TEAMWORK SAVES EAGLE
By Capt Lance Wilkins,
Mountain Home AFB, Idaho

JUST SAY IT
By Capt Carlton Keen,
USAF

WOUNDED WARTHOG
By TSgt Jason Haag,
Yongsan Army Garrison, ROK

SOMETHING DOESN'T LOOK RIGHT
By TSgt Jesse R. Munday III,
Eglin AFB, Fla.

I'M STILL HERE
By MSgt Shane Curtis,
Fort Rucker, Ala.

WEAPONS SAFETY
By SSgt Anthony S. Boler,
Keflavik NAS, Iceland
SAFETY IS OUR COMBAT EDGE!

When you think of safety, what comes to mind? Is it a group of “those guys” just filling time with another briefing about something that went wrong? Or is it an honest, open discussion of what you can do to prevent the next mishap? Is safety reactive or proactive in your organization? Hopefully, the answer is yes to both.

As the new Air Combat Command Director of Safety, I want to make safety within the command more proactive. We’ve used our flight, ground, and weapons mishap checklists too many times over the past year in reaction to events, some tragic. The time has come to buckle down and see how we can make safety more proactive to meet the command’s needs.

Safety is:

A leadership issue. Leaders at every level need to be actively engaged in the safety health of their organizations. From the commander on down to the frontline supervisor, solid safety leadership is mandatory, they must set the example. If you don’t think safety is a leadership issue, visit our website and see how many times COMACC and the CSAF have addressed safety for our Air Force. Protection of the command’s #1 combat asset, our people, demands persistent, engaged leadership.

A training issue. The Safety staffs provide the training foundation, but it’s everyone’s responsibility to continue the training, even when “they” are not looking. Safety is a 24/7, on/off duty way of life. When you leave the front gate, don’t leave your safety training behind. We’re fond of saying we “train the way we’re going to fight.” Be involved in all aspects of training; make safety proactive.

ACC is involved in every corner of the globe defending our nation. Engaged leadership and solid training will ensure we are not overlooking safety while deployed and employed. We need to bring that same level of intensity back to the command; we need to make safety in ACC more proactive. By doing so, safety will remain our Combat Edge.

Colonel Creid K. Johnson, ACC Director of Safety
There I was ... it was a clear night with some scattered clouds at about 20,000 feet. I was returning from a fairly boring Operation NOBLE EAGLE ONE sortie over the Western U.S., and you could see Mountain Home AFB from over 100 miles away. Altogether, it was a beautiful night, and it had been a great way to update my night air-to-air refueling and landing currencies. As I turned to line up on a 7-mile visual approach, approach control handed me off to tower, and it was time to configure. I had already slowed to below 250 knots, so I lowered the landing gear handle and pulled the flap switch aft.

The momentary MASTER CAUTION illuminated but quickly extinguished as the Pitch Ratio drove to the appropriate setting. I looked down to note that the flaps had rolled down and indicated normal. I then heard the landing gear warning tone, and a bright light shone in the handle. I looked at the gear indicator lights, and for the first time in my Air Force career, all gear indicated UNSAFE!

Out of sheer force of habit, I inappropriately called, “Claw 03, base, gear…” Immediately I realized what I had said and before releasing the mike switch corrected myself saying, “Disregard, I’m showing all gear unsafe.” I had about 6,000 pounds of gas, enough for about four radar patterns and low approaches; so on my first low approach, I asked tower to see if they could spot my gear as I passed by them. Well, in a three bag (three external gas tank) configuration, it’s hard to see an Eagle’s gear from the ground or in the air. Upon passing the tower at about 300 feet above ground level over the runway, they informed me that “you appear to have a nose gear, but we can’t see your mains.”

At this point, all the training I got in the Air Force really began to pay off.

**Maintain aircraft control:**
Maintaining Visual Flight Rules, I started a slightly smaller version of the local radar pattern at the standard altitudes and reminded myself to stick to the altitudes and ground tracks that I knew would keep me safe. As we all know, a constant cross-check of all available instruments is vital, especially at night. I told tower that I would set up for another low approach and that I would be contacting my ops.

**Analyze the situation and take the appropriate action:** I really wanted to know if my gear were down so I could further determine my best course of action. My Ops Officer was on the horn about the time I got midfield downwind. Upon hearing my predicament, he recalled a previous experience he had of this nature. He elected to run to life support, get a set of Night Vision Goggles (NVGs), and catch a ride out to the runway to see if he could ascertain my gear’s actual position. He handed the “checklist reading” over to our Squadron Commander (SQ/CC). As I declared an emergency with tower and set up for the next low approach, he told me he was ready with the checklist.

Passing the tower the second time, they reconfirmed that my nose gear appeared down but that they could see no mains.

With the SQ/CC on the horn, we started running the checklist on ops freq as I heard my Ops Officer and the Vice Wing Commander (CV) standing by on a hand-held radio on tower frequency. The tower personnel were very helpful by allowing the...
NVG wearers expeditious access to the taxiway in order to get a better view of my aircraft. As we finished the checklist, I still had no safe gear indications; so I set up for a low approach close to the NVG wearers. My Ops Officer asked me to turn off all exterior lights so he could get a better view.

As I passed over the field on my third low approach of the night, I noted how eerie it is flying around at night with no lights. The CV called me on the radio to tell me that all the gear appeared down, but my main landing gear doors were still open. This was good news — I had wheels! After this, my SQ/CC and I discussed the type of approach and landing I should do, and we decided on an approach-end arrestment.

Land as soon as the situation dictates: Needless to say, after all of this, I was definitely ready to land. As I set up for about a 10-mile final, I now had about 4,000 pounds of gas, four live missiles, a gun with 940 rounds of 20 mm, and a full load of flares.

I lined up on an easy 10-mile final and slowed to on-speed, about 150 knots. I picked up a “one white and three red” visual indication on the Precision Approach Path Indicator lights so I could get down on the runway prior to the normal Instrument Landing System glidepath because the cable was only 964 feet down the runway. As I approached the runway overrun, I started easing the power back and touched down on speed 300 feet down the runway. I lowered the nose gear and got off the brakes in preparation for the cable engagement.

