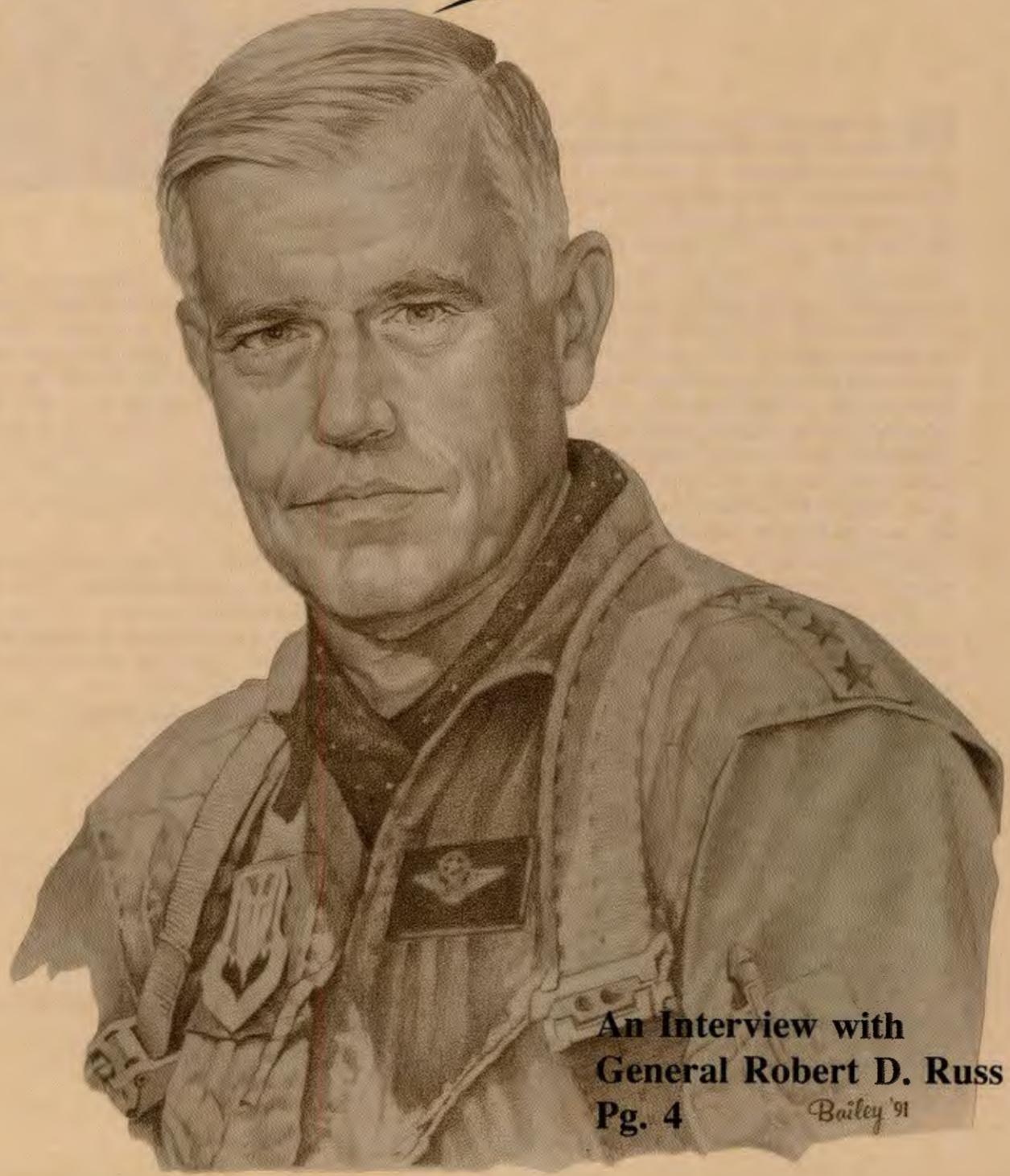


# TAC *Attack*

MARCH 1991



**An Interview with  
General Robert D. Russ  
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*Bailey '91*

# ANGLE OF ATTACK

**H**ow many times have we sat at the bar with a bunch of folks when somebody makes the remark, "Come on get in the game. You can't loose in a big game!" A few minutes later, we wonder what they really meant as we take our wallets out to pay the bar bill. Or how often have we heard or said, "You have to expect losses in an operation of this size." In both of these examples what we are talking about are the groups or programs and not the specific individuals who make up those groups. But, it's not groups or programs which prevent mishaps. Sure, they can and do help by providing practical guidance, proper support, and good leadership. But it's still up to the individuals like you and me to properly implement that guidance. If you and I as individuals are indifferent or undisciplined, then, in spite of the "safety" provided by the group, accidents will continue to occur. It doesn't matter at what level our job is, from unloading boxes to commander, -- when it comes down to "smart mission accomplishment," you and I are the ones who make it happen.

When General Russ became the TAC Commander, he clearly articulated that the TAC mission is to fly and fight -- and the mission of those who don't fly is to support those who do. He shifted our focus away from building and protecting "programs/empires" to motivating people to develop better and more effective ways to accomplish the mission. He instituted the Chief of Safety Program, which places people who "think like squadron commanders" in charge of the various wing safety offices. Those innovative leaders changed "safety" from being considered an adversary by Ops into one of their key supporters. Now, highly motivated people not only highlight the risks, but more importantly help develop practical alternatives. Commanders need that information to enable them to properly balance the risk verses training reward. An excellent illustration of balancing risk verses reward occurred with the Red Flag exercises. Gen Russ' emphasis on "train like we are going to fight" caused us to



rethink our "lower and faster is always better" tactics. Who were we going to fight at 50 feet and 600 knots? Only ourselves and our allies flew down there! We started flying more realistic tactics based on a better evaluation of the threat. The results, our Red Flag mishap rate for the last five years was slashed by 50 percent from the previous five years. TAC training was more realistic and right on target. The outstanding success of our deployment to and continued support of Operation DESERT STORM stands as a solid testimony that you, the TAC professional, did it right!

As Gen Russ retires, we should continue to remember the numerous lessons he shared with us. One, which has been especially meaningful to me, is "If we, as individuals, demonstrate good leadership and discipline, then the job will be done right!" Godspeed to you and your family and continued success in all you do.

Happy Saint Patrick's Day, pardner.

*Jack Gawelko*  
**JACK GAWELKO, Colonel, USAF**  
**Chief of Safety**

# TAC Attack

DEPARTMENT OF THE AIR FORCE



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**HON DONALD B. RICE**  
*SECRETARY OF  
THE AIR FORCE*

**GEN ROBERT D. RUSS**  
*COMMANDER*

**COL JACK GAWELKO**  
*CHIEF OF SAFETY*

**LT COL "HAP" TUCKER**  
*EDITOR*

**JANET GAINES**  
*EDITORIAL ASSISTANT*

**RON SMITH**  
*ART DIRECTOR*

**SGT MARK S. BAILEY**  
*STAFF ARTIST*

**STAN HARDISON**  
*CONTRIBUTING ARTIST*

# An Interview with General Robert D. Russ

**1. TAC ATTACK:** General Russ, TAC units were among the first to deploy in support of what has evolved into Operation DESERT STORM. Those initial short-notice deployments were credited by many as providing the added deterrence which prevented Iraq's potential advance into Saudi Arabia. What were the key factors which made those deployments successful?

**GENERAL RUSS:** The key factor was people -- proud, proven professionals who were well trained, highly motivated and superbly led. The first TAC fighters deployed within 24 hours of the President's order and were the first Air Force combat aircraft to arrive in Saudi Arabia. Within the first five days, we had five squadrons in place with their associated crews and maintenance personnel. In spite of flying over 8,000 miles nonstop, flying all night, and accomplishing as many as 12 in-flight refuelings, not a single aircraft or crew developed a major problem. That would have been a major miracle when I was a Lieutenant in a squadron. Back in 1958, TAC forces were deployed on short notice to Lebanon and Turkey; and of the first 12 F-100s launched, 4 arrived on schedule, 8 diverted due to refueling problems and 1 crashed due to fuel starvation. Today's

success, by comparison, stands as a tribute to the professionals who both fly and maintain our aircraft as well as the pros who transport us and refuel us in the air.

**2. TAC ATTACK:** It's been reported that a Checkered Flag exercise cost TAC in excess of \$500,000. Is it worth it -- as opposed to say an ORI?

**GENERAL RUSS:** Yes, it's well worth it. In fact, some of our forces which deployed to the Middle East had recently been in the area during a Checkered Flag exercise. I can think of no stronger recommendation than the praise those commanders had for their Checkered Flag training. The extra combat edge and confidence it gave to the commanders and their people were definitely worth the cost.

Compared to an ORI, which does an outstanding job at evaluating how prepared a unit is for deployment, the Checkered Flag exercise goes well beyond that. It gives our personnel the actual experience of deploying and operating in potential areas of conflict. And while our unit commanders personally visit Checkered Flag locations about every other year, those visits cannot substitute for actually deploying the personnel, equipment, and aircraft



over there. No matter how many intel books you read or videos you see, you can never adequately substitute for the real life experience of working and flying in the new environment. Only by deploying can units experience how they will integrate into the allied command structures and operations. The deployments invariably transform the unit's plans from one that looks good on paper into one that's tried and proven.

**3. TAC ATTACK:** From watching the news broadcast covering Operation DESERT STORM, the initial air campaign appears to have gone exceptionally well for the Allied Air Forces. Do you have any comments about why it was initially so successful?

