



The Combat EDGE

June 2002

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The Combat EDGE

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Front Cover photo by MSgt. Thomas J. Meneguín



SAFETY IS COMBAT READINESS

As we enter the 101 Critical Days of Summer, I am alarmed at the number of ACC members we have lost this year. Mishaps are occurring at an unacceptably high rate. So far this year we have doubled our FY01 Class A ground mishap rate. Ground Class B mishaps are 400 percent higher. The loss of a single ACC member impacts our combat readiness.

To stop this trend, I ask all of you, from commanders down the line to airmen, to focus on Personal Risk Management (PRM) skills and habits. We know what behaviors lead to mishaps: excessive speed, alcohol, failure to use seat belts, and fatigue. Commanders and supervisors need to identify and eliminate at-risk behaviors. Take an active role in the lives of our personnel. Let our troops know they are our single most important resource and safety is integral in everything we do, on and off duty.

We all need to be more resourceful in helping people weigh the risks against the potential consequences of their actions. I am confident, with proper supervision, mentoring, and command emphasis, mishaps will decrease.

I need you in the war, not in memorial services. If you can't get out of town for a deployment, you are of no value as an airman. ACC airmen are our combat capability!

Have a fun and safe summer!

General Hal M. Hornburg
ACC Commander





Photos by TSgt Jack Braden

Hot Pit

Refueling at Night

By Lt. Col. Peter C. Hunt, Pope AFB, N.C.

Operational Risk Management gave us the tools so we could prove we were able to safely hot pit at night...

Can't do that...not allowed...against the regulations...*safety reasons*. Ever hear a supervisor or co-worker utter such phrases when you suggest a better way to accomplish a task? Some people view safety procedures as obstacles to success. As in all human endeavors, people make mistakes, which in our business can result in serious injury or loss of life. To prevent recurrence, institutions — including the military — tend to develop stricter rules and prohibitions to protect less experienced personnel from making the mistakes of their predecessors. There is truth in the saying that technical order notes, warnings, and cautions are “written in blood.” However, Operational Risk Management (ORM) permits us to take a fresh look at the hazards and risk control measures that we encounter in any process. Often, smart risk mitigation allows us to perform tasks that would be otherwise prohibited.

This article describes an ORM effort that removed a local restriction against hot pit aircraft refueling at night. The 23rd Fighter Group executes a disciplined and aggressive flying hour program for its A-10 attack aircraft, while constantly seeking ways to optimize flight scheduling. Over the past decade, the A-10 community has integrated night vision devices with updated night attack tactics, improving the effectiveness of a weapon system designed primarily for day, visual meteorological conditions. As a result, the proportion of night A-10 sorties has increased, adding complexity in managing personnel, shift schedules, and operational support.

Hot pit refueling allows pilots to return from a sortie, refuel while

the engines are running, and take off for a second sortie with minimal ground time. Assuming that an aircraft experiences no major malfunctions in flight, maintenance personnel prepare the aircraft for the second sortie with fewer required throughflight inspections.

Hot pit refueling reduces the time from landing to takeoff from about 2.5 hours to less than 1 hour. During sortie surges when aircraft fly four times per day, two hot pit sessions reduce the flying hour window by over 3 hours. In the winter, increased periods of darkness offer the opportunity for aircraft turns at night while gunnery ranges and operating airspace are still open for business. A local operating instruction prohibited hot pit refueling at night, which handcuffed schedulers' attempts to match aircraft turn schemes with tactical training airspace. Then one day, a frustrated squadron operations officer asked the safety office, “Why don't we hot pit at night?”

Conducting a risk assessment for night hot pit operations required a formal fuel site recertification. The recertification plan involved the participation of many key organizations: maintenance, operations, fire department, Petroleum Oil Lubricants

(POL), airfield management, aerospace ground equipment, and — of course — safety.

The ORM team identified numerous hazards, including the potential for aircraft collision with ground equipment and the potential for ground equipment to interfere with emergency response. Maintenance personnel wanted to ensure that lighting was adequate to ensure safe refueling. Operations supervisors insisted that the lighting be adequate for safe taxi operations, but not such that it would blind taxiing pi-





lots. Fire department and Aerospace Ground Equipment (AGE) personnel cautioned about equipment placement in unlighted areas. After assessing these and other risks, the ORM team analyzed the risks and developed a wide range of control measures.

To determine if the recommended control measures were adequate, commanders tested the plan using a building block approach. Quality assurance ensured that the diagrams and processes conformed with Air Force and major command guidance.

Dry runs were conducted, with and without A-10 taxi operations, to ensure distances, markings, and lighting were adequate.

Portable light-alls were stationed adjacent to the refueling operations at a precise angle that provided light for fuels personnel without blinding the pilots. A memorandum of agreement between AGE personnel and hot pit supervision contained specific information about AGE delivery and procedures when night hot pit operations were planned.

The addition of equipment in the vicinity of an active taxiway required coordination with airfield management, since large aircraft cannot taxi past the hot pit operations with adequate wingtip clearance. Ground personnel required additional training to ensure familiarity with the proposed procedure. Finally, the ORM team decided to increase the supervisory requirements for night hot pit operations, due to the additional flightline activity and decreased visibility.