As the hook caught, I was jerked completely from the seat, and my shoulder harnesses not been locked, I probably would have smacked my face/mask into the glare shield. The aircraft shuddered to a stop and began a rapid rollback. I countered with power as the nose gear landing strut extended. Fearing that the tails would scrape and I’d “pop a wheelee,” I added more power and the nose lowered. The oscillations dampened and the power/brakes combination kept me stopped as the fire crew approached.

**BOTTOM LINE:**

Never let your guard down. No sortie is routine no matter how many times you may have done the same thing. This time may be “different.”

An uneventful sortie can turn into a crisis anytime — even on short final or when engines are shutting down in the chocks.

Mutual support is more than you and your wingman; it’s anyone who can help you.

Sometimes getting the job done requires more than procedures — innovation, like using NVGs from a taxiway to check your gear, can give you much needed information to make a better decision.

I’d like to close by saying I thank all of those who assisted in the safe recovery of this air superiority fighter. In a situation like this, teamwork really does make all the difference!
a new **EA-6B Pilot**
completes his check ride
with the **low fuel** light on ...
to avoid a contest of wills
A year had passed since arriving at Naval Air Station Whidbey Island, and I finally was getting my Naval Aviation Training and Operating Procedures Standardization (NATOPS) check in the EA-6B. I had completed the F-15E Replacement Training Unit course 3 years before, so I was more than ready to get out of the training command and fly operationally again.

I was scheduled with one of the most experienced and respected instructor pilots. He was known throughout the Fleet Reach Squadron (FRS) as “the velvet hammer.” Legend was he downed a greater than average number of students. However, his downing style was velveteen. Apparently he would make you feel great about yourself despite your substandard performance. Although he was a reserve guy, I can attest he kept his knowledge of the jet and its systems very fresh, and he was a superb FRS Instructor Pilot (IP).

Despite his reputation, I wasn’t concerned. I had 500 hours of fighter time and had taken numerous check rides—I knew how the game was played. We briefed for a two-ship formation flight in one of the local military operating areas. The flight was uneventful until the recovery. Although the fuel gauge indicated a safe fuel state, the low-fuel light flickered. My IP ran a built-in test on the fuel gauge, and all indications were normal. We
pre-emptively ran through the Pocket Checklist (PCL) and checked our fuel-switch positions and circuit breakers. Because the light was not continuously on and our wingman saw no fuel streaming from us, I saw no need to land immediately. I also did not advise my instructor to do so. We agreed the low-fuel circuitry was receiving spurious inputs. We cleared our wingman to land and flew out to the radar pattern to do simulated emergencies for my NATOPS check.

In the pattern, the low-fuel light stayed on. My IP told base of our problem, and the duty officer advised him to land immediately. He told the Operations Duty Officer he believed the indications were false, and he planned on pressing with the check ride.

While I agreed that the low-fuel indications were spurious, I knew in my heart the right thing to do was land and let maintenance look it over. I made a weak protest against his decision to press but made no serious effort to persuade him to put the jet on the ground. We finished the check ride and landed uneventfully, with the low-fuel light on the entire time.

Here are a couple of lessons and observations I took away from this flight. I failed to lodge a forceful protest because I also wanted to complete the check — a definite case of senioritis. Additionally, I let my instructor’s greater experience in the Strike Eagle, but I knew better than to fly around with a low-fuel light. I never felt in danger of flaming out and we were in sight of the field at all times, but staying airborne was not what I call professional aviation. Furthermore, I was reluctant to get into a great contest of wills with the guy who was grading me. Bottom line: Never be afraid to say what needs to be said.

**Editor’s Note:** Reprinted Courtesy of Approach Magazine.
An A-10 Thunderbolt II pilot safely landed her "Warthog" after it sustained significant damage from enemy fire.
A n A-10 Thunderbolt II pilot, deployed with the 332nd Air Expeditionary Wing, safely landed her "Warthog" at a forward operating base after it sustained significant damage from enemy fire during a close air support mission over Baghdad.

Capt Kim Campbell, deployed from the 75th Fighter Squadron at Pope Air Force Base, N.C., and her flight leader, Lt Col Richard Turner, had just finished supporting ground troops and were on their way out of the area when her aircraft was hit by enemy fire.

"We were very aware that it was a high-threat environment — we were over Baghdad," Campbell said. "Those are the risks you take to help the guys on the ground. That's our job; that's what we do. Our guys were taking fire feeling over Baghdad. It didn't respond to any of my control inputs."

The captain tried several different procedures to gain control of the aircraft; none of which worked. At that point, she decided to put the plane into manual reversion, which meant she was flying the aircraft without hydraulics. After that, the aircraft immediately responded.

"The jet started climbing away from the ground, which was a good feeling because there was no way I wanted to eject over Baghdad," she said.

Because the aircraft sustained hits to the rear of the aircraft, Campbell said she couldn't see the damage. Her flight leader, Lt Col Turner, positioned his aircraft where he could view the damage, which included the horizontal stabilizer, tail section and engine cowling.

"The jet was flying pretty good, and the damage had not affected the flight control surfaces or the [landing] gear," Turner said. "If [Kim] could keep it flying, we would get out of Baghdad and might be able to make it."

Once they assessed the situation, the two worked closely together to determine the best course of action. Campbell said the colonel's calm demeanor and attention to detail were instrumental in

Her options, which ultimately came down to two: fly the aircraft to a safe area and eject, or attempt to land a broken jet and we want to do everything we can to help them out. We did our job with the guys there on the ground, and as we were on our way out is when I felt the jet get hit. It was very obvious — it was loud.

After sustaining the hit, she said the aircraft immediately became uncontrollable, and the entire caution panel lit up with warnings — not the best scenario over hostile territory.

"I lost all hydraulics instantaneously, and the jet rolled left and pointed toward the ground, which was an uncomfortable

Above: Capt Campbell surveys the battle damage to her airplane.
her being able get the airplane home.