**GENERAL RUSS:** It was successful because our people were ready. And that readiness was the

culmination of our daily efforts to "train like we would fight." Our numerous Red Flag exercises provided realistic training in generating, launching, controlling, and turning a large strike package and its associated air cover. Green Flag exercises honed our electronic warfare skills. Blue Flag exercises provided practical experience for our planners, battle staffs and senior leaders in controlling and deconflicting such complex operations. That training, the large scale use of force, precision guided munitions, and the element of tactical surprise were the key factors to our initial and continued success.

**4. TAC ATTACK:** It has been reported that the Mission Capable (MC) rate, the percentage of our aircraft which are not broken but are ready to accomplish the mission, has been averaging over 90 percent since the war began. Is that

accurate; and, if so, do you feel those rates are being accomplished at the expense of taking shortcuts around normal peacetime safety precautions?

**GENERAL RUSS:** Yes, it is accurate. The MC rates are over 90 percent -- which, by the way, is higher than our normal peacetime rates. And no, I definitely do not think it is due to taking shortcuts around safety. The real life and death drama places an increased awareness of the need to do the job right the first time. A poorly performed procedure which could lead to an emergency landing during peacetime might lead to a forced ejection over hostile territory in war. Our pilots and support personnel understand the stakes better than any armchair quarterback ever will. As a result, these professionals are doing an outstanding job at minimizing risks to lives and other

combat resources.

In addition, the logistics support continues to be second to none, with everyone working together to make sure the needed parts and/or munitions are available when and where they are needed. There is even a Military Airlift Command equivalent of an overnight delivery service if any critical spare parts are needed to accomplish the mission. All of those combine to give us those high MC rates which translate directly into combat effectiveness.

**5. TAC ATTACK:** During the first day of DESERT STORM, the allies flew 2,107 sorties and suffered the loss of four aircraft. Do you have any comments you would like to make about the number of sorties, their effectiveness, or the number of aircraft losses associated with the DESERT STORM combat sorties?

**GENERAL RUSS:** Since the beginning of the air war, the allies have been averaging about 2,000 sorties per day and pounding the enemy with about 1,000 tons of bombs per day. Never in our history has air power been so massive and so effective with so few casualties. In WW II the CEP from a B-17 was about 1,000 feet. In Vietnam the F-4 was some 135 feet and today an F-16 is about 40 feet and this assumes they are all dropping the same type of non-precision bomb. But when you marry a precision guided munition with an F-15E, F-111 or F-117, the results are truly spectacular. You just have to look at the TV set to see example after example of the effectiveness of our tactical force.

Our losses have also been remarkably low. As Chairman Powell said, "The Air Force has achieved an attrition rate 'unparalleled in history' in air combat in the Persian Gulf war." From the



first sortie in DESERT STORM up to the start of the ground war, USAF aircraft were experiencing about one loss in every 1,800 sorties. This is a direct result of tactics, training and aircrew proficiency. We executed superbly against a sophisticated air defense system, and we did it because we had trained realistically during our Flag exercises.

**6. TAC ATTACK:** Sir, do you have any final advice or comments for the men and women of TAC?

**GENERAL RUSS:** During the past six years, I have been truly impressed by the professionalism, dedication, and personal sacrifices of

the men and women of TAC. As recent events so vividly demonstrate, the world remains a dangerous place. TAC will continue to be called upon to protect America's vital interests. My successor, General Mike Loh, is a fighter pilot and leader, who is second to none. I am positive he will lead you to even greater accomplishments. Mrs Russ and I wish you all the best, and thank each and every one of you for your dedication and support over the past years. Well done, and Godspeed to you and your families!

# TENETS OF LEADERSHIP

General Robert D. Russ  
Commander  
Tactical Air Command

reprinted from TIG Brief



We spend a lot of time and effort in the Air Force to ensure we pick the right people for leadership positions. We treat them special -- and we should -- and we try to give them the tools to do a good job. But inherent in any successful leader are the "must haves" of **INTEGRITY, DISCIPLINE, DEDICATION, and SENSITIVITY.**

**Integrity** is a must! It's the most important quality a leader can have. Simply stated, integrity is being honest -- honest with your people, your superiors, and yourself. There is a very predictable phenomenon that occurs without honesty -- that is, dishonesty breeds dishonesty. *Good leaders nurture the climate that fosters integrity at all levels.* They don't "shoot the messenger" when presented with bad news. They accept bad news gracefully.

No one likes bad news, but those in charge cannot expect their people to bring the kinds of news needed to solve problems if they don't control their emotions and provide the proper environment to rationally resolve the crisis.

Likewise, good leaders do not cover up the small things to their boss. If they do, their people will see it and accept it as the way of doing business. Remember, the boss needs a great deal of information, so give it to him -- honestly.

It's equally important to be honest with yourself and do what you think is right. No one is expected to be perfect, but good leaders recognize their mistakes and earnestly try to correct them. If they don't, they are sending the wrong signal.

The second tenet is **discipline** -- personal and unit discipline. People look to their leaders to set high standards in public and private. Moderation and self-control are keys to personal discipline -- strive for a proper balance.

Units must have high standards as well, but they have to be realistic, attainable, and sustainable. *When the standards have been defined, they must be met by everyone, including the leader.* Any individual who chooses to test the system by pressing the limits must be corrected. Believe it or not, they expect it -- and so do their contemporaries, who are assessing the leader's every reaction.

The third tenet is **dedication.** Being a leader at any level is a great responsibility and a calling. It's useful to remember worthwhile things come from hard work and careful planning. The great leaders always work toward the organization's shared goals rather than simply for promotion or self-glory.

An important part of dedication is loyalty. *A successful system runs on loyalty, both up and down the organization.* Being loyal to the boss doesn't mean blindly accepting everything he or she says -- good leaders expect you to question ideas you don't agree with. They also expect you to support decisions after all the inputs have been weighed.

Being loyal down the organization doesn't mean blind loyalty to people who will be, or are, detrimental to the organization. If 95 per cent of the people do the right thing and 5 per cent don't, you don't have to be loyal to those 5 per cent. They're not the ones who deserve your loyalty. The 95 per cent deserve your loyalty.

Be aware of overprotecting people -- when they're right, support them all the way. But when they're clearly wrong, it serves no purpose to "fall on your sword" under the pretext of loyalty.

Finally, good leaders are **sensitive** and sincerely care about their people. It has been said that "no man stands so straight as when he stoops to help someone." Leaders are in a position to impact the lives of every man and woman under their command and, therefore, must recognize what motivates their people. *Quality treatment begets quality performance.*

Being sensitive also means being approachable by providing a clear channel to get the straight word. Whether it's a recognized and used "open door" policy or trusted individuals who act as spokespersons, people must have an avenue to provide the information a leader needs to make the organization a success. Once a successful channel has been opened, a good leader **LISTENS!**

These four tenets -- **integrity, discipline, dedication, and sensitivity** form the foundation for a good leader. From these the leader instills pride in the organization, and with them the system will perpetuate itself with a genuine eagerness to work for the benefit of all.

# Aircrew of Distinction Award



**L**ieutenant John D. Noah was flying as #2 in a four-ship of F-16s on a clear VFR day. After completing a low level, the flight began climbing into the air-to-air combat working area. During this climb, Lt Noah felt a subtle engine vibration. Scanning the instruments, the only visible irregularity was the oil pressure gauge which was fluctuating between 16 and 20 psi. Responding to the engine oil problem, he set the throttle at mid-range, exchanged airspeed for altitude, and notified the flight lead of the problem. As the flight turned towards the nearest normal divert base, Rickenbacker ANGB, Ohio, Lt Noah was informed that his aircraft engine was now on fire. He retarded the throttle to idle, jettisoned the wing tanks over an unpopulated area and radioed he would not be able to make it to the original divert field. The good visibility allowed the flight to spot Ross County Airport which had a 5400 foot runway, and Lt Noah continued with his emergency procedures as he glided towards the small civilian field. Next the hydraulic/oil light illuminated, and a scan of the gauges revealed the

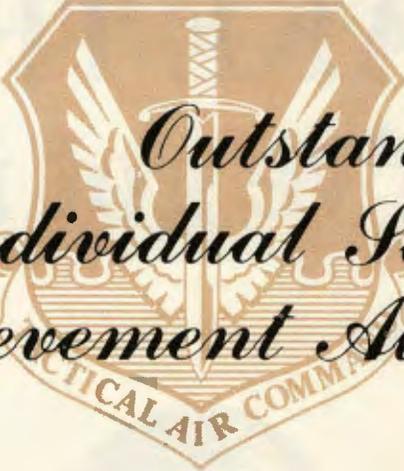


Lt John D. Noah  
89 TFS, 906 TFG  
Wright-Patterson AFB OH

engine oil pressure was now below 10 psi. Fortunately, both hydraulic systems continued to indicate good. The engine fire extinguished itself as the engine oil pressure fell to zero. Lt Noah continued his descent, manually activating the Emergency Power Unit (EPU), and accomplished a flawless simulated flameout approach and landing at the civilian airfield. He had left the engine running in idle until after the landing, in case it might be needed. During landing roll, he shut down the engine and brought the aircraft to a safe stop. He set the parking brake and turned off the EPU prior to his emergency ground egress. The professional and timely actions of Lt Noah resulted in the recovery of a valuable USAF asset, prevented possible loss of life and earned him the TAC Aircrew of Distinction Award.



