## In the middle of

The Combaik

July 2002

## Critical Days



Volume 11 Issue 2, ACC SP 91-1 General Hal M. Hornburg, Commander

#### COLONEL KEVIN W. SMITH, CHIEF OF SAFETY

4 Throttle...Brakes... Hook!

> 8 We're Going In

11 July Fourth Safety

12 Hearing Preservation

15 Cell Phone Driving Dangers

23 Difference Between Life and Death



24 Dangerous D Waters

26 Drown-Proof Your Pool 27 Learn not to Burn 28 NNMSB... What is it?

Departments

Monthly Awards - 18, Fleagle - 30, Safety Stats - 31

MAJ REBECCA COLAW EXECUTIVE EDITOR

MAJ DANIELLE COLEMAN EDITOR

Ms. Barbara Taylor Associate Editor

SSGT NEIL ARMSTRONG DESIGN & LAYOUT

**TSGT JACK BRADEN** Associate Photo Editor 1st Communications Squadron

The Combat Edge (ISSN 1063-8970) is published monthly by Air Combat Command, HQ ACC/SEM, 175 Sweeney Blvd, Langley AFB VA 23665-2700. Send address changes to the same address.

**DISTRIBUTION:** F. OPR: HQ ACC/ SEM. Distribution is based on a ratio of one copy per 10 persons assigned. Air Force units should contact *The Combat Edge* staff to establish or change requirements.

ANNUAL SUBSCRIPTIONS: Available to non-DoD readers for \$47.00 (\$65.80 outside the U.S.) from the Superintendent of Documents, PO Box 371954, Pittsburgh PA 15250-7954. All subscription service correspondence should be directed to the Superintendent, not HQ ACC/ SEM.

**CONTRIBUTIONS:** Please send articles with name, rank, DSN phone number, e-mail and complete mailing address and comments to:

Executive Editor, *The Combat Edge* HQ ACC/SEM 175 Sweeney Blvd Langley AFB VA 23665-2700

Telephone: (757) 764-8868 DSN 574-8868 FAX: (757) 764-8975 e-mail:rebecca.colaw@langley.af.mil

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

**DISCLAIMER:** This magazine is an authorized publication for members of the DoD. Contents of *The Combat Edge* are not necessarily the official viewsof, or endorsed by, the U.S. Government, the DoD, or the United States Air Force. Information contained in any article may not be construed as incriminating under Article 31, UCMJ.

Denotes images digitally manipulated.

Front Cover digitally created by SSgt Neil Armstrong



#### Keep Up the Good Work!

After 28 years and 6,400 flying hours, it's finally time to hang up the green bag, and I'll miss it profoundly. When my boss, Kevin Smith, offered me the ACCent column this month, I welcomed the opportunity to bid farewell to the ACC warriors I've been so proud to serve with.

In the safety arena, you've done a tremendous job in driving ACC's flight mishap rate to an all-time low. During FY00 and 01, your superb performance in the cockpit and on the flightline produced the safest 2 flying years in ACC history. And you are currently on track to match that rate for a third consecutive year. Such an exceptional record is clearly a tribute to the outstanding aviators, maintainers, and safety professionals who deliver the world's greatest combat capability on a daily basis.

In the last 4 years, I've flown with many of you throughout the command. From base-to-base, the one thing that stands out above all else is your unwavering professionalism. With one or two exceptions many years ago, I've never witnessed an act of true buffoonery. I've never flown with anyone in ACC who wasn't totally engaged in the mission. We may not always call it "safety" or "ORM" or even "professionalism." It's simply what we do. Attention to detail, focused Situational Awareness, anticipating the next move, and following the checklist are all part of our normal cross-check. It's a way of doing business, and no one does it better than you. So keep it up. You're obviously getting it right. But never let your guard down. Old Murphy is always lurking in your six, just waiting for a chance to whack you.

Remember too that the most dangerous part of any mission is the drive

to the squadron. With more than 20 off-duty fatalities this year, it's imperative that we take personal risk as seriously as we do professional risk. On the ground as in flight, we often live or die by the choices we make. So if it looks dumb, dangerous, or different, ask yourself those three key questions: What can go wrong? — How bad can it be? — What can I do to make it not so bad?

Six thousand four hundred hours wasn't enough, but it will have to do. It's been an honor and a privilege to serve with you, and I wish you all tremendous success in the future. Y'all take care and fly smart!

> Colonel Bill Snow Chief of Flight Safety



3

Photo by SrA Michael Holzworth

4

# Throttle...Br

he abort decision has been a part of my training since the first flight in the mighty T-37. I remember long conversations on critical field length, decision speed, go-no-go speed, and the different categories of takeoffs. Fortunately, all through pilot training, I never had to utilize any of this knowl-

edge. Later, flying C-141s and C-5s, I learned of critical engine failure speed and rotation speed. Still later, I transitioned to the F-15, adding much more powerful afterburning engines and cable arresting gear into the equation. After five significantly different airframes, with a myriad of abort considerations specific to each type, I have a sufficiently jumbled mix of knowledge in my one brain cell to confuse almost anyone.

Fortunately, over the past 8 years of flying, I've been able to practice the appropriate procedures in simulators and gain the sort of proficiency I'll need in case I ever have to use the knowledge. The simulator generally prepares you for the worst-case scenario known and builds both reactions and skills to handle these situations. For all my practiced abort scenarios, I've only had to use these skills twice in my career.

The first situation was during a category III takeoff while flying a maxed-out C-141. For those of you that may be a little rusty on the category III departure, rotation speed is less than critical engine failure speed, placing the aircraft in a scenario where you are getting ready to lift off, but if

akes.

By Capt Michael T. Morgan, Eglin AFB, Fla.

you lose an engine, you wouldn't be able to control the aircraft using the flight controls. I was performing the takeoff from the right seat, and after passing rotation speed, I noticed a thrust reverser "Not Locked" indication in the cockpit - generally not a good situation. I had seen this scenario before in the simulator and aborted the takeoff. in accordance with the boldface procedures, safely getting the plane to a stop and returning it to maintenance.

The second and only other time I've had to stop an aircraft from taking off came after about 900 flying hours in three different airframes. This time, I had my F-15C Eagle all ready for

flight, prepared to depart on an Operation NOBLE EAGLE sortie. The aircraft was configured with three external fuel tanks and four missiles on the wing pylons. I was cleared for takeoff, lined up my formation on the runway, waited for my wingman to get into position, ran up the engines, and switched to departure frequency. After my wingman indicated that his jet was good to go, I released brakes and began my takeoff roll. Operations were normal at this point; we were about to be air-



borne via a 15-second trail departure. Unfortunately, the next 50 seconds of my life proved this was not going to happen.

