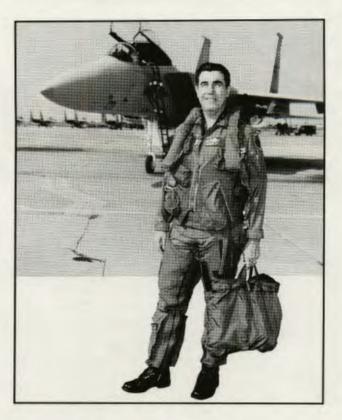


ANGLE OF ATTACK

I ly smart. Strive for excellence on every mission and every task. Take pride in your performance and appearance. Execute each mission with a healthy balance between risk versus training reward and make safety an integral aspect of our operational culture. That's the advice I, your new Commander, give to any TAC aircrew member today. If you change that first word from "fly" to "work," it's the advice I would share with anyone serving on the TAC team, regardless of their rank or duties. As we watch many of our units being downsized, reorganized or deactivated, we face a unique set of leadership challenges. We will have numerous opportunities to set the direction for our shop, squadron, and, ultimately, our nation's Air Force as we enter the 1990s.

How should we respond to these challenges? Will it be business as usual -- attempting to do more with less? Not at all. We've seen that demonstrated unsuccessfully too many times in the past. Within a short period of time both morale and effectiveness show a noticeable decline while the number of mishaps in all categories begins to edge upward. Instead, we need leaders and supervisors to create a climate where a sense of ownership fosters excellence, pride, teamwork and trust. In other words, leaders need to be focused on creating a quality culture where continuous improvement and service to the customer are the driving forces. That has been our current attitude toward safety -- a culture of safety -- and it's healthy. But, the job is not finished. Now, as TAC undergoes what I refer to as a "build-down," you will have the opportunity to help develop even better



and smarter ways for us to do our business. We need your good ideas on how we can get our job done more efficiently and more effectively.

TAC's passion for excellence must touch us all. From the airman arriving from tech school up to and including myself, all of us need to focus on improving the quality of our products. No one in TAC should be satisfied with just doing a "good job." With the rapid changes in technology, society and our Air Force, we must continue to search for ways to improve the quality, efficiency and timeliness of our service. For some that might mean hitting the books so you can improve your scores on the bombing range. For others, it could be a self-help project which would enable you to serve your customers in a more professional manner. For me, it means creating an environment where quality weapon systems, training and people are the focus of our daily activities -- a genuine culture of quality. In short, it means working together to make the greatest Tactical Air Command in the world even greater!

J.L.

JOHN M. LOH General, USAF Commander



DEPARTMENT OF THE AIR FORCE











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JUNE 1991

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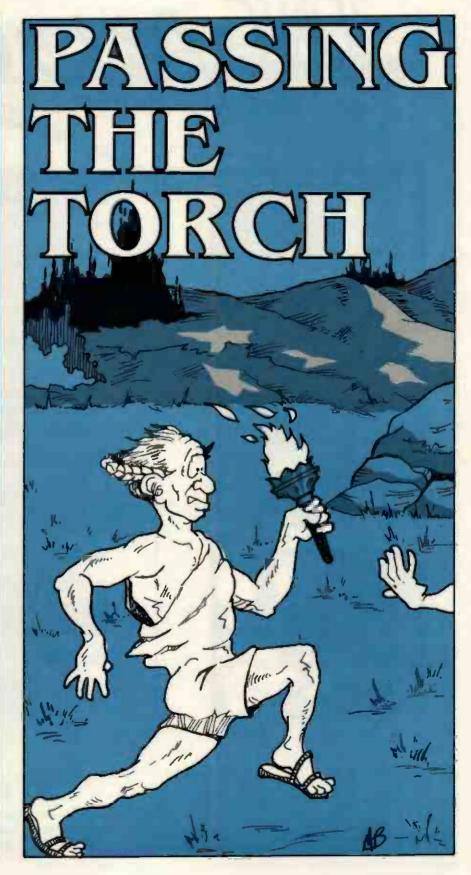
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JANET GAINES

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STAN HARDISON





incredible relay races--races that sometimes went into the night. It must have been very exhilarating to see the lit torch of the first runner coming over the hill. The key to success was not just speed, but the ability of the lead runner to effectively pass the torch. In TAC we have first-class leaders. Unfortunately, some of our best leaders retire before effectively passing the torch. Sometimes we need to be reminded that good leadership and professionalism are not supposed to be kept secret. Even OJT must extend beyond the boundaries of the work

PASSING THE TORCH

environment. As supervisors and managers, we have the awesome task of shaping and molding our people into good leaders. Maybe we need to be reminded just what it takes to be a good leader in this Air Force. AFP 50-34, Vol I, provides six distinctive traits that are vital to the success of any leader: Integrity, Loyalty, Commitment, Energy, Decisiveness, and Selflessness.

—Integrity can be defined as a total commitment to the highest personal and professional standards. We must be honest and fair. Integrity means establishing a set of values and not just enforcing them, but adhering to them ourselves.

-Loyalty is a three dimensional trait which includes faithfulness to superiors, peers, and subordinates. Example is the best teacher. If you pass these first two torches, the new runners will be well on their way to finishing the race.

--Commitment refers to complete devotion to duty. There's no half stepping here. There's no part-time professional or leader. Either you're in or out; you do or you don't. If this torch is passed, you won't need to micro manage. -Energy denotes the enthusiasm and drive to take the initiative. The icing on this cake is actually showing genuine concern and interest in the job to be done. The mentality that says, "It's just another job," breeds boredom, complacency, and mishaps. We must instill in our people that every job is important to the mission. If this torch is passed, you won't have to tell them how fast or how far to run.

—Decisiveness is a willingness to act. The bottom line is confidence in your own medicine. Know vourself, your job, your people, and your mission. Use all the training, experience, and skills you've gained through the years to do the best job you can. Your subordinates and superiors need to be able to have confidence in your decision making ability. If things don't go according to plan, your attitude should be, "The buck stops here." Take responsibility for your own actions. If you pass this torch, it won't be the cheers of the crowd that brings the runner in.

-Selflessness denotes the sacrificing of one s personal needs for a greater cause. It has been said, "that if you don't take care of yourself, nobody else will." But if you don't take care of your people, you

won't be able to take care of yourself. No one can do it all by themself. Your people need to know that you are taking care of them. They'll believe it when they see it. If you pass this torch, your people can run without continually looking over their shoulders with uncertainty.

Our role as leaders and supervisors extends far beyond just ensuring our people learn the job. We must pass, by example, the qualities of professionalism and good leadership to them. Otherwise, who will carry the torch to the next generation?