**Sgt Leslea Johnson**  
**1903 CS/LGV**  
**Davis-Monthan AFB AZ**



# Outstanding Individual Safety Achievement Award

**S**ergeant Leslea Johnson, 1903d Communications Squadron, Davis-Monthan AFB AZ, performed an act of courage at the Desert Inn, Tucson AZ. Sergeant Johnson arrived on the scene of an accident where a man had walked into a large plate glass window. The window broke into long jagged shards inflicting deep cuts and several arterial wounds on the victim. Sergeant Johnson

took charge of the situation and applied direct pressure and emergency first aid to the most severe wounds. She continued to administer first aid until the paramedics arrived. Sergeant Johnson's outstanding first aid knowledge and immediate selfless actions earned her the TAC Outstanding Individual Safety Achievement Award.

## Noteworthy Contributors to Smart Mission Accomplishment

Capt John L. Whitney  
 353 TFS, 354 TFW  
 Myrtle Beach AFB SC

Lt Pablo Sanchez  
 21 TASS  
 Shaw AFB SC

2Lt David W. Kierski  
 333 TFTS, 355 TTW  
 Davis-Monthan AFB AZ

MSgt Horace E. Ingram  
 116 CAMS, 116 TFW  
 Dobbins AFB GA

MSgt Paul Niemkiewicz  
 USAF TFWC/SE  
 Nellis AFB NV

SSgt Darlene L. Norton  
 325 CRS  
 Tyndall AFB FL

Lt Col Michael L. Bumpas  
 Capt Louis A. Berrena  
 461 TFTS, 405 TTW  
 Luke AFB AZ

Capt Wayne C. Bradshaw  
 Capt John A. Keefer  
 Capt Timothy G. Vaughan  
 TSgt Eduardo Garza  
 TSgt David L. Wyckoff  
 TSgt John A. Zilavy  
 SSgt Terry R. Fraser  
 8 TDCS  
 Tinker AFB OK

TSgt David J. Hennessey  
 4507 CAMS, 507 TAIRCW  
 Shaw AFB SC

SMSgt Marc E. Yardley  
 347 CES, 347 TFW  
 Moody AFB GA

A1C William M. Omeara  
 366 CRS, 366 TFW  
 Mountain Home AFB ID

405 TTW  
 Luke AFB AZ

325 EMS  
 Tyndall AFB FL

185 TFG  
 Sergeant Bluff IA

# SHAKE THE STICK — you've got it

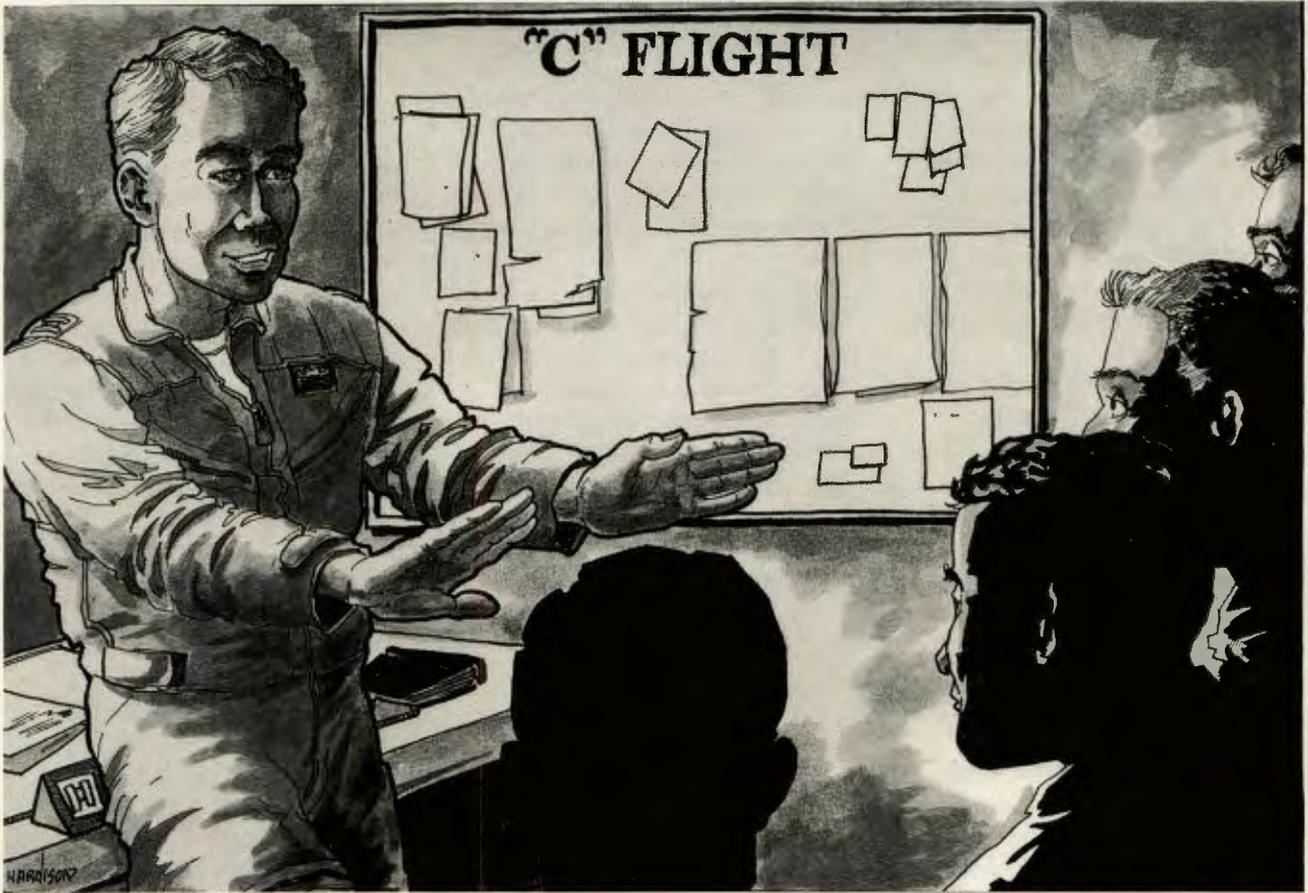


**General Robert D. Russ**  
**Commander**  
**Tactical Air Command**

Reprinted from Aug 86 *TAC*  
*Attack*

**C**ongratulations! You're a flight commander! You have accepted an extremely important position — important to me and important to your people. You have also inherited all the responsibility that comes with the job — the work, headaches and rewards of command. You have probably never been a commander and may have questions about how to be a good one. You need to get your arms around the job and understand its real purpose, scope and what is expected of you. I would like to share my thoughts with you on being an effective commander—to help you be your best.

First, you need to understand the responsibilities and where and how you fit in the big picture. A flight commander is much more than an OER writer. You are a leader, builder, developer, challenger, teacher, counselor . . . and most of all, a commander. **COMMANDER**, that's your title and that gives you a great deal of responsibility. Remember that — **COMMANDER**.



You are now a part of the chain of command, an integral part. You are the first level of command in our flying business. As a commander, you need to adjust your perspective; you are no longer just “one of the boys”; you cannot be “one of the gang.” You are now part of the establishment, the institution — you are “THEY.” And as such, you now are a brick “layer,” not a brick “thrower.” You are an Air Force team player and you need to make positive contributions to gradually build a better Air Force. You must guard against destructive criticism and refrain from disparaging your Air Force, your unit or your fellow leaders. Instead, provide constructive inputs geared to improvement. Use the system. Be a part of

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### The most basic of Air Force goals is to be ready to fly and fight.

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the solution — not part of the problem.

As a flight commander, you should support your squadron commander and all his goals. He supports the wing’s goals and that support continues up to the Chief of Staff who is responsible for achieving the goals of the Air Force. Ultimately, you are supporting Air Force goals. The most basic of Air Force goals is to be ready to fly and fight. To that end, your first responsibility is the

preparation of your flight for combat. You direct their training and guide their development. You fly with them, learn their strengths and weaknesses, and judge their capabilities. You control their flying schedule and know if they are ready to fly a certain mission or even ready to fly at all. Don’t let someone else schedule them for a mission they are not ready to fly.

It’s that simple. Take care of them. Train them and guide their development. You are responsible for their well-being. You are their flight commander. Your goal is to build professional, competent aviators who are ready for war and have the judgment to employ effectively in combat and to fly safely in peacetime.

How do you teach that judg-

ment? The short answer is, you don't. Judgment is something to be acquired or developed over time. As a flight commander, you contribute to this development, probably more than anyone else. You do that by teaching your philosophy on employing the aircraft, on accomplishing the mission, relating your past experiences, and drawing from the experiences of others.

You must teach them all you know about how to fly safely. Teach them what the really important things are, like living through the first combat mission, protecting our resources, and ensuring safe conduct of a normal day-to-day peacetime training mission. Help them realize they have limits to their capabilities and that people who exceed their limits demonstrate a lack of maturity—and frequently pay a steep price. Emphasize that different people have different limits and not to assume they will be able to

do everything you can. But also, teach them how to challenge themselves safely and effectively to improve their skills and thus reduce their limitations. Help them grow so the best of them will be ready to take responsibility for your people when you move on.

I want you to recognize how much responsibility you have. You are key to the success of our business. You also need to know you must be accountable for your flight. When I look at an individual who has made a mistake and consider what may have been in his head, I realize that much of that came from his teachers and

leaders. Bad training and bad leadership are usually the reasons for bad judgment.

