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Since the first of the year, the Tactical Air Command's aircraft accident rate has been too high. This is a matter of serious concern, not only for all commanders, but for everyone within the command.

There is no known magic formula or single, simple solution to this problem. On the other hand, the majority of these accidents were attributed to the same failures and the same weaknesses that have caused accidents in the past. This makes it apparent that we are not taking full advantage of our experience and that by strengthening our efforts in this area, we can achieve significant results.

Our present investigating system ostensibly brings out the causes of our accidents and incidents. However, investigators and reviewing authorities throughout the command often concentrate or even confine their efforts to correcting only the obvious factors. As a result, many of the less apparent but no less important causes are overlooked. For example, when an accident occurs because someone violated a directive we must find out why he violated it. Were others violating directives and establishing dangerous precedents? Was the directive poorly worded or ambiguous? Did the man involved know of the directive? If not, why?

By probing more conscientiously into the obscure reasons behind the defined cause of each accident and incident and then taking prompt and definite action to correct each weak area, we can learn and accomplish more with each investigation. Almost invariably, a determined and searching examination of each accident or incident will reveal suspect areas which deserve positive improvement, even though these areas were not directly contributory.

Every supervisor must recognize this valuable accident prevention tool, and independently expand, through his own efforts, the scope of each formal investigation.
"You ALL are real fish. If your strafing wasn't any better than your bombs, that penny-a-hole is going to make me a rich man."

Ellrod had his barbed needle working overtime all the way from the flight line to ops. His flight had just finished the last gunnery mission of the day and everyone within half a mile could hear about Ellrod's shack. The chutes and G suits were shucked with a little reluctance... a pretty good mission, no idiot loops, just good old dive bomb and strafe.

"Sockroller, get into my office now!" the squawk box blared.

"Oh my, sounds like the boss has his jaws torqued down as
I've been working my pretty sloppy week. There's just said. You're pushing the target no excuse for it. We are all ops
ence or poor judgment. The problem is you're gettin' in the bird ... it's not inexperi­
"Well, sir, you know how it is. The boys are a little aggressive and in the heat of ..."
"Look, Ellrod, you've been around long enough to know better than that. Remem­
be the last troop we had who was a little ag­
gressive on the range? The last time he fouled we found about six

of him. Now you get the

of clowns of yours together:

get them straightened out. One
tea mission like this last one and you
better learn some accounting because you'll have to rework your
budget to live without flight pay!"

When Ellrod got back to the briefing room it was apparent the
for the heat of

"Gentlemen, you were tabbed with two fools today on top of a pretty sloppy week. There's just no excuse for it. We are all ops
ready and have quite a bit of time in the bird ... it's not inexperi­
ence or poor judgment. The prob­
lem is you're gettin' lazy."
"What do you mean by lazy? I've been working my ..."
"Quiet. I meant just what I said. You're pushing the target because it's the lazy way to get

Somehow, you've gotten the

idea that the rules apply just to the
new heads and that the safety fac­
tors aren't necessary because you
know more than the people that
made up the pattern. You are for­
getting what your real mission is.

We may be dropping 25 pounders
now, but if we ever start really
earning our pay we'll be pickin' 750s or bigger. Unless you want to
start wearin' a turbine for a

necklace, you pull out with plenty
of room to spare with those mud
slingers. Sure, the fly safe types want reasonable minimums and safe patterns, but this isn't safety for safety's sake. It's just plain
good operations to train under
conditions that are as close as possible to those you will have in
combat."

"But Ellrod ... I mean Captain
Sockroller, we have had the best
scores in the wing for the last six

months. If we back off and start
flying like a bunch of pussy-cats
our average will be ruined."

"You're way off base," Ellrod
said as he got up and moved to the
black board. "Let's review the
basics of weapons delivery and I'll
show you where you're wrong."

"There is a category between
a pussy-out and the idiot who
makes low pull outs ... it's called
a professional! You make or break
a gunner pass when you roll in.

If you start your pass at the right
airspeed, altitude and distance
from target, there isn't much that
can go wrong. It doesn't make any
difference how you get there ... out of a pull up or from a base leg ... if your roll in is on the money, the rest of the pass will be OK.

From there on you can spend your
time tracking and can eyeball the
airspeed and a little off on altitude. Why? Because you were

softing off somewhere earlier on the
pass. If you were a little off on
airspeed and a little off on altitude
at roll in, you're bound to be a little off when you want to pickle.

Move one more step back up the
line and you find the reason you
weren't right on the money for roll
in is that you didn't put enough ef­
fort into getting there."

"You're right, Capt Sockroller. I
guess we've all been doggin' it
around the pattern, but it sure is
hard to break off at minimums when
you need just one more little correc­tion to really nail the tar­
get."

"Sure it's hard - no fighter pi­
lot wants to drop a bad bomb or
hose off 30 or 40 rounds that don't
hit the target. But remember this,
a good fighter pilot doesn't get in­
to the position where he has to drop
that bad one. Pressing the target
is a crutch for weak sisters that

can't hack the program. We've
been top guns around here and
we're going to stay there, but the
name of the game is follow the
rules. We're on the first mission
Monday and let's make sure it's
obvious the Pros are at work.

Now, as I recall, someone owes me
some dough."

"Not till the scores come in. Say,
was the boss a little un­
happy?"

"What, the boss unhappy with
me? Not a chance! He knows my
problems. He realizes that it's
tough for an outstanding flight
commander like me to work with a
bunch of clods. He simply asked
me to see if I could offer you the
benefit of my vast background and
superb skill."

"Ah ... Ellrod ... he left the
squawk box on and we heard it all."
"Oh, ah well............"
THE TRIP WENT about as usual...somewhere short of perfection. The bird lacked a couple hundred pounds of being fully serviced, the headwinds were stronger than forecast (ain't they always?) and a max load all made us keep a close tally on fuel to make sure we'd be legal when we arrived at Tinker.

Over Tulsa, the center came thru with an enroute descent and cleared us direct to the Tinker beacon. Beacon! “Hey center, TAT here, we have TACAN and OMNI, but no one bothered to install a bird dog in this heap.”

“Roger TAT, but the Tinker TACAN and OMNI are both inoperative.”

Doggone, they sure didn't say anything on the NOTAMs about all this...“Ah Fort Worth, how about giving us a radar vector to a GCA handoff?”

“Negative TAT, we are unable to handle a radar approach. Are you able to proceed VFR?”

Humm. Tinker has 2000 foot broken and we were over a scattered to broken deck, descending toward a large hole in the clouds. “Roger Center, we'll cancel item fox at this time.”

With no UHF-DF, that left dang little to go on except dead reckoning and some cobwebbed memories of the Okie City area. We didn't hit Tinker, but we did hit Oklahoma City and soon found an airport, getting traffic and landing direction from Tinker tower as we approached. “We'll enter base, Tinker.”

“Roger, TAT. I don't have you in sight.”

Hey, that looks like Will Rogers. Tinker has concrete runways...Ahh better head northeast...crank the bird around and...

“I have you in sight now TAT, you are northeast of the field headed northeast!!!

Cripes! Those sneaky rascals blacktopped the runway since the last time this tiger had been into Tinker.

Somehow there must be a moral to this story...like carrying a set of sectional charts around with you. Off hand, the NOTAM system still isn't fool proof. The Tinker VORTAC apparently blew a fuse just before we arrived over Tulsa and no one had time to let us in on the secret beforehand.

Had the weather been worse, we'd have been forced to go to our alternate...which is what alternates are for.

Speaking of NOTAMs...coming back home we started our let down off Franklin. The other troop, a light colonel and a good head, was making the letdown. He got established on the 30° radial of Franklin and I switched TACAN to Langley and, at his request, tuned the OMNI onto the ILS, putting 109.5 in the window.

The ILS seemed to lock on, with the course full left. It still read full left when my TACAN indicated we were crossing the 283 degrees radial. Humm! About then, approach control advised that we were north of the localizer. The colonel cranked the bird around, to about 90 degrees and as he rolled out all sorts of red flags dropped on the flight director. We were transferred to GCA and the first thing that good gent did was advise that the ILS frequency had changed to 109.7.

You know, when you fly only once a week, a whole lot can happen around the airpatch between flights. It pays to check NOTAMs on the home drome just in case you've missed one of these changes! Live and learn.

AT TIMES, this business gets rather discouraging...a glance at our accident record this year is reason enough for this to be one of those times...but there's more. Right after this cat came back from a short leave, the wife called to find out what happened to a friend of ours. She heard he'd been killed in an F-105 crash overseas.

I checked the message file and confirmed. A good, sharp troop with over 6000 hours experi...
mostly in fighters. Causes are not firm at this time ... but it looks like he ran into wing wash very close behind another F-105. 

Low visibility, communication problems and poor coordination between tower and GCA all resulted in both aircraft being where they were, when they were. A well accepted emergency procedure may have caused the accident to be fatal.