"I could not have asked for a better flight lead," she said. "He was very directive when he needed to be because all I could concentrate on was flying the jet. Then, once we were out of the Baghdad area, [he] just went through all the checklists, all the possibilities, all the things I needed to take into account."

Campbell said she and Turner discussed all her options, which ultimately came down to two: fly the aircraft to a safe area and eject, or attempt to land a broken jet.

"She had a big decision to make," he said. "Before anyone else could throw their two-cents worth into the mix, I made sure that she knew that the decision to land or eject was hers and hers alone."

To Campbell, the decision was clear.

"The jet was performing exceptionally well," she said. "I had no doubt in my mind I was going to land that airplane."

After getting the aircraft on the ground, the final task was getting it stopped and keeping it on the runway.

"When you lose all the hydraulics, you don't have speed brakes, you don't have brakes, and you don't have steering," Campbell said.

Nonetheless, she brought the A-10 home safely, and it did the same for her.

"One of the really cool things was that when I did touch down, I heard several comments on the radio — like, 'Awesome job! Great landing!'" Campbell said.

"I guess we all think we are invincible and it won't happen to us. I hadn't been shot at — at all — in any of my other missions. This was the first. Thank God for the Warthog, because it took some damage, but it got me home."

Right: Capt Campbell and her flight lead Lt Col Turner, photographed after landing her battle damaged aircraft April 2004 The Combat Edge
What a grind

SOUTHWEST ASIA -- SSgt Richard Panepinto grinds down a weld for a roll-up door at a forward-deployed location.

Photo by SSgt Suzanne M. Jenkins
**Giving Hercules Props**

OPERATION IRAQI FREEDOM--
321st Maintenance Squadron airmen secure a propeller prior to installing it on a C-130H Hercules

*Photo by SSgt Jennifer Wallis*

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**Fixin' it up**

TALLIL AIR BASE, Iraq --
SrA Juan Hurtado removes a caliper from a Humvee

*Photo by TSgt Bob Oldham*

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**Ka-boom!**

AL FATHAH AIRFIELD, Iraq--
Heavy equipment is used to bury part of a 2-million-net-pound weapons cache before Army engineers and Air Force explosive ordnance workers can begin detonation

*Photo by SSgt Jeffery Wolfe*
While supporting advanced short-range air-to-air missile test and development, a QF-4G was the primary target aircraft for an unmanned live-fire mission. During pre-launch drone system checks, the drone experienced an uncommanded disengage (drone reverts to cockpit control), coupled with a complete loss of telemetry data between the ground stations and the drone’s onboard Automatic Flight Control System (AFCS). Extensive testing with flightline test stations revealed nothing abnormal and the failure was not duplicated. The drone Automatic Flight Control Computers (AFCC) were removed and analyzed for internal failures revealing nothing concrete; however, the back-up computer showed intermittent software lock-ups, so this AFCC was replaced. Maintenance personnel performed another operational drone check, this time with engines running, using the ground remote control station. During this check, this drone again experienced a complete loss of telemetry and went into an automated routine called an “escape.” The check was terminated, and more rigorous ground troubleshooting was performed. This time a short was discovered in the Command Transponder System (CTS) 28 VDC supply circuit. This was traced to a terminal lug on the CTS 2 power switch contacting the panel’s case and shorting CTS 2 power to ground. This condition had evidently existed intermittently and the terminal lug finally welded itself to the case. The engine-running drone checks were key to uncovering the problem because the switches in this panel are not used during external power tests. Because of the unpredictable nature of AFCS reaction to the problem, including conditions that would cause an unmanned drone to be lost, a one time inspection of the QF-4 fleet was ordered by the Lockheed Aerial Target’s program manager in coordination with the drone system program office. To date, approximately half the fleet has been inspected with one aircraft found that required the terminal lug to be repositioned. In addition, British Aerospace has emphasized this malfunction at the drone conversion facility in Mojave, Calif., and with their subcontractor who supplies the affected panel and switch. Because of the discovery of this design flaw, the nominees saved the Air Force over $1 million in lost test assets and possible property damage or loss of life.

Mr. Frank K. Mobley, Mr. Jerry H. Everett, Mr. Danny C. Beasley, Mr. Timothy D. Davis, Mr. James A. Bearden, Mr. Lawrence Trahan, 82nd Aerial Target Sqdn., Tyndall AFB, Florida

Capt Rueschhoff was instructing Low Altitude Step Down Training (LASDT) as part of an A-10 Basic Surface Attack Mission on the Poinsett Range. After completing a series of turns at 500 feet Above Ground Level (AGL), the flight reset their altitude alert to 300 feet AGL and accomplished several turns. Capt Rueschhoff then rejoined to a wedge formation on the other flight member to conduct simulated attacks on the Poinsett Southern Target Array. During the first attack, approximately 3 Nautical Miles (NM) southwest of the target, the Master Caution Panel illuminated with a Right Hydraulic Reservoir light followed by a Right Hydraulic Pressure Low Light. Flying at 320 knots at 300 feet AGL, Capt Rueschhoff’s immediate concern was maneuvering away from the ground. Unknown to him at the time, the source of the hydraulic problem was a catastrophic right slat failure which sent numerous pieces of metal through the number two engine. He initiated a “knock-it-off” and climbed to 3,500 feet Mean Sea Level where he analyzed the situation and determined that the right side hydraulic system failure was accompanied by a right engine flameout. Capt Rueschhoff then applied the Engine Failure/Over Temperature/Compressor Stall checklist, declared an emergency, and then began preparing to accomplish a single-engine landing at Shaw Air Force Base, S.C. approximately 12 NM to the north. He configured the aircraft for a single-engine landing with gear, no speed brakes, and no flaps. During the single-engine approach, he focused on counteracting the adverse yaw associated with single-engine flight. The importance of this cannot be over-emphasized, as the failure to do this has resulted in three Class A mishaps in the A-10s history. On final, Capt Rueschhoff experienced a slight crosswind on the same side as his inoperative engine, making it more difficult to both counteract the single-engine adverse yaw and fly a proper ground track. He quickly recognized that the loss of right side hydraulics would prevent speed brake employment on landing roll and greatly increase the landing distance. He flew a flawless single-engine approach, touched down near the approach end of the runway, employed maximum aero braking, cautiously applied the brakes to stop on the runway available, performed a prompt and normal shutdown, and then egressed the aircraft. Capt Rueschhoff’s exceptional in-flight reactions during LASDT and flawless execution of a complex single-engine approach prevented the possible loss of a valuable combat asset.