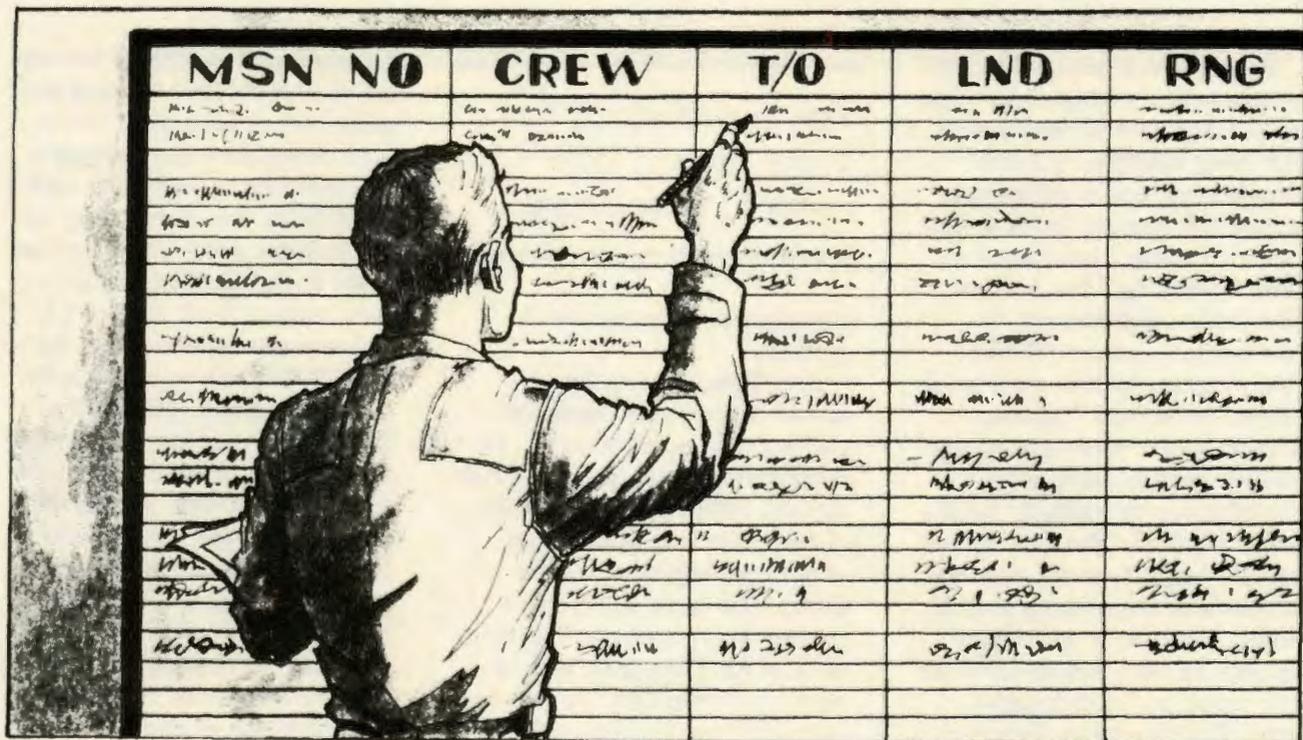
This is where the importance of a flight commander is difficult to overstate. Your experience and leadership are indispensable. You may very well be the most important leader in the squadron. Your position is such that you can have a relationship with your subordinates not available to anyone else in the chain of command. It's the kind of relationship that permits clear communication and has a lasting impact on their view of the Air Force.

Unfortunately, good leadership is a very difficult concept to accurately describe. Even so, you can certainly recognize it when you see it. You know it by the results achieved and the morale of the unit. I believe there are four tenets of leadership. They have served me well over the years. These tenets are integrity, discipline, dedication and sensitivity.

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**Bad training and bad leadership are usually the reasons for bad judgment.**

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Your integrity is your most important personal asset. It is the beginning of your self-esteem, of liking yourself. It arms you for those tough decisions leaders must make. It is your greatest strength.

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### Your integrity is your most important personal asset.

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Your personal discipline should be beyond reproach. Your officership and airmanship must be of the highest caliber. Use your discipline to set high, but attainable flight standards — then insist on compliance.

My third tenet, dedication, is based on loyalty to your unit, your mission and your country. You should support your commander and, at the same time, dedicate yourself to your flight members and their well-being. Your commit-

ment to them and the mission is the root of your motivation to accomplish the job even under adverse circumstances.

The last element, sensitivity, recognizes the need to be aware of all the outside influences affecting your leadership task. Peers, subordinates and superiors all have things happening to them and around them. You must be sensitive to them. Listen to them. Try to understand them. Be approachable and care about them.

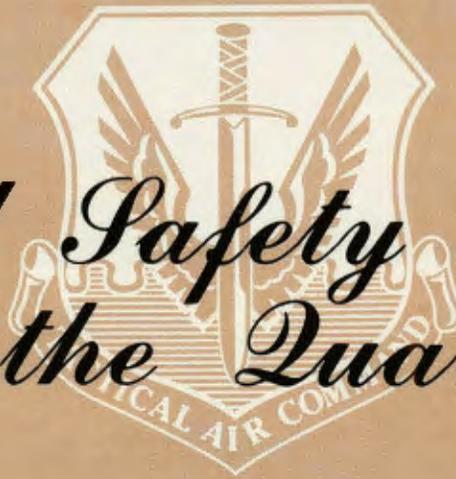
A complete “How To” on leadership is beyond the scope of this article. Hopefully, these few points will help. Becoming a good leader is a learning process, and the school of hard knocks is a requirement. There will be times when you will not know how to approach a given situation. Use your good judgment and try to do what you think is right. The real “How To” is a very individual thing, and you shouldn’t try to be a Patton when you’re not. Be yourself. Have confidence and use your time as flight commander to

find what works and doesn’t work for you. One thing that always contributes to success is to meet or exceed the standards yourself. Show them how it’s done.

You should be the role model for your flight. Every one of them should wish to be just like you. You should be the best aviator in your flight. Your officership and airmanship should set the standard. Imagine how good your flight would be if you just said, “Follow me, and do like I do,” and then you just did everything perfect. Leadership by example is *real*. That’s why we have such high standards for our commanders. If you do nothing else right in the leadership game, at least lead by example.

You can see the important reasons for the significance and responsibilities of flight commanders. Now you know what I think of your position. Your impact on our aircrews and our capabilities warrants your best performance. So, shake the stick—you’ve got it. ➤

# Ground Safety Award of the Quarter



**S**taff Sergeant Gregory M. Schmidt, 552d Component Repair Squadron, 552d Airborne Warning and Control Wing, Tinker AFB OK, sets the standard for outstanding ground safety programs. He continually emphasized mishap prevention by utilizing innovative, proactive techniques to encourage personnel to "Live Safety" both on and off duty. He utilized a quarterly computer generated Trend Analysis program to help pinpoint potential problem areas before mishaps were caused by them. Additionally, the program served as an excellent tool for tracking the effectiveness of on-going corrective actions. A HQ TAC Staff Assistance Visit report stated, "The 552 CRS Trend Analysis program, managed by SSgt Gregory M. Schmidt, served as the most detailed and impressive Trend Analysis program in the 28th Air Division." His Trend Analysis program combined with his motivating personality directly contributed to the unit completing its 12th straight quarter without a Class A, B, or C on-duty ground mishap.



**SSgt Gregory M. Schmidt**  
552 CRS, 552 AWACW  
Tinker AFB OK

Realizing the importance of getting both supervisors and workers at all levels involved in preventing off-duty mishaps, he initiated a highly successful 101 Critical Days of Summer program which ran from Memorial Day weekend through Labor Day weekend. He used special competitions and exchanges of safety information between 2 branches (included 4 work centers each) and the Commander's staff to increase every worker's involvement and awareness of the increased hazards during that time period. This approach proved to be effective, resulting in great enthusiasm towards the benefits of safety education which then carried over to the personnel's behavior. From his CPR classes to his weekly safety information packages, unit personnel are seeking out and applying his practical lessons.

Sgt Schmidt's numerous innovative programs earned the 552 CRS Safety program another "Outstanding" rating for the third consecutive year from the 28th Air Division and earned him the TAC Ground Safety Award of the Quarter.

