# WT TODAY

AEROSPACE DEFENSE COMMAND
WILLIAM TELL WEAPONS MEET

3 November 1976 Wednesday No. 2

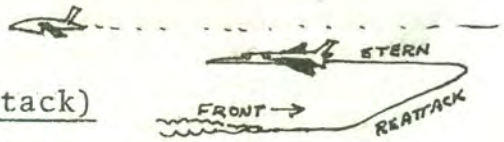

## WHAT'S A PROFILE?. . .

Air Defense interceptor pilots and weapons controllers face any number of possibilities in their four fold mission--to detect, identify, intercept, and destroy.

Hostile intruders may choose to attack from extremely high altitudes and speeds. Or the bandits may be found down in the weeds, hoping to avoid detection by terrain masking. A combination of tactics may be used, as enemy planners strive to confuse defensive crews and complete their mission.

Because of the many possibilities a crew must face, WT planners have incorporated several different profiles into capabilities possessed by the aircrew, weapons and the ground-based controllers.

During the competition, four profiles will be flown. A brief description of each follows.




### PROFILE I (Front/Stern Reattack)

Each interceptor will be guided by their ground control team for a front head to head attack against a drone target flying at medium altitude at approximately 485 MPH.

The aircraft and drone target will be approaching each other at combined speeds of more than 1,000 MPH. The pilot will be required to track the target by a prescribed distance. Airborne detection, however, is much greater than this.

After the pilot acquires and tracks the target, missiles or rockets will be launched at the proper distance. Usually, this distance is determined by on-board computers, depending on altitude, speed, closure rates, and angles off.

If the first attack does not destroy the target drone, the pilot will reattack by repositioning his aircraft for a stern attack. The stern attack requires the interceptor crew to make hard turns, generally, in excess of 3 Gs, (or three times the normal body weight). If the reattack is successful, another missile or rocket can be fired with a minimum of target travel distance.

### PROFILE II (LOW)

Each interceptor will be committed on a stern attack on a low altitude towed target at an unspecified altitude.

The towed target, either the TDU-25, for the F-101 and F-106, or the TDU-9 for the F-4, is a small unpowered fiberglass target towed behind an F-101 on 26,000 feet of cable. The TDU-25 incorporates a constant heat source to stimulate the infrared radiation of a jet aircraft. The TDU-9 incorporates a traveling-wave tube to provide a constant source of energy for radar missiles. Infrared missiles are fired at the TDU-25 and radar missiles at the TDU-9.

Like their powered big brother, the Firebee, it has radar reflectors to make it appear bomber size on radar scopes.

PROFILE III (High Front)

This profile uses, for the first time, the BQM-34F, a supersonic drone, and is designed as a minimum time intercept from a scramble status. Each interceptor will be committed on a front attack against a high altitude Firebee.

Target altitude will be 50,000 feet minimum at mach 1.2. Each aircraft will be allowed only one engagement against the target.

PROFILE IV (F-101/106 ECM)

No armament will be fired on this mission. Targets will be manned EB-57s and F-101 aircraft equipped with radar detection devices (jammers and chaff) and radar confusing devices. These targets will be difficult to find since their altitude and speed will be unknown until the fighters are airborne. The attack geometry will vary depending on altitude and angle from which the fighter attacks. To make this profile even more difficult, radar ground control teams will be required to commit two fighters simultaneously against the EB-57 and F-101.

PROFILE IV (Hook/ID)

Profile IV for the F-4 will require the identification of a Firebee by tail number before receiving permission to fire. A pair of F-4s (Eyeball and Shooter) will depart in formation, with the Eyeball identifying the large number painted on the tail of the drone. The Shooter will position for a stern firing position. If the number called to the ground by the Eyeball is correct, a cleared to arm and fire will be called. At that time, the drone target will begin a 3G turn and the shooter will fire, attempting to destroy the drone.

Scores of these four profiles will be pooled for the team score. Other scored items will be radar intercept directions, radio transmission and take-off times.

Radar intercept directors manning automated or manual command and control consoles at the Air Defense Weapons Center at Tyndall will be scored on their ability to guide the interceptors to the target.

The judges for the William Tell Competition are tasked with computing scores, deciding points, and arbitrating disputes to

choose the winning teams for the weapons meet. Their decisions are final.


## A DAY IN THE LIFE OF A PHANTOM. . .

What's it like to jockey a jet fighter around the sky, maneuvering for a bulls-eye on a tiny drone target?

