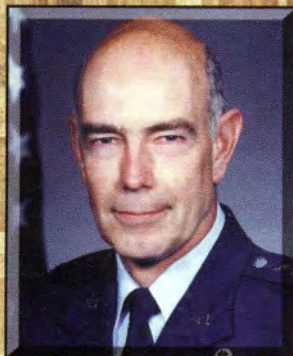


Bosnia Issue

COMBAT COMMAND



PAGE 4



PAGE 8

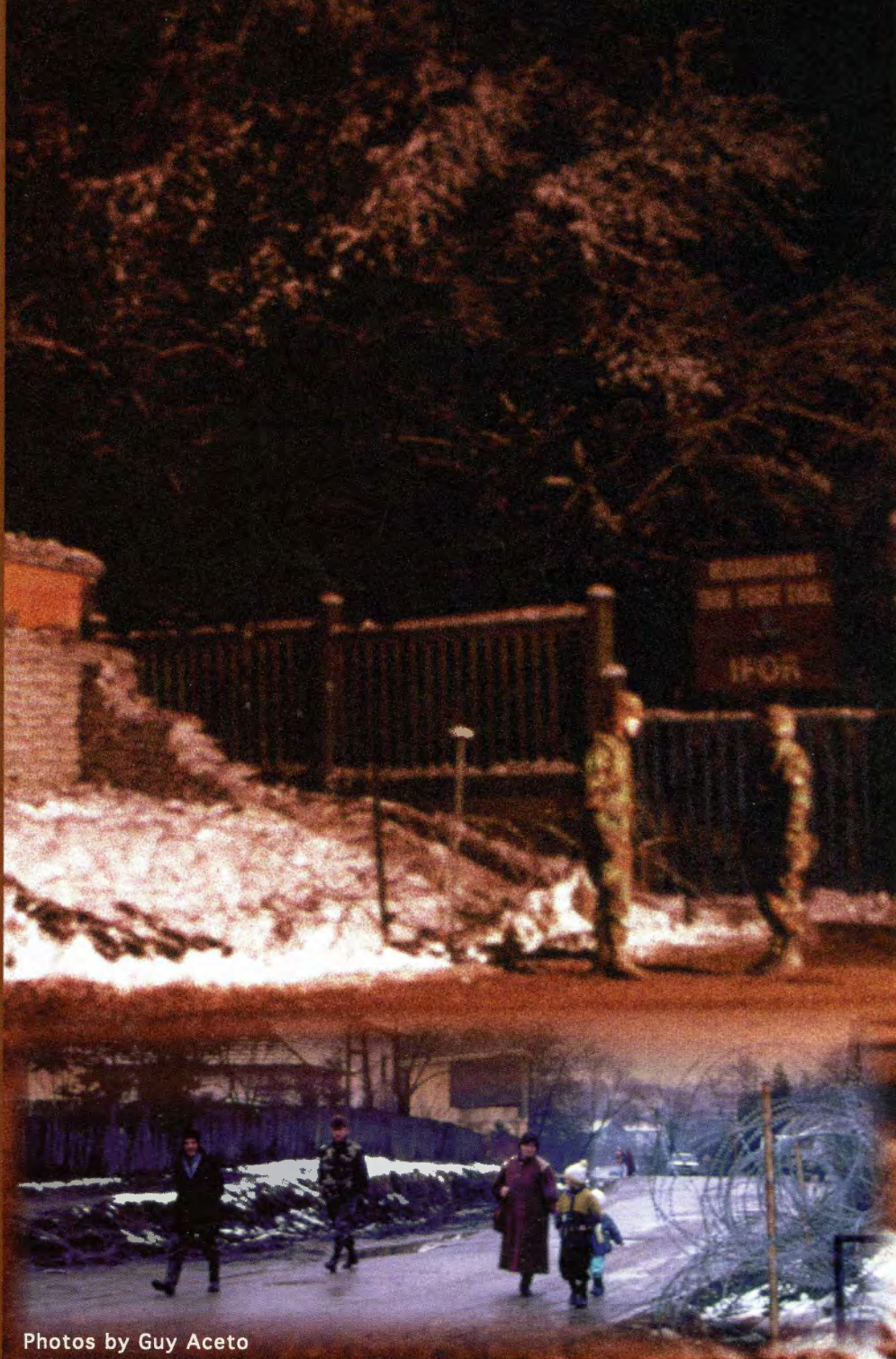


PAGE 28

Features

THE COMBAT EDGE

JUNE 1996



Photos by Guy Aceto

The Combat Edge

AIR COMBAT COMMAND
SAFETY MAGAZINE

Gen Richard E. Hawley
Commander

Col Zak Tomczak
Chief of Safety

Lt Col "Nellie" Beard
Editor

Ron Smith
Art Director

Barbara Taylor
Awards Administrator

Sgt Mark S. Bailey
Staff Artist

SrA David W. White
Staff Artist

The Combat Edge (ISSN 1063-8970) is published monthly by the Air Combat Command, HQ ACC/SE, 130 Andrews St Ste 301, Langley AFB VA 23665-2786. Second-class postage paid at Hampton VA and additional mailing offices.
POSTMASTER: Send address changes to *The Combat Edge*, HQ ACC/SEP, 130 Andrews St Ste 301, Langley AFB VA 23665-2786.

DISTRIBUTION: F(X). OPR: HQ ACC/SEP. Distribution is controlled through the PDO based on a ratio of one copy per ten persons assigned. Air Force units should contact their servicing PDO to establish or change requirements. Other DOD units have no fixed ratio and should submit their requests to the OPR.
ANNUAL SUBSCRIPTIONS: Available to non-DOD readers for \$22 (\$27.50 outside the U.S.) from the Superintendent of Documents, PO Box 371954, Pittsburgh PA 15250-7954. All subscription service correspondence should be directed to the Superintendent, not HQ ACC/SEP.

CONTRIBUTIONS: Articles, comments, and criticisms are welcome. Write:

Editor, *The Combat Edge*
HQ ACC/SEP
130 Andrews St Ste 301
Langley AFB VA 23665-2786

Telephone: (804) 764-3658
DSN 574-3658
FAX: (804) 764-6362
E-Mail: smithr@hqaccse.langley.af.mil

The editors reserve the right to edit all manuscripts for readability and good taste.

DISCLAIMER: Viewpoints expressed are those of the author and do not necessarily represent the policy of DOD, DAF, ACC or the author's organization. Information contained in any article may not be construed as incriminating under Article 31, UCMJ.

CONTENTS

JUNE 1996

ACC SP 91-1

VOLUME 5

ISSUE 1

FEATURES

4

IN MY VIEW

*General Richard E. Hawley
Commander*

8

RED HORSE DEPLOYS TO BOSNIA

823 Red Horse Squadron, Hurlburt Field, FL, deploys to Bosnia in support of Operation JOINT ENDEAVOR, making home station holiday safety preparations unnecessary, but Bosnia winter preparations essential.

28

A LITTLE EXTRA TRAINING

Pilots may grumble about extra ground training, but spinning-up prior to a deployment helps sharpen your skills and sets the tone for a safe flying operation.

DEPARTMENTS

FLIGHT SAFETY

7 18 24

GROUND SAFETY

22

AWARDS

12 26

FLEAGLE

25

ACCOLADES

16



ACCent on Safety

Accent on Safety

"Our Armed Forces are giving the Bosnian people, exhausted by four years of war, the strength to make peace. I wish every American could see firsthand what the men and women of our military are accomplishing under very difficult conditions...."

*President Clinton
Taped Radio Address to the Nation
January 13, 1996*

Operation JOINT ENDEAVOR, the latest attempt to stop the ethnic violence in Bosnia-Herzegovina, started just after the warring parties signed a peace accord in December 1995. Within days ACC had reconnaissance, airlift, ABCCC, electronic combat, fighter, medical evacuation, and civil engineering units moving to the theater. Since then, as the President told the nation in his radio address from Hungary, your accomplishments have been truly outstanding and a testament to safe mission accomplishment. Despite record-breaking inclement weather, the holidays, and truly austere conditions in theater, your response to the task at hand was exemplary. What secured our success in this monumental task? As I hope you'll see from the articles in this special edition, leadership, training, and preparation were the keys to our success.

Leaders who encourage every member of their team to contribute their good ideas, and focus on finding the best way to accomplish their mission; will succeed. During the past few years we have worked very hard to improve the command's safety performance. Improvement in our mishap rates is a direct result of your efforts. Your ideas — put into action by your leaders allow us to do the things we do the way we do them. Safely! For you commanders, we know that you constantly endeavor to make safety "a way of life" where your supervisors and workers continuously assess risk and then select the best course of action based on that assessment. But, don't forget to occasionally get up on your soap box and preach — the message you have needs continuous emphasis.