Just a few weeks after making control decisions like these, the Flying Tigers began routine night hot pit refueling operations. All members of the refueling team implemented the risk mitigation measures smoothly, and hundreds of missions have conducted night hot pit operations without incident. We continue to

supervise, review, and refine the process to ensure that this valuable operational enhancement is balanced with sensible risk management. ►

Editor's Note: This article is a superb reminder that ORM is not just another way to further restrict operations. Instead, it often provides the mechanism for "expanding the bounds of what can be safely achieved" by offering commanders and supervisors an analytical look at risks. And the risks are sometimes actually lower than intuition would suggest. This particular ORM study resulted in a change to local guidance (23rd Fighter Group's Supplement to Air Combat Command's Instruction 21-101), which in turn allowed the new procedures.



335th Fighter Squadron Makes History

By MSgt. Jose Rojo, Seymour Johnson AFB, N.C.

A 4th Fighter Wing squadron will soon be presented with a flying safety award, a first for the Air Force. The 335th Fighter Squadron (FS) will receive, at a date to be determined, the 100,000 Accident-Free Flight Hours Award from the Boeing Company. The award recognizes the fact that the 335 FS has not had a Class A mishap during those 100,000 flight hours. Class

A mishaps involve a loss of life or more than one million dollars of damage to an aircraft.

According to Gerald Miller, a field service engineer for Boeing, the 335 FS is the first F-15E squadron to reach this milestone. However, Miller added that the journey, which began in 1987, also included 16,120.1 hours of F-4E time. The 335 FS transitioned from the F-4E to the F-15E in 1990.

"In the F-15 world, only three squadrons have now earned this award," said Miller. "However, the 335 FS is the first F-15E squadron to receive it." They are also the only known fighter squadron in the Air Force to have earned two of these awards. "The first time the 335 FS earned this award was in 1984 when the squadron was operating F-4Es," said Miller, who attributed this great

Photo by MSgt. Dave Nolan

Y



achievement to the aircraft maintainers.

Lt. Col. Wylie Lovelady, 335 FS acting commander, agrees with Miller. Lovelady said it was the "outstanding sustained teamwork exhibited by our maintainers and operators" that allowed his squadron to reach this feat. "The Chiefs have a great history and we couldn't have

reached this milestone without the great determination of our people," said Lovelady. He added that he has a lot of pride

to-day basis and our people continually deliver a safely executed mission," said Lovelady. The Chiefs reached

100,000 accident-free flight hours without a Class A mishap

in the people of the 335 FS. "We've come to expect a high level of achievement on a day-

their 100,000-hour milestone Feb. 13, 2002, during a flight in Southeast Asia. ▶

Safety and red Horse go together

*Safety
and*

Red


By MSgt. Anne Higby, Nellis AFB, Nev.



Photo by SMSgt. Eddie McAnnally

HORSE

Go Together



When the men and women of the 820th RED HORSE (Rapid Engineer Deployable Heavy Operations Squadron) set their eyes on the vast expanse of desert, they took a deep breath knowing that they wouldn't be going home until nearly everything they saw was turned into pavement. The events of Sept. 11, 2001, put the 820 RHS from Nellis Air Force Base, Nev., on the hot seat for what they do best — rapid heavy construction. This time it would be in support of Operation ENDURING FREEDOM.

The Air Force's Central Command quickly listed their requirements and 820 RHS deployed to build 1 million square feet of pavement (i.e., over 20 football fields) for an aircraft-parking ramp and taxiways. In addition to this monumental task, RED HORSE was tasked to build six large aircraft hangars, a fire station, office space, a warehouse, a vehicle search area, road network, and all the utilities necessary to support these facilities. And, by the way, all of this was needed within 179 days! These necessities made this project the biggest in the history of RED HORSE to include the tremendous efforts of Vietnam...

Once in the area of responsibility, engineers, their assistants, and craftsman from each trade began their assessments, making safety the number one priority in every aspect of the deployment. Special emphasis was placed on operations in extreme heat and dust, low visibility for both day and night operations, as well as fatigue. A safety Noncommissioned Officer (NCO) was assigned to each of the 14 projects. Each safety NCO worked with the individual project officer in charge and NCO in charge, developing a plan specifically designed for the unique processes and tasks of each project.

Groundbreaking began in the midst of a Southwest Asia winter; midday temperatures were

Placing asphalt and concrete, constructing forms, and erecting facilities in extreme desert conditions is difficult work. To do it effectively, it is vital that all safety issues are as well planned and executed as the engineering design itself.

Once the temperatures heated up, many of the 24-hour operations were shortened so much of the work could be done at night to escape the unbearable heat. Work-rest cycles proved critical for any daytime operation. Supervisors, lead craftsmen, and project safety NCOs constantly surveyed the crew for individuals that required rest, water, and shade.

Everyone faced blowing sand and dust that caused low visibil-

same time, supervisors kept abreast of where their crewmembers were located on the ramp to increase assurances that everyone would be seen. Additionally, vehicle and equipment movements were planned and briefed before operations began each shift. Safety briefs, in conjunction with these daily work briefs, kept these efforts in the forefront of each worker's mind so they were not simply a formality. As the project progressed, a realistic pace evolved.