C taff Sergeant James F. OGreathouse, 34th Aircraft Maintenance Unit, 388th Aircraft Generation Squadron, 388th Tactical Fighter Wing, Hill AFB UT, is an extremely conscientious, self-motivated individual who demonstrates sustained outstanding performance in all duties. On 5 Aug 90, Sgt Greathouse was conducting engine oil accumulator servicing training as part of an in-house OJT program he initiated. While stressing to the trainees the importance of using a mirror and flashlight to doublecheck all areas accessible to foreign objects, he detected an unsecured bolt, nut, and washer in the engine bay. Immediately grounding the aircraft, he initiated and performed aircraft engine removal to determine the origin of the foreign objects. Researching and crossreferencing engine technical orders, he determined the missing hardware came from a clamp on the engine oil return line. Undetected, this would have resulted in severe chafing and the possibility of catastrophic engine failure. The aircraft was returned to fully mission capable status in a matter of hours.

On 24 Oct 90, while performing the preflight on his assigned aircraft, Sgt Greathouse's keen eye and attention to detail once again averted possible disaster. While readying his aircraft for flight, he detected a panel hinge that had broken completely off. The panel hinge was being held in place by the hinge pin itself. Although a discrepancy of this type is not normally considered serious in nature, the panel was located only two feet from the engine intake, making engine ingestion

Crew Chief Safety Award

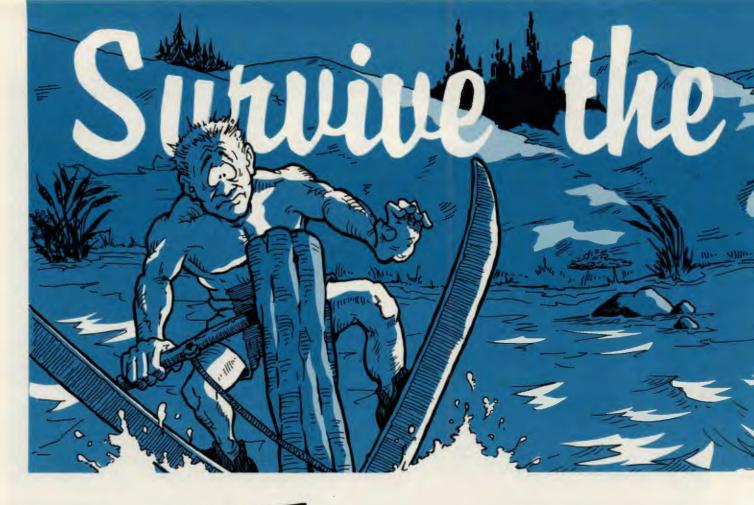


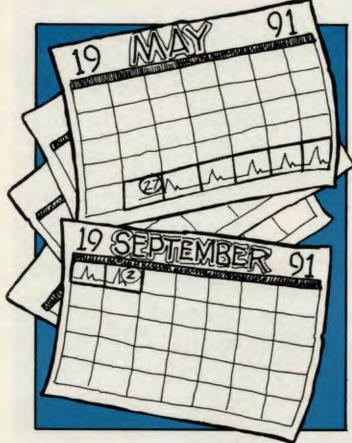
SSgt James F. Greathouse 388 AGS, 388 TFW Hill AFB UT

a real possibility. Again, Sgt Greathouse identified the problem and took immediate corrective action, preventing a possible catastrophe.

On 10 Nov 90, during a CORONET LIGHTNING exercise, Sgt Greathouse was assigned to generate an aircraft other than his own. The crew chief he replaced stated the aircraft was ready to go except for a hydraulic leak check that was needed on a flap power drive unit hydraulic pressure line. After reviewing the situation, Sgt Greathouse determined that the leading edge power drive unit command servo link had been disconnected to facilitate the installation of the new hydraulic line requiring a full rig of the leading edge flap system. He completed the required maintenance actions which were not originally identified, ensuring safe, quality maintenance was performed.

Sgt Greathouse is a top professional, dedicated to his work. He shows pride and integrity in all he does. This is reflected in the 97.6 per cent fully mission capable rate his aircraft has maintained since September 1990 and the 100 per cent quality assurance pass rate on all personal evaluations. Sgt Greathouse's sustained superior performance has earned him the TAC Crew Chief Safety Award.





WE CARE ABOUT YOU

Mike Mehalko HQ TAC/ISEG

The warm summer days are here, and many of us are taking some time off for rest and relaxation. But all too often as we try to get the maximum enjoyment, thrill or time of our life during our leave or weekend, by doing so we place ourself, our family and others at an unnecessary high level of risk.

In 1986 TAC experienced 40 off-duty fatalities, and in 1987 this number further increased to 42. That was the year TAC/CC began the "We Care About You" initiative to reverse the upward trend. The initiative has produced excellent results. During the first year, 1988, off-duty fatalities were reduced to 37. As more individuals became involved, the unnecessary loss of life was further

101 CRITICAL DAYS



reduced to 22 in 1989 and 10 in 1990. The initiative worked because it was supported at all levels; this included commanders, functional managers, supervisors, the wrench turner, and the administrative troop. Everyone will say you cannot measure safety—it's intangible. But had we continued on the trend started in 1986, we would have lost at least 64 more TAC personnel.

As in the past, commanders and supervisors must continue to remind themselves and others of the increased risks summer brings and the practical steps that can be taken to limit their negative impact. We want to pass on for your consideration what we believe is needed to make this initiative work. These actions can help you survive the high risk summer months that normally start on "Memorial Day" and last for 101 days until "Labor Day."

ON THE ROAD

—If you plan to take a trip, remember the roads are more congested because it seems everyone else has the same idea.

—Allow sufficient time to make the trip safely. During 1990, 5 of the 10 fatalities involved fatigue. People were pressing to get home or back to their base. —Ensure your vehicle is up to making the trip, too. You need to check items such as tires, lights, exhaust, brakes, and steering. If you plan to tow a trailer or carry items in/on a roof rack, you will also need to make sure your shocks/suspension can handle the added weight. Have you ever been blinded by the overloaded car that looks as if it's taking off because the front end is so high? In an emergency, lack of quick steering or braking action can cause you to lose control of the vehicle. Some nice things to have with you are: an extra set of keys (just in case), maps, driver's license, medication, registration, emergency road flares, fire extinguisher, and first aid kits. Don't forget your spare tire and jack.

—Take frequent rest stops; it breaks up the trip and gives you some needed relief.

—Stay within the posted speed limit. Adjust your speed to compensate for inclement weather and changing traffic conditions.

-Always use seat belt/helmet.

—Don't drink and drive. If you drink alcohol, use the designated driver or "buddy system" approach. Remember, this means one person **DOESN'T** drink **at all**; don't just choose the one who had the least to drink. It's not only unwise,

SURVIVE THE SUMMER (We Care About You)

but can really add to the expense of your vacation or weekend.