Capt Jason Rueschhoff, 75th Fighter Sqdn., 23rd Fighter Group, Pope AFB, North Carolina
Lt Col Quinn and his weapons system officer, Capt Mendieta, took off as the third aircraft of an F-15E 4-ship Night Surface Attack Tactics Mission to Dare County Range, N.C. They were loaded with two external fuel tanks and a SUU-20N with 6 BDU-33s. On departure, they entered the clouds at 1,000 feet and flew radar trail in the weather to the range. As they began their descent into the range airspace, Lt Col Quinn lost all communications in the front cockpit. He could not transmit or receive on the Ultrahigh Frequency (UHF) radio and the aircraft intercom was inoperative. In order to get Capt Mendieta's attention, he began shouting. Capt Mendieta then let their flight lead, Titan 11, know the nature of their emergency and requested Visual Meteorological Conditions (VMC) airspace. At the top of the range airspace and still in Instrument Meteorological Conditions (IMC), Titan 11 declared an emergency for Titan 13 and coordinated separate clearances. Turning away from the lead element, Lt Col Quinn then flew radar trail off their wingman, Titan 14. Lt Col Quinn and Capt Mendieta continued shouting back and forth to communicate, while Capt Mendieta coordinated with Titan 14 on the UHF radio. En route to the initial approach fix at 10,000 feet Mean Sea Level, while dumping gas and flying radar trail in the weather at night, the indicated airspeed on both the heads up display and electronic altitude display indicator decreased to 14 knots indicated airspeed. Additionally, all three channels of the Computer Aided flight controls also dropped off line. Lt Col Quinn transitioned to standby instruments and had Capt Mendieta request an immediate climb to VMC airspace. They immediately began to troubleshoot the compounding emergency and Lt Col Quinn reset the flight control switches. While their pitot heat remained on through the emergency, their indicated airspeed climbed to 120 knots and then decreased again to 14 knots. After approximately 4 minutes of erroneous indications, their indicated airspeed returned to 300 knots. As they commenced the Instrument Landing System (ILS) approach in radar trail with Titan 14, the weather was reported 900 feet scattered, 1,000 feet broken, with a crosswind component of 24 knots. Lt Col Quinn and Capt Mendieta executed a flawless ILS approach in steady winds and deteriorating weather. Their actions during this serious emergency directly contributed to the safe recovery of a $45 million Air Force asset.

Lt Col Vincent Quinn and Capt Shelly Mendieta, 4th Operations Group, 335th Fighter Sqdn., 4th Fighter Wing, Seymour Johnson AFB, North Carolina

During a routine phase inspection as the left wing area supervisor, SSgt Newton noticed that an excessive amount of repairs were required on the engine auxiliary inlet doors, hinges, and safety wiring of the exhaust screens due to non-compliance with technical data governing safety wire and proper hinge staking. Upon further investigation, it was determined that the aircraft in question had recently returned from depot level inspection and indicated a quality control problem. Realizing that these discrepancies posed a serious Foreign Object Damage (FOD) hazard to the $200,000 TF-33 engines on the B-52, Sergeant Newton coordinated with 2nd Bomb Wing Scheduling and identified three other aircraft that had not been inspected since returning from depot. He performed a special inspection of over 192 auxiliary inlet doors, 384 hinges and 384 exhaust screens, photographing and repairing over 125 doors, and returning aircraft to technical data standards. Photographs and supporting documentation of his findings were forwarded to Air Combat Command Logistics Division, 2nd Bomb Wing Quality Assurance Chief Inspector and Depot Quality Assurance, resulting in immediate corrective action, FOD prevention measures, and adherence to technical data at depot. The identified findings added specific inspection criteria to the 1B-52H-6WC-2 acceptance inspection work cards affecting the entire B-52 fleet of 94 aircraft, which included Minot Air Force Base, N.D., and the Air Force Reserve Component Wing at Barksdale. Aircraft in the process of depot inspection were inspected and repaired, as well as the ring cowling located in the supply system. In addition, a special tool was manufactured and approved for use at field level to properly stake the inlet door hinges to prevent them from failing. Elimination of these defects at depot and field level dramatically reduces the possibility of inlet door hinges being ingested into aircraft engines causing catastrophic failure and safety of flight concerns.

SSgt Patrick M. Newton, 2nd Maintenance Sqdn., 2nd Bomb Wing, Barksdale AFB, Louisiana

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he 33rd Combat Communications Squadron (33 CCS) prevents safety incidents through a proactive safety awareness and prevention program, which is evident from over 130 days since the last on-duty safety incident. Proactive measures include the procurement of a scrolling marquee, sign placards, and pre-task safety briefing signs. The scrolling marquee is mounted in a prominent location within the squadron’s primary building, visible by all members entering and exiting the building daily. Messages displayed on the scrolling marquee are centered on regional/environmental conditions affecting the safety of squadron personnel. Sign placards are located in high traffic areas, including entrances to restrooms and hallways, and display the Group’s weekly safety message. Pre-task safety briefing signs (2 feet by 3 feet) are located at the bay exits which maintenance personnel use to depart the building. The signs remind all personnel to conduct a safety briefing targeted at the specific task performed. The payoff of these actions is measurable and significant. 33 CCS personnel completed a full Air Mobile exercise, which tested the squadron’s ability to pack required deployable Unit Type Code (UTC) equipment. 33 CCS personnel packed nine UTCs with zero safety incidents. Additionally, 33 CCS personnel prepared a 98-vehicle fleet for the Group’s quarterly vehicle inspection, including washing, aligning, and inspecting all vehicles. End result: “Outstanding” rating and, more importantly, zero safety incidents. The key to preventing a safety mishap is stopping it before it happens. The 33 CCS takes all the right PROACTIVE steps needed to prevent mishaps before they occur!