# Weapons Safety Award of the Quarter

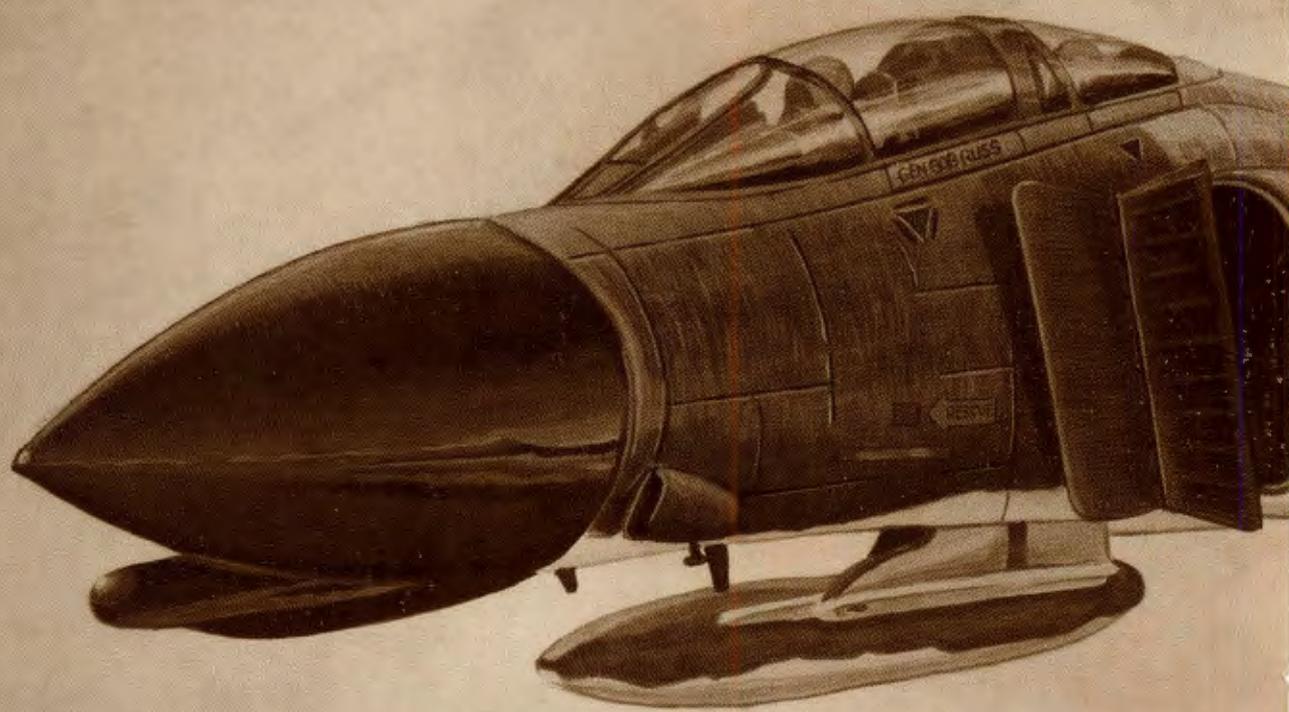


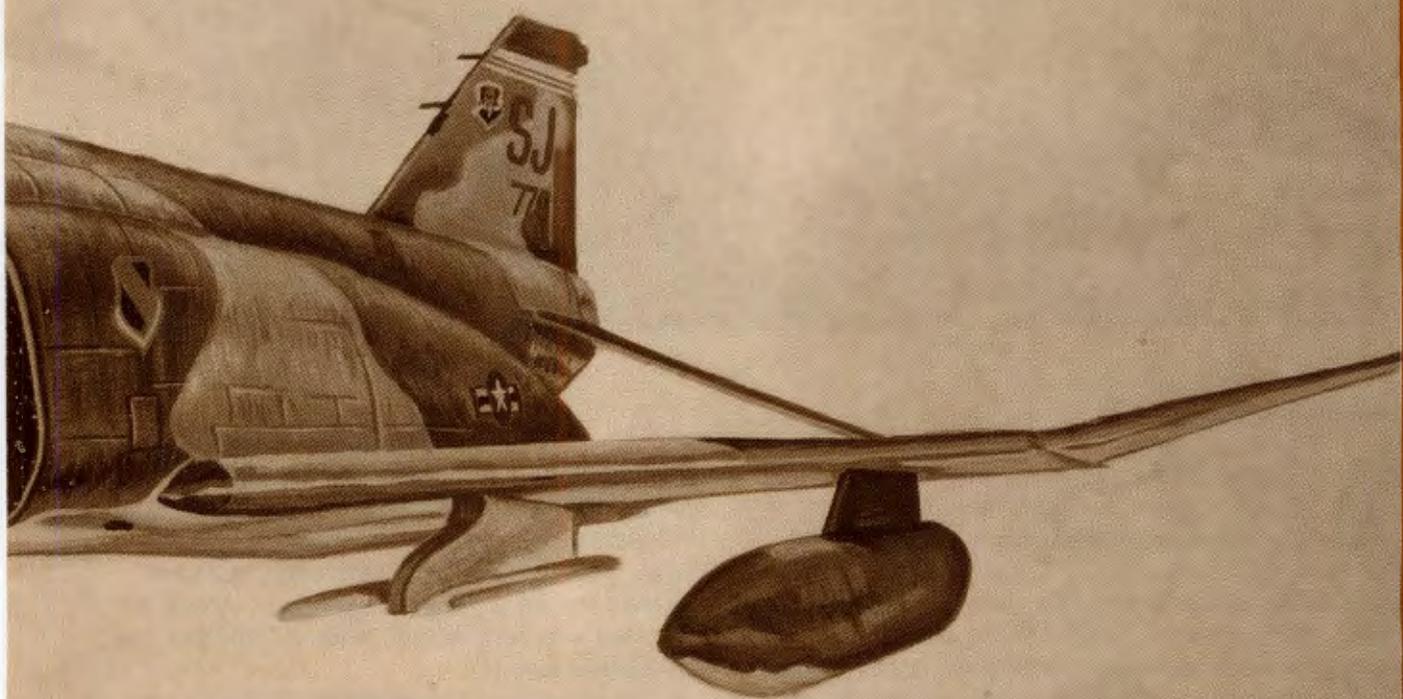
**A**s the 4446th Tactical Training Squadron Explosives Safety NCO, Sergeant John W. Berry is responsible for ensuring Joint Readiness Training Center (JRTC), Air Warrior II explosives operations comply with Air Force, Tactical Air Command, Military Airlift Command, and 314th Tactical Airlift Wing (host-base) explosives safety standards. His initiatives and accomplishments have included acquisition of rocket storage racks for assembly and temporary storage of built-up 2.75 inch rockets with white phosphorous warheads. He upgraded the capability to transport aircraft rockets and parachute flares by acquiring and mounting 2.75 inch rocket tubes and LUU-2 flare racks to the munitions transport trailers. Sergeant Berry replaced over 50 per cent of the unserviceable nose fuse cushions in the 2.75 inch rocket transport tubes. In doing so, he reduced the possibility of an explosives accident due to white phosphorous fuze damage on the rockets. All of these actions were accomplished at no cost to the 4446 TTS or the host base. Sergeant Berry's initiative led to the installation of half-sized fire symbols on all maintenance and inspection bays in the munitions



**Sgt John W. Berry**  
4446 TTS  
Little Rock AFB AK

facility shared with the Arkansas Air National Guard. He added grounded metal surfaces to munitions work bay tables and had their ohmic resistance validated by base civil engineering, thus, preventing a static electricity build-up which could cause an explosives accident. All of these activities were conducted as a self-help project. Sergeant Berry wrote and coordinated an in-depth and comprehensive munitions pre-task safety briefing guide for the TDY munitions personnel deployed for the JRTC exercises. Sergeant Berry has been instrumental in ensuring that Air Warrior II operations conducted at the alternate combat aircraft parking area were conducted safely and efficiently. Sergeant Berry has been essential in managing the 4446 TTS explosives safety program in a proactive manner. He not only identifies safety deficiencies, but also takes lasting corrective actions to prevent recurrence. He works closely with the host base safety staff and munitions management section. Sergeant Berry's great insight, initiative, and ability earned him the TAC Weapons Safety Award of the Quarter.





Bailey '91



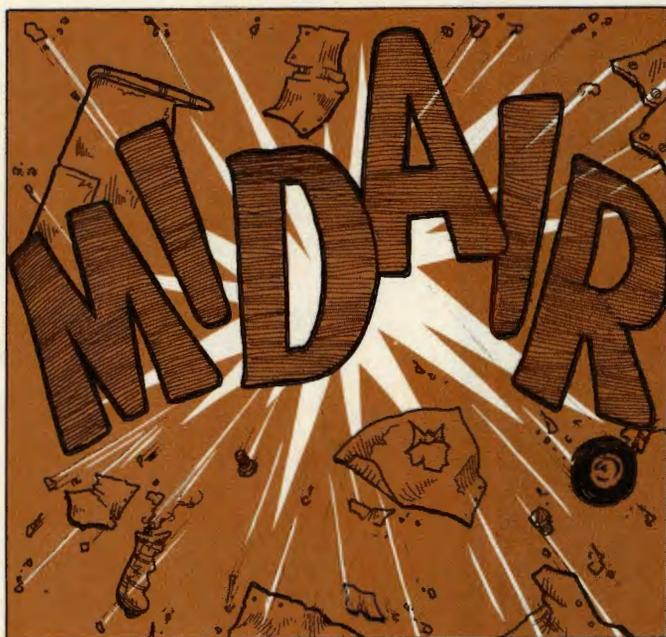
#### Anymouse (Anonymous)

A flight of two F-15A's and a single F-16B briefed to fly an intercept/Dissimilar Air Combat Maneuvering (DACM) mission. The flight proceeded normally through the planned intercepts, and the fighters positioned for their first briefed DACM engagement. The F-15's began from an offensive perch approximately 12,000 feet behind the F-16. Following the "fight's on" call, the lead F-15 engaged the F-16 who began a hard right hand turn. The #2 F-15 went high and to the left, then reversed right above and outside their flight paths hoping for a counterflow entry. Primarily due to the 12,000 feet distance between the two adversaries at the beginning of the engagement, the F-16 was able to force the engaged F-15 to a lag position. As the fight progressed, the F-15 wingman, as the supporting fighter, continued to hawk the fight anticipating a counterflow entry from a left turn. The F-16 pilot

obtained a visual pick up on the wingman at high 12 o'clock, 9,000-12,000 feet range. Since the engaged F-15 was stuck in lag and was not an immediate threat, the F-16 seized the opportunity and went offensive against the supporting fighter. The F-16 pilot took a no-lock AIM-9L shot at 7,000 feet and 120 degrees aspect.

At the same time, the supporting F-15 pilot was attempting his briefed counterflow entry; but realizing the entry had been denied by the flight geometry, aborted the entry and pulled up, temporarily masking the engagement with the nose of his aircraft. The F-16 pilot continued to press his attack, but misperceived the actual aspect, range, and closure of the F-15, and violated the training rules by continuing a pure-pursuit, head-on missile attack inside 9,000 feet. He took a second AIM-9L shot at 3,200 feet. By the time the F-16 pilot perceived the

# Done That



actual geometry, it was too late for him to take effective evasive action; and he collided with the #2 F-15. The F-15 was disabled, and the pilot ejected successfully. The F-16 sustained serious structural damage, but the pilot was able to make an emergency landing without any injuries.

