

# THE COMBAT EDGE

MARCH 1996



HEADQUARTERS  
AIR COMBAT COMMAND



# The Combat Edge

AIR COMBAT COMMAND  
SAFETY MAGAZINE

**Gen Joseph W. Ralston**  
*Commander*

**Col Zak Tomczak**  
*Chief of Safety*

**Lt Col "Nellie" Beard**  
*Editor*

**Ron Smith**  
*Art Director*

**Barbara Taylor**  
*Awards Administrator*

**Sgt Mark S. Bailey**  
*Staff Artist*

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

**POSTMASTER:** Send address changes to *The Combat Edge*, HQ ACC/SEP, 130 Andrews St Ste 301, Langley AFB VA 23665-2786.

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

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

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

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

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

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

## CONTENTS

**MARCH 1996**

ACC SP 91-1

VOLUME 4

ISSUE 10

### FEATURES

#### 4 SAVING OUR COMBAT ASSETS = BOMBS ON TARGET

*Brigadier General Lance L. Smith  
Commander, 4th Fighter Wing  
Seymour Johnson AFB NC*

#### 28 SAFETY MESSAGES FROM HISTORY

*Are there safety messages we can glean from historical visionaries such as Confucius, Sophocles, Sun Tzu, Frederick the Great, and Napoleon? We believe there are and offer the following quotes along with their "safety" interpretation.*

### DEPARTMENTS

FLIGHT SAFETY

10

GROUND SAFETY

20 27

WEAPONS SAFETY

8 9

DEBRIEF

18

AWARDS

12

FLEAGLE

26

ACCOLADES

24

#### ABOUT THE COVER

This month's cover salutes General Joe Ralston as he assumes the duties of Vice Chairman of the Joint Chiefs of Staff. The emblems superimposed over the ACC headquarters building represent units General Ralston has commanded -- 68th Tactical Fighter Squadron, 56th Tactical Training Wing, 11th Air Force, Alaskan Command, Alaskan North American Aerospace Defense Command Region, and Air Combat Command.





# *ACCENT* *on Safety*

## **SAFE ACTIONS SPEAK LOUDER THAN WORDS**

**T**hanks to you, our safety record for this fiscal year shows that each of you has taken the prevention of mishaps very seriously. That's a good news story, written by each one of you who adheres to the highest possible standards and, in so doing, teaches others to do the same.

Every person in a leadership position — from wing commanders to flight commanders to crew chiefs — teaches others about safety's importance in hundreds of ways, day after day. Every action, philosophy and attitude, even hallway conversations, communicates your views about safety. Safety's critical importance must be a theme that becomes part of the natural rhythm of day-to-day business for all of us.

The maxim that actions speak louder than words is so true when it comes to safety. Commander's call briefings are great, yet they're not enough to educate our people about safety's importance. Lead by example. Follow the technical orders and regulations, use seat belts, drive within the speed limit and be smart when consuming alcoholic beverages. You take the initiative. Do things the right way instead of the easy way and others will follow.

It's unrealistic to think ACC will never have another accident. The only way we might achieve that goal is if we never again turn a wheel or start an engine. So, when accidents or mishaps do happen, we must determine the cause, distinguish between honest mistakes and negligence, re-evaluate our training programs, then ask ourselves two important questions. Are we doing things the right way instead of the easy way? Are we leading by example?

We are entrusted with our nation's most costly and valuable resources to provide for America's defense. We have a special obligation to take care of these resources, especially the most valuable one of all — you.

One final note as I leave Air Combat Command. As members of ACC you have been training, deploying, and serving safely in remote locations around the world with pride, dedication, and skill. I want you to know that your commitment to the Air Force has not gone unnoticed by me. I very much appreciate — and so does America — the sacrifices you have made in providing our nation with the best combat airpower in the world. I know you will continue your efforts. You will still lead; you will set the example for safe actions within the Air Force.

Thanks for the great work you're doing — keep it up. Good luck and Godspeed.

