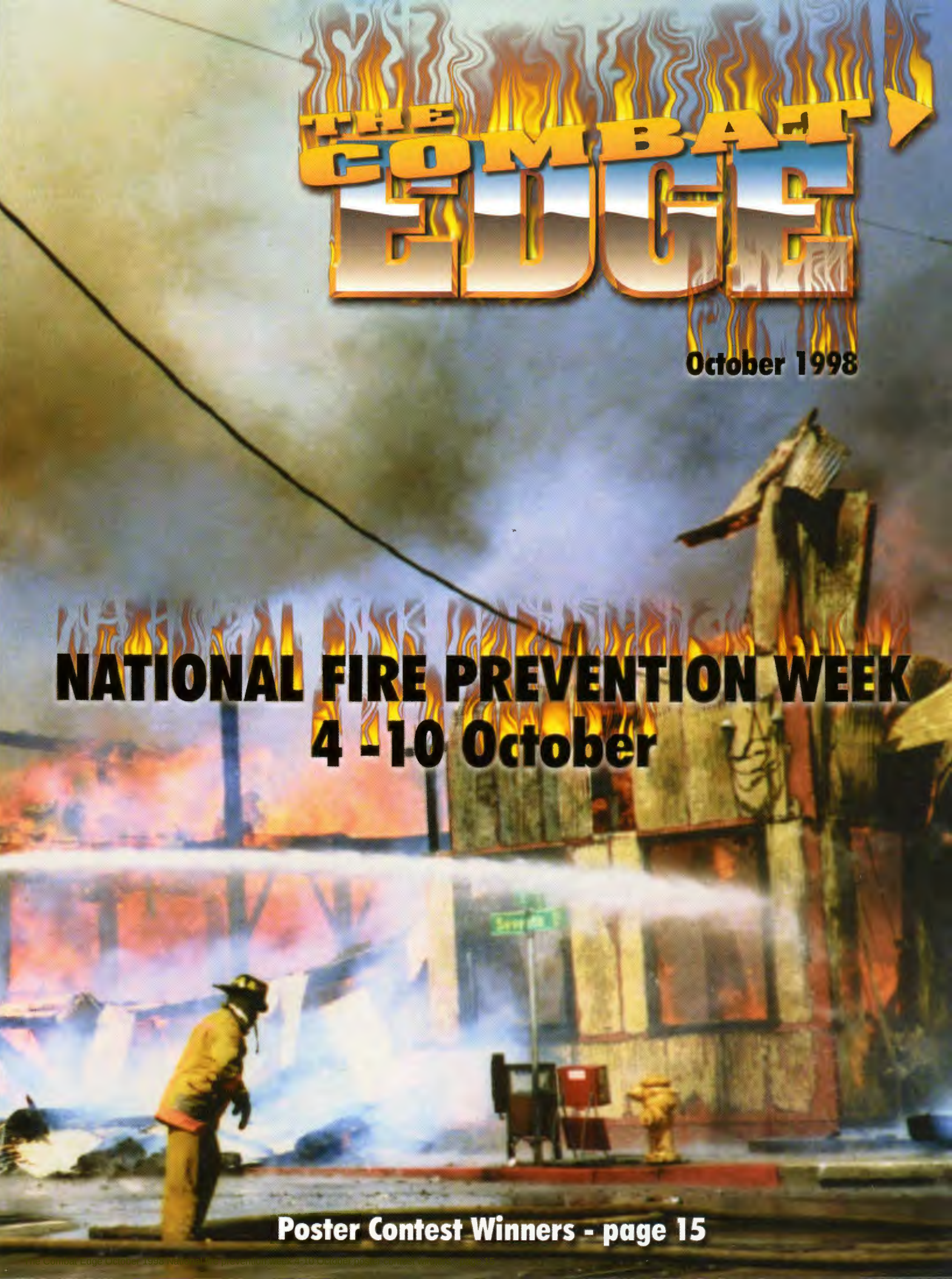
THE COMBAT EDGE
October 1998
NATIONAL FIRE PREVENTION WEEK
4 -10 October
Poster Contest Winners - page 15

The Combat Edge
Air Combat Command's Mishap Prevention Magazine

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CONTENTS

October 1998
ACC SP 91-1 VOLUME 7 ISSUE 5

About the Cover:
The week of 4-10 October 1998 has been proclaimed as National Fire Prevention Week. This week commemorates the Great Chicago Fire of 1871 which killed more than 250 persons, left 100,000 homeless, and destroyed more than 17,400 buildings. The 1998 theme for Fire Prevention Week — "Fire Drills: The Great Escape" — calls to attention the importance of having a home fire escape plan and practicing it on a regular basis.

FEATURES

DEPARTMENTS

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Accent on Safety

ACCent on Safety

I admit it; I like playing with words. Sure, it may not be as manly as juggling chain saws or clinging for 8 seconds to the back of several thousand pounds of enraged bovine, but word games tend to conclude with a far greater percentage of body pieces still intact. And at my age, that has real appeal. One of my most favorite word challenges is thinking up all the different uses, meanings, and mental pictures that one word can convey and trying to include all of those in one sentence. Here's an example with the word *burnt*:

"*Burnt* down buildings, *burnt* up property, and *burnt* out firefighters have indelibly *burnt* in one harsh lesson — fire can be our enemy."

What? You weren't expecting this to have a safety angle? Did you forget what my job is? At any rate, you've stumbled onto the theme of this month's issue. We want to talk to you about fire safety and what you can do to prevent being *burnt* out of your house and home.

Why now? Well, think about it, we are entering a burning season. First, there are all those leaves which look so pretty in their autumn colors. Soon, you'll be fussing at those same leaves as you rake and pile the seemingly endless supply. I have a good friend who once had hair on his arms and eyebrows on his face. He doesn't anymore — thanks to the couple gallons of gasoline he poured on a pile of leaves, "just to get it goin' good." His neighbors said the fireball was really impressive...!

All those burning leaves must spark long suppressed paganism in our children because they turn from the "work" of burning leaves to the joy of lighting up huge stacks of wood while dancing around them and chanting blood thirsty war cries. Yeah, I'm talking about football rallies and bonfires! You know, the things where the size of your team spirit is measured in the height of the conflagration you raise. I've seen these rituals get out of hand, too. They take a nasty turn when you no longer burn the visiting team in effigy; you just burn 'em.

Next up... Halloween. We Americans have tired of just decorating our homes for Christmas. Now every October 31st, we drape black velvet cloth over lamps, hang ghoulish paper figurines in the light of a single candle, and put open fires inside of fruit (yep, I checked, a pumpkin is not a vegetable). Then, boy are we surprised when this stuff bursts into flames. Get a grip, folks, having a scary house is not nearly as scary as no longer having a house!

All right, enough already. Turn the page and read some of our hints, tips, and tales to help you keep fire a friend and not a foe. Oh, and don't use the magazine to light your fireplace; pass it on to someone else and let them BE FIRE SAFE, too.

Colonel Turk Marshall
Chief of Safety

DUCK!!!

Avoiding Migrating Waterfowl On Low-Level Routes

Maj Thomas J. Donalds, HQ ACC/SEF, Langley AFB VA

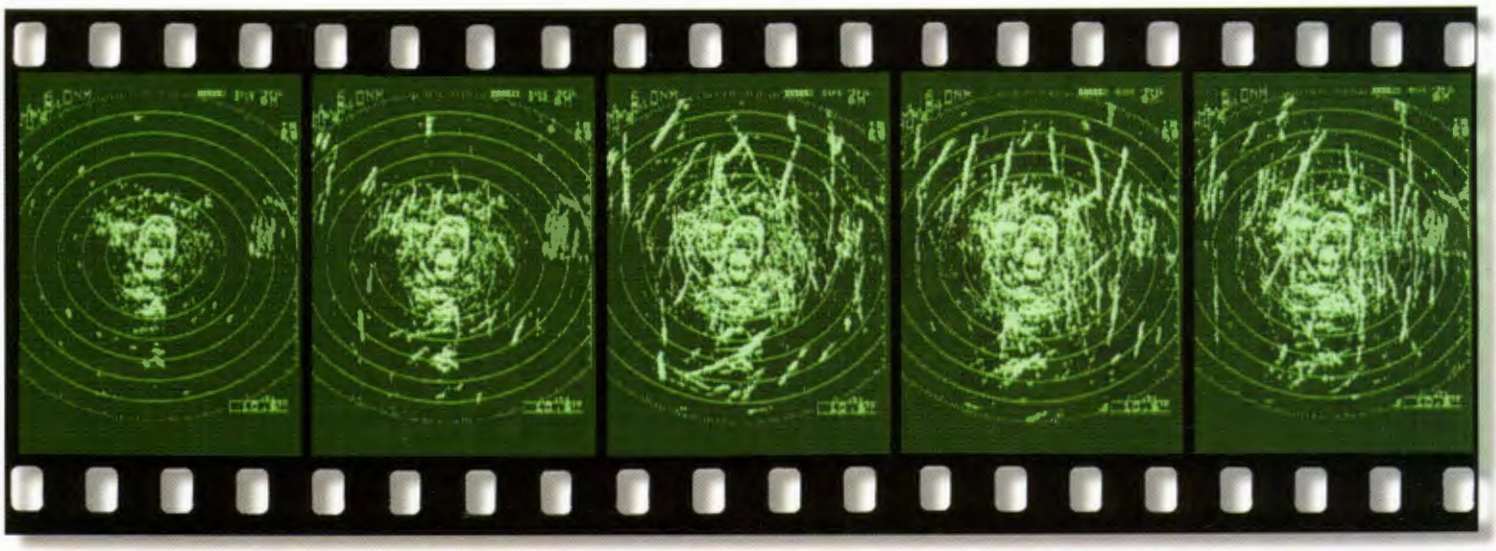
Launch the fleet! Those words were music to my ears. We had been on weather hold for 3 days; and, as a young lieutenant, I was more than ready to go flying. That morning a cold front had come through and cleared the skies. It was late October with a little bite in the air, a perfect day to jump in the RF-4 and head out to do some serious low-level flying. After departure, as we prepared to cancel with center and go VFR, we heard another two-ship from our squadron declare an emergency for an engine problem. They did not need our help, so we canceled, rolled over, and did a combat descent into the low-level route. About 2 minutes into the route, we had to dodge a couple flocks of ducks; within another 30 seconds, ducks were everywhere! Lead directed a climb; by some miracle, we were able to go above the ducks without hitting any. As we passed 5,000 feet, I looked down to see what must have been a flock of tens of thousands of ducks. When we got back in the squadron, we found out the jet with the emergency had taken a bird down the engine and recovered safely to a divert base. I thought to myself, this was the perfect day for us to fly. Why did every duck within 500 miles have to fly today, too? Ten years later, after becoming ACC's Bird Aircraft Strike Hazard (BASH) Program Manager, I learned that it was not a coincidence that all those ducks decided to fly that crisp October day. Before we can reduce the risk associated with migrating waterfowl, we need to understand a few things about their behavior.

