic failure, causing acrid fumes and dense smoke to enter the cockpit, totally obscuring all flight instruments. The strength of the smoke and fumes were so strong that they temporarily blinded the aircrew.



The number two man immediately notified lead of his problem, and Captain Smisson, quickly assessing the situation, dropped back to a wing position and began giving the stricken aircrew pitch and bank corrections to maintain level flight. After declaring an emergency, Captain Smisson began aiding the number two aircrew in clearing the smoke from the cockpit and completing checklist procedures for utility hydraulic system failure---all the time still in the weather.

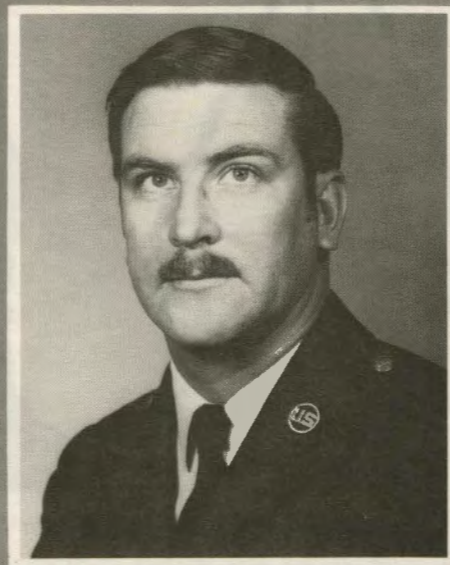
After completing the proper emergency procedures, the flight recovered by GCA and completed an uneventful landing. The quick thinking and decisive action taken by Captain Smisson, in a very tense situation, prevented possible loss of life and resulted in the recovery of a valuable aircraft. This achievement qualifies him as the TAC Aircrew of Distinction. ➤

TAC SAFETY AWARDS



Individual Safety Award

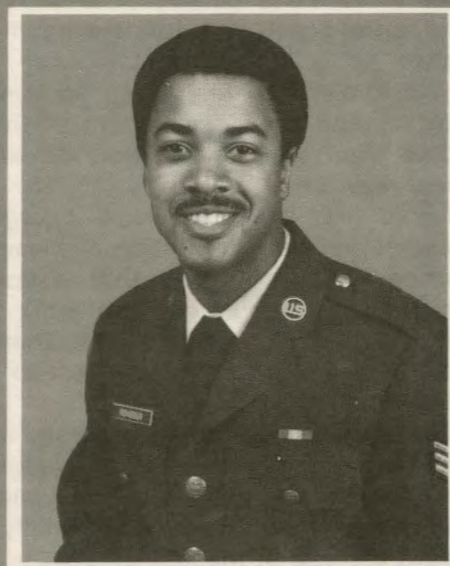
Staff Sergeant John T. Schewanick, 57th Equipment Maintenance Squadron, 57th Tactical Training Wing, Nellis Air Force Base, Nevada, is the recipient of the Tactical Air Command Individual Safety Award for May 1979. Sergeant Schewanick served with exceptional merit as section project NCO for the AIM-9L Follow-On Test and Evaluation. His demonstrated concern for the success of this new weapons system has gone far in insuring that the safest and most reliable missile and support equipment is provided.