Today's interceptor pilot may be only one of a large team of specialists, but once that plane is airborne, he is the man alone, concentrating his finely-honed skills on an isolated world of unique physical sensations and psychological pressures.

Suppose you are in an F-4 Phantom, waiting for takeoff on the runway. You're the pilot and the mission is a front/stern reattack, similar to the William Tell Profile I.

If you'd really like to get into the mood, find a tiny closet and stock it with every electronic gadget you can find. Get a straight backed chair, and spend the next two hours sitting on a slab of concrete. Ready...here we go!

The tower radios clearance for takeoff. With a nearly-unconscious reflex, your chest contracts to force out the words of your reply against the continual pressure of the oxygen supply.

Your left hand shoves the two throttles forward, and your Phantom strains against brakes like a thoroughbred in a starting gate. One last, brief look at engine instruments, and your feet slide off the brakes atop the rudder pedals. Quickly, you snap the throttles outboard and forward. There's a brief, sinking moment as the engine's thrust drops...and then... the wooooooosh-SLAM of the afterburners as they hammer on!

Eight seconds...seventy knots...punch off the nosewheel steering...the Phantom is now half-rolling, half-flying.

Five more seconds...120 knots...ease the stick back. The needle-sharp nose edges up, above the horizon...stop it at 10 to 12 degrees on the altitude indicator. Three seconds later, 155 knots, your Phantom lifts smoothly into the air...less than a half mile from brake release!

Up comes the gear...bump!...the wheels shudder to a stop in their wells. This is an afterburner climb, like that used on the scramble profile. Rapidly, the airspeed builds to 400 knots as 36,000 pounds of thrust push you and the bird like a giant hand. You ease the nose of the Phantom higher and higher, until finally you're hurtling up faster than the vertical velocity indicator's 6,000 feet a minute limit. It feels as though you're on your back, climbing nearly two miles straight up for every 60 seconds.

Roll it over, ease it down, and level off at 15,000 feet. Relax for a minute. The thin air outside the canopy is remarkably clear, a brilliant dark blue...and you can actually see the curvature of the horizon. In a single glance you can see what Columbus took months to prove.

No time for sightseeing though...back to work! Armament safety checks complete...check in with the radar weapons controllers on the ground. They steer you toward the drone, itself streaking along at 15,000 feet, on wings only 13 feet wide. You and your target are approaching each other at a combined speed of more than 1,000 miles an hour!

Concentrate...eyes and hands sweep the cockpit consoles from the left to right, pre-setting vital switches for the front attack. Your stomach tightens a bit as you run through the familiar actions and radio calls and launch ranges one more time.

A faint blip flashes as the radar seeps across the weapon systems operator's scope...30 miles away. The WSO locks on as you fly your Phantom to center the steering dot...

You smoothly squeeze the red trigger in the control stick... a split second later there's a brilliant orange flash as the missile's rocket motor blasts it forward a few feet below.

No time to gawk...quickly roll your fighter into a steep bank...feel your body sag heavily into the seat with the force of the five-G reattack. Wait...you see the two huge parachutes of the drone as it goes into recovery. You've scored a direct hit...A BULLS-EYE!

The rest is routine, if you call a return to base and landing with an instrument approach "routine." On final approach now... power back...touch down at 155 knots with a smooth coordination of stick and power control.

Park you Phantom...shut down the engines...relax with a sight of satisfaction. Mission accomplished.

Sign the forms...give the bird back to maintenance...walk back to the squadron area...stiff-legged...trying to massage a little circulation into your numb butt.

Now you know why they're called the "Phantom Phlyers" and "Fighter Gators".

## TONGUE TWISTER. . .

2Lt June Trizzino reports that a background in broadcasting can be more helpful to a weapons controller than one might suspect. At the end of a mission, one of many bits of information that the Weapons Controller must relay to the pilot is the active runway to be used and the condition of the runway.

The runway most frequently used will be 13/31, and if it happens to be a rainy day, the radio transmission would be "ACTIVE RUNWAY, ONE, THREE RIGHT, WET RUNWAY."...Try saying that three times in succession.