Passing 120 knots, with an abort speed of 133 knots, I felt an increase in the nose wheel shimmy on my jet. This became violent as the speed approached 130 knots, and I elected to abort. After applying the initial Dash-1 procedures, and reducing the throttles to idle, I heard a loud bang and the nose of the aircraft impacted the runway as

the nose landing gear failed. I concentrated on keeping the jet on the runway centerline using rudder actuation and differential braking. I also called my wingman on the auxiliary radio to let him know of the situation. I then switched back to tower frequency and told them I was aborting. Apparently anyone who was watching the takeoff was aware of the failed takeoff attempt and was able to see the nose of the jet sliding down the runway. Based on the high-speed of the aircraft, I



pacted the runway as the nose landing gear failed.

dropped the tail hook in case I had to engage the departureend cable. As the aircraft slowed down, I placed the throttles into the "OFF" position to prevent further damage to the engines.

Unbeknownst to me, the aft end on the jet had become engulfed in flame, and the only indication I had was tower informing me I was on fire. As the situation appeared to be under some semblance of control, I decided against ejecting. The jet was staying on runway centerline, and I began preparing to emergency ground egress once it was stopped. Once the F-15C stopped, I noticed fuel pouring onto the runway from a ruptured centerline tank. I quickly jumped over the left side of the canopy rail and ran away from the jet.

I can safely say that I had never experienced a simulator that adequately represented my situation that day. However, all the "routine" aborts I'd practiced ingrained the appropriate procedures into my mind. When the time came to recall this knowledge, it was readily available. Looking back, I feel this situation could easily have turned out a lot worse. I'd like to think it was some of my actions that prevented this from elevating to the next level: loss of life or the jet.

As pilots, we take off and land everyday. This is, by sheer definition, part of our flying lives. On the other hand, I've learned over the years not to treat any takeoff or landing as routine. Abort procedures are very similar among many Air Force aircraft, with minor differences such as thrust reversers or tail hooks to help the situation. Dash-1 procedural knowledge is a must, and I review these prior to each takeoff I perform. Simulator training is invaluable in honing your skills for handling emergencies. Learn all you can in the

simulator, especially those emergency procedures that hopefully do not happen on your daily sorties. Finally, recurring hanging harness and egress training is generally seen as something that simply "needs to get done." Take the time to review your egress procedures and equipment just in case you have to get out of an aircraft.

As a parting shot, should something unusual happen during a routine area of flight, make a decision and execute. Time is of the essence during an abort.

## We're Going

By Maj Michael A. McDonald, Langley AFB, Va.

M Photos Digitally Created by SSgt Neil E. Armstrong

he first 4 hours of the B-52 training sortie went smoothly and according to the pre-briefed plan. Our crew was highly experienced and utilized good Crew Resource Management (CRM) techniques to maximize effectiveness of each member and accomplish mission objectives. So far, so good ...

The weather report for this flight had been pretty much standard for the "dog days of summer" in the southland — partly cloudy with isolated afternoon thunderstorms around home base and the planned low-level training route. This was the norm for Barksdale Air Force Base, La., so there had been no requirement to make any changes to the original flight plan. We had decided to continue with the mission and were keeping our eyes open for any weather changes.

As the Radar Navigator (RN), it was my job to avoid any thunder-bumpers we found along the way. I had developed a healthy respect for thunderstorms from my many years of living in the south, horror stories from others with unfortunate weather experiences, and documentaries on the Discovery Channel. To me, isolated storms were considered "no problemo" ... just see and avoid.

We were about 10 minutes out from low-level entry when I took a final sweep around to see if there were any shadows on the radarscope. A shadow on the radar of the BUFF is the one indicator of a thunderstorm threat. The radar paints through normal clouds and most rain showers, allowing us to see behind them; however, a thunderstorm's intensity bounces the radar energy off of it like a wall, creating a shadow beyond it, which is basically a noshow area on the scope.



I scanned the area around the entire low-level route and saw no telltale shadows around or within the route itself. I told the crew that the route was clear. While there

were several white, puffy cumulus clouds in the area, they looked far from ominous, and I saw nothing to cause us concern.

We dove down into the lowlevell regime on our scheduled timing and accomplished terrain avoidance training, simulated threat maneuvers, and began preparations for the main event for the RN — the bomb run. This is *the* real test to see if an RN is worth their mettle. Whether simulated (electronically scored by a land-based site) or actual iron dropped from the plane, bomb scores determine the success or failure of a sortie. I was somewhat proud of the fact that I normally posted betterthan-average scores and especially enjoyed the free beers I've won in friendly wagers. The bomb run is the RN's reason for being; filled with high-intensity, pressure and — of course stress.

With our pre-bomb-run checklists completed and my offensive avionics system running smoothly, I reviewed the run with the crew. About 20 seconds from the Initial Point (IP) call to begin the run, the copilot announced on the interphone that things looked a bit dark and nasty in the direction we were turning. We hit the IP, made the turn toward the target area and started our watches for the run, but both pilots now agreed it looked real ugly farther down track.

We all decided it was definitely better to be safe than sorry where weather was concerned. We initiated a climb away from terrain to a safe altitude, and I brought the radar out of terrain avoidance mode to allow a better picture of the weather situation. I knew immediately that the bomb run was over. I also knew that my workload was going to increase miles down track and right on centerline.

During mission planning the day before, we had briefed just this type of contingency plan: get away from the ground — the most immediate danger, get away from the storm threat, and contact Air Traffic Control (ATC) and let them know what we are doing so they can keep other aircraft away from us. Each crewmember carried out their part of the plan. As the aircraft commander passed visual information to me, I analyzed the radar picture and determined how we were going to get away from the nasty stuff. The visual cues from the pilots ended when we climbed because we entered instrument flight rule conditions.

I looked wide-eyed at the scope. It was covered with menacing storms all around us where there were none a short time before. I felt the pressure mounting. At lower altitudes (up to 20,000 feet), crews are mandated to avoid thunderstorms by 10 miles or more. My work was cut out for me.

When I found the best route to a clear area away from the threat, I passed it to the pilots who, in turn, passed our intentions to ATC. Commercial traffic must have been already avoiding this area since ATC didn't voice any concern over where we were going and gave us leeway to do what we needed until we could proceed

## Aircraft and lives have been lost due to thunderstorms.

dramatically for the next several minutes. In less than an hour, storms had developed all around the target area and exit legs of the route. There was an especially large storm looming 20 to an en route navigation point on our flight plan.

All was going well. We were passing between the last two storms on the scope with at least a 10-mile clearance on both and were breathing easier when suddenly — directly in our flight path and not more than 2 miles away — a shadow began forming. I was in shock for what seemed like minutes. After what was actually a split second, I told the pilots to set penetration airspeed because we were going in ...

No sooner had I pronounced the inevitable rough ride ahead than

we hit our first bump. It was just the opening salvo in proverbial the roller-coaster ride from hell. We were tossed around like a salad for a very long 30 seconds. Serious injuries would definitely have occurred if we had not all been strapped into our ejection seats. As soon as we were on the other side and the radar confirmed clear sailing from that point, we began to assess the damage.

The BUFF is one tough old dog. Aside from a few loose items that had been thrown about and some high pulse-rates in the navigator compartment, we seemed none the worse for wear. Then the pilots informed us that we had encountered hail in the bowels of the storm and it had cracked the copilot's window. While the damage was determined to be only on the outside of the multi-paned windshield, the possibility of losing cabin pressure was real so the crew went on oxygen and flew the aircraft directly home, landing uneventfully.

