

TAC ATTACK

TAC Attack September 1965



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Contents

ANGLE OF ATTACK	2
EJECTION	3
OLD TAT	4
GROUND SAFETY	8
OL' SARGE	9
TAC HERITAGE	11
CHOCK TALK	12
V-BAND COUPLINGS	14
I'M A BELIEVER	17
BETTER MOUSETRAP	18
SIDESLIP	19
SEG NEWS	22
TAC TIPS	24
RECOGNITION	27



COVER PHOTO:

F-111 with external stores. Pylons stay parallel to fuselage when wing sweep is changed.

Articles, accident briefs and associated material published in this magazine are non-directive in nature. All suggestions and recommendations are intended as helpful and remain within the scope of existing directives. Information used to brief accidents is extracted from USAF Form 711 and may not be construed as incriminating under article 31 of the Uniform Code of Military Justice. All names, dates and places used in accident stories are fictitious. Air Force units are encouraged to republish the material contained herein; however, contents are not for public release. Written permission must be obtained from Hq TAC before material can be republished by other than Department of Defense organizations. Contributions are most welcome as are comments and criticism. We reserve the right to make any editorial changes in manuscripts which we believe will improve the material without altering the intended meaning. Direct correspondence with the Editor is authorized.

A F E T Y



GENERAL G. P. DISOSWAY

through



Leadership

Today, the most important problem facing Tactical Air Command is the steady loss of combat potential caused by needless aircraft accidents.

An accident, by definition, is an event that takes place without expectation, it is the opposite of design or intent. Careful planning and purposeful intent, then, will reduce or eliminate accidents. Thorough planning requires foresight and understanding, both of which must come from experience. The people most capable of using foresight and understanding in planning are commanders who have worked up to their positions through years of experience. Properly used, a commander's experience and background should allow him to anticipate the hazards and pitfalls which lead to accidents and his planning should be oriented to avoid them.

Most of the aircraft accidents in TAC this year have been caused by operator error or material failure. The two causes are about equally divided. Such accidents should not continue to occur if adequate planning precedes each operation. It is an easy and lazy out to say that material failure is a problem of design and manufacture and that the operating level has no control over it. If this situation exists, the operating level must identify the deficiency and recommend modifications. Frequently, however, material failures occur as a result of improper or inadequate care of the equipment, either in operation or maintenance. This can be traced to a failure in planning . . . and supervision. If the planning left a loophole that permitted a hazardous condition to exist, or a lack of supervision allowed the operation to deviate from a safe plan into a hazardous situation, the commander must shoulder much of the responsibility.

The more gross accidents, attributed to flagrant violation of directives or regulations, can especially be traced to faulty supervision which permitted an atmosphere conducive to these deviations.

I expect commanders at all levels to accept their responsibility for accident prevention, to eliminate needless risk through careful planning and to do their utmost to create a safe environment within Tactical Air Command.

*Trust that man in nothing who has
a conscience in everything*

—Sterne

angle of **ATTACK**



Colonel Gust Askounis
Chief of Safety

During a routine safety survey one of the people on the survey team was dissatisfied with the corrective action being taken to correct the driving habits of an airman who had recently been picked up by the local police for reckless driving. The airman had been clocked at over 85 mph, and the corrective action was in the boys-will-be-boys category. While checking, the team member soon learned that this particular airman had a long history of speeding and reckless driving violations plus a few accidents to his credit. For some reason none of these events had triggered an alarm bell within the unit and he was receiving no special attention! The Base Commander was somewhat shocked to learn that such goings on existed in his unit. He thought everything was well under control.

Experience has shown that we must not look the other way when our people ignore traffic laws. We lose too many people, spend too much money and time patching them up and create too many problems within the local community.

Supervisors at all levels should be aware of this and pay particular attention to the driving habits of their men. The best way to keep our people alive and unhurt is to get tough with those who refuse to follow the traffic rules. If a man habitually violates traffic laws, can he be trusted to follow the more stringent directives which prescribe how he must do his primary military task? This is a crucial question which must be accurately answered and firmly acted upon.

Ejection



By - Capt William H. Coon
Hq TAC Office of Safety

The pilot was leader of a three ship flight of F-100s on an air defense intercept exercise. Shortly after takeoff, the pilot came out of afterburner and noticed the aft overheat caution light was on. He retarded the throttle, turned downwind for immediate landing, jettisoned his external stores. Shortly thereafter, the number one flight control system failed and the pilot engaged the ram air turbine. Just prior to starting a turn to base leg, the number two flight control system failed and the stick began to stiffen. At this time, someone advised that he was on fire.

The pilot's ejection and subsequent rescue are of interest to all fighter pilots. I will quote directly from the pilot's statement, then add pertinent comments.

I positioned myself for ejection and reached for the triggers but missed as they were too low, reached again and squeezed.

During the period 1962 through the first six months of 1965, ten out of 66 crewmembers who successfully ejected from TAC F-100 aircraft reported difficulty in finding or locating the ejection

seat triggers. Some of the ten found they were squeezing the arm rest release by mistake. Many solutions to this problem have been proposed and are being evaluated, but positive resolution is considered long term. In the interim, your best solution is to give yourself frequent drill in a seat trainer for your aircraft.

As the seat fired, I felt a pain in my lower back.

X-Ray photos revealed that the pilot had sustained a compression fracture. This type injury is generally the result of a pilot leaning forward while pulling the triggers. Improper positioning at the time of ejection continues to cause compression fractures. This again is an item where frequent training and practice are a must.

The pilot stated that after ejection he found himself apparently free falling on his back and waited several seconds for the chute.

When it didn't open, I grasped the chute handle with both hands and pulled. Still no chute for 3-5 seconds, when I saw the seat departing at about 10-15 feet, the chute opened with moderate shock.

The investigation revealed that

the seat had operated in a satisfactory manner and that the delayed opening was probably due to the pilot holding onto the seat for a few seconds immediately following ejection. If this occurs, the chute will not deploy until the pilot leaves the seat. This is another continuing problem. Pilots should drill themselves to follow thru and try to beat the automatic equipment and to kick free of the seat after opening the belt. Remember, you can't beat the automatic equipment if it works properly and you can't hold onto the seat if you are trying to unfasten your seat belt.

His chute opened at about 500 feet and the pilot was in the water before he could deploy his survival kit. Once in the water he was unable to deploy it. This indicates a problem with the kit release mechanism . . . however, the unit didn't UR it.

Saw helicopter and waited for it to arrive. They lowered sling and tried to raise me but chute was still attached. Lowered back to water and released right quick release, but could not locate the left. After some effort, found survival knife in flying suit and tried to cut shroud lines. Became entangled as fast as I cut. Finally found left quick release but still could not be raised because I was tangled in shroud lines.

By this time a small boat had arrived and the pilot was picked up by boat. The helicopter rescue aircraft was not able to pick up the pilot from the water with parachute attached, due to the added heavy drag. Crewmembers should be made aware of this and the proper procedures for releasing parachute canopy during water landing. However, if you are ever in this predicament and can't release it, try to cut the parachute risers instead of the individual shroud lines. This is a much faster way to get clear.



TAT

PULL UP YOUR CHAIR and get comfortable. I have a sad story ... a story about three high time pilots, a student flight engineer and an instructor flight engineer who managed to get tangled up with the elements and their big four-engined flying machine.

My story starts during final approach. Visualize two of the three pilots seated in their usual seats. The third, an IP, standing behind the right seat with the student engineer at the panel and the IFE looking over his shoulder. The tower has reported a 16 knot gusty cross wind from the left. The runway is wet. The pilot in the left seat has the number four engine at 25 inches because it has been backfiring at higher settings and he's making all power adjustments with the other three. As he flares the big machine over the overrun, he retards the three throttle to idle. The pilot in the right seat has been thinking about the landing and that 16 knot cross wind. He figures he'll have to hold in some aileron for the other troop in order to keep things under control. He should have opened the throttle lock plate, but forgot it.

Squawk! Screech! Thunk! The contraption is on the ground. The pilot tries to reverse, can't, and opens the lock plate. Still watching the runway, he reaches for the throttles and pulls back one and two, thinking he has two and three. (Four is still up at 25 inches.)

The big machine swings left. #!#! The left pilot cranks in opposite rudder, brake and more reverse on number two, still thinking it's number three. Meanwhile, his helpful companion in the right seat gets on the rudder and brake with him while he cranks in full left aileron.

After a short trip thru the mud the big bird lum-

bers into a mobile control truck and catches fire. All hands scramble out unhurt.

Enter investigators, who check everything, listen to each man in the crew tell what happened ... then start writing words like asymmetrical reversing, improper technique and poor crew coordination.

These are big words for a dumb fighter pilot like TAT, but as near as I can tell, everyone was unhappy because the pilot in the left seat did not bring the throttles out of reverse when directional control started to go to pot ... because the co-pilot started stomping brake and rudder and putting in aileron without getting the nod from his leader ... because the instructor pilot was not monitoring this merry-go-round and did nothing, and because neither engineer said anything to anyone about the reversing error.

I can see their point and agree ... but before I let you jump on the bad mouth wagon, let me toss out a few chunks of raw meat for you to chew on. Chunk one; why did the pilot continue reversing after the bird started to veer left, instead of coming out of reverse? Was it because he thought the cross wind was causing the veer ... or was it because he instinctively attempted to correct with differential reverse (a technique he had previously used to good effect) and got caught this time? See the trap? The cure is to always use correct procedures so they'll come natural when you're in a bind.

Chunk two ... why did crew coordination crumble? Had the crew worked as a team very long? If the mission does not permit having close knit crews, are crew duties rigidly standardized? Had the co-pilot previously worked for an AC who wanted him to pitch in on his own? This crew coordination is a fragile thing at times. Each man must know what the AC expects of him. There are times when he must trust his AC and take no action. Other times he

offer advice or pitch in to help without being asked. Why anyone to formulate a hard and fast set of rules that will cover each case. In this instance we have both extremes. The co-pilot cranking in aileron which made a bad situation worse instead of doing his assigned task of preparing throttles so the AC can reverse, and the pair of engineers who made no effort to tell the man he was making an error.

Another chunk of meat ... were the engineers quiet because someone once stomped all over them for volunteering information? Perhaps neither were monitoring throttle at all. If so they may have been treating this as a touch and go landing instead of a full stop. What is the ratio between full stop and touch and go landings?

Finally, the IP who failed to catch the error. Had things gone so smoothly during the rest of the flight that he was certain these troops knew their stuff or was he checking something else when things started to fall apart? Perhaps he took the wrong moment to grade the final approach speed or some other such item. If so, when he looked back he would have had little time to analyze the problem and do anything constructive to correct it.

If nothing else, I hope I have shown both sides of this little story and have given you some ideas that keep you out of my next story!



ALTHO I DON'T weigh down my pockets with horseshoes, I do believe in luck. Take this TAC many-motored crew ... they lost nose wheel steering just after turning clear of the active. Now that was luck. Bad luck. Not real bad, just nuisance bad. Pressing on, someone noticed hydraulic fluid drooling on number two. More bad luck. The crew shut the

engine down and continued taxiing. Approaching a crowded ramp, the brakes suddenly failed . . . serious bad luck. The crew was unable to steer with differential power and the whole unlucky contraption was soon headed toward three parked F-100s.