Training and preparation go hand-in-hand. A well trained team is prepared. Conversely, a prepared team is well trained. However, a team cannot be all things at all times. In a rapidly changing world, it is inevitable that missions and tasks will also change. It is important that we honestly and continuously assess our capabilities and, when necessary, revamp our training or engage in some "specialized" preparation. Not all operations are as "standard" as we may think.

The real heroes in Operation JOINT ENDEAVOR are all of you, the ACC professionals, who took your training and preparation seriously and chose to fly, fight, and work by the rules. Your efforts resulted in very few mishaps in an environment fraught with the potential for disaster. As we've seen before in operations like this, sometimes the thing we have to fear most is our own people leaning too far forward and getting seriously injured or killed. This didn't happen and you should all be proud of your accomplishments. Because you safely accomplished your mission, Nihad Mehmedalic, a Bosnian citizen can say, "I am very happy the Americans have come. It's the first time I can sleep peacefully at night."

Colonel Zak Tomczak
Chief of Safety



*General Richard E. Hawley
Commander*

In My View



The warfighting capability of Air Combat Command is renowned and revered world-wide and, in some places, feared. From the sands of the Middle East to the skies over Haiti, from Cuban refugee camps to the hills of Bosnia, ACC is recognized as one of the most potent combat forces in the world. Our reputation and capability rest on the talents and abilities of every single member of the command.

When we lose people or equipment to mishaps, it affects our ability to perform even routine day-to-day missions and eventually our combat capability suffers. Our mishap losses are felt deeply and are very difficult to replace. Operations Deny Flight, Deliberate Force and now Joint

Endeavor are our most recent demonstrations of what the right people operating the right equipment can do.

Europe's deadliest conflict since World War II began in 1991 when Yugoslavia began its internal disintegration. Since then, various international organizations have attempted to halt the violence through both diplomatic and military operations. Operation Joint Endeavor began shortly after the warring factions signed a peace accord in Dayton, Ohio, on 21 Nov 95. As soon as the call went out, ACC responded with a multi-disciplinary, total force effort. Reconnaissance units, airlift squadrons, airborne command and control and

electronic combat elements, a Red Horse squadron, and Air National Guard and Air Force Reserve fighters were deployed to the theater to preserve the fragile peace.

It is no accident of history that we are so highly respected by friends and potential adversaries across the globe; rather, it is the product of many years of hard work and quality leadership by you and your predecessors. In my view, the Air Force is,

and long has been, a world leader in the quality movement that has been sweeping through the global business community with such telling effect. But as our Air Force has gotten smaller, increasing efficiency by eliminating non-value added work is more important than ever.

The policies, procedures, and standards that made ours the world's finest Air Force are very good; but we can make them better. With leadership that focuses on continuous improvement, that encourages every member of the force to contribute his or her good ideas, and makes decisions based on a careful evaluation of facts, we can make this great Air Force even better.

The policies, procedures, and standards that made ours the world's finest Air Force are very good; but we can make them better. With leadership that focuses on continuous improvement, that encourages every member of the force to contribute his or her good ideas, and makes decisions based on a careful evaluation of facts, we can make this great Air Force even better. As we do that, we must subject every proposal for change to rigorous scrutiny by those who might be affected; we must conduct carefully constructed trials to validate the anticipated improvements; and we must have good metrics with which to track performance when the change is

implemented in the system as a whole.

To achieve continuous improvement in our ability to safely accomplish our mission, we must rely on those who know their process best and encourage them to identify ways that we can improve. The concept of empowerment, however, is a unique challenge for military organizations. Empowerment can help us identify opportunities for continuous improvement in every one of our processes and products. It is incumbent on leadership to stress that empowerment requires: clear expectations, clear delineation of authority, tough standards of accountability, and is always dependent on a person's capabilities and training. Whether it's called delegation of authority or decentralized execution, the empowerment philosophy must always be tempered with the seriousness of the consequences. We deal in lethal force — there will be instances where empowerment is not appropriate.

Our Air Force people are the best that our nation has to offer. With leaders who are committed to the principle of "Quality" Air Force: and who actively seek out the good ideas that we need to make things

better, we can make ACC even better than it is today. With good strategic planning, carefully selected metrics, fact-based decisions, and a leadership style that encourages all of our people to participate in the process of continuous improvement, we will find ways to make not just ACC, but the entire Air Force more effective.

We will undoubtedly face many challenges in the years ahead, but through your unequalled talents we will turn each of those into opportunities. As General Fogleman puts it, "In essence, the Air Force exists for one reason and one reason alone. That is to fight and win America's wars when called upon to do so." The Chief has set our course and we will share in the responsibility to work towards our common vision: Air Force people building the world's most respected air and space force...global power and reach for America. ■



Disaster Averted

Capt Scott Ryan, 42 ACCS/ADFSO, Davis-Monthan AFB AZ

Flight

Ground

Weapons

The 42d Airborne Command and Control Squadron deployed to Aviano Air Base in July 1993, and has flown over 1,000 missions and nearly 9,000 hours. The squadron serves a vital function in Operation JOINT ENDEAVOR providing theater commanders a flexible airborne command and control platform. With only three EC-130E aircraft deployed to Aviano, it is imperative that each one is maintained to the fully mission capable level in order to accomplish those missions. With severely limited assets to accomplish our critical mission, we must continuously strive to do the right thing at the right time — safely! Unnecessary risk or improper actions endanger the mission and our troops. Everyone, at all levels, must take responsibility for their actions while following proper procedures.

While deployed to Aviano AB, Italy, in support of Operation JOINT ENDEAVOR, an aircraft from the 42d Airborne Command and Control Squadron was involved in a ground emergency earlier this year. Prompt application of proper towing procedures by SrA Charles Turman, TSgt Eric Jiran, SrA Robert Managlia, and SrA Michael Duncan spared the EC-130E from major structural damage.

While backing the EC-130E out of its parking spot, SrA Turman (towing supervisor) heard a loud bang. At the same time, the landing gear warning horn could be heard through the interphone. SrA Turman observed the forward nose gear door resting on the tow bar, and SrA Managlia reported an unsafe gear indication on the flight deck. SrA Turman immediately directed the application of both the aircraft



and tow vehicle brakes. SrA Duncan applied the tow vehicle brakes, and TSgt Jiran set the aircraft parking brake. Inspecting the nose gear well, SrA Turman saw that the landing gear actuator was broken. The crew notified the tower and maintenance, and began planning the emergency jacking of the aircraft. In less than 25 minutes, the aircraft was safely on jacks and ready for repair.

The quick actions of this towing crew saved the aircraft from major structural damage. Their excellent crew coordination and communications enabled the towing supervisor to rapidly assess the problem and take corrective action. If the aircraft had been towed any further, the nose landing gear would have completely collapsed resulting in significant damage to the radome, gear, and other aircraft systems. Because the aircraft was immediately stopped by applying the brakes, the nose gear did not collapse. Excellent systems knowledge and SrA Turman's correct, safe decision-making averted a major incident.



Play

Done



RED HORSE

Deploys to Bosnia

*MSgt Kevin L. Ennis
823 RHS/SE
Hurlburt Fld FL*

The week after Thanksgiving, like most Air Force safety professionals, I was starting to kick around ideas for our squadron's Holiday Safety Campaign. I didn't realize it at the time; but within a month, we would find ourselves deployed to Bosnia in support of Operation JOINT ENDEAVOR, making home station holiday safety preparations unnecessary, but Bosnia winter preparations essential.

After weeks of uncertainty it was finally confirmed that the squadron would deploy to Bosnia. It's correct to assume that most of us weren't thinking about safety from an AFOSH standpoint, but safety from another angle. What about those "land mines, snipers, and rogue elements" news broadcasters were speaking of so routinely? In addition to these worries, we were dealing with being pulled away from family and friends just days before Christmas. It's not hard to understand why safety goggles and hear-

ing protection weren't the first things on everyone's minds. However, as the squadron's Chief of Safety it was one of my first concerns; and believe it or not, incorporating safety into the operation wasn't nearly as difficult as I'd imagined.

From the very beginning of the operation we had a team effort. Prior to depart-



ing home station, local EOD personnel provided training on land mine identification and procedures should someone stumble upon unexploded ordnance. HQ USAFE pitched in too. They did a great job providing Tuzla-bound personnel training at Sembach Air Base. We received 3 days of mandatory Implementation Force (IFOR) training on multiple topics including cold weather survival, weapons handling, ground safety, and again land mine recognition. After completion of this IFOR training, deployment to Bosnia was imminent.

ment.

We left the comforts of Germany and arrived in Tuzla, Bosnia, 2 1/2 hours later-- a



short plane ride to the totally different world that was waiting for us. We found ourselves facing some of the worst living conditions imaginable. Did these conditions directly affect the safety and well-being of the troops? I think so, and if not a direct impact, surely a distraction. Enforcing safety standards would be difficult when nothing else was even remotely close to normal living conditions. Project locations still had not been cleared of mines, and small arms fire was commonly heard throughout the area. Sanitation facilities were virtually non-existent; what latrines were available were constructed of untreated pine lumber and burn barrels, making the waste saturated wood an uncleanable health hazard. There were four shower heads for approximately 2,000 IFOR personnel. Sinks and running water were non-existent. The lack of adequate billeting forced people to sleep on concrete floors and in vehicles.