Wing wash is never easy to cope with and even less so with spoiler equipped aircraft, because with large roll corrections, spoilers can degrade lift. Anyway, this troop hit the runway hard enough to break off the right wheel, the left strut and collapse the nose gear. The aircraft burst into flame and skidded 4000 feet before it stopped in a pool of fire.

An H-43B was over the wreckage and had the fire blown away from the cockpit within two minutes. The pilot jettisoned the canopy during the slideout, released his seat belt and removed his helmet in an attempt to get out of the bird. He never made it.

For some years most handbooks have said to get rid of the canopy during situations where the aircraft is apt to end up sliding and bent. The procedures came into being after crash damage jammed a few canopies and trapped pilots in their aircraft. I concede that this is a problem and know one pilot who was 'ed that way. He's still flying.

On the other hand, the canopy offers valuable protection. I know one troop who was badly injured when the nose gear of his bird failed during a landing emergency. The aircraft went under the barrier and the cable dropped into the cockpit. I know another who had a similar encounter with a barbed wire fence! Both survived because their birds stopped sliding in the nick of time.

I investigated one accident where the pilot was killed by fire that surged forward around the open cockpit as his bird slid to a halt. I question the wisdom of opening a canopy during such events. Almost without fail, fuel from ruptured tanks will surge forward as the aircraft slides to a halt, causing fire to envelop the cockpit, then subside to the area around the wings.

It seems to me a pilot would be better off to start getting ready to run as soon as the bird halts, then open the canopy and go. If the canopy refuses to open, he should drag out a knife or canopy tool and start hacking.

To confirm personal observation along this line, I wrote the head shed for safety types and found I've been doing similar thinking. In fact, they have already made a recommendation to change fighter and trainer dash ones. They based the recommendation on a recent study of crashes and sent us a copy of the study. Some of the briefs in it made interesting reading.

Of note, pilots in two separate crashes became annoyed by flames as they attempted to extract themselves from their birds. They calmly sat back down, closed their canopies and finished unstrapping. After they were ready, they opened their canopies - one electrically, the other using the jettison system - and climbed out. Neither was injured.

The study cautioned that pilots are not rehearsing for this type emergency and often fail to use the alternate canopy jettison system. This has caused from three to five inadvertent ejections from crashes. Exact number isn't known since all five of the pilots involved are dead.

TWO T-BIRDERS checked the forms before starting their preflight and noticed their bird had been on a red cross due to maintenance on the ejection system. However, everything was supposedly back in place and the forms had been cleared.

"How come that hose is still unconnected?" the pilot asked, pointing to an initiator hose lying limp and loose by the canopy rail.

The crew chief muttered some semi-appropriate reply, whipped out an Arkansas socket wrench and went to work.

"Beg your pardon," said the pilot, who knew more about maintenance than most, "I thought egress systems are only supposed to be handled by egress technicians!"

Out came the crescent wrench and a slightly flustered crew chief unfastened the hose and called an egress specialist. When this worthy arrived, he looked at the hose, borrowed the crew chief's wrench and cinched things down again.

Continued next page
"Beg your pardon, but aren't you supposed to use a torque wrench on those fittings?"

"Ordinarily, yes sir, but when you've done as many as I have, you can hit 'em right on the button without a torque wrench."

For some reason, this little episode leaves this tattered one without a single decent word in mind. *#!!

ALL THREE PILOTS in Hog flight were old heads... and there was no sweat when they got a weather recall while waiting for GCA to fix a scope malfunction. There was still no sweat as they waited for another troop to get on the ground with a sick utility system... or when Hog One had to turn the lead over to Hog Two because his radio was giving trouble. Hog Two was an IP type. Hog Two brought the flight onto a seven mile initial, requested a straight-in and instructed the others to take spacing on final. Humm.

Ah, well, still no sweat... when they were five miles out, some pros in a big bird took the runway with a controlled takeoff time. They continued across the field and circled back onto initial only to get cut out by another aircraft that called on a straight-in. Another loose circle. On a wide downwind the tower operator called to report that visibility was down to two miles and then asked, "What are your intentions?"

Yeah, heh heh that's always good for a chuckle. Hog Two advised that he had the field in sight and intended to land the flight. He turned base while Hog One and Hog Three spaced themselves during their turns onto base. Hog Three didn't take enough spacing and eventually ended up fighting for control in jet wash, wing wash or hog wash... whatever you call it. He bent the bird when one wheel hit a road track 271 feet short of the overrun. He slid the rest of the way home.

Like most accidents, this one is far from being cut and dried. The goofs, as viewed in harsh light using hindsight, are simple enough. Hog Two didn't give his people a real good shake and Hog Three didn't take enough spacing. In fact he was only 500 feet behind Hog One and is lucky he didn't bust his britches along with the bird. The reason behind the obvious takes a little guessing... however, I've never been shy about guessing, having pulled enough bone-head stunts in my day to more than qualify as an expert on bone-head stunts.

My analysis of this one would be that the leader was expecting too much from the others - unconsciously he figured they had enough savvy to take care of themselves. This is indicated by his original plan to have them take spacing on a seven mile straight-in final. This plan would require some nimble execution even for Tom Swift types. Tell me, what would you do besides pull off power and stall out or make a 360? — Remember, there were three birds.

The second underlying cause is dynam opposite... and is the tendency for older heads... to follow their leaders with less than complete blind confidence. Hog Two made a fairly, tight pattern because of the low vis. Hog One made a looser pattern, but was still close enough to keep the runway in sight. Three made his pattern just a little wider, but apparently was trying to keep from losing sight of the field and didn't make it wide enough. A more trusting type would have spaced himself off One and let One lead him up to within eyeball distance of the runway.

To each his own, his big goof was not starting a wave off shortly after turning final... at that point he undoubtedly knew he was too close, but decided to take a chance on salvaging the approach. The best rule for safe flying I know of is to decide on the safe side whenever you are faced with this sort of decision.

AN EXPERIENCED TAC pilot was forced to eject from his F-105 after an oil loss caused engine failure and fire. Here are some comments from his statements and testimony that should be of interest.

JUNE 1964
pilots.

"After blowing the canopy with the first move of the ejection handles, the smoke cleared from the cockpit and I was experiencing difficulty locating the ejection trigger. I had already brought my feet against the seat, put my arms in the arm rests and had my head back for ejection. At this time I lowered my head to look for the trigger. Seeing it, I grasped the trigger and squeezed. I remember feeling the impact of the seat firing, a blur as I left the cockpit, the wind forces at deceleration and a tumbling motion. The tumbling slowed and I reached for the seat to kick free and discovered that the seat had already separated. At this time I reached for the D-ring and as I grasped it, the chute deployed before I could pull. I did not have the lanyard connected.

"My descent was normal with a ground wind of about 35 knots blowing. I landed on the side of a mountain which was covered with very large rocks. My hand was on the quick release cover when I landed and impact caused me to open the cover as I rolled slightly to the right. Then I went up with my left hand and unlocked the risers. The release was rather difficult to get to... had I been unable to release the risers I would have been in considerable trouble with that wind.

"I had always heard the riser release will be up to your ears because your shoulder straps ex... On the way down I checked the position of my shoulder straps. They weren't over an inch above my shoulders and the riser release was only up slightly. "I had a chute that only had one riser release and it would have been hard to get hold of had I broken my right arm. The reason I used my left is because I was hanging onto a big rock with my right arm to keep from being dragged. Even after I released the risers with my left, there was some doubt in my mind whether I had been successful... until I saw the canopy start to deflate and collapse."

Of interest, this pilot found that the ejection seat trigger is much lower than he expected. In his case, time was not critical and the slight confusion resulted in nothing more serious than a stiff neck. During a low altitude emergency it could have been fatal. Ejection seat drill in an unarmed seat is the best cure for this problem that has been devised to date... which is why this training is required by TAC regulations.

Regarding the chute... it takes almost 30 pounds of force to open a left hand riser quick disconnect using your left hand. This is due to a subtle difference in how pressure is applied to the release buttons.

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It takes a strong man to grind out 30 pounds of pressure with two fingers. This pilot could have avoided the more awkward and dangerous release method if he had removed the cover while well airborne, then grasped the left hand riser above the release with his left hand while holding onto the release with his right, actuating the release immediately on ground contact.

There is no assurance he wouldn't have lost his grip on the disconnect... the latest proposal for the disconnect should correct this since it replaces the buttons with a small loop of cable. At this writing the improved release is still under test.

That's right, both feet on the floor.

HEY TROOPS, this tiger read about another approach end engagement... a T-bird into an MA-1A! As could be expected, it wasn't a resounding success and it wasn't done on purpose.

The T-birdmen were on the flare for a full stop after a series of night touch-and-go's when they felt a sudden jolt and were slammed onto the runway. The pilot landed out of the bounce, lowered the nose and applied brake. The right pedal promptly bottomed. He retracted speed brakes, stopcocked the throttle and opened the canopy... the bird rolled some 6000 feet before it drifted off the left side of the runway and swung around to look reproachfully at the landing end of the runway.