33rd Combat Communications Sqdn.,
3rd Combat Communications Group, Tinker AFB, Oklahoma

Flight Safety
Award of the Quarter

Sgt Campbell was observing Aft Optical Bench (AOB) maintenance in the Airborne Laser clean room when he noticed that current wire wrapping and securing did not appear to meet Air Force and contractor standards. He researched and suggested implementation of common Air Force procedures. The contractor reviewed the procedures and implemented a change on the spot. Sergeant Campbell’s consistent attention to detail not only reduced foreign object damage potential and electrical wire chaffing in the $5 million AOB, but prevented possible equipment damage, increasing the safety of the flight crew. He followed-up on corrective actions to ensure they were incorporated into the engineering drawings and that Federal Aviation Administration certifications were met. Sergeant Campbell’s discovery saved more than 300 man-hours of re-work to the AOB and the safety hazard associated with it. A couple of weeks later, Sergeant Campbell attended a 1-day class at Hales Engineering in Camarillo, Calif., dealing with Airborne Laser Aerospace Ground Equipment. During this visit, he was asked to train five subcontractors on Hydraulic Test Stand operations. Sergeant Campbell performed a prior-to-use inspection on the test stand, which revealed loose and malfunctioning equipment control knobs. He repaired the knobs and upon starting the test stand, he noticed a leaking fuel line on the return side of the motor, which he isolated and repaired. Without repairs, the leak would have escalated, posing potential harm to personnel and destruction of the government-owned stand worth $95,000. His findings were elevated, and formally documented to ensure a long-term fix. After completing the test stand training, Sergeant Campbell inspected a chiller unit slated for use in the Systems Integration Lab. An inspection led to the identification of: incorrect weld and solder joints, the installation of incorrect hardware, an electrical system that was not isolated from possible water contact, a broken wire, and unsupported wiring harnesses. His findings were immediately elevated and documented, successfully avoiding program delays.

TSGT James L. Campbell, Jr.,
31st Test & Evaluation Sqdn., Edwards AFB, California
In response to a commander directive requiring all personnel to be trained prior to further All Terrain Vehicle (ATV) and off-road motorcycle riding, MSgt Shipman established an off-road vehicle training program from scratch within 3 weeks. He researched and evaluated training options, coordinated with the Specialty Vehicle Institute of America (SVIA) and 27th Security Forces Squadron to obtain qualified ATV instructors. He worked with the 27th Civil Engineering Squadron to develop a training range, submit environmental documents, and obtain riding approval. To provide off-road motorcycle training, he solicited highly qualified motorcross riders to design a syllabus to mirror the Motorcycle Safety Foundation street course. His tireless effort satisfied the entire initial wing requirement and allowed 58 ATV riders and 48 off-road motorcycle riders to get back to riding their vehicles within 1 month. Sergeant Shipman then set his focus on long-term sustainment of the off-road program. He solicited wing volunteers to become SVIA ATV instructors, obtained commander approvals, and organized a SVIA instructor course. He recruited a SVIA Military Chief Instructor from off-station to travel to Cannon Air Force Base, N.M. He secured an off-base track for use as a recurring training site and set up periodic dirt-bike courses using experienced riders as instructors. Filling an Air Combat Command (ACC) core unit tasking, he deployed to Red Flag and spearheaded the ground safety effort. He managed 12 deployed Unit Safety Representatives (USRs) and ensured proper ground safety incident documentation. During a spot inspection of end-of-runway operations, he identified a potential foreign object damage issue with concurrent heavy and fighter aircraft operations. He coordinated with operations and maintenance to modify arming procedures to help mitigate the hazard. His resolute safety efforts resulted in zero reportable ground mishaps during the entire deployment. Sergeant Shipman re-energized the wing ground safety training program. He integrated applicable Occupational Safety and Health Administration (OSHA), Air Force Occupational Safety and Health, and ACC ground safety requirements into a one source document for units to reference and implemented a quarterly USR ground safety training session to provide the most current safety information. Sergeant Shipman’s dedication and initiative ensure the 27th Fighter Wing remains “Most Lethal” ... and safe.

MSgt James A. Shipman, 27th Fighter Wing, Cannon AFB, New Mexico

Sgt Dale’s stringent safety program management and positive attitude has had an outstanding effect on the success of Air Combat Command’s singular air-to-ground Weapon System Evaluation Program (AG WSEP). This is evidenced by the 86th Fighter Weapons Squadron’s sustained mishap-free record despite an aggressive munitions and aircraft evaluation schedule. Sergeant Dale was personally responsible for the safe and reliable execution of all maintenance and logistics operations for three combat unit evaluations. These evaluations involved the deployment of 210 personnel, 12 tons of support cargo, 16 F-16 and eight F-117A combat aircraft. Sergeant Dale expertly supervised all aircraft maintenance and weapons loading phases while at a deployed location ensuring 100 percent technical compliance and uncompromising safety for all evaluated personnel. He also closely monitored end-of-runway arming and de-arming procedures for 24 live munitions aircraft sorties, resulting in the successful release of 18 AGM-65 Maverick missiles, six GBU-10 and 12 GBU-24 laser-guided bombs and six GBU-31 Joint Direct Attack Munitions. His “safety-first” attitude, coupled with his vast technical know-how, proved invaluable during a recent combat aircraft parking separation distance conflict. Sergeant Dale spent 65 hours of disciplined self-study to become the squadron K-series explosive separation expert for all newly-fielded weapons. He personally advised the 53rd Wing Commander of the potential hazards associated with aircraft loaded with live CBU-105 Wind Corrected Munitions Dispensers parked alongside similarly configured aircraft. The commander based his Operational Risk Management decision on this advice, optimizing scarce aircraft parking ramp space and executing a safe and reliable A/G WSEP assessment. He continued to demonstrate his intense dedication to providing a stellar safety program when he identified and corrected outdated AF Forms 55, Safety Record, during a random squadron wide self-assessment. He supervised the complete re-accomplishment of all forms in question and briefed supervisors on the form’s proper use and purpose. He also illustrated the severe consequences to all personnel if they were not fully qualified on all critical safety tasks. Sergeant Dale’s continuous efforts not just to maintain the status quo, but to improve our Safety Program, ensured a safe and efficient working environment for all squadron members.