RECREATIONAL ACTIVITIES

—The Bar-B-Que. Many times each year, we see reports where someone was seriously burned, overcome by carbon monoxide or set fire to their residence. Here are some dos and don'ts:

DO

—Keep your grill far away from your house and flammables.

—Keep small children away from the hot surface of the grill.

-Check your gas grill for gas leaks.

DON'T

—Add fuel to the hot charcoal, as it can and will produce a flash fire.

—Operate grills in confined spaces such as a garage (doors closed). It produces carbon monoxide and a flash fire on the grill could easily start a fire.

-Use a grill as a heating source.

—Empty used charcoal into your trash can (use a metal container and fill it with water).

SPORTS ACTIVITIES

—This is the time of the year we always see an increase in unsupervised sports activities. Some factors that appear frequently are:

—Strains from lack of warm-up, being out of physical condition and plain old aggressiveness. If you are out of shape, ease into the activity and do warm-up exercises. Limit the time you participate and take rest breaks.

—Is the area where the activity is conducted in good condition? Before starting the activity, police up the area and make it as safe as possible. Anything you do to improve the area reduces the risk of injury to yourself and others.

WATER ACTIVITIES

—We seem to lose several folks each year in water related mishaps. Swimming and boating activities definitely increase with the warm weather.

SWIMMERS

—Know your limitations and **do not** exceed them.

—Thinking you can swim from shore to a floating dock or small island has resulted in several TAC losses. Determining the distance visually is not a good idea. Even strong swimmers have been overcome by heavy currents. Again, know your limitations and swim with a buddy. Never dive into unknown waters or swimming pools not specially designed for diving. Each year we read of personnel who hit the bottom and are paralyzed or drowned after being incapacitated by the injury.

BOATING

—We can't say enough in this article to cover anything but the basic requirements. Your local Coast Guard Auxiliary normally has excellent training available. As a minimum, please have your boat checked by the Coast Guard Auxiliary. They will ensure it meets federal and state requirements for structural integrity and safety equipment. Boating alone is risky and should especially be avoided in large bodies of water. The rules regarding alcohol are almost the same as operating your car. We highly recommend attending a Coast Guard sponsored course before venturing out in the deep blue seas.

We have attempted to address the activities that produce the majority of injuries during the summer months. But by all means, we sincerely hope you carry that caring attitude into all activities whether they be at work, around your home, or in the pursuit of enjoying yourself on leave/vacation. Our goal is to have each and every family member return because you're vital to the mission of TAC and "WE CARE." We want you to enjoy your free time, but we want you back safe and sound. Sometimes it only takes a second to be safe, not much time when you think about it. Have a nice summer!

Flight Safety Award of the Quarter

Nechnical Sergeant Robert H. Griffith, 507th Tactical Air Control Wing, Shaw AFB SC, has been a driving force in the wing safety office since his assignment as NCOIC, Flight Safety. His diligent pursuit of potential flight safety problems contributed to the wing receiving the TAC Flight Safety Award for fiscal vear 1990. Sgt Griffith's keen awareness of flight line safety identified a serious flight line lighting deficiency that degraded the wing's night operations and presented a safety hazard. His persistence and close follow-up actions were instrumental in getting the deficiency corrected in minimum time. Sgt Griffith initiated actions for the accomplishment of two onetime inspections of wing OV-10 aircraft. Each action identified an aircraft discrepancy and prevented a serious in-flight emergency and possible loss of aircraft. The first inspection revealed a coaxial cable in the aircraft tail section that, if



TSgt Robert H. Griffith 507 TAIRCW Shaw AFB SC

detached, could cause the aircraft's flight controls to bind. The second inspection discovered loose engine tail pipe brackets, creating the potential for an in-flight engine fire. When the chief of flight safety was TDY, Sgt Griffith investigated an in-flight jettisoning of a centerline tank and weapons pod loaded with 2.75 inch rockets. His recommendations led to modification of the aircraft's emergency jettison system, precluding recurrence of the incident. Sgt Griffith took the initiative and computerized the wing's flight safety trend analysis program, working closely with the wing's maintenance analysis branch to identify potential hazardous trends. Both actions have significantly enhanced the effectiveness of the wing safety trend analysis program. Sgt Griffith's outstanding contributions to accomplishing the wing's mission have earned him the TAC Flight Safety Award of the Quarter.

Ground Safety Award of the Quarter

aster Sergeant Robert M. Lopez, 358th Aircraft Maintenance Unit, 355th Aircraft Generation Squadron, 355th Tactical Training Wing, Davis-Monthan AFB AZ, sets the standard for properly balancing the risk versus reward equation. His alert attitude and determination to keep the unit incident free has paid great dividends. This has been true in all areas he has responsibilities for: ground safety, weapons safety, airworthiness assurance, and personnel safety, both on and off duty. He obtained this high level of success by emphasizing smart mission accomplishment while performing his normal weapons flight chief duties. Sgt Lopez believes that effective mission accomplishment by definition must always incorporate safe operations; this results from closely following technical data, paying attention to detail, and performing your best EVERY TIME. This philosophy inspired his weapons flight to maintain three months straight with a 100 percent release rate -- not a single hung bomb or flare, no gun jams, or other incidents occurred in this period. His flight's superb maintenance practices earned it the Wing Weapons Flight of the Quarter honors for the 4th quarter of FY 90 and the 1st quarter of FY 91. Sgt Lopez encouraged his

weapons maintenance section to devise a trend analysis inspection program for the GAU-8 gun system used on its A-10 aircraft. This program calls for detailed inspections of the gun bay area, in addition to the usual end-of-firing day inspections; it also involved monitoring and tracking high interest items, such as the gun driver mount brackets, which have a known history of cracking. These inspections have resulted in the discovery of a broken gun hydraulic pin and its fractured pieces. On another occasion, this scrutiny resulted in identification of a sheared gun lubrication line.



MSgt Robert M. Lopez 355 AGS, 355 TTW Davis-Monthan AFB AZ

If either had gone undetected and uncorrected, it may have resulted in foreign object damage and/or failure of the gun system. Sgt Lopez' insistence on attention to detail and "taking that extra step" made the 358 AMU and the 355 AGS both FOD Prevention Award Winners of the Year for 1990. His safety bulletin boards and work center safety books were evaluated as being precise, informative, and up-to-date throughout the year. Sgt Lopez' safety program was highlighted and directly contributed to the squadron's "Excellent" rating on the annual ground safety inspection. His Hazardous Communication program was "error free" when inspected by the base Environmental Protection Office in November 1990. Again, Sgt Lopez' materiel safety data sheet display board made hazard information readily accessible and visible to all personnel. None of the 175 people in the 358 AMU have received a DUI or DWI in the last 12 months; and Sgt Lopez' weapons flight line loading operations were found to be flawless during the Annual Weapons Safety Inspection, contributing to the Squadron's "Outstanding" rating. Sgt Lopez' sustained superior contribution to smart mission accomplishment earned him the TAC Ground Safety Award of the Ouarter.