It seems the tower operator hit the wrong switch and raised the approach end barrier instead of the one on the opposite end. He got it up in time to snag the landing bird and the arresting cable flipped into the speed brakes, then deflected to the main gear where it gave a healthy tug before it broke.

Damage was limited to speed brakes and gear doors, thanks to a pilot who remembered the complete abort procedure.

* TAT *
CLAMP FAILURES

Back when the Century birds were still gleaming new, we started having trouble with heat and vent leaks due, mostly, to clamp failures. This was our introduction to the Marmon type clamp. Since, these clamps have received a great deal of attention... and you'd think we'd be thru reading about 'em. We ain't. The Navy has had at least six F-4s damaged by heat from leaking boundary layer air systems. Ducting in this system is fastened together with Marmon type clamps.

The INTERCEPTOR told of an F-106 that was fair burned to a frazzle by an inflight emergency that featured all sorts of inflight malfunctions and which ended with loss of trim. After landing, the pilot couldn't get a drag chute because it had already fallen out during flight. He stopped on the taxiway, and then left it after an explosion rocked the bird. Cause: a broken T-bolt on a Marmon type clamp used to couple the bleed air duct. Hot air squirted into the compartment melting insulation and shorting out assorted wiring. There was no positive indication of overtorque.

Down at MacDill, our own F-4 people have been bumping heads with people about this clamp. The F-4 bird has a half bushel basket full of 'em on everything from the bleed air system to the fuel system. They reported three failures where the duct connects to the flap BLC. One was discovered in flight and caused extensive damage to the engine doors, wiring, etc. The clamp that attaches the engine-driven utility pump to the engine has resulted in two hydraulic system failures. The clamp that attaches the elbow to the fuel booster pump outlet has racked up three failures... all were on the ramp, otherwise we would have surely lost these birds. As is, the failures dumped a lot of fuel out of the ramp. All of these failures were due to the T-bolt. This bolt has been beefed up and rebeefed up and at present all hands are holding their breath hoping the last "fix" is going to fix the problem. Meanwhile, this is one more place where a torque wrench and tender loving care is an absolute must.

In addition, report all failures, paying particular heed to the type bolt installed... if the latest, super type with precision rolled threads doesn't hack it, we want to know about it, but quick.

NO BRAKES

An overseas F-105 took the barrier after its brakes failed... cause was listed in the report as material failure... a B-nut backed off the brake line. This is the kind of "material failure" which comes under the heading of improper torque... that's another way of saying that someone out on the line goofed.

MAINTENANCE DISCIPLINE

Have you noticed that the experienced mechanic, the one who should know better, is often the one who walks into the prop or is sucked up the intake?
same experienced mechanic is often the one who takes
cuts or uses substitute hardware which causes
le.

Depot "experts" performed maintenance without
capping fuel lines; another failed to follow the check
list and omitted a cotter pin; a TAC mechanic failed
to torque a marman clamp... each caused a major
aircraft accident.

None of these individuals wanted to destroy an air-
craft, but long association with a particular job had
created complacency. This complacency shows up in
other areas, such as tech order compliance... "The
aircraft got by yesterday without compliance, why not
today?" And, again, this has caused its share of ac-
cidents.

Other areas of high accident potential are im-
proper strut service and tire inflation, failure to
monitor oil consumption and failure to make proper
entries in aircraft records. These are relatively
simple, everyday tasks usually assigned to the less
experienced mechanic; yet, each can be deadly if not
properly accomplished.

Maintenance discipline demands strict compli-
ance with check lists and technical orders. Each is
prepared for the sole purpose of insuring a safe,
serviceable aircraft, and each requirement was
there for a definite purpose. To omit any
one is to invite disaster.

COMING ATTRACTION

For the past two years, TAC ATTACK has been
plugging aerospace nondestructive inspection with all
the zeal of a Tin Pan Alley agent.

Recent USAF authorization and guidance on this
subject will add X-ray, ultrasonics, eddy current,
and conductivity meter methods of aerospace inspec-
tion to our present antiquated visual, penetrant and
magnetic particle inspections.

Initial action in USAF's long range program, will
be to form mobile NDI teams within TAC that will
service all TAC units on an emergency basis. First
equipment delivery is not expected prior to 1 October
1964. However, the following preparatory actions
have been taken by TAC.

* A TAC regulation on aerospace nondestructive
inspection is in coordination.

* Three wings are being tasked to form mobile
aerospace nondestructive inspection teams.

* A TAC Manual is being written to implement
"TAC aerospace nondestructive inspection pro-

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* One completely trained team has been formed
within TAC and is awaiting delivery of newly author-
ized NDI equipment.

As a matter of interest, TAC has twenty-nine
airmen who have completed NDI training, four have
considerable prior experience in aerospace non-
destructive inspection.

Maintenance managers and safety people can ex-
pect to "look deep" into their aerospace equipment in
the foreseeable future.

THE AMATEUR HOUR

A T-bird had a UHF write-up and two young air-
men were dispatched to solve the problem. Airman
A was familiar with the bird and Airman B went
along to learn about it. They climbed aboard, A in
front and B in the back cockpit, and closed the canopy.
In a little while, Airman B wanted to get out and
asked if the canopy would open if he pulled the canopy
jettison handle. Airman A, in what is probably the
understatement of the year, said, "Yes."

That's right, you guessed it, ZORK went the
canopy.

TO ELIMINATE FALSIES

Few lights in an aircraft can generate more sweat
and interest than the fire warning lights. However,
too often the importance of these lights is dimmed
because we get fire warning with no fire, or fires
with no warnings.

Maintenance troops can make these systems
work somewhat better if they will be careful to keep
moisture out of all connections and make sure they
are secure. Keeping insulators clean and replacing
frayed wiring also helps. However, the quickest way
to improve these systems is to be careful and not
damage the sensing elements when working around
them. These elements are quite fragile.
MSgt DANIEL J. VESTYCK

MSgt Vestyck, a native of Pennsylvania, entered the service in 1945 and was sent to Camp Blanding, Florida, for basic training. Enlisting in the Army Air Corps in November 1945, he was assigned to Wright Field, Dayton, Ohio, where he began his Air Force career in aircraft maintenance. In February, 1947, he was transferred to a newly formed meteorological equipment flight test facility at Port Newark, Newark, New Jersey, and moved with the unit to Olmsted Field, Pennsylvania. In 1948 Sgt Vestyck began his flying career in T-11 aircraft. He later qualified as an engineer on C-47's, B-25's and B-17's. His qualification in the B-17 sent him to L. G. Hanscom Field, Mass., to fly research missions for Massachusetts Institute of Technology. In August 1953 he was sent to Guam and was assigned to the "Typhoon Goons" of the 54th Strat Recon Sq. (MATS) equipped with WB-29's. In October 1955 he returned to the United States and an assignment with the 4502nd Support Sq., Shaw AFB, South Carolina. Three years later he was assigned to the 82nd Troop Carrier Sq. at Sewart AFB, where he cross-trained into the C-130 aircraft. Sgt Vestyck qualified as a C-130A flight mechanic in May 1959 and progressed to the position of Stdn/Eval Flight Examiner in the squadron. In December 1961, he was transferred to Langley AFB, Virginia, and his present assignment in SEG is the C-130A flight mechanic evaluator.

GOOD IDEA

Most of you foreign car owners are familiar with the automobile service booklet. It tells when to have routine service performed and includes coupons to be filled out when the items are accomplished. Faithful adherence to the service booklet's schedule insures a planned maintenance program and smoother operation all around. The European attitude is that an automobile is a most valuable item and deserves the best of care. The SEF in the 12th Tactical Fighter Wing at MacDill AFB has adopted this idea to the annual instrument check program.

Ninety days prior to his birthday, each pilot is issued a booklet of instructions and coupons. The booklet outlines the pilot's responsibilities and the requirements he must complete prior to his AFM 60-1 instrument flight evaluation check. It contains the pilot's instrument responsibilities along with an in
The Instrument Progress Record Chart summarizes the information found in the first section. As the individual completes each item, he checks it off on the chart. This chart will help him plan his schedule, which is no mean feat.

Section three consists of a coupon for each specific requirement. The coupons for the instrument training flights include a lesson plan for each flight. As each requirement is completed, the pilot tears out the appropriate coupon and gives it to the unit instrument training officer. When the coupons are gone, he has completed a planned, well organized, instrument training and evaluation program.

It goes without saying that this system or any other system like it can aid immeasurably in solving some of the training problems. The pressures of TDY, deployments, ORI's, mission requirements and stdn/eval activities make it imperative that some sort of positive program be instituted to aid individuals and units to meet their requirements.