The sheer size of this project was daunting, but the squadron was extremely motivated. Combat heavy construction is a hazardous business, and safety is paramount to its success. It doesn't just happen, and it isn't



Photo by SrA. Danielle Upton



Photo by CMSgt. Tony Salvo

already in the 80-degree range. As spring and summer approached, the thermometer headed to its peak in the 100- and 110-degree range with 90 percent humidity. These conditions required getting the crews in the habit of continual hydration, wearing adequate ultraviolet protection for eyes and exposed skin, and using work-rest cycles when risk of heat stress increased.

ity and continual irritation to eyes and lungs. Nighttime operations also had occasional fog and relied on temporary lighting for visibility. Equipment operators would purposely slow down operations so they could keep an eye out for the individuals directing material to drop locations. All workers on the ramp stayed visible by using reflector belts and vests. At the

common sense. It requires effective and well-timed training as well as leadership at all levels driving the procedures and habits that are employed. RED HORSE is a vital Air Force and Department of Defense asset — ready to go anywhere, anytime to build the facilities and infrastructure needed for the mission. Wherever we go, safety goes with us! ►



By MSgt. Brian R. Kolczynski, Nellis AFB, Nev.

Photo by SSgt. Shane Cuomo

As a member of the elite group of Weapons Safety Managers (WSMs), one of our largest, most difficult, and important jobs is to produce base Explosives Site Plans (ESPs). An ESP is a document that contains the necessary information to properly site a Potential Explosives Site (PES) and/or an Exposed Site (ES). According to Air Force Manual 91-201, *Explosives Safety Standards*, once approved, the ESP becomes the source document for explosives operations and storage, including control measures.

Developing an ESP takes a lot of interaction and coordination with base supporting agencies as well as experience in the weapons safety area. Researching different areas, such as water and gas utilities, electrical ground-work, and numerous blueprints and facility drawings takes an unprecedented amount of time. In addition, gathering all the required information to support an ESP requires good working relationships between the various units involved.

There is some good news for WSMs who are on the hook for creating an ESP. The Air Force, in conjunction with Integrated Systems Analysts, Inc., has developed a state-of-the-art software

program called *Assessment System for Hazard Surveys II* (ASHS II). This program consists of a collection of mapping programs and an application database that automate much of the explosives site planning process. Given the proper geographical information, ASHS II can assist the WSM in computing distances and exposures between all designated PESs and ESs. In addition, it automatically calculates required explosives clear zones as well as identifies problem areas. Now a fully trained WSM will be able to produce or update an existing ESP at a moment's notice.

This sounds great, right? A computer program that eliminates having to manually pencil in explosives clear zone arcs on base maps provided by the Civil Engineers (CE). No longer will a WSM have to use k-factor formulas to calculate explosives clear zones. Well, not so fast. There are some tasks that require time and patience before ASHS II can be implemented. The most difficult and tedious part of the transition is populating the database with current and accurate data for all the facilities. This is also the most important part of the implementation process. The information

used to update the database must be precise and correct in order to produce an accurate ESP.

So what does all of this have to do with you if you are not a WSM? Well, everything — if you are working in or near an explosives clear zone! The next time you're preparing an Air Force Form 332, *Base Civil Engineer Work Request*, for building modifications that will in any way change the exterior footprint of the building — even if it is a self-help project — STOP! Now go back and contact your base's Weapons Safety office for guidance. They can assess whether the modifications will require a new ESP submittal.

ESPs are an essential part of the base construction and modification process and are vital to the safety of the entire base populace. It is imperative that all data be researched and double-checked to ensure an ESP is reliable and the established explosives clear zones are correct. More importantly — and sometimes less realized — lives are at stake. The extra time base WSMs spend to ensure all data is crunched and 100 percent accurate is well worth the effort in lives saved ... EXPLOSIVES SAFETY IS ESSENTIAL. ▶



I'm CMSgt. Robert Ryan, the 33rd Logistics Support Squadron Chief of Operations at Eglin AFB, Fla. Last year, I approached the 2001 "101 Critical Days of Summer" with every intention of having a safe and happy summer with my family. Those plans turned sour, just one day after the wing's summer-safety-kick-off campaign.

I, my wife Brenda, my 15-year-old daughter Colleen, and two of her friends set out on our boat for the first time that year. We'd planned to test out the motor which I just had overhauled and if all went well to do some tubing, kneeboarding, and skiing. Since this was the first season outing, we wanted to go somewhere close and familiar, so I launched the boat on the base.

We spent some time testing out the motor, checking idle

speed, acceleration, different speeds and trim and then stopped for lunch. After lunch we ventured out across the bay to Crab Island and then back. Satisfied everything was in good order we decided to have some fun and broke out the toys. After several tubing runs the kids wanted to take a few turns on the kneeboard.

As I was pulling my daughter on the kneeboard, she attempted a 360 spin and fell off. I turned the boat around and returned to her. As I approached, I put the boat in reverse to slow and stop the boat, then shifted it into neutral, and then went to the side of the boat to ask her if she wanted to go again or let someone else ride.

Colleen said she wanted to get back in the boat. This is where it gets ugly. I hadn't shut the motor off when I went over to talk to her. I walked to the

back of the boat to help her get in. That's when my complacency took its toll. Not only had I not shut off the motor, the prop had not disengaged. You probably now know where this is going.

Colleen came around the backside of the boat to get in and one of the straps on her life jacket got caught in the boat prop. My daughter was pulled under the water, and before I could shut off the motor, I heard the prop hit her twice. At this point, I truly thought I was going to recover a lifeless body.