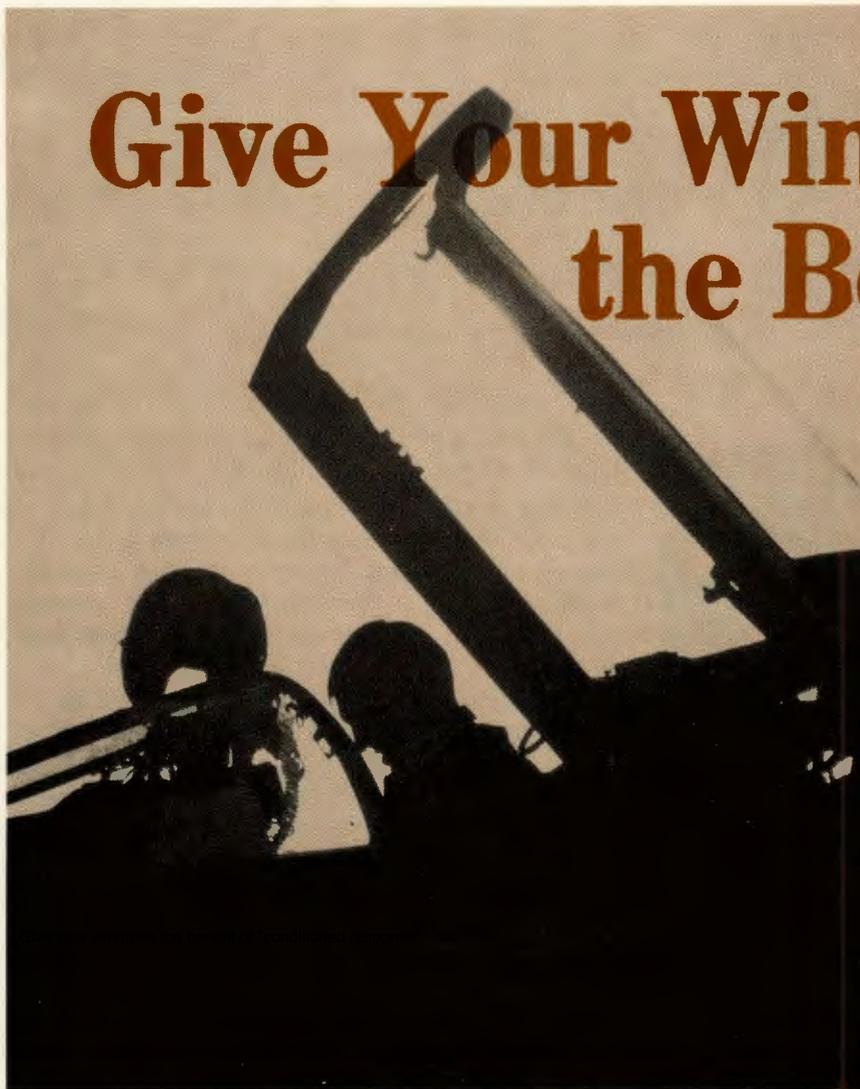
This mishap, unfortunately, is not an isolated case. In the past 3 years, the TAF has experienced 13 midairs, with the loss of 15 aircraft and 7 pilots. Eight of those 13 midairs occurred during some portion of air-to-air tactical training, with nearly all of those mishaps involving a violation of one or more of the training rules. But these were not necessarily intentional violations. In most cases, the pilots involved did not recognize the training rule violations until it was too late.

Those training rules were devised primarily to help balance the risks between effective tactical training

and the need to conserve limited combat resources -- aircrews and jets. It takes judgment, experience, and discipline to effectively apply those training rules, especially when the adrenalin gets pumping and the fangs are hanging out. There are very few air-to-air missions in which at least one training rule violation does not occur. But how do the flight leads in your unit handle it? How do you handle it? Is it routinely debriefed as "stuff happens" and no big deal, or is it thoroughly debriefed to determine how the violation occurred and how it can be avoided in the future? Was a knock-it-off call warranted and/or made? Why or why not? A brief review of the scenarios of those 13 midairs strongly indicated to me that we, as aircrew members, need to not only be able to recognize during the heat of the engagement that a training rule will be broken, but to then exercise the discipline to take the appropriate action. I remember one debrief where the film showed #2 doing a great job tracking lead and gunning his brains out. The only catch was the film also clearly showed lead had stopped maneuvering and was rocking his wings **before** the tracking solution began. Lead had gone NORDO, had an in-flight emergency and was rocking his wings to signal a knock-it-off. While it takes a lot of discipline to switch from "I've got a great shot" to keying the mike and transmitting "\_\_\_ Flight Knock-it-Off," it's that kind of discipline we have to develop if we hope to avoid additional losses from midairs.

To sum it up, a midair collision is one of the purest forms of a pilot-related mishap that can occur. Very seldom are aircraft breakdowns involved. There is no "black box" technology that will keep our jets from running into each other. The responsibility of this issue rests squarely on the shoulders of you and me, the aircrew members. The key to our avoiding future midairs is training, discipline, and rigorous adherence to training rules -- rather than just giving them lip service.

# Give Your Wingmen the Benefit of



**Maj C. J. Weiss**  
16 AF/SE  
Torrejon AB SP

**H**ave you ever noticed that your mission seems to fall into place and go better when you've had a chance to sit down and mentally prepare for it at your own pace, prior to brief time? Well, I have. I hate it when, for whatever reason, I can't find out the day before what we're going to do on tomorrow's flight. When I arrive at the squadron the next day, I often find we're doing something that I haven't recently done. At times like that, I'd like a

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**When I arrive at the squadron the next day, I often find we're doing something that I haven't recently done.**

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chance on my own to refamiliarize myself, but this isn't possible because we're maxed out getting

maps and mission materials together prior to brief time.

In this age of computer enhanced mission planning, I find this phenomenon occurs more often than way back when. Then, by necessity, you had to get some mission planning done the day before the flight just to have the materials together prior to brief. The flight members naturally knew the overview and flow of events and had time to individually prepare mentally. Now we're

# “Conditioned Response”

more efficient, and we can come in and whip up a cosmic mission in no time — a definite advantage that we need. But this efficiency doesn't provide a similar upgrade on our same old MOD zero noggin. We still need the old lead time to properly program our portable cranium. There are some advantages we can stack in our favor if we give our flight the lead time they need to benefit from “conditioned response.”

I'm not talking about the classic definition of “conditioned response” here, like your application of bold face or critical action emergency procedures (these do require significant mental prepa-

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**There are some advantages we can stack in our favor if we give our flight the lead time they need to benefit from “conditioned response.”**

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ration, and our training programs, hopefully, always keep us polished up on them). Rather, I'm referring to the benefits we reap by having the time to “chair fly our mission.” The edge we gain by having time to individually store the

known details of the mission gives us more brain bytes available to solve the unknown parts of the mission when they occur.

Let's look at three examples which could apply to a flight of F-16s. You're scheduled for a simple low level to the range to drop some practice bombs in various patterns. As usual you're going to do multiple events to fill those training squares. You'll be in a pop pattern you haven't seen in awhile, and the squadron's interested in getting good solid bomb footprint data on the jets. You didn't know which low level you'd fly, or the range events until minimum time prior to brief. You end





up flying a safe mission, but it's a good thing your inertial system didn't fail because you really weren't prepared to navigate the low level manually. Fortunately, the turkey buzzards in the pattern saw you and reacted because you were too busy looking at your card for the pop parameters to look out and see them. And your hits were so so, but your parameters were out of there (so much for any good footprint data!). But what happened in strafe? Too bad you forgot to make sure the ball was trimmed up.

Or how about the easy Surface Attack Tactics (SAT) mission with a first look target and then some tactical intercepts. Again, you plan and prepare the mission in minimum time and adequately brief, step and fly it. Well, the first look SAT target turns out to be tougher than we thought. Funny how lead was the only one who saw it early enough to get a bomb on it (he spent some time yesterday picking the target out off various maps). The intercepts went okay, but why did we miss detect-

ing and sorting their high-low post hole formation? Oh, you usually put the radar in 4-bar elevation scan but somehow forgot this time.

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**Fortunately, the turkey buzzards in the pattern saw you and reacted because you were too busy looking at your card for the pop parameters to look out and see them.**

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Well, today we're doing dissimilar air combat training — all right! "You didn't know they were bringing their electronic counter measures (ECM) pods with them? Yeah, we're going to do some ECM intercepts as part of the flight. Don't worry, I'll tell you in the brief everything you need to know about how our radar will react to the ECM." Yeah, and I'll really

know it all for this flight too — right?

These kind of examples occur everyday (and sometimes are much juicier when they involve RTU or MQT pilots). I bet you can easily think of numerous similar examples for the jet you fly. The point is that we perform significantly better when we have an adequate chance to mull over the mission and rehearse in our mind what we'll do at this or that point of the flight. Of course, how much mental preparation is needed changes with the mission, the aircrew, his experience and proficiency. But **everybody** benefits from some of it.

This is not to hint that we're not capable of, or don't need the ability to react, plan and fly a mission in a minimum amount of time. We can do that; but when we do have the time (and certainly this is always in any training or upgrade syllabus), we can allow room for complete individual mental preparation. The stage will be set for peak performance, and we'll be further ahead of our air-



craft and more adept at handling any unusual circumstances or emergencies that may arise.