Aircraft and lives have been lost due to the thunderstorm environment, which includes the blatantly obvious effects of lightning and hail to the lesser known effects of wind shear, updrafts, downdrafts, icing, and the enormous engine-snuffing deluge that can be loosed from these dangerous phenomena. Armed with this knowledge, along with vast respect for the power of the thunderstorm, I was confident I would never get in this situation, but I was mistaken. The unpredictability of these storms is well documented. They can build

ough

ingly short period of time with no warning or way to avoid them. Although we did every-

thing right to see and avoid them, we still ended up with our aircraft in a vulnerable position looking down the gun-barrel of a storm.

Could we have avoided this situation? Sure. We could have decided to not fly our planned routing or — for that matter the mission at all. But that isn't realistic risk management. It would ground most flying in the south during the spring and summer months and hinder training drastically. The best we can do is be aware of where and when to expect dangerous weather via forecasts, have a plan in the pocket for any weather contingencies, keep our heads out of the cockpit, listen for updates on the radios, and be willing to make the decisions necessary to avoid getting the aircraft in a precarious place.

If you have to make the decision to divert to another destination to avoid a storm, do it. It's

not worth the risk to the aircraft and crew to push the envelope with a thunderstorm nearby if you can avoid it completely. Maintaining a 10mile separation under 20.000 feet and a 20-mile separation above 20,000 feet are good rules of thumb no matter what kind of aircraft you fly. Although the preponderance of thunderstorm effects are found directly under the storm, hail and wind shear have been documented

more than 20 miles away.

The Air Force currently has no mission that mandates penetration of thunderstorms since the risks far outweigh the operational need — so don't even think about it! While ORM had not yet been formalized, we applied basic ORM principles to everything we did on that B-52 sortie. A quick risk assessment should tell you if thunderstorms are in the area. If they are, don't mess with them - period! With the thunderstorm season upon us, take heed of my warning. File this information in the back of your cranium somewhere for future reference. Trust me, you don't want to experience what it's like to be in or near a thunderstorm while flying — EVER!

### July Fourth Safety By MSgt Mark W. Nichols, Shaw AFB, S.C

mputations, third degree burn, loss of sight, loss of hearing ... sound like battlefield injuries, an industrial accident, or maybe a car crash? How about the aftermath of an off-duty get-together of a few

friends or family members — no way, guess again! These are real life. recreational fireworks. injuries seen by our military and civilian physicians during their professional careers. Seemingly innocuous sparklers, firecrackers and bottle rockets exact a toll of pain and suffering on thousands of Americans each year. Unwitting children often make up a large segment of those victimized, and the physical and emotional scars often last a lifetime.

An Air Force doctor interviewed in the preparation of this article stated he had personally witnessed the following injuries:

- Superficial burns to the fingers and hands from simply handling the lighting devices or from faulty fuses
- A blinding injury from an offcourse bottle rocket
- A third degree burn on the lower extremity from a Roman candle that ignited a patient's clothing

• A complete amputation of an index finger from a "home-made" super firecracker

Fireworks account for an average of 10,000 reported injuries annually. Firecrackers top the



stances should children, especially small children, be allowed to use fireworks unsupervised.

Additionally, fireworks are not authorized in all states and municipalities. Local ordinances in many cases severely

> restrict and, in some cases, prohibit the use of fireworks. It is important to check with your local fire and police departments prior to using any fireworks. Just because you can purchase them, does not mean it is legal to use them!

> Does this mean all fireworks use should be avoided? Not at all. Responsible use of legal fireworks under the close supervision of mature individuals can be a lot of fun for all. Do not let your Fourth of July celebration end on a sour note. Follow the manufacturer's guidelines and treat all fireworks with respect!

#### **Fireworks Safety Tips**

Always read and follow label directions
Light only one at a time
Only ignite fireworks outdoors
Be sure to have water handy
Never experiment or attempt to make your own fireworks
Always, always have an adult present

list as the cause of these injuries. Firecrackers account for approximately 51 percent of all injuries followed by skyrockets at 12 percent, common sparklers at 7 percent, according to the U.S. Consumer Product Safety Commission, National Electronic Injury Surveillance System.

As previously stated, children are especially susceptible to injury when using fireworks. Under no circum-

### Hearing Preservation By SSgt AnnaBelle Q. White, Ramstein AB, Germany

o you love the sound of jets as they roar overhead, or going to see your favorite band and standing right in front of the speakers? Well, these pastimes can cause permanent problems.

Loud noise is the leading cause of hearing loss in the United States. However, noise-induced hearing loss is preventable by wearing proper hearing protection. As noise levels increase, the amount of time you can be exposed without being harmed decreases. Other factors that impair the hearing are age, ear trouble, and time and distance from the source of sound. Hearing effects are cumulative; the more noise your ears are exposed to (on and off the job), the more hearing you may lose.

Noise-induced hearing loss occurs when the delicate hair cells in the inner ear are damthe grass flattens the blades until the grass is dead). Hearing loss progresses very slowly and is not obvious at first. The problem is that, by the time you're aware of the hearing loss, the hair cells are permanently damaged. Hearing loss due to noise exposure is permanent and cannot be corrected by surgery or medication. Hearing aids just amplify sounds that are distorted without the hearing device; they don't necessarily reduce the distortion. To determine if hearing protection is required, a good guide to follow is the "3-Foot Rule." It is a method of identifying whether noise levels are loud enough to cause harm. You can be certain you are in a hazardous noise environment if you have to shout at a distance of 3 feet (arm's length) or if you have to raise your voice at 1 foot to be understood. You



posed to a hazardous noise area at work, your supervisor is required to provide you with form-fitted earplugs, adjustable earmuffs, or foam earplugs. Fitted earplugs can be obtained from the occupational medicine section within your base's Public Health of-

## Hearing loss due to noise exposure is permanent and cannot be corrected by surgery or medication.

aged (i.e., think of the hair cells as grass; step on the grass once and the blades will spring back, but continual walking on should always use earmuffs or properly fitted earplugs to reduce the noise getting into your inner ear. If you are exfice at no cost to you or your shop, and replacements can be obtained anytime during normal duty hours. You don't



advantages over the E-A-R singleuse foam earplugs. The benefits of personally fitted earplugs are that they are good for use up to 6 months, and they are inserted more quickly and easily than E-A-Rs. To insert E-A-R plugs. vou must roll them in-between your fingers until they are the thickness of a pencil. They are then inserted into the ear and held until the plugs expand (usually 1 to 2 minutes in warm weather and 2 to 4 minutes in cold weather). The directions are

need an appointment or audiogram to receive fitted earplugs.

#### **About Hearing** Protection

Proper use of hearing protection can prevent hearing loss. Be aware of potential hazards and simply avoid being exposed to unnecessary loud noise. However, when exposure is unavoidable, use earplugs or earmuffs to protect your ears from most common noise sources. An exception is for personnel working immediately adjacent to aircraft while on high power

settings; in this case, earplugs and earmuffs should both be worn.