I killed the engine and jumped in the water. The first struggle was to at least get her above the water so she could breathe. Then to get her life jacket and suit unhooked off the prop. Once that was done and I got her back in the boat, I saw the damage the prop had done. Her leg was severely cut and her



Prop Dangers

By SSgt. Robert Zoellner and CMSgt. Robert Ryan, Eglin AFB, Fla.

Photos by Jaime Bishop

hip had a good-size chunk of flesh hanging by the skin. The injuries were just as bad as anything I'd ever seen in the self-aid buddy care classes we all take.

I used some towels to cover the wounds and had her two friends apply pressure. I was so shook up I tried to use my cell phone to

My daughter received more than 70 stitches in her leg and 13 on her hip. Both injuries left noticeable physical scars, just what every 15-year-old high school girl needs.

For my complacency, I received a \$73.00 fine and a mental scar I will have for the rest of my life. I'm now included in the boating accident statistics for 2001. At the hospital, I watched the officer fill out and mark the report he was making.

tor saying and then repeating: Never enter or exit the boat with the motor running. If I had only taken 10 more seconds and shut the motor off, this would have never happened.

It's easy to become complacent on things we do every day. As a chief, I can't count the number of safety briefings I've given. This was no different than what we tell our people out on the flightline every day at roll call. Use technical orders, obey the warnings, cau-

My daughter was pulled under the water, and before I could shut off the motor, I heard the prop hit her twice.

call for help but no luck. So I started the boat and went back to the dock as fast as we could. There was a wild life officer there that called for an ambulance. And fortunately for my daughter, there was a doctor at the dock taking a boating safety class who immediately took charge and administered first aid.

Preprinted on the form, there was a check box for the accident category for exactly what happened. As a matter of fact, there were categories for everything else the instructors covered in the boating safety course I had taken the year before. All I could think of was this was my fault and I heard that instruc-

tions, and notes; and follow established safety practices. I would give anything to have done that this day. The one time you're not paying attention, not thinking about what you're doing, is when it is going to hit. I'm reminded of that every time I see my daughter. Worst of all someone else paid for my mistake!! ►

The Raptor



F-22



Primary Function: Fighter, air-superiority • Builder: Lockheed, Boeing • Power Plant: Two Pratt & Whitney F119-PW-100 turbofan engines with afterburners and two-dimensional thrust vectoring nozzles • Thrust (each engine): 35,000-pound class • Length: 62 feet, 1 inch • Height: 16 feet, 5 inches • Wingspan: 44 feet, 6 inches • Speed: Mach 2 class (approximately 1,500 miles per hour) • Ceiling: Above 50,000 feet • Empty Weight: 40,000-pound class • Range: More than 2,000 miles • Armament: One M61A2 20-millimeter multibarrel cannon; internal stations can carry AIM-9 infrared (heat seeking) air-to-air missiles and AIM-120 radar-guided air-to-air missiles or 1,000-pound Joint Direct Attack Munitions • Crew: F-22A: one. F-22B: two • Initial Operational Capability (IOC): 2003 • Projected Inventory: Active: More than 300.

Pilot Safety Award of Distinction

Capt Brian Dickinson made a late evening takeoff for an all-night combat reconnaissance mission in support of Operation ENDURING FREEDOM. He was scheduled to spend approximately 10 hours, in a full pressure suit, some 70,000 feet above Afghanistan. Forty-five minutes into the flight, however, the "Airframe Mounted Accessory Drive (AMAD) Oil Temp High" light illuminated. The AMAD powers the main AC and DC generators as well as the hydraulic pump. If the AMAD fails, the aircraft is left with no secondary flight controls and only battery power to the emergency AC and DC busses.

Following the emergency checklist, Captain Dickinson turned the main AC generator off, in an attempt to cool the AMAD. The hydraulically-driven standby AC generator, which should have picked up the load and continued to provide essential AC power, failed to activate. The main Attitude Director Indicator (ADI), the Horizontal Situation Indicator (HSI) and the autopilot all lost power.

Captain Dickinson had to hand-fly the aircraft in the U-2's narrow airspeed envelope between stall buffet and

Mach tuck. To make matters worse, the pitch trim also failed.

With no discernible horizon, only standby flight instruments for attitude control, and initially, using the wind-up clock and the whiskey compass to navigate, Captain Dickinson turned his aircraft around for the return to base. Lacking radio contact with any ground or airborne control agencies, and with his primary navigation system inoperative, Captain Dickinson found his way back to base with the aide of his hand-held Global Positioning System stored in the leg pocket of every U-2 pilot's pressure suit.

Approaching the landing field, he established radio contact with his "Mobile Officer" (another U-2 pilot who follows the aircraft in a chase car during takeoff and landing) and reviewed additional checklist items to ensure that nothing had been overlooked. He made a safe night landing. Captain Dickinson exhibited tremendous skill and courage when faced with an extremely challenging in-flight emergency, on an operational combat mission.



Capt Brian C. Dickinson
99th Reconnaissance Squadron
9th Reconnaissance Wing
Beale AFB, Calif.

Ground Safety Award of Distinction

As the squadron ground safety representative, SSgt Thomas Sampson was responsible for his squadron receiving an *Excellent* rating during the annual ground inspection for 2001.