The system employs a gimmick it's true, but it is a good idea -- an idea which, if everyone plays the game faithfully, will add many silver dollars to the proficiency bank!

A Short Play...

By CAPT TOM BLAKE

CAST OF CHARACTERS IN ORDER OF APPEARANCE

CAPT STANEVALSKY...Clear eyed, steel jawed, straight toothed young man who in pre-service days was considered quite a judge of good (or bad) horses, whiskey or women while being thought by many to be an all around fine fellow. Currently writes things for Headquarters TAC.

1ST LT C. R. STATUS...Shiny young flight instructor and trade school graduate who is often used as a good example for his fellow aviators.

MAJOR ASHEBOURNE...Kindly old ex-cavalry officer who came up through the Air Corps. Provides a steadying influence for the young officers.

THE MEN.................A group of the squadron's fly boys with various amounts of age, experience, hair and rank.

SYNOPSIS: After long hours of eye-burning reading of assorted manuals and tech orders and many days of finger-cramping scribbling, Captain Stanevalsky has done it at last. He has created the most complete, comprehensive, valid and best written master question file in the history of written examinations. He knows it's the best because, after all, HE wrote it -- and rewrote it, and rewrote it until it was so polished it dazzled the eye. And sure enough, it made the rounds of coordination and comments, and came back unanimously approved as written. It has been printed and proofread and in distribution for several months now and not a complaint from any of the units.

SCENE I

SETTING: The 69th Assault Squadron briefing room on the first day of an SEG Formal Visit. Captain Stanevalsky has just collected the answer sheets.
for the first giving of the new master written exam. At first there is a stunned silence, then murmuring which rises to a full-throated roar as Captain Stanevalsky finishes grading the papers and posts the grades on the bulletin board.

CAPT STANEVALSKY: Alright men, are there any questions? (—There is a mass response with everyone talking at once.)

1ST LT STATUS: Yes, all those questions on electrical power sources. Why do I have to know all that?

MAJOR ASHEBOURNE: I can't understand why I missed all those questions. I put down the answers I got at "Smile" school.

1ST LT STATUS: I agree that you're probably right, but technically...

MAJOR ASHEBOURNE: Now understand, I'm not bad-mouthing you, but...

THE MEN: (From the general clamor came such remarks as: ) "Do you guys write your own questions or do you have monkeys for that job?" "You are so loused up you can't see straight." Most of these questions are not only ludicrous, redundant, ambiguous, and superfluous but they don't even make sense! "All I want to know about this drivel is, 'Who's responsible?'"

--------- /The footlights fade and the curtains close on this pertinent remark, 'Who's Responsible?"

FOOTNOTE

Maybe this little drama stretches a point in a few places, but let's take a serious look for a second at who is responsible. Even if our fictional character, Captain Stanevalsky, did conscientiously put forth his best efforts to prepare that master question file, is this enough to make it the best examination possible? The answer to this is obviously a resounding "NO!"

Supposing that Captain S. is a trained and qualified test writer, he must have the continued support cooperation of every man affected by these tests. If he slips and lets a poor question get into the master file, the thing to do is get rid of it, not ignore it. Be assured that no matter how much you ignore those bad apples, they just won't go away. In summary, if you think there's a poor question in your master file, then fill out an AF Form 847 and send it through channels. Better than that, send in new well-thought out questions in all areas. The answer to the question "WHO'S RESPONSIBLE?" is: "We all are responsible."

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Ejecting is serious business. Getting out of the aircraft is the first and obviously the most important step, but what the individual does after he hits the ground or water can have just as much effect on his chances for survival.

Now a man can't legally print greenbacks or do very much about inflation by himself, but he can learn finance. By the same token, he can't legally make or modify survival equipment for his own use but he can learn how to use the equipment he has to its fullest extent.

One learns about kissin' from hearing the experience of others, reading stories about it and seeing movies. But you do not really understand what it's all about until you pucker up and try it. Survival equipment and technique are much the same. Passing knowledge from ready room demonstrations and listening to hair raising stories will not insure that you will pass the real test. Try your survival equipment under realistic controlled conditions. There is still no medicine for regret or failure!

—NASC Weekly Summary
MOST OF TAC's T-birds have been modified to install rocket seats. This improved capability is certainly welcome, but unfortunately the installation has a lot of Murphy-bait just waiting to cause trouble. Most of these were uncovered by ADC's INTERCEPTOR staff and they were kind enough to loan us these photos.

The first Murphy area is just over your left shoulder... the quick disconnects for the canopy and seat. (Photos 1 and 2) The problem can develop by hooking the shoulder harness adjustment buckle on the quick disconnect. The cure, check the disconnects before you climb aboard and then make sure the shoulder harness doesn't get behind the seat. Hang the harness straps over the canopy rails or the headrest. (How 'bout it Crew Chiefs?)

The next trouble maker is down at the left rear of your seat... the cable from the lap belt/butt snapper to the cockpit. (Photo 3) A hard pull and ZAP! It sure gets crowded in the cockpit after the butt snapper fires. It's already happened. A pilot dropped his clip board and when he tried to pull it free...

Murphy number three is on both sides of the cockpit, the seat and canopy initiator hoses. There have been many cases of hoses being pinched by the canopy. (Photo 4) The best cure here seems to be to just check the hoses before you close the canopy.

These built in booby traps can teach us more than just the obvious lesson. Whenever you get a new piece of equipment or your bird is modified, be a real nit-picker and try to find the Murphies before they find you.
This month our center spread highlights an F-100 crew chief... a typical crew chief on a typical first line fighter. It is intended as a tribute to ALL of the men in TAC who are dedicating themselves with sweat, talent and extra effort to keeping the birds flying safely.

BY CAPTAIN JOHN R. CANTY
MYRTLE BEACH AFB, S. C.

The pilot lends a hand as the crew chief secures the drag chute compartment during preflight.

THE OFFICIAL USAF designation is "Aircraft Mechanic, jet fighter," but everyone calls 'em crew chiefs. Recently we talked to a staff sergeant who is crew chief of 974, an F-100D at Myrtle Beach.

A veteran of almost nine years in the Air Force and a typical TAC crew chief, he attended the three months technical training school at Amarillo AFB, Texas, immediately after completing basic training in early 1955. Later that year, he reported to Langley AFB, Virginia, and served his apprenticeship on the 405th Fighter-Day Wings F-84F Thunderstreaks and F-100 Super-
sabres.

In October 1956, our crew chief became a fully qualified maintenance technician and was transferred to the 4th Tactical Fighter Wing at Seymour Johnson AFB, N.C., where he crewed F-86Hs and F-100Cs.

"In those days," the sergeant said, "each fighter squadron had its own birds and usually er..."

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the dock supervisor and

of a periodic.

Chief

The sergeant explained that this pooling concept was put into effect about three years ago to increase efficiency. Less maintenance support personnel are needed since a tactical fighter wing seldom flies all four of its fighter squadrons at the same time. The consolidation allows the wing's total aircraft inventory to be interchanged through the four squadrons, allowing a sufficient number of top-notch, ready-to-go Super Sabres to be always on alert for immediate deployment.

"Although I have 974 now," the experienced crew chief said, "it stays here when I go to Turkey this year. We'll be operating the birds that are being used by the squadron we relieve."

This will be his third overseas deployment since arriving at Myrtle Beach over two years ago. He went to Aviano AB, Italy, for 90 days of NATO duty in 1962 and served 90 days at Adana, Turkey, in 1963.

Besides these short tours, he served a year at Dhahran AB, Saudi Arabia with the U.S. Military Training Mission just prior to being assigned to Myrtle Beach in November 1961.

The typical USAF crew chief has an average workday that varies from 8 to 14 hours. This covers from about 5 AM to 7 PM depending on the workload. "We average two weekends of work a month in addition to our regular work week. When 974 has a down day and isn't scheduled for flight, I do other maintenance in the hangar, cover for a buddy on leave or work with another crew chief who needs help. They do the same for me. Between us, we get the job done."

In addition to minor maintenance performed on the ramp, each F-100 must be turned in to the hangar crews periodically for scheduled preventive or corrective maintenance, depending on how many hours it has flown.

"We have 50-hour, 100-hour, 150-hour and 200-hour inspections. The 50s we do on the flight line, but the 100 and 200s call for major work in the hangar. We replace the engine after 500 to 600 hours of flying," the sergeant reported.

"But today isn't like it used to be. It's getting to a point where the crew chief acts as coordinator between the pilot and the specialist. We have engine specialists, fuel system specialists, hydraulic specialists, electric system specialists and many others besides weapon and munitions load teams. We're responsible, but many times we just oversee the work being done by the specialist. This is true on the line, as well as in the hangar. When our bird gets towed in for a periodic, we expect this.

But now, when we have a hydraulic problem, for instance, the specialist comes right out to the parking area and attempts repair without taking the bird off the line. This has helped keep the hundred on the go. I miss tinkering, though, they way we had to when we did the troubleshooting ourselves, but I guess the new way is best."