SSgt John T. Schewanick

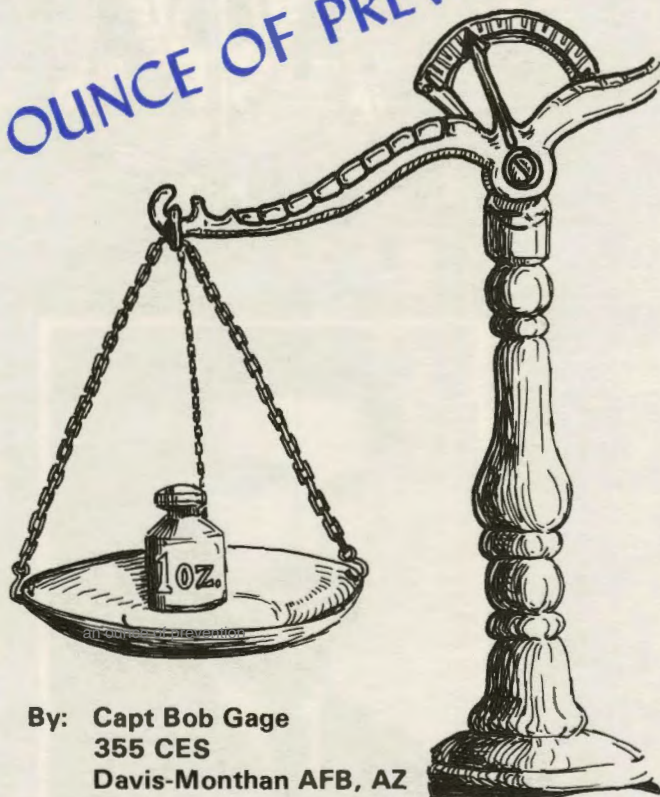
Crew Chief Safety Award

Sergeant William A. Richardson, 59th Aircraft Generation Squadron, 58th Tactical Training Wing, Luke Air Force Base, Arizona, is the recipient of the Tactical Air Command Crew Chief Safety Award for May 1979. Sergeant Richardson was chosen as one of the first F-15 crew chiefs at Luke because of his knowledge and experience. He has been instrumental in the training of Ready Eglin and Ready Holloman personnel. His constant striving to improve flight line working and safety conditions has made significant contributions to the unit's mishap prevention efforts.



Sgt William A. Richardson

AN OUNCE OF PREVENTION



By: **Capt Bob Gage**
355 CES
Davis-Monthan AFB, AZ

One of the main thrusts of the Air Force Occupational Safety and Health program has been to reduce hazards in the industrial work environment---civil engineer shops, maintenance hangars, supply warehouses, and the flight line to name a few. This is a monumental undertaking and immediately identifies a major problem---that of adapting personnel to work operations and conditions with the maximum degree of safety.

We know that this is not an easy task. The military and civilian members of the Air Force come from diverse backgrounds, and the jobs they may be required to do are even more diverse than their individual backgrounds. Industrial accident prevention is always a primary concern and requires that a sound safety program be integrated with work tasks as a normal part of operations. I'll attempt to give you a few clues on how this can be accomplished.

First, we'll cover some generally accepted industrial accident prevention procedures; second, we'll examine employee actions and their relationships to accidents; and finally, we'll talk about the role of the line supervisor in industrial safety.

H.W. Heinrich, in his book **Industrial Accident Prevention**, has identified eight basic procedures to follow in improving work safety. They are:

- 1) Improvement of physical conditions, operations, and processes to minimize accident probability
- 2) Guarding all moving parts of machinery
- 3) Modify personnel policies in training, assignment, and supervision in ways that increase the expectation of safe performance
- 4) Analysis of accident facts with the purpose of initiating preventative measures
- 5) Identifying potential hazards
- 6) Identifying existing hazards
- 7) Selecting the proper remedies
- 8) Applying the remedies

If the procedures sound familiar, at least you're aware of some of the actions which involve unit safety personnel every day. The procedures form a logical means of both preventing and investigating accidents. While these eight procedures can improve work safety, numbers seven and eight hold the key in the prevention/correction of mishaps. Mr. Heinrich feels that these remedies fall into four classifications:

- 1) Engineering revision
- 2) Persuasion, appeal, and instruction
- 3) Personnel adjustment
- 4) Discipline

It is interesting to note that of the four mentioned remedies, only one---engineering revision---has to do with mechanical processes or physical conditions; the other three involve modifying the behavior of people. The need for engineering revision is usually apparent through the malfunction of equipment, while the need for behavior modification comes about as a

result of human causes and is seldom clear cut. We're all familiar with those causes---failure to follow established instructions/procedures, operating at unsafe speeds, not using safety equipment, attempting a task for which an individual wasn't trained---to name a few. What can we do to remedy these situations? Here are a few reasons that individuals have mishaps and their potential remedies:

belief has not gotten the job done. He points out in his book, **Safety Supervision**, that in recent years progress in making industrial conditions safer has ceased. He believes that one of the causes for this lack of progress is our inability to transform our fundamental belief about supervisory responsibility into supervisory action.