The 347th Rescue Wing Commander, as well as the Chief of Safety, recognized Sampson for his outstanding achievement during his support of a Class B ground safety investigation at Moody AFB, from Jan. 3-23, 2002. His efforts, from tracking down documentation on the project to working liaison between the Board President and the 347 RQW Safety Officer, were invaluable.

Additionally, Sergeant Sampson implemented a unique unit safety representative training program that was highly effective in educating all personnel in mishap prevention, hazard identification, and correction of deficiencies. He downloads on-line consensus safety standards for the Consumer Product Safety Council, keeps abreast of OSHA compliance materials, and uses e-mail to disseminate pertinent information throughout his unit.

Sergeant Sampson also coordinates and manages Supervisor Safety Training (SST) courses for all squadron per-

sonnel. His meticulous records resulted in zero "no shows" for an entire year. His squadron has the highest percentage of supervisors in his wing who are SST certified.

Sergeant Sampson also identified an engineering design safety hazard that could have possibly caused individual permanent disability. Personnel in heating, ventilation, and air conditioning were forced to perform preventive maintenance, inspections, and repairs on air conditioning fan/coil units while perched perilously above the facility's 10-foot-high suspended ceilings. The 347 RQW Safety Office validated the hazard and Sergeant Sampson helped establish interim control measures until a safer permanent modification could be implemented.

His in-depth quarterly seat belt and vehicle inspection plan is phenomenal; his unit continually documents 100 percent usage. Sergeant Sampson is the epitome of a true Air Force safety professional.



SSgt Thomas E. Sampson
347th Civil Engineer Squadron
347th Rescue Wing
Moody AFB, Ga.



Aircrew Safety Award of Distinction

Lt Col David T. Greer, Lt Col Keith R. Allford
Capt Lance A. Brockman, 1Lt Thomas J. Podwika
TSgt Jerry T. Bobo
965th Airborne Air Control Squadron
552nd Air Control Wing
Tinker AFB, Okla.

An engine start, taxi, and takeoff into a 400-foot ceiling with about 1 mile visibility of an E-3A from the 965th Airborne Air Control Squadron were all uneventful. However, approximately 45 minutes after takeoff, the #1 auxiliary hydraulic pump failed resulting in the loss of inboard spoilers/speedbrakes. The speedbrake loss impacted crosswind-landing capability as well as increased stopping distance.

The crew returned to home station and entered a holding pattern to assess their options and compute landing data. Tinker weather was alternating between 200-foot ceilings and 3/8-mile visibility, to 300' ceilings and 5/8-mile visibility with a wet runway.

After dumping fuel to landing weight and preparing for the approach, the Circuit Breaker (CB) for the brake pressure gauge and the auxiliary hydraulic system pressure gauge popped. Attempts to reset the CBs in accordance with Technical Orders (T.O.s) were unsuccessful. The situation was further compounded by failure of the #3 exhaust gas temperature tape.

While on final to Runway 35, approximately 2 miles out, the inboard anti-skid CB popped. One reset was attempted. The CB popped again resulting in the loss of the brake inboard anti-skid system. Due to a wet runway, aircraft landing distance exceeded the runway available. The crew elected to divert.

En route to Amarillo, Texas, about 12 miles out on the approach, the hydraulic quantity gauge dropped about 1.5 gallons, and on short final approximately 3 miles out, the #2 auxiliary pump pressure light illuminated. This pump powers the hydraulic rudder. Subsequently, the rudder boost light started flashing. Compensating for the potential loss of this critical flight control, the crew was able to land safely. The crew's adherence to T.O. procedures and sound judgment resulted in the safe recovery of a multi-million dollar asset.

Crew Chief Safety Award of Distinction

A1C Clayton Jones and Jason Whitman were assigned to launch an F-117A in support of a day surface attack mission. Airman Jones was assigned to the "A-man" position (Assistant Dedicated Crew Chief) and Airman Whitman was assigned as "B-man" (launch assistant).

Following an uneventful start of the first engine, Airman Jones cleared the pilot to start the second engine. The second engine immediately began rotating and the pilot acknowledged "light-off" as the start sequence progressed. Seconds later, at approximately 400 degrees Fahrenheit engine gas temperature (EGT), a sustained 15-foot flame shot from the engine exhaust onto the left rudder of the aircraft. Airman Jones told the pilot that his aircraft was on fire and instructed him to shut down. The pilot immediately performed an emergency shutdown.

Airman Whitman manned the 150-pound Halon fire extinguisher and stood ready to extinguish the flame. As the engines were shut down Airman Jones assisted the pilot in his emergency ground egress of the F-117. Both

Airmen Whitman and Jones alerted flightline supervision of the incident and monitored the situation until the fire department arrived.

Although the aircraft sustained only minor damage to the left rudder radar absorbent material coating, the ground crew's quick actions averted a potential catastrophic event that could have destroyed an F-117 and/or endangered the pilot.

Post mishap analysis revealed standing fuel was discovered in the tailpipe of the engine, which was the result of a faulty fuel control unit. A1C Jones and Whitman prevented the potential loss of an irreplaceable asset!



A1C Clayton L. Jones and A1C Jason A. Whitman
8th Fighter Squadron, 49th Fighter Wing, Holloman AFB, N.M.

Flightline Safety Award of Distinction

Maj Scott D. Johnston
8th Fighter Squadron
49th Fighter Wing
Holloman AFB, N.M.