s the Explosive Safety NCO of the 74th Tactical Control Squadron, Langley AFB VA (507th Tactical Air Control Wing, Shaw AFB SC), Technical Sergeant Carlton Lundy is responsible for ensuring all explosive operations are accomplished effectively and in compliance with Air Force and Tactical Air Command explosive safety standards. His accomplishments in the area of safety are numerous and outstanding. The 74 TCS did not have storage containers for the M-203 rifle, a modified M-16 equipped with a grenade launcher. Sgt Lundy immediately initiated action to requisition new storage containers for the M-203 rifle and had them in use within a few days. In conjunction with getting the new storage containers. Sgt Lundy noted that the unit did not have the required number of personnel qualified to use and maintain the M-60 machine gun. He quickly coordinated with the weapons training school at Nellis AFB NV and scheduled a training team to

come to Langley AFB. While at Langley, the weapons training team provided qualification training for 25 individuals on the M-60. These actions resulted in savings of thousands of dollars to the 74 TCS and other Langley AFB units. Following this training, Sgt Lundy saw the need



TSgt Carlton Lundy 74 TCS, 507 TAIRCW Langley AFB VA

for a safety guide for all weapons and munitions utilized in the 74 TCS. He wrote, published, and implemented an in-depth, comprehensive new-comers safety briefing guide that is now used as a model throughout the 507th Wing. Sgt Lundy's knowledge and expertise have also been put to good use by the wing's radar standardization division. He has been called upon to augment wing visits to other units. Sgt Lundy manages the 74 TCS explosive safety program in a proactive manner, ensuring all weapons operations are conducted safely and efficiently. He identifies safety deficiencies and takes lasting corrective action to prevent recurrence. He works closely with the 507th Wing and the 1 TFW Safety staff on all safety matters. Sgt Lundy has great insight and initiative and is extremely effective in all areas of weapons/explosive safety. For his demonstrated initiative and ability, Sgt Lundy earned the TAC Weapons Safety Award of the Quarter.

TRY HARDER AND HIS 4TH OF JULY CELEBRATION

Jimmy Campbell 1 AF/SEW

It's time to celebrate our Nation's birthday, and Try Harder isn't going to pass it up. Although he had a little trouble last year when his 1966 Mustang convertible caught on fire from the fireworks and the sheriff drove up at the wrong moment, this time it would be different.

Sure, fireworks were still illegal in Try's state, but he would go out in the woods where no one would see him. Then he could have some real fun. And, best of all, he would not be under the watchful and nosy eye of his pesky neighbor, Jim. Try was sure that some of last year's problems were because of Jim. Try couldn't accept the thought that he was the one solely responsible for last year's fire.

Try loaded a cooler into the backseat of his Mustang. This time, he didn't have to cover the beer cans with those fake soda labels since Jim wasn't coming along. He lowered the top on his convertible, put on his World War II aviator's cap, wrapped his World War I silk scarf around his neck and headed for the state line. He knew he could get all the fireworks he wanted down there because they were still legal and no one would ask any questions about his out-of-state tags.

On the way down, he finished off his first beer. Then he chewed on a breath mint figuring it might be smarter if the fireworks people didn't smell the beer. Try loaded up the car with all kinds of neat stuff. He had a sack of M-80 cherry bombs, some roman candles, smokes, spinners, and several gadgets that he wasn't sure what they did.

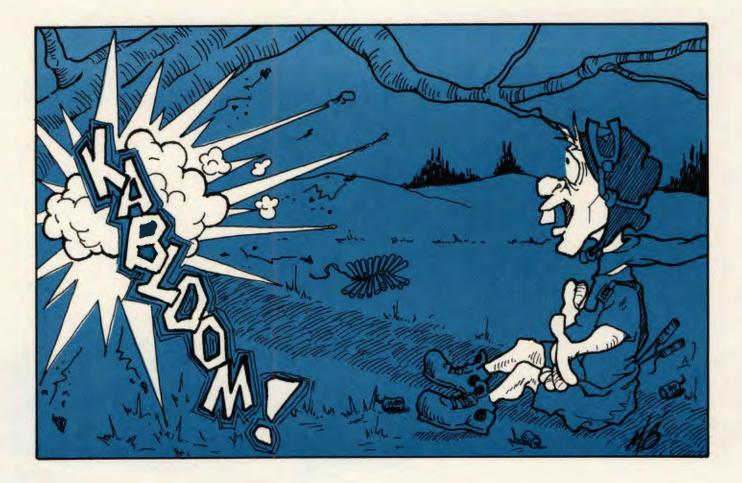
Try had another beer as he headed for a nice little clearing he knew about nestled among some tall pine trees. The place wasn't more than ten miles from his home, but it was so isolated that he was sure no one would ever find him. When he arrived, he looked around the area to make sure no one else was around where they might be hurt with his fireworks. He figured that Jim would be real proud of him for thinking about the safety of others like that. He also was looking for a nice place to shoot his M-80s. There would be no firecrackers under tin cans this year, because last year a can went wild after a couple of shots and broke the windshield of his Mustang.

Try found a nice big old dead tree about sixty feet tall that would be just right for him to play like he was blasting tree stumps again. That had been one of his favorite summertime sports as a kid until a short fuze caused some dynamite to go off too soon. The noise from that explosion caused him to have a permanent ringing in his ears which had prevented him from qualifying for pilot training.

Using a stick, he dug out a little hole at the base of the tree and planted an M-80. He lit it and stood back. **BOOM!** A little bit of bark and some dirt flew past his head as he ducked. His automatic reaction was to look for Jim because he could already hear the comments about almost losing an eye since he wasn't wearing safety glasses. Maybe Jim's concern about safety was starting to rub off. No, that's impossible!

Well, that wasn't much of a bang, so why not tie ten M-80s together. Now that might be something to talk about. But first, another beer.

After finishing the beer, Try put the M-80s under the tree and lighted them. He started to run, but he tripped and fell. **BBBOOMMM!!** The M-80s all exploded together, dirt and bark went flying through the air, and the tree shuttered and slowly



began to lean.