RED HORSE's job was to provide better living conditions for the troops. We had to construct dry tents, showers, and flush toilets as quickly as possible. RED HORSE personnel found procurement of equipment and supplies in Bosnia next to impossible. Getting something as simple as tire chains for vehicles proved arduous. As if constructing tent cities wasn't enough, some of our people found themselves operating snow removal equipment practically around the clock. Not only were they faced with the dark and snow conditions, they were operating foreign equipment on an unfamiliar airfield. Other equipment operators were chal-

lenged by the terrible road conditions in the area — severely deteriorated from lack of maintenance caused by years of fighting. Compound all these elements with the inclement weather that had slowed operations to a crawl, and you have all the ingredients for a catastrophe. If ever a scenario was developed to test one's safety culture, this was it!

The mission RED HORSE executed is truly noteworthy. We had RED HORSE personnel in Germany, Italy, Bosnia, and, of course, putting in long hours at home. In about 2 months, crews prepared 20,000 cubic meters of base coarse, which equated to placing and compacting about 700 truck loads of gravel. Our crews constructed 550 general purpose medium hard back tents from lumber at four different locations. In addition, 4 US Army Force Provider modules (equivalent to four 550-man Harvest Falcon modules) were erected at 2 of these

locations. Crews ran an average of 5 convoys per day, amounting to over 250 movements with a minimum of 4 vehicles per movement over treacherous roadways. There was also the daily grind of tent city living to contend with. Equipment and supplies were flown in daily (weather permitting), and then required marshaling and handling once it hit the ground. Handling and storing fuel was a constant concern, along with operating field showers, directing traffic, providing security, and all the other daily mundane tasks too numerous to mention. I estimate RED HORSE personnel accumulated approximately 120,000 man-hours of duty. Our

The real key to the success of preventing mishaps is training. For us, this concept begins at home with the squadron's vigorous Readiness/ Training programs. Training all horsemen receive runs the gamut from weapons training to field deployment training, rapid runway repair to horizontal construction, and so much more.

safety record was nearly flawless. Unfortunately, we experienced 2 reportable mishaps. Even with the mishaps, at our ops tempo and under those conditions, I'd compare safety records with any challengers.

Can I pinpoint particular actions that led to only 2 reportable mishaps? Not really. Safety was represented by a full-time safety person who conducted inspections, gave briefings, and identified and resolved issues. But, these things are common aspects of any safety program. Did it make for a safer deployment? I'd like to think it did. However, in my opinion, the real key to the success of preventing mishaps is training. For us, this concept begins at home with the squadron's vigorous Readiness/Training programs. Training all horsemen receive runs the gamut from weapons training to field deployment training, rapid runway repair to horizontal construction, and so much more. Fortunately for me, safety is integrated into every facet of this training. Additionally, the 823d completes approximately 30 major globe-spanning projects every year. These projects, more often than not, occur at austere locations. I'm not exactly sure how the saying goes, but I've heard something to the effect that you must train the way you expect to fight — incorporate safety in your training and it will carry over into real-world situations. Lucky for me, RED HORSE epitomizes this philosophy. Does this mean the squadron is ready to change its motto from "CAN DO - WILL DO - HAVE DONE!" to "CAN DO - WILL DO - HAVE DONE SAFELY!" Maybe.... ■





PILOT SAFETY AWARD OF DISTINCTION

Lt Col John D. Harris, 393 BS, 509 BW, Whiteman AFB MO

Lt Col Harris and another pilot flew a T-38 into Kirtland AFB NM. Upon landing the jet, the aircraft experienced several electrical problems that required maintenance personnel to drive up from Holloman AFB to repair. After a day of working, the jet was "Code One" and ready to return to Whiteman. Due to the extensive delay at Kirtland, Col Harris flew back solo. After cruising at FL 370 for five minutes, the LEFT FUEL PRESS light illuminated on the caution panel, indicating a low fuel pressure condition in the left system (most likely an inoperative boost pump). Realizing the possibility of an engine flameout above FL 250 with an inoperative boost pump, Col Harris began a descent to FL 250 and turned the crossfeed system on to minimize the possibility of fuel flow interruption. He also decided to divert to McConnell AFB since he had insufficient fuel to reach Whiteman at the lower altitude. Cruising at FL 250, the XMER RECT OUT light illuminated on the caution panel, indicating approximately 10-20 minutes of battery life remained. Col Harris told ARTCC he would proceed directly to McConnell and land, would be temporarily out of radio contact, and would call back 50 miles out. Col Harris then turned off the battery in an attempt to conserve battery power until close to McConnell. Passing FL 225 in his descent, the left engine flamed out. He ran the restart checklist with the crossfeed on and the engine restarted normally. He left the crossfeed on till 6,000 ft MSL and landed uneventfully. Col Harris expertly handled a difficult compound malfunction, quickly analyzed all available options and in a timely manner selected the best in each case.



CREW CHIEF EXCELLENCE AWARD

TSgt Phillip D. Wells, 457 AMU, 301 FW, Ft Worth JRB TX

Sergeant Wells was performing routine maintenance on his F-16. He had opened a service door on the lower right aft side of the jet to gain access to the constant speed drive (CSD) generator. Sergeant Wells was servicing the CSD generator when he noticed an irregular piece of metal stuck to the inside of access door #3304 by some hydraulic fluid. The metal was approximately one inch in diameter with no paint or protective coating. Sergeant Wells noticed that the metal alloy it was made of was not consistent with that of the aircraft fuselage. He asked other personnel in the area if the metal piece looked familiar to them. When Sergeant Wells was not satisfied with any of the answers, he contacted Quality Assurance (QA). The QA engine technician identified the alloy as that from the engine. QA called for the engine to be pulled. Upon removal of the engine, a crack and one-inch piece hole were found in the 3d stage fan casing. QA contacted Pratt and Whitney for further analysis and submitted a product quality deficiency report. Due to Sergeant Wells' inquisitiveness and persistence to determine the unknown, the potential loss of a valuable combat asset, and injury to personnel were prevented.

AIRCREW SAFETY AWARD OF DISTINCTION

*Capt Faron W. Burke, Capt John S. Emig,
Capt John C. Richard, Maj Samuel W. Rampey,
Capt Brian K. Rhodarmer, MSgt Robert A. Zyonse,
Lt Col Herschell C. Johnson, Lt Col Larry L. Baker,
Maj Eric C. Fenstermaker, Capt Marcus R. Lesseur,
Capt Terry L. Mock, Capt David A. Omstead,
Capt Steven M. Robinson, Capt Phillip N. Dalbertis,
SrA Michael S. Christensen, SSgt Deborah A. Charlton,
SrA Johnathan J. Clement, A1C Daniel J. Dye,
A1C Jeffrey L. Wright, MSgt Jerry S. Motes,
SrA Robert A. Ward, TSgt Scott A. Carroll,
SrA Eric L. Baer, SrA Jay D. Broadus, SrA Amy J. Morcom
963 AACS, 552 ACW, Tinker AFB OK*

While orbiting in Southwestern Texas, the crew of Sentry 32 detected a call on VHF guard about a downed civilian aircraft somewhere in the Houston area. The flight crew coordinated with Houston Air Traffic Control Center to assist in search and rescue recovery of the civilian pilot. The mission crew received inputs from Naval SAR helicopters and civilian pilots who had also detected the distress call. After contacting the civilian pilot on the ground, the mission crew asked him to set an emergency squawk of 7700. They established radar contact and assisted in vectoring rescue assets to the general area of the downed pilot. Sentry 32 remained overhead until the downed pilot was visually identified and his recovery was initiated. Their genuine concern for the safety of a fellow aviator and dedication to duty make the crew of Sentry 32 most deserving of this prestigious award.





GROUND SAFETY INDIVIDUAL AWARD OF DISTINCTION

MSgt Herbert H. Hilmer, III, 389 FS, 366 WG, Mt Home AFB ID

In the first six months of his tenure as the Ground Safety NCOIC, Sergeant Hilmer has taken the squadron ground safety program and raised it to an outstanding level. He has revamped the squadron safety inbrief and incorporated specifics of the HAZMART program, flight line, and hangar safety. He also revitalized the squadron's "Safety Shots" program by providing interesting and relevant ground safety articles to the shop chiefs and operations supervisors, who in turn brief their cadre weekly. A Work Environment Assessment Team from the 366th Medical Group Bioenvironmental Engineering Flight praised his diligence in providing personal protective equipment to work centers subject to working with hazardous chemicals or compounds and rewarded his efforts with an "Outstanding" rating. He recently investigated a squadron Class C ground incident involving a damaged ASQ-213 High-speed Anti-Radiation Missile Targeting System pod. He energetically contacted the contractor and the contractor agreed to fix the pod at no cost to the USAF, other than the cost required to ship the part to and from the factory. This culminated in a net savings of over \$10,000. Sergeant Hilmer has personally involved himself with the other agencies on base and has coordinated with the base fire and police department to provide programs on fire and holiday safety, anti-terrorism, child safety and abuse recognition/protection, and poison safety. He has taken ground safety to heart and tirelessly provided the 389th Fighter Squadron with the safety tools required to keep our personnel and equipment available for combat.