"We get flight schedules at least a week in advance...then gear ourselves to the schedule. If a pilot is to take 974 for an 8:15 takeoff, I'm up and on the job at six. My response then is 2 hours and 15 minutes prior to takeoff."

"I have a deck of preflight work cards which is a checklist of each item requiring attention. It takes me about two hours to go through them. They include such things as tire pressure, hydraulic

--end--
accumulator pressure, control surfaces, drag-chute and so on. Before I finish, the pilot appears and begins running through his preflight list.

He takes about 30 minutes. That includes his walkaround and cockpit systems check. He double-checks us on some items, but usually relies on us to do our job right. His life depends on it and he knows it. We know it too, that's why we're careful. My biggest concern is making sure 974 is safe for flight. So much so, that I don't want to overlook anything. Many times I go back and doublecheck something I'm not sure of. The pilots trust us and we do everything possible to avoid mistakes. It's a serious business and a big responsibility. I haven't lost a pilot or a plane and don't intend to.

"After the pilot taxis out, I move over to help a buddy who helped me get 974 launched. He may have driven the power unit, pulled the chocks or gear pins. My buddy may have a launch time of 8:45, so he helps me and I help him.

"The pilot usually tells us how long he'll be up. When he lands, I guide him into the parking stall on the line. We check the wheels and install the ground looks on the gear."

"I throw the ladder up and ask the pilot if there's anything to be checked while the engine is still running. This might be a hydraulic leak or an oil leak. If not, he shuts down, following a checklist. He fills out his 781 to log the hours of flight and maintenance deficiencies.

"Then I go through my post-flight checklist. This includes refueling, a visual check of exterior surfaces for loose panels, popped rivets or to check on any failure reported by the pilot. It usually takes another two hours to turn 'er around. When I'm through, she's ready to go again."

"Besides the 781 form I mentioned, we've got many other forms to fill out and examine. There's the 200 series. This includes such things as a record of maintenance performed, a record of parts replaced and turned in and a record of TO compliance."

Air Force Manual 66-1 is a bible. It is a guide for depot and organizational maintenance. Ya can't go wrong by following Sixty-Six dash One.

"Then we have TO 00-20A. The Double-Oh Twenty is officially known as 'Operation and Training Equipment Inspection and Maintenance System and Records Administration.' We've got to know everything that's in it.

"Our other main reference is the Maintenance Operating Instructions, a manual published by our chief of maintenance.

"Coordination is another secret to success. We work closely with maintenance specialists in Field Maintenance, Armament and Electronics, Squadron and Munitions Maintenance. They all work on 974 from time to time and as a team, we keep her ready for the mission. This includes armament and weapons loading operations which vary with mission of the bird."

"The pilots' attitude means a lot to us," our crew chief said. "They're a new breed of highly educated, cautious, professional fliers. If they're joking and asking light questions, we know our work is appreciated. That means a lot to a crew chief. I try hard to give 'em nothing to complain about. It's a tough order, because they're fussy. But you'd be fussy too, if your life depended on someone else's work. And that's how I operate. If there's any doubt, the bird is grounded and he gets another. But when I say she's ready to fly, she's ready. The pilots here understand that."

So that's what a crew chief is... a man with a difficult job who meets the challenges of that job!
POSITIVE CONTROL
With practically the whole world turning into a positive control area (everything above 18,000 feet as of next January), we're going to be spending more and more time working with FAA Centers. Except for special flights, everything in the high altitude structure is going to be IFR - hard altitude. The UHF special use frequency plan allows tactical formation flights to use a single frequency within each center and only requires changes when you pass from one center to another. Here are a few things you can do to make things work a little smoother...

* While flight planning, write the Special Use Frequency for each center you will be working in the place on your form 21A. These frequencies are not listed in any of the flight planning documents, but cards are being distributed and you will soon have one for your check list.

* Be sure to write "tactical formation flight" in the remarks section of the form 175, and make sure the dispatcher passes it on.

* During climb, while you are still on departure control frequency, remind the controller that you want the special use frequency when you enter the high altitude structure.

* A few minutes before you are going to be passed from one center to another, remind the controller to set you up on the next center's special use frequency.

* One last item; if you are planning around a round-robin, try to stay within one center's area. This will save you at least two frequency changes. An angle here is to use TACAN fixes rather than stations as turning points.

OFF THE TRACK
Number two failed to sight the field at GCA minimums and headed for his alternate. Undaunted, his pilot made a try. About a mile and a half out he picked up a rapid left drift but was close enough to centerline when he spotted the runway at one mile to adjust his flight path. He touched down at about 140 knots around 1200 feet down the active and deployed the drag chute. It was a good chute.

After rolling about 2000 feet his F-4 started to drift left, and although he applied full right rudder and aileron, the bird went off onto the shoulder at about 100 knots. The pilot secured both engines and kept the aircraft reasonably straight. It received slight damage from thrown coral and mud.

The left tire had failed shortly after touchdown and this ganged up with a crosswind with gusts to 30 knots causing the bird to drift to the left. The investigators criticized the pilot for not engaging nose gear steering... stating that nose gear steering should be engaged in any emergency situation where directional control cannot otherwise be maintained. This sounds reasonable, particularly since it is very difficult for an F-4 pilot to perceive a blown tire.

F-4 HONEYCOMB FAILURE
A Marine F-4 lost about two square feet of honeycomb from the trailing edge of its stabilator. It came off during a supersonic run, causing a mild buffet. The bird had been sitting in the rain for three days. Apparently moisture got into the honeycomb, froze at altitude and separated the bond.

The squadron now restricts their birds to 1.5 for at least two days after periods of heavy rain. This writer feels that it would prevent an occurrence unless skin temperature at high mach is high enough to boil the entrapped water and steam is causing the problem instead of ice.

QUOTE - UNQUOTE
The time and energy that go into an accident investigation almost always exceed the time and energy that could have prevented the accident. 
BEDTIME STORY

Once upon a time a team of headquarters types on a staff visit had a serious problem... they were out of money, patience and clean underwear. They called home to set up an Air Evac, but somehow got a little confused about time (seems people think zebra means a horse with striped pajamas).

When the aircraft arrived, it was 5 hours early and the team just couldn't leave early. It doesn't take a math major to figure out that a five hour layover on top of a planned flight time of 10 hours is going to rip crew rest to shreds. The aircraft commander mentioned this fact to the team chief. Now the AC and the team chief had about the same time in grade, but since the AC's time was as a Captain and the team chief's as a Colonel, their discussion on this problem was a little bit strained. Soon the AC did some re-figuring... with a quick preflight and by sleeping for 17 minutes during the weather briefing they could just make it.

After a quick run-up, while the crew chief briefed the passengers, the Douglas Racer launched. The flight back was uneventful until the left engine quit. From that moment on things went from tense to tenser - one fighter type in the back even promised to give up telling war stories if he made it down in one piece. On the first night weather go-around (with no parachutes aboard) the general feeling changed from insecurity to stark terror. On the next pass at the runway, the pilot managed to make a successful, if somewhat firm landing. After the crew chief helped him out of the aircraft, the team chief had only one comment: "That pilot was sure shaky. He flies like he was half asleep!!"

Directives concerning crew rest are pretty clear... supervisors and aircrrew know them well. But, pressures from many directions urge that directives be bent and broken. The ultimate respon­ sibility rests on the individual pilot, but all too often he is the bottom man on the totem pole. Scheduling that pays only lip service to crew rest backs the pilot into a corner. Passengers who use their rank or the urgency of their trip to persuade the pilot to exceed crew rest force him further into the same corner. Although the authority of the aircraft commander is rarely questioned, insinuation often places the pilot in an untenable position.

Only command support can assure that both the spirit and letter of crew rest directives are followed. Good scheduling can eliminate much of the problem, but more important, pilots must realize that their commander is supporting the crew rest program, and will give them unlimited backing and will support any decisions based on their own good judgment.

HASTE MAKES WASTE

The Navy F-4 Crossfeed told of some airmstart experiments with the Phantom which should be of interest to all Phantom pilots. Relighting at about 60%, it took 13 seconds to restart and bring power up to military. Thirteen seconds can be an eternity with a double flameout (they have been repo... meaning that pilots may not wait long enough on their start attempts before making another try.

CHAIN OF COMMAND

Almost everyone is familiar with the term "Chain of Command" but rarely does anyone analyze the significance of these words. The root of the phrase comes from the similarity between the system of delegating and re-delegating authority and the links of a chain which connect the prime mover to its load. Other characteristics of the common chain also apply to the "Chain of Command." Let's consider these briefly.

First, and most obvious, is that each link of the chain must be of adequate strength or the chain will break and be useless. A Chain that is too long or too heavy for the load it must carry, becomes part of the load by virtue of its own excess weight. Each link of a chain which connect the prime mover to its load. Other characteristics of the common chain also apply to the "Chain of Command." Let's consider these briefly.