One common misperception among aircrews is that migrating birds move a little each day for several weeks to get to their destination, and they start and end their migration on about the same day each year. What actually happens is... the start of a migration for a given species can vary as

much as several weeks from one year to the next based on several factors. When food starts running low or it starts to get cold, the birds decide it is about time to think about migrating. Instead of moving a few miles each day, they wait for a clear day — with tailwinds and some moon illumination — then move in massive flocks several hundred miles before stopping and resting for a few days. Consequently, instead of having a moderate to high bird hazard over several weeks, there is an extremely severe hazard for a few isolated days sometime within that window. An example is the 60,000 tundra swans that migrate down the East Coast and across Dare County Bombing Range in North Carolina each November. Instead of having 2,000 birds a day for a month pass through the range, the birds normally come in waves of 15,000 to 20,000 birds on 3 or 4 individual days. Historically these swans rest and feed near Dover, Delaware, depart between 0900 and early afternoon and proceed down the Chesapeake. Unfortunately, they arrive at Dare County Range at night when aircrew on the range cannot see them. This process is repeated two or three times with anywhere from a day to 2 weeks between events. If a formation of three F-15Es flys on the range for a half hour during this migration, the probability of one of them hitting a tundra swan is about 17 percent! Considering these birds weigh up to 26 pounds, and our canopies are only designed to withstand a 4-pound bird, striking one of these birds will almost certainly result in a Class A or B mishap. It is only due to an extensive study that was conducted at Dare County Range that we know this hazard exists. Unfortunately, this same level of risk exists anywhere waterfowl are migrating; and since we do not know when and where these movements will take place, and most migration takes place at night, we have aircraft flying in these extremely hazardous areas without any awareness of the associated risks.

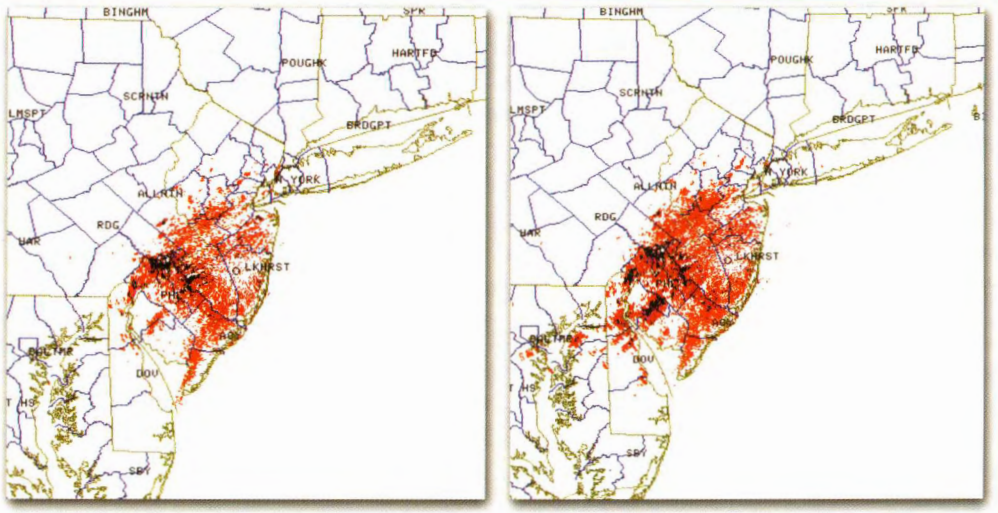
Our current system of bird hazard identification, the Bird Avoidance Model (BAM), has recently been completely rebuilt and is an excellent tool for bird hazard identification — especially during non-migratory seasons. One limitation of the BAM is that it can only identify the window when these extremely hazardous migrations will most likely occur, not the specific days they will take place. Therefore, in order to avoid the 4 or 5 extremely hazardous days during the migratory season, units close their airspace for the entire migratory window. Since some units are unable to maintain their combat capability, or complete their training requirements with all their low-level routes closed for several weeks, they have a difficult choice to make — accept the risk of a serious bird strike or accept a significant degradation of their mission. The solution to this problem is to forecast when these mass movements

These images show the dense migratory movement of tundra swans over Dare County Range, North Carolina, as seen on a radar display. The first image primarily shows radar energy reflected off ground targets. On the subsequent images, the additional lines are created by flocks of swans moving through the range airspace. Each line represents between 5 and 100 swans, and the elapsed time from the first to the last image was 20 minutes.



will occur so appropriate warnings can be issued.

The Avian Hazard Advisory System (AHAS) is being developed by ACC to complement the BAM by determining when these massive flocks will be in our low-level training airspace so that aircrews can be advised. The main tool AHAS uses to detect these large flocks of birds is the WRS-88D weather radar, commonly referred to as NEXRAD. There are 137 individual NEXRAD radars in the CONUS; they are networked, and their data is available via satellite. Because NEXRAD is a very sensitive radar and these migrating flocks are so large, the birds create significant radar returns that are easily detected by trained individuals. The network capability allows NEXRAD data for the entire CONUS to be collected, interpreted, and disseminated at a single location by a small group of experts. For AHAS, a contractor will perform this data analysis and distribution.



These NEXRAD images above show waterfowl migration north of Dover DE on the Atlantic flyaway. The first image shows three distinct migratory tracts moving south out of New Jersey and the second image, 29 minutes later, shows an increase in bird density and an extension of the migration to the south.

Another important input to AHAS is the BAM. Although many of the migratory routes in the United States have never been precisely defined, the BAM gives us excellent information on where the birds will be starting their migration and where they will end. This information is critical in knowing what NEXRAD sites can be used to closely monitor and detect bird movements at the start of their migration. The data collected through observation of these bird migrations will not only be used to issue advisories but also to update and improve the BAM.

A third important input to AHAS is weather forecasts. Since bird migration is directly related to weather patterns, forecasts can be used to predict when migration is likely to take place. By knowing the weather forecasts, the AHAS contractor will know when specific NEXRAD sites should be more closely monitored to detect the start of migratory movements. In many instances, knowing where the birds are in their migration, how long they have been resting, and the weather forecasts will be all the information necessary to determine if a large migration will be taking place the following day in a certain part of the country.

The key to AHAS is ensuring that aircrews have this hazard information in a timely manner. It is not acceptable to tell a flight lead at step time, after he has spent 3 hours preparing and briefing a mission, that his low-level route is closed for birds. The goal of AHAS is to have the bird hazard information available when the flight lead decides where to plan the mission, so he can plan to avoid birds just like he would plan to avoid thunderstorms.

In order to demonstrate and refine the detection and dissemination capabilities of AHAS, the ACC/DO has funded Phase I of 4 phases to be conducted from 1 Oct 98 to 30 Nov 98. The 4th Wing at Seymour Johnson AFB NC is the test base for Phase I of AHAS and warnings will be provided for airspace commonly flown by the 4th Wing. Hazard advisories will be disseminated via the internet address www.ahas.com/home.htm for the following areas: Dare County Range, Gamecock A, B, and C MOA, Farmville MOA, VR-1074, VR-1751, VR-1753, and a 15 mile radius of Seymour Johnson AFB. For low-level routes, each route segment will have a separate forecast since only part of a route may be effected by migration. Since Phase I is a test of the system, ACC does not recommend units decrease restrictions currently used to reduce bird strikes

during the migratory season. Instead, the AHAS forecasts should be used to complement current measures and ensure extra precautions are taken during the most hazardous situations. In addition, units that have accepted the risk of flying low-level during the migratory season can use these forecasts to discontinue training for a few days.

Upon completion of Phase I of AHAS — if the results are favorable — Phase II is planned to expand coverage to the entire East Coast over a 1-year period. Expansion to the remainder of the CONUS could be accomplished in Phases III and IV. The long-range outlook for AHAS is to use the NEXRAD data to update the BAM and eventually link the two systems, so the birds in the BAM are "moved" based on near real-time observations, not just on historical trends.

Despite renewed vigor in most airfield BASH programs in the last few years, our number of bird related mishaps in training airspace continues to be a problem. Although strikes on low-level routes and ranges represent only about 20 percent of all bird strikes, they account for about 70 percent of the damage. This year alone, bird strikes have caused one Class A and two Class B mishaps during low-level training in ACC. As aircraft become more expensive and our training airspace continues to diminish, it is critical to take all available steps to manage this risk. ■

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FLIGHT SAFETY AWARD OF THE QUARTER

Capt Steve M. Arbetman, 96 BS, 2 BW, Barksdale AFB LA

Capt Arbetman's superior performance and leadership as the flight safety officer for the 96th Bomb Squadron and the 2d Air Expeditionary Group has greatly enhanced their operational readiness and ability to execute missions effectively with minimum risk to people and assets.

The 2 AEG, spearheaded by the 96 BS, deployed 15,000 miles to the island of Diego Garcia where it conducted continuous around-the-clock alert, enforcing Iraqi compliance with United Nations' weapons inspections. As Chief Safety Officer for this combined ACC and AMC task force, his foresight and successful application of operational risk management (ORM) techniques significantly mitigated the risk associated with this now "sustained" operation. After analyzing the airfield and flight operations, he coordinated B-52 emergency requirements with the fire department and tower personnel, and set up life support and aircraft orientations training for local rescue personnel—resulted in flawless execution of several minor emergency responses. Due to the non-standard runway environment, Capt Arbetman conducted flight line orientation training for 2 AEG aircrews and maintenance including communication procedure handouts that became standard in all flight line vehicles. He authored and implemented a desperately needed Bird/Aircraft Strike Hazard (BASH) Program to include command unified bird definitions and procedures, limited mowing operations, and guidance ultimately changing the contract mowing height. The BASH plan was implemented by the entire bomber and tanker strike force, as well as by Naval tower personnel. It was also highlighted as a "Recommendation" for the Navy and Air Force in a recent USAF flight mishap investigation and benchmarked by the 55th Wing for operational deployments to Diego Garcia. Overall, the 2 AEG birdstrike rate was reduced significantly—zero birdstrikes during the first 2 months of its application.