So, flight leads, our training system builds "conditioned response" for much of our basic stick, throttle and rudder reactions — plus critical emergency responses. Let's make sure we provide our flight members the

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**Let's make sure we provide our flight members the same benefit for mental preparation on our missions.**

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same benefit for mental preparation on our missions. Whenever possible, ensure our flight members have an opportunity to look at the big picture about tomorrow's sortie as early as possible — rather than keeping it a surprise item of interest for the briefing.



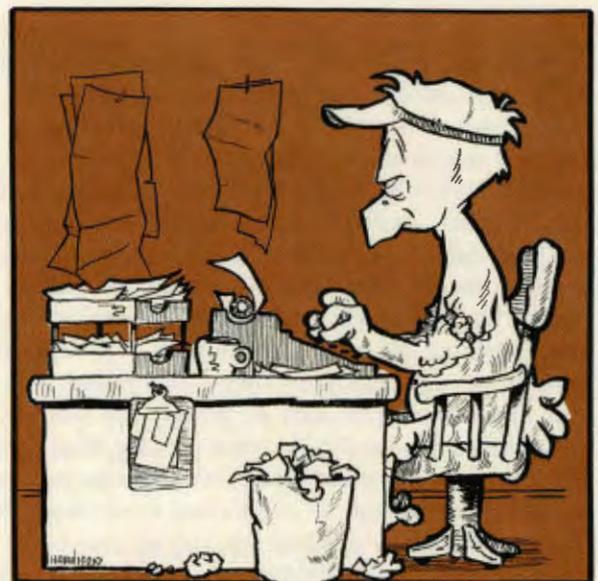
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**There are a million stories out there in the Tactical Air Command.**

**Send me some of them.**

Editor, *TAC Attack*  
HQ TAC/ISEP  
Langley AFB VA 23665-5563

DSN 574-3658





## "GET THE JOB DONE QUICKLY" Attitude

MSgt Francis S. Gore  
363 EMS  
Shaw AFB SC

Sergeant Fast had been in the ammo business for six years, and no one doubted his ability or knowledge of the 461X0 career field. When you needed someone to get the job done, he was the person. What his supervisors didn't realize was that Sgt Fast had become such an expert, he often failed to doublecheck his work. He was more interested in getting the job done fast. He had gained much praise for this, and it was the leading motivational factor behind his super performance. He didn't do things "wrong" exactly; he simply overlooked many of the time constraints, such as, posting fire symbols correctly, using cardboard when packing flares and checking the tire pressure in his munitions delivery truck. Even though he overlooked these things, he had never had an accident nor had he ever been written up for unsatisfactory performance, until one

day...

Sgt Fast was called upon to transport live AIM-9 missiles to the flight line (Red Ball). He quickly ran to his truck and hooked up the trailer. Sgt Fast failed to perform the required pre-use inspection on his truck and trailer. He headed off to the flight line about two miles away over the uneven and bumpy pavement. He was pushing the max speed of his bobtail (a whopping 18 mph). Things were going great; and it seemed as though another successful mission was about to be completed when all of a sudden, Sgt Fast glanced into his rearview mirror and noticed that the top three missiles had fallen off to the side of the trailer. He stopped his bobtail, left it in gear, set the emergency brake and jumped out to see what had happened to the missiles. One missile had fallen off the trailer and was in the road about a



hundred yards behind the trailer. Instinctively, he took off running towards it (I suppose he wanted to see if it was damaged). Once he came upon the missile, he realized it was basically destroyed; however, lucky for him, the rocket motor had not ignited. Suddenly he heard someone up the street yelling; and when he turned around, his bobtail was driving up the road by itself! He ran after the truck; but before he could get there, it had already run off the road, crossed through the ditch and hit the perimeter fence. When he got to the truck, he noticed that both guidance units on the other two missiles were broken. He asked himself, "Why did this happen to me? How did it happen?" The accident investigation showed that the weld on both the forward and aft tree stands were cracked before the trailer was moved. It also revealed the emergency brake was not operational on the bobtail and the rear tie down strap was frayed prior to transporting the missiles. Sgt Fast's "Get the Job Done" attitude ended in disaster. He did not take the two minutes to perform a trailer check. He failed to go through his checklist to ensure everything was good to go. All of his hard work and quick

response time had gone down the tubes because he didn't use his checklist and he didn't think about the safety of the munitions involved. Sgt Fast is lucky he didn't lose his life!

This incident didn't really happen; however, it very well could have. Many times we are called upon to do a task as quickly as possible. Before responding, think about the safety requirements and do everything you can to complete the task on time and without incident. If there isn't time to complete the task in accordance with the established procedures, then a judgment call needs to be made -- is the increased risk worth taking?

For a training mission, it's just that -- training. No ground units are saved, and national policy is not at stake. You can always fly the mission tomorrow. For a combat mission, the increased risk may or may not be worth the potential cost. But, except in very unusual circumstances, it's the commander's job, not the worker's, to evaluate that risk versus reward trade-off. Don't let a mishap be the first time the commander is told there isn't time to do it in accordance with the procedures.

# Crew Chief Safety Award



At approximately 2100, Staff Sergeant John J. Severson was assisting Staff Sergeant Jeffrey D. Marshall launch an RF-4C aircraft for a night mission. The engine start and pre-taxi checklists



**SSgt John J. Severson**  
155 CAMS, 155 TRG  
Lincoln NE

were uneventful. But, seconds after Sgt Marshall was instructed to pull the chocks, the aircraft commander heard a loud thump that shook the entire aircraft. Sgt Marshall yelled, "You're on fire!" Both external wing tanks had jettisoned onto the ramp. The right tank ignited, but quick action by Sgt Severson extinguished the fire and averted further damage. At virtually the same time, Sgt Marshall retrieved and hung the aircraft ladder allowing the aircrew speedy egress from the aircraft. The investigation by quality assurance personnel found that one wire in a large wire bundle in the #1 miscellaneous panel was slightly gouged with one strand, approximately 1/16 inch long, poking straight out. The short strand was possibly jostled to a position where it lay next to a hot wire when the panel was removed the previous day to replace the speed break relay. Normal vibration after engine start probably caused the strand to penetrate the "hot" wire and supplied power to the jettison circuit. The quick and well-coordinated actions of Sgts Marshall and Severson may have prevented serious injury and assuredly prevented the destruc-

tion of a valuable combat aircraft. For their professionalism and quick actions under very stressful conditions, Sgts Marshall and Severson earned the TAC Crew Chief Safety Award.



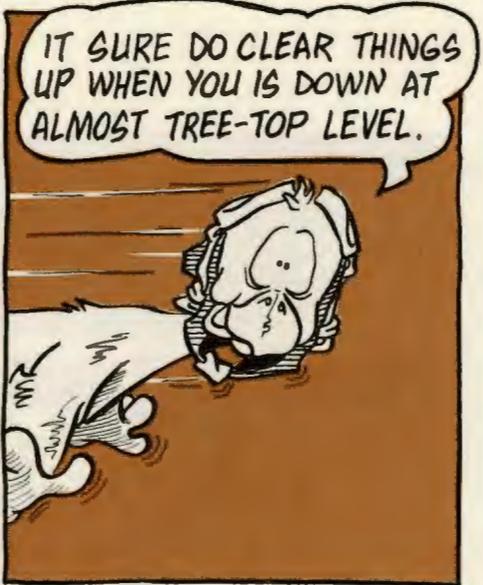
**SSgt Jeffery D. Marshall**  
155 CAMS, 155 TRG  
Lincoln NE

Fleagle

THIS TIME OF TH' YEAR WHEN MOST OF TH' LEAVES IS GONE IT SURE DO SHOW A LOT OF GROUND.



BET IF I FLIED DOWN LOW I COULD SEE JUL'S ABOUT EVERYTHING.



SPLOOSH!



# LIVE SAFETY

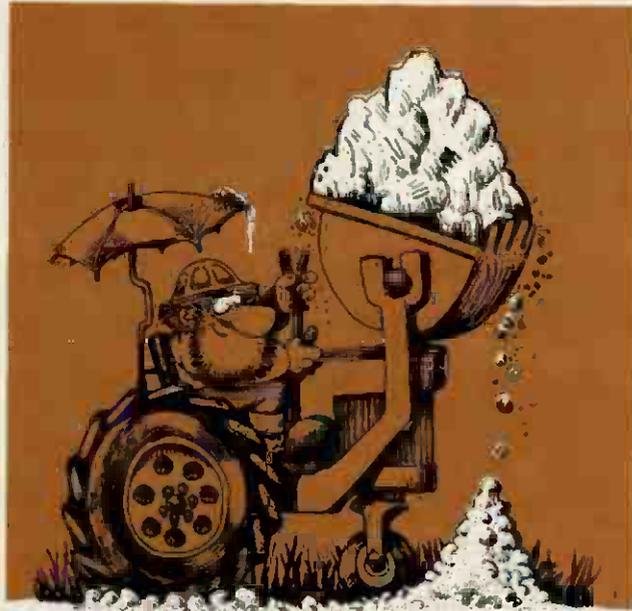
Anonymous (Anonymous)

I learned a very important lesson recently which I'd like to share with you — in the hopes that you can avoid the same experience. I'd brought my German-built diesel-powered automobile into Europe (not Germany or even the central region) some 18 months before; but because of the language barrier and difficulty in getting it into a shop, the preventive maintenance I'd been so careful to have done in the states was allowed to slide. Of course, I faithfully put fuel in it whenever necessary; but behind the scenes, there were other fluid additions and preventive maintenance which needed to be done, but weren't.