Earplugs should be worn whenever exposed to hazardous noise, both on and off duty. If earplugs are worn daily, they should be washed daily. Wash them in warm soapy water, rinse, and air dry. Do not use rubbing (isopropyl) alcohol for cleaning. Remember, if you lose your earplugs, just drop by the Public Health office anytime and get more.

#### **Types of Earplugs**

Triple Flange and V51R personally fitted earplugs have two

also on the E-A-R container. To properly place the V51R earplug, simply insert the plug into the ear and rotate the tab to the rear. To properly place the Triple Flange plug, insert the plug so that the largest flange touches the outer rim of the ear canal.

In all cases, when inserting earplugs, you should straighten the ear canal by lightly tugging the ear up and back. Also, in order to preclude unnecessary buildup of bacteria, do not moisten the earplugs with your saliva before placing them in your ears. Moreover, you should wear only approved earplugs or earmuffs (contact Public Health or Bioenvironmental Engineering



to find out if the plugs or muffs • used in your shop are approved at your base).

#### Hearing Conservation Program Requirements

Air Force medical personnel are aware of hearing loss problems. As a result, there is a continuous and comprehensive program to reduce personnel noise hazards throughout the Air Force; this program is called the Hearing Conservation Program and includes:

- Periodic hearing tests to detect hearing loss before it becomes permanent.
- Educational briefings and distribution of information letters or pamphlets to acquaint personnel with the hazards of noise.

- Design of less noisy ground equipment and aircraft.
- Design of enclosures to attenuate noise from equipment that cannot be internally modified.
- Issue of earplugs, earmuffs, and other specialized protective equipment to personnel when noise attenuation is either economically or technically not feasible.

All Air Force members are required to follow the guidance set forth by the Hearing Conservation Program. In fact, failure to comply with current standards could result in disciplinary action against an offender and supervisor under the Air Force Occupational Safety and Health (AFOSH) Standard 161.17, *Standardized Occupational Health*  *Program*. Remember, hearing loss from exposure to loud sounds is permanent and irreversible. It is preventable when you wear hearing protection. You are the only person who can care for and be responsible for your hearing. Don't let yourself down! Finally, if you ever have any questions concerning noise or occupational health, please contact the Public Health office at your base. That's why we're here — to be a help and service to you.



## Dangers By SSgt Aaron Gordon, Nellis AFB, Nev.

D rivers are four times more likely to have accidents while talking on cellular phones, according to the National Highway Traffic Safety Administration. This is especially frightening when you consider that cell phone use while driving has become commonplace among the military and civilian community.

Driving while carrying on a phone conversation diverts attention from a driver's first responsibility: safely maneuvering a ton or more of rolling metal. With all the national media attention focused on this issue, military members must be exceptionally mindful of their driving practices.

More than just the latest electronic gadget, cellular telephones have become integral parts of everyone's business and personal lives. They are used to schedule appointments, call for assistance, report emergencies, and maintain contact with the office and family.

Particularly within the mobile military, cellular telephones are rapidly becoming the norm because they are the primary tools necessary to carry out the daily mission. The Department of Defense (DoD) has taken a stance against the risk of hurting government people and damaging property by establishing guidance restricting the use of cell phones on military installations. The guidance, found in DoD Instruction 6055.4, paragraph 6.7, states, "that safety guidance should note the potential for driver distraction when operating modern communication and navigation devices, for example cell phones or global positioning systems, in moving vehicles. Drivers must use



Safety is the first and foremost responsibility while operating a motor vehicle:

- Give full attention to driving.
- Use hands-free devices if they are available, to include auto answer.
- Pull off the road and park before answering or placing a call.
- Driving safely is your Number 1 responsibility.

caution when operating these devices. Whenever possible, use these devices only when the vehicle is safely stopped."

While operating a personal vehicle, cell phone use should be limited to and done so only along the side of the road or in a parking lot. Position the cellular telephone as close as possible to the line of sight and use the voice activation and memory dialing capability if the phone is equipped with such functions. If the phone is equipped with voice mail, allow it to answer and return the call at a more appropriate time.







Primary Function: Multi-role fighter • Builder: Lockheed Martin Corp. • Power Plant: F-16C/D: one Pratt and Whitney F100-PW-200/220/229 or General Electric F110-GE-100/129 • Thrust: F-16C/D, 27,000 pounds • Length: 49 feet, 5 inches • Height: 16 feet • Wingspan: 32 feet, 8 inches • Speed: 1,500 mph (Mach 2 at altitude) • Ceiling: Above 50,000 feet • Maximum Takeoff Weight: 37,500 pounds • Range: More than 2,000 miles ferry range • Armament: One M-61A1 20mm multibarrel cannon with 500 rounds; external stations can carry up to six air-to-air missiles, conventional air-to-air and air-to-surface munitions and electronic countermeasure pods • Crew: F-16C, one; F-16D, one or two • Date Deployed: January 1979

#### Monthly Award Winners

#### Pilot Safety Award of Distinction

**C** apt Michael Ferrario had been the flight lead in an F-16 night flight lead upgrade sortie when he began an Instrument Landing System (ILS) approach. He attempted to extend the landing gear, but the gear handle light did not illuminate to indicate the gear was in transition and neither did the three green down-and-locked indicators illuminate once the gear had extended. Capt Ferrario could not confirm that he had a safe landing configuration and directed his wingman to rejoin with him as he executed a go-around back to the radar pattern. After coordinating with the supervisor of flying and his wingman, Capt Ferrario accomplished the landing gear malfunction checklist. Visual inspection with night vision goggles indicated the gear was down and locked, although the cockpit gear lights continued to indicate an unlandable configuration. Due

to his critically low fuel state and visual indications that the gear was safe, Capt Ferrario chose to attempt a night approach-end cable engagement rather than continue to trouble shoot the problem. He executed an ILS approach and successfully engaged the approach-end cable. The landing gear remained down and locked, and the aircraft was not damaged by the cable engagement. Capt Ferrario's quick analysis under extreme pressure, timely decision making, and superior flying skill ultimately prevented the loss of a combat asset and potential loss of life.



Capt Michael Ferrario 4th Fighter Squadron 388th Fighter Wing Hill AFB, Utah

#### Ground Safety Award of Distinction

Sgt Craig Gorowsky's proactive approach as the squadron's ground safety Noncommissioned Officer (NCO) resulted in a reduction in overall safety incidents by 50 percent last quarter. These included zero on-duty incidents during the month of October, thereby keeping four maintenance bays and 19 offices at the highest safety standard. Upon his appointment, he immediately cleared aging annual inspection discrepancies within the squadron like removing an improperly grounded grinder in the support section. For wing Safety Days, MSgt Gorowsky created and presented PowerPoint presentations on Fiscal Year 2001 safety results, 101 Critical Days of Summer summary, monthly safety topics, and product-specific safety issues. He keeps unit members abreast of any safety issues through electronic bulletins highlighting product recalls, safety concerns, and child safety issues. Last quarter, he conducted 132 random seat belt inspections, covering all three maintenance shifts. This new awareness led to zero discrepancies! During one of his spot inspections of the maintenance facilities, he highlighted a hazardous oil spill on one of the hangar floors, traced it to a faulty oil-servicing cart, and contained the spill. This prevented the hangar water

supply from becoming contaminated and eliminated a dangerous slip hazard. As wash rack supervisor, he noticed improper drainage in the work area, documented the safety hazards for wash rack personnel, equipment, and aircraft, and forwarded them to wing safety personnel and quality assurance evaluators. He was the hands-on safety advocate during a squadron deployment to Tucson International Airport. While conducting two facility inspections, he ensured current safety policies were displayed and that all deployed maintenance members were briefed on fire exits and evacuation routes. Because of lighting issues, he pounded the ramp to make certain that reflective belt us-

age was at 100 percent, which contributed to 412 mishap-free training and cross-country sorties. MSgt Gorowsky has also maintained engine run currency, tow supervisor, and aircraft marshalling certifications, which increases his visibility on personnel safety and technical data usage. As a youth leader for the Lutheran Pioneers, he provided instruction on proper outdoor and fire safety precautions during weekend camping trips ensuring multiple incident-free campouts during his tenure. MSgt Gorowsky is the epitome of a ground safety NCO, both on and off duty.