Capt Arbetman conducted interesting and relevant weekly safety briefings to keep aircrews and maintenance informed and focused. This included the COMACC-directed January ACC Safety Day meeting. He produced an exceptional multi-media presentation with minimum resources for over 300 personnel from ACC, AMC, and Diego Garcia Naval Support Facility—a total success! Due to the high turnover rate, he developed standard briefings on BASH, flight line driving, sports/recreation safety, and local flying procedures and hazards that were used as orientation briefings for over 1,000 incoming personnel. His flight safety role expanded to ensure mission success. He discovered a significant trend—most minor ground injuries occurred during the 2d and 3d week of the deployment. Through proactive leadership, he tackled this issue with "The 14 Critical Days of Diego" briefings emphasizing to newly deployed personnel the most common mistakes and injuries and how to prevent them. This reduced the total minor injuries by 59%! Brilliant application of ORM principles and steadfast safety leadership resulted in zero flight-related mishaps in well over 1,000 hours of flight time.

During this same period, his superior overall flight safety program received an "Outstanding" rating during the Combined Wing Annual Safety Inspection. Notable items such as the computerized Form 55 database/presentation and a stand-alone continuity book were important, but the key to the outstanding program was superior communication and coordination among squadron safety personnel. Capt Arbetman instituted innovative weekly safety briefings and squadron-level ACC safety days on vital topics ranging from ORM to recent AF mishaps, greatly enhancing the lines of communication. Personnel interviewed felt "upper level management throughout the squadron promoted 'Safety First!'" The squadron members had no doubt who the safety personnel were and clearly understood their mishap/incident reporting procedures. This increased safety awareness and education resulted in zero Class A and B flight, ground, or weapon-related mishaps in 1997 during more than 4,500 flight hours.

Capt Arbetman's steadfast dedication, leadership, and superior performance epitomize the qualities necessary to be an effective Air Force safety officer. A driving force behind the success of the 96 BS and the 2 AEG, his vital contributions enabled his squadron to support global operations and maintain the highest standards of safety excellence at home and abroad! ■

GROUND SAFETY AWARD OF THE QUARTER

SSgt Dana L. Fraher, 99 TRNS, 99 ABW, Nellis AFB NV

Setting the standard for safety is paramount in the 99th Transportation Squadron. At the helm of an incredibly effective safety program is SSgt Fraher. As Transportation's Unit Safety Representative (USR), SSgt Fraher demonstrated how a model safety program should be developed, administered, and improved. Exhibiting tireless enthusiasm, professionalism, and devotion to duty, she impacted the squadron's awareness of safety issues tenfold, resulting in greater overall unit effectiveness and the ability to meet the challenge of Team Nellis. In the extremely short time subsequent to her appointment as USR, she labored intensively to bring to fruition the restructuring of each flight's Job Safety Training Plan (JSTP); a daunting task of effective writing and in-depth research that resulted in highly-descriptive, technically-accurate, and user-friendly JSTPs that allowed each flight a clear and concise understanding of safety guidelines respective to their operation. Sgt Fraher also conducted monthly squadron-wide safety inspections, ensuring all flights were in compliance with prescribed safety standards. Not one to be satisfied with meeting only minimum Wing Safety requirements, she provided informative, well-researched, and entertaining weekly safety briefings to the squadron at large. Utilizing countless resources, including the internet and various local safety-related agencies, she single-handedly created a superb, second-to-none agenda for the 5 Jan 98 Safety Day. Working closely with the Nevada Highway Patrol (NHP), Sgt Fraher arranged the visit of a NHP guest speaker to provide a unique point of view and insight on safe vehicle operation. As process owner for the unit's Operational Risk Management (ORM) Program, she ensured a near-100 percent compliance among squadron members of ORM training initiatives. Through an aggressive Supervisor Safety Training (SST) Program, Sgt Fraher ensured squadron supervisors were thoroughly trained in all aspects of SST; this enabled the dissemination of this highly-critical information to all squadron members, greatly enhancing mission effectiveness.

Sgt Fraher lent her endless talents to the squadron's environmental program, acting as the alternate Unit Environmental Coordinator. Her expertise on all environmental and safety issues was instrumental in her stellar performance as a member of the recent Internal Environmental Compliance Assessment and Management Program inspection at Nellis AFB. Exhibiting unmatched attention to detail and environmental in-sight, Sgt Fraher was able to accurately identify numerous potential shortcomings in environmental compliance, a situation that, if left unchecked, could result in punitive Notice of Violations if identified by the State Environmental Protection Agency. In the course of working closely with the Base Environmental Management, she was able to increase her awareness and expertise in the environmental arena by attending Unit Environmental Coordinator training. This knowledge proved indispensable as she tied in and found common ground for the unit's Safety, Environmental, and Hazard Communication (HAZCOM) programs; a strategy which promoted a safe and healthful working environment for all squadron members. Sgt Fraher's vast knowledge of all aspects of HAZCOM enabled her to develop a written workplace-specific HAZCOM program for the Vehicle Operations Flight. This was the first step in ensuring all flights are thoroughly informed of hazards present in their respective work areas.

Sgt Fraher's contribution to the effectiveness of the 99th Transportation Squadron's mission has been nothing less than spectacular. On several occasions, she has been singled out and lauded by her commander for her outstanding performance and tireless dedication to the unit's safety program. Sgt Fraher has been the one driving force that has brought safety to the forefront in the hearts and minds of Transportation's members. Bringing a fresh approach, zeal, and infectious enthusiasm to the safety arena, she has taken an often-maligned and overlooked program to new heights of excellence, and is, without a doubt, light years ahead of the competition. The hugely-successful safety program Sgt Fraher has so diligently orchestrated to well-hone efficiency, serves as a benchmark for other Nellis units to emulate. ■

SMSgt George Bice
2 BW/SEF
Barksdale AFB LA

You're a Flight Safety NCO...

I'm writing this article to share some thoughts and experiences with Flight Safety NCOs (FSNCO) around the command. Chiefs of Safety (COS) and Flight Safety Officers (FSO) might find this information to be of great value to them as well. There are some safety lessons learned that have helped me over the years as a FSNCO. While they may not fit all your particular situations at the present time, there is a high probability that they will apply to you at sometime in the future.

As you read the article, I'd like you to think about a couple of questions. First, if your FSO goes on a lengthy deployment, are you fully prepared to manage each and every program by yourself during his absence? You can't always count on a "fill-in" squadron FSO. They're busy too and not always available to help you out. Second, with your FSO gone, your COS might need to go TDY or take some leave. Can your COS be confident that you're fully prepared to manage the wing's flight safety programs while he's gone? With today's pace of ongoing and pop-up deployments, how likely are you to find yourself in these situations? If your answer is "Never!," count yourself fortunate, skip to the end of the article, and put your head back in the sand. For the rest of us, let's take a look at a few areas concerning the FSNCO.

Program Management

First, let's look at Program Management. I have found that the backbone to any office is the management of its programs. Without that, there is no continuity or direction. Who is in the best position to keep continuity for flight safety programs? You, the FSNCO, of course. Why? Because you will most likely be there for 3 to 4 years — while FSOs change every 12 to 18 months. Flight safety programs stay around for a long time, and they cannot be left unmanaged. Furthermore, you must completely know "and" understand each and every program in the office. When the new FSO comes in, I can tell you which direction his head will turn for answers — your way.

Getting Involved

Next, I'll talk about the application of programs — or even better — getting involved. Not only should you know how to maintain the books, but you should also get involved (i.e., learn how to actu-

. Prepared to Go It Alone?

ally implement the programs yourself). When the FSO is gone, the meetings, briefings, and daily activities of what he or she did on the flying end should not come to a halt. Be prepared to pick up those types of responsibilities in the FSO's absence. Acquaint yourself with all the things the FSO does on a daily basis; focus on the things that you are unfamiliar with — the things you haven't been involved with in the past. Simply stated, in the absence of the FSO, people will turn to you for assistance ... and here are a few examples of what you should be familiar with:

Annual Inspections

There are many areas to look at in a flying squadron. As an FSNCO, you should not only be able to inspect the maintenance side of the house — but the operational side as well. Normally, the FSO takes care of that, but what if the FSO is gone? When was the last time you sat in on a morning brief or observed mission planning? Just because you're not a flyer does not mean you can't do it! After all, you're assigned to the Flight Safety Office, right?

Flight Safety Meetings

Normally, the FSO hosts the flight safety meetings. But here's an opportunity for you to consider. When was the last time you volunteered to organize and host the meeting for the FSO? There's nothing wrong with that idea, is there? In fact, you'll probably find the FSO more than happy to let you give it a try. Just remember this — the sooner you do it, the better. The first time you step out in gathering topics and hosting a meeting should not be when the FSO is deployed.

Mishap Investigations/ Hazardous Air Traffic Reports (HATRs)

Normally, the FSNCO will take care of all the maintenance aspects; and the FSO will perform the operational aspect in a mishap. HATR's normally deal with operations and procedures. Now consider this — when was the last time you helped investigate the operational side of a mishap or a HATR? As I said before, the first time you become involved with it should not be when the FSO is deployed.

These three examples show that keeping and maintaining the books is just the first step in a flying safety program. The real key to success is implementation. Get involved, learn all you can — whenever you can. Just because you don't fly doesn't mean you can't learn about the local pattern, training routes, or even some basic emergency pro-

cedures. Now don't get me wrong here; I'm not recommending you take over the FSO's job. I just want you to realize that sometime in the future, your FSO may be away for an extended period of time; therefore, you need to be prepared not only to maintain the flying safety programs, but implement them as well.

Fear of Change

Now let's talk about something that all FSNCO's need to prepare for — CHANGE. Believe me, after 3 plus years, five FSOs, and five COSs, I don't even worry about "change" anymore; I just accept it! The Air Force initiative to learn and implement Operational Risk Management (ORM) is a prime example. If you're going to be around as an FSNCO and can easily adapt to change, you will be better prepared for any situation that comes up. Here's a little tip I've learned that has helped me over the years. You know those programs that need updating from time to time? And, you know how almost every new FSO comes into the office with guns blazing and willing to tackle anything? Hey, nothing wrong with that — fresh face, new ideas — that's always a good thing. Take those programs that need updating, and get your new FSO involved. Working together at the onset to make these changes is an effective way to get all your programs into top shape while developing a solid working relationship.

Mishap Procedure Awareness

Finally, let's talk about mishaps. Programs cover the majority of your duties, but a mishap can really expose what you know and don't know. How well you've managed your programs can determine whether your mishap "journey" will be a smooth ride or a rocky road. Yes, I've been through the Class A mishap process and have been involved with many Class C mishaps as well. One thing I can testify to, they usually never occur when everyone in the Flight Safety Office is around. There have been numerous mishaps where I was at work, the FSO on leave, and the COS flying. Was I prepared? Well, I thought I was. But I sure found out in a hurry that I was not familiar with those things the FSO normally took care of. Talk about becoming conversant in record time; it wasn't fun.