The problem I'd been allowing to develop finally reared its ugly head one dark, cold evening in late December as I was headed home. The car obviously lacked a significant amount of power as I tried to tackle some of the medium-sized hills along my route. Finally, I got to one where I was only able to do 10 mph and the engine was chugging. I was lucky that there weren't any autos bearing down rapidly on my crippled steed. Unfortunately, it finally died; and I found myself alone, sitting on the side of the road in the middle of nowhere. The phrase I would have liked to put on the end would have been "through no fault of my own." But, that wouldn't have been totally true. Eventually, I was able to get the car started again and limped the rest of the way home.

I had visions of "big bucks" and major engine repairs being necessary to get my car back on the road. Faced, for some mysterious reason, with an inoperative automobile, I asked around and a friend suggested that it could be a clogged fuel filter. Fuel filter? Hummm? I dug my owner's manual out of the depths of the glove compartment, beneath all the tour guides and road maps, and found out that the fuel filter was one among several items which the manufacturer felt the owners might want to replace for themselves.

## DOWN TO EARTH



ITEMS THAT CAN AFFECT YOU  
AND YOUR FAMILY HERE ON  
THE GROUND

I managed to get to the local AAFES auto parts store and purchased a replacement fuel filter for my car. After much careful reading of the owner's manual and plodding as I went through the procedures step by step, I got the old filter off and the new one installed. Starting the engine and accelerating it at different speeds for a few minutes, it was apparent that there were no leaks. Amazing — success!! What a feeling of accomplishment.

A check back through the records of past auto maintenance and work I'd had done in the states showed that the dealer had changed the fuel filter yearly and every 15,000 miles or so. How long had I allowed the filter to go since its last change? Try 45 months and probably 45,000 miles. Over 15,000 miles past the recommended change interval (30,000 miles). The result was a fuel filter that looked like it had something from the bottom of the ocean inside it and an engine that couldn't squeeze another precious drop of diesel fuel from it — total fuel starvation.

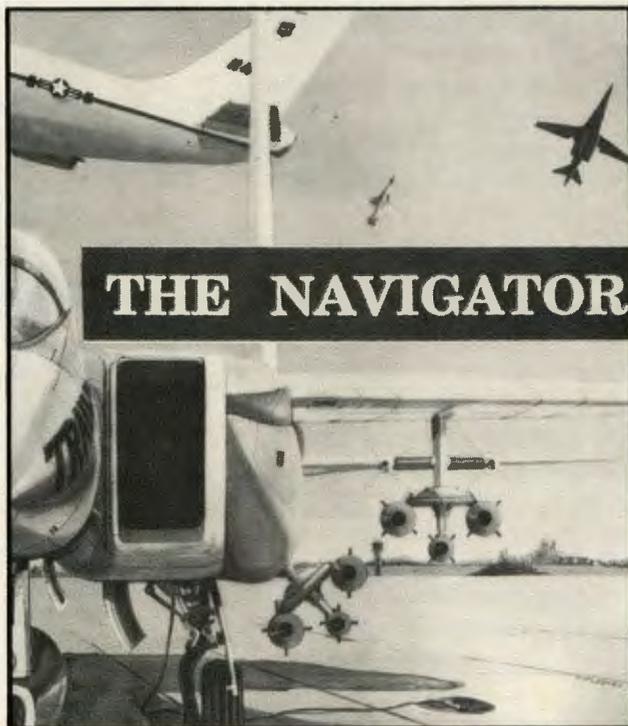
As you can imagine, this was not the only area of auto maintenance which had been benignly neglected by me. I could have just as easily had a problem because of my neglected brakes, which could have cost a life, rather than just my pride. I won't bore you with those stories, but suffice it to say that this experience taught me an invaluable lesson. There are sev-

eral components of any vehicle, yours or mine, that require periodic inspection or maintenance to ensure our cars are operating not just efficiently, but more importantly safely. Various fluid levels (brake reservoir, power steering, engine oil, automatic transmission, window washer, etc.) need to be monitored to make sure we're riding inside a car that will take us safely where we want to go and stop reliably when we desire, rather than out in the country somewhere. Tires, brakes, filters, belts, etc., need to be checked as well, watching for cuts, defects, or wear. They should be changed when it's obviously required or, in many cases, at some prescribed time schedule before they break or rupture.

My lesson cost me a little over \$5.00 for a part and a few hours of time that couldn't have been spent more wisely. Imagine what it could have cost me if the situation had ended differently, and I had caused an accident. I hope you haven't been neglecting your auto; but if you have, go take a good look at the critical components — tires, brakes, exhaust, fluid levels, etc., or get someone else to do it for you. It's not enough to just know we should keep our vehicles in safe operating condition. We have to take the action steps required to make it happen — to transition from "Think Safety" to "Live Safety."

If you are one of the 2,000 plus WSOs, EWOs, or NAVs in the Tactical Air Force (TAF), keep an eye out for the special Commemorative Edition of *THE NAVIGATOR* Magazine. It celebrates the 50th anniversary of Air Force navigators and is a special one-time only issue. It will bring back a lot of memories for us old heads, from the first NAV school to Operation JUST CAUSE. For the younger aviators, it includes articles from training fledgling WSOs at Lead In Fighter Training at Holloman AFB to up-to-the-minute insights on employing the F-15E Strike Eagle. Look for it at a squadron near you, or request a copy from:

*THE NAVIGATOR* Magazine, c/c Silver Wings Museum, Mather AFB CA 95655-5000.





# Outstanding Unit Safety Achievement Award

**D**uring the recent Coronet White deployment, the 74th Tactical Control Squadron, in support of the 159th Tactical Fighter Group, mobilized over 100,000 tons of equipment and 75 personnel. The unit convoyed 30 vehicles for 2,000 land miles (from Langley AFB VA to Dauphin Island AL), equating to 60,000 convoy miles without a single mishap. Furthermore, not one vehicle suffered a mechanical breakdown during their 2,000 mile long trip. All convoy refuelings were accomplished by the refuelers at rest stops along the way. During each nightly stop, a fire watch was posted at two-hour intervals to ensure the weapons and equipment were secured and safe. Unit members performed 24-hour-a-day wartime perimeter defense at the deployed location, while the unit set up a fully operational radar site to include numerous communications antennas and a 30-foot



**74th Tactical Control  
Squadron  
Langley AFB VA**

search radar unit. In addition, a cantonment area, composed of 75 one-man sleeping tents, showers, messing and operational tents, was set up in a densely wooded area. During the entire operation, all personnel performed their duties utilizing safety equipment, such as: steel toed shoes, hard hats, gloves, and goggles. The safety representative conducted classes on ground defense, fire and maneuver tactics, ground search procedures and the unique safety challenges they presented. All site personnel participated in the demonstrations increasing the unit's safety awareness. The entire deployment reflected the strong command support and the unit's attitude toward smart mission accomplishment. It typifies the exemplary safety record of the 74 TCS and earns the unit the TAC Outstanding Unit Safety Achievement Award.



# TAC TALLY

CLASS A MISHAPS
AIRCREW FATALITIES
* IN THE ENVELOPE EJECTIONS
* OUT OF ENVELOPE EJECTIONS

TOTAL			TAC			ANG			AFR		
JAN	THRU JAN		JAN	THRU JAN		JAN	THRU JAN		JAN	THRU JAN	
	FY91	FY90		FY91	FY90		FY91	FY90		FY91	FY90
6	8	8	3	4	6	3	4	1	0	0	1
2	4	5	1	1	2	1	3	2	0	0	2
5/1	6/1	4/0	2/0	3/0	4/0	3/1	3/1	0/0	0/0	0/0	0/0
0/0	0/0	1/1	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0

\* (SUCCESSFUL/UNSUCCESSFUL)

## CLASS A MISHAP COMPARISON RATE

(CUMULATIVE RATE BASED ON ACCIDENTS PER 100,000 HOURS FLYING)

		MONTH											
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TAC	FY91	0.0	0.0	0.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	1.8	2.8	2.7	3.0	2.4	2.7	2.8	2.9	2.8	2.7	2.8	3.2
ANG	FY91	4.2	2.1	1.4	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	0.0	0.0	1.6	1.2	0.9	0.8	1.3	2.2	2.4	2.2	2.0	2.2
AFR	FY91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	20.4	11.2	8.2	5.9	4.7	7.7	6.4	5.5	4.8	4.4	4.0	3.6
TOTAL	FY91	1.2	0.6	0.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	FY90	2.4	2.5	2.7	2.6	2.1	2.4	2.6	2.9	2.8	2.7	2.6	3.0

## TAC'S TOP 5 thru JAN 1991

1st AF		9th AF		12th AF	
*COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS*					
135	48 FIS	68	507 TAIRCW	45	479 TTW
60	57 FIS	43	1 TFW	37	355 TTW
20	325 TTW	24	363 TFW	36	366 TFW
		22	56 TTW	31	27 TFW
		14	31 TFW	17	49 TFW

ANG		AFRES		DRUs	
*COMMAND-CONTROLLED CLASS A MISHAP-FREE MONTHS*					
456	119 FIG	154	301 TFW	172	552 AWACW
432	147 FIG	117	482 TFW	63	28 AD
236	110 TASG	114	924 TFG	42	USAFTAWC
216	177 FIG	102	906 TFG	34	USAFTFWC
216	138 TFG	77	507 TFG		

# DESERT DIARY

THIS PAGE IS DEDICATED  
TO OUR TROOPS IN OPERATION DESERT STORM

(Reprinted from the *Desert Defender*, a newspaper supporting Operation Desert Storm)