The pilot hit the emergency brakes and - luckily - they worked. All this bad luck started from a ruptured hydraulic line in the number two nacelle.

Yes sir, I believe in luck. That broken hydraulic line was bad luck. It was luck, because the crew had no control over it. But, the nose gear steering system hinted at impending trouble and the drooling fluid fairly shouted that it was on its way. Why press on just to test your luck with the emergency system? Never can tell, it might be your day to be REALLY unlucky. Yeah, I believe in luck, I believe you make a lot of it yourself!

TAT SPOTTED this one in the morning message traffic . . . "While on downwind at 220 knots, I lowered the gear and advanced throttle. I checked rpm, but it remained at 80 per cent. While turning a short base leg, I selected emergency fuel and rpm responded normally to throttle movement. The landing was uneventful."

Not very exciting is it? Remember to use proper procedures and you'll avoid fright.

TWO YOUNG LIEUTENANTS, with just over 1000 hours between them, crawled into their U-6A (in case you are slow with numbers, that's the L-20) and chugged off an airstrip that is adjacent to an overseas ordnance range. There was no range activity at the time and a few moments after getting airborne the pilot radioed he was on final for a victor one maneuver.

A bit of humor, had he just left it at that and gone on his way. Instead, he pulled up, rolled inverted and on thru. The bird slammed into the ground in a near level attitude. The joking was over. This grim ending is unnecessary proof that airplanes are airplanes and are terribly intolerant of being treated as toys.

A YOUNG DART shooter left the range when fuel was down to a bingo of 2000 pounds. About four minutes later he noticed fuel was down to 800 pounds total, with 900 on the forward gage. He landed from a straight in approach with 200 pounds total fuel on board. After he taxied in they poured 1180 gallons



into the bird - meaning that he had exactly nine gallons left, plus taxi fuel.

Close.

The unit checked and cleaned the fuel probes... recalibrated the system and checked it out on the run up pad, then flew the bird to minimum fuel on a test hop... all without finding anything amiss.

This tiger couldn't help wonder if this young man didn't stay for an extra pass. If he did, he caused a lot of good people to go thru a lot of needless effort just so he could save face. I sincerely trust he is honest even tho it means that this particular bird is going to scare someone else.

This business of honesty brings up a point or two. No commander in his right mind is going to penalize a pilot who honestly admits an honest mistake or an error in judgment. We're in a complex business and can't avoid making an occasional error. One of the old heads in the office was telling about the time he checked the switches on his hundred and proceeded to make a LABS that scattered tanks, pylons and other gear all over the range. Much to his disgust, when he rechecked the armament selector switch it was on jettison all. He had misread it on the earlier check. He saved the armament shop countless man-hours by admitting his error and at the same time saved others from making a similar goof because the unit started painting the end of the knob day-glow orange so it was easier to check.

LET'S SAY you're driving a heavily loaded twin engine bird out over the high rough country when fuel pressure drops on one engine. Whatcha gonna do? If you're flying a goon, the dash one says to shut down the engine using the mixture control, then

feather the prop. If you follow this bit of advice, you may find yourself in a sweat trying to dump c in time to avoid the rocks. Some of the other dash ones are less autocratic about this... they explain that a drop in fuel pressure CAN mean a fuel leak. That you should check for a fuel leak and in general keep the engine running if you need it badly enough, shutting down when you are ready to slow the aircraft for final approach. They explain that changes in air flow as the aircraft is slowed can cause the fuel leak to encounter hot exhaust stacks or other ignition sources and go from a simple fuel leak to a fuel-fed fire.

When shutting an engine down because of a fuel leak, do the honors by cutting the mixture control or turning off the fuel supply unless your dash one specifies a different technique. Know the potential hazard indicated by a drop in fuel pressure, weigh the course of action and decide on the one that best suits the conditions that exist. You may have to take a calculated risk to avoid an accident, but that's why you draw flight pay.

AN INSTRUCTOR and his two students were returning from a gunnery training mission when one of the studs called, "I just got a big thump in my gine... rpm jumped ten per cent and down and I got a fire in the aft section."

"Roger Three, throttle off and turn left so I can check you over."

"See anything?"

"Don't see anything, no smoke. Check your instruments and what is your rpm?"

"EGT is up to 600 with throttle off. It's vibrating pretty bad."

"What's your rpm, Three?"

"Fifteen per cent, the lights still on!"

Lead transmitted a May-day and then said, "I don't see any smoke, Three, try an airstart. Turn on your emergency fuel, airstart ignition on..."

"The lights still on, Lead. The fire light."

"Pancho Flight, this is Pancho Ops. Don't try an airstart if you have a fire light."

"Roge, ah Three, disregard the airstart and set up for an ejection..."

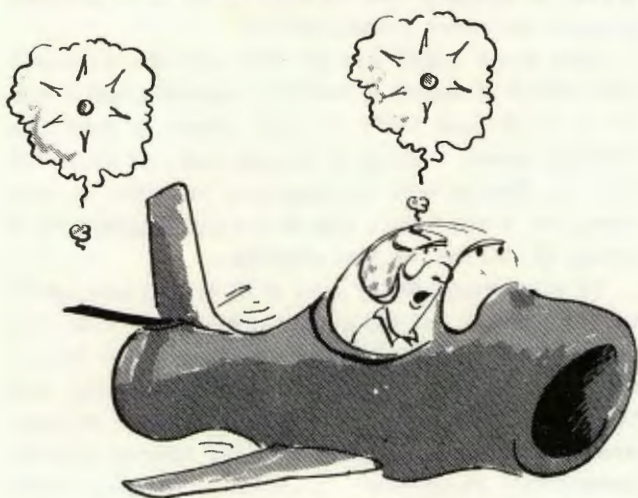
The ejection was a success at around 3000 feet above the hills... even tho Three had some trouble getting the seat to fire, possibly he didn't get the arm rest fully up before squeezing the trigger. Steady readers of this column should be able to forecast my next comment. That's right, the stud was handling this emergency better than his instructor!

The instructor's first error . . . which probably had no effect on the outcome of this accident, but which could effect other emergencies . . . was telling the student to stopcock. First action with a fire light, vibration, overtemp or any combination of the three is to reduce power to see if you can keep things under control and still develop some thrust. The thump and the overtemp confirmed the fire light and there should have been no doubt in anyone's mind that trouble was for real.

If you can't keep temperatures under control with reduced power, then go ahead and shut the thing down. Once you shut it down you can forget it. You are not going to get any more power from that particular engine - unless it's a J-79 that has been in compressor stall - which is an entirely different set up.

Error two was having the student fool around trying to nurse a crumped engine to life while only three thousand feet above the hills. Sounds like the flight leader couldn't bring himself to believe that one of Uncle Sam's gold plated engines had finally come unglued. He has lots of company. I see several fatal accident reports each year where the involved pilot refuses to admit he is in ejection-serious trouble until it's too late to punch. I have no cure for

his false optimism, other than for each of you to think about emergencies and decide on what you should do under a given set of conditions so your plan of action is already formed when the actual emergency arises. Along this line, you still can't beat regular, realistic simulator drill. There's a heap of difference between having some SEF ask for the Engine Failure After Lift Off procedure and having that



sudden loss of thought that accompanies the cold hard
hit in your belly which is induced by that sudden
surge of thrust at an extremely critical phase of flight.

TAC ATTACK

“INVESTIGATION TO DATE,” the message said, “indicates the pilot crashed while attempting to follow his flight leader thru a roll at a very low altitude . . .”

No, this wasn't a rerun of a message sent during the fearless forties . . . I checked the date and it was current. Well, like many troops of the earlier era, he'll never do it again. I'll wager a year's flight pay his leader won't get a chance to lead someone else thru another one of these either.

Each year we get a few of these bashes and I don't have to listen to the hangar flying to know that for each of them, many others pulled a similar stunt and got away with it.

Back in the old days I almost admired the spirit of these diehards - while condemning their lack of good sense and their disregard for fellow man. In those days the chief risk was losing one's life. The glamour and glitter of the flying business hadn't worn off and the exposed citizenry had yet to awaken to the fact that these foolish displays were at their expense and, often, at their risk.

I do not need to remind you that today a pilot may live thru the flat hatting but have someone witness his performance and bring about the end of his career in military aviation. Sincerely, this is as it should be. Today, there is no place for such childish antics . . . the machinery is too expensive and the mission far too important.

I would imagine the head shrinkers have a field day explaining why some clods still fly this way . . . they'd speak things that range from a secret fear of flying (yeah, get caught and you solve that fear!) to a need to impress.

I think most flat hatters are trying to prove themselves hot pilots, either to themselves or to other pilots in their unit. They listen to a lot of bar talk about the good old days, or about someone's more recent efforts and they misunderstand. They think this is the tried and true route to tiger status.

It ain't. If I want to find tigers, real honest tigers, all I need do is check the gunnery scores, the range log and mobile control log. Try it. You'll find the tigers in the flight that has no squawks. Those with comments on poor spacing, pass too steep or too flat, low pass, sloppy formation on initial, bad spacing, landed short or long and hot, will be the culls. Invariably, the gunnery scores will verify the logs. It all goes together.

Flat hatting is not the route to tigerhood. And don't go whining about working off frustrations. You can do that in the gym. ➤

Ground Safety

CONTACTS

People who wear contact lenses should carry a card in their wallet stating that they do wear contact lenses and that the lenses should be removed from their eyes if they are involved in an accident and become unconscious for a period of time. Contacts can do serious damage if left in the eyes for a few hours during unconsciousness.

Another tip, if you are a sunbather and wear contact lenses you should remove them before sunbathing. There have been cases where a person stayed in the sun too long and the contact welded to the eyeball.

HOT SEAT

This airman first was working the midnight shift in the ground power shop. About two hours after he reported for duty, his super told him and an airman second to put a new fuel pump on an MC-1 compressor.

They got the new pump on, but the new pump didn't have enough suction to draw fuel and they had to pressurize the tank. While pressurizing the tank, fuel splurged out onto the airman first, getting all over his pants from waist to his knees.

His super sent him to the john, telling him to take his clothes off and let them dry, explaining the raw fuel would burn his skin. The airman first went into the latrine all right, but sat down in one of the cubicles after lowering his trousers. While meditating, he absent-mindedly (that's the only way I can explain it) fired up a cigarette. He blew out the match . . . but some moments later, a bit of burning ash dropped off the coffin nail and ignited his britches. And that's when the fun began.

After extinguishing the fire and waiting for the zipper of his trousers to cool, he checked himself for damage and then got someone to drive him to the hospital. Laugh if you will, but several people are hurt each year just because they did not use their heads. Will we read about YOU next?



JUDGMENT

Safety is often a matter of judgment. Good judgment is a pilot's most valuable asset . . . his good judgment and the good judgment of the mechanics, traffic controllers and other people who work to keep him flying. The same applies at ground level. A short time back I became a victim of the skate board craze. After I bounced off the pavement all kinds of people started telling me how dangerous these boards are. I look at it this way . . . skate boards, like aircraft, boats, skis, surf boards, and a lot of other things, have certain limitations. If you exceed the limits, or press too close to them, things get downright nasty and you are asking for an accident. Actually you shouldn't call it an accident because the event is foreseeable.