*General Joe Ralston*



# Saving Our Combat Assets = BOMBS ON TARGET!

**I**t's 0300 in the morning in some remote region of the world where American interest and lives are at stake. A formation of McDonnell Douglas F-15E Strike Eagles from the 4th Fighter Wing streak towards their target. These heavily armed fighters are each loaded with eight thousand pounds of Laser Guided Bombs and four Air-to-Air Missiles. Their target is a heavily defended airfield hundreds of miles deep into enemy territory. The mission planners expect to achieve total surprise and a quick decisive victory in a tremendous initial strike. In order to minimize damage to the coalition ground forces, the enemy MIGs need to be destroyed on their airfield before they can fly. If everything falls into place, the MIGs will be caught on the ground in the shelters.

This fictional but typical mission embodies the driving purpose of the men and women of the Fourth Fighter Wing. It illustrates the objective of a wing united for a single purpose — **"BOMBS ON TARGET ON TIME!"** Training to perform this mission is a dangerous undertaking involving all the resources of the wing. It is what we must do, and do safely.

The factors that influence our ability to accomplish this training efficiently and also return to talk about it are many. It begins with the way we learn to do our job in basic training, UPT/UNT, FTU, FTD, and tech school. It is mastered in the daily training we accomplish in our operational



*Brigadier General Lance L. Smith  
Commander, 4th Fighter Wing  
Seymour Johnson AFB NC*

squadrons. In ACC, before the first wheel is turned, there is a process that is intended to evaluate the environment we fly in and the risks inherent in the way we train. The process is called Realistic Training Review, and its primary purpose is to ensure that balance is maintained between realism and safety.

The centerpiece of the process is the Realistic Training Review Board, which is chaired by the ACC DO and includes the Air Reserve Forces, NAF/Center leadership, and key members of the ACC staff. The board has a fairly simple and structured agenda that includes worldwide threat briefings, OPlan/DOC statement review, and mishap analysis. The Board concludes with an evaluation of the peacetime training events we perform versus what we are expected to do in war, in terms of cost/benefit tradeoffs. For example; given the threat, our wartime tasking, and the





number and type accidents that occur when flying at extremely low altitude; what kind of low level flying should we do in peacetime? Do we need to fly at 100 feet on every mission, can we just as easily fly at 500 feet and step down to the lower altitude as war approaches, or do we need to fly low at all? This is the process that eliminated 100 foot low level training in ACC.

One of the keys to the success of the program is operator involvement - members of ACC/DOT's Realistic Training Review Section fly with the units in the field on a regular basis. They get a feel for the way flight training is conducted, receive feedback from the units, and recommend changes where necessary. These individuals are also members of the DO's Mishap Response Team and use their expertise to determine if current training rules are at fault when an aircraft accident occurs. While aimed at the actual flying of the mission, the basic tenets of the Realistic Training process can be effectively applied in other disciplines across the wing. These tenets are simply 1) **identify the threat or risks**, 2) **assess the tasking and why we do things the way we do**, 3) **analyze mishaps when they occur**, 4) **implement effective improvements**, and 5) **communicate and educate**.

Every unit has a method for **identifying**

**risks**. Normally this is done through the hazard abatement program. Too often, however, this is considered the commander's or safety NCO's responsibility; though neither is well prepared to identify all of the safety problems in the work place. The ones best positioned to ID risks are the men and women doing the work. The commander's challenge is to build safety awareness and hazard elimination into the culture of the unit. In almost all cases if we can identify a dangerous work environment, we can reduce the risk.

The Wing Safety staff can do a great deal to facilitate this through safety assessments. Like the realistic trainers discussed above, the safety staff members need to be out and about to pass and receive feedback from the work force on how to do the job better and safer. These safety experts are trained to work with the unit safety monitors, to look at how and why we do business the way we do, and to come up with recommended actions to improve the process.

We at the 4 FW believe that routine formal evaluations by the Wing Safety office are not only an effective way to ensure good safety programs, but also an efficient method to crosscheck good and bad practices across





**Safety education is a major part of the solution when trying to get the troops and their families involved.**

the wing. Of course in some areas, where OSHA and Air Force standards must be met, we have little choice but to inspect for compliance. The positive side of compliance though, is better communication and

continuous review. Our Safety shop has an unusually effective method of grading each area in the unit being evaluated, on a scale from "Unacceptable" to "Outstanding." The system is simple, understandable, and well received by those being inspected. The final inspection report reflects current performance level and clearly identifies what is required to reach each higher level score.