First, and most obvious, is that each link of the chain must be of adequate strength or the chain will break and be useless. A Chain that is too long or too heavy for the load it must carry, becomes part of the load by virtue of its own excess weight. Each link of a chain supports the weight of all the links below it, so a chain can be made of links of varying strength as long as the higher links are the stronger. If a weak link is placed above a stronger one, the extra strength of the latter is wasted. If a
chain is to move, it must start with the top link and  

"probably the most outstanding property of a  

chain is that it is not possible to move a load by  

pushing on the chain.

So think about your own position in the chain.  

Are you staying out in front of your following links  

d and pulling? Or are you being pushed? If you happen  

to be the last link in the chain, remember that you  

occupy the all important position of attaching the  

whole chain to the load. A chain must move as a unit  

or it cannot move at all. Are you moving with the  

chain?

GOOD PRACTICES

There goes the little critter! He'd been buzzing  

around the cockpit ever since takeoff. There on the  

windscreen! I leaned forward to swat him and,  

POP. A quick peek over my shoulder and I  

saw that my  

chute had popped. Sitting firmly back against the  

seat for the rest of the trip I finally landed  

OK. Taxiing in I called for the experts to come take a  

look... The fly safe and PE types who met the aircraft  

quickly located the problem... the lower ripcord pin  

had been only partially inserted, and when the chute  

bent slightly as I leaned forward, the pin came loose  

and the pilot chute popped out. OK, these things  

happen. A word to the NCOIC of the chute shop ought  

to solve the problem. As I walked away, the fly safe  

type asked if I had checked the pin before flight.  

My answer was no... checking the chute isn't my  

job, that's what the PE technician is trained to do!  

Then I heard that old classic, "Well, it's not a re-  

quired check, but it's considered good practice."

"Not required but considered good practice"...  

Baloney!!! You hear that phrase used in reference  
to all sorts of things; preflight inspection, flight  
planning, normal and emergency procedures. What  
does it mean? Nothing! As often as not, the "good  
practice" is a carry over from some long-obsolete  
procedure or technique, and is based on nothing more  
than a "This is the way we did it in the Stang"  
attitude.

There are at least two good reasons why many of  
the old checks, inspections, and procedures have  
been deleted. First, they were useless. Face it, PE  
technicians, aircraft mechanics and other specialists  
know a lot more about their jobs than most pilots,  
and about all you can check or inspect are the obvious,  
simple, and easy to forget items. Every important  
item has a system established to check and recheck  
by experts. The second reason for eliminating a lot  
of pseudo-technical checks was that pilots were  
causing more problems than they were preventing.  
When pilots were required to unsnap and unzip para-  
chutes before every flight, the result was bent pins,  
broken timers and generally goofed up chutes. In  
other words, while pilots are certainly reasonably  
civilized people, when they get their hot little hands  
into things they shouldn't, the results are ungood.  
The next time you hear of a check that is "not  
required but is a good practice" stop and think. If  
the practice really has merit, take action to make it  
a required procedure or check for everyone. But, if  
you find you are following your "good practice" out  
of habit and it doesn't have real worth, forget it.
VERTIGO? I found out what it's like when I was a first lieutenant, shortly after the Korean War. First let me give you a little background. I was working for a major who was a time hog. One of us had to be on duty at all times, so that left me. I wasn't getting in much flying and only had about 500 hours total time. Most of it was VFR. In fact, when I went thru flying school, they wanted everyone to be a tiger and we spent a lot of our instrument practice periods in hassels.

This particular day ops called with a flight when the major was at lunch. I grabbed it before he could get back. Despite my lack of experience, I was the leader and took the flight out for some tactical formation. I climbed up VFR in a clear quadrant, but after a bit decided to get some instrument time. Bases were at 10,000 feet and tops at around 30,000 most quadrants. I broke the flight into elements and got an IFR clearance. Once in the soup, I kept looking back over my shoulder to check on my wingman. I didn't trust him...he had even less experience than I did!

Arriving over high station, I called speed brakes, dropped the boards and at the same time glanced back at my wingman, who was on my left. I guess it was the deceleration. At any rate, when I looked back, I had all sorts of sensations. The aircraft was in a slight right bank and I could see it on the attitude gyro. Even tho I thought I was giving that stable old F-84 left aileron, I apparently was making the right wing drop even further. The vertigo sensation was completely overpowering my ability to react! After it progressed to a steep right bank, my wingman called that he was breathing off. I didn't even answer. In fact I didn't have any desire to talk to anyone. I was just scared. I must have panicked because I remember that I wallowed the stick all over the cockpit. Finally, I got some control of myself, turned loose the controls and put both hands on the armrests. I sat this way just watching the altimeter, planning to eject at 10,000 feet, I broke out just before reaching 10,000 in an inverted dive, but with the speed boards out and throttle at 85%, speed wasn't too excessive and I was able to recover. For three years after that I had to force myself to get in an airplane. This thing stayed in the back of my mind. I can tell you one thing...since that day I've never logged a minute of hood where I was not under the hood practicing instruments.
Major Lewis waited for his eyes to get used to the dim interior and fumbled for his pipe. "Man is it ever hot and bright! When are you white collar grease slingers going to equip this dingy den with an air conditioner?"

Captain Green looked up from his work. "We wouldn't dare. If we did, everybody would find an excuse to come in here and we never would get anything done."

"Don't mind him, sir," the Old Sarge countered. "He's afraid we'll fumigate him. Care for a full tip?"

"Yeah, thanks."

"Full tips?" Green asked, shaking his head.

"Yes, full tips." Lewis grunted, "I know what you're thinking. But there's a paragraph in the front of that book which says the procedures are no substitute for sound judgment ... and I know I can hack a heavy landing without dinging the bird."

"Anyway, I wrote it up and went back to the office. After a bit I got to thinking. There was something about that crew chief's face ... like he thought I was seeing ghosts or something. I called Norm and asked him to check. He called me back and said they'd marked it ready for flight ... ground checked OK."

The Old Sarge shrugged, "Educated guess, sir, educated guess."

"The Major's a good maintenance man," the Old Sarge observed. "What'd they find, a bunch of metal in the oil screens?"

Major Lewis looked surprised, "You been talking to Norm?"

"No sir."

"How'd you know they found metal in the screens?"

The Old Sarge grinned, "Don't spread it around or you'll spoil my reputation. I was walking down the line when the Major was setting his fangs into that trouble shooting crew. The way he was yelling I couldn't help but hear. But like I said, I wasn't talking to him."
THE 4415TH COMBAT Crew Training Squadron flew its 35 thousandth accident-free hour in March of this year. That’s right, 35,000 hours in the air without a major or minor accident...a tough feat in any aircraft, but a look at the RB-66 and the mission of the 4415th make this accomplishment even more amazing.

To many people in TAC — "B" in an aircraft designation conjures visions of pilots and co-pilots, flying long missions straight and level. Well, it just doesn’t work that way for the 4415th. First of all, the 66 has only one set of controls. Except for a couple of elderly fighters (F-84 and F-86) the RB-66 is the only aircraft in the Air Force that doesn’t have a dual controlled model for check outs. To make transition more interesting, there isn’t even a seat for the IP. He spends his time perched on a backless wooden box that’s better suited for milking cows than flying airplanes. About the only things he can reach are the throttle and the intercom. This is no job for the faint hearted.

One of the primary missions of the RB-66 is night photogr...
and many of the training sorties necessarily flown after dark further increases the accident potential. And one look at a '66 pitching out for a 360 overhead will quickly dispel any thoughts of straight and level. Finally, as though planned to show that the 4415th is no day-VFR flying organization, the aircraft that logged the 35,000th hour landed in a driving rain storm.

The 4415th has set an enviable record. There is no easy recipe for their success. Every facet of aircraft operation had to be expert. Supervision of both operations and maintenance was professional, with great attention to details. Personnel of the 441th Organizational and Field Maintenance Squadrons delivered the kind of quality maintenance that makes safe flying possible. Squadron instructor pilots and navigators combined their skill, knowledge, and techniques to train students within a safe environment. Majer George K. O’Neal, Commander of the 441th sums it up like this, "Every man in this organization is a Flight Safety Officer."

Congratulations 4415th, for a tough job, well done.

Dear TAT -

Got to admit I look forward to receiving and reading your rag as soon as I can get these grimy hooks onto one. To quote George Getchel Hupp of AFSC Sdn/Eval "...you people are still putting out the best rag in the business." However, my joy and pleasure is invariably short-lived when I get to your RECOGNITION section; specifically, your "Pilot of Distinction" bit.

After much soul-searching, this old and not so bold fellow TAT feels that the caption should well be changed to "Idiot of Distinction," or "Lucky Pierre," or "The Lucky Few" etc. With your gift of the gilded pen, you could probably come up with a better one. What's my gripe? - Here goes!!!