While awaiting takeoff clearance in the end of runway (EOR) area, Major Scott "Sparky" Johnston observed a German Air Force (GAF) Tornado crew frantically attempting to gain the attention of a Tornado crew taxiing toward the active runway preparing for takeoff. Major Johnston immediately noticed smoke and fire emanating from

the aft section of the Tornado. He immediately contacted the Tornado crew on Tower Control frequency and directed their attention to their EOR crew and described the condition of their aircraft. As the GAF Tornado crew initiated an immediate emergency ground egress, Major Johnston declared an emergency with Tower and Ground controllers. Additionally, he directed all remaining aircraft in EOR to reposition on a taxiway away from the burning aircraft. Major Johnston continued to coordinate emergency response efforts until the arrival of crash and fire response personnel. Fire personnel immediately extinguished the fire in the aft engine section of the Tornado, minimizing damage to the aircraft. Major Johnston's actions definitely averted a potentially catastrophic mishap.

Congratulations to the Winners of the 2001 National Safety Council Awards

AWARD OF HONOR. *This is the highest National Safety Council Award recognizing wings and groups with 1,000 personnel (civilian and military). Units must be organizationally and operationally distinct and geographically remote from the parent organization.*

4th Fighter Wing, Seymour Johnson, AFB N.C.
20th Fighter Wing, Shaw AFB, S.C.
27th Fighter Wing, Cannon AFB, N.M.
28th Bomb Wing, Ellsworth AFB, S.D.
33rd Fighter Wing, Eglin AFB, Fla.
53rd Wing, Eglin AFB, Fla.
70th Intelligence Wing, Fort Meade, Md.
93rd Air Control Wing, Robins AFB, Ga.
347th Rescue Wing, Moody AFB, Ga.
509th Bomb Wing, Whiteman AFB, Mo.
552nd Air Control Wing, Tinker AFB, Okla.
Headquarters Air Combat Command, Langley AFB, Va.
Headquarters, Twelfth Air Force, Davis-Monthan AFB, Ariz.

AWARD OF COMMENDATION. *This award recognizes organizations with 500 to 999 personnel (civilian and military). Units must be organizationally and operationally distinct and geographically remote from the parent organization.*

5th Combat Communications Group, Robins AFB, Ga.
85th Group, NAS Keflavik, IC
Headquarters, Eighth Air Force, Barksdale AFB, La.

PRESIDENT'S AWARD LETTER. *This award recognizes organizations with 50 to 499 personnel (civilian and military). Units must be organizationally, operationally, and geographically separate from the parent organization.*

84th Radar Evaluation Squadron, Hill AFB, Utah

ACC Safety is Proud of All Our Award Nominees

**Maj David Krumm**

F-15 Operational Test and Eval Instructor Pilot
85th Test Squadron
53rd Wing
Eglin AFB, Fla.

Capt Christopher J. Nemeth

F-16 Pilot
389th Fighter Squadron
366th Wing
Mt. Home AFB, Idaho

Lt Col Reid D. Reasor

F-15C Asst Ops Officer
83rd Fighter Weapons Squadron
Tyndall AFB, Fla.

Capt Keith A. Derbenwick,

Chief Stan Eval/F-16 Instructor Pilot
4th Fighter Squadron
388th Fighter Wing
Hill AFB, Utah

Maj Eric Reinhard, B-1 FTU Instructor Pilot

Capt Craig Prichard, B-1 Student Pilot
Maj Kerry Evans, B-1 FTU Instructor WSO
Capt Christian Senn, B-1 Student WSO
28th Bomb Squadron, 7th Bomb Wing
Dyess AFB, Texas

Lt Col William E. Roberts III, Unit Commander

TSgt Edward Rendon, ATC Watch Supervisor
SrA Joshua Kurtenbach, ATC
A1C Angelena Morales, ATC
Amn Kesia Stafford, ATC Apprentice
7th Operational Support Squadron Control Tower
7th Bomb Wing
Dyess AFB, Texas

TSgt Ethan A. Jones

Specialist Section Expeditor
94th Fighter Squadron
1st Fighter Wing
Langley AFB, Va.

TSgt Michael J. Lee

Electrical Environmental Systems Craftsman
71st Fighter Squadron
1st Fighter Wing
Langley AFB, Va.

MSgt Chris A. Ader

Production Superintendent
33rd Maintenance Squadron
33rd Fighter Wing
Eglin AFB, Fla.

2Lt Joshua Pope, Sortie Support Flight Commander

SSgt Stacy R. Evans, B-1 Dedicated Crew Chief
28th Bomb Squadron
7th Bomb Wing
Dyess AFB, Texas

TSgts Kurt J. Hauschka and Ronald G. Schmick

QA Electro-Environmental Inspectors
509th Logistics Group
509th Bomb Wing
Whiteman AFB, Mo.

A1C Matthew W. Summers

F110 JEIM Journeyman
20th Component Repair Squadron
20th Fighter Wing
Shaw AFB, S.C.

TSgts Donna E. Elicker and Russell R. White

E-4B Alert Crew Chiefs
1st Airborne Command and Control Squadron
55th Wing
Offutt AFB, Neb.





The Designated Thinker

By Lt. Col. Brian D. Yoltz, Shaw AFB, S.C.