The skate board can get very unstable at speed. The speed at which it becomes unstable and starts to S back and forth is very close to your max running speed, making a bailout risky. If the board hits an obstruction or becomes unstable at high speed on a steep hill and if you get tangled with it trying to bail out, or just stumble . . .

If you choose to try your skill at this new sport, take a tip from me and pick your play area with care . . . build up your skill as you progress toward faster slopes or more advanced maneuvers, but beware of speeds that make a bailout risky, because eventually you will spill. No, the boards are not excessively dangerous . . . unless you ignore their limitations and leave no margin for error . . . but that goes for anything.



Major Lewis stirred his coffee and watched the passengers make their way into the commercial Convair on the ramp below. He spoke, more to break the silence than anything else, "The guy who designed this hash house had the right idea. Big picture windows overlooking the whole airfield... that's my kind of atmosphere."

The Old Sarge absently nodded agreement. He wasn't exactly in his best mood. The bed in the motel was swaybacked and sleep had been a struggle from one uncomfortable position to another. The eggs he'd just finished looked as if they had been swimming in a drip pan, and to top it off, the coffee was pitifully weak by maintenance office standards. Besides, he was mulling over the C-123 accident that had brought them to this place.

The Convair coughed out clouds of light grey smoke as its crew started first one engine then the other. The smoke apparently triggered a response from Major Lewis. "That bunch was pretty lucky the other night."

The Old Sarge was thinking the same thing. "Yes sir, a few minutes more and the fire in that left nacelle could have burned thru into the fuel tank and that would have been it."

"Seems real weird that an electrical problem started fuel fires in both nacelles." Major

Lewis thumbed thru a battered steno pad. "You figure the sudden overvoltage cause the fuel boost pumps to overspeed and that this caused fuel leaks?"

"Yes sir, as you know, voltage was high enough to pop light bulbs and voltage high enough to do this would cause the pumps to develop well over 50 psi. Fuel disconnects and B-nuts started squirting fuel at 50 psi."

Lewis tested his coffee and grimaced. "My wife makes stronger tea than this!" He put the cup down and returned his attention to the problem. "Shorted wires in the nacelles would be a likely source of ignition once the hydraulic lines burned thru, and both fires fed on this after the fuel pressure dropped to normal."

"Right. Until the left main fuel line burned thru just after touchdown... a good thing they got the bird on the ground when they did."

"Do you have a list of the electrical write-ups? I'd like to bring my notes up to date." Lewis turned to a blank page.

The Old Sarge took a worn envelope from his pocket and unfolded it. "The problem started about four months ago when they installed another APP generator to replace one with a sheared shaft. Later the same day the battery overheated. They troubleshot the system, found the voltage a bit high, installed a new gen-

erator switch and paralleled the generators. The next write-up was a month later, and was followed by four more write-ups during the next two months. To correct them, they paralleled the generators three times, troubleshot the system once, and once found a bad connector on the regulator. This was after number two generator dropped off the line.

The write-ups got real frequent starting about a month ago. Number two generator dropped off and would not reset, number one went off the line on landing... they found an open field in number two.

"Two days later, number two dropped off again and had to be manually reset after every take-off. They found a loose lead on number one. Two dropped off again four days and four flying hours later. They troubleshot and replaced the field control relay, but got a repeat write-up the next day. It flew eight hours and then number one dropped off. It flew two hours and came back with an overvoltage squawk. Each time they'd find something wrong, fix it, and hope they'd cured the problem. Yesterday morning a pilot aborted takeoff because both generator warning lights came on. The right one reset OK and the left seemed to correct itself. The next takeoff was OK. They made a third takeoff and both generator fail lights came on. Maintenance

checked the system and installed a new regulator for number two, paralleled the generators and tried to get ops to run a high speed taxi test that afternoon since most of the trouble seemed to start during takeoff."

Major Lewis sighed, "Too bad they didn't get around to it instead of mulling over the situation until it looked less and less serious. Anyway they finally launched it at night on that training flight. Too bad they didn't wait. I'll have to brief this thing, so let me run over the flight itself...see if I miss anything."

"All right, sir."

"Everything went perfectly normal until their second takeoff. Then, number two generator dropped off the line just after they picked the gear up. The co-pilot reset it and checked the voltage. It was 28 volts, but moments later number one dropped off the line. The flight mechanic pulled the throttle back on the APP, thinking it was forcing the engine generators off the line. At the same time, number two dropped off the line. The flight mechanic returned the APP to run while the co-pilot tried to reset the generators electrically.

"Unable to reset them, he put the APP on the line, but got no help from it. They were in the dark, which means the battery was dead too. Using a flashlight and checklist, the co-pilot started thru the generator out procedure. The flight mechanic asked him to take the APP generator off the line, which he did, and then the flight mechanic went back to manually start it. He reset the APP field control and started the unit. Normally he would have let it idle, but it was already warmed up, so he put it over to run. At this point he should have reset the control

relays for both engine generators. Instead, he reasoned that number one was kicking number two off, and that the APP was the best cure.

"All this time, the pilot was headed back around for landing and extending his approach, anticipating electrical power. The co-pilot then put the APP on the line, all lights came on and they got the gear extended. They tried to contact the tower, but couldn't raise them.

"About this time the co-pilot noticed cylinder head and carburetor inlet temperatures were off scale on the low side. He figured the single phase inverter had failed, although the warning lights weren't on. He switched to the spare and both failure lights came on. The pilot told him to put the single phase inverter back on the line, which he did. The co-pilot then checked the APP voltage and found it slightly low. Meanwhile the pilot had started his turn onto base, flashed his landing lights to alert the tower, and put flaps to the takeoff position. Within seconds, sparks started showering down from just aft of the wing beam on the ceiling of the cargo compartment. All lights became extremely bright and the bulbs started exploding.

"The pilot called for everything off, but fires had already broken out in both nacelles and in the battery compartment. The pilot pulled the T-handle on number one, but without electricity this had no effect. Somehow he managed to get the bird onto the runway with the co-pilot holding a flashlight on the airspeed indicator. Fire fighting equipment was already headed their way, since the fire department people saw the flames while he was making his approach.

"The APP worked OK during

bench check, but after ten minutes voltage started fluxuating. Except APP voltage is what caused them.



to lose both engine driven generators. The APP reverse current relay was stuck closed. This kept the APP on the line and explains why the APP stalled when they lost both generators. The battery failed because it had to assume the whole electrical load & motor over the stalled APP. About three minutes after they got the APP back on the line, the APP voltage control went out and allowed the extreme high voltage that caused the rest of their problems."

"Yes sir, sounds correct to me."

"To sum up the causes...the APP voltage regulator is our number one villain...along with the stuck reverse current relay. The aircrew contributed - inadvertently - when the flight mechanic moved the APP from run to idle after the generator initially failed. This was a troubleshooting measure, not a corrective measure, and is what caused the APP to stall and cost them the battery.

Not manually resetting the engine generators also contributed. Of course, they had no way of knowing the APP started

trouble instead of one of the fine driven generators."

The Old Sarge spoke, "True. Also, the engine driven generators may have already been ruined by then."

"A good point. Now for maintenance. Altho most of the maintenance corrective actions were pretty much normal and reasonable, they were missing the true cause of all their problems."

The Old Sarge nodded, "Another case of curing symptoms instead of the cause. The APP

voltage regulator and reverse current relays were likely giving intermittent trouble. This would be hard to spot unless someone went 'way back to that first write-up the day they installed the new APP and got suspicious. Now, it's easy to see...but that always seems to be the case."

Major Lewis glanced at his watch. "Time we got started. You know, after looking at this one, a fellow can see why it pays to stick to the published emergency procedures. Then, if things fall apart,

the powers that be will have to blame the aircraft or the procedures instead of including you on their list."

"I guess you're right," the Old Sarge murmured, "but I still think that crew did a fine job, everything considered. They were trying and they were thinking, and no one should blame them for not being able to analyze the true cause of their problem when maintenance had been unable to come to grips with it after almost four months of troubleshooting."



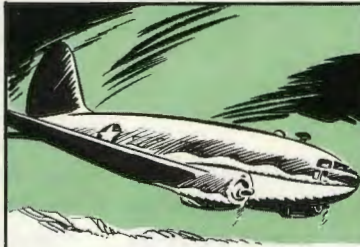
516th
TROOP CARRIER WG.
DYESS AFB, TEX.



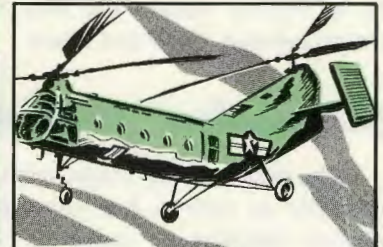
THE COLORFUL LINEAGE OF THE 516th CAN BE TRACED TO WWII WHEN, AS THE 31st TRANSPORT GROUP, THE UNIT PARTICIPATED IN THE ETO, FLYING CARGO TO THE CONTINENT AND EVACUATING WOUNDED TO ENGLAND.



BY THE END OF THE WAR IN EUROPE, THIS UNIT HAD MOVED 45,000 TONS OF CARGO, EVACUATED 50,000 WOUNDED AND TRANSPORTED 98,000 PASSENGERS.

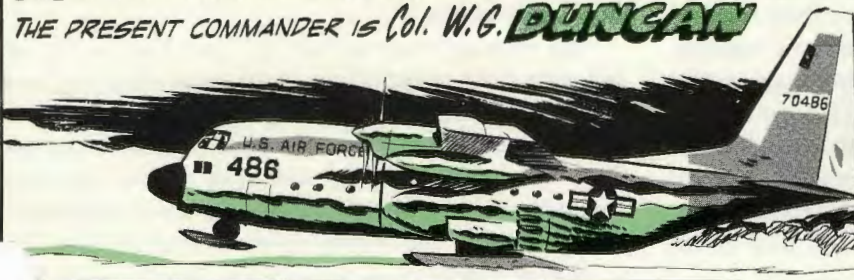


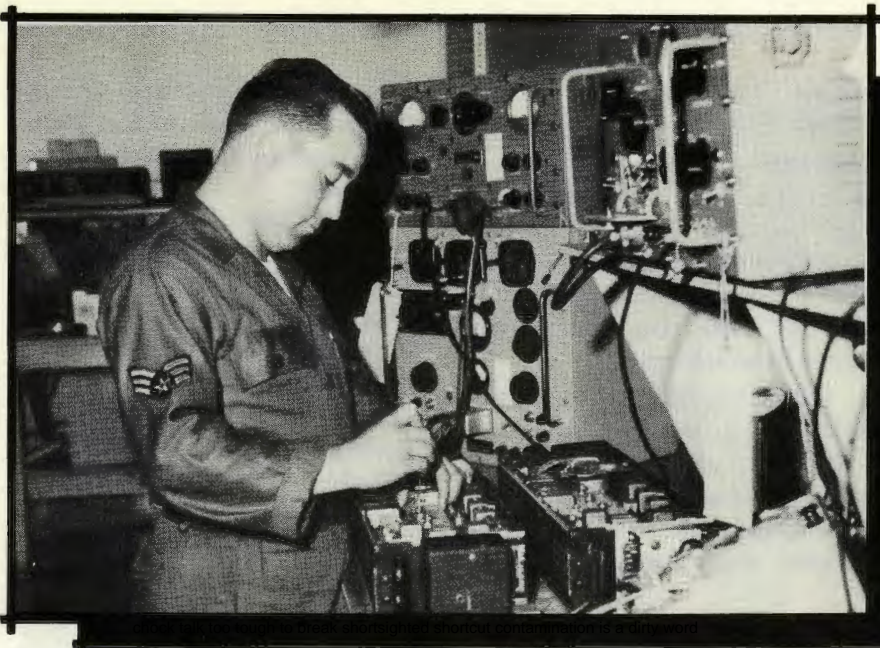
DURING THE KOREAN CONFLICT THE 516th TROOP CARRIER WING SERVED WITH DISTINCTION AT MEMPHIS MAP.