Why is this happening? Petersen feels that the main problem is that management itself gives

Reasons	Indicated Remedy
<p>1. <i>Improper attitude--</i> Willful disregard, recklessness, laziness, disloyalty, uncooperativeness, fearfulness, over-sensitivity, egotism, jealousy, impatience, absent-mindedness, excitability, obsessions, phobias, inconsiderateness, intolerance, mental unsuitability in general.</p>	<p>Personnel adjustment-- Placement and medical attention, including psychology. Discipline in rare cases and as a last resort. Engineering revision always should be considered.</p>
<p>2. <i>Lack of knowledge or skill--</i> Insufficiently informed, not understanding, not convinced of need, indecisive, etc.</p>	<p>Training, instruction, persuasion and appeal. Instruction and reinstruction, training and practice, persuasion and appeal based on motivating characteristics, psychology, and human engineering. Engineering revision always should be considered.</p>
<p>3. <i>Physically unsuited--</i> Unsuitable hearing, sight, age, sex, height; illnesses, allergies, slow reactions, lameness, intoxication, physical handicaps in general.</p>	<p>Personnel adjustment. Placement and medical attention, including psychology. Engineering revision always should be considered.</p>
<p>4. <i>Improve mechanical or physical environment--</i> Space, light, heat, arrangement, ventilation, materials, tools, equipment, procedures, company policy, routing, etc., that make it awkward, difficult, inconvenient, embarrassing, or impossible to follow safe practice rules. (1:150)</p>	<p>Engineering revision.</p>

The preceding analysis can be helpful in identifying to our own personnel why they have accidents and can be a starting point in our own industrial accident prevention program. But what about the role of the line supervisor in industrial safety? Let's take a look at his ability to prevent accidents.

The line supervisor is recognized by many as the key figure in accident prevention---he comes into daily contact with the workers; he is responsible for physical conditions and surroundings; he must assess individual skill levels and help improve performance through training. For all these reasons he must be a leader. A fundamental belief among safety professionals and managers has been that if anything is to be done to promote safety, it will be accomplished by the supervisor. At least one noted safety author, Dan Petersen, states that having this

misleading guidance. On the one hand is the ever present push to "get the job done" followed by the admonition to also do it safely. Supervisors are seldom rated on how safe their work center is but rather on how much his work center accomplishes. So, why should we expect him to put great emphasis on safety?

If we are to make the flight line, the warehouses, and the shops safer, we must realize why accidents occur and direct our remedies at the real causes, be they human or environmental. Above all, the first line supervisor must accept the challenge that if anyone is going to have an influence on the safety of his workers---he is the one. ➤

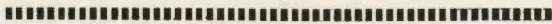
1. Heinrich, H.W., *Industrial Accident Prevention*, 3d Edition, McGraw-Hill Book Company Inc., New York, 1950.

2. Petersen, Dan, *Safety Supervision*, AMACOM, a Division of American Management Associations, New York, 1976.

DOWN TO EARTH

BRING BACK HELMETS

Quoted Without Comment--San Antonio News, Jan 2, 1979.



There were only 12 Texas deaths of motorcycle riders without helmets in 1976.

But the motorcycle helmet law was repealed in 1977.

There were 89 helmetless motorcycle riders killed in 1977 (over a 700 percent increase).

The argument was that motorcycle riders should be allowed to play Russian roulette with their own lives if they wanted to do so.

But more is involved than this. Often a motorcyclist is killed in a collision with a car. No car driver wants to be involved in a crash that takes another's life.