## RIGHT SHAPE IN THE WRONG PLACE

By 2Lt June Trizzino
23rd AD, Duluth IAP,
Minnesota


The billeting office must have been more than a little surprised when 6'4" SSgt Craig Abbey arrived. Thinking that SSgt Abbey Craig would be arriving from Duluth, Minn., for the William Tell Competition, the billeting office assigned him to the Women's Dormitory. Sergeant Abbey is a weapons controller with the 87th FIS "Red Bulls."

## WELCOME BACK 49TH FIS MAINTENANCE CREW. . .

By Capt J. W. Weining
49 FIS Griffiss AFB, New York

Many of the 49th maintenance specialists are returning for the second time to William Tell. They were part of the 1974 Team from Griffiss AFB. In addition to these veterans, the squadron has brought three men with them who are competing in their third William Tell meet. TSgt George Laubmeir was also a member of the 84th FIS Team in 1970. TSgt Michael Bondy represented the 32nd FIS from Camp New Amsterdam in 1965. TSgt Ed Pilok participated in his first William Tell meet in 1972 as a member of the 2nd FIS from Wurtsmith AFB, Michigan. All of these three-time veterans are MA-1 fire control specialists and will help the team immeasurably.

## YOU NEVER KNOW WHO'S AT THE NEXT TABLE IN A SIDEWALK CAFE. . .

The boys from USAFE, who because of their average age of "15½" are known as "los bambinos," were lunching in the O Club and discussing the fine points of Phantoms. Suddenly one of them stopped and said, "Gentlemen, I think we should continue this talk somewhere else." And they all sat quietly, examining each other's name tags. The only people around them were a protocol officer and a group of Canadians who were trying to figure a use for the fork.

## IN TEXAS EAST. . .

By Capt Kirk McManus
147th FIG
Ellington AFB, Texas


The Texans have challenged the Canadians to a softball game. The Canadians accepted the challenge by replying that none of them have soft balls, thus exposing their ignorance. The friendly Texans explained that the idea of the game is to smash your soft ball over the fence with fewer than three swings from a bat that is a little smaller than a hard ball bat.

"Doesn't it hurt?" asked the Canadians.

"Sometimes, if the weather is cold, it hurts your hands," smiled the Cowboys.

Here, then is an explanation for the lumberjacks. Softball is just like hockey. The puck, though, is a sphere. You play on melted ice. Break off the skate blades to little spikes. Only one player has a stick. Everybody else has a goalie's glove. After a player hits the puck, he runs around the ice while everybody else tries to touch him with the puck. If he makes it back to the goal, he gets one point. If you hit the puck out of the rink, you get to run around the ice without everyone else trying to touch you with the puck.

Lt Col Dean Landon, Distillery Liaison Officer for the Texans, went to the club the other night, hoping to save his collegues from Devil Booze by beating them to it, and joined a promising party. It turned out to be a transactional analysis party. In four hours of partying, all Col Landon managed to consume was a popsicle. Everyone else left the party more well-adjusted than when they arrive. Col Landon entered psychoanalysis.

## LET'S RODEO. . .

One of the Texans, dressed in western suit and boots, was trying to impress a local lovely.

"I got my Noconas on," he bragged.

She shook her head and frowned. "I don't use those 'cause sometimes they break."

## SHAKEDOWN FLIGHTS. . .

By Capt Keith Williams
43rd TFS Information Liaison Officer

Shakedown flights have been the order of business this week as the 11 competing William Tell teams ready themselves for the start of competition.

Each team is allowed one hour for the shakdown flights. The 43rd Tactical Fighter Squadron from Elmendorf AFB, Alaska, took its flights Monday. Here's how Lt Col John K. (Ken) Ek, 43rd TFS Commander and Alaskan Air Command William Tell Team Captain, summed up the shakedown flights:

"It gave us a good look at the local area and reaffirmed our smooth working relationships with the weapons controllers and the maintenance men. We also were able to practice some of the William Tell profiles. It was an excellent opportunity to exercise all the systems for a good William Tell performance. All the systems are go and we are 100 per cent ready for the competition to start."