Unfortunately in even the best of programs mishaps occur. Mishap

investigation, we know is a critically important function in preventing future accidents, and must be accomplished by the most competent individuals we have. Where mistakes occur, the investigating team must not only identify the mistake but develop realistic recommendations to fix the root of the problem. If flagrant disregard for rules or regulations was the cause, then the right people must be held accountable - this includes everyone in the chain of command when appropriate. I can think of few things more important than ensuring the men and women who put out so much effort for us everyday have the right knowledge, tools, and working environment to be able to do their job safely.

Assessments, inspections, and investigations all provide the unit commander with a set of actions that he or she can **implement to improve** the operation. They also identify exceptional accomplishments so that proper recognition

can be made and performance benchmarked. Both are essential to an effective safety program. This leads us to the last step of the process.

Safety education is a major part of the solution when trying to get the troops and their families involved. At Seymour Johnson, like most places, we put a great deal of effort into on-the-job training, formal instruction, meetings, and newsletters. Investigation and inspection reports are great vehicles for crosstell, but commanders must be aggressive about reading the reports and implementing appropriate actions - too many reports sit in closed drawers awaiting review. We have found the Commander's Access TV Channel to be an effective tool, especially for general safety messages. Recently we used it to advertise the new bicycle helmet requirements on base. We also use the cable interrupt capability to transmit safety messages of a more immediate nature, most recently warnings for hazardous ice conditions. Since the most significant ground safety problem we have in the 4 FW is off-duty mishaps, we use every available media tool to get the safety message into the home. For whatever reason, once our people get to the house or to the sports field, everything we ever learned about doing things the smart and safe way is forgotten. The TV, newspaper, and posters have all proven effective in reducing our problem.

Seymour Johnson has had several recent successes in applying the **identify, assess, analyze, implement, and educate** principles. A little over a year ago the F-15E FTU, with its 40 additional aircraft, was about to join the wing. To prepare we did a detailed risk analysis of our procedures in the flying areas, traffic pattern, flight line, and work shops and conducted a survey of operations and maintenance. We asked our people what procedures they believed could contribute to an accident as a result of the expected new mission and increased ops tempo. What was routine to an experienced aviator or crew chief could be pushing the envelope to someone initially upgrading or newly

arriving on station. As a result, numerous operational and procedural changes were implemented prior to the transition. Upon arrival of the new training squadron we revisited the same topics, and recently did another evaluation to ensure we maintain the safest training environment possible. Each assessment resulted in changes that fine tuned our operation.

A major success story has been our Bird Aircraft Strike Hazard (BASH) program. Birdstrikes have accounted for more damage to our combat assets than any potential enemy could do, so the threat is pretty obvious. Seymour Johnson AFB sits right in the heart of the migratory corridors and wintering areas of numerous very large birds. This presents a significant hazard to our aircraft and aircrew, as a large portion of our training is conducted at low altitude. In concert with HQ ACC and the Air Force BASH Team, we positioned Geo Marine Inc. to develop radar tracks on the paths and altitudes of the birds transiting our primary flying airspace. We concentrated on the highest threat area, Dare County Bombing Range, and were able to gather some very interesting facts. For example, every year between the 1st and 15th of November 36,000 Tundra Swans (about 22 pounds each) attack the range. The patterns they fly are generally below 1500 feet AGL and occur from 0700-0900 and 1600-1900 daily. As a result, last November we significantly altered our flying schedule to avoid flying during those time frames. When we did fly, we restricted our jets to altitudes above 1500 feet. We also passed this information to the other users of the bombing range. The data from the year long study has been integrated into an interactive software program that is now in place at each of our flying squadrons and will soon go into the Safety and Scheduling shops. It allows us to determine when and where we should be scheduling sorties and what restrictions need to be in place to minimize the birdstrike hazard. The results of this program are amazing - our incidents of birdstrikes decreased from 34 in the first quarter FY 95, to 13 for the first quarter of

this year. We reduced birdstrike related quarterly repair costs from \$364,000 to \$6,500 for the same time period, easily recovering the cost of the entire study.