UNIT SAFETY AWARD OF DISTINCTION

99th Civil Engineering Squadron, HQ AWFC, Nellis AFB NV

On 29 Jan 96, the 99 CES EOD Flight began the clean-up of Range 62 Target 07 (62-07) on the Headquarters Air Warfare Center (HQ AWFC) Range Complex. The target and the surrounding area were literally covered with unexploded bomblets and CBU shells. Pilots drop an average of 45 "cans" of CBU a week on 62-07, cratering the landscape and scattering unexploded ordnance for miles. Flight leadership developed detailed operating instructions for the mission. An experienced master and technical sergeant were to lead the teams. Extensive pre-mission training was conducted and all personnel selected to the team, regardless of rank or experience, were thoroughly briefed. Safety and teamwork were emphasized at all levels and flight leadership stayed involved throughout the clearance to provide support and oversight. Leadership, teamwork, and training were the key to success. The results were evident. From the end of Jan to the first of Apr the EOD flight ran a seven-day-a-week operation logging 9,266 man-hours and destroying 12,846 unexploded ordnance items including BLU-97 combined-effects munitions, MK 118 Rockeye anti-armor bomblets, and BLU-63 anti-personnel bomblets. Strict compliance with established safety procedures, intensive concentration on the task, and superior leadership ensured the mission was completed without a single accident or incident. The pride and professionalism of the EOD flight leaders and team members ensured the safety of the teams and continued success of HQ AWFC mission.

FLIGHT LINE SAFETY AWARD OF DISTINCTION

*TSgt Oscar Hines, Jr., SSgt Donald Jacobs, SSgt Gregory Kelly
SSgt James Starnes, SSgt Paul Johns, SrA John McCoy
4 OSS, 4 FW, Seymour Johnson AFB NC*

During normal 4th Wing recovery operations with 16 F-15Es airborne, Mosey 33 flight was on short final to runway 08. Upon touchdown, Mosey 33's landing gear appeared to generate an unusual color of smoke. TSgt Hines told SrA McCoy to ring out the crash phone. Before all agencies had answered the primary crash phone, fire developed around the left main landing gear. SrA McCoy, still on the crash phone gave a detailed account of the situation. At this time, Crash, Fire and Rescue had one engine rolling towards the distressed aircraft which had not yet come to a complete stop. Upon reaching the 7,000 ft remaining marker, a fire developed around the right main landing gear. After the aircraft stopped, SSgt Jacobs immediately granted Engine 4 access onto the runway and directed it to the right side of the aircraft which by then had developed a hydraulic leak, resulting in an additional fire. Almost simultaneously, Sgt Hines began to assist the SOF in diverting all remaining aircraft to Cherry Point. Meanwhile, Sgt Jacobs was busily coordinating with Crash/Rescue who had successfully doused the flames, saving the aircraft from catastrophic damage while the two aircrew members egressed unscathed.



WEAPONS SAFETY AWARD OF DISTINCTION

TSgt Steven R. Nye, 549 CTS, Nellis AFB NV

Everything was proceeding normally for Air Warrior 96-3 until a deployed unit experienced five dud munitions. Sergeant Nye began investigating the cause by gathering as much information as possible from the pilots who flew the missions. Sergeant Nye's next step was to inspect the aircraft bomb racks—the racks looked normal except that some of the retaining lanyards were elongated and broken, which indicated an abnormal amount of stress being put on them. He took immediate action by inspecting munitions before they were loaded onto the aircraft. After scrutinizing the munitions, everything looked fine, with the exception of the arming wire. It felt too soft. He collected a sample of the wire and immediately took it to Weapons Loading Standardization and tested this piece of wire against their stock wire. He immediately informed all key personnel and members of the deployed unit that defective arming wire was the suspected cause of the dud munitions. The following day, the Non-Destructive Inspection (NDI) flight conducted a pressure test on the soft wire and confirmed that the wire was not in compliance with present specifications. Sergeant Nye's concern resulted in 20,000 feet of arming wire being pulled from stock. When all was said and done, the dud munitions situation was corrected—the Air Warrior mission proceeded successfully with no damage to aircraft, personnel, or equipment.

ACColades

QUESTIONS OR COMMENTS
CONCERNING DATA ON THIS
PAGE SHOULD BE
ADDRESSED TO HQ ACC/SEF,
DSN: 574-7031

	TOTAL			ACC			ANG			AFR		
	APR	THRU APR		APR	THRU APR		APR	THRU APR		APR	THRU APR	
		FY96	FY95		FY96	FY95		FY96	FY95		FY96	FY95
CLASS A MISHAPS	0	6	6	0	3	5	0	3	1	0	0	0
AIRCREW FATALITIES	0	0	1	0	0	1	0	0	0	0	0	0
* IN THE ENVELOPE EJECTIONS	0	4/0	8/0	0	2/0	7/0	0	2/0	1/0	0	0	0
* OUT OF ENVELOPE EJECTIONS	0	1/0	0	0	0	0	0	1/0	0	0	0	0

* (SUCCESSFUL/UNSUCCESSFUL)

CLASS A MISHAP COMPARISON RATE

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

ACC	FY 95	2.1	1.1	0.7	0.6	0.9	1.6	1.6	1.7	1.6	1.6	2.3	2.0
	FY 96	0	1.0	0.7	0.6	0.9	1.2	1.0					
8 AF	FY 95	0	0	0	0	1.8	1.5	1.3	1.1	1.0	0.9	1.6	1.5
	FY 96	0	0	0	0	0	0	0					
9 AF	FY 95	0	0	0	0	0	1.2	1.0	0.9	0.8	0.7	1.9	1.8
	FY 96	0	0	0	0	0	1.2	1.0					
12 AF	FY 95	6.5	3.3	2.3	1.7	1.4	1.2	2.0	2.6	2.4	2.1	2.6	2.4
	FY 96	0	2.9	2.0	1.5	2.9	2.4	2.0					
DRU	FY 95	0	0	0	0	0	5.3	3.7	3.5	3.3	5.6	5.6	4.9
	FY 96	0	0	0	0	0	0	0					
ANG	FY 95	0	0	0	0	0.8	0.7	0.6	1.0	1.4	1.6	1.5	1.4
	FY 96	0	1.9	1.3	2.0	1.8	2.2	1.9					
AFR	FY 95	0	0	0	0	0	0	0	1.3	1.2	1.1	1.0	0.9
	FY 96	0	0	0	0	0	0	0					
TOTAL	FY 95	1.3	0.7	0.4	0.3	0.8	1.1	1.1	1.5	1.4	1.5	1.9	1.8
	FY 96	0	1.2	0.8	0.9	1.1	1.4	1.2					
MONTH		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

(BASED ON PROGRAMED HOURS FLOWN)

ACCOLADES

HONOR ROLL

Units without a "Command-Controlled" Class A flight mishap since the stand-up of ACC on 1 Jun 92, or their respective assimilation into the command.

5 BW
24 WG
28 BW
55 WG
79 TEG
85 GP
93 BW
102 FW
103 FW
104 FW
106 RQW
109 AW
113 WG
114 FW
116 BW
118 AW

119 FW
120 FW
122 FW
123 AW
124 FW
125 FW
129 RQW
130 AW
132 FW
133 AW
136 AW
137 AW
138 FW
138 ACS
139 AW

142 FW
143 AW
144 FW
145 AW
146 AW
147 FW
148 FW
150 FW
153 AW
156 FW
165 AW
166 AW
167 AW
169 FW
174 FW

175 FW
177 FW
178 FW
179 AW
181 FW
184 BW
185 FW
187 FW
189 AW
301 FW
314 AW
347 WG
366 WG
388 FW
403 AW

419 FW
440 AW
442 FW
482 FW
509 BW
552 ACW
908 AW
910 AW
911 AW
913 AW
914 AW
916 ARW
926 FW
928 AW
934 AW
939 RQW

(As of 1 April 1996)

ARGUS OVER IO: FLIGHT SA

*Maj Jeff C. Alfier
USCENTAF/A-5 DOXCR
Shaw AFB SC*

Air weapons controllers work with all types of aircraft across a wide spectrum of operations. Many aircrews view the E-3 as a prime command and control (C2) radar platform, and know the controllers aboard AWACS as one of the main providers of what has come to be known as "the big picture." While this is true, several other big picture type assets also fall into the C2 category, such as the US Navy's E-2C, along with the EC-130 Airborne Battlefield Com-

"big picture"? This will depend upon one's reference. To some, it will mean the mechanical components of the data-link architecture framed within a specific area of responsibility (AOR). However, for our purposes, I will specifically define the big picture as it relates to the air weapons controller and how he establishes and maintains safe situational awareness over this large piece of sky we call "the big picture." First of all, there are no Air Force or Joint publications that I am aware of that give a definition of this admittedly conceptual

mand, Control, and Communications (ABCCC) aircraft. Increasingly, we are seeing other assets join this fold such as the E-8C Joint STARS aircraft, whose controllers will direct fighter-bombers in air-to-ground attacks. In addition, ground-based radar units also provide a big picture aspect. Their big picture perspective gives all of these assets a wide area look as they control, direct, and advise aircraft by way of tactical and safety information throughout the given time frame of a particular mission.