Take advantage of those lower level Class C mishaps — even though you may be handling only the maintenance part of them — and get involved with the operational part as well. Know local procedures and what the aircrew did or should have done that was in the book. The key here is to get involved, and be prepared in case you have to go it alone for awhile. Remember, before the COS or FSO arrive, many eyes will be on you seeking direction for the next step to take in the mishap investigation process. To be effective, you need to think about it now, be aware of all mishap process requirements, and build yourself a mental checklist. Standing there frozen, like a deer in headlights, will be about as good for you as it is for the deer!

There are many other examples I could share with you, but I think you get the picture. You need to be "prepared to go it alone." I hope that never happens; but if it does, you've got to be ready. I have talked about several things such as program management, getting involved, fear of change, and increased awareness of the mishap process. These are things flight safety personnel should do on a daily basis, but how many times has an FSNCO totally relied on the FSO or COS to carry out certain flight safety obligations simply because the person says "it's a pilot's thing." If the truth be known, I think you'll find out there are many FSNCOs with this opinion. While I agree that FSNCOs are maintainers and don't have an operator's background, there's still nothing wrong with them getting more involved and becoming more comfortable with their job. You might even find in the long run that your COS and FSO will be more at ease when they are out of the office, TDY, or on leave because of your increased awareness of flight safety procedures.

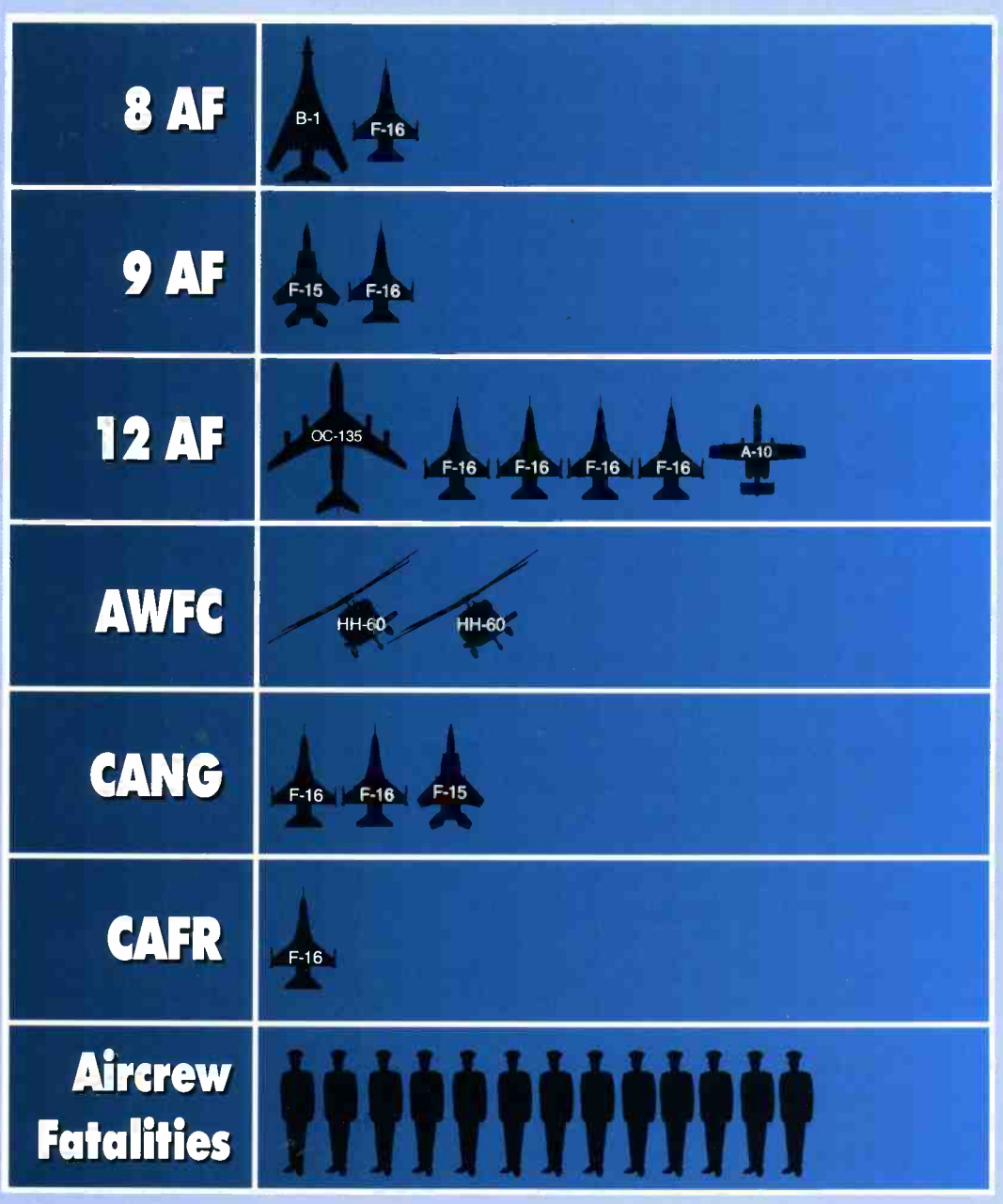
I know there is no COS or FSO out there that will just leave you hanging for any length of time on purpose; but believe me, it can happen. How do I know? Well, my FSO has been deployed now for about 60 days, my COS has been on leave for the past week, and we have one squadron deployed that took their safety officer along. Through all this, the FSO and COS have not once mentioned bringing in a squadron FSO as a filler. For the most part, I've been on my own. No need to wonder about my FSO or COS's confidence in me — I couldn't ask for better trust on their part. With this blanket trust in hand, I have an obligation to them to be fully prepared for effectively managing each and every program during their absence. I hope all other flight safety offices throughout the command can operate under that same level of confidence. As one Flight Safety NCO to another, let me ask you, "Are you prepared ... to go it alone?" ■

Flight Safety Stats

Flight Safety Stats

ACC & ACC-Gained Losses for FY 98

1 Oct 97 - 9 Sep 98
Class A Damaged or Destroyed Aircraft



Class A - Fatality; Permanent Total Disability; Property Damage ≥ $1,000,000

"Not a single sortie we fly is worth compromising the integrity of an aircraft or the life of an airman."

Portable Fire Extinguishers

SMSgt Gary Reniker
442 FW/SE
Whiteman AFB MO

How effective are portable fire extinguishers? According to a recent survey by the National Association of Fire Equipment Distributors (NAFED), portable fire extinguishers had an effectiveness rate of 95.3% in extinguishing fires during 1996.

The survey brought out the value of proper inspection and maintenance. Damaged fire extinguishers accounted for nearly 16% of the malfunctions. Lack of proper maintenance accounted for an additional 42% of the malfunctions. This maintenance should include a monthly visual inspection, examination for recharge, other annual maintenance work, and hydrostatic testing at 5- or 12-year intervals depending on the type of fire extinguisher.

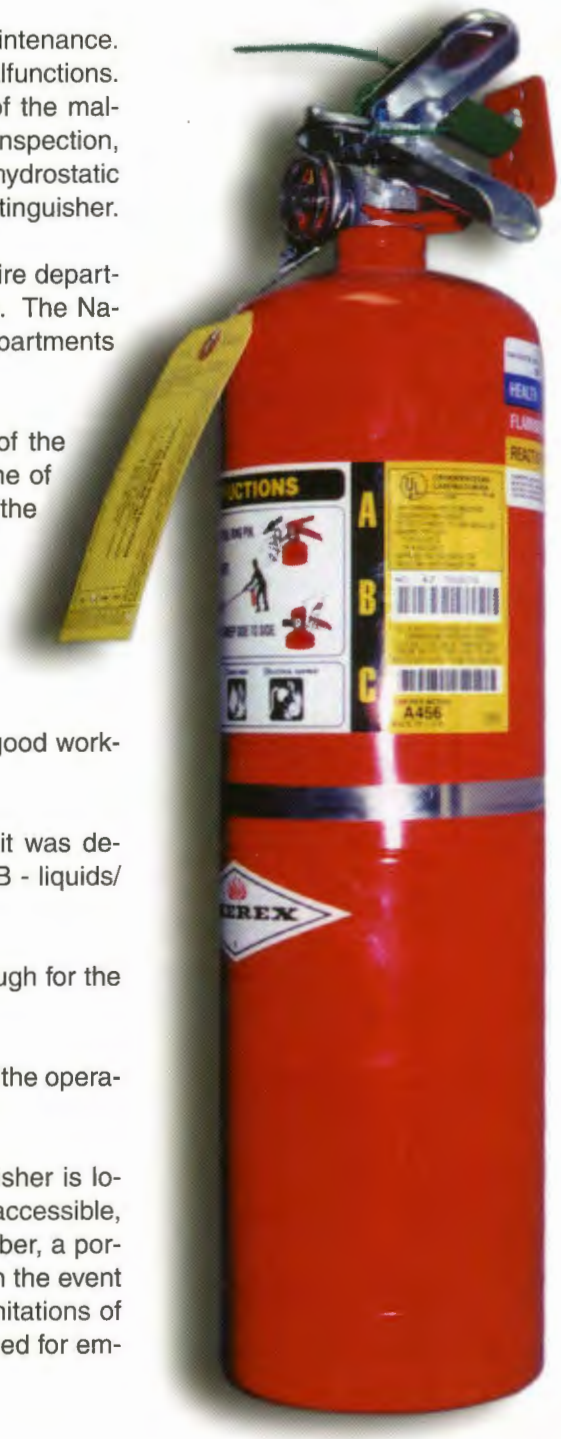
The study also revealed a deficiency in reporting fires to the fire department. The fire department was called in only 24% of the cases. The National Fire Protection Association (NFPA) recommends that fire departments be called as soon as a fire is discovered.

Portable fire extinguishers can represent an important part of the overall fire protection program. They are intended as the first line of defense to cope with fires of limited size. Many fires are small at the start and may be extinguished by a portable fire extinguisher.

According to NFPA 10 "Standard for Portable Fire Extinguishers," the success of a portable fire extinguisher depends on several factors:

- The fire extinguisher should be located close by and be in good working order.
- The fire extinguisher should be used on the "type" of fire it was designed to snuff out (i.e., Type A - trash, wood, paper; Type B - liquids/grease; Type C - electrical equipment).
- The flames should be doused when they are still small enough for the portable fire extinguisher to be effective.
- The person discovering the fire should be properly trained in the operation of the extinguisher and be willing to use it immediately.

In conclusion, do you know where your portable fire extinguisher is located? Is it being used as a coat rack? Is it readily visible and accessible, or is it blocked by stock and/or other equipment items? Remember, a portable fire extinguisher can be your first and only line of defense in the event of fire. So make sure you're familiar with the capabilities and limitations of the fire extinguisher as well as the technical procedures to be used for employing it in the event of various emergency situations. ■



Fire Prevention Poster Contest

Winners!