The process is not limited to operations at home. Like many wings, the 4 FW has spent a lot of time in Southwest Asia. During these deployments, we discovered that the F-15E windscreens were becoming pitted and obstructing the pilot's view. We determined that there was little we could do to change the way we were doing business, so we looked to hardware improvements instead. Working with ACC LG and the depot, we benchmarked an idea from the NASCAR Race Car Circuit. We now have a new windscreen which makes use of a replaceable outer layer. The outer layer can be changed quickly and is relatively inexpensive. This development not only fixed the visibility problem, but produced the side benefit of highly improved windscreen resistance to catastrophic birdstrike damage as well.

We have plenty of statistics to show that this systematic approach is meeting with success, but I don't wish to overstate things. A 37 percent reduction in on-duty mishaps for the first quarter of this year could be reversed quickly with an act of buffoonery tomorrow. What we do in the 4 FW is not much different than what is being done in every other wing in the Air Force. We all know the key is commander/supervisor emphasis, and even that can't result in complete success if we're going to train the way we fight. This is simply the structured approach we use to keep our goal of preserving combat assets at the forefront, while maximizing readiness. The Fourth Fighter Wing's motto "Fourth But First" exemplifies the standards by which we operate. Each person is held accountable for himself and for the part he or she plays in mission accomplishment - "Bombs on Target on Time." We operate under the philosophy that safety goes hand-in-hand with this mission and strengthens our combat capability when successfully practiced. ■



# WALL OF SAFETY OR WALL OF DIRT?

SMSgt Brian D. Prucey  
2 BW/SEW  
Barksdale AFB LA

**“Y**ou’ve been in that safety office too long! You’re out of touch with reality! Get real! We can’t operate under those restraints!” Sound familiar? Sometime in your career you’ve either said these words or were on the receiving end. Usually, the catalyst for such a tirade is the conflict between safety standards and the perceived operational needs of the unit.

I take “fingers to keys” to discuss a concern about providing proper personnel protection in our nonnuclear munitions storage areas. Specifically, how much protection does that 12-inch substantial dividing wall provide? Let’s back up a little and review the explosives safety standard. Personnel considered generally “related” to explosives operations yet not “immediately” involved in an operation must be provided K18 separation or sufficient protection to reduce blast overpressure to 3.5 psi. Engineering studies have determined substantial dividing walls provide that protection under certain conditions.

We have all seen multi-bay M&I facilities with 12-inch dividing walls separating bays and the office area. But what kind of protection does this provide? AFMAN 91-201, paragraph 4.2 discusses concurrent operations in a facility with substantial dividing walls. This paragraph states that a 12-inch reinforced concrete wall will prevent propagation of an explosion from one bay to another for charge weights up to 425 pounds NEW of hazard class/division (HC/D) 1.1. However, the wall will be completely demolished and violently thrown into the adjacent bay.

Additionally, the standard goes on to explain how to calculate the amount of NEW to prevent breaching of the wall. But why do we need to calculate that? If you are conducting concurrent operations in two adjacent bays and the NEW of one bay is sufficient to breach the dividing wall, personnel in the other bay must be evacuated. That’s right! The adjacent operation has to stop and the people have to leave. This holds true for operations in the bay adjacent to the office/breakroom area. When the NEW of the bay exceeds the amount necessary to breach

the wall, the office must be evacuated. Additionally, when the NEW of one bay exceeds 425 pounds HC/D 1.1, any munitions in the adjacent bay must be removed to prevent propagation.

Maybe an example will clear away the mud. You have an M&I facility with two operating bays and a crew office. Both the bays and the crew office are separated by a 12-inch substantial dividing walls. Inspections Section performs their duties in one bay and Missile Maintenance uses the other. The entire facility is sited for 1,000 pounds NEW. Let’s say that it will take 100 pounds NEW to breach the dividing wall (based on the stand-off distance calculations in paragraph 4.2.1). Both Inspections and Missile Maintenance can conduct concurrent operations as long as neither bay exceeds 100 pounds NEW. If the inspection section needs to process 125 pounds of C4, the Missile Maintenance Section must evacuate for as long as the NEW exceeds 100 pounds. If the inspection bay is next to the office, then the office will need to be evacuated as well. If the NEW is increased to 425 pounds, any live missiles must also be removed.

“You’re out of touch with reality! We can’t stop operations like that!” I’m not asking you to. The explosives safety standard is. We must provide as much protection as possible to those not immediately involved with a particular explosives operation. Inspection Section and Missile Maintenance Section are two separate explosives operations requiring applicable safety separation from each other.