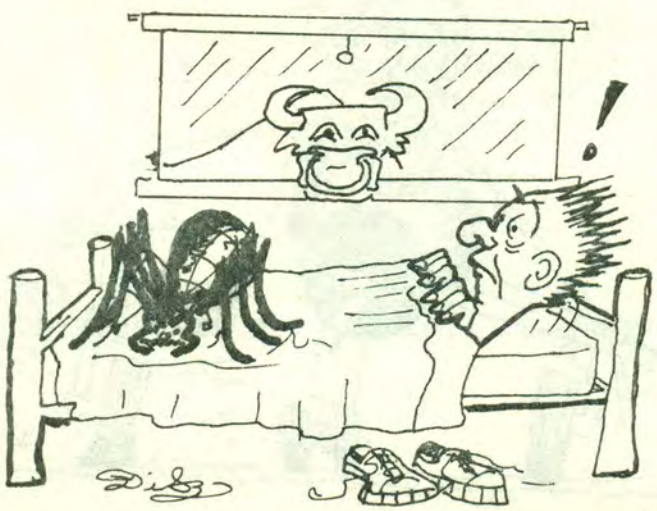
## IS IT TRUE WHAT THEY SAY?. . .

By Capt J. W. Weinig
49th FIS, Griffiss AFB, New York

Is it true what they say about Florida's insects or does the blame lie somewhere else?

Some guys have all the luck. The 49ers brought with them several young troops who have met and been heart struck by the northern Florida Lovelies. However, A1C Loren Verhey was struck by something a little less appetizing. The young weapons load crew member was struck by a strange fate Monday night. While lying in his bed, he was attacked by a spider. The spider won and Airman Verhey was admitted to the hospital, suffering from a poisonous spider bite. He's doing ok and should be released for duty Wednesday.

We're sure that the spider was already in the room before our arrival. However, taking no chances, our commander has asked that the 87th FIS graze their insect infected Red Bull in other pastures.



## BIG SKY PEOPLE SETTLE IN. . .


By Capt B. G. Bramlette
120th FIG (F-106)
Great Falls, Montana

After buying the first round at the O Club, bench pressing the piano, and ordering in the Blackberry Brandy, the Big Sky gang is settled down. They are determined to defend their 1974 W.T. Championship.

The Montana ANG team brought back about one-half of their winning 1974 team. While most of these members are full-time Guard personnel (and a few alert bums) there are a few part time Guardsmen.

The team chief, Lt Col "Buck" Juedeman, is a cattle Baron along the Missouri River. When you end up with one of those tender N.Y. cuts you can cut with a fork, it may well be from one of Buck's critters.

The Big Sky Maintenance Officer, Maj Gary Blair, has quite an interst in the Florida ANG F-106s. He was the project officer during their very extensive Pup Mod (Power Upgrade Program).

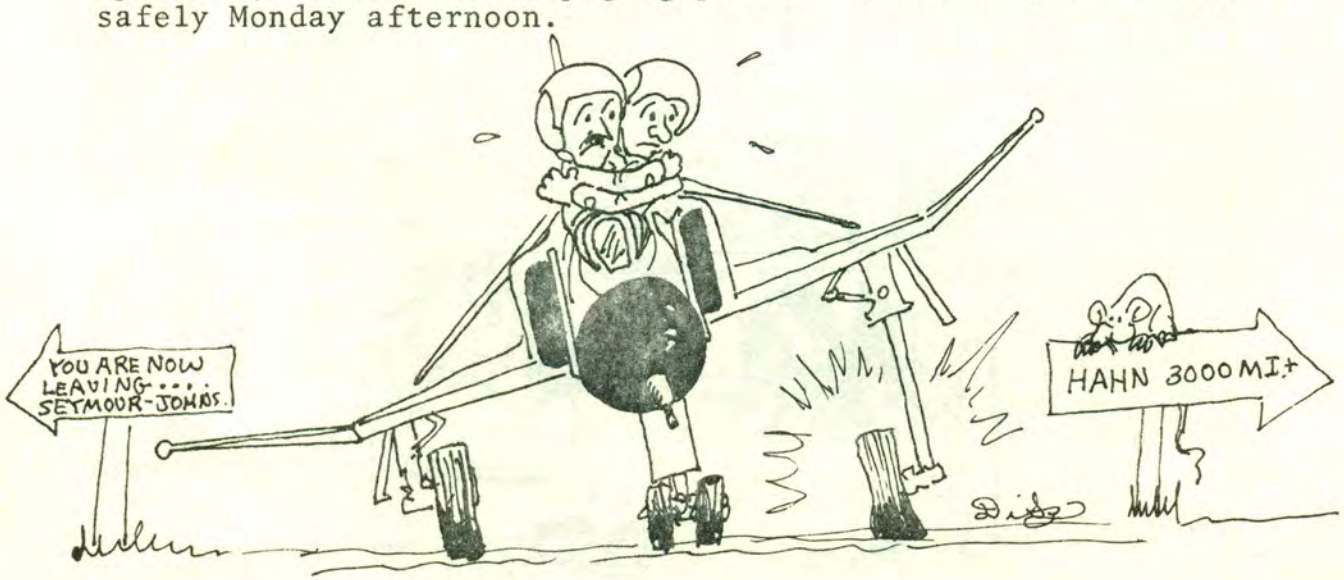
The Montana group is very proud to have a Bilingual controller. Lt Don Riley is very fluent in both English and Canadian. Don is no stranger to WT. He was chief controller for North Dakota ANGB during the 1974 William Tell Competition.