Much has been written concerning the application of Operational Risk Management (ORM) principles to minimize the risks to our people and equipment. Some directives and examples involve preparing specific forms and charts and gathering data before proceeding with a task. Air Combat Command guidance tells us to *ACT*; to *Assess* the environment for risk, *Consider* options to limit the risk, and finally *Take* appropriate action.

For the majority of situations we face day-to-day, a formal or full-blown analysis is not required before we can get started on a project. What is needed is for someone to step back and ask some simple questions concerning the task or situation at hand, the risks associated with accomplishing the task, and how to best proceed to accomplish the mission with the minimum acceptable risk.

Since we don't have the luxury of assigning an ORM specialist to each job, event, or project, it is the job of each of us to be responsible for our own actions and the actions of those around us — essentially we have all been deputized as risk management specialists. That means each of us needs to step up and be *designated thinkers* ...





There are no rank or grade requirements associated with being a ***designated thinker***. What is important is that you don't wait around for someone else to do the thinking for you. Very simply, we each need to step back and take a common sense look at the physical conditions surrounding our task, the procedures we intend to follow, along with the urgency of the task and state of the crew assigned to accomplish the work.

For civil engineers, the physical aspects of the job include things like: Has the excavation site been cleared with a fully coordinated and approved digging permit? Are there overhead lines that may

come into contact with the backhoe or dump truck? What is the potential for a cave in? What type of electrical power is available? Can it safely be worked hot? Should it be worked hot at all? Does the system need to be locked out? Is this a confined space challenge? What type of piping material is at the site? What are the weather conditions? How about the weather forecast? Snow? Rain? Lightning?

Procedurally, we need to ask: Is this the safest, most effective way to go about accomplishing the task at hand? Have we considered all the potential risks in advance? Do we have the right tools for the job? Are the appropriate supplies to complete

the job on hand? Is the proper personal protective equipment available and in serviceable condition? Have we informed the fire department alarm room? What could go wrong? What will happen then? What sort of shape is the work crew in? Are they tired from being out in the heat and sun all day? Are they properly hydrated and have they eaten? How about you as the supervisor? What shape are you and your crew in? Just how important is it that we accomplish this job right now?

In the civil engineers, we thrive on adrenaline and pushing ourselves with a "do it now" motto. It's our culture and it's in our blood. At times, the mission requires us to think and act

that way; however, there are other times when the risks clearly exceed the need for immediate action. Is this one of them?

We all need to be **designated thinkers** on the job to make common sense assessments of the tasks we face. However, being a **designated thinker** doesn't stop here. It should be applied just as much in our on-duty environment as well as our off-duty environment.

Being a **designated thinker** can apply to that well deserved trip to the beach after a tough week. We should ask ourselves: How far is it? How much traffic might I be faced with? What are the conditions of the roads? How about construction on the way? How about the car or motorcycle? Is it in good repair? Do I have a spare tire, flashlight, and flares? Are they in good repair? Do my supervisor, friends, or family members know my itinerary? How about my mental state and/or the state of the folks I'm going with? Have I worked a long day and had a few cold ones to finish off the work-week? Just how important is it to go tonight instead of getting a good night's sleep and starting fresh in the morning?

Being a **designated thinker** also applies to simple tasks around the house and yard or when we're just hanging out. What happens if I have a grease fire in my kitchen? Just how bad is the corrosion on the gas grill? Should I burn that pile of leaves today? When was the last time it rained? Where is the fire extinguisher? What type is it? Is it properly charged? Can I stand on a couple of chairs to reach that burned out light or should I get a

ladder? Do I have the right tools to do the job? Are there any rocks or glass on the softball infield or in the volleyball pit? Should I take their keys and give them a ride home? Should I call for a ride for myself? Get the idea?

I urge you to apply the concept of the **designated thinker** — both on and off duty. Make it a habit to step back and take a look at what's going on around you to minimize the risks to yourself and

your team. This is how we all made buckling our seat belts a habit. Make it something we just do ...automatically. It matters greatly if you or I get injured on duty or off — a loss is a loss. We need each and every member of this Air Force family — military and civilian — to be available and ready to fix and fly jets. Being a **designated thinker** will help make certain we are all here tomorrow to do just that! ►



Lack of Attention Risked Our Lives

By Mr. Mike Ange, Rondale's Scuba Diving

With a cluttered dive deck, busy hands assembling gear, the hiss of air, and the anticipation of a night dive at a brand-new dive site, is it any wonder that divers miss details from the pre-dive briefing? Take the case of Liz and David. They were college students on spring break. Both had recently completed advanced certification, had safely logged more than 20 dives, and were about to make their second night dive.

The seas were glass, the moon nearly full, and 30 feet below lay a patch reef in clear tropical water. The dive boat tied to the mooring just before dusk, and the captain asked everyone to stop their activities for the pre-dive briefing. During his briefing, the captain illustrated the structure of the patch reef and how the boat was anchored near its center. He also explained that although there was virtually no current over the reef itself, the tidal current beyond the western end of the reef could be quite brisk. Divers were cautioned to stay on the well-defined reef structure. In the event that they surfaced away from the boat, they were given specific instructions to signal with dive lights and whistles, both of which were required equipment. The enthusiasm of the group frequently caused distractions during the briefing, forcing the captain to ask for the divers' attention repeatedly. The divers entered the water just after sunset...