Consider the types of operations to be performed, the total NEW and the relationship of the people when designing new facilities in your storage area. If you have a Missile Maintenance shop that works on high NEW missiles, don’t plan to house a different shop in that same facility thinking that concrete and rebar will keep them safe.

But what about facilities with greater than 12-inch dividing walls? The AFMAN says to contact the MAJCOM, but I’ll save you the quarter. You’ll need to get an engineering study accomplished by an agency skilled in determining structural blast resistance. Good luck! ■



# REQUESTS FOR MAINTENANCE ASSISTANCE

*MSgt William A. Hodgson  
HQ ACC/SEW  
Langley AFB VA*

**O**ver the past year, some units have found rejectable defects on their Type 3/A maintenance trainers, 3/E load trainers, or unique training equipment such as weapon pullout cables. The defects were serious enough to hinder qualification/certification training.

As supervisors, it is your responsibility to provide your workers with the proper tools, technical data, and on-the-job training using equipment and trainers capable of performing all required operations. Long-standing deficiencies that go uncorrected and operations filled with simulations/deviations provide negative training for your technicians and breed complacency. It is unreasonable to expect your technicians to meet high operational performance standards if their training is second rate. Quality training is the foundation on which the rest of their maintenance techniques are built. Quality training can only be accomplished if you provide the proper tools, current technical data, and trainers that are maintained to operational standards. If your trainers and equipment don't meet these standards, you need to report it.

Don't report trainer deficiencies as Dull Swords. Use a maintenance assistance message which is sent directly to the WEAPONS DIRECTOR KELLY AFB TX//NWTB//. Most of the time units submit these messages as follow-up corrective action to Nuclear Surety Inspection write-ups or as a cover-your-backside action right before the inspection team arrives. Unfortunately, this is the wrong time to submit your request for assistance.

The right time to submit a maintenance assistance request in accordance with AFI 91-204, paragraph 12.1.2.7, is as soon as the

defect is discovered. This will prevent your trainers from getting in such bad condition. Supervisors should gather all the data required for the maintenance assistance message by filling out a possible Dull Sword worksheet. If the defect affects your ability to train effectively, say so in the message. Don't let the item manager decide if this condition is acceptable or not — you make the call. In my experience, if you are willing to use a defective trainer to do your training, the item manager will let you. All you will receive is a message to accept the defect and annotate the Inspection Record Card. If the defect hinders your training or you own a weapon with so many defects that training is a waste of time, let the item manager know. Don't let yourself be bullied by the item manager who is interested in saving a few bucks. The long-term cost is far greater to you if you can't provide the quality training your technicians need and deserve.

You are in the best position to decide if all you need is a replacement part to bring your trainer up to operational standards or if the defect is so severe that a replacement trainer is required. No matter what you decide, to get the results you want from the item manager, you need to put it in your message. Make them explain the reason why a replacement can't be ordered.

Remember, you, as a customer, don't have to be satisfied with the item managers stock answer, "Defect acceptable for training annotate the Inspection Record Card citing this message number as acceptance" when, in fact, the defect does adversely affect training. With all the base closings and mission realignments, trainers and unique training equipment are available to ensure your training program supports your operational requirements. ■



**Lt Col Karl "Lips" Dittmer, Jr.**  
**178 FW/AFA**  
**Springfield OH**

*You make the difference*

**G**uess it's time I put my two cents worth in. My brother, "2-lips," has been showing me up lately — two articles in 2 months. Whoa, I've got some catching up to do!

Okay, so maybe I'm a little jealous, or maybe it's just one of those sibling competition things, but Kurt's last article ("What Kills Viper Drivers?") got me thinking a little.

Don't get me wrong, the article was good — real good — and dead on. But, before we label ourselves as our biggest enemy (which is true), I think we should give another one of those safety-buzzword-entities its due.

### **Insidious Culprit**

How I hate doing this. I know when you see what I'm talking about, your eyes will instantly glaze over and you'll immediately flip the page; but I've got to try. You see, this particular entity, whether it's addressed or not, is the underlying culprit in just about every accident or incident report you've ever read. It's usually there in spades. It often rears its ugly head several different times, through the actions of several different people. We're all guilty of succumbing to it, usually several times a day, and often don't realize it. It's been discussed here more than a few times, yet nobody really has a clue how to get a handle on it. That's why it's worth broaching the subject one more time. Maybe this article will help — maybe not.