IN 1955, THE 516th PROVED ITS VERSATILITY AS A HELICOPTER ASSAULT LANDING GROUP, AT SEWART AFB, TENN.

ASSIGNED TO TAC 19 JULY, 1962, THE 516th HAS FLOWN A VARIETY OF WORLD WIDE COMMITMENTS, SUCH AS THE SKI MISSION FROM GREENLAND WITH THE ONLY AIR FORCE SKI EQUIPPED C-130s. THE PRESENT COMMANDER IS Col. W.G. **DUNCAN**





CHOCK TALK

too tough to break

An F-105 pilot couldn't get a good chute after landing his big beast, and tried three times to drop the hook for a possible BAK-9 engagement. But, he was unable to break the safety wire on the guarded switch. The arrester hook switch was safetied with a double strand of .018 copper wire instead of .014 wire in accordance with TO 1F-105D-2-2. This may sound like a small item, but it isn't to a pilot when he is headed toward the boondocks rapidly running out of runway, time and ideas.

shortsighted shortcut

The chances that some people are willing to take in order to save a few seconds! For example, an airman decided he could check to see if an M-39 cannon was loaded by just glancing down the muzzle. If he couldn't see a round, the gun was not loaded. He used this "technique" to check weapons on aircraft coming back from the gunnery range. Can you imagine? Peering down the business end of a 20 MM cannon that might be ready to cook off a round!

In addition to being extremely dangerous, his shortcut was ineffective. A bird came back from a mission, he peeked down the barrel and saw nothing but black. He stepped aside and another man on the armament crew pulled the trigger... a sure way to prove if a gun is loaded or not... BLAM! It was.

Did he blame his shortsighted shortcut? Indeed not! He explained the accident happened because he was wearing sunglasses and they kept him from spotting the live round!

contamination is a dirty word

Not long ago there was a lengthy TV show about Doctor Pasteur and some of the problems he had educating his contemporaries. He couldn't seem to convince them to sterilize their knives before operating on their fellow man. He couldn't get most to even wash their hands.

Now, as any TV addict well knows, the germics go thru a complex little washing ritual which is routine. Off hand, our fluid handling in and around the Air Force is at about the same level that surgery was during Pasteur's day.

A few dedicated maintenance people recognize the importance of keeping things absolutely clean... but the rest can't seem to bother. Check thru the incident reports here at TAC and you can almost visualize the emphasis each unit is placing on proper fluid handling.

Units reporting numerous hydraulic pump failures, fuel control, flight control and AB malfunctions generally have poor fluid handling control. You'll find them with a bird in the hangar with its aft section off and uncapped lines dangling a few inches above the floor. The hydraulic mule will be in similar shape...

We even spotted one unit that had sawdust spread out under the aircraft to catch fluid drooling from the unprotected fittings. Men working in the area couldn't help but kick sawdust on an occasional fitting. This compares with the old-time doctor who performed surgery with a scalpel he'd just dropped in the barnyard and wiped clean on his trouser leg.

When a hydraulic pump fails, they'll write i

an incident report and advise that they've replaced pump, leaving one and all to wonder if they bothered to flush out the system and clean the filters. By the time someone asks 'em about it, 'tis too late and the new pump has been ruined.

Present day aircraft are almost human and their fuel, oil and hydraulic systems are terribly intolerant of foreign material. To keep them running trouble free is no small problem...lines and fittings have to be covered with plastic caps, plastic bags or heavy aluminum foil everytime they are broken apart, regardless of how soon they are to be reattached. The same holds true of the fittings on the hydraulic mule and the fluid used to service both the aircraft and the mule. One slip anywhere along the line can undo all the good work.

But, in the final analysis, all of this cleanliness really pays off, just as surely as it does for today's doctors.

modifications and modernization

Many improvements go unnoticed because no one realizes they are significant or because the Airman or NCO who discovers a way to improve on a system item of equipment knows unauthorized changes are no and allows the improvement to die a natural death. Perhaps the people involved were not familiar with the procedures for presenting improvements. The details are spelled out by AFR 57-4 and supervisors should make certain everyone knows about this reg.

Basically, Class I requests should go thru channels to TAC and give a full bill of materials, including federal stock numbers, part numbers, military specifications, number of items needed, type of material and approximate cost. The request should give the AFSCs involved, along with the man-hours and hourly rate of each operation. It should specify the manufacturer, or installation required to accomplish the improvement. It should tell how the improvement is accomplished and tell how it will effect AGE, training aids and so on. This sounds complex, but is often easier done than said.

When we receive the modification package here at TAC we will get configuration board approval, approval from the prime AMA, and if the mod is to be retained over six months, get authority to press on from HQ USAF.

After this is all done, we'll assign a command emphasis code, publish details of the modification and send it to other affected units.

precision measuring equipment

For years we've had two big troubles with our precision measuring equipment ... torque wrenches, tire gages and such ... getting people to use them and keeping them properly calibrated. Everyone agrees that you can inflate a tire more accurately by checking its pressure with a gage instead of eyeballing the bulge on the bottom side... and everyone agrees that a man can torque bolts a whole lot more accurately using a torque wrench instead of going by feel. However, when there's only one or two tire gages on the line . . . or the fitting to be tightened is buried in the bird's innards where an agile man with two elbows on each arm is hard pressed to get at it, people start to cheat on the system.

The answer to this is adequate supply, better design and a hard-nosed attitude. You can reach more with that torque wrench than you may think! However, there is much less excuse for uncalibrated equipment.

We have systems to insure that precision measuring equipment gets frequent checks. Don't get lazy and ignore these checks . . . and take care of the equipment so it doesn't get knocked out of calibration between checks.

Don't go piling tools on your torque wrench, for example. You know how to treat these items, so treat them with the special care they deserve.

not so well oiled

Most car owners keep a pretty good check on the oil level in their heap to make sure it doesn't get too low or use so much oil it's in danger of running it out. They'll take reasonable care to check on a piece of equipment that may not be worth more than five bills, yet some of these same people can crew a two million dollar airplane and ignore the amount of oil it uses. This hardly makes sense. If a car engine runs out of oil and grinds to a halt, the driver can coast to the side of the road and walk. When an aircraft engine runs out of oil, the pilot is going to be hard pressed to save the bird. Sometimes he'll even have trouble saving his neck. Stupid as it sounds, we still have cases where this happens. In the last one, the pilot observed the oil pressure fluctuating and got back on the ground before the J-57 failed. It took 15 quarts to service it, there were no oil leaks and consumption checked normal on the test stand. The form 781, part 2, did not indicate when the engine was last serviced with oil. Would you treat your car this way? ➤

A Marman clamp, or V-band coupling, is used to connect and seal tubing and ducting or to attach accessories. When handled properly and installed correctly, it is very effective and time saving. Removing, replacing or inspecting is a one man operation, the clamp goes on or off in a few seconds. But don't let its simplicity fool you. Improperly handled or incorrectly installed, it will not perform its sealing function and leaks will occur. Hot air from aircraft engine compressors, leaking around an improperly installed coupling, has burned wiring, deformed metal components and started fires. Fuel, oil or hydraulic leaks caused by incorrect handling or use of Marman couplings have caused system depletion and serious accidents.

The Marman Division of Aeroquip Corporation produced a pamphlet on the correct handling and installation of V-band couplings and generously permitted us to reprint from it. The few simple rules below contain the secret to success . . . and safety!

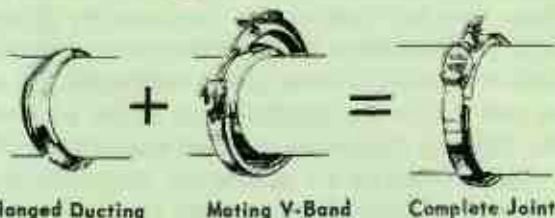
We believe this article should be mandatory reading for all aircraft mechanics.

HOW TO MAKE EXPERT

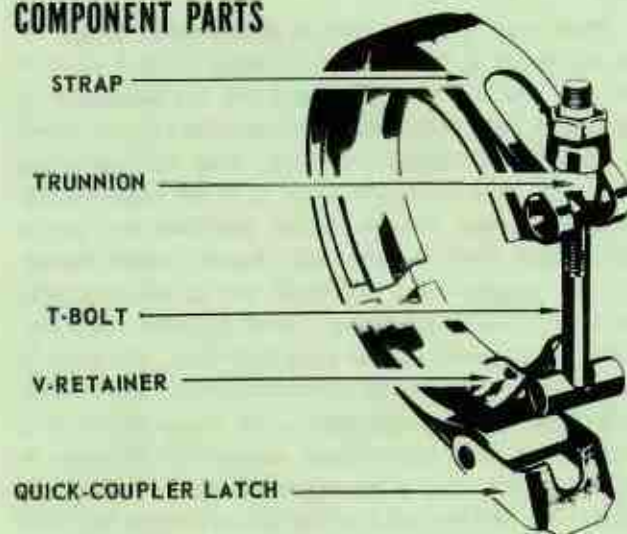
ON THE V-BAND COUPLING



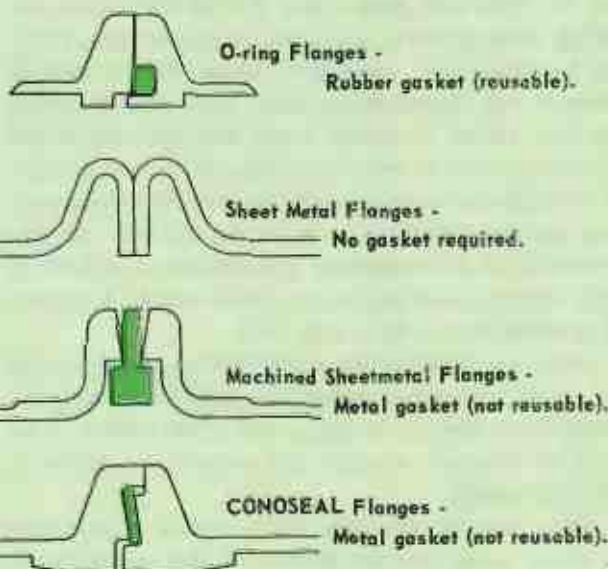
WHAT IT IS



COMPONENT PARTS



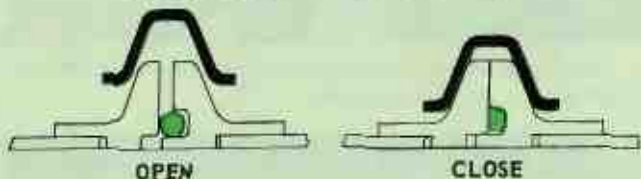
V-BAND COUPLINGS ARE USED ON DIFFERENT TYPES OF FLANGES. HERE ARE SOME OF THEM:



Illustrations Copyright 1964 Marman Division/Aeroquip Corporation.