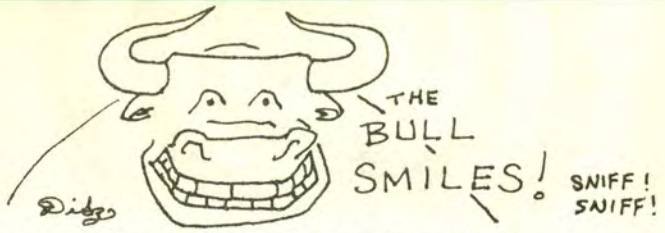
## ON KEEPING COOL, FROM GERMANY. . .

By Capt Keith Thiel
496th TFS, USAFE, Hahn AB, Germany

While trying to depart Seymour-Johnson AFB Sunday, Capts Bill (Bijou) Gracy (A/C) and Tom (T.R.) Kalman (WSO) found that their Phantoms gear would not retract.

When the problem was traced to an overserviced right main gear, Bijou, in his own quiet way, was accusing the Tactical Air Command of attempting to sabotage him, his aircraft, the 496th TFS and all of Europe in general. T.K., his level headed "pitter", calmed the rampaging pilot. Both managed to land safely Monday afternoon.






## NOTES FROM THE BULLSHEET. . .

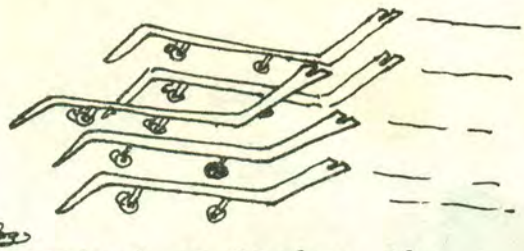
With the shakedown flights over, the waiting begins for the Red Bulls of the 87th. The planes seem to be fairing better than the men. Almost half of the contingent have been affected by coughs, sneezes, or sniffles. Could it be a plot by the birds and gators, or was it blown in from the "big sky?" Watch out or we'll breathe on you.

Some of us are wondering how one night in the NCO Club could transform SSgts Jack Fromm and James Miracle into Canadian Officers?

## MUST BE HAYSEED IN MY HAIR. .

SMSgt Bob Nouis is the Houston Honcho. Not a man used to hearing no, Chief Nouis approached some local talent in the NCO Club and asked if she'd like to dance. The woman hesitated, something the Chief sees as weakness. "Hey, be nice," he roared, "Don't you know who I am?" With that, he ripped open his cowboy shirt to reveal a tatto that said, "Flightline Pharoah." The girl gasped, wheezed, smiled apologetically, and hissed, "I'm sorry. I'm having an asthma attack."

## CANUCKS OFF TO A GOOD START. . .



By Capt J. M. Comtois
CFADG

After what must have been the best arrival on Sunday, the best retort was also compiled by the Canucks. When asked by General Peterson as to how long the team had been practicing this formation landing of two elements on two separate runways, our leader, Lt Col Sundvall replied: "Uh...today, sir."

There is more credit to that reply than meets the eye. You must remember that Sundance flies with the Mouth and any time he can beat O'Sullivan in a reply, it is quite an achievement.

The 142nd and 147th feel that we played dirty pool in loading the team with Paddy O'Sullivan and Charlie Gladders. Those Canucks brought along their own voice jamming.

The next winners of the F-4, 106 and 101 categories met at D's Oyster Bar last night. Along with the Canucks were the 49th from Griffiss and the F-4 weenies from Alaska. Many toasts were drunk (not all fit for publishing) and fine Mexican lumps were devoured. I'll bet we had a few launcher-hot lites this morning from ring pieces.