Therefore, what does it mean to have the

term. Although not defined de jure, it may be addressed referentially, which is to say in terms befitting the experience of the controllers in air- and ground-based radar units. Therefore, I will define having the big picture as possessing wide area situational awareness over most elements of a large air picture, as they are integrated into a defined space. Lest this appear too nebulous, the definition is guided by way of example. In Operation DENY FLIGHT, an airborne NATO AWACS controller's scope may display an area extending from northern to southern Italy.

SAFETY AND THE BIG PICTURE



This does not mean that such is the range or threshold of his radar coverage, but simply that he may be controlling or providing advisory information to aircraft within an expanse exemplified in this particular situation.

In cases such as these, an aircraft coming down from the northern Adriatic may check-in on his assigned radio frequency at the same time his controller is concentrating on providing altitude changes or

weather, possible mission changes, anticipated density of air traffic, threats, etc., even though the controller has not yet established radar

vectors for separation of aircraft already under his control on another frequency, quite a distance from that aircraft that just checked-in. So circumstanced, aircraft may check-in only to find that they are not yet within the controlling agency's radar coverage due to factors such as altitude and distance. As such, the big picture may mean, momentarily, "I hear you but I don't yet see you." However, this does not mean the controller is totally "blind," he can still provide such information as updates on taskings,

contact.

Now, if it is true that radar units possess the big picture, why are controllers sometimes not able to immediately answer radio calls, or transmit "standby" or "searching" when addressing queries from aircraft under their control? Why, for instance, would our usually friendly Tornado pilot tell me — as occurred on one occasion — to stop ignoring him? Or, we could rephrase his question another way by posing it this way: "If AWACS has the big picture why don't they see me?" To explain it, one needs to understand something of what the controller is doing at any given time.

For one, in order for the controller to perform his tasks safely, he needs to have his scope expansion set so that he sees the larg-

est slice of sky which will encompass his assigned aircraft without letting other aircraft, also under his control, be off of his scope display for any extended period of time. To effect this, a trade-off often occurs where the controller alternates between scope expansions in order to maintain situational awareness over any given area. Otherwise, if the scope expansion is set too low, the big picture becomes "the big clutter." Therefore, what the controller sees is dictated by several things, including the controller's AOR, airspace, and the division of labor such as whether one is controlling tankers or fighter aircraft.

There are several things the controller considers in his assessment of the big picture. In a real-world situation presented by flying operations such as Bosnia, the existence of potential threats will add a sharp edge to already heightened safety awareness. In this situation, our controlled aircraft will operate in various combinations of low, medium, or high threat levels.

In any event, as the controller operates his radar scope, working with the big picture means dealing with a large amount of vital flight safety data compressed into a short span of time. The elements making up this data consist of a number of things on the scope display which include radar and IFF data that identify aircraft, numerical read-outs identifying call signs, and a multitude of lines denoting airspace, political, tactical, and geographic boundaries. In addition, modern computerized radar scopes have sections reserved for tables of useful information, such as airbase weather or tactical priorities. As such, the controller must prioritize all of this data quickly and subsequently transmit it over the radio. This means that certain aircraft may not get the information they need or be able to immediately get a transmission in on the radio in a busy air environment. Therefore, one controller will often ask another one sitting next to him to watch his aircraft momentarily and answer his radio calls while he concentrates on another piece of the sky which is also under his control. Does an increase in data available from advances in

communications and electronics equate to more situational awareness for the controller? This is a "yes and no answer," for the controller must still analyze all the information as it becomes available to him. Once again, it becomes a matter of prioritization. This is high on any instructor weapons controller's list when instructing new controllers — what students need to display as distinct from what is nice to know must be differentiated. In computerized displays there is usually no shortage of nice-to-know information.

Besides computer-generated information, the big picture is multi-dimensional and is affected by such elements as daylight, darkness, terrain, distances, and the nuances of physics as they apply to radio waves. Another important aspect is weather. For instance, if heavy rain is expected in our working area, we may require our aircraft to operate at higher altitudes than usual. In addition, weather could affect visual contact ranges, nap-of-the-earth flying, and primary recovery bases. To further illustrate, if fighter radars or other on-board systems (including an aircrew's eyes) are less effective because of adverse weather, then the big picture becomes a little busier as controllers spend more time repeating radio transmissions, providing vectors to avoid thunderstorms, or shifting aircraft around in an airspace to reflow them against alternate targets. Heavy precipitation can adversely affect radar energy and radio modulation, thereby reducing effective ranges. Weather may also adversely affect the employment of terrain-following radars and precision guided munitions, or our ability to determine battle damage assessment after an air-to-ground attack. Winds, rain, cloud cover, and high absolute humidity can alter the thermal contrast of a target with its background, making it more difficult for infrared (IR) sensors to be employed to their fullest potential. As we can see, weather plays a bigger part in the three-dimensional picture than we may think and has a definite impact on flying safety.

Terrain is another important aspect of the

big picture. Terrain does not simply block radar and IFF signals. For instance, if a search and rescue (SAR) mission occurs, terrain suddenly gets a lot of attention in the big picture as the controller may have to direct fighter aircraft to search for parachutes, downed crew members, and aircraft wreckage. Therefore, controllers should be familiar with the terrain over which they operate, or at least have the sources readily available that will provide them topographical data when needed.

An overarching consideration continues to be education and shared learning opportunities. As a member of the air weapons controller community, I always encourage aircrews to visit ground-based radar units or fly aboard AWACS in order to see, first hand, their controllers in action, thereby gaining more of an appreciation for the work they perform in managing the complexities of the big picture. Academic environments also present opportunities. In NATO I would brief aircrews concerning the complexities of controlling in AWACS with respect to flight safety as well as the usual tactical considerations. But this education is certainly not one-way. On the controller's part, we can do several things that go beyond the minimal mission planning considerations, learning as much as possible about the particulars of the air environment we will be working in. Controllers can also gain an appreciation for cockpit workload through their interface with aircrews. This does not mean that controllers will be aware of such things as fuel flow and drag indexes while they are controlling, but there is a lot we can do on our own to enhance overall learning. It could mean the difference between proficiency and mediocrity.

In summary then, aircrews should be aware, in a general sense, of how the controller functions in what we know as the big picture. How does the controller community keep the situation safe when dealing with the dynamics of such a large area? Unless providing situational awareness to specific aircraft, the controller employs a scanning method throughout the various elements that compose his big picture.

Throughout, the controller handles both fast-moving fighters and slow-moving transports, providing vital flight safety data such as avoidance and deconfliction. Fortuitous events such as in-flight emergencies and tactical incidents mean a narrowing of the controller's focus down to one small quadrant of the big picture.

Ground and airborne radar units may be likened to the multi-eyed giant Argus of Greek mythology, who never completely slept

An overarching consideration continues to be education and shared learning opportunities. As a member of the air weapons controller community, I always encourage aircrews to visit ground-based radar units or fly aboard AWACS in order to see, first hand, their controllers in action, thereby gaining more of an appreciation for the work they perform in managing the complexities of the big picture. Academic environments also present opportunities. In NATO I would brief aircrews concerning the complexities of controlling in AWACS with respect to flight safety as well as the usual tactical considerations.

as he kept watch over the promiscuous maiden Io. Analogous to the task of this giant, agencies providing the big picture keep vigil over potential flight safety incidents. And yet, this may prove an elusive proposition. Just as in the myth we find Io escaping the guard of Argus and slipping across the Bosphorus, essential safety elements can elude our grasp through inattention to our priorities within the big picture.



Capt Ed Thomas
Air Force Combat Information Team

They look Army and they speak Army — but they're Air Force. They're the operations officers on the Air Force aeromedical evacuation liaison team. Their job: Getting injured troops out on airlifters as fast as they can.

From the 23d Aeromedical Evacuation Squadron at Pope AFB, they serve as liaisons with the US Army, wearing the 82d Airborne Division patch on their shoulder and parachutist wings on their chest. It is easy to mistake them for Army when you see them pass. Their web gear hangs with the style of a well-broken-in field troop. And their responses are often limited to two words, words usually reserved for Army use — “Houwah” and “Airborne.”