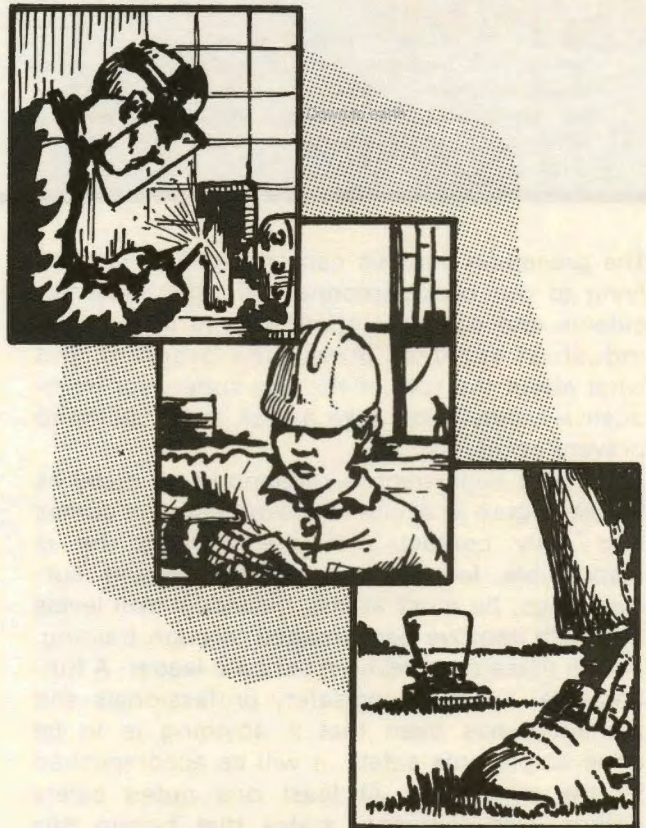
WHY PROTECTIVE EQUIPMENT?

Amn Jones was struck in the eye while grinding a piece of metal. His face shield was hanging on a hook! Sgt Lemon was hospitalized with a fractured skull when she was hit by a falling hammer at a construction site. Her hard hat was

in the truck cab! These injuries are common and painful and could have been prevented or minimized if the workers had worn the protective equipment provided them on the job. Too often the need for wearing protective gear is opposed by workers.

Resistance to using equipment usually occurs because the specific hat, shoe, or suit is uncomfortable, doesn't fit right, or people don't believe an accident can happen to them. There are items of protective equipment which are bulky, restrictive, and less than comfortable. But without them certain jobs could not be performed safely. For example, firemen do not love wearing the heavy aluminized hood and suits to fight fires. However, without this protective equipment severe burns and death could occur. How much do you value your eyesight, hands, feet, head, or your life? That should be reason enough for always making sure you wear protective equipment when it's needed.

Engineers are trying constantly to make jobs and materials free from any hazard to the user. This is done by design, isolating a worker from



any exposure to a hazard, or substituting a hazardous process or material with a safe one. We haven't been able to conquer everything, but we have realized the need to protect the worker in those areas where we cannot eliminate the job hazard.

Your protective equipment should fit properly and be cleaned regularly. The Air Force's safety and health personnel are available to help management and supervisors determine the right type of protective equipment needed for specific tasks in your work center. But it is up to you as the user of this equipment to adopt a positive attitude towards the wear and care of your equipment.

And don't forget you need protective equipment at home. Do you have a grinder, power saw, lawn edger, ax, etc? Look around your neighborhood the next nice day and count the number of folks doing yardwork or weekend fix-it jobs in sandals, shorts, and without a pair of 98 cent safety glasses.

BACKPACKING

Has the urge to warm up your backpack struck you? Camping is an exciting way to enjoy the out-of-doors, but you need to take along some safety precautions as well as your rucksack. Before you start out, carefully check your clothing and equipment, and keep in mind these safety pointers:

- Wear sturdy shoes or boots.
- Always carry essential equipment--matches in a waterproof container, maps and a compass, a knife, and a police whistle for use.
- Take what food and shelter you'll need, but don't overload your pack.
- When you go camping, tell someone where you are going and when you expect to return.
- Travel alone only if you are an experienced woodsman.
- On the trail, keep your group together; don't let anyone lag behind.
- Make camp before dark. Traveling in darkness can lead to tragedy.