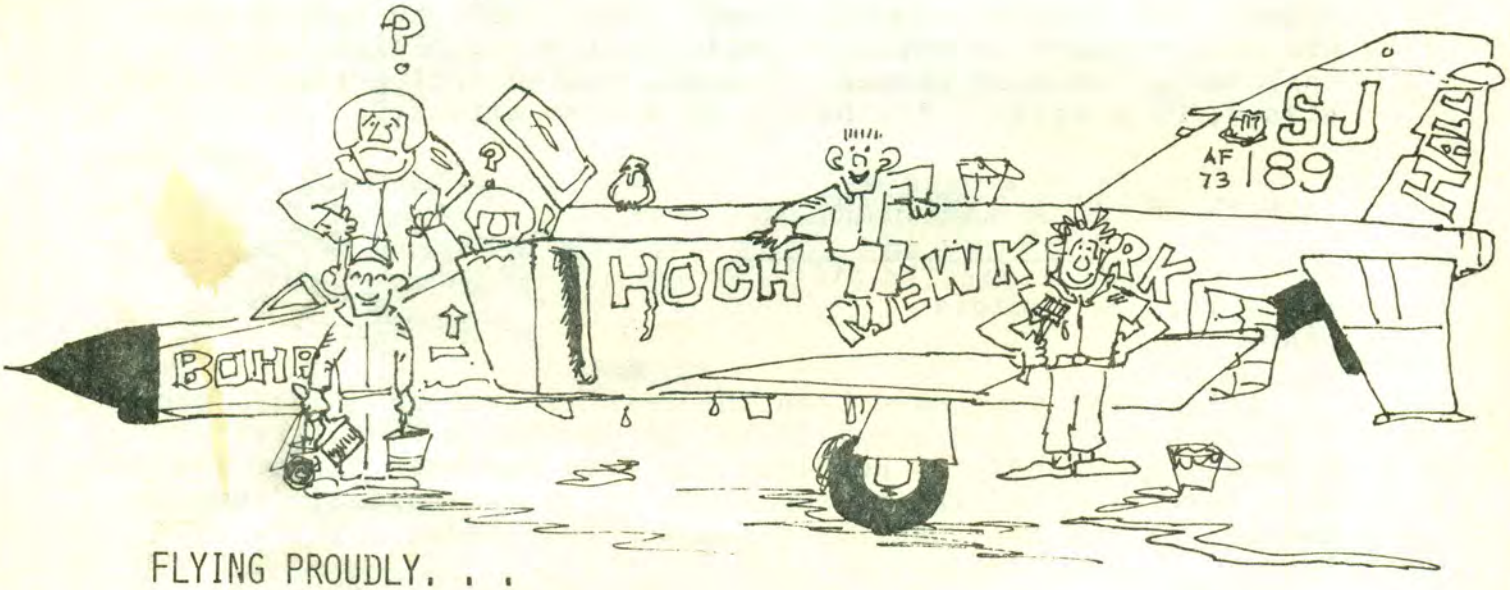
## FROM THE CONTROLLERS. . .

"Fighter pilots get it up. We tell them where to put it!"

## MY AIRPLANE. . .

By 2Lt Barbara Brumme
Capt Bill Bruening
4th TFW, Seymour-Johnson AFB,
North Carolina

Seymour-Johnson crew chiefs (Hoch "Rembrandt", Bohrer "Van Gogh", Hall "Picasso", and Newkirk "Monet") will be painting the names of the aircrews and crew chiefs on each of the Fourth's Phantoms today. The aircrews will be married to their aircraft and fly that aircraft for the duration of the William Tell Competition. What a feeling! Your own name on a sleek, mean looking supersonic "fighter". Not only is this a thrill for the crew chiefsand the aircrews, but it further enables the aircrew and maintenance people to get to know their machine..the good and the bad!




## FLYING PROUDLY. . .

We have some boy scout hearts with us. Yes, yes, flying proudly over our building now is the North Carolina "Tar Heel" state flag. Before raising the tobacco state's colors, Sgt Jeffrey V. Newkirk, who incidently hails from Kinston, N.C., SSgt Quentin L. Jones and A1C Eric A. Koch, paraded the flag in various positions on a Seymour-Johnson F-4E. We know you guys felt silly, but it looked nice. Another North Carolina boy, TSgt John T. Matthews, wired the flag to its pole, probably reminiscing when he was a lad in Fayetteville, N.C.