WHAT IT DOES

It really just squeezes the flanges together.



The engineers call it efficient wedging action.

NOW YOU'RE READY TO PUT THE V-BAND COUPLING TO WORK (ALMOST)

First you'd better check the part number. Make sure it's the number called out in the parts manual. Couplings may look alike, may even fit OK, but each type has its special use. Expect a lightweight to do a heavyweight's job and you will have to mop up the leaks.

Marman clamps are *not* designed to be used as rigging tools to correct misalignment... *not* to support equipment during embly.

And there can be no misalignment or offset of the two tubes.



NOW YOU'RE READY!



Slip the coupling over the flanged tube or ducting. Don't spread it more than necessary.



This is what happens when the coupling is over-spread. The band gets kinked and the spotwelds are weakened. Don't use a coupling in this condition.



Put the gasket (if one is specified) in place carefully. Make sure it's properly seated.



Bring the mating flange into position. If there's an index, be sure it's engaged. Flanges must meet exactly and easily. Don't use the coupling as a pipe stretcher!

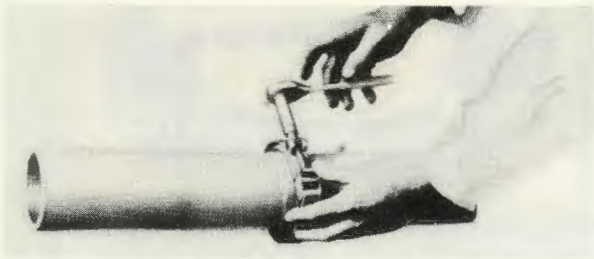


After the flanges are together, bring the coupling into position over them. Press the coupling around the flanges and engage the latch.

Nothing to it so far, right? But now you've come to the most critical part of the operation.

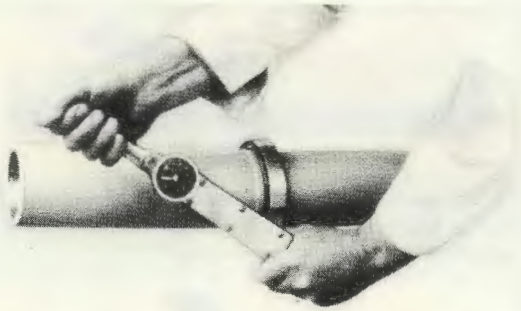
For initial tightening, a small socket wrench may be used. But for final tightening to required torque value, switch to a torque wrench.

Remember, just using a torque wrench doesn't guarantee success. You've got to use it correctly. The only thing is **COUPLINGS MUST NOT BE OVER-TORQUED!**



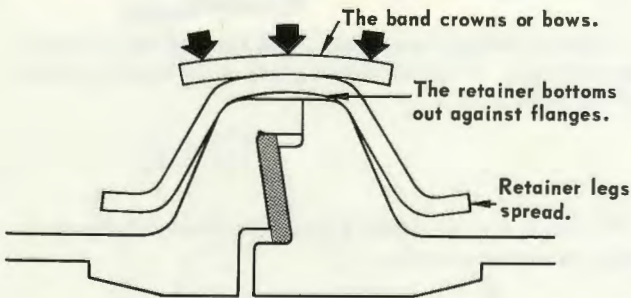
Check for proper torque value in your parts manual. (Sometimes it is shown on the part). After initial tightening with a socket wrench, tighten the nuts to about 70 per cent of maximum indicated torque. Tap around the outside of the coupling with a rubber or plastic mallet to distribute band tension.

STOP! DON'T OVER-TORQUE!

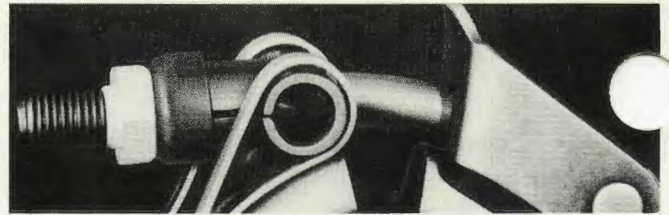
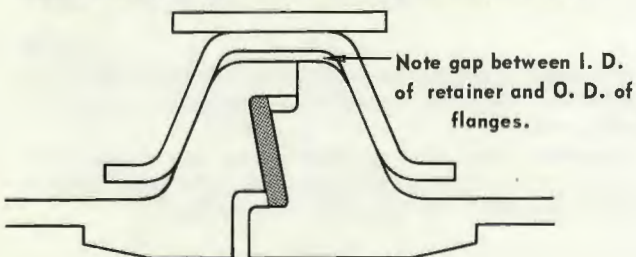


THE EVILS OF OVER-TORQUING!

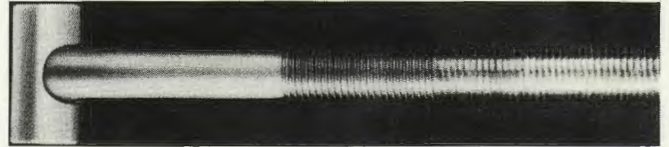
THIS IS WHAT HAPPENS WHEN A COUPLING IS OVER-TORQUED



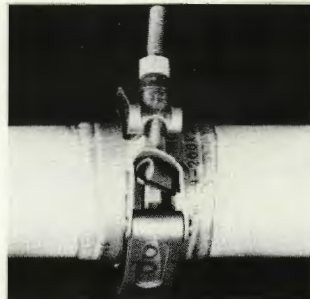
HERE'S WHAT IT LOOKS LIKE WHEN PROPERLY TORQUED



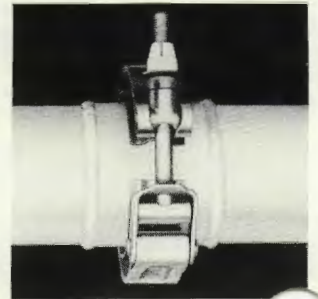
Some small sized couplings are purposely designed with curved T-bolts. . . they look like this.



Over torquing can also strip the T-bolt threads. Sometimes so slightly as to be invisible to the naked eye, but enough to cause coupling failure. If you know a coupling has been over-torqued, don't reuse it.



OVER-TORQUED note bent T-bolt, turned T-bolt head and deformed quick coupler.



PROPERLY TORQUED

SEVEN WAYS TO AVOID GOOFS:

- * Make sure you have the right part number.
- * Check in your parts manual for correct torque for each specific coupling.
- * Do final tightening of couplings only with a torque wrench.
- * If you have a leaky joint, extra tightening won't help. You have the wrong coupling, a damaged flange, or a non-reusable gasket.
- * Be sure the T-bolt is correctly seated.
- * Don't use Marman couplings as rigging tools or pipe stretchers.
- * Never deliberately bend a T-bolt to force a coupling to fit.

YOU MADE IT!

You now qualify for expert on the Marman V-band coupling. You should be getting your badge any day now.

i'm a Believer

I'm now a believer. From now on out I'll not trust anyone or anything. I used to read articles in the safety magazines that warned pilots to always tune in all available nav aids when making let-downs so they could monitor controlling agencies. Like most pilots I endorsed the practice but never could find time to follow thru with it on most approaches. No problems, so I stayed comfortably confident and complacent about my mode of operation.

Sure I trusted the controllers. I still do, even after that big bird crew drove into that California hill during a radar vectored climbout. I agree it was a shock to learn that climbout vectors keep you clear of other traffic but pay no mind to ground clearance. I still trust the controllers because I have to, but I don't trust them explicitly and I'll tell you why.

Five of us were bringing our F-105s into Brack Air Patch. . . that's not the name of the place, but it'll do for now. Gotta protect the guilty. Brack is located in a plains area with some mesa hills about 20 miles west southwest of station. Inbound, we split into two elements and a single, and approach control gave each of us vectors to get spacing and work us with other traffic. Weather was reasonably good . . . about 1900

scattered, 13,000 overcast, two or three miles in haze. The scattered deck was variable to broken.

I was leading the first element and was planning to make a TACAN approach just before they split us for vectoring. We had a little trouble getting our call signs straight with Approach Control, but finally ironed it out to everyone's satisfaction.

As I recall, they asked me twice for my Brack estimate before we split the flight. We were about ten or twelve minutes out the last time. I was having a little radio trouble, as usual, and Phil, my wingman, was having to make some of the calls, but the radio straightened out when we changed channels and got closer in.

We squawked 3-04 for the man and he told us we were 35 miles south. He had us turn to 360 and maintain FL 290 for vectors to precision final.

He let me and Phil down to FL 170, holding the others at 290, and eventually dropped us down to 6,000, still headed north, turning us to 300. We had a little trouble unscrambling our vectors since he was talking to all three of us.

I remember he told one of the others to turn to 220 and descend to 4000. Since I was lowest, I figured it was for me and asked. It was, so I turned and continued

on down. He turned us over to feeder control and they told us to continue heading 320 and to perform our landing cockpit check. I started to turn back to 320 and he gave me a turn to 230 just before I dropped the rollers. We were in the clouds at the time, so I glanced over at Phil to see if he was managing OK. He was still hanging in nice and tight. The controller turned us to 220 and asked if we had performed our landing check. I told him we had. He said, "Roger, you're 24 miles north northeast of Brack."

He seemed fairly busy, and gave instructions to three other aircraft in the space of two or three minutes. I called once to remind him we were steady 220, 4000 feet. We were in and out of clouds and I'd glance down when we were in the clear and we seemed rather close to the ground. I called and asked if he was certain he had me.

He said he was, that we were 18 miles north northwest. He asked me to squawk ident. I did, and he turned us to 240, then started giving us no gyro instructions. About this time we broke out of another cloud and there was this hill sticking up into the next one! Holy cow! Another ten seconds on that heading and we'd have splashed. I yelled something over

the radio and pulled up. As soon as we got clear I had Phil squawk ident and the controller really flipped. He told us to climb to 10,000 IMMEDIATELY! We were already half way there by then. We talked to the senior controller after getting on the ground and he couldn't really explain it, other

than some other aircraft must have been following the headings they'd been giving me, at about the same time.

It could have been a case of someone deliberately following my headings for practice...I've heard of that happening, tho darned if I know what practice that gives

a man.

The main point is that I know fairly well where the mountains were around the area and could have easily prevented that scare by paying a little attention to my TACAN. Believe me, I will from now on out!



better mousetrap DEPARTMENT

POOPY-SUIT POOPER

Looking for a pin-hole leak in an anti-exposure suit can be mighty tedious, but every suit in every TAC unit must be inspected each 60 days. TSGT Edward J. Conner, NCOIC of the 317th Troop Carrier Wing Personal Equipment Section, became concerned over the time it took to handle the bulky suits and dreamed up a simple, yet efficient device to speed inspections.