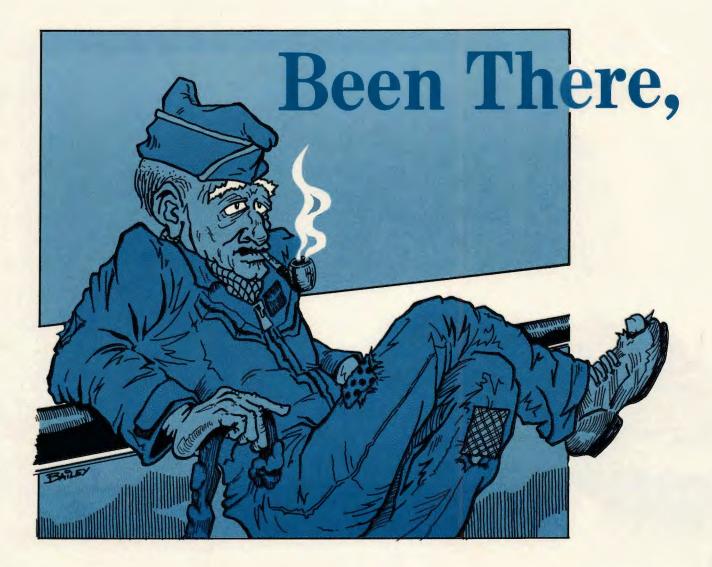
Try looked up through his blurred vision from too many beers and the concussion of the blast. The tree was leaning with its shadow creeping across his body with ever increasing speed. Try rolled, clawed the ground, and crawled away as fast as he could. CCCRACK, BANG, CRUNCH! and all was quiet. The tree had fallen directly across the center of the Mustang. Its hood was sticking out on one side of the tree and the car's trunk out the other. Try just sat there and shook his head.

The Mustang was out of the question as a way to get home. Besides, the world was still turning and shifting every time he put his foot down; so he decided it was best to sit down, have another beer and think about it some more. Try figured that he would be in real trouble if he was discovered with all those fireworks still in his car, so there was only one thing left for him to do. Shoot them all up! Try started with the roman candles, but he was having a little trouble holding the match and the fuse together. In the process, he dropped a burning match in the back seat of the Mustang. At first just one or two items caught fire, followed quickly by **BOOM...BANG...CRACK...POP!** Black smoke and fire were everywhere.

Try managed to stumble off down the road about one hundred yards when he heard the whine of the siren on the fire truck. He thought how glad he was that Jim didn't know about this. As the fire truck arrived, a fireman jumped off and ran toward Try. Try broke out in a cold sweat and froze in his tracks as he saw the face and recognized the voice. It was Jim, who was also a volunteer fireman. Jim smiled and said, "I guess burning up your car and a trip to jail last year just wasn't enough, so you had to go and do it again this year."







ROMAN CANDLES AND SPARKLERS

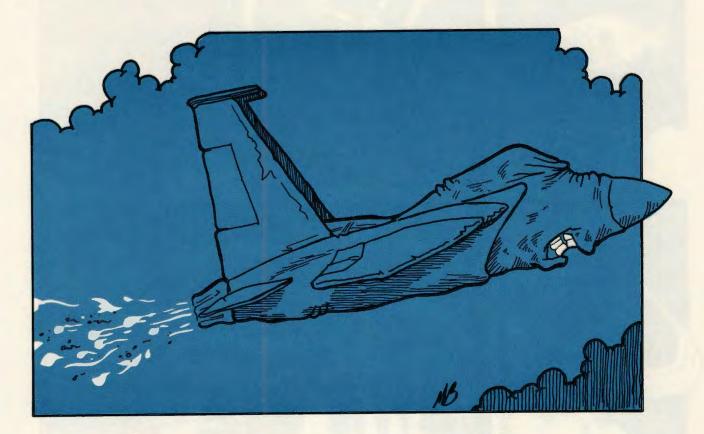
Maj Michael E. Fox HQ TAC/ISEF

During a slow speed scissors, at approximately 220 kts and 14,000 ft MSL with full afterburner selected, the flight lead thought he saw an abnormally long burner plume streaming back from two's aircraft. Lead transmitted "check engines," and the wingman scanned his gauges and replied that the engines looked good. Approximately five seconds later, the flight lead saw sparks and what looked like a "roman candle" and said, "terminate right afterburner." The mishap pilot looked up into his

mirror and saw the sparks as he terminated the engagement. The entire sequence from the first "check engines" call to throttle idle took only eight seconds.

With the F100 engine, burn-through continues to be an all too common occurrence that can inflict a lot of damage on our jet if it isn't handled properly. In some mishap reports, pilots use the words "roman candle" or "sparks" to describe what they saw when an augmentor burn-through occurred. In others, the warning signals are more

Done That



subtle. They may occur with little or no indication in the cockpit of the affected aircraft.

The main reason for burn-throughs are certain mechanical failures in the augmentor section which, in turn, disrupt the cooling airflow around the augmentor section. Then, when AB is selected, a hot spot develops followed rapidly by a burn-through of the augmentor. For you engineering types, the failures are primarily caused by: balance flap fractures, pivot pin fractures, and actuator misrigging. An active program named Pacer Growth is designed to eliminate these problems. This program will upgrade the current augmentor using the most recent technology. A cast balance flap will replace the welded honeycomb balance flap, and a solid pin will replace the hollow pivot pin. The actuator rigging procedures will be improved to help

prevent misrigging. Until upgraded, an intensive inspection schedule remains in place. Another change which will help reduce the damage caused by burn-throughs is the planned addition of an augmentor fire detection system in the F-15.

Until this new system arrives, flight members will continue to have to look out for one another in this critical area. Early detection followed by proper action is the best line of defense. During and after augmentor use, be alert for signs of smoke, fire, or vapor. Pay special attention during the battle damage check for signs of heat or fire damage near the nozzles. If you have, or suspect you have, an augmentor burn-through, terminate the mission and avoid the use of afterburner. Get the jet back on the ground where the maintenance experts can work the problem and the fire trucks are a lot closer.





Lt Col Marty Jubelt 28 AD/SE Tinker AFB OK

Tell me if you've heard this one ... It's three thirty in the morning, you're running five minutes late for your show time at work, and you're doing everything you can to make up the time. You approach a major intersection with a red light; you can see at least a mile in all four directions and you're the only car around. Your choices: continue through and make-up some time, or stop and wait for the light to turn green. If your decision was to stop, you would have acted with **DISCIPLINE**.

Our potential for a mishap resides with us every minute, day, and year of our lives. Let's face it, life is a risky business, complete with continuous choices. We face risks at home, traveling, on the job, and in our relationships with each other everyday. Do we always have the discipline to make **SAFE** choices, weigh risks, and minimize or eliminate them? Human nature says "not always."

To be prepared for these choices, we learn, usually through trial and error, what hurts and what rewards. As we get older, **EXPERIENCE** becomes the knowledge from which we resolve our choices. From the moment we rise each day, we're faced with **RISK** decisions. For example, do we get a ladder or use a chair with wheels, readily available to hang a painting? Do we accelerate the barbecue by squirting the lighter fluid on the slow burn? Do we stop or go at the red light at three in the morning? These examples are easy to relate to, and each of us could easily add to this short list.

When was the last time you told someone about an experience where you made a poor choice, but survived? If you did, you contributed to extending our collective **KNOWLEDGE**; you lowered **RISK** and may have prevented someone else's mishap. This grand idea, though not new, needs to be restated. If **YOU** do share your **KNOWLEDGE**, then **SAFETY** becomes exponential. This is a worthy goal which should be intrinsic to each of us.