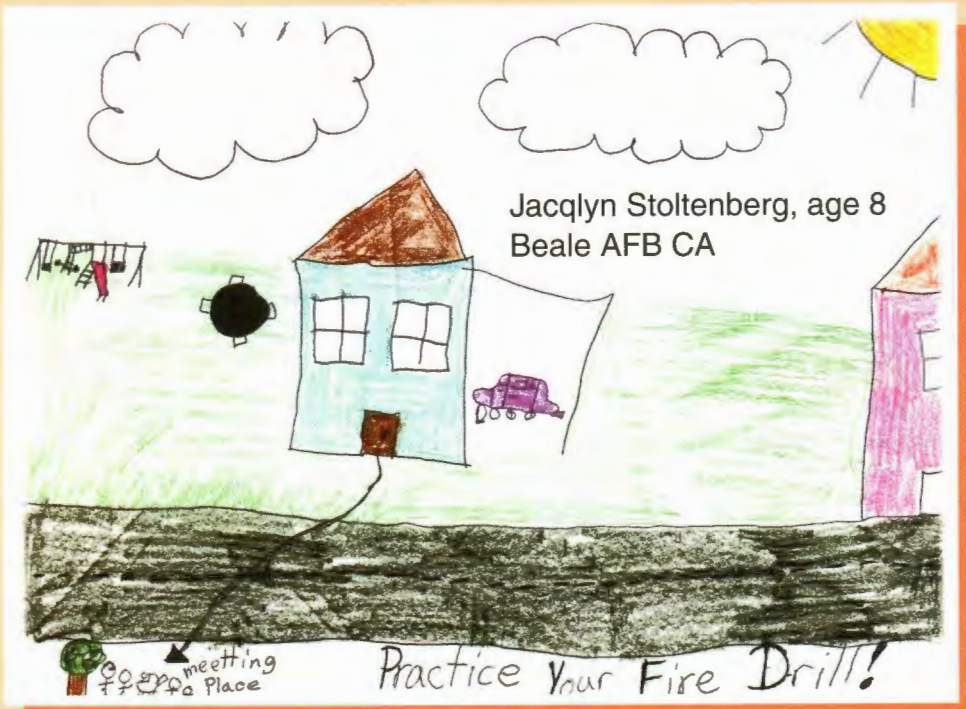
Creating safety awareness is the goal of ACC's Mishap Prevention Magazine — not only among the active duty military and civil service personnel, but their family members as well. In observance of National Fire Prevention Week (4-10 October 1998), *The Combat Edge* sponsored a Fire Safety Poster Contest for young boys and girls. Categories of poster awards included (1) "best art" and (2) "best theme." In addition, a single "best overall poster" was chosen from all the entries received. Congratulations to all of our winners! The success of the Fire Safety Poster Contest is due to the support provided by the parents. *The Combat Edge* staff wants to express a special thanks to all those moms and dads who worked with and encouraged their children to participate in the poster contest. Your efforts in creating a safety awareness regarding the benefits of fire prevention are not only greatly appreciated, but may actually save a child's (or adult's) life! This was one contest where everybody is a winner.

Best Overall Poster!

Ashley Radcliffe, age 14
Shreveport LA

Division I Ages 5 - 8

Best Art

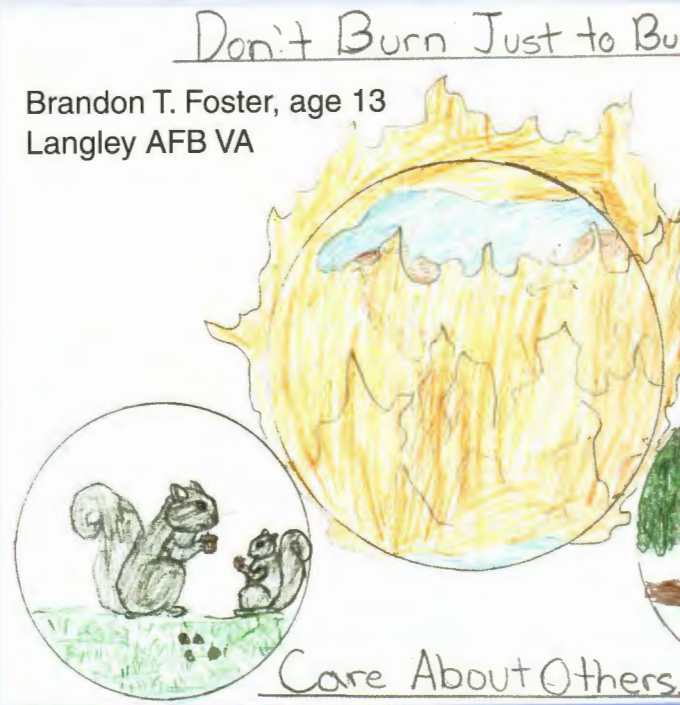


Jacqlyn Stoltenberg, age 8
Beale AFB CA

Best Theme

Samantha Cook, age 7
Smithfield VA

Best Art



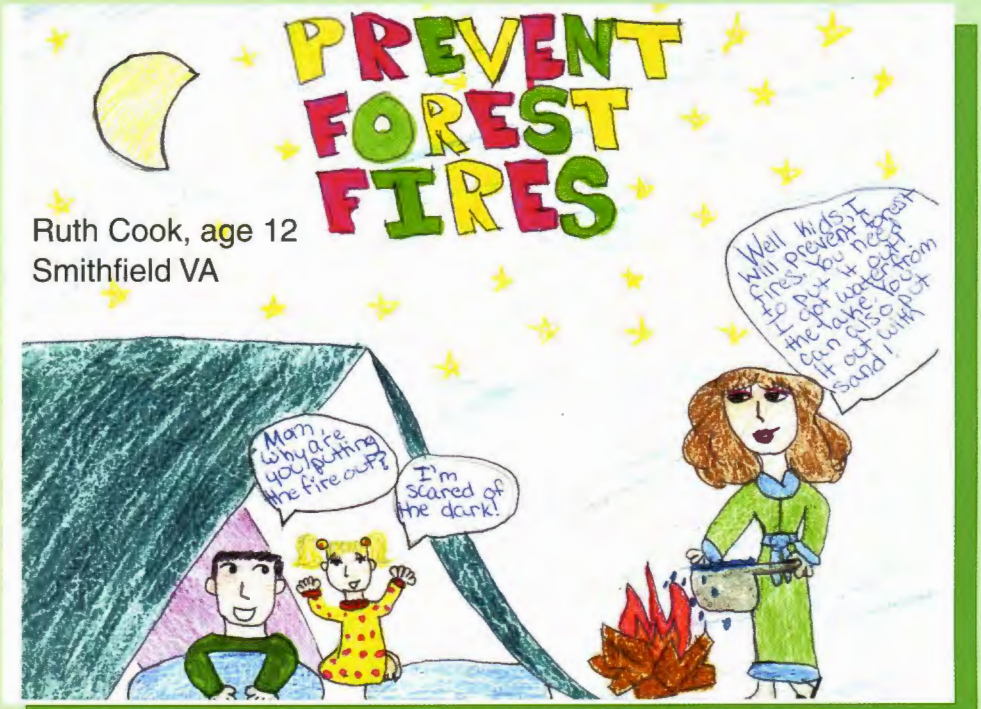
Brandon T. Foster, age 13
Langley AFB VA

Crissy Done, age 12
Hampton VA

DivisionII Ages 9-12

st Art

Best Theme

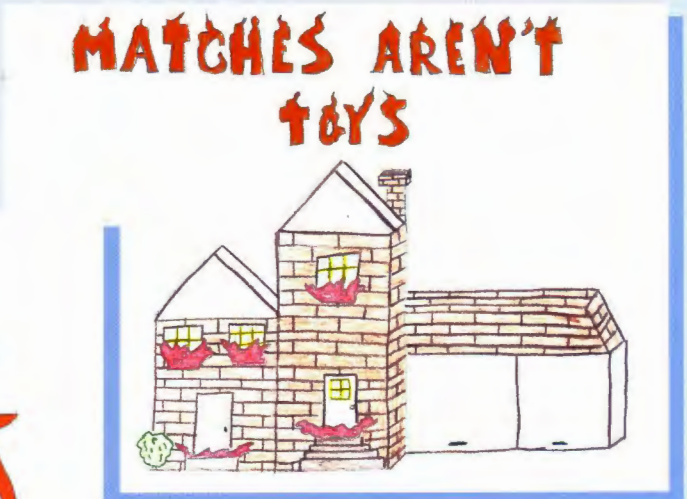


Ruth Cook, age 12
Smithfield VA

DivisionIII Ages 13-16

Best Theme (Ist Place Tie)

Erin Haskell, age 14
Ellsworth AFB SD



Steven Johnson, age 14
Port Haywood VA

Monthly Awards

AIRCREW SAFETY AWARD OF DISTINCTION

Capt Nick P. Radovcich, Capt F. Craig Pearson
Capt Michael S. Ballek, Capt Craig G. Hunnicutt
335 FS, 4 FW
Seymour Johnson AFB NC

The sortie began as a normal Operational SOUTHERN WATCH F-15 sortie from Prince Sultan Air Base (PSAB) for Teepee 41 flight. After an uneventful departure and air refueling, Teepee flight entered the marshal area just south of the Iraqi border. Three minutes prior to push time, Teepee 42, Capts Ballek and Hunnicutt, notified Teepee 41, Capts Radovcich and Pearson, that they had an engine problem: the #2 engine oil pressure was fluctuating erratically between 5 and 15 psi, even after selecting idle power in accordance with checklist procedures. Capt Radovcich immediately terminated the mission and turned the flight toward the nearest divert field, Al Jaber AB in Kuwait. This airfield was over 250 miles away and required constant coordination between the flight, AWACS, and civilian Air Traffic Control authorities. Coordination with civilian controllers was especially critical since English is not their primary language, increasing the potential for confusion. Capt Pearson immediately began the complex task of notifying the command and control agencies of the impending emergency, ensuring other Strike Eagles flying Defensive Counter Air were rerolled to strike, coordinated for clearance into Kuwait airspace, and contacted the Al Jaber Supervisor of Flying (SOF) (US).

During the divert, Capt Ballek continually monitored the malfunctioning engine while Capt Hunnicutt ran through the checklists and assessed the various scenarios. Five minutes into the divert, the oil pressure fell below allowable limits and Capt Ballek shut down the engine IAW checklist procedures. Teepee 41 declared an emergency for his wingman and coordinated with Al Jaber to allow Teepee 42 to adjust gross weight prior to landing. En route to A1 Jaber, Teepee 41 contacted the PSAB SOF. Teepee 42 accomplished a flawless single engine approach and landing at Al Jaber, an airfield where he had never previously flown.