So what insidious culprit am I talking about? Complacency, plain and simple.

Now wait! Don't flip the page! Give me a chance. Let's shed a different light on this "badboy" — I'll try not to waste your time. Maybe, we can make some changes to the way we do business that'll make a difference. And just maybe, at the same time, we can make the work place environment a little more fun (a tall order, I admit, but let's give it a go).

### **How this "Badboy" Works**

First of all, what is complacency? Most of us see it as a state of mind where we just aren't paying attention. You might be thinking, "Enough said! We just need to pay more attention."

Right? Well, yes, that's true, but that's easier said than done. It's not always possible to "will" ourselves to pay more



attention. Sometimes there are too many distractions, both internal and external, for us to keep our attention from wandering. When these distracters become too prevalent, or they demand too much of our attention at an inopportune time...Bingo! An accident or incident occurs.

So, what can we do?

### **What to Do?**

Actually, we can do a lot. In fact, I'll bet my government desktop computer and laser printer against your operational fighter slot that you have a lot more power than you realize in helping nip complacency in the bud. I'll also bet you didn't realize our boss, General Fogleman, has already provided us with the tools necessary through his push for personal accountability.

"Wait a minute," you ask. "What's Lips talking about now?"

Well, I'm not talking about hanging every officer and airman for each little mistake. No, I'm talking about what the flip side means when you hold people accountable. You see, it's a two-way street. If we believe we're dealing with people who are accountable for their actions, then, by definition, we're dealing with people who are acting responsible. If that's true, we owe it to them to trust them.

### **You Get What You Expect**

My daddy once told me, "When it comes to people, you get exactly what you expect."

What he meant was, if we treat people as if we don't trust them — we worry they cut corners using tech data or violate flying regulations when we aren't watching — then guess what? That's exactly what we'll get. Eventually a climate or culture (yecch, another buzzword) forms where people are irresponsible and do cheat. It becomes the norm.

Naturally, the reverse is also true. If we believe the people we're dealing with are responsible individuals — we trust them —

then they'll live up to our expectations. They'll act responsibly.

Now, don't misunderstand me. I'm not saying we don't need to supervise anymore. We still need to speak up when we see things that aren't right, whether we're a supervisor or not. There are a few bad eggs and we need to ferret them out of the organization. But, more often than not, it's a good egg that just got a little off track and is in need of some guidance. The vast majority of people we work with are doing the best they can. It may not seem like it at times, but it's almost always true. When someone isn't performing well, it's usually due to one of those attention-stealing mental distractions.

### **How to Make a Difference**

It's worth believing in this concept, no matter who you are. Trust your co-workers. Give them the benefit of the doubt. See if your attitude adjustment doesn't produce a positive change in the work environment.

If you're a leader, you'll find a more trusting attitude will reap better productivity and improve morale. Naturally, when someone needs help getting back on track, do it. But realize there may be some unseen demon that you have control over causing his or her "best" to be lacking. You owe it to them to look for it and get rid of it.

### **Yea Old Bottom Line**

Remember, almost without exception, folks are trying to do their best. If their "best" isn't very good, it's often because the climate stinks. We should fix it if we can. If we trust our co-workers, they'll fire up. Not only will they live up to our expectations, they'll enjoy their work more (as will we) and a healthier work environment will grow. They'll pay better attention, because it's fun. Complacency won't totally die, but it sure will take a hit!