SSgt Stephen R. Dale, 86th Fighter Weapons Sqdn., 53rd Wing, Eglin AFB, Florida
ACC FY 03 ANNUAL AWARDS

NAF/DRU SAFETY PROGRAM OF THE YEAR
9th Air Force
Shaw AFB, S.C.

WING SAFETY PROGRAM OF THE YEAR
5th Bomb Wing
Minot AFB, N.D.

WING CHIEF OF SAFETY OF THE YEAR
Lt Col Anthony N. Correro
2nd Bomb Wing
Barksdale AFB, La.

FLIGHT SAFETY OFFICER OF THE YEAR
Maj Christopher A. Schwartz
347th Rescue Wing
Moody AFB, Ga.

FLIGHT SAFETY NCO OF THE YEAR
SSgt Michael L. Mayhew
552nd Air Control Wing
Tinker AFB, Okla.

ACC CREW CHIEF SAFETY OUTSTANDING ACHIEVEMENT AWARD
SrA Kevin D. Miniano
366th Fighter Wing
Mt. Home AFB, Idaho

ACC FLIGHTLINE SAFETY OUTSTANDING ACHIEVEMENT AWARD
MSgt Lee D. Walters
347th Rescue Wing
Moody AFB, Ga.

ACC WEAPONS SAFETY OUTSTANDING ACHIEVEMENT AWARD
MSgt Mark D. Hosier
4th Fighter Wing
Seymour Johnson AFB, N.C.

ACC LOGISTICS SAFETY OUTSTANDING ACHIEVEMENT AWARD
1Lt Travis R. Hughes
5th Bomb Wing
Minot AFB, N.D.

ACC GROUND SAFETY OUTSTANDING ACHIEVEMENT AWARD
MSgt Chad D. Lingerfelt
23rd Fighter Group
Pope AFB, N.C.

ACC GROUND SAFETY SPECIAL ACHIEVEMENT AWARD
MSgt Jacob E. Robinson
1st Fighter Wing
Langley AFB, Va.

ACC TRAFFIC SAFETY SPECIAL ACHIEVEMENT AWARD
5th Bomb Wing
Minot AFB, N.D.

ACC INDIVIDUAL SAFETY AWARD
Capt Thomas B. Vance, Jr.
9th Air Force
Shaw AFB, S.C.

ACC OUTSTANDING AIRMANSHP AWARD
Capt Mike L. Matesick
421st Fighter Squadron
Hill AFB, Utah

ACC SPECIAL ACHIEVEMENT AWARD
4th Fighter Wing
Seymour Johnson AFB, N.C.

ACC FLIGHT SAFETY SPECIAL ACHIEVEMENT AWARD
27th Fighter Wing
Cannon AFB, N.M.
ACC SAFETY SPECIAL ACHIEVEMENT AWARD

66th Rescue Squadron
Nellis AFB, Nev.

ACC SAFETY CAREER PROFESSIONAL OF THE YEAR AWARD

MSgt David Buentello
33rd Fighter Wing
Eglin AFB, Fla.

ACC CHIEF OF SAFETY MEDICAL ACHIEVEMENT AWARD

1st Medical Support Squadron
Langley AFB, Va.

ACC NUCLEAR SURETY OUTSTANDING ACHIEVEMENT AWARD

SSgt Kolbi E. Shartzer
5th Mission Support Squadron
Minot AFB, N.D.

ACC NUCLEAR SURETY AWARD

2nd Bomb Wing, Barksdale AFB, La.
5th Mission Support Squadron, Minot AFB, N.D.
4th Fighter Wing, Seymour Johnson AFB, N.C.

ACC MISSILE SAFETY AWARD

33rd Fighter Wing, Eglin AFB, Fla.
4th Fighter Wing, Seymour Johnson AFB, N.C.
83rd Fighter Weapons Squadron, Tyndall AFB, Fla.

ACC EXPLOSIVES SAFETY AWARD FOR OUTSTANDING ACHIEVEMENT

MSgt Sean E. Carter
9th Air Force
Shaw AFB, S.C.

ACC EXPLOSIVES SAFETY AWARD

23rd Fighter Group, Pope AFB, N.C.
1st Fighter Wing, Langley AFB, Va.
7th Bomb Wing, Dyess AFB, Texas
27th Fighter Wing, Cannon AFB, N.M.
9th Munitions Squadron, Beale AFB, Calif.
4th Fighter Wing, Seymour Johnson AFB, N.C.
2nd Bomb Wing, Barksdale AFB, La.
388th Equipment Maint. Squadron, Hill AFB, Utah
33rd Fighter Wing, Eglin AFB, Fla.
86th Fighter Weapons Squadron, Eglin AFB, Fla.

ACC FLIGHT SAFETY AWARD

23rd Fighter Group, Pope AFB, N.C.
27th Fighter Wing, Cannon AFB, N.M.
66th Rescue Squadron, Nellis AFB, Nev.
55th Wing, Offutt AFB, Neb.
2nd Bomb Wing, Barksdale AFB, La.
4th Fighter Wing, Seymour Johnson AFB, N.C.
1st Fighter Wing, Langley AFB, Va.
552nd Air Control Wing, Tinker AFB, Okla.

ACC AIRCREW AWARD OF DISTINCTION

Maj William V. Winans
Maj Greg Anderson
Maj Charles P. Bailey
Maj Lane Humphreys
Capt Patrick McGlade,
340th Weapons Squadron
Barksdale AFB, La.

ACC Safety congratulates our Annual Award Winners!

April 2004 The Combat Edge 23
It was day 2 of a 3-day Phase II exercise. The F-15Cs had come back from their sorties, and the aircraft commanders had relayed back to the production super what they had expended. The load crews were briefed on the simulated expenditures and waited for the aircraft to return to chocks for a quick replenishing load. After the half-up/half-down loads, the jets cranked back up and taxied out for launch. The first aircraft took off, and then the second, but something looked different. Something fell off the second jet as it gained altitude over the runway. It looked like a missile! How in the world can something like this happen?