Therefore, **SAFETY** is a verb! It's action, something to do, or create. The act of using our experience, choosing a path, and the outcome of this choice, are all active events. The complexity, intensity and teamwork required by our exciting lives in the 28th Air Division demand the right choices. Thus, safety is a verb in the context of "LIVE SAFETY." Our collective wisdom and smart mission execution come from making the right choices without the loss of life, injury or damaged equipment. We can all "LIVE SAFETY" if we believe "SAFETY is a verb."

LIVE SAFETY POSTER CONTEST WINNER

Congratulations to Staff Sergeant Gary Brinson, 1878th Communications Squadron, 347th Tactical Fighter Wing, Moody AFB GA, for having his poster selected as the winner. Although many excellent entries were received and the crew here had some difficulty in picking the best, Sergeant Brinson walked away with the top honor. He was also the most enthusiastic participant with a total of six posters entered.

We want to thank all of you who shared your ideas, they were all good. You are all winners in the "Live Safety" contest because you took the time to think through and apply good safety practices to real life situations. We hope many more of you also accomplished this feat, even though you didn't send in your ideas. Our goal is to share experiences and wisdom with our readers, so that TAC is a safer and more effective place to work. Again, thanks to all our poster contestants.

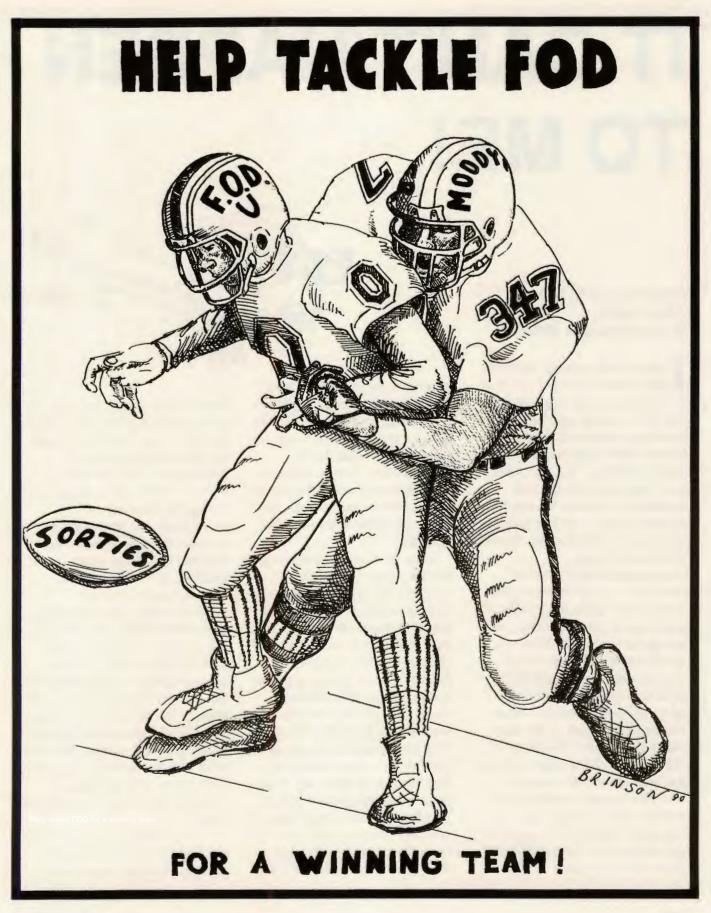
If you would rather express your ideas in writing instead of art, call or write our editor. He would be happy to discuss the probability of printing your article in one of our future issues. SSgt Gary W. Brinson 1878 CS, 347 TFW Moody AFB GA

Ron Smith, Art Director

FROM THE EDITOR'S DESK

Congratulations to the 1878th Communications Squadron, Moody AFB, Georgia! Although their group entry was received too late for consideration in our "Live Safety" poster contest, their example of how to promote "Living Safely" was outstanding; and we had to include them in this issue.

After the announcement of our contest in the December issue, the professionals in the 1878th embarked on their own safety poster contest. That's the kind of initiative we hope you will also consider for future use. The 1878th took the *TAC Attack* "Live Safety" contest and made it their own! That type of motivation and individual commitment to make their unit better, more effective, and safer are the essential ingredients which make up smart mission accomplishment. If your unit has some good ideas for improving the quality, efficiency and timeliness of your service and/or products, let us hear from you. We would like to share those ideas with others in TAC, so we can further reduce the negative impact of mishaps and continue to maximize the quality of outputs.



TAC ATTACK

IT CAN'T HAPPEN TO ME!

Major Patrick D. Nowak AFLC/IGFO Wright-Patterson AFB OH

It was a fairly normal day with the activities being no more or no less hectic than any other day. The weather was 500' scattered, measured 2600' broken, 5000' overcast, and 7 miles visibility. A routine afterlunch meeting with the civil engineers to discuss taxiway repairs looked to be just another task in an overloaded day. Some of the participants recommended that after the meeting a tour of the work area would be in order. So a team of eight loaded into two vans, one being the base operations van, which had a UHF radio; both vehicles proceeded across the airfield to inspect the taxiwayall on the same mission-all on the airfield to look at the same piece of concrete. The driver of the second vehicle pulled behind the base operations van and followed it to the runway. The driver of the base ops van requested clearance to cross the approach end of the runway and proceeded to taxiway 7. The

ground controller, seeing two vehicles in formation approach the runway, cleared the vehicle to cross the approach end of the runway. The controller's transmission made no reference to a second vehicle. After all, the pattern was clear of traffic, and there was little activity on the airdrome.

After 30 minutes of discussing the finer points of curing concrete and the best method of sealing cracks for longer wear, the individuals traveling in the base operations van regrouped and started back towards the runway for the return trip. The second group, still debating those finer points, noticed they were about to be left. Assuming they were going to use the same procedures on the way back, they hurried to their van in the hope of rejoining the first van. The driver of the second van, realizing he required an escort to cross the runway (at least he was pretty sure he did), put the

pedal to the metal. Since he could communicate with neither the tower nor the lead van and the first crossing was as a formation of two, the driver watched what the first van was doing and proceeded accordingly. Feeling lucky, he entered the runway when the first van was about threequarters of the way across.

At the same time and approximately six-tenths of a mile from the field, an aircraft broke out of the clouds. The pilot, flying an ILS approach, noticed the one vehicle exiting the runway; as the pilot looked back to the runway center line, he noticed a second vehicle still on the runway. At that point, the crew initiated a missed approach (and called in an air strike).

Where was Murphy hiding this time?

—At the meeting, as the group left together and proceeded to the site requiring repair work, neither the van drivers nor the group leader held any discussions on the procedures to be used when crossing the runway.