Noting their blue insignia, the better-trained eye might mistake them for combat controllers. But they are Medical Service Corps by trade — hospital administrators who jump out of airplanes into enemy-held landing zones.

While their job in Bosnia didn't call for a night drop onto Tuzla AB, their duty remains the same.

“Our mission is to move sick and injured — whether injured because of accidents, whether they are battle or nonbattle related, or due to disease — out of the theater to a definitive medical facility,” said

Capt Elmo Robison, one of the 2 operations officers on the team. “We want to get them out of harm's way to a peacetime environment.”

Their work is slow now; hospital beds are empty and Robison and his teammate, Capt Bill Tyra, want to keep it that way.

“We're like that insurance policy on a big mansion. You hope you never need to cash in on it. But when that mansion goes floating away in a flood, you're glad to have the insurance,” Tyra said.

The team is responsible for covering the Bosnian theater. Another team mirroring their capabilities, from the Air Force Reserve, covers Hungary.

“We work with the Army medical tactical operations center to move injured troops to an area where they can be looked at and stabilized. From there, they are turned over to the mobile aeromedical staging facility and airlifted out,” Tyra said.

Through and through, the mission is joint. It only makes sense, they said. “We'd be two animals doing the same job,” Robison said regarding the team's interaction with the Army. An Army medic will usually respond first to an injury, but it will probably be an Air Force nurse who flies out of the theater with the patient, he said.

From the time a troop goes down, until

WINNING THE PEACE

they reach a major hospital — Landstuhl Army Regional Medical Center, Germany, in this operation — Tyra or Robison is on the radio working a quick exit for the wounded service member.

The total team includes the 2 operations officers, 3 communications specialists, and 1 flight nurse.

“We’re the liaisons with the Army, but we couldn’t function without them,” Tyra said of the other members of the team. “We’re just the facilitators.”

When patients need to be moved out, the liaisons can call for special airlift or just grab the first plane in, he said. They can configure CV-17, C-141, and C-130 aircraft for aeromedical evacuation or use the traditional C-9 medical transport.

There is a “robust” medical treatment capability in the theater; but if more intense care is needed, the team can turn every incoming aircraft into an outgoing aeromedical evacuation flight, Robison said.

“Every plane that lands here is a potential air evac, because of the capabilities of the aircraft and because of the capabilities of the medical crews,” he said.

As for this unique unit, they’ve been involved in 5 real-world operations in the last 18 months, including operations in Haiti, Saudi Arabia, Africa, and now Bosnia.

Their basic mission — while somewhat new — includes parachuting in with Army troops.

“We discovered right off that when we go into a secured airfield on a C-130, that can delay patient movement. The airborne guys are going in there sometimes 24 to 48 hours ahead of that. Casualties are happening from the jumps or from enemy activity. If we can have a team go in with the airborne airfield seizure package, we can move patients out on the first plane that lands,” Robison said.

When parachuting into an area, the initial team is pared down to include an operations officer, a communications specialist, and a nurse or medic.

The airborne mission was created after delays in moving wounded troops during Operation Just Cause in Panama in 1989.

“The faster we work, the better their (casualties) chances are,” Tyra said.

While in Bosnia, the team stays close to the radio. And they pray for a quiet deployment.

“Heaven forbid anyone gets hurt down here, but if you get hurt, you’re gonna get one heck of a ride home,” Robison said. ■

FOLLOW ME

Capt Richard L. McGough
50 AS, Little Rock AFB AR

"Follow me, Welcome to Paradise." These are the first words arriving pilots see after touching down on the mortar-battered runway at Tuzla Airfield. But here, it's not paradise — it is winter. The sun is visible about every third day, and the daytime temperature seldom reaches 25 degrees Fahrenheit. Add snow and ice storms, and you've got winter in Bosnia.

Since early last December, C-130 Hercules flown by the United States and the multinational Implementation Force have transported troops and supplies here in support of Operation JOINT ENDEAVOR, the NATO established mission to help maintain peace in this war-torn country.

Deployed to Ramstein Air Base, Germany, the 50th Airlift Squadron from Little Rock AFB, Arkansas, provided the bulk of the C-130 airlift. During their 3-month stay in the Bosnian theater, the Red Devils flew 1,575 sorties, and over 3,250 combat hours, transporting 7,378 passengers, and over 6,796 tons of cargo. Even with the comfort factor of flying the new C-130H3 outfitted with the advanced APN-24J radar, kevlar armor, and the ALE-47 defensive system, the hazards at Tuzla Air Base still presented a challenge.

The weather was the first hazard to be overcome by the aircrews. Because of where the base sits in relation to the mountains, low cloud ceilings and dense fog accumulate in the area making it tough to see the field.

Adding to the low visibility is smoke from all the town's wood burning stoves. "The winter months here are so bad, that even during the civil war, the different sides stopped fighting," said Air Force Capt Mike Kelly, a spokesperson at Tuzla Airfield. Bad weather conditions hampered flight operations from the beginning. In fact, during a 4-day stretch in December, none of the planes launched from Ramstein Air Base could land at Tuzla.

Prior to December, Tuzla Airfield hadn't seen a US fixed-wing aircraft land since 1992, because of heavy Serbian ground fire and threats to all airplanes attempting to use the airport. Many young aircrew members got their first taste of an actual threat when they saw tracer fire streaming towards them while flying into Tuzla at night. "It's a very uneasy feeling flying into Tuzla because of the unexpected," said US Air Force Lt Col Steve Dalbey, commander of the 50th Airlift Squadron. "You get pumped up because of all the possible threats. But I've been flying Herks for about 16 years and have all the confidence in the world in what the airplane can do." Due to an excellent training program at home base and the safe conduct of each mission, the Red Devils returned to Little Rock in March with an excellent safety record and one of the biggest and most successful airlift missions ever under their belt. ■

A BIG PAIR OF SHOES

A1C Rob McCulloch
314 AW/PA
Little Rock AFB AR

As a C-130 aircraft commander, a captain has a big pair of shoes to fill. But as a squadron commander?

That was the case soon after the 50th Airlift Squadron deployed in support of Operation JOINT ENDEAVOR in early December. Since most of the squadron deployed — including the squadron commander, Lt Col Steven Dalbey — someone had to fill the role as the squadron's rear-echelon commander. The remaining 88 members of the squadron then looked to Capt Donna Alvarado to lead their unit in Col Dalbey's absence.

Although Capt Alvarado, aircraft commander and chief of the squadron's EPR/OPR section, had been planning to deploy, she was forced to stay behind due to her pregnancy. It was then that Col Dalbey personally selected Capt Alvarado to take the reins of the squadron.

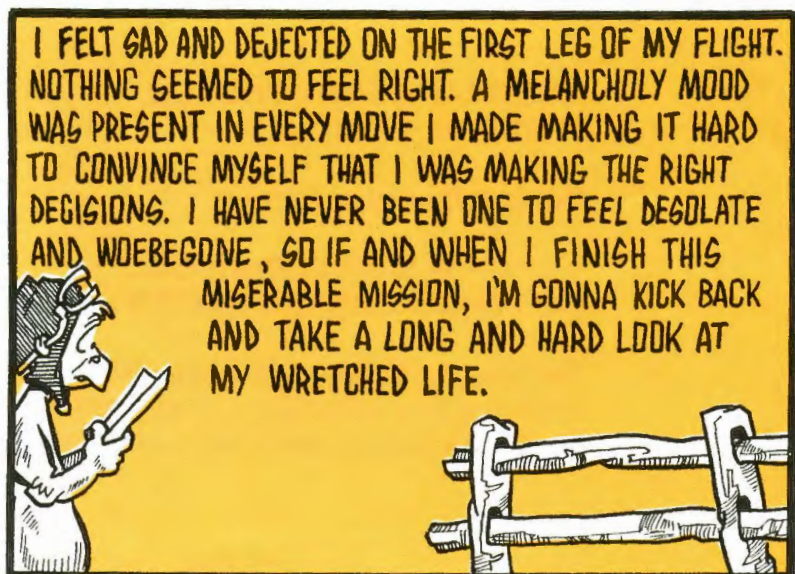
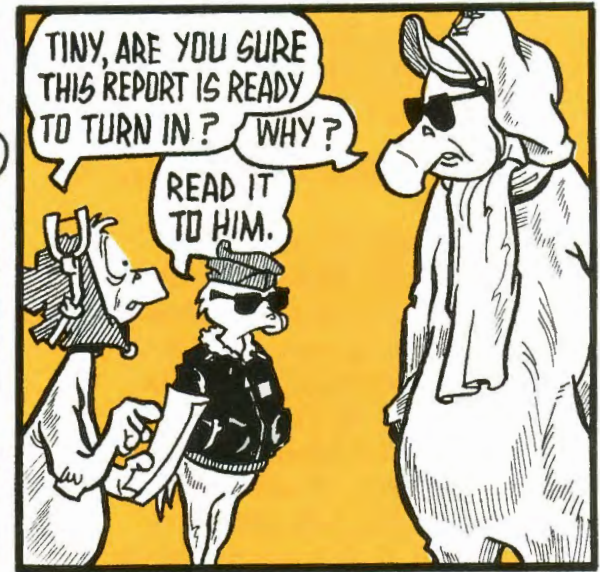
"At first it was like running a miniature squadron," Capt Alvarado said. "We still had 2 planes remaining, so our flying mission continued." However, a few weeks later the remaining planes deployed to Ramstein AB, Germany, to join the rest of the squadron. "At that point, only 45 members remained, so I was able to focus on the personnel side of running a squadron," the Bremerton, Washington, native said.