After Teepee 42's landing, Teepee 41 returned to PSAB as directed by higher headquarters. Post-flight inspection of Teepee 42 revealed a large quantity of oil in the tailpipe of the #2 engine, with only 1/4 of the normal oil quantity remaining in the oil system. The quick analysis and actions of these superb aviators reduced the severity of this incident, saving an engine from catastrophic failure.

PILOT SAFETY AWARD OF DISTINCTION

Maj Christopher R. Maloy
388 FW
Hill AFB UT

On 25 Feb 98 at 1630L, Maj Maloy, the pilot of F-16C 88-500, started the engine for a training flight. Approximately 10 minutes after the engine start, Maj Maloy reported an unusual vibration accompanied by a flash of the inlet icing caution light while the engine was at idle rpm. Ice FOD condition one was in effect at the time of the engine start. Three to four minutes later, a more pronounced vibration occurred with no unusual engine indications other than the inlet icing light. Maj Maloy elected to abort the aircraft mission. During a subsequent maintenance engine run, the mechanic reported excessive engine vibrations. The engine was shut down, removed from the aircraft, and taken to the engine shop for investigation. The teardown found a number four bearing failure. Following the previous flight, a 1.8 hour sortie, the Jet Oil Analysis Program (JOAP) test gave no abnormal indications. The number four catastrophic bearing failure is a known problem that can occur with no warning. Maj Maloy's decisive action prevented the possible loss of the engine, aircraft, and life.

WEAPONS SAFETY AWARD OF DISTINCTION

SSgt Jonathon P. Hanson
83 FWS, 475 WEG
Tyndall AFB FL

During routine preparation for the inspection and shipment of explosive dish assemblies (EDA) used in AIM-120 telemetry missile flight termination systems, SSgt Hanson noticed discrepancies in the interim hazard classification of AIM-120s installed with a telemetry unit and an EDA. The classification of any assembled unit is the highest classification of any of its components. The AIM-120s in question were classified as 1.3C explosive hazard based on the rocket motor hazard. The discrepancy became apparent upon review and comparison of not only the amount but also the components of the explosive contained in the EDA. Upon further research, Sgt Hanson was unable to find any documentation covering unpackaged EDAs and noted that current interim hazard classification resources cited packaged EDAs at a 1.4D explosive hazard based on packaging and amount of explosive present. To resolve this issue, Sgt Hanson coordinated between Warner Robins ALC missile depot and Hill ALC munitions depot. The correct and significantly higher 1.1D explosive hazard classification, based on the explosive's components, for unpackaged EDAs was confirmed by HQ AF Development Test Center. As a result of the higher classification, he quickly determined that telemetry-equipped AIM-120 missiles containing "unpackaged" EDAs were erroneously being classified and handled as 1.3C, based on the rocket motor hazard, instead of 1.1D, based on the unpackaged EDA hazard. Sgt Hanson took immediate action and notified his flight supervision, maintenance operations, weapons safety NCO, and group safety office of the discrepancy and arranged for the immediate repositioning of AIM-120 laden munitions trailers to 1.1D explosive hazard classification approved aircraft parking spots on the flight line. Sgt Hanson identified a previously unrecognized interim hazard classification in relation to EDAs and led to extensive procedural changes in the transportation, maintenance, storage, and flight line parking of AIM-120 telemetry missiles. A separate interim hazard classification letter for unpackaged EDAs has been marked for inclusion into relative technical orders and will soon be released by depot. Sgt Hanson's efforts in identifying this problem as well as his proactive response greatly reduced the potential for a major explosive mishap.

CREW CHIEF AWARD OF DISTINCTION

A1C Mark L. Bragel
34 FS, 388 FW
Hill AFB UT

A1C Bragel was conducting a preflight inspection on an F-16 (88-0500) when he noticed that the front retaining cap at the top of the left strut was missing and the bushing pushed out. At closer inspection he found the pivot pin was missing and the rear cap was being held on by grease. The strut was totally unsecured and covers inspection of the area. Amn Bragel's thorough inspection procedures and strict adherence to tech data averted further damage to the aircraft and prevented another FOD potential from the rear cap to the rest of the fleet. The pin and retaining caps were replaced and the aircraft returned to service. Had this gone unnoticed it would have certainly caused the main landing gear to collapse on taxi or even worse on landing. Amn Bragel's attention to detail prevented the catastrophic loss of a multi-million dollar aircraft and perhaps even the pilot's life.

GROUND SAFETY AWARD OF DISTINCTION

TSgt Michael J. Clarke
939 MXS, 939 RQW
Portland IAP OR

TSgt Clarke is responsible for ground safety for the 939th Logistics Group, including the 939th Logistics Support Squadron and the 939th Maintenance Squadron. He is the unit safety representative to five C-130 and eight HH-60G aircraft as well as over 100 full-time employees and over 250 Air Force Reserve personnel, three maintenance hangars and two administrative facilities. In this capacity, he established a highly effective and active organizational safety program within the 939 RQW; compliance with proper safety procedures and hazard reporting is best ever. Sgt Clarke reorganized, computerized, and made accessible to all employees important safety related materials. In doing so, he distributed a monthly safety newsletter that highlighted safety program mishaps and hazards in an effort to prevent similar occurrences. His use of local area network improved accessibility and communication throughout maintenance. He gathered data from the wing safety office, internet, magazines, and other resources adding meaningful articles to the newsletter. His program was identified as a "Best Practice" during a recent Headquarters AF Reserve Command Inspector General Unit Compliance Inspection.

Sgt Clarke investigated all mishaps, forwarded reports and photographs to wing safety, and made recommendations to help prevent further mishaps. He reported identified safety program deficiencies and assisted in the rapid abatement of deficiencies. Implemented use of digital camera for a variety of different safety related purposes and replacement of older Polaroid cameras with new digital cameras adopted Air Force-wide. He conducted semiannual safety inspections of all maintenance facilities, submitted formal reports through appropriate levels of command, and followed up to ensure corrective actions were implemented and hazards abated. His actions resulted in no Class A, B, or C ground safety related mishaps since April 1996.

FLIGHT LINE SAFETY AWARD OF DISTINCTION

TSgt Betty Lou Nadig
917 WG
Barksdale AFB LA

On 8 May 98, after recovery from a flight of B-52H aircraft, TSgt Nadig found the "Catapult Safety Pin Pull Initiator Gas Line" disconnected at the quick disconnect on the copilot's seat. Egress personnel were dispatched to the aircraft and corrected the problem. If this discrepancy had gone undetected, and an emergency situation occurred during flight requiring crew members to eject from the aircraft, the copilot would not have been able to eject. The attention to detail in performing her job properly in accordance with technical data prevented a potentially dangerous and critical situation that would have had a serious effect on flight safety and possible loss of life.

UNIT SAFETY AWARD OF DISTINCTION

83d Fighter Weapons Squadron
475 WEG
Tyndall AFB FL

The mission of the 83d Fighter Weapons Squadron (FWS) is to test and evaluate the man, the machine, and the missile. As part of the United States Air Warfare Center's Air-to-Air Weapon System Evaluation Program (A/A WSEP), "Combat Archer," it is the only Air Force squadron to conduct live missile firings for operational units. During combat unit deployments, squadron personnel provide expertise and assistance ranging from live missile employment techniques to aircraft and missile fault trouble shooting and repair. In addition to all this, extremely valuable trend information on missile capabilities and Combat Air Force (CAF) day-to-day mission capability is captured. This information is then given to Air Force logistics planners and CAF decision makers who use the information to determine future force structure. During this month, the 83 FWS hosted six combat units from ACC, ANG, and the USN. These six units produced 500 sorties and 750 accident-free flying hours. Sorties included live missile firings, live air-to-air gunnery, and collateral BFM, ACM, and (D)ACT missions. Additionally, the 83 FWS conducted the first-ever joint A/A WSEP with USN F/A-18s from Air Wing 8 firing four AIM-7s, three AIM-9s, and three AIM-120 missiles. This deployment proved the concept of A/A WSEP hosting joint deployments, and the results will add to the A/A WSEP database. Supporting these safe flying hours are the squadron's many accident-fire ground activities. The squadron's Munitions Flight is the only one of its kind in the active Air Force. Maintenance personnel are exposed to unique explosive hazards during the tactical-to-telemetry reconfiguration of missiles involving the removal and replacement of the warhead with telemetry packs and the rewiring of the missile. They managed the breakout, inspection, transportation, loading, and firing of seven AIM-7s, nine AIM-9s, eleven AIM-120s, and 5,140 rounds of 20MM ammunition worth over $10M. The vigilance demonstrated by 83d maintenance personnel and supervisors also ensured 56 safe explosive missile operations and the incident-free delivery of 140 missiles to the flight line and munitions storage area. They inspected and repacked 16 shipments, weighing over 75K pounds of excess missile components generated during the tactical-to-telemetry reconfiguration of AIM-7M, AIM-9M, and AIM-120A/B missiles worth over $16M without a single weapons incident. This level of effort, in concert with a superior safety program, is the basis of the 83 FWS's exceptional safety record. The 83 FWS is proof positive that a sound safety program enforced by good people can ensure successful, incident-free missions.

Ask Orville!

Col Ronald L. Garhart, HQ ACC/SEO, Langley AFB VA

Our letter this month asks Orville to take the risk of exploring the mystical, to dance with the purveyors of "Black Magic," to flirt with the occult, to taste the forbidden fruit, to knock on the door of the superficial... errr... I mean, the supernatural. Yes, loyal readers, the author of this month's thought provoking letter proposes that Orville go where no Chief of ACC Operational Risk Management has ever gone before... deep into the secret, vast, and heretofore illusive caverns of THE WORLD! WIDE! WEB!

At somewhat the expense of Orville, GS-10 Craig P. Unstrum (better known to his friends as CPU) corresponds with us from Travis AFB... just a stone's throw from the heart of the silicon valley. CPU writes:

Hey, Orville!

When are you planning to come out of the stone age and start putting ORM on the Web? You have an overwhelming abundance of ORM information in the form of instructions, pamphlets, guides, personal contacts, instructional courses, briefings, training, etc. I could go on forever — but you get my drift. There's seemingly no end to the ORM information out there that could easily be placed on the World Wide Web for everyone's unimpeded access.

But nnnooooooo... you would rather stick with your archaic, marginally effective method where units and individuals request these items from you; then you in turn make them available to the requestors on a case-by-case basis. Perhaps this antiquated approach makes you feel important since everyone must come directly to you, and maybe you rationalize that you are better able to keep your finger on the pulse of ORM implementation in this manner. Or could it be that you're just too naive when it comes to matters of the Web to establish a site for ORM.