—When the vehicle with the radio crossed the runway the first time, it was not identified as two vehicles requiring permission to cross.

—The ground controller, in the initial clearance to cross the runway, did not mention the number of vehicles cleared to cross the runway.

—When the group finished the survey and started back across the runway, neither the drivers nor the group leader clarified the procedures to be used.

—Again, the request to cross the runway sounded the same as the first; however, only one vehicle was at the intersection. Even though an aircraft was on the approach, the controller cleared the vehicle across, albeit "without delay."

—The second vehicle, seeing the first vehicle crossing the runway, proceeded—following the same lack of procedures as were used to cross the first time.

—The controller, now confused by the appearance of the second vehicle, tried to determine where this second vehicle came from. In doing so, the radio traffic became congested. As a result, nobody got the word.

—Not realizing any problem existed, both vans rode off into the sunset, still feeling lucky.

Procedures not followed? You bet. Assumptions made by individuals in the vans and the tower? You bet. Lack of effective communication? You bet. Does the incident resemble routine everyday activities (with the exception of the missed approach)? I hope YOU DON'T BET!!!



Aircrew of Distinction Award

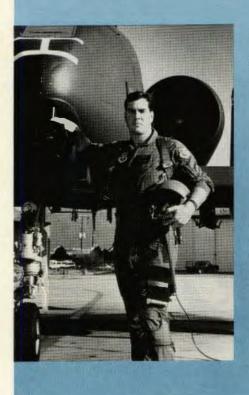
aptain James G. Harris, 1358th Tactical Fighter Training Squadron, 355th Tactical Training Wing, Davis-Monthan AFB AZ, through his superior flying skill and prompt reaction to serious in-flight emergency, avoided what easily could have been a Class A aircraft mishap. Capt Harris was flying a single-ship A-10 Functional Check Flight. While maneuvering in the aircraft's "cable and pulley" backup flight control mode, manual reversion. Capt Harris felt a "thump." He noted an uncommanded partial restoration of hydraulic pressure with the flight control switch still in "manual reversion" position. He immediately selected the primary flight control mode and used rudder to recover to wings level and aft stick to recover from the dive. After getting the nose of the aircraft above the horizon, Capt Harris attempted to roll the aircraft using the stick, but found stick movement would not displace the ailerons, only the

smaller aileron tabs. Pitch and roll trim was also inoperative. Visual inspection revealed no structural damage and no leaking fluids. Capt Harris flew the aircraft at maximum endurance angle of attack while analyzing the emergency.



Capt James G. Harris 358 TFTS, 355 TTW Davis-Monthan AFB AZ

Working together as a team, Capt Harris, the SOF, wing leadership and depot technical representatives tried to solve the problem, to no avail. Because the left hydraulic system was indicating 1000 pounds lower than normal, Capt Harris extended the landing gear using the alternate gear extension procedures. Next he performed a controllability check between 160-200 KIAS. Depot engineers advised not using speedbrakes or flaps due to possible undetected damage which might further compromise aircraft control. At 195 KIAS full sidestick deflection resulted in no roll response for three seconds, then a roll opposite the direction of stick throw of 3/4 to one degree per second. At 180 KIAS and below, the aileron tabs did not produce enough aerodynamic load to roll the aircraft at all. Given the choice of attempting to land or ejecting, Capt Harris chose to attempt to land using rudders only for roll control, an act never



accomplished before in the A-10. After several practice approaches and go-arounds at altitude, Capt Harris returned to base and flew a gear-only approach at 180 KIAS, 50 KIAS faster than normal. As he neared the runway, Capt Harris skillfully kept the aircraft under control despite increasing turbulence and crosswinds. After touchdown, he attempted to deploy the speedbrakes, but they did not function. He brought the aircraft to a stop using light brake applications due to the uncertainty of anti-skid being

available, then cleared the runway. Post-flight inspection revealed that a cannon plug connecting a wire bundle to the emergency flight control box had failed. Capt Harris' precise flying and superb execution of emergency procedures prevented a potential loss of life and saved a valuable combat aircraft. His exceptional performance in handling an emergency never before encountered in the A-10 community earned him the TAC Aircrew of Distinction Award.

HELP WANTED: EDITOR

TAC Attack is looking for a Major/Lt Colonel fighter pilot or weapons system officer who likes to write and who would be proud to sign his name on a highly visible product 12 times a year. Call me at DSN 574-3658 and/or send me a sample article. Hap Tucker, Lt Col, USAF Editor, TAC Attack



ASSUMPTIONS!!!

MSgt Theodore R. Menneke 35 AGS/CCS George AFB CA

During a local phase II exercise at an F-15 base in Germany, the first day began with the usual sortie surge that signaled the beginning of a busy week. An F-15C taxied toward a hardened aircraft shelter that contained maintenance "professionals" busily preparing to perform an integrated combat turnaround (ICT) on the returning fighter. It may be important to note here that although ICTs are inherently demanding, this mishap actually began after the ICT was completed.

During the download of AIM-7 missiles from stations 3 and 4, left forward and left LAU-106 missile launchers, the weapons load crew became confused as to who did what. One crew member removed the explosive impulse cartridges from station 4, another crew member saw this and assumed they were also removed from station 3. The crew member removing the cartridges from station 4 saw the other crew member working on station 3 and **assumed** this person removed the cartridges from station 3. With everyone **assuming** the other did it, a lead seal was placed on the launcher breeches signifying a safe launcher.

Sound familiar? Notice the assumptions? This from an experienced and well trained weapons load crew. Read on, the plot thickens! Two sorties later, the mishap aircraft ground aborted for a Jet Fuel Starter (JFS) failure. It was determined that the JFS would have to be replaced which meant the aircraft would have to be de-armed (explosive cartridges removed from all stations) and the station 5 center line pylon removed. A second load crew was dispatched for this task and an inspection of all launcher breeches revealed lead seals installed and, thus, a safe weapons station. This assumption is allowed by technical data.

Late on the second day of the exercise, the mishap aircraft was released for flight and placed on the next day's flying schedule. A third weapons load crew was dispatched to re-install the station 5 center line pylon. After other maintenance personnel installed and filled the center line fuel tank, the weapons crew returned to perform required electrical jettison checks on the affected station.

The weapons crew chief, seated in the cockpit, activated the weapons systems as the weapons #2 member operated test equipment installed on the station 5 pylon. The weapons #3 member, with no immediate task to perform, casually positioned himself just aft of and approximately two feet from the station 3 missile launcher. Remember -- the station with the explosive cartridges installed nearly 48 hours before!

The weapons crew chief reached the step in his checklist that reads "Emergency Jettison Switch -Depressed." He did so and the system operated as designed, sending jettison voltage to all weapons stations simultaneously. The #3 crew member heard a loud bang and observed the ejector feet of station 3 explosively extend towards him, stop, and retract just inches from him. The **assumption** came to an end, at the expense of the #3 crew member's wits, at this point. It was now a fact -- the aircraft was not safe for maintenance!