"Acting as the squadron commander was a tremendous learning experience," Capt Alvarado said. "One of the highlights was being able to work with enlisted issues — something that a person at my level doesn't usually get involved in."

Her fellow commanders were very helpful, Capt Alvarado said. "They were very supportive — I could always call on their expertise and advice. They wouldn't tell me what to do, but instead give me the tools to find out how to get there myself."

"Although the experience in Bosnia would have been great, I wouldn't trade it for the opportunity I had here," the former C-21 pilot said. "Being able to see how a squadron works, and getting involved with my people's well-being was a lesson in leadership I won't forget."

Although Capt Alvarado returned to normal duties after the first redeployment of the 50th, she got the chance to prove her leadership skills again by being placed in charge of the final squadron redeployment this week. "The opportunities I've had over the past few months have been terrific — hopefully next time the squadron deploys I'll be there to learn even more," Capt Alvarado said.





USAF SAFETY AWARDS

HQ AF/SE 050851 Apr 96 message announced the following ACC winners of Air Force Annual Awards. Congratulations to all for a job well done. Your efforts and dedication contributed significantly to the overall success of the USAF mishap prevention program.

EXPLOSIVES SAFETY PLAQUES

366 WG, Mountain Home AFB ID
2 BW, Barksdale AFB LA
33 FW, Eglin AFB FL
4 FW, Seymour Johnson AFB NC
49 FW, Holloman AFB NM
436 TS, Dyess AFB TX

FLIGHT SAFETY PLAQUES

55 WG, Offutt AFB NE
314 AW, Little Rock AFB AR
366 WG, Mountain Home AFB ID
1 FW, Langley AFB VA
24 WG, Howard AFB PN
552 ACW, Tinker AFB OK
355 WG, Davis-Monthan AFB AZ
347 WG, Moody AFB GA
388 FW, Hill AFB UT
28 BW, Ellsworth AFB SD

MISSILE SAFETY PLAQUES

366 WG, Mountain Home AFB ID
388 FW, Hill AFB UT

NUCLEAR SURETY PLAQUES

5 BW, Minot AFB ND
7 WG, Dyess AFB TX
2 SS, Fairchild AFB WA

MOTORCYCLE SAFETY AWARD

5 BW, Minot AFB ND

AERO CLUB CERTIFICATES

Barksdale AFB LA
Beale AFB CA
Davis-Monthan AFB AZ
Holloman AFB NM
Langley AFB VA
Offutt AFB NE
Shaw AFB SC

NATIONAL SAFETY COUNCIL AWARD OF HONOR

4 FW, Seymour Johnson AFB NC
5 BW, Minot AFB ND
24 WG, Howard AFB PN
33 FW, Eglin AFB FL
49 FW, Holloman AFB NM
65 ABG, Lajes Field Azores
85 GP, Keflavik AFB IC
314 AW, Little Rock AFB AR
347 WG, Moody AFB GA

NATIONAL SAFETY COUNCIL AWARD OF MERIT

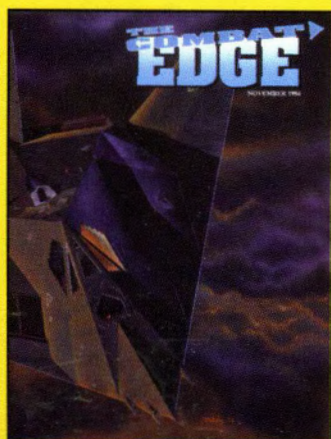
HQ 8 AF, Barksdale AFB LA

NATIONAL SAFETY COUNCIL PRESIDENT'S AWARD LETTER

Northeast Air Defense Sector, Rome NY
Southeast Air Defense Sector, Tyndall AFB FL
Western Air Defense Sector, McChord AFB WA



AU REVOIR ADIOS AUF WIEDERSEHEN



If, as Napoleon claimed, "Imagination rules the world," then Sgt Mark Bailey has ruled the world of safety magazines for the last 6 years. Each and every month Air Combat Command's premier safety magazine, *The Combat Edge*, starts life as 32 blank pages. By the end of the production cycle, largely due to the imagination, creative genius, and artistic talents of Sgt Bailey, a world-class magazine is mailed to readers throughout the world.

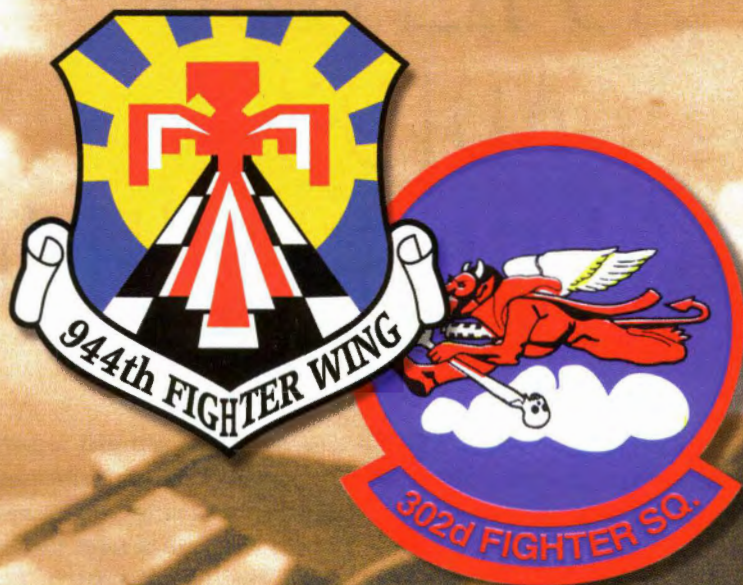
Raised in Rantoul IL, Sgt Bailey didn't discover his artistic persuasion until well into high school. After attending two prestigious art schools, he hit the streets with his degree and a portfolio of art samples. It wasn't long before he became frustrated at hearing "inexperienced" or "over-qualified" and turned to the Air Force for the opportunity to exercise his imagination and apply his talent.

During his first assignment as a graphics specialist with the 347 MSS at Moody AFB GA, his artistic reputation spread throughout the Air

Force and he was asked to submit a portfolio for a vacancy on the *TAC Attack* magazine staff. Sgt Bailey was selected and soon found himself embarked on a new phase of his art career. Sgt Bailey's dream of being a magazine illustrator and artist became a reality when his first magazine cover was published in June 1990.

Sgt Bailey was the driving force behind the design and visual creation of *The Combat Edge*. His efforts led to its development as the benchmark in creatively conveying practical methods of mission accomplishment while protecting people and preserving critical resources. His paintings, drawings, computer graphics, covers, and centerfolds, launch the readers right into the heart of the stories. Although they may not agree with the story or its ending, the readers will long remember the lessons learned because of Sgt Bailey's art work. Through his brush, pen, and computer he is able to project the often costly lessons of experience onto the canvas of the reader's mind.

With the completion of this issue, Sgt Bailey is about to embark upon yet another phase of his art career and life — that of a civilian. Since this is Mark's last issue as the staff artist, we felt it would be most appropriate to take this opportunity to say "thank you" to him and his family for their selfless contributions to our mishap prevention efforts and the Air Force mission. With all the respect and admiration possible, we wish Mark, Brenda, and Kailey good luck and Godspeed. **You'll be missed!** ■



A Little **EXTRA** TRAINING

*Capt Chris "F+10" Fellhoelter
302 FS/SE
Luke AFB AZ*

The 302 FS, an Air Force Reserve F-16C fighter squadron, at Luke AFB, has flown in Provide Comfort II (Dec 92) and Deny Flight (Jan 94). The unit's average experience level is over 1,500 hours of F-16 time per pilot. For Operation JOINT ENDEAVOR (Jan 96), 6 aircraft from the 302 FS and 6 aircraft from the 457 FS at Carswell AFB, Texas, would combine to form a flying squadron. The 302 FS flew the aircraft to Italy and continued flying there until the middle of February 1996. The 457 FS came in February, flew until late March, and then brought the aircraft back to the United States.

PREPARATION

The wing commander announced to everyone that we are going to Aviano in January 1996 to support friendly forces in Bosnia. Hey, we did this back in '94. Piece of cake. Somewhere around here we have lessons learned from our first trip to Aviano.