The suit is attached to a four gallon metal drum and inflated with low pressure air from the exhaust side of a vacuum cleaner. A bright light mounted inside the drum lets the inspector easily spot abrasions



and small holes which might otherwise go undetected. A far more detailed inspection can be performed in about one-third the time than was previously required.

The neck of the suit is fitted over the drum and sealed by tightening the draw cord. The wristlets are closed with the wrist straps allowing a small amount of air to escape to avoid over-inflation. With the rig mounted where all external areas are exposed, the suit is readily accessible to the inspector.

Sergeant Conner reports that all parts except the vacuum cleaner were from scrap materials, keeping the cost down to almost nothing. He spent approximately three man-hours assembling the device, using a four gallon metal drum, two metal straps for mounting, an electric light fixture, switch and extension cord, plus a seven inch section of 5/8 inch tubing and the vacuum cleaner.



Reduce the airspeed by moving the throttle to IDLE and maintain attitude by holding the nose up. When the desired speed has been attained, it can be maintained by varying the

high near the horizon. The rudder should be applied against the spin when the nose is at the lowest point of descent. When the controls are more effective. Recovery initiated when airspeed is low will take one half to one minute to complete.

SIDESLIPS

Sideslip characteristics are normally good. However, a critical limit exists beyond which the maneuver may progress into uncontrolled flight. The out of control condition is severe.

STALLS

1G Stalls.

At 1G and gear and flaps up the airplane stalls normally, with plenty of warning; it mushes noticeably and begins to shake and buffet about 10 knots

INVERTED SPINS.

Note

An inverted spin is easily recognized because negative-G forces exerted on the pilot will force him against the lap belt.

Inverted spins are usually caused by too much forward stick during slow speed in a steep climb. Recovery may be achieved by pushing the stick forward too quickly when the airplane is inverted. Recovery from an erect spin. In

slips

Sideslip missed the morning meeting. He wasn't just late for it, he missed it! But he wasn't worried. They'd made him a flight commander for this deployment, hadn't they? With such an important position it was logical that he'd have special duties that would occasionally take him away from the squadron. And that deal last night was a perfect example of the responsibilities a flight commander-type picks up. There had been a few details to clear up this morning and as he entered the squadron tent he decided the best move would be a casual word to the ops officer that he was going to report to the commander on the incident at the main gate that he had been investigating . . .

"Yes, sir," Sideslip was being as affirmative as he could, "It looks to me like the AP could have prevented the whole thing . . . he let that farmer drive this load of hay right up to the main gate before he told him that all trucks must use gate three."

From the expression on his

face, the C O obviously wasn't too convinced, but Sideslip gamely continued. "Well, sir, when the farmer said he couldn't turn around outside the gate, the AP told him to drive thru, turn around, come out the other side, and go to gate three."

The C O seemed to be rapidly running out of patience. "That explains why this farmer wiped out both sides of the gate. But let's get to the tie-in with this squadron . . . how come the base commander wakes me up at one o'clock Monday morning to tell me his main gate's been demolished, me, who's been here all of six days on serious business with the Army? Does he have a piece of intelligence that I haven't gleaned from your wandering narrative?"

"Well, sir . . ."

"Like, whoinell ordered that load of hay for the club. And what were you going to do with it?"

"Well, sir . . ."

"Don't stand there and just 'well, sir' me, what were you guys up to?"

"Well, sir . . . I mean, it was like this, sir . . . I, uh . . . we, that is . . . they had con . . . uh, talked the club officer into allowing them to put on a hay-ride party. You see . . ."

"I'm beginning to see . . . don't make me ask who 'they' were."

"I was doing my best to stay away from a discussion of that, sir." Sideslip felt terribly deflated. This interview wasn't turning out the way he had planned. But the boss was still talking . . .

" . . . so when he said he wanted someone to bring the F down and pick up the Division Commander, I foolishly gave the colonel your name as a responsible, conscientious type who could do the job."

"You mean you want me to go back home, pick up the general and bring him up here for . . ."

"It may not be what either one of us wants at this point, captain, but the gods have ordained that our Division Commander should meet the commander of this base the day after what will forever be known as the hay-ride debacle." The C O

had a menacing look on his face, "And you're going to bring him up here, so go check on the weather and work up a flight plan . . . I have to call the command post and tell them when you'll be arriving."

Sideslip tossed the CO his most responsible, conscientious salute, turned in a military manner, and dashed out of the tent. He commandeered what passed for the squadron pickup and ordered the driver to take him to base ops.

Sideslip had regained his composure by the time he reached the weather station. He calmly surveyed the situation . . . cold front with possible snow in the higher planes . . . moving fast . . . get south and east of it and all's clear. He did some fast figuring in the remarks section of a 21A and called back to the squadron.

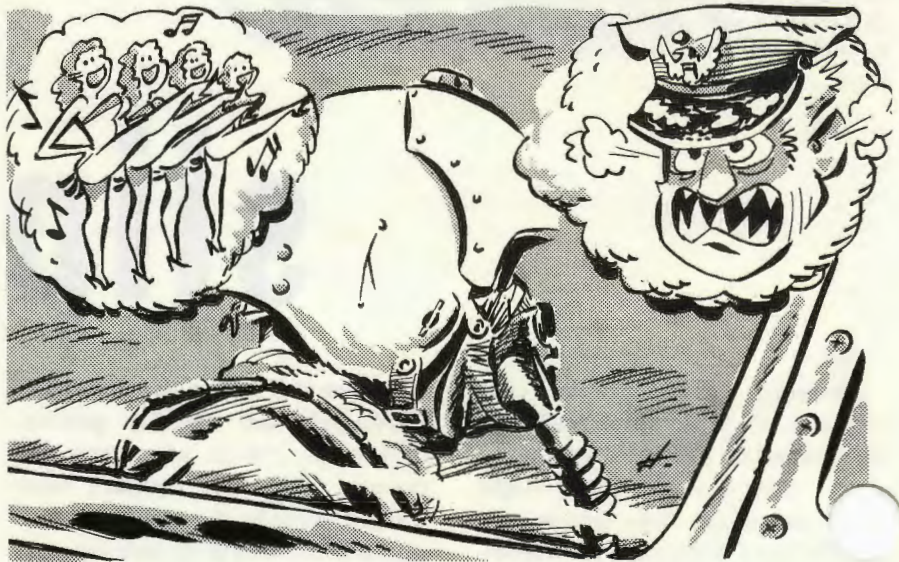
Within an hour and a half he was in the air, knowing the supreme satisfaction of a solo dash into the clear autumn sky. It wasn't going to be a long haul and he let it climb in burner . . . the thrusting surge of power helping to ease the frustrations of the morning.

As he levelled off, Sideslip's mind turned toward the general. The Old Man was a real terror . . . he hadn't come by that "Wild Will" tag by accident. They said he kept a red rug in his office so the blood wouldn't show, and that nothing upset him more than a poorly planned or incomplete mission. He considered an abort a crime more heinous than any other thing a man could do. Center interrupted Sideslip's thoughts.

"Sideslip Two, Center, weather advisory: Your destination now reporting 500 feet and one mile visibility in dust with frontal passage within the next hour."

Sideslip stood straight up in the cockpit. Five hundred and one normally wouldn't bother him, but

the front was just approaching . . . and he knew what these premature winter storms could generate in the way of sleet, icing and slush on the runway. The way his timing was working out, his arrival would coincide with the worst of the frontal passage. And if he landed anywhere else, he'd probably incur the worst of the general's wrath.



His only hope was for Homeplate to go below minimums in time to force him to divert. Wild Will couldn't do any more than cuss the weather.

If he landed somewhere else, he'd never be able to pick up the Old Man today . . . maybe the ruckus over the ill-fated hay-ride party would subside, given a bit a time.

"No, Boy . . ." Sideslip scolded himself. "That's not the way to approach the problem. Face it out! Wild Will respects the pilot who can get through to accomplish his mission."

He'd just decided that he'd press on as long as the weather was at minimums or above, when Center told him it was still dropping . . . down around two hundred obscured.

As he studied the letdown for

Nellis . . . as good an RON as he could think of . . . al ready to call in a change of flight plan, he thought, "Wild Will couldn't expect me to break regulations, below minimums and all . . . he might be mad at the weather, but I'm not going to give him a chance to be mad at Sideslip!"

As he worked out the justifica-

tion for his divert, he was passed to another center, and he asked for confirmation on Homeplate weather.

It was below minimums.

Sideslip breathed a quiet sigh of relief and turned to the back page of the Enroute Supplement to prepare his change of flight plan report. Nellis wouldn't be a bad stopover . . . several old friends from whom he could grub drowned olives and a steak. And then a fast pass at the Strip . . . maybe a late show.

"Whoa, Boy," he reigned himself in again. "Never know what the morrow brings . . . bright eyed and bushy tailed in the AM. Wild Will MIGHT wait." Before he had completely organized his report, Center was calling:

"Sideslip Two, concerning your destination . . . a C-130

anded and reported that the ceiling is actually 300 feet and approach visibility three quarters of a mile. Since the weather is at minimums, are you going to try an approach?"

"Leave it to some smart alec, many-motor to go into a field that was reported below minimums," Sideslip thought. A picture formed in his mind of Wild Will pacing Base Ops, knowing the field wasn't below minimums, waiting. He couldn't stand the thought, and shelved all his Vegas plans for another, brighter day.

The approach was barely routine altho he had made it hundreds of times. The last few feet of the GCA got kinda tense, but Sideslip broke out ... well, he saw the strobe lights ... as he passed minimums. The landing was good, considering he made it more by instinct than anything else and the runway wasn't too wet. He managed to brake to a reasonable speed before he spotted the taxiway and skidded precariously around the turn.

Since he had been too busy to call the command post in the air, he twirled in the manual frequency as he taxied and called, "This is Sideslip Two ... on the ground. I'll be ready to take the general aboard as soon as I'm refueled. I'll call you from the line shack when departure time is firm."

"Sideslip," The Command Post sounded almost apologetic, "The General left from the commercial airport about twenty-five minutes ago ... right after he got that call from some base commander up north. He was certain you wouldn't land here in this weather, and he was muttering something about going on a hayride with you ... nobody really understood him."

TAC ATTACK

the



other



TRAFFIC SIGNS



Long before we learned to drive, we learned the meaning of most traffic signs. First we learned the very basics ... red and green mean stop and go ... and gradually began to understand that driving is controlled as much by the signs outside the car as by the wishes of the driver.

By the time we were ready to start driving ourselves, we knew all about the meanings of individual signs ... square ones are basic warnings, octagons are STOP, triangles are YIELD, and a double stripe means don't pass.

Yes, we knew all about traffic signs. Or did we?

How about the traffic signs that are not painted yellow or white, the ones that don't change from red to green? How many of the other traffic signs do you see and react to now that you've been driving for ten ... or twenty ... or thirty years?

The other traffic signs are the movement, speed and direction of your surroundings as you pass thru them. Here are a few ... see how many more you can think of.

When a ball rolls across the street, EXPECT a child to follow it!