MSgt Craig S. Gorowsky 357th Fighter Squadron 355th Wing Davis-Monthan AFB, Ariz.

#### Aircrew Safety Award of Distinction

uring an Operation ENDURING FREEDOM sortie in Afghanistan, Rambo 34, a fully loaded B-1B, experienced an uneventful takeoff roll until past decision speed and immediately prior to rotate. At this point, the crew noticed a loud explosion, followed by a shudder and left yaw. The number four tire's outer tread had separated and had been ingested by three of the four aircraft engines. Engine number three was largely unaffected, however, engine number two suffered some damage, resulting in noticeable performance degradation. Engine number one was severely damaged and suffered a classic compressor stall at liftoff. Following rotation to liftoff attitude, the aircraft remained on the ground for an unusually long roll and finally lifted off with 1,000 feet of the 12,000-foot runway remaining. After being in ground effect for an extended period in order to gain energy, Capt Kent Payne began a shallow climbout while Capt Brian Meade retracted the gear and began retracting the flaps at one-quarter intervals. The tower controller reported a large flame trailing the aircraft, so Capt Meade checked cockpit indications and shut the number one engine down in accordance with bold face procedures. The crew dumped the majority of the aircraft's 190,000 pounds of fuel and Capt Ken Boilot further reduced aircraft gross weight by jettisoning all 24 of the 2,000-pound Joint Direct Attack Munitions. Finally, the supervisor of flying inspected the suspect gear as the aircraft executed a low approach. Twenty minutes after initial takeoff, the crew executed a safe landing and shut the aircraft down on the runway. After consulting with the wing commander, the crew stepped to the combat-loaded spare aircraft and completed their mission.

COMBAT CO



Capts Brian Meade, Kent Payne, and Ken Boilot 1Lt Jason Pax, 34th and 37th Bomb Squadrons, 366th Wing, Mt. Home AFB, Idaho

#### Crew Chief Safety Award of Distinction

SrA Matthew D. Luketina A1C Ryan A. Rambo 94th Fighter Squadron 1st Fighter Wing Langley AFB, Va.

O n Feb. 17, 2002, an F-15C aircraft laden with live munitions was scheduled to fly in support of Operation NOBLE EAGLE. SrA Matthew Luketina was driving in the expeditor truck prepared to respond to red balls and A1C Ryan Rambo was launching the aircraft. With the number two engine running, A1C Rambo signaled the aircrew to start engine number one. At that time, SrA Luketina noticed an audible pitch difference coming from the jet fuel starter and immediately investigated to determine the cause. Upon opening a servicing door, SrA Luketina identified flames in the Airframe Mounted Accessory Drive (AMAD) bay, located below the engine. Without hesitation, he signaled A1C Rambo to perform an emergency shutdown and egressed the pilot. Meanwhile, SrA Luketina doused the flames with a nearby fire bottle. The team's ability to think and act quickly under extreme pressure prevented injury to the pilot and other personnel and significant damage to the aircraft.



#### Monthly and Quarterly Award Winners

#### Flightline Safety Award of Distinction

SSgt Mark D. Nino 366th Equipment Maintenance Squadron 366th Wing Mt. Home AFB, Idaho

O n Dec. 17, 2001, an HH-60 Blackhawk helicopter was conducting search and rescue operations from a deployed location in support of the air campaign in Afghanistan and enforcing the no-fly zone over Iraq. During an attempted night landing at an undisclosed site, the Blackhawk lurched dramatically to the left. The pilot quickly lifted off again and the on-board crew chief reported the left main landing gear strut was broken and would not support the weight of the helicopter. The pilot declared an in-flight emergency and returned to base where they were met by SSgt Mark Nino's team. Using the resources avail-

#### Weapons Safety Award of Distinction

SSgt Michael Monroe, SrAs Kurt Scandrol and John Harper, A1Cs Adam McGee, Marcus Ellis, Lucas Dorosky, Adam Read, Amber Hull, and Jeremiah Phelps 7th Munitions Squadron 7th Bomb Wing Dyess AFB, Texas

**S** Sgt Michael Monroe was directing his crew of eight in removing FMU-139 tail fuzes from MK-82 general-purpose bombs when a crewmember notified him that some of the fuzes were difficult to remove. After checking the item technical order, he found no checkpoints for this discrepancy. He directed his crew to set aside the bombs that were difficult to disassemble. The crewmembers later came across a fuze where the arming wire housing was protruding about an inch. This prompted additional precautionary concerns from SSgt Monroe and his crew. SSgt Monroe conducted an operational risk assessment and up-channeled this information to the munitions control center for assistance from Explosives Ordnance Disposal (EOD) personnel. Upon inspection, EOD able to him, SSgt Nino assigned duties to the people at his disposal and ensured those who did not need to be involved were evacuated. If the helicopter could not remain upright during the emergency landing, there was the possibility that the flying rotors could possibly destroy the aircraft, injure, and even kill, bystanders and the aircrew. SSgt Nino used what he had available (i.e., pallets, sandbags, and chocks) to fabricate a platform for the disabled craft to rest on. He even taped glow sticks to the upper surface of the structure to help the pilot see how to line up in the dark for a precise touchdown. The helicopter crew made four unsuccessful attempts to land. After each missed attempt, SSgt Nino's crew had to adjust the height of the supporting material as the aircraft hovered 100 feet above the ground. On the fifth try, the helicopter was down, safe, and stable. SSgt Nino and his crash crew used sound judgment, innovative thinking, and went above and beyond the normal call of duty to avert the loss of the Blackhawk helicopter and possibly its aircrew.

determined there wasn't a risk of the fuze initiating the explosives train; however, the excessive efforts required to remove the fuzes raised concern from the explosives ordnance technician. The explosives ordnance team trained SSgt Monroe and his crew to properly remove the fuzes without causing additional damage to the fuzes. The EOD technician commended the crew for properly using Operational Risk Management (ORM) and technical data for this abnormal condition. It was discovered that the fuzes created a vacuum seal inside the cavity because there was an excessive amount of corrosion prevention compound inside the fuze well. The proper use of technical data and the decisive use of ORM kept this situation from escalating into a mishap. SSgt Monroe and his crew are to be commended for their precautionary efforts and safety awareness.