Things remembered: great pasta, lots of rain, cold weather, rugged mountains, low ceilings, and night operations.

Aviano has changed dramatically since our last trip including a new mission and a new command structure. The 31 FW now lives there with 2 fighter squadrons, the 510th and the 555th. Instead of flying under United Nations command and control, we will be directly supporting NATO, with US forces on the ground.

Besides sending personnel for a site survey, planning the deployment, and accomplishing our annual training squares, we developed and completed a "spin-up" train-

ing program. Our multi-task trainer (MTT) was put to full use by programming Aviano and the local divert bases into the database. All of the pilots were scheduled for the MTT because living in Phoenix, Arizona, we do not routinely shoot approaches down to minimums in the weather. The MTT could be set for 300 feet and 1 mile of visibility with rain and night landings.

In Italy almost every base has an outstanding PAR with controllers who speak good English and are not shy about informing the pilot if he is more than 5 feet off the glide slope. The worst case scenario is diverting to a strange base (i.e., other than Aviano) and shooting the published approach to minimums. After sweating in the MTT, shooting multiple approaches to weather minimums, our pilots were ready to land anywhere in Italy.

Life support played an integral part in preparation for the Aviano deployment. If something went wrong and one of our pilots ended up on the ground in Bosnia, he

needed to be able to survive and evade until rescue. Proper use of radios, NVG's, and, more importantly, GPS were taught to and demonstrated by each pilot. For each sortie over Bosnia the pilot would have a new adjustable survival vest as well as GORTEX socks, thermal underwear, and watch caps to keep the feet dry and the rest of the body warm.

The pallets were loaded and the bags were packed — everyone had trained for any contingency. We would be able to accomplish our mission over Bosnia, no matter what the tasking. Pilots may grumble about extra ground training, but spinning-up prior to a deployment helps sharpen your skills and sets the tone for a safe flying operation. Our dedicated training should help prevent a Class A fatality.



DEPLOYMENT

It's O'dark thirty and 2 AOS is briefing your divert bases en route to Aviano AB. It is January, and the great Blizzard of '96 is raging across the Northeast and the North Atlantic. Aviano is the warm spot with temperatures around 40 degrees Fahrenheit. Can't wait for some good pasta and wine.

After dressing out in thermals and anti-exposure suit, you collect all of the maps, flight plans, approach plates, and box lunches and step to the jet. The F-16 does not have a large cockpit, so efficient cockpit management is a requirement. Sure would hate to have a box lunch trip the main generator off the line and activate the emergency power unit (EPU). Time to take off.

Everyone joins on the tanker. After everyone gets gas and confirms that their tanks are feeding, the airborne spare returns home. Several hours into the mission and after 2 air-to-air refuelings (AAR), it is now 1:00 AM. You are monitoring your external fuel and determine that you have trapped fuel. With 5 other F-16's and a SOF on the tanker, plenty of help is available. Unfortunately, going through the checklist does not solve the trapped fuel problem, which makes diverting your only solution.

Plenty of discussions on the radio. Finally, you and another F-16 are diverting into Gander International. You look at the divert pages and find an airport diagram and pertinent information about Gander. Runway (RWY) 04 is 10,500 feet long and 200 feet wide, but has no cables. RWY 13 is 8,900 feet long and 200 feet wide with cables. Approach tells you that RWY 04 is the active runway with strong winds from the North. Knowing the landing runway helps, but then you realize you will be landing heavy with 30 percent more weight than normal in an F-16. Is the runway icy or has it been cleared off? Will the aircraft stop on the runway remaining without a barrier? Good news, the runway is clear with an RCR better than 18.

After reviewing the approach plate, setting up your nav aids, and losing your night vision, you begin the approach. Did you

remember the anti-ice? What was the weather at Gander? With another F-16 in your formation, crew resource management works and all of the questions are answered. Landing was simple and a "follow-me" is waiting to show you where to park. Someone on the ground puts the chocks in and signals for engine shutdown. Probably need to move the EPU switch to off, just in case. With everything stowed, it's time to shut down. Up goes the canopy. Son-of-a-gun, the weatherman was right, a minus 40 degree wind chill factor. Talk about a very quick 100 degree temperature change. Good thing you were wearing a poop suit and a flight jacket.

The other F-16 pulls in beside you and shuts down. Who are you going to call and what are your actions? All of this happened on our deployment to Aviano. One week later our 2 F-16's arrive in Italy, ready to employ the next day over Bosnia. Trapped fuel is the nemesis of the F-16. Good preparation and sound judgment prevented a possible loss of aircraft and/or life.

EMPLOYMENT

Welcome to the land of pasta and wine. After completing the mandatory 48-hour crew rest, it is time to start flying. Standard luck of the draw, this will be a night mission, and the weatherman predicts it will be raining tonight with low ceilings. At least the temperature is not close to freezing.

Following a thorough briefing about the mission in Bosnia, we discuss divert procedures and night operations on the airfield. We go out to the jets and find them in the Tabvee's (hardened aircraft shelters). Using your flashlight you inspect the aircraft, happy that you are not parked out in the rain. Engine start and taxi to the runway are painless. Just can't wait to fly the first sortie over Bosnia. Let's see now..., 20-second trail departure, 180 degree right climbing turn at 3 miles and 350 KIAS. Good thing we reviewed the trail departure and the ground track during the briefing. Light

the burner and off you go. Poof, right into the weather at 800 feet AGL. After the 180 degree turn in the weather both aircraft are on course with the wingman in a 2-mile trail. During climbout, a faint glow develops at the bottom of the canopy, just above the radome. Zap! Nothing like static electricity dancing across your canopy to get your attention. At 24,000 feet you break out of the clouds and the 2-ship rejoins. Maybe the weather will change in a few hours before we return to Aviano.

Returning home from Bosnia, approach informs you that the Aviano weather has changed to 500 foot ceiling and 2 miles visibility. Very dark and very rainy. The flight splits up early and the autopilot clicks on allowing you time to refresh your memory of the approach and missed approach for RWY 05. You remember someone saying not to fly north of the 047 radial because of the Cumulus Granite (mountains). Back into the weather, you descend to the final approach fix enduring a little turbulence and that pesky static electricity. At 2-mile final the runway environment comes into view and you prepare for touchdown. With 4 missiles, 2 bombs, an ECM pod, and IFR divert fuel, you have more weight than normal for landing. Touching down a 1,000 feet down the runway you start aerobraking and see the water splashing up from the wheels. The anti-skid works as advertised and hydroplaning is averted. The aircraft slows to a crawl as you cross the departure cable and clear the runway.

Taxiing back to your Tabvee, you notice that it is raining harder. It's so dark, you need street lights in the parking loop to see where you are going. This base is packed with all types of aircraft supporting Operation JOINT ENDEAVOR. As you pull onto the apron in front of the Tabvee, the night wands come on and guide you to a full stop. Getting out of the jet you look around and wonder how you missed seeing the other aircraft parked on the apron. You make a mental note, next time survey the parking area surrounding your Tabvee, before starting engines.

Not all flights had weather as a problem.

Sometimes Murphy's Law applies during daytime, VMC flying operations. Returning to Aviano from the AOR a voice on Guard announces that Aviano is closed, all aircraft divert. No big deal. We will divert to Istrana AB and wait for Aviano to reopen. After landing you taxi to parking. FOD can be a real problem at any base that does not routinely handle F-16s. Plenty of spacing between taxiing aircraft is a good idea. Keep the throttle at idle and the aircraft moving. Shut down the engine on the clearest spot they give you for parking. When you get out of the jet, you grab your Dash 34 and hope there are a few pins left over to save your weapons.

The Italian F-104 pilots are happy to see you. With telephone numbers from your local inflight guide and some assistance, you get the call through to your squadron at Aviano: Good news, the runway will be clear in an hour. Just enough time for you to file an 1801 (not a DD-175), gas the jets, and sweep the ground around the intake and in front of the jet. Thirty minutes later you are back at Aviano.

This article does not discuss "Safety" while flying over Bosnia. Your safety over Bosnia is determined by your training, tactics, and how well you execute both in a possible hostile environment. Survival might be a better topic for discussion. What if your one and only engine quits? Can you dead stick the aircraft into Tuzla or Sarajevo? Are these airports under sniper fire? Are they even open? Is it possible to turn West and get feet wet and then eject? It would be nice to have a game plan before you takeoff.

A deployment, no matter where you are going, runs smoothest when everyone has prepared before leaving home. Anything can and usually does happen when least expected. A little extra training, combined with good situational awareness keeps the commanders happy at your deployed location. The "warm" return to Phoenix in February was a welcomed relief. ■



COMING NEXT MONTH

**TCE Special Edition on the
Air National Guard**

ANG ARTICLES



**THE FOUNDATION OF A
QUALITY SAFETY PROGRAM**

ANG PHOTOS