If the car in that driveway has a driver in it, he may be ready to back out ... look for his back-up lights and for movement.

Is that car approaching the intersection going too fast? He may have missed the stop sign ... be prepared to get out of his way!

When a driver stops at the curb ahead of you, give him room ... he'll probably open his door in your face!

When a parked car has a driver in it, look at the front wheels ... if they're turning, he is probably starting to pull out in front of you.

A bike or two up ahead means slow down and expect anything!



SEG NEWS

4450th Standardization Evaluation Gp.

FLASH

Rumors have a way of multiplying when there is a change of command. One which caused a great deal of speculation in recent weeks concerned the SEG. To keep the matter straight and in perspective, the status as TAC ATTACK went to press was as follows:

The 4450th Stan/Eval Group as a unit will be dissolved. The responsibility for Stan/Eval functions will be transferred to the Deputy for Operations, Headquarters TAC, with each ops staff agency assuming their appropriate responsibility for the program. It should be pointed out that dissolution of the 4450th does not mean the end, or even de-emphasis, of the standardization and evaluation program in TAC. Rather, it is a realignment and decentralization of responsibilities. And strong program, more responsive to the needs of unit commanders will continue.

TAC ATTACK will keep you informed as the program develops.

*L/Col I. T. VanPatten
Asst Chief, Office of
Standardization and Evaluation*

WHY?

By Captain Eldon D. Olsen

"I'm flabbergasted! Who'd a thought old Jim would flunk a written test on his air machine? He has had a solid month to get ready. With any reviewing at all, he should have been a cinch to ace it. But a 63% overall grade, spiced with five bold face procedures wrong - - I can't believe it!!!"

How many times have you heard a similar spiel

from some dazed supervisor? How many more times will we hear this question being asked?

The only answer that seems to fit is that, "the troops just ain't studying." With all the effort SEG puts out to prepare master question files, added to all the effort each unit makes to print and distribute study guides to the crew members, there isn't much excuse for anyone to fail an examination. Can you imagine the outcome if one of these individ

wed a similar lack of purpose or dedication to a lian job? You guessed it! They would end up either fired or bankrupt! But even this would only affect their personal well-being. When you goof off around aircraft, you go beyond your own personal well-being and into the well-being of others. So let's all get into those study guides and manuals and sharpen up on this thing called "professionalism."

Who knows? The aircraft or life we save might be our own!

NEW CONCEPT FOR AIRCREW EVALUATION MANUALS

At present, there are 23 different 60 series TAC manuals being used to evaluate aircrews during stdn/eval checks. Many of the areas and items that are graded on proficiency and instrument checks are identical and there is naturally a great deal of duplication among the manuals. During the past few months, a study has been made to determine the feasibility of combining all criteria in one manual. It was concluded that two basic manuals would be the minimum requirement, one for jet and one for conventional aircraft. Drafts of these new manuals have been prepared, combining the best parts of the manuals now in use. Of course, there are some items and areas that will not apply to certain aircraft. These items/areas will be tagged "not applicable," e.g., ARA not applicable to C-123. The draft manuals, numbered TACM 60-6 (Jet) and 60-7 (Conv) have been given to selected examiners to use on a three month test. At the end of this test period, the decision will be made whether or not to continue with this project.

Tactical evaluation criteria would continue to be published individually for each tactical weapon system, as appendices to the basic jet and conventional grading manuals.

MAINTENANCE STANDARDIZATION/EVALUATION

Now that we have visited many bases and the field is becoming more aware of SEG-M, specific items of interest should be covered. This month we would like to cover the use of study guides.

In the aircrew program, each aircrew member is normally provided a personal study guide, prepared from the Master Question Files on his aircraft. Those who have seen the size of the Maintenance MQF's and multiplied them by the number of personnel in a maintenance complex can see that if

we did the same thing, our best friends would be corporations producing paper and ink. Since we are all cost conscious in TAC, we want to cut down on the expense of printing these guides and still provide each individual the tools of the program.

We recently notified the field to reproduce just enough study guides to insure that personnel can prepare for their checks. These guides should be distributed and controlled by the stand/trng function.

Now, we need the help of each individual. Use the guides thoroughly and return them to training when you are finished. Remember, all the work you did researching answers helped you gain knowledge. Give the next man in line the same opportunity and do not mark the guides. Who knows, perhaps the dollars we save in this respect may be applied toward your next pay raise.

WATER, WATER EVERYWHERE

By MSgt Lionel R. Hale

Much can and has been said about water. It can be both fascinating and useful. Bathing, boating, fishing and drinking, mixed with scotch, bourbon, or straight, are but a few of its uses. It comes in all shapes, temperatures, and types of containers . . . glasses, buckets, tanks, streams, rivers and lakes, also oceans (of which, fine examples are the Atlantic and Pacific). They can be used for swimming, bathing, fishing, and traveling (either on, under, or over). Traveling over oceans is old hat to many TAC crew members carrying out the command's far-reaching mission. Though spanning our oceans is routine, occasionally an airplane falters because of mechanical difficulties, lack of fuel, or fire. The transition from birdman to seaman is rapid and often those who falter join the legions of the deep. To help keep from becoming a part of this legion, one must have a thorough understanding of the ditching procedures outlined in Section III of his flight manual. For many-motor types, this requires coordination on the part of all crew members. Without frequent realistic dash one procedure practice, this coordination is hard to come by. The Air Force has expended much effort and money developing water survival aids. Like water, they come in all shapes and sizes.

Become thoroughly familiar with the location, removal and proper use of all water survival gear carried aboard your aircraft. So if the day of reckoning should come while over the wet, you can do the next best thing to walking on water -- FLOAT.

TAC TIPS

STUCK GEAR

The Fifth Air Force Safety News told of an RF-101 pilot who was unable to extend the left main gear. After trying all procedures, he intentionally exceeded gear down limit speed and retracted the other main gear. He pulled the gear control circuit breaker and this left the nose gear down and locked. The pilot then landed on a foamed runway, touching down on the nose gear and external tanks. He used nose gear steering to keep on the foam. The aircraft slid 3300 feet and damage was confined to the flaps and one lower AB shroud.

THREE POINT

The F-105 was further out than normal when the pilot turned final for landing. He checked 220 knots on both the airspeed tape and the standby indicator. He slowed the aircraft and held it at 190 knots with power until he was over the overrun, then decreased airspeed and landed short of the spot he was shooting for. The main gear and aft section touched down simultaneously. After shutdown, the airspeed tape was found to be stuck at 170 knots. Altho the incident report charged the damaged skin, speed brake and busted IFF antenna to pilot factor, this one was probably set up by a defective Central Air Data Computer which caused the airspeed tape malfunction. An angle of attack indicator . . . and proper use of it . . . might have saved this one. Of interest, extreme nose high attitudes are not always evident since some pilots tend to lean forward when trying to wish one one, and this changes their normal references.

GOONEY GONE

Almost eight years ago a Navy F-11F test pilot started a shallow dive after firing his 20mm cannon. About 13 seconds later he ran into the spent projectiles and literally shot himself down. Well it happened again . . . only this time they used a gooney bird. The pilot tried to fire JATO and bottles failed to fire. He hit the switches again firing the second pair of bottles. Airborne, he actuated the jettison and firing switches simultaneously. All bottles jettisoned and the two unfired bottles ignited. One clobbered the port prop, the engine fell off and down came one each gooney. Fortunately no one was seriously injured.

BOOM-SEAT BUSINESS

The pilot involved in a recent Navy bash reported the ejection was normal in all respects; however, the accident investigation uncovered significant evidence that he had ejected thru the canopy. In many instances where the pilot reports no obvious malfunction, investigation of the ejection system comes to a screeching halt. The importance of detecting all malfunctions in this system always warrants a detailed investigation. Minor malfunctions, if uncorrected, have a nasty way of growing into major problem areas. . . usually after a fatal ejection attempt. A malfunk which results in a five second delay in ejection would hardly be noticed above 5000 feet, but it would probably be fatal below 500.

— USNASC Cros.

OUND CHECKED OK?

On a live close air support napalm run, three of the four cans released normally, but the left outboard wouldn't go. The pilot brought his F-100 around for another try using the outboard auxiliary release . . . this time the 335 gallon tank smartly separated from the aircraft, struck and ruptured the napalm can, then proceeded to damage the left wing tip, left horizontal stabilizer and punch a five by fifteen inch hole in the aft fuselage. When the pilot got the bird home, he learned maintenance had trouble shot the bird for an identical problem three days before, but couldn't find the malfunctions. After the maintenance cats had a bent bird and an irate herder on their hands they finally impounded the bird until they could determine a positive cause.

OIL STAINS

A recent OHR from a training base tells of a smart young fellow who charged forth on a nav training mission carrying three extra cans of engine oil in the cockpit. All went well until one of the cans leaked all over his clothing bag. It doesn't say what kind of a reception he got at the club that night, but it does have some potent thoughts about oil-soaked canvas, oxygen pressurized cockpits. If you must carry petroleum-base fluids around in your airmachine, make a special effort to keep the stuff away from the LOX . . . you can have your TDY suit cleaned, but it's a mite more difficult to recover from the spectacular results of an oil-oxygen mixture in the cockpit!

FINICKY F-4C

An RF-4C pilot had trouble getting started after landing at a Navy base. Seems they serviced the bird with JP-5 and the J-79-15 has its ignition system, fuel nozzles and fuel control all set up for JP-4 and doesn't run too well on other fuels. In fact, it would be almost impossible to get an airstart on JP-5.

If you're stranded and must use something besides JP-4 in a J-79-15 powered machine, fill it with the lowest grade aviation gasoline available.

AW, C'MON GUYS

Overseas incident report:

Pilot failed to deploy chute until airspeed was too slow for deployment . . . all pilots briefed to remember to deploy drag chute.

How about briefing pilots to turn off the runway . . . shut down the engine before they climb down the ladder?

TAC ATTACK

HAZARD REPORTS

An Operational Hazard Report is the first chance at accident prevention. An overlooked problem invariably leads to serious accidents, loss of lives and aircraft, and a reduction in TAC's combat capability . . . unless someone observes the problem and takes time to report it.

Now isn't that ridiculous - to think that you, the pilot, navigator, flight mechanic, loadmaster, or crew chief can help prevent accidents! One would almost think you were a safety officer. And who said a supersonic fighter or hard working assault transport should be safe? Isn't flying dangerous, after all?

If those are your thoughts, consider this! Every accident is the result of a sequence of events - a series of little mistakes. Eliminate just one step in the sequence, and you will probably prevent the accident. Why shouldn't flying be safe? We have tried through brains, hard work and training to make it so.

So what's so big about an Operational Hazard Report? It is the first step to success, and the basis for our effort. It does make every man a safety officer, and it does get results.

The program is designed with you in mind. All you have to do is be alert, and observe a hazard. Write it down, call your safety office, or send a wire. Sign your name, or be anonymous, as you please. Just join the program, and see how safe flying can really be when we try.



DOWN THE HATCH

The 4453CCTW safety newsletter, Phumbs Up, warns F-4 drivers not to put helmets and other gear on the canopy rails. Anything that falls off the rail when the engine is running will most likely go down the duct into one of the world's more expensive grinder uppers. Nuff said.