#### Ground Safety Award of Quarter

Sgt Jason Schoenbeck organized and implemented a comprehensive Lockout/Tagout program for the 726th Air Control Squadron. He established Maintenance Operating Instructions and an in-depth training plan that covered all affected equipment within the squadron. The 355th Wing Safety and Occupational Health Specialist, responsible for the wing Lockout/Tagout program, lauded his program and uses it as an example for others to follow. TSgt Schoenbeck also developed a squadron job safetytraining outline recognized as the benchmark for the 366th Wing Safety programs. He also constructed a squadron briefing covering Operational Risk Management and other safety topics for Air Combat Command's Safety down day. Due to the shift schedules to support Operation NOBLE EAGLE, TSgt Schoenbeck took it upon himself to go from shift-to-shift to ensure everyone got the briefing without interfering with their assigned duties. COMBAT CO



TSgt Jason D. Schoenbeck 726th Air Control Squadron 366th Wing Mt. Home AFB, Idaho

#### RESTRUCTURED ACC SAFETY AWARDS PROGRAM

Based on your feedback, the ACC Safety Awards Program has been restructured to align it with the USAF Safety Awards Program. A message, dated May 13, 2002, covers the awards program in its entirety (until a supplement to AFI 36-2833 is published). The following is an excerpt from subject message:

Monthly awards are still due on the 1st of each month. Nominations for monthly awards are for events that occurred within 45 days of the due date. Each NAF/DRU, HQ AFRC, and NGB may only submit one nomination per category.

Nominations should be prepared IAW with subject message and forwarded through the unit/wing commanders to their respective NAF/DRU/NGB/AFRC safety offices, to process prior to forwarding to HQ ACC/SEM. To win an ACC or USAF safety award, a nominee must win at wing level, then NAF level, then ACC level. A nominee must win at each of these lower levels to be forwarded by ACC for an Air Force-level award. All awards will be submitted electronically. Monthly and Quarterly awards will be submitted using the latest version of AF Form 1206 or the ACC/SE approved MS Word Document format. There is a 25-line maximum length for both monthly and quarterly awards.

A photograph or unit patch must accompany nominations for the monthly and quarterly awards. Photographs should be sent electronically using .jpeg format with at least 300 dpi resolution. Whenever possible, photographs should be taken in an environment which illustrates the nominees job. Be sure to coordinate the photo shoots with the base photo lab. Head and shoulder shots are discouraged and substandard photos will not be published. A digital graphic file of the unit/wing patch is required for any unit nominations.

NOTE: Please include the date of occurrence (if it's a one-time act), the wing, (in addition to the squadron), the type of aircraft (if applicable), and the duty title for each nominee.

Point of contact for the Safety Awards Program is Barbara Taylor, DSN 574-8846, or e-mail at: barbara.taylor@langley.af.mil.



#### **ACC Safety is Proud of All Our Award Nominees**

#### Capt Michael J. Matesick

Stan Eval Officer 421st Fighter Squadron 388th Fighter Wing Hill AFB, Utah

#### Capt Kirk M. Schultz

Chief of Training 4th Fighter Squadron 388th Fighter Wing Hill AFB, Utah

Capt Matt Ahner, Pilot Capt James Stahl, Copilot 1Lt Mike Mullins, Navigator SSgt David Stoner, Flight Engineer A1C Brian Jensen, Maintenance Technician 42nd Airborne Command & Control Squadron 355th Wing Davis-Monthan AFB, Ariz.

#### **A1C Paul Zent**

HH-60G Helicopter Maintenance Apprentice 41st Rescue Squadron 347th Rescue Wing Moody AFB, Ga.

#### TSgt Curtis A. Timmons

Maintenance Expediter **SrA Michael R. Choyce** Crew Chief **SrA Phillip S. Suchicital** Crew Chief **A1C Peter J. Lujan** Asstistant Crew Chief **A1C James G. Hipkins, Jr.** Asstistant Crew Chief **A1C Eugene D. Ward** Asstistant Crew Chief 99th Reconnaissance Squadron 9th Reconnaissance Wing Beale AFB, Calif.

**TSgt Paul R. Sudweeks** Composite Tool Kit Monitor 421st Fighter Squadron 388th Fighter Wing Hill AFB, Utah

#### SrA Scott M. Evol

F-16 Inspection Section Tech 388th Equipment Maintenance Squadron 388th Fighter Wing Hill AFB, Utah

#### **2Lt Reginald V. Mosley**

Commander, Maintenance Flight MSgt James C. Roberts Isochronal Inspection Section 93rd Maintenance Squadron 93rd Air Control Wing Robins AFB, Ga.

#### SrA Cory N. Jackson

Aircraft Armament Systems Journeyman 34th Bomb Squadron 366th Wing Mt Home AFB, Idaho

#### TSgt Scott J. Drayna

Flight Engineer Evaluator 42nd Airborne Command and Control Squadre 355th Wing Davis-Monthan AFB, Ariz.



### Difference Between ife and eath

By TSgt Jaime R. Hernandez, Dyess AFB, Texas

t was just like a scene from a typical action movie. A family of four is peacefully driving down the road in a minivan after spending a delightful afternoon with friends. Suddenly, an out-ofcontrol car, coming from the opposite direction at a phenomenal speed, starts to head directly into their path. As the speeding vehicle gets closer to them, the minivan driver tries desperately to steer away. His efforts are unsuccessful.

The ill-fated car hits the minivan at a 35-degree angle, right behind the driver's door, going over 70 miles per hour. The force of the impact is so great that it pushes the minivan toward the curb where the force of inertia overrides its center of gravity. The van tips completely over onto its roof and skids down the road, pouring gas out of its ruptured tank. Despite the fact that sparks and fuel were present, it does not catch on fire. After a few nerve-racking seconds, the minivan comes to a complete stop. Silence.

Out of the sea of debris, mangled metal, and broken glass, one of the family members emerges ... unharmed. One by one, the rest of the family walk out of the wreckage. Obviously, they are shaken, but miraculously not hurt except for some minor cuts and bruises.

Still sound like your typical action film scene

where the special effects guys "do their thing" and nobody gets hurt? Guess again. That family in the minivan was my own and the person in the speeding car was a drunk driver.

The fact that I am able to write

miracle that happened that day. That my wife and children are also alive completes it. I am convinced that this miracle was made possible because every single one of us was wearing our seat belts that day.

injury than those who don't. This truth became even clearer to me several months later when I received a phone call from my aunt. She told me that my cousin had just had an accident the morning prior. She was in the intensive care unit



All of us have heard and read the briefings and articles dealing with seat belts. Sometimes we skip over the seat belt articles in safety publications because we think we have "heard it all." It rarely crosses our mind that one day we could have a real use for them. My family's brush with death taught me just that. Even though we have been faithful, as a family and indiat the hospital with massive head injuries. I later found out that the crash happened when my cousin was on her way to work out at the gym. At some point in her trip, she lost control of her car. The vehicle departed the paved road and hit a tree head-on. Sadly, she was not wearing her seat belt. A week later I attended my cousin's funeral.