* March Pilot of Distinction. A bold but not so old sprog puts a HOG down safely with the control stick frozen in neutral. He made it and undoubtedly gets much glory; i.e., Pilot of Distinction, Air Medal, v's Welcome, etc. What about the countless men who didn't make it in similar circumstances?

TAC ATTACK

Letters to the Editor

I can name a bunch and you can too. One outstanding type, leading MIG killer extraordinary, etc., - DECEASED - his '86 decided to quit that nonsense short of the runway.

* Another distinctive type I hear who is being submitted for an award was towing a dart, got the big bad red lights, jettisoned rag (banner type), flew a while and got it on the ground. Immediately after touchdown the back end made with the spectacular fireworks and the tower advised pilot he was trailing fire. Again - Hero Extraordinaire, good show old chap - you other troops take heed, you too can be heroes. However, I can think back when another almost "Pilot of Distinction" got the big lights after takeoff, jettisoned the load, honked it up to a downwind and base leg and was in good shape until his controls burned through. Bailout was successful but the bird did bad, bad work. Poor "Almost Hero" type was Personna Non Grata. The hue and the cry - Court Martial him! Drum him out of the Corps! Dunderhead! Unprofessional show, that!, etc.

In short TAT, hindsight separates the boobs from the heroes. However we only praise and glorify the heroes, make no mention of the boobs, and thereby encourage our young tigers - the backbone of any good flying and fighting Air Corps - to emulate the heroes by taking their chances as they come. Statistics will prove we lose a lot more of their flesh and blood than the Air Force iron we save.

In many cases, the "Pilot of Distinction's" boss should turn him over his knee, pat the seat of his flying pants et al with severity, and possibly ground him for a good 30. This might provide the necessary...
deterrence which might prevent the loss of a couple of fortunates trying similar feats of distinction.

At any rate, what must be eliminated is the commonly accepted hypothesis that the more hairy and scary the deed of daring do, the more to be envied the feat of airmanship (some associate such dare devilry with reckless, irresponsible, immature aerial hot rodding).

Let's face it, TAT, when the fan stops turning, when the control's burning, when the wings fall off, real professionals should be making like Geronimo. Tailspin Tommy went out when the talking movies came in.

Fellow Tired A----Tiger

PS - if you feel this is too strong to print, or may alienate those who have the best of intentions, you can tone it down or not print it. However, plead my cause to your boss. Encourage him to praise the guys that do their jobs day in, day out, year in, year out - competently performing the difficult and demanding TAC mission - effectively handling the unexpected as it arises - in short, the real professional!

Dear Fellow TAT

By Joe, I agree with you all the way! However I must defend our March selection. We didn't fully explain the situation in our short write up. This lad had an emergency which normally wouldn't degenerate into a loss-of-control situation so his first decision to land was valid. After he was committed to final, the controls froze. He was over the city of Dayton. If he ejected, someone would die. He had two choices, add power and hope to rudder the bird around to a less populated area and eject or continue the approach. The final approach looked good, so he continued it to a landing. I think he made the best of a losing set-up and deserves the honor because he had enough skill to get it on the ground where nine out of ten would have hauled power off or otherwise changed the status quo and would have bashed on the overruns.

As a result of your letter we are taking a hard cold look at all future selectors and I think you will see much less luck factors in future write ups.

—TAT

Dear TAT

Reference "Ol' Sarge" in the March 1964 issue of TAC ATTACK.

As a supply Officer, I take exception to the article and feel that it was ill-advised and erroneous. It was an unwarranted attack on the service organizations on this base, in TAC and the entire Air Force.

We, in supply, or any of the other service organizations, do not submit that we run a perfect operation. Far from it! However, when we "err", or do not provide adequate service, it should be brought to our attention either personally or through official channels, not in a magazine article, written, obviously, by an individual with a personal "ax to grind".

The article does an excellent job of undermining the morale of a group of people who are trying to do a job. It planted seeds of doubt into the minds of personnel who know little or nothing about the supply field. While we are on this subject, I wonder just how much you know about this field and our related problems. From the article, you know very little, and the tone of the article only proves the age old adage, "that a little knowledge is dangerous".

We think we play a very important part in the overall mission of the Air Force. We also feel that supply is like safety and security; it is "everyone's business" and should not be criticized in a magazine which is supposedly dedicated to flying safety. For your information, supply is no longer just a "field jacket and flying glove operation". Today, it is a highly complex, important and expensive field. It is true, we use many, many forms. If you think forms are silly, we do not, nor does higher headquarters. Some individuals may feel that some of our safety forms are silly, but I am sure they all serve a useful purpose or they would not be in our system.

It is interesting to note, that on Page 28 of your TAC ATTACK you have a Crew Chief of the Month, a Maintenance Man of the Month, and a Pilot of Distinction. All very deserving, I am sure. But, where would they be if it were not for supply? Why not a Supply Man of the Month, or a Personnel or Finance Man of the Month? The point here is, we all have a job to do and every phase of the operation is vitally important. We should all try to work together instead of using our energies to create doubt and animosity toward each other.

In conclusion, I feel a retraction is in order. Further, the next time you have a gripe, real or imaginary, come down and see us. We will buy you a cup of coffee and do our best to solve the problem in a manner that is in the best interest to the both of us and to the Air Force and prove that we haven't forgotten why we are in business.

LT/COL CHARLES SERGEANT
Langley AFB, Va.
Dear Colonel,

Ops! We were not cutting bait with any specific supply line. In fact, the article was drawn from actual incidents and up from a number of bases. At least three bases in this command require crewmen to carry worn out gear to one section to get it condemned before they turn it in to BEMO, some distance away. Langley is NOT one of those bases. We quarrel with the procedure since officers and NCOs should be qualified to tell when their gear is worn out and because it is poor utilization of resources to establish a procedure that sends your highest paid people on needless jaunts around the base. Most get enough traveling going TDY.

As for undermining morale... most pilots and maintenance men are like you supply troops - hard working and conscientious. We do not hesitate to romp and stomp on the few who are not. Shucks, if we did hesitate, we might just as well close shop and go back to earning an honest living.

Regarding our limited knowledge of supply... since when does a customer have to know merchandising in order to tell which stores do a good job of serving him and which ones don’t?

P.S. We’ll look into that.

TAT

Dear TAT,

Although I am a member of another command, I read and appreciate the many goodies published in The TAC Attack. As an old goonie pilot however, the Goonie Goodie published in your March issue has tossed me for an outside loop. I can’t seem to recover from this one without an assist, so please fill me in.

This highly condensed version of a job-well-done leaves one with the impression that the gear handle must have been in the “up” position when the material failure occurred and that the hydraulic cylinder fitting separated on the “up” side of the gear actuating cylinder. These assumptions must be correct if the gear fell and a complete loss of both pressure and fluid was experienced.

Using the term “shortly after a night take-off” leads one to believe that the landing gear handle had not been returned to the “neutral” position in accordance with the take-off and climb instructions outlined on page 2-10, T.O. 1C-47-1.

Of course it was extremely unfortunate that a flying piece of debris damaged the prop feathering control, but I am unable to understand why the gear was not have been lowered using any one of the landing gear emergency extension procedures outlined in T.O. 1C-47-1 in time to land the aircraft safely while both engines were still operating normally.

Perhaps there are other goonie pilots that are out in mid-air on this one too, so maybe a little additional information from the accident report would help.

CAPT F. D. HANSEN
2223 Inst Sqn, Minneapolis/ St Paul

Dear F. D.,

I believe the failure occurred with the gear in transit and that the cylinder itself broke where the inlet port is drilled. A fitting wouldn’t part with enough noise to be heard over all the other goings on in one of those birds.

The report said the crew tried all procedures before giving up, so apparently the failed cylinder interfered with the system and kept them from snapping the gear down and locked.

Thanks for pointing out the omission.

TAT

Dear TAT,

I thought the Fox Able deployment article in your last TAC Attack was excellent. My thanks to “Bob” Massoni for it, although he should have been in the cockpit himself. The old 104 sandbagger!

For the record, there were two discrepancies noted with the photographs used in the article. In the parking scene labeled, “after over ten hours in the air,” the aircraft is not equipped with an inflight refueling boom, making the flight impossible. Number two discrepancy was the “Swift Strike” aggressor markings on the tails. These markings have not been on the aircraft since the fall of last year.

The professional eye would be the only one to catch these, I know, and I do not mean to detract from a job well done. Fly Safe!

CAPT LOWELL D. STEWART
Flying Safety Officer
831st Air Div., George AFB, Calif.

Dear Stu Babes

Thanks for the kind comments and critique. You struck a nerve... we are forever hard pressed to get photos of missions such as this. Rather obviously we used everything we had available in the files.

Photos anyone?