Well... get with it, Orville! Join the ranks of the enlightened and productive members of the Air Force team who have taken the time and interest to make the "power of the Web" work for them. I request that you denounce and turn away from your current methods and make ORM available on the Web, where no one will ever have to grovel to your office again in order to gain the clear benefits and advantages

afforded them by Operational Risk Management.

Craig P. Unstrum,
GS-11 (Select)

Dear Mr. Unstrung,

Well, you certainly put me in my place; and am I ever embarrassed and red faced — **NOT!** For you see, I looked into the gaping maw of my so-called cyberless soul. I saw the light and emerged from the darkness. I broke free of the oppressive communications shackles of my past and entered a curse — I mean a course — that will place ORM squarely in the center of the electronic abyss (known by all as the World Wide Web) now and forever more. Can I have an AMEN?!

Yes, Mr. Unstrum, ORM has been available on the Web for a few months now; but it would probably be helpful for me to tell you where to find it. As you are well aware, ORM is an Air Force initiative. As such, it would not be prudent for each MAJCOM to put the same information on their own Web site. In addition to the obvious negative aspects of this approach, we would likely risk the wrath of "giga-byte" huggers — such as yourself — who would surely accuse us of wasting precious electronic space. So bear with me, Mr. Unstrum. Now... in order to get the full ACC picture, you will need to tap into two sites.

First, the Air Force Web site contains the ORM information that is "common to all MAJCOMs." You can locate the Air Force site at: www-afsc.saia.af.mil. Here you will find beloved and timeless treasures such as AFI 91-213 "Operational Risk Management Program" and AFP 91-215 "Operational Risk Management Guidelines and Tools" — truly classics in the ORM world. In addition, you will be provided with the Air Force ORM Computer-Based Familiarization Course, the Senior Leader's Indoctrination Course, the Applications Course, course dates with details for enrollment, a list of "Who's Who in ORM," and links to all the other MAJCOM (as well as select Joint Service and civilian) ORM sites. Yes, CPU, the Air Force site is a veritable ORM library that Mr. John Phillips and his professional staff at the Air Force Safety Center are continually updating.

Second, if you want to gain access to "ACC specific information," you can accomplish this in one of two ways. Either go to the Air Force site and use the links to get to the ACC Office of Safety, or try us direct in the "SE" listing found at: At this site, you will be conveniently treated to beneficial information like the ACC Staff Champions list, the ACC Risk Management Guide, ACC's original rendition of the ORM Computer-Based Familiarization Course, an ORM Training Briefing created by the 33 FW at Eglin AFB FL, and other MAJCOM specifics. But lest I risk being accused of passively taking credit for this work, let me be quick to acknowledge the folks who are responsible for ACC's exceptional Web site:

www.mil.acc.af.mil/se

- Mr. Bryan Lopatic (Web Master), ACC Command Graphics

- Mrs. Barbara Taylor, ACC Safety Publications Branch

- TSgt Rob Widener, ACC Safety Analysis Branch

These are truly the unsung heroes and heroine responsible for bringing the ACC ORM Web page to fruition.

So call us up, gaze upon the ORM wonders that are now yours at the touch of a button. Feel the freedom and exhilaration that only comes from that one-on-one relationship between man and computer. But alas, I have no desire to become the Maytag Repairman; so should you find it necessary (or more to your liking) to speak or correspond with a human being, never — I say again — never hesitate to personally get in touch with me.

Keep those cards and letters flying in,

Orville R. Mudd
ORM Dogfight Veteran
ACC Office of Safety

If you have any questions or comments regarding ORM, send them to:

"Ask Orville!"
HQ ACC/SEO
175 Sweeney Blvd
Langley AFB VA 23665-2700

DSN 574-8800, Fax DSN 574-8975

Rage and my 5.0 GT!

MSgt Thomas S. Foster, Jr.
HQ ACC/SEW
Langley AFB VA

Road rage on our nation's highways has grown to new heights. One thing for sure, it doesn't matter if you live in the city or in rural areas. Almost everyday you can read about aggressive drivers in our newspapers or hear about their acts of rage on the daily newscast. Needless to say, these people are high-risk drivers that climb into the anonymity of their "vehicular projectiles" and take out their frustrations on anybody at any time. I have experienced this first-hand while stationed here in the Hampton Roads area. Here's my story...

It was an early, crisp, February morning and of all days, Friday the 13th! I live approximately 10 miles from my office; and at this particular time, I had to be at work at 0700. So, like any other day, I would head off to work around 0615 in the morning. As I was merging onto the interstate, I noticed that the traffic varied from moderate to heavy. I merged into the first lane as usual, using my turn signals. After waiting for the center lane to clear, I then merged into the center lane. Because of the high volume of traffic that morning, I stayed in the center lane for approximately 1 mile. Once the far left lane opened up, I merged and continued my usual travel route maintaining speed to stay with the rest of traffic.

After driving in the left lane for awhile, I noticed in my rearview mirror a pair of headlights coming up fast behind me. With the traffic situation as congested as it was that morning, I couldn't merge back into the center lane because other cars were already there — all three lanes were bumper to bumper.

It was very evident that "Mr. Excitement" was in a real hurry; his front bumper came to within a foot of my car. Because I was driving a Mustang GT and he was in a Ford 4x4 pickup, his headlights were right smack dab in my rearview mirror. To make matters worse, he began to constantly flash his high beams at me. There was absolutely nothing I could do but wait till the center lane opened up. I even slowed down some, hoping an opportunity would open up for

him to be able to merge into the center lane. But no! He wanted this far left lane, and he wanted it now! For a moment, it got so bad that I actually thought he was going to pass me on the far left shoulder of the road just to get in front of me.

Eventually, the center lane opened up for me; and I merged. But then I noticed something. He also changed lanes and was still on my rear bumper — flashing his lights. I really didn't know what this person wanted me to do. So I slowed down again, hoping he would pass me and go on his merry way. Well, he did merge to the right of me and started to pass. But instead of passing and going on, he was now beside me; and it looked like he was trying to move back over into my lane.

I checked on my left to see if I could merge back into the left lane, but there was already another car there; I couldn't change lanes. So I got over to the left as far as I could into my lane... without crossing over the lane markers. This is when I noticed that "Mr. Excitement" had rolled down his driver's side window, had his left arm hanging out of the window, and was holding something in his hand — something that I could not quite figure out.

Then all of sudden, he threw whatever was in his hand directly at me. At that same instant, something hit the side of my car — "WHAM!" My natural reflex prompted me to jerk the car left. As a result, I almost lost control of my vehicle. Then as I attempted to bring my car back over to the right, I inadvertently overcorrected. This is when I lost total control of my automobile and began sliding sideways down the interstate... hanging on for the ride. When the skidding stopped and the smoke cleared, my car was turned around 180° and sitting in the middle of the median with the engine cut off. Fortunately, all the cars behind me had enough time to stop in order to avoid a major accident. From the corner of my eye, I noticed the Ford 4x4 heading up the adjacent off-ramp.

Right then and there, I lost my temper! "Road Rage" had taken over me! I was going to get "Mr. Excitement" at any cost... I didn't care! I got my car started again and noticed the long line of previously stopped cars had barely begun to move. I had just enough time to cross over the interstate ahead of the traffic, and up the off-ramp I raced... chasing after my mystery aggressor.

When the skidding stopped and the smoke cleared, my car was turned around 180° and sitting in the middle of the median with the engine cut off.

My 5.0 Mustang GT and I were on "Mr. Excitement" in the blink of an eye. I was determined to follow this guy to wherever he was going and get a big piece of his "you know what." But as I was following him, I had a chance to calm down a little and think about what had just happened. That's when I realized this wasn't the smartest thing to do. Not only had I possibly endangered other people around me, but now I didn't even know where this guy was leading me. So I finally did the only smart thing to do. I wrote down a description of the vehicle along with his license plate number, abandoned the chase, and reported the whole incident to the State Police. Within an hour and a half, I received a phone call from the State Police stating that they had arrested "Mr. Excitement." They asked me if I wanted to press charges, and my answer was YES.

Friday the 13th wasn't a very good day for "Mr. Excitement" for sure. "Road Rage" is a federal offense; and after his court date, it cost him a permanent mark on his record, $2,000 in lawyer fees, $500 in fines, 2 years probation, and $168 worth of damage to my car. He was fortunate; if he had killed someone, he could still be behind bars.

The bottom line to my story is, "Report acts of aggressive driving to the proper authorities." Most states have a telephone number that motorists can use to report dangerous drivers to local law enforcement officials. If you have a cellular telephone in your vehicle, keep that number handy. Then when you see a driver operating a vehicle in a threatening manner, pull over and make the call. In addition, always remember to be courteous when you're driving. Don't get lured into duplicating some of the same irresponsible driving patterns of the aggressor. Every motorist has the ability, as well as the obligation, to set a good driving example for others. By working together, we can help make our roadways safer and prevent unnecessary tragedies. Take this advice from a seasoned weapons troop — the mixture of road rage and vehicular projectiles can be an "explosive" one! ■

As you may or may not know, static electricity is caused by friction and the build-up of stray electrons on a moving object. The amount of static electricity is enhanced by low temperatures and humidity. But this doesn't mean that static isn't just around in the winter months. A prime example is "static cling" on your laundry after going through the dryer. Static electricity can produce up to 10,000 volts of electricity in a single charge, but it doesn't kill us. This is because there is little to no amperage along with the volts, and its duration isn't that long.

Here's an actual incident that occurred last month while I was riding with the Goldsboro Rescue Squad. About 3:45 in the afternoon that day, we received an emergency call to go to a residence where an individual had been burned. When we arrived, we found a man outside his house with the water hose on trying to cool himself down. He appeared to have second and third degree burns on his left arm and side — all the way from his armpit down to the middle of his thigh.

We quickly assessed his condition and the scene. We noticed a strong smell of gasoline about his person. While we were transporting him to the hospital, he told us that he was under his car working to fix a leaking fuel line. He had made several trips to his toolbox prior to the incident to get the right tools. On his last trip, he began to work on the fuel line. He noticed a small puddle of gas on the floor next to him, and just when he reached to start turning the bolts, he heard a pop!!! You guessed it, it was a discharge of "static electricity." The next thing he knew, he was on fire. His quick thinking son threw a blanket on him to snuff out the flames and manned a fire extinguisher to put out the rest of the fire.

Lessons Learned

The following conditions directly contributed to this incident:

1. The man was working in an enclosed area which severely restricted ventilation and allowed the build-up of gas fumes.
2. The man was wearing a wool shirt and gortex jacket. These materials are a prime habitat and contributor to the build-up of static electricity.
3. While he was under the car, he was using a piece of carpeting made up of synthetic fibers — another generator of static electricity.

Additionally, these factors were present which could have easily caused a similar or worse disaster:

4. His son was in the garage smoking.
5. The man was using a kerosene heater to heat the garage.
6. The ground prong was broken off the drop light he was using.