In case of emergencies, such as getting lost or suffering an injury that leaves you unable to go for help, signal by whatever means are available. The universal call for help is three signals in rapid succession repeated at regular intervals: three shots, three flashes of light from a mirror, three blasts on a whistle, three puffs of smoke. If you build a signal fire to help guide rescuers, make sure you can keep the fire under control.

As with all recreational activities, a reasonable amount of planning will go a long way in keeping you out of trouble.



Down To Earth

ARE WE TEACHING OUR CHILDREN TO BE RISK TAKERS?

Many of us often question the job rules in our work place as useless or a waste of time. But if you would take a few minutes to think about them, you would realize they protect you and every other worker. Who wants to lose their eyesight from chemical burns, or an arm or leg from a flammable liquid explosion or even a finger from a high speed saw blade. No one in their right mind! But what about at home? Do we project the Macho or risk-taker image to our children? Do we expose them to hazards at home that we would not tolerate in the work place? Are we not wrongly conditioning them by our own actions? We will ask a few questions and as you read them, think about your home life.



- Do you insist that everyone wear a seat belt when you are driving, but don't wear one yourself?

- Do you warn your children to stay away from flammable liquids, yet put them in a soda pop bottle and the like?

- Do you tell your children not to leave toys or sports equipment lying around, but you leave shoes, briefcase, and tools right where someone can fall over them?

- Do you tell your children not to play with sticks or stones because they may lose an eye, but yet use your power saw without wearing any eye protection?

- Do you tell the children to get out of the pool at the first sign of a thunderstorm, but continue playing golf yourself?

- Do you tell your wife not to leave the kitchen when frying food, and then leave the lawn mower running in the backyard while you get something cold to drink?

- Do you tell your children they should never play with matches, but leave match books and lighters all over the house?

- Do you warn your children about drugs, and then drive home from a party after having too many cocktails?

- Do you warn your family about the danger of fire, and you still don't have a smoke detector or fire extinguisher?

Almost everyone is guilty of inconsistency in word and deed at some time or another. We see it occur too often in our job area. But, we cannot afford to portray this attitude toward our children. Developing good attitudes in children results from our actions. We should give a great deal of thought to anything we do that might affect the development of our children's attitude and our own safety. When you're showing or telling children about the correct way to do things, make sure you follow your own instructions. Set the example and you will help create a safer future for them and yourself.

SKATEBOARDING

People should be aware that skateboards are not toys. They are highly maneuverable vehicles, some capable of speeds of 20-30 MPH. In competition, a specially prepared board was clocked at 57 MPH! Skateboards have no brakes and are steered by the operator through shifting of body weight. This requires balance and coordination and lots of practice. Falls are inevitable. Here are some things to keep in mind when your son or daughter, or even you, get the urge to "hang ten" on the asphalt.

SAFETY EQUIPMENT

Safety equipment and proper clothing are essential for skateboarding. Whether you're a beginner or an expert, the proper gear will eliminate some injuries and minimize others. Select protective equipment---helmets, gloves, knee pads, and elbow pads designed for skateboarding. An ordinary pair of tennis shoes gives good traction on the board and helps protect the feet. A long-sleeved shirt and a pair of jeans will give some protection from the common problem---"road rash"---the skateboarder's term for the cuts and scrapes that result when the pavement files down the epidermis of a fallen skater.

LEARN TO FALL PROPERLY

One of the first things skateboarders must learn is how to fall properly. Falling with arms outstretched is only inviting a broken wrist. Skateboarders who fall relaxed, rolling off the point of impact to transfer the force of the fall, usually won't get hurt badly. Many skaters just run out of a fall without ever going down. Judo and gymnastics offer good training on learning how to fall.

CHOOSING AN AREA

Finding a safe area to ride on can be most important. Locate an area with a smooth riding surface, free of obstacles and away from traffic. If in doubt as to where to find such an area,



check with local authorities, park departments, or school and town officials. Some cities concerned with the rising injuries have designated specific sections of parks or parking lots for skateboard use.