TAT
ATT and I have been friends for such a long time, I feel we may have shared the same wad of bubble gum or swapped cold fried egg sandwiches for peanut butter the first year of school, but sad to say, it wasn’t that way. I first met him eleven and one-half years ago in Kempshee country. This was before that Marl’s Burro stuff. We started out in competition trying to bag the most MIGs – he won. We then went into it painting gag murals on the walls of the mess – I should say MESS. We were in different squadrons, and in good spirit, shot each other down time and time again with a brush and paint on the wall. The late Felix Asla fought in our fricas for awhile until a MIG cut him down for real. Between ATT and I, it was a draw, and all the “Forth but First” Fluggers really got their enjoys from it. It was there and two more consecutive assignments together that convinced me, with due respect to all who pull his tail, M&A, Maintenance, Ops, SEG, and those bouncing between, that TAT was one of those rare finds; a man in a boy’s world.

TAT can usually out-do the best of us, be it “slap hands” (I’ve seen him dilly dally diehards until their hands looked like inflated red rubber gloves), boat building, furniture making and house building with liveable, ingenious designs, making most 40,000 types look like brick veneered box cars. Also, from building Stereo HI-FI AM/FM Multiplex to inventing strange gad making airplanes (to fly and rebuilding temperamental Porsche engines. All this and at the same time, Pin’ in the T-39 and he’s putting out the best safety mag, in or out of the military, that I have yet seen. This I say, as the guy who developed and produced USAF’s AIRSCOOP from nothing up for almost nothing down from 1958 to 1961. TAT invariably sees through a problem to the bottom and reaches the heart of it quickly without preoccupation or infatuation with the procedures enroute. I think some of you reading this owe your “here and now” to TAT, but don’t know it. He has without doubt, in his way, saved more birds and birdmen for our side than any other man in Safety. I’m in safety, have been for awhile, and I think I know safety and that really isn’t a boast. So may I say, “Listen to him. Put his lie in the back of your mind where they tend to pop out when you need them and you’ll need them sooner or later, if you keep riding your laughter silvered wings.”

ATTACK is TAT and TAT is ATTACK. What he doesn’t write, he carefully selects, and those of us who know him find him on every page full-faced or incognito. I’m leaving Safety. I’m going to read maps, ford streams, jump out of planes and do other things with the Army for about three. Believe it or not, I’m going to miss safety. I was proud of my job, my work and my goals. Perhaps because I was on the same team with TAT.

See you in ’66, and that’s so for now.

_Done by hand while TAT was flying._
Captain Fabian F. Kalapach, of the 355th Tactical Fighter Wing, George Air Force Base, California is selected as the Tactical Air Command Pilot of Distinction.

Captain Kalapach was leading a flight of two F-105s, with weather at destination 1000 feet scattered, 2000 overcast with higher layers and three miles visibility in light snow. He split the flight at the high cone to accomplish individual penetrations, and actuated the leading edge flaps during descent. The air turbine motor surged twice, then failed. Captain Kalapach realized he would have to complete the approach on standby instruments, lower the landing gear by emergency means and would not have the benefit of stability augmentation. He informed GCA of the emergency and continued the approach. The landing gear did not extend when he used the emergency system, so he made a missed approach. During the next approach, he performed all emergency checklist procedures without success and made a second missed approach. He then had GCA vector his wingman to him for join-up and requested clearance to 3500 feet to get between cloud layers to apply G forces in an attempt to lower the gear. He pulled approximately 5 Gs and the nose gear extended. The next application of G produced no results. His wingman checked the aircraft and stated that the main gear doors were bulging and might break loose with further G forces. Captain Kalapach made another turn pulling G forces and the left gear extended. With less than 5 minutes of fuel remaining, he made another high G turn and got the right gear extended. He asked GCA for an immediate vector to final approach, made a normal touchdown and deployed the drag chute. The emergency brakes failed, but Captain Kalapach was able to stop the aircraft without further incident. Well Done, Captain Kalapach.

**Legion of Merit**

COLONEL ROBERT F. WORLEY

**Air Force Commendation Medal**

COLONEL ROBERT F. ZACHMANN

**USAF Awards**

ANNUAL FLYING SAFETY, 314 TFW, 27 TFW, 363 TRW

ANNUAL MISSILE SAFETY, 27 TFW, 4520 CCTW

**TAC Awards**

ANNUAL OUTSTANDING FIGHTER WING, 31 TFW

QUARTERLY OUTSTANDING FIGHTER WING, 474 TFW

ANNUAL OUTSTANDING ASSAULT AIRLIFT WING, 314 TFW

QUARTERLY OUTSTANDING ASSAULT AIRLIFT WING, 314 TFW

ANNUAL OUTSTANDING COMBAT CREW TRAINING SQUADRON, 4453 CCTS

QUARTERLY MATCH POINT TROPHY, 4 TFW

ANNUAL EXPLOSIVE SAFETY AWARD, LUKE AFB, ARIZONA

ANNUAL GROUND ACCIDENT PREVENTION AWARD, LUKE AFB, ARIZONA

QUARTERLY DRIVE SAFE AWARD, 4481 AD, ENGLAND AFB, L.A.
Staff Sergeant John F. Reid, Jr., of the 4520th Combat Crew Training Wing, Nellis Air Force Base, Nevada, has been selected as the Tactical Air Command Crew Chief of the Month.

As crew chief of an F-100 aircraft, Sergeant Reid has maintained his aircraft in a commendable state of readiness as evidenced by a record of 23 sorties, 44.5 hours and no aborts during a recent month of operation.

Because of his job knowledge, unselfish attitude and devotion to duty, Sergeant Reid is often assigned the duties of flight chief. He has readily accepted and accomplished these duties in an exemplary manner.

Sergeant Reid’s inherent ability to instruct younger airmen in correct maintenance procedures has made him very valuable to his organization. He is not only interested in educating others, but himself as well and is presently engaged in several off duty study courses.

Technical Sergeant James E. Ussery, of the 4520th Combat Crew Training Wing, Nellis Air Force Base, Nevada, has been selected as the Tactical Air Command Maintenance Man of the Month.

Sergeant Ussery has demonstrated outstanding accomplishments while working with the communications and navigation equipment on F-86, F-100, F-105, T-33 and T-39 aircraft. Using resourcefulness he arranged the maintenance shops to provide maximum utilization of limited space. His conscientious efforts reduced test equipment to the absolute minimum and released critical avionics equipment back to supply channels.

A continuous improvement in effectiveness resulted from the sense of responsibility Sergeant Ussery instilled in his personnel. His improved checklists for equipment undergo field maintenance repair contributed to greater confidence and pride in production.

Sergeant Ussery’s unselfish devotion of time and effort to mission requirements reflects the best qualities of a professional maintenance man.

The following TAC personnel were awarded the Air Medal for meritorious achievement while participating in aerial flights:

Captain Larry G. Mason
Captain George F. Baker, Jr.
Captain Erwin Bergman

SSGT JAMES J. DAVIS
4302CCTW, Nellis AFB, Texas

SSGT DANIEL D. KASSMAN
516TCW, Dyess AFB, Texas

A1C ROBERT J. WALLING
366TFW, Holloman AFB, New Me.
A COMPARISON OF TACTICAL AIR COMMAND ORGANIZATIONS

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SUMMARY

There was little improvement in the TAC accident picture during April with nine majors, one minor and eighteen fatalities. F-84Fs contributed the lion's share with four of the majors; however, none of them fatal. A nose wheel fire failure prompted an F-84F pilot to abort. The pilot escaped uninjured when the aircraft ground to a halt off the runway but the machine was destroyed by fire. Compressor stalls greeted an F-84 chase pilot as he started a go-around. He landed short and collapsed a nose gear. Another F-84 was destroyed after it pitched up and spun in. The pilot got out OK. One F-84F pilot walked back from a navigation mission after several astart attempts failed to cure a cold tailpipe. An F-1000 engine compressor stalled consistently after takeoff so the pilot left the aircraft at 400 feet. An F-100C pilot found himself in a like situation recovering from a strafing pass. He took the same route home. A student pilot flying an F-100D crashed during a turn over a low level check point...undetermined and fatal. An F-105 flamed out from fuel starvation during turn to final, but the pilot ejected safely.

Seventeen people were killed when two C-119s collided during night formation.

Our one minor accident occurred when a large feathered friend lost a right-of-way argument with an RF-101.
When accidents occur because of maintenance error, the people who goofed are made well aware of it— and usually remain conscious the rest of their lives!

Most maintenance errors may be attributed to carelessness, poor supervision, fatigue, working under pressure, or improper indoctrination!

We can prevent some of these accidents by forming more good maintenance habits.

For instance, loose tools can still be found in the engine intakes, wheel wells, under access panels, and scattered around taxiways and parking ramps. ---- A tool check after maintenance can make the difference between safety and disaster!

Avoid using force on mating parts. If they won't come apart or go together, something is wrong! Check and re-check the tool. --- or get expert help!