Once in the water, Liz and David swam on the surface to the group leader and asked for compass bearings on the reef. The group leader noted that this information had been detailed in the briefing and again cautioned the divers not to leave the reef. He explained that they should stop if they found themselves over clean sand, then either surface or return to the reef immediately. Liz and David gave a cursory acknowledgement to his advice and began their dive.

As the dive drew to a close, the group leader notified the captain that Liz and David were missing. An immediate underwater search was initiated. The group leader and two other instructors dived back down to the reef and circumnavigated the entire structure looking for lights or other signs of the divers. They were not located.

The dive boat and another vessel operating in the area initiated a surface search. Approximately 30 minutes into the search, a light was spotted on the



and mate swam through the shallows and reached the divers. Both divers were exhausted, and Liz was in a state of terrified panic. They had to be towed against the current approximately a mile to the safety of the boat. Aside from what was later

that they had left the reef, but decided to continue following Liz anyway. Reaching 1,000 pounds per square inch (psi), they surfaced and quickly noticed that they were far from the boat and caught in a current leading through the shallow-water break between two islands. They tried to swim against the current until they were exhausted. At this point, with Liz near panic, David dumped both weight belts. Unfortunately, he also discarded both dive lights, which they had clipped to their belts. David attempted to assist Liz back to the boat until he was also exhausted and could swim no farther. They drifted at the mercy of the ocean until they were fortunately spotted with the searchlights. ►

Editor's Note: For more information visit: <http://www.scubadiving.com/training/lessons/>

... they didn't pay attention.

bottom in the shallows around a nearby island. The light was stationary, so the boat mate immediately jumped into the water, swam to the light, and found the dive light attached to an abandoned weight belt in about 10 feet of water. Searchlights were focused down current from that point, and the divers were spotted in deeper water on the far side of a shallow reef and sandbar structure. The group leader

termed emotional trauma, the divers were returned unharmed.

What went wrong? David and Liz missed most of the captain's pre-dive safety information because they didn't pay attention. Upon entering the water, they swam around the reef and back to the west end. Liz wanted to practice her navigation skills and continued following her compass course beyond the reef structure. David later said that he realized



Photo by Jaime Bishop



Scuba Lessons

- Be sure that your diving equipment can handle the dive you have planned and that the equipment is working well.
- Never dive while taking medicine unless your doctor has said it's safe.
- If you don't feel well or if you are in pain after diving, go to the nearest emergency room immediately.
- Don't fly for 12 hours after a no-decompression dive, even in a pressurized airplane.
- If caught far from the boat in a current too strong to swim against, divers should not struggle to exhaustion. Stay calm, achieve positive buoyancy and signal to the boat for pick up.
- Never dive without a buddy and be aware of local tides and currents.

Editor's Note: Did you know that scuba diving is the third leading cause of fatalities in the Air Force?

Fleagle



BRING IT ON, BIG GUY. I'M READY FOR ANYTHING YOU GOT.



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













GUESS NOT.



HARRISON
























FY02 Aircraft

As of May 1, 2002

	Fatality	Class A
8 AF		
9 AF		
12 AF		  
AWFC		    
ANG (ACC-gained)		
AFRC (ACC-gained)		

FY02 Ground

As of April 29, 2002

	Fatality	Class A	Class B	Class C
8 AF	       	7	2	65
9 AF	   	3	2	59
12 AF	      	6	0	119
DRU	   	3	0	17

FY02 Weapons

As of May 1, 2002

	Class A	Class B
8 AF	0	0
9 AF	0	0
12 AF	0	0
AWFC	0	1

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

 - Loss of an ACC member's life

Flight Safety (SEF)

Congratulations on yet another Class A mishap-free month! We have all done a great job but need to continue our diligence. As we approach the "101 Critical Days of Summer," our routines will change and the stresses in our personal lives will become more demanding as we go on vacations and spend more time away from work. We must all keep our focus and make sure we are ready for that next flight or that next engine borescope. If you do find yourself a little too sunburned or feeling the effects of a day on the water, make sure you stop to assess your mental and physical state and manage your personal risks.

Ground Safety (SEG)

As of the end of April, we sit at 19 Class A mishaps, 21 fatalities, 1 permanent total disability. Seventeen have been off duty, 11 PMV4, 5 PMV2, and 1 miscellaneous. Two fatalities occurred on duty, both involving dump trucks. We are currently three mishaps higher than for all of FY01. The 101 Critical Days of Summer is fast approaching. We must ensure everyone is actively involved in stopping this terrible trend now.

Weapons Safety (SEW)

Overall, weapons mishaps are remaining relatively stable. There are no significant trends to report nor are there any MAJOR areas of concern. This does not mean we should ease emphasis on personnel and procedures. We are on track to have another record-breaking year with low mishap numbers. Let's all strive to bring this goal to reality.

Symbols for Mishap Aircraft

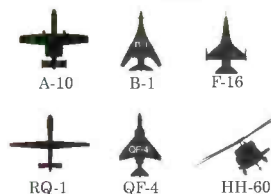




Photo by MSgt. Dave Nolan

Pararescuemen from the 106th Rescue Wing, North Hampton Beach, Long Island, N.Y.,
prepare for a jump mission aboard an MC-130P Combat Shadow of the 71st Rescue Squadron,
347th Rescue Wing from Moody Air Force Base, Ga.

Lock on
Safety

The Combat
EDGE