For you pedestrians, watch out for skateboarders. A collision can be really dangerous---especially if the rider is moving rapidly.



Letters to the Editor

Editor,

Concerning your article on page 8 of the Jan 79 edition of TAC ATTACK, reference article TAC Tips, "What's A DCU-94 Plastic Guard."

In the article you stated a tank was lost because "someone didn't want to take the time to install a guard." **WRONG...** A tank was lost because the pilot did not properly set his switches in the first place, and then secondly he did not **check** his switches prior to release.

I have been in weapons 18 years, and we call these plastic guards idiot panels. Enough said? Please don't blame the weapons personnel.

TSgt David E. Shaw
58 AGS/311 AMU
Luke AFB AZ

TSgt Shaw,

The DCU-94 weapons control panel is poorly located in the cockpit, being under the right arm of the pilot. To set any switches on the panel, the pilot must devote his attention under his arm while flying the aircraft--not the safest operation to begin with. Secondly, the toggle switches for five stations are easily confused. These two problems led to the DCU-94 plastic guard to prevent inadvertent selection of the centerline station.

You may call it an idiot panel or anything else. My only points are that the guard is required to be on the aircraft whenever a centerline store is carried and therefore, why wasn't it installed and why did the crew fly the aircraft without the guard?

Ed

30

Editor,

I am the NCOIC of the Intelligence Section for the 7405th Operations Squadron (USAFE) at Rhein-Main Air Base, Germany, and read your fine publication monthly. I'm sure you have already taken plenty of flak about this, but I must point out that picture #4 of "Sky Hazards" in your Jan 79 edition of TAC ATTACK is not an L-29 MAYA, but an L-39 ALBATROS. That's a gotcha'.

MSgt Paul J. Boatman
7405 Ops Sq
Rhein-Main AB GE

MSgt Boatman,

You caught us. You're 100% correct, but you're the only sharp-eyed individual among our many readers who caught the error. Whenever you get ready to PCS, we sure could use some help on our proofreading staff...

Ed

Editor,

The article entitled "TAC Tips, ACES High" in the Mar 79 TAC ATTACK is very informative about the ACES II ejection system; however, that portion concerning the "Rapid Escape Divestment System" is no longer true. The rapid deflagration cord transfer lines on the ACES II ejection seat have been deactivated or removed due to a deficiency. At present time the harness releases must be manually disconnected for ground egress. Please advise your readers of this change. SA-ALC point of contact is Mr. W. Brient, MMIRCB, AV 945-7448.

Mr Samuel Idrogo
SAALC/MMIR
Kelly AFB TX

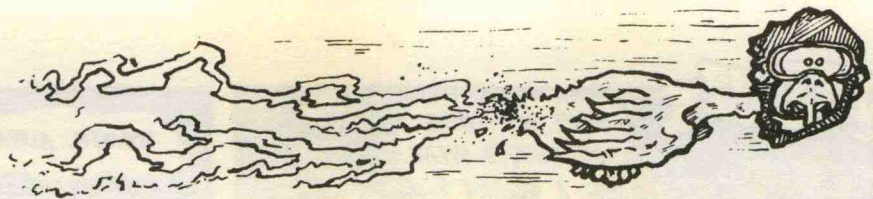
Mr Idrogo,

I've received several calls on the same subject and I want to thank you and the callers for the information. Unfortunately, with the lead time required to publish the magazine some of our information may be out of date by the time the magazine hits the streets. We try to keep it to a minimum, but sometimes we miss one. Like Avis we're going to have to try harder. Thanks for your interest in the magazine and the safety program.