LOADED

Not long ago, an OHR came bounding up thru channels because a TAC crew arrived at a southern airpatch, taxied to the transient parking area, calmly shut down the engines on their machine and pressed on with their business. The hazard? Well, seems the bird was hauling 16,000 pounds of high explosives!

The crew hadn't said a thing to anyone. Fact is, they didn't realize that 160 one hundred pound bombs require special treatment...like a special parking spot out in the boondocks. The directives are scattered - or buried - thruout Air Force Manuals 71-4, 127-110 and TO 11A-1-33, AF Regs 55-4 and 60-5.

Basically, they say that if you are carrying explosives, you should contact the tower before takeoff or landing and let them know what kind of cargo you have. They'll have special taxi and parking instructions for you. Cargo such as this should warrant an entry in the remarks section of your clearance, too.

Regardless, the next time you have an explosive cargo, get in touch with your transportation officer and have him brief you on ALL the safety precautions required for that specific cargo...like the bird must carry a placard when carrying Class - A explosives and so on.

CRY WOLF

Both the number one and master fire warning lights flickered just before a crew started to taxi their C-130 bird. "No sweat, the dadburned fire detector system gave false indications on the last two flights. Signal chocks out and we'll let the engineer check it when he gets thru fooling with that door."

"Sir, this is the loadmaster, smoke is pouring out of both number one and number two . . ."

"Shut 'em down! Shut 'em down! Get the extinguisher while I secure things!"

Apparently the starter control valve failed, allowing the starter to continue running after it was de-energized. It oversped, failed, and high temperature air escaped into the number one nacelle, causing the ruckus. Aside from not taking things for granted, this episode illustrates the danger of not making (or keeping) fire warning systems reliable.

HOT FLAP

An F-4C pilot noticed the wheels light blinking after he turned downwind from his fourth touch and go landing. The BLC malfunction light was also on, but was quite dim. He extended the gear and attempted

to lower the flaps. The flaps would not go down so he made an immediate no flap landing.

The left trailing edge BLC valve had failed internally, sticking full open. Heat damage to wiring popped the flap circuit breaker. F-4C pilots are cautioned that a BLC failure can deprive them of normal flap control. If this occurs, they should attempt to lower flaps with the emergency system. Altho this limits trailing edge flaps to half flaps, it will open the BLC louvers and reduce further heat damage.

KAMAKAZI

"I was leading a flight of two F-4Cs on a practice nuc weapons delivery and was descending to maintain five-by-five . . . five hundred knots and five hundred feet. When I saw the other flight of two, they were slightly above us, and it looked like we had ample clearance. However, both folded their wings and entered a dive. It was too late to take evasive action and I felt a thump as the leader bounced off my inboard pylon. I won the engagement and he'll never attack another big bird intruding on his private hunting territory."

Bird strikes, such as this, are definite hazards when flying low level missions and it pays to keep your visor down in case one goes for your eye.

MORE BIRDS

On takeoff, approximately 300 KIAS, a dove (gross weight approximately three ounces) struck the windscreen. Aircraft (gross weight 11,300 pounds) was in one G attitude, 1600 feet MSL. Angle of collision headon. No damage to aircraft.

Swell!

QUICK THINKING

A moderate vibration warned a T-bird crew to expect trouble just after they picked up the gear and started to climb out from a touch-and-go. The bird soon lost thrust with much rumbling. The crew tried a gang start as they declared an emergency and bent the bird out and back in a sort of procedure turn to a downwind landing.

The IP dropped gear and flaps during the latter part of the turn, then noticed another bird on the runway. He made a quick decision, skidded over alongside the runway, and landed on the sod. Damage was minor, and the engine problems were induced by a failed vane on the compressor that caused extensive turbine damage. ➤

PILOT OF *Distinction*



Capt Thomas B. Blaikie of the 4447th Combat Crew Training Squadron, Sewart Air Force Base, Tennessee, has been selected as a Tactical Air Command Pilot of Distinction.

While demonstrating a stall series to a student C-130 crew, Captain Blaikie felt an explosion and saw the number two engine turbine light come on. The engine was shut down and the number one fire extinguisher discharged into it, but the overheat light remained on. Based on an inflight inspection, Captain Blaikie determined the number two engine turbine had disintegrated throwing fragments into the left wheel well severing utility hydraulic lines; however there was no fire present. By allowing the utility system to deplete, Captain Blaikie ascertained he would have five minutes of usable pressure if the flaps and gear were not activated. He lowered gear and flaps, refilled the system, and turned off the number one pump. Just before landing, Captain Blaikie turned on the pump so he would have normal braking and nose wheel steering. As a backup he selected emergency brakes prior to executing a successful landing.

Captain Blaikie's thorough knowledge of his aircraft and its systems and his professional handling of this emergency, qualify him as a TAC Pilot of Distinction.

Pilot of Distinction Crew Chief of the Month

MAINTENANCE MAN of the MONTH

Technical Sergeant Cecil L. Stambaugh, 464th Field Maintenance Squadron, Pope Air Force Base, North Carolina, has been selected as a Tactical Air Command Maintenance Man of the Month.



CREW CHIEF of the MONTH

Staff Sergeant Calvin C. Robinson, of the 4528th Organizational Maintenance Squadron, Nellis Air Force Base, Nevada, has been selected as a Tactical Air Command Crew Chief of the Month.



Captain Bobby J. Ussery, of the 313th Troop Carrier Wing, Forbes Air Force Base, Kansas, has been selected as the TAC Outstanding Nuclear Safety Officer for the six-month period ending 30 June 1965.

As an additional duty during the activation of the 313TCW, Captain Ussery developed and administered an outstanding nuclear safety program. He set up an effective nuclear safety training program for all combat crews and established a thorough and carefully coordinated nuclear safety plan in conjunction with AFR 122-1 and AFM 122-1. While participating in surveys and staff visits, Captain Ussery continued to prove his value as a qualified nuclear safety officer by assisting and guiding reserve units attached to the 838th Air Division. His extensive and professionally applied nuclear safety program was rated outstanding by Twelfth Air Force during one of their recent staff visits.

Captain Ussery's diligence and hard work to create an effective nuclear safety program qualify him as a TAC Outstanding Nuclear Safety Officer.

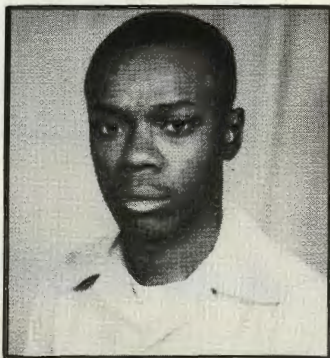
RECOGNITION



Major Bobby D. Cornell, of the 4504th Missile Training Wing, Orlando Air Force Base, Florida, has been selected as the Tactical Air Command Outstanding Missile Safety Officer for the period 1 January through 30 June 1965.

Major Cornell initiated and completed many outstanding safety projects during the awards period. He originated a monthly supervisor's safety training program to insure pertinent missile safety information was available at all working levels. Major Cornell researched all Air Force Mace mishaps and included a description and cause factor analysis in the Wing's safety information file. In conjunction with his permanent party oriented safety program, Major Cornell has developed and continues to conduct detailed safety briefings for all incoming student crews. He visits the missile compound daily to insure a before-the-fact accident prevention program and help correct deficiencies.

Major Cornell's continual and dynamic missile safety program qualify him as a TAC Outstanding Missile Safety Officer.



Staff Sergeant Earnest L. Rickett, of the 4520th Munitions Maintenance Squadron, Nellis AFB, Nevada, has been selected as the Tactical Air Command Outstanding Contributor to Nuclear or Missile Safety for the six-month period ending 30 June 1965.

Sergeant Rickett is assigned as a weapons load crew chief and has performed numerous flawless missile loadings in support of the Wing

missile training program. During the last six months, his crew performed 30 AIM-9B and 10 AGM-12B missile loadings on the F-105 aircraft. No missile loaded under his strict supervision was involved in a missile accident or incident. His crew was monitored and observed during all of the live launch missile loadings, and no safety violations were detected during any of these operations. Because of the high standards and safety compliance demanded by Sergeant Rickett, he has acted as the overall supervisor for multiple missile loading operations. He and his crew received highly favorable comments for their excellent performance while demonstrating AIM-9B loading procedures during a TAC Missile Safety Survey.

Sergeant Rickett's continuous high standard of performance, safety conscientiousness, and outstanding display of professionalism are exemplary goals which other load crew chiefs should strive to achieve. Well done, Sergeant Rickett.

TAC TALLY

A COMPARISON OF TACTICAL AIR COMMAND ORGANIZATIONS

JUL TALLY

UNIT	MAJOR	MINOR
4TFW	1	
3TFW	1	
474TFW	1	
4510CCTW	2	
23TFW	1	
121TFW	1	

ACCIDENT FREE MAJOR & MINOR

JET

ACTIVE	MONTHS		ANG
15TFW	10	17	108TFW
354TFW	5	7	126ARW

CONVENTIONAL

ACTIVE			RESERVE
4500ABW	49	104	434TCW
4442CCTG	32	65	435TCW

MAJOR ACDNT RATE

TYPE	1965*	1964
TAC	10.4	10.5
A-1	29.7	10.7
F-4	12.4	4.9
F-84	13.2	16.1
F-86	47.6	13.4
F-100	14.0	17.8
F-101	0	20.1
F-104	31.7	12.1
F-105	22.8	26.7
B-26	0	76.0
B-57	22.6	0
T-29/C-131	0	0
T-33	0	0
T-39	0	0
C-47	0	0
C-54	0	0
C/KC-97	13.9	15.3
C-119	2.1	1.9
C-123	4.9	5.6
C-130	2.3	1.2
U-3	0	0
U-10	0	17.2
O-1	0	0

The accident picture was a little less bleak in July, but we still have plenty of room for improvement . . . seven major accidents with three pilots killed and one badly hurt. All seven aircraft were destroyed.

An F-84F pilot got into a spin at 14,000 feet while in simulated air combat. He got the spin stopped, but did not have enough altitude to finish the recovery and was still with the bird when it hit the ground.

The pilot of an F-104G was killed when his aircraft rolled vertically to the left shortly after takeoff on a dart tow mission. He ejected, but was too low at that attitude to survive. The aircraft was carrying two 165 gallon tip tanks with the dart rig on the left pylon. Another F-104 pilot was killed when he tried to eject after his aircraft appeared to pitch up, yaw and roll during recovery from a hot rocket pass. Cause of both accidents is unknown at this writing.

An F-105D pilot received major injuries after he ejected at low altitude when he apparently stalled and decided he could not recover from a random tactical rocket pass. Another F-105 pilot ejected successfully after his bird flamed out from fuel exhaustion. The pilot was busy with details of a combat mission and didn't monitor fuel. The external tanks failed to feed.

Two F-100D pilots made successful ejections during the month . . . one after a maintenance error caused his right aileron to go full up. He couldn't maintain enough control to permit landing. The other hit trees while flying wing on a TACAN approach into a 400 foot ceiling with a half mile visibility. He pulled up with a very rough engine and unsafe gear to eject short of the runway.

* 1 JAN - 31 JUL 1965