This is how! A weapons load crew prepped the aircraft to replenish its simulated expenditures, which required the download and then upload of one Captive Air Training Missile (CATM-120). The crew unlocked the missile on the launcher and was told that the fuel truck was there and ready to gas up the jet. The crew had to leave the area until refueling was complete. All gassed up and ready to be loaded, the weapons expeditor was notified to dispatch the load crew back to the jet to complete the job. A different load crew was sent to the jet. They prepped a different CATM-120 to be down/up loaded. After completing the load, a pilot was sent to inspect and accept the jet and launch on the next sortie.

Did everyone do their job as outlined in applicable technical data? The answer is a resounding, “No!” The sad truth about this mishap is there isn’t one single link in the chain of events that caused the missile to freefall to the runway. Instead, several people failed to perform their duties according to technical orders. First, the initial load crew did not secure the CATM-120 to the launcher prior to leaving the area for aircraft fueling. Since there was no requirement for the first crew to record the load in the forms until it was completed, communication between them, the expeditor, and the second load crew was crucial. Unfortunately, the message about the unfinished load didn’t make it to the second load crew. Secondly, the expeditor did not send the original load crew back to complete the load but dispatched another crew without informing them of the unfinished load. In addition, the second load crew, now
working with a different missile, never inspected the aircraft's other weapons stations as required. Lastly, the pilot were subject matter experts. They had performed the procedure so many times they thought they could do it from memory. And, they thought they had created workable shortcuts to complete the job faster. What they failed to realize is that following technical data is their job and that it’s there for exactly this reason: it ensures the job is completed in a safe manner, and most importantly, done right every time.

So why didn’t these people follow their technical order guidance? Their excuses are familiar. They didn’t follow technical data because they was hurt, but an “inert” missile was destroyed. If any one of the people mentioned above had completely followed their technical guidance, the missile would not have departed the jet uncommanded. Let’s use this mishap as a tool to prevent something like this from ever happening again. Simply put, don’t work from memory and don’t take shortcuts. When you go out to do your job armed with your technical data, you may be the one who breaks the accident chain.

How in the world can something like this happen?

failed to ensure that the weapons stations lock indicators were positioned correctly as his checklist dictates.

So why didn’t these people follow their technical order guidance? Their excuses are familiar. They didn’t follow technical data because they
Motorcycles were my thing as I grew up. I raced in motorcross competitions just about every weekend and worked for the shop that sponsored me. I fell often enough to learn the hard way that my helmet, gloves, elbow and shoulder pads, boots, long-sleeved jersey, and riding pants really did work. But it wasn't until one night after I joined the Army that I learned just how important my helmet really was.

In a never ending quest for a better bike, I bought a new Yamaha 650 and ordered a full-face helmet that looked cool and worked. That cost me some money. Since I always needed more money, I figured I needed to get my sergeant stripes. To get that promotion, I needed to go to night school to further my education and gain an airframe and power plant license. Riding my motorcycle was part of that process. When I got off duty, I rode home, grabbed my books, and then headed off to school on my new bike.

All of that changed one night. As I was going down the four-lane road heading towards my house, a teenage girl who had her license less than a week came toward me from the opposite direction. She saw me coming her way, but thought the car behind her was going to rear-end her, so she turned in front of me thinking she would miss me. She didn't. Instead, she hit me head-on.

I flew over the handlebars and into her windshield. The back of my head bounced off her steering wheel, and then I was thrown face first into a telephone pole. The doctor said that if I hadn't been wearing my full-face helmet, parts of my head would have been smashed into the windshield and the left side of my face would have been left on the pole.

I suffered a double brain concussion, and my brain swelled so badly the doctors thought they would have to drill holes in my skull to relieve the pressure. Fortunately for me, the day I was supposed to have the drilling done the swelling went down on its own.

I was in and out of consciousness for the first 4 days after the accident. I woke up long enough to say that I wasn't unconscious the whole time, but I was in a semiconscious state for the next 2 weeks. By the time I realized what was going on, close to a month had passed. Although my parents had come to see me, I didn't even know they were there. Some of my coworkers were there every day to help my wife, who basically lived in my hospital room with me, but I don't remember that either.

I spent more than 2 months in the hospital receiving physical and occupational therapy. I lost motor coordination and even had to learn how to walk again. The doctor gave me a razor and told me to shave, but it wasn't until after I was released that I found out the razor didn't have a blade in it. The doctors just wanted to see how good my coordination was, but they didn't trust me with a blade.

I also had a problem with my memory; I knew names and people, but that was about it. Part of my therapy was going back out to the airfield to learn stuff that I once knew. It was only after I was told what an item was that it rang a bell and would come back to me.

I'd say, "Oh yeah, that's what that is, now tell me again what it does." Once they'd do that I'd say, "Oh yeah that's right, I remember now!"

After a little more than 2 months the doctor gave me a quick "test." He told me to remember three things: the number 7, ice cream, and blue sky. After he talked to me for what seemed like an hour, he asked what the three items were. Once I told him, he said I was ready to go home.

Even after being released from the hospital, the list of things I couldn't do on my profile made me feel like there was little I could do! No driving for a year, no climbing on top of aircraft, no going inside an aircraft unless the ramp was down and I could walk up it. I couldn't stand for more than 10 minutes, walk more than a mile, run, do physical training, and — for fear of blackouts — go anywhere alone. My flying and crewing days were over for the next couple of years.

It took years of hard work before I got back to normal. Well, about as normal as I will ever be. I still have some minor problems with my memory. In spite of all this, life for me is good. I am living a life that would have ended if I hadn't been wearing my helmet the night that girl turned in front of me.