Two major automobile acci-

#### Seat belts really do make the difference ...

vidually, in wearing our seat belts, we realized that day just how effective they really are. Seat belts work!

The statistics always show that those who wear their seat belts always have a much greater probabilthis article is only part of the ity of surviving and/or escaping

dents; two completely different outcomes. Seat belts really do make the difference between life and death. In the movies, no one really gets hurt. In real life, the ending is in your hands and the precautions you choose to take. Buckle up!

By TSgt Jeffrey Brown, Hurlburt Field, Fla.

## Dangerous Maidro

he Emerald Coast on Florida's panhandle boasts some of the finest coastal beaches in the world. Stretching from Panama City to Pensacola, the Emerald Coast, with its miles of pure white sand and emerald green, crystal-clear waters, attracts thousands of vacationers every year. However, with all its majestic beauty, the area water can be deadly if not respected. With all its reputation as having the finest beaches, recently it was arguably given the designation as being "the worst place in the country for drowning" according to the U.S. Lifesaving Association. This is due to the number of drownings that occurred last year.

In 2001, there were 11 drownings in the area waters. In one day alone, the waters claimed four lives. These numbers do not reflect the number of near-drownings that occurred. Almost all of these drownings resulted from rip currents, strong currents that quickly carry a swimmer out to sea, far away from shore; and almost all involved visitors to the area, who were either unaware of the unpredictable water conditions or chose to ignore warning signs and swim in dangerous, unprotected waters. Almost all used poor judgment and took unnecessary risks that ultimately cost them their lives.

The Emerald Coast beaches are no different from any other

beach. Whether a visitor or local resident, you must respect the beach waters and take the precautions to protect yourself and your loved ones from the dangers. Here are some precautions you should take as you plan for your next trip to the beach

Be aware of the surf conditions. Check the local weather service for a weather forecast and the current surf conditions. Determine if there are any advisories issued for dangerous currents and avoid them.

Swim in protected or supervised waters. These are areas where there is a certified lifeguard on duty. Swimming in unprotected waters places you at risk of drowning because there will not be anyone to alert you to dangerous conditions and to provide rescue in the event of distress. Almost all the drownings that occurred happened in unprotected waters.

Know and obey local warning systems. Many area visitors surveyed stated they did not know about the beach warning system or know what each warning signal means. Nearly all protected beaches have a warning system established to alert swimmers when surf conditions are dangerous. Whatever beach you visit, ensure you educate yourself to the local warning system and understand its meaning. When warnings are given, don't ignore them. Warning systems are only effective if they are heeded. Most beach officials don't have the authority to force swimmers out of the water, so it's an individual responsibility to safeguard themselves.

Know how to identify a rip current and what to do if caught in one. According to the U.S. Lifesaving Association, 80 percent of the rescues made by lifeguards are the result of rip currents. It was the cause of most of the drownings that occurred in the Emerald Coast waters. In all the drownings, swimmers tried to swim against the current toward the shore and ended up tiring themselves out. To increase your chances of survival in a rip current, swimmers should swim parallel to the shore until the current lessens and then swim to shore. Don't fight

the current. Most rip currents are narrow and a short swim parallel to the shore will bring you to safety.

Going to the beach will always be one of the most popular summertime recreational activities and the Emerald Coast or others have some of the finest to offer. Beaches are only deadly because individuals fail to recognize dangers or just choose to ignore them and take unnecessary risks that endangers their lives. Be aware of the dangers, avoid the risks and have fun.

Editor's Note: The U. S. Lifesaving Association is a national agency that focuses on lifeguard training, fitness, and equipment in open waters. For more information visit: http://www.usla.org/ index.shtml.



They used poor judgment and took unnecessary risks that ultimately cost them their lives.

### Drown-Proof Your Pool By U.S. Consumer Product Safety Commission

bout 350 children under 5-years-old drown in pools each year nationwide, and over half of these incidents occur in June, July, and August. Among unintentional

injuries, drowning is the second leading cause of death to this age group after motor vehicle incidents. Another 2,600 children are treated in hospital emergency rooms each year for near-drown-



#### **Tips to Prevent Drowning**

- Barriers should be at least 4 feet high and installed completely around the pool.
- Fence gates should be self-closing and self-latching and out of a small child's reach.
- Protect doors leading from the house to the pool with alarms that produce a sound when a door is unexpectedly opened.
- Keep rescue equipment and a phone poolside with emergency numbers posted.
- Learn cardiopulmonary resuscitation (CPR) because it can be a lifesaver.
- Remove above ground pool steps and ladders when the pool is not in use.
- Look in the pool first for a missing child seconds count in preventing death or disability.

ing incidents. Most of these cases involve residential pools. The U.S. Consumer Product Safety Commission (CPSC) wants to reduce the number of children drowning this summer.

Many people assume that, at a residence with a pool, the danger of drowning occurs only when the family is outside or using the pool. But a common scenario takes place when young children leave the house without a parent or caregiver realizing it. Children are drawn to water, not knowing the terrible danger pools can pose. "Drowning happens quickly and silently, often without any splashing or screaming," said CPSC Chairman Ann Brown. "It can occur in just the couple of minutes it takes to answer the telephone."

The key to preventing these tragedies is to have layers of protections. This includes placing barriers around your pool to prevent access, using pool alarms, closely supervising your child, and being prepared in case of an emergency.

CPSC offers three free publications consumers can use to help prevent child drowning: "Safety Barrier Guidelines for Pools," "How to Plan for the Unexpected," and "Guidelines for Entrapment Hazards: Making Pools and Spas Safer."

*Editor's Note:* Copies of these publications can be obtained at CPSC's website: www.cpsc.gov or by writing to "Pool Safety," CPSC, Washington, D.C., 20207.



o one has ever planned to get a sunburn," said Maj. Jonathan Portis, Health and Wellness Center health promotion manager. Besides being uncomfortable, sunburn is a condition resulting from over-exposing the skin to ultraviolet rays found in sunlight. Fair-skinned, blue-eyed blondes and redheads are especially susceptible, but everyone, even the dark-skinned, is at risk for sunburn, said the major. Redness, pain, swelling, and even blistering can occur and peeling usually follows several days later.

"A suntan is actually a sign of damage and not something people should try to get," said Portis. He recommended artificial tanning solutions to those who want to have dark skin as an alternative that is not linked to skin cancer. When going out into the sun, take steps to protect yourself from the sun's harmful effects. Wear a big brimmed hat, dark glasses, and protect skin areas not covered by clothing with a broad-spectrum sunscreen with both Ultraviolet A (UVA) and Ultraviolet B (UVB) protection, said Portis.

UVA rays damage the skin, but the effects do not show up until years later in the form of wrinkles, leathery skin, and skin cancer according to the institute. UVB affects the production of melanin, which gives skin its color and produces burns and tans. Sunlamps, reflectors, and tanning beds all produce high levels of ultraviolet radiation.

According to the International Health Awareness Center, some drugs can also produce an allergic-type rash on body parts exposed to sun. Some medicines decrease the amount of time one can be exposed to the sun without burning.