Ed

MAY 1979

TAC TALLY



	TAC			ANG			AFR		
	MAR	thru MAR		MAR	thru MAR		MAR	thru MAR	
		1979	1978		1979	1978		1979	1978
CLASS A MISHAPS	2	8	10	1	4	2	2	2	1
AIRCREW FATALITIES	3	6	8	0	3	0	1	1	0
TOTAL EJECTIONS	0	5	9	1	4	2	2	2	1
SUCCESSFUL EJECTIONS	0	4	8	1	2	2	1	1	1

TAC'S TOP 5 thru MAR '79

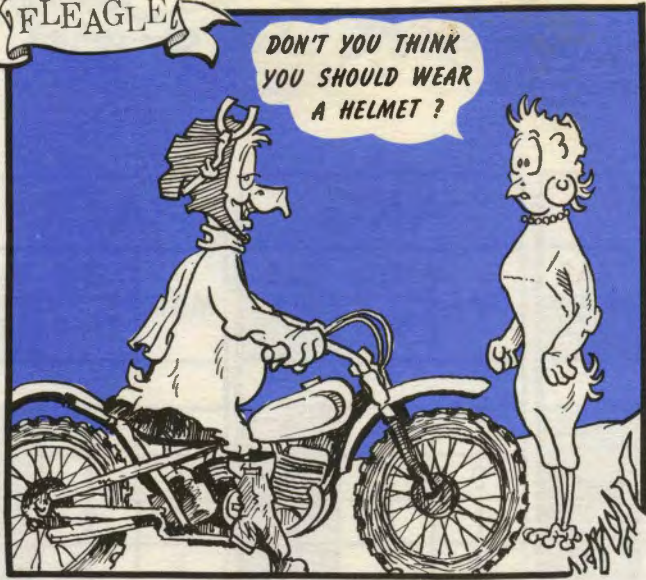
TAC FTR/RECCE		TAC GAINED FTR/RECCE		TAC/GAINED Other Units	
class A mishap free months		class A mishap free months		class A mishap free months	
27	347 TFW	50	156 TFG (ANG)	109	193 TEWG (ANG)
22	363 TRW	31	184 TFTG (ANG)	96	USAFTAWC (TAC)
14	479 TTW	30	123 TRW (ANG)	92	919 SOG (AFR)
13	33 TFW	15	116 TFW (ANG)	65	1 SOW (TAC)
9	56 TFW	15	121 TFW (ANG)	60	302 SOG (AFR)

CLASS A MISHAP COMPARISON RATE 78/79
(BASED ON ACCIDENTS PER 100,000 HOURS FLYING TIME)

	78	79	78	79	78	79	78	79	78	79	78	79
TAC	16.0	6.9	12.4	7.0	8.3	6.2						
ANG	0.0	0.0	3.4	11.4	4.0	9.6						
AFR	0.0	0.0	0.0	0.0	10.9	20.4						

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

FLEAGLE



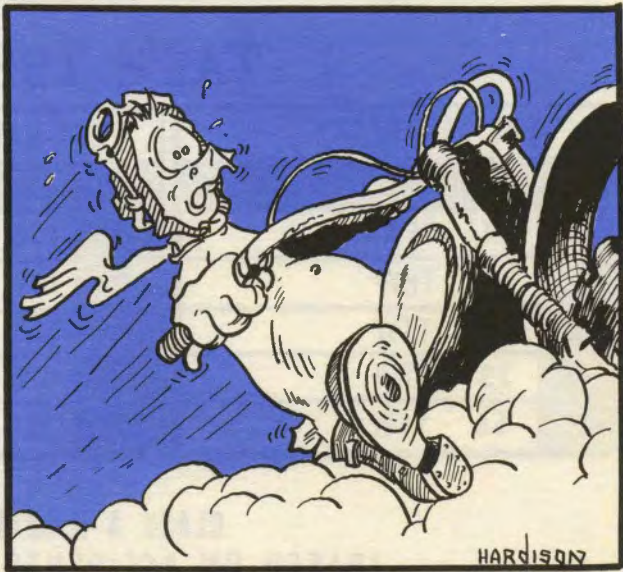
DON'T YOU THINK YOU SHOULD WEAR A HELMET ?



WOMEN...ALWAYS WORRIN'



FIRST JUMP COMMUN' UP, TIME T'POUR IT ON !!



HARDISON



SMASH



TIS A SHAME,...HE SHOULDA NEVER TRIED ANYTHING BEYOND A TRIKE.