You hear people argue that wearing a helmet gets in the way of their "personal freedom" or keeps them from hearing or seeing dangers around them. Well, I can tell you from experience that helmets work because I'M STILL HERE.
How many newspaper articles or news stories have we all seen about non-intended firearm-related deaths or injuries? As I reflected on these, I realized all of them could have been prevented if only safety rules and common sense had been used. For Air Force personnel, safety guidelines can be found in Air Force Instruction 31-207, Arming and Use of Force, and Air Force Manual 31-229, USAF Weapons Handling Manual. Following are a few tips to help with the common sense that’s needed.

First and foremost, treat all weapons as if they are loaded...at all times! Everyone should always assume every firearm is loaded, whether stored in the armory or being used in a training environment, at work, or at home. You must pay attention to what you are doing when handling a gun. There are a lot of elements involved in always treating a weapon as if it were loaded.

For example, always keep a weapon pointed in a safe direction. If you do it all the time, it becomes a habit and will become the only way you know to handle a weapon. I have often heard people say we should only point our weapons at things we intend to shoot, but what happens if you are in a classroom training environment? While no one intends to shoot the walls or ceiling, we usually point our guns at these “targets” instead of other people in the classroom. We must look at each situation and point our weapons at whatever will cause the least amount of damage. It is much easier to explain a hole in a clear barrel than in another person — although neither is acceptable!

Get to know a weapon before you ever use it! Just because you might be an expert on one weapon does not mean you are an expert on all weapons. Learn the characteristics, capabilities, limitations, and safety features of each weapon you handle. Each weapon has different operational factors. A BB gun can cause serious injury if not handled properly!

If your weapon is not actually loaded for duty or hunting, then you should constantly “clear” it. Clearing means nothing more than
checking the safety and ensuring no ammunition is present. I personally believe failure to do this is one of the biggest causes of incidents. Think about it, if you know your firearm is not loaded, and you keep it pointed in a safe direction, how can it be

get to know a weapon before you ever use it

used to injure others? But you hear it all the time, “I thought it was unloaded.” Bottom line: unloaded weapons cannot be fired!!

Never place your sights on anything or your finger on the trigger unless you are absolutely positive you are going to shoot. It is way too easy to do either of these and then get startled. Just don’t put yourself in that predicament.

Be aware of what others around you are doing! While you could be doing everything exactly as you are supposed to, all it takes is another person doing something wrong, and you could pay the ultimate price. If people around you are loading weapons for duty, don’t turn your back on them. Be vigilant and immediately correct anyone who is not following sound safety practices. If you don’t say anything, you are contributing to the problem.

A combination of not knowing how to properly use the equipment, not properly caring for the equipment, and not constantly paying attention while handling the equipment can have disastrous results. For example, an M-16 rifle was destroyed when an individual fired a round with a cleaning rod in the barrel; a rifle exploded when it was fired after an individual placed the muzzle into some rocks and blocked the barrel (sand and water can have the same effect); and live rounds were “accidentally” mixed with blanks during training. Each and every one of these incidents could have been prevented.

It is everyone’s responsibility to ensure sound weapons safety procedures are followed. I firmly believe you can avoid all firearm incidents by following safety procedures, using common sense, and by paying attention to everything around you.
BRING IT ON, BIG GUY. I'M READY FOR ANYTHING YOU GOT.

THEY JUS' DON'T MAKE NETS LIKE THEY USED TO.

GUESS NOT.
### Mishap Statistics Scoreboard

#### FY04 Aircraft
**As of February 29, 2004**

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<th>Fatal</th>
<th>Aircraft Damaged/Destroyed</th>
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<tr>
<td>9 AF</td>
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<tr>
<td>12 AF</td>
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</tr>
<tr>
<td>AWFC</td>
<td></td>
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<tr>
<td>ANG (ACC-gained)</td>
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<tr>
<td>AFRC (ACC-gained)</td>
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#### FY04 Ground
**As of February 29, 2004**

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<th>Class B</th>
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#### FY04 Weapons
**As of February 29, 2004**

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<td>0</td>
</tr>
<tr>
<td>AWFC</td>
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<td>1</td>
</tr>
</tbody>
</table>

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### Aircraft Notes

There were two Class As in February. An E-4 had an engine malfunction while airborne and a B-1 departed the runway on landing roll during inclement weather. Fortunately, we had no injuries and the airplanes are repairable. Stay engaged! Demand disciplined aviating and responsible decision making. Know and follow the instructions. If there is a technique passed by Word-Of-Mouth (WOM), write it down and get it incorporated into the guidance. WOMs that never get written down may evolve into things they were never meant to accomplish. I've even seen a few become procedurally incorrect (read: illegal). Check yourself before you wreck yourself. Fly Safe!

### Ground Notes

Statistics show that springtime brings an increase in the number of mishaps involving outdoor activities and vacation travel. As we enjoy this time of year, we must remember safety and consider the risks involved in each and every task we undertake. During the month of February, ACC experienced three Class A fatal mishaps — three more than January. We are losing far too many of our precious airmen to senseless mishaps. We can and must do better.

### Weapons Notes

It has been a quiet month and quarter so far, everyone knock on wood! There were no reportable weapons mishaps in the month of February. So far there have been five weapons mishaps since FY04 started. Keep integrating ORM principles throughout your daily activities and follow tech data. Zero reportable mishaps can be achieved.

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**Legend**

- Class A - Permanent Total Disability; Property Damage $1,000,000 or more
- Class B - Permanent Partial Disability; Property Damage between $200,000 and $1,000,000
- Class C - Lost Workday; Property Damage between $20,000 and $200,000
- * Non-rate Producing

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**Symbols for Mishap Aircraft**

- A-10
- B-1
- F-16
- B-2
- U-2
- E-4
- RQ-1
- QF-4
- HH-60
- F-15
- EQ-4
- T-38

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**April 2004 The Combat Edge 31**
From tower operations at home station or deployed, to directing air-to-air intercepts and close air support operations, command and control is one of ACC's most heavily tasked mission areas. This month's magazine is dedicated to all the ACC personnel supporting the command and control mission for the Air Force, Joint Services, Allies and Coalition partners around the world. While "Pushing Tin" both in the air and on the ground, ACC command and control systems and the personnel who support them are 24/7, keeping a watchful eye on the skies.