While enjoying the great outdoors this summer, protect yourself and your children. Use sunscreen or sunblock, hats, umbrellas, and UV-blocking glasses. The higher the SPF number, the more protection a sunscreen will provide. The SPF number will be prominently displayed on each bottle of sunscreen or sunblock. If a person's skin would begin to turn red after 10 minutes in the sun, a SPF of 15 would mean he could stay in the sun 15 times longer or 2.5 hours. (Ten minutes times 15 equals 150 minutes or 2.5 hours.)

Editor's Note: For more information, visit www.nci.nih.gov, www.cancernet.nci.nih.gov or www.healthtouch.com.

#### Sun Burn Can Lead to Skin Cancer

While not as common as sunburn, skin cancer is also caused by over exposure to the sun and can be prevented by the same methods. Skin cancer is the most common of all cancers, according to the National Cancer Institute. They estimate that 40 to 50 percent of Americans who live to age 65 will have skin cancer at least once. A common warning sign of skin cancer is a change on the skin, such as a new growth or a sore that does not heal.

While cancer cells are most commonly found on areas of the skin that are exposed to the sun, they can appear anywhere. Skin cancer can have many different appearances:

- It may be a small, smooth, shiny, or pale lump.
- It can also appear as a firm red lump.
- The lump may bleed or develop a crust.
- Skin cancer can also start as a flat, red spot that is dry, rough, or scaly.



Skin cancer is also a very curable form of the disease. The cure rate could be 100 percent if all skin cancers were diagnosed before they had a chance to spread. Many skin cancers can be cut from the skin completely at the time of biopsy and no further treatment is needed.

To protect yourself, try to avoid the sun between 10:00 a.m. and 2:00 p.m. when its rays are strongest.

Editor's Note: The picture on the left is an example of skin cancer.

## NNNSB... Vhat is it? By Mr. Michael K. Lawhorne, Branch Chief, ACC SEW

Any of you may have heard of the Nonnuclear Munitions Safety Board (NNMSB), but may not be sure what it is they actually do. Well, I didn't either prior to my assignment to Air Combat Command's Weapons Safety office. As the Chief of Weapons Safety, I became very familiar with the board's basic responsibilities and how it conducts business.

Air Force Manual 91-205, Nonnuclear Munitions Safety Board, governs the board's activities. It details everything from membership to the types of munitions that are or are not required to meet the board prior to introduction into the Air Force inventory. The board consists of one voting member from the Air Force Division Chief from the Air Force Safety Center (AFSC).

The board's mission includes providing design and qualification safety guidance to the program management authorities of nonnuclear munitions. Okay, in layman terms, we are the reviewing authority for system safety of all nonnuclear munitions and associated support equipment.

We convene at least twice a year to receive briefings from contractors or other subject matter experts. Their aim is to provide board members with enough information on a specific munition or piece of support equipment to gain board approval for a particular action. That action may be a request for flight-testing or the final board certification that is re-



the briefing. All members realize they must be prepared to decide what the appropriate action is for the specific request. Most meetings last 2 full days with briefings one after the other.

### NNMSB is the final reviewing authority for system safety of all nonnuclear munitions and associated support equipment.

Operational Test and Evaluation Center, Air National Guard Bureau, and all major commands. Currently, the board is chaired by the Weapons, Space, and Nuclear Safety quired prior to an item's entry into the inventory. After the presentation, the floor is opened for questions so that all the board members can ensure they fully understand the details of Prior to the semi-annual meetings, board members are provided advanced copies of a Technical Munitions Safety Study. This is a very detailed report of all the data they will



need to make an informed decision. These reports may be in excess of 100 pages, with very complex electrical diagrams and safety analysis.

Board members spend a great deal of time reviewing these documents and providing the information to technical experts on their respective headquarters staff. After the coordination process is complete, the board consolidates all the information and establish a command position with respect to the issue at hand. Once a command position is established, the member is prepared to attend the meeting.

The board reviews a diverse array of munitions items. The agenda is always aggressive and challenging, but all members have adequate time to make smart decisions that will ensure safety remains at the forefront of munitions and associate support equipment development. Meeting minutes are kept which detail board activities. At the completion of all briefings, those minutes are reviewed and signed by the chairman and all voting members. The minutes contain all recommendations and are provided to personnel requesting action by the board, as well as the members themselves.

Now, the next time you see these five letters together, NNMSB, you will know what they mean and understand the important role the board plays in the safety arena and in the continuing effort to preserve Department of Defense resources. Bottom Line: This group of dedicated safety professionals ensures system safety is built into all munitions and associated support equipment introduced into the Air Force inventory.



FY02 Air	craft	As of May 31, 2002	
	Fatality	Class A	
8 A F			
9 AF		HH-60	
12 AF	•	***	
AWFC			
ANG (ACC-gained)		÷	
AFRC (ACC-gained)		HH-50	

FY02 Ground			As of May 28, 2002	
	Fatal	Class A	Class B	Class C
8 A F	*****	7	3	69
9 AF	****	3	2	65
12 AF	******	7	0	135
DRU	****	0	1	19

FY02 Weapons		As of May 31, 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

#### Flight Safety (SEF)

A tough month for mishaps here in ACC. We lost one HH-60 and had two non-rate producing Class As. The first was a B-2 ground mishap and the second was another Predator loss. The B-2 mishap did result in injury to several maintenance folks, but we were very lucky we did not kill someone. Like we always say: We can build new airplanes and fix the ones we break, but we can't replace the people. For the most part, people have been working hard and making the right decisions. For risky tasks, remember to use ORM and ACC's abbreviated A.C.T. acronym to weigh your options: Assess the risk, Consider options, and Take the appropriate action. Let's continue to work hard and think smart. Learn more about https://wwwmil.acc.af.mil/se/ A.C.T. at: 4.1.act.htm

#### Ground Safety (SEG)

ACC experienced one Class A sport/recreation mishap in May 2002. The individual drowned during a scuba diving class. The investigation is ongoing. There was also one Class B mishap where a person suffered a crushed vertebra in a Private Motor Vehicle 4 wheel (PMV4) mishap. On the good news side, there were no Class A or B mishaps in ACC during the Memorial Day weekend. Please keep up the emphasis on safe driving for the 101 Critical Days of Summer.

#### Weapons Safety (SEW)

Overall, weapons mishaps still remain relatively stable. There are still no significant trends to report or any MAJOR areas of concern. This again does not mean that we should ease emphasis on personnel and procedures. We are still on track to have another record-breaking year with low mishap numbers. Let's all strive to make this goal a reality!





Photo by SSgt Jeremy Lock

stan was the last known site where Osama Bin Laden (OBL) had commanded and fought from. Targets May 7, 2002, in Tora Bora for Operation TORII. This past December, the Tora Bora region in Afghaniin Tora Bora were then bombed with 2,000-pound Global Positioning System-guided Joint Direct Attack Members of a coalition force prepare to be extracted from a mountainside 7,500 feet above sea level on Munitions with hopes of taking out OBL and his followers while closing caves

WHEN AIRPOWER REALLY COUNTS!