Safety Precautions

Had the man taken the time to fully read the automotive repair manual — which was lying on his workbench — he would have found this list of safety precautions. By observing them, he could have eliminated or greatly reduced the probability of this incident ever occurring.

1. "No smoking" when performing any type of auto maintenance.
2. When working around the battery or fuel system of a car, ensure there is no open flame in the area.
3. When working around your car fuel system, always ensure that there is adequate ventilation to prevent the build-up of gasoline fumes.
4. If you use any type of electrical tool or appliance when working on your car, ensure that it is in serviceable condition.
5. Clothes made of wool or synthetic fibers tend to enhance the build-up of static electricity. Periodic touching of an area away from where you are working will discharge any built-up static on your person.
6. Avoid sliding across the floor or walking on carpet prior to and during maintenance. Occasionally touching an area — as described in item 5 above — will discharge any built-up static you may have accumulated.

The lessons learned from this incident were mostly personal observation on my part, but was I right or what? As you think about this incident, try to come up with other ways of avoiding or dispersing static electricity so that you can avoid a similar mishap. And oh ... by the way ... the ear of a friend is not a recommended place to discharge the build-up of static electricity! So go ahead and work on your car this summer; but manage your risks, and do it safely! ■

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Fleagle
THIS OLD BEAUTY COULD USE A GOOD CLEANING.
LET'S SEE... PAINT AN' RUST REMOVER. THAT ALONG WITH SOME GASOLINE SHOULD DO TH' TRICK.
CAN'T REMEMBER IF THIS THING IS LOADED OR NOT..?
GAS
ONE QUICK PULL ON TH' TRIGGER SHOULD LET ME KNOW.
BA LOOM!
HARRISON
WHAM! WHAM! WHAM!
?

Weapons Safety

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The weapons safety staff performs a wide variety of duties, many of which require specific expertise to execute and manage. However . . .

What should I expect as a Weapons Safety Manager (WSM) in Southwest Asia (SWA)? That was the number one question I asked my supervisor and weapons safety counterparts who had previously deployed to the U.S. Central Command Area of Responsibility (AOR). In preparing for my deployment, my first step was to develop a game plan by making a list of things I would need to do and accomplish upon my arrival there. It is always a good idea to have a good plan of attack, right? Well, with that in mind, here are some lessons learned from my recent tour of duty as a WSM in the AOR.

My experience in Southwest Asia proves that weapons safety is constantly changing. I looked up the word "change" in the dictionary and found the definition to be as follows: "to cause to be different... to give a completely different form or appearance to... to transform." This is definitely true for the SWA WSM. After I arrived and started my first day of

Role in the AOR

work in the AOR, I realized that my game plan had to be significantly adjusted in order to compensate for the realities of the situation at hand. I also recognized that I had to remain flexible in determining the most efficient way to accomplish my job in the constantly changing environment of the AOR.

As I was confronted with the challenge of satisfying a multitude of changing requirements, I knew the answer was right there in front of my face. My job is no different from any other in the Air Force — I have Air Force Instructions, Air Force Manuals, and an official checklist that I must comply with. The foundation of all jobs in the Air Force — especially for the WSM — must be based upon applicable directives and the mission requirements, i.e., just the facts!

Ensuring that the weapons safety career field continues to provide the highest level of protection to all personnel and maintain the highest level of credibility possible is of utmost importance to me. Weapons safety personnel should never provide leadership with information based on personal opinion; it must be based on technical order criteria. If WSMs were to base their decisions on personal opinion, we would get ourselves into a position of distributing inconsistent information as the rules of weapons safety change with each rotation. This was a major concern of wing and group commanders during my stay in the AOR.

So... what is the role of the WSM in the AOR? The weapons safety staff performs a wide variety of duties, many of which require specific expertise to execute and manage. However, the primary role of the WSM is to establish and direct the weapons safety program for the base. As WSMs, we are obligated to provide wing leadership with information to make decisions on the developing functions of the base such as aircraft parking plans, maintenance operations, and various other construction projects.

In the AOR, all construction projects are monitored and approved by the host nation. Since the Air Force is limited on real estate and funds, Quantity Distance (QD) is very important. The bottom line is that we must provide the most accurate information possible to our wing leadership. If the user wants to be more restrictive, that is highly encouraged; but that's up to the commander. We must remember to adhere to the facts we know based upon validated and approved regulations, instructions, and directives.

How do we operate in a deployed environment? It is the WSM's responsibility to manage the weapons safety program in accordance with all applicable directives. A newly assigned WSM should check the foundation of the program he has inherited. The best way I have found to do this is to review the previously accomplished higher headquarters inspection reports (Staff Assistance Visits, Department of Defense Explosives Safety Board reports, etc.) and the End of Tour reports from previous WSMs. Moreover, a very effective method is to conduct a Unit Self-Assessment on the program. By using checklists based upon technical data that governs weapons safety, you can do a complete and honest assessment of your program. It's also a good idea to document the results in a report, route it through the Chief of Safety, and file it for future WSMs to use.

In conclusion, the role of a WSM in the AOR is critical. The wing leadership depends on your expertise to prevent injury to personnel, damage to equipment, and mission degradation. Your proactive participation is key to successful weapons safety management. Prioritize your tasks, remain flexible, and stick to the books. By doing this, you will make the Air Force a safer place to work and receive personal satisfaction from knowing the job was done right. ■

A man was very concerned about the expense of feeding his horse. He decided to teach the horse not to eat. About the time the horse learned the trick, it died.

-Author Unknown-

How Many Accidents Have You Prevented Today?

Lt Col Woody Lamar, ANG, 187 FW/SE, Montgomery AL

How do you measure the number of accidents you've prevented? This question has confounded safety officers and commanders at the unit level for years. What is a positive measure of a unit's safety effort? I think I have found an answer. Read on ...

When we think of performance metrics, we usually think of charts and graphs with sloping lines indicating our progress toward a goal. Most squadrons have a very low Class "A" mishap experience (e.g., 0 or 1) when viewed on an annual basis. However, no meaningful "rate" can be determined from an experience of zero or one. If a unit had a meaningful rate, it would also have new leadership on the way in ... or the doors to the organization would be on the way of being closed.

For example, let's say that your squadron has a goal of zero mishaps (as it should be) and the mishap rate is also zero; how would your organization measure how well it is maintaining zero? It would be easier, from a measurement point of view, if your mishap rate was five major mishaps per year. The next year you could strive for four, and the next three, and so on. You would, therefore, be showing great progress toward your goal of zero mishaps. Conceivably in the sixth year, you would reach your goal and could rejoice — or could you? In reaching your goal, you would lose fifteen aircraft! Guess what — your horse just died! At the squadron level, accepting any mishap rate makes as much sense as teaching your horse not to eat.

Statistics suggest that Air National Guard (ANG) F-16 units should experience zero to two major mishaps every decade. Remember, those units that lose aircraft are also actively involved in mishap prevention; so think what the rate would be without a safety effort. Those one or two mishaps they experienced were just the ones that slipped through the cracks in their efforts. In reality, even those units with aircraft losses still prevented many mishaps, but they just didn't prevent them all.

It is an entire unit's effort and culture that keeps it from contributing aircraft and aircrew to the mishap rate. Whether you are an engine mechanic working to produce dependable engines, a security police officer ensuring the physical safety of aircraft and personnel, a medic making sure people are medically qualified to do their job, or a pilot who accepts no unnecessary risk in accomplishing the mission, you are a key contributor to the overall safety effort. Whether you are a recruiter bringing in qualified people to the Air Force, a finance officer arranging for timely and on schedule payment of our people so they will not be distracted by financial worry, a civil engineer providing runway arresting gear and quality facilities for our people to do their jobs, a supply officer providing needed parts and supplies for daily operations, a Family Support Center representative helping to ease the problems associated with separation or retirement from the military — you are still an important contributor to the overall safety record of your base. Beyond the immediate scope of his or her job, the actions of each and every individual play an important part in the overall safety picture at an Air Force installation.

So ... what is the elusive safety metric? Well, when asked how many accidents you have prevented today, your answer should be "all of them!" I can't put a number on a graph that represents how many that would be, but I know it involves every unit member doing their very best ... "all the time!" If you are doing the best job you can, you are doing your part for zero mishaps. Then ... and "only" then ... when you're asked how many accidents you've prevented today, your answer can honestly be "all of them." Preventing "all" mishaps is the only goal worthy of our efforts and abilities. To quote Wilson Pickett, the noted contemporary singer from Prattville, Alabama, "Ninety-nine and a half just won't do." ■

To protect children participating in Halloween activities from fire and burn injuries, experts at the nonprofit National Fire Protection Association (NFPA) say to plan ahead. "Taking simple fire safety precautions, like making sure fabrics for costumes and decorative materials are flame resistant, can prevent fires," says Meri-K Appy, NFPA assistant vice president for public education. "Using candles greatly increases the chance of fire, so we encourage people to use flashlights to light pumpkins and for other spooky effects."

Decorations for special events, most often involving candles, account for an annual average of 800 home fires, causing nearly $4 million in direct property damage, according to NFPA. Additionally, in the United States, more than 100 people die each year as a result of their clothing becoming ignited.

Halloween can be a fun celebration, but children should be closely supervised and their costumes made with fire safety in mind. The NFPA suggests the following guidelines for a safer Halloween:

- Purchase only those costumes, wigs, and props labeled as flame resistant or retardant. When creating a costume, plan carefully to ensure that it won't easily ignite if it comes in contact with heat or flame. Costumes should be made without billowing or long trailing features that present a higher risk of ignition. Avoid highly flammable fabrics and accessories.

- When planning party decorations, bear in mind that dried flowers and cornstalks are highly flammable. Keep crepe paper and other decorations well away from all heat sources, including light bulbs, heaters, etc. Decorating with candles should be avoided. Pumpkins can be safely illuminated with small, inexpensive flashlights. When decorating, remember to keep exits clear. Be sure children are supervised at all times.

- With a little creativity, using flashlights instead of candles or torch lights to decorate walkways and yards is highly effective in creating a festive atmosphere, and it's much safer for trick-or-treaters.

- Instruct children to stay away from open flames or other heat sources. Be sure each child knows the **stop, drop, and roll** technique in the event their clothing catches fire. (Stop immediately, drop to the ground covering your face with your hands, and roll over and over to extinguish the flames.) Instruct children who are attending parties at others' homes to locate the exits and plan how they would get out in an emergency.

- Provide children with lightweight flashlights to carry for lighting or as part of their costume instead of candles.

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"Planning ahead can help make this Halloween a fire-safe one," says Ms. Appy. For additional information on fire and burn prevention, contact your local fire department. ■


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