Three fallacies came to mind at the conclusion of this mishap: complacency, lack of communication, and assumptions. All three can be summed up in one word and placed under one very broad category -SAFETY! The official standpoint is viewed as lack of safety awareness and training. The human standpoint can be viewed as lack of communication and attention to detail. As I said before, many assumptions were made here, both human and technical, but the human side was once again proven to be at fault. Weapons loaders, and all aircraft technicians, must realize the dangers involved with maintaining and operating tactical combat aircraft; supervisors must get involved, too.

The point here is not to ask supervisors to give another safety lecture that goes in one ear and out the other, but to impress on them the need to instill professionalism and ownership in their subordinates. In other words, teach them to think and teach them to think ahead, to "turn the page" so to speak. In this mishap, the original weapons load crew's communication broke down. With forethought, the crew chief would have asked each crew member which loaded stations they de-armed. With attention to detail, the crew members would not have assumed that the other did the job; they would have verified the job was done. This brings us back to communication; if the crew members had told each other or asked one another what was complied with, they would have prevented the mishap. Unfortunately, they made several critical assumptions. Attention to detail is mandatory when dealing with explosives.

The second and third weapons crews made assumptions based on available technical data. This is further proof that technical data is not a bible, but a guide to be followed parallel with common sense, experience, and training. The crew member who casually stood right next to a supposedly safe weapons station also displayed lack of foresight. He failed to think ahead to the next event -- what if it isn't safe? - am I in harm's way? It is true that the entire mishap could have been prevented by the original weapons crew -- the crew that started this chain of events. But what about all personnel that worked on or around this aircraft that could have been injured or killed because of it? How about it, supervisors? Are we teaching smart mission accomplishment by instilling logic, common sense, and forethought into our subordinates?

The three-person War Readiness Section, 56th Supply Squadron, 56th Tactical Training Wing, MacDill AFB FL, between 1 October 1990 and 31 January 1991, palletized, transported, and marshalled 34 segments of fuels Nonairborne War Readiness Spares Kits (NAWRSK) for shipment in support of Operation DESERT SHIELD/STORM. The three members containerized, netted, and successfully moved over 30 tons of property via 463L forklift, 1-1/2 ton truck, and 40-foot trailer between storage, assembly, and marshalling areas. This was completed without a single safety violation, error, or incident and illustrates the importance of properly balancing "risk versus reward" in order to effectively perform the assigned task. Smart mission accomplishment is a way of life in the NAWRSK area, not only while operating material handling equipment, but also while using hand tools, lifting, and mobilizing fuels support property.

During this same period, the entire NAWRSK area was rewarehoused. This included the movement of several thousand line items of newly authorized assets and necessitated the constant use of material handling equipment throughout October and November 1990. This project was completed without incident or mishap and resulted in the proper segregation of WRSK assets.

Outstanding Unit Safety Achievement Award

> As DESERT STORM turned into DESERT CALM, the movement of property to and from the marshalling area slowed; the team used the extra time to erect a better office inside building P-49. This also required the safe use of hand tools, material handling equipment, and use of personnel protective covering to erect the prefabricated building. They

expended in excess of 40 additional man-hours during their off time to build a more professional office work area.

Technical Sergeant Jeremiah Carlton's "Live Safety" attitude, along with Technical Sergeant Sidney J. Harper and Staff Sergeant Chrystle W. McNiel, his subordinates, ensured an accident free completion of these major projects in that highly industrial environment. Their outstanding success earned them the TAC Outstanding Unit Safety Achievement Award.



TSgt Jeremiah Carlton, Jr. TSgt Sidney J. Harper SSgt Chrystle W. McNiel War Readiness Section 56 SUPS, 56 TTW MacDill AFB FL

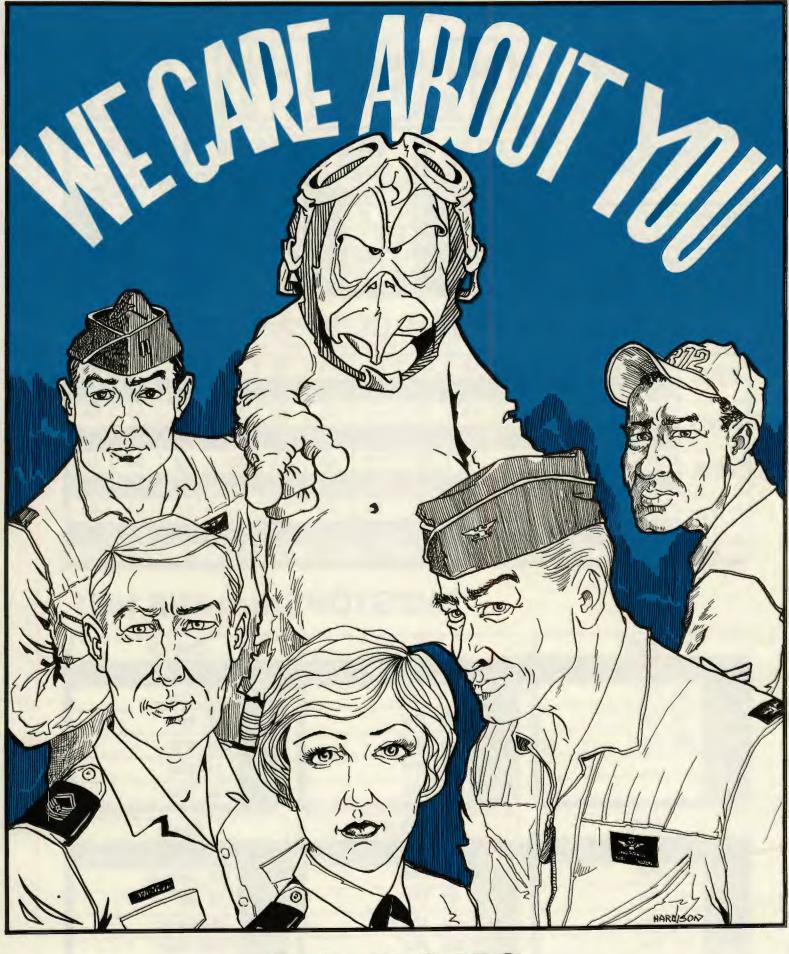
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ANG	FY 90	0.0	0.0	1.6	1.2	0.9	0.8	1.3	2.2	2.4	2.2	2.0	2.2
AFR	FY 91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AFR	FY 90	20.4	11.2	8.2	5.9	4.7	7.7	6.4	5.5	4.8	4.4	4.0	3.6
OTAL	FY 91	1.2	0.6	0.8	2.3	2.4	2.5	2.8	0.0	0.0	0.0	0.0	0.0
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