# AIRCREW SAFETY AWARD OF DISTINCTION



Maj Gilstrap and Lt Col Brightman were Vegas 52, #2 in a F-15 cross-country mission from Dallas-Love Field to Kirtland AFB, with Vegas 51, crewed by Maj Robinson and Lt Col Rook, when severe weather extended from Fort Worth to Abilene, with much of Texas overcast and imbedded with rain showers. After leveling at FL350, 120 miles west of the DFW TACAN, Maj Gilstrap announced, "two's got a left-engine flameout." Vegas 52 began a wings-level descent with yellow flames emanating from the left engine. Using the emergency procedures checklist, Col Brightman directed Maj Gilstrap to shut down the left engine. The flight lead, Maj Robinson, asked if the engine was shut down; when told it was, he informed Vegas 52 that their left engine was still on fire. Vegas 51 immediately declared an emergency, and while following emergency checklists, provided directions around storms using their radar. Vegas 51 rejoined with Vegas 52 and observed pieces of metal falling from the jet as the fire dissipated. Due to the severe weather, Vegas 51 diverted to Dyess AFB, the nearest suitable airfield. Vegas 51 gave Vegas 52 a vector and informed ARTCC that they were proceeding to Dyess AFB. Dyess weather was reported as 1,100' broken, 3,000' overcast, rain, with cloud tops 6,000' MSL west of the field and severe rain showers east of the field. The flight proceeded to the IAF for the ILS approach to RWY 16 and entered holding, dumping gas to reduce weight. At that time the Abilene TACAN and ILS simultaneously became unreliable. With no PAR, ILS or TACAN available, Vegas 52 requested a surveillance approach. With Vegas 51 flying chase, Vegas 52 began the approach and descent through the weather. The flight arrived at minimum descent altitude 3.5 miles from the field, with 1.5 miles visibility. Vegas 52 experienced a partial avionics shut down, losing UHF radio #1 as tower was issuing final landing clearance. Vegas 51 immediately recognized the radio failure and relayed landing clearance to Vegas 52 via the auxiliary radio. Vegas 52 completed the approach to an uneventful landing and shut down on the runway. After 20 minutes, Vegas 52 was towed off the runway and Vegas 51 landed. The time from engine failure to landing was slightly over 20 minutes.

***Maj Billy Gilstrap, Lt Col Mark Brightman***  
***57 TG, 57 WG***

***Maj Charles M. Robinson, Lt Col Richard D. Rook***  
***422 TES, 57 WG***  
***Nellis AFB NV***



## FLIGHTLINE SAFETY AWARD OF DISTINCTION

After arriving in Kuwait we were regenerating our aircraft, when A-10A aircraft, tail number 78-0676, was undergoing missile operational checks by a weapons load crew. Because this crew failed to ensure the proper safe for maintenance procedures were adhered to in the cockpit, it was not noticed that the number one engine throttle was set in the idle position. When the crew started the auxiliary power unit (APU), the number one engine started to rotate and dumped fuel into the engine. When this engine lit off a tail fire commenced. The engine shot a flame out the back end about 20 feet. Sgt Torres heard the engine rotate and he shot out of the maintenance hangar and proceeded to the aircraft. At the same time, Sgt Crouch and Amn Stone were working on the flightline loading live Maverick missiles. Both individuals darted for the aircraft when they noticed the engine fire. Quickly grabbing a halon fire bottle, they charged the bottle and started to extinguish the fire. The weapons crew in the cockpit shut down the APU, but this just allowed the fire to continue to burn. Sgt Torres quickly climbed up the ladder to the cockpit and started to motor the engine over to allow the engine to cool itself. The actions of these three individuals contained the fire to only the engine tail pipe; and absolutely no damage occurred to the engine, aircraft, or personnel. Their selfless actions are to be highly commended.

***SSgt Timothy C. Crouch***  
***Sgt Gil A. Torres***  
***SrA Henry E. Stone***  
***75 FS, Pope AFB NC***





## GROUND SAFETY AWARD OF DISTINCTION



Airman Reynolds is an integral part of the Unit Safety Team. His creative techniques for providing safety training have greatly enhanced the levels of safety awareness throughout his unit. His idea to produce a safety tips video for the semi-annual ACC Safety Day was a resounding success. By using humor and entertaining situations to relay very serious messages, the video provided a fun and enjoyable way for unit personnel to be exposed to safety. After being shown at the unit's Safety Day activities, instant feedback from the audience was that the Safety Day was "the best ever!" The video highlighted several safety-related topics ranging from fishing, to fires and electronics hazards, to recreational hunting safety to drunk driving. Each area was addressed in short skits performed by Amn Reynolds and others from the unit. Compliance with published standards was highlighted as the driving factor in each area. The video was such a hit at the unit level that the 475 WEG Safety office is showing it throughout the group to provide a "fresh and innovative look" at safety. In addition, the host base safety office is considering using the video during their Safety Day and Safety Fair activities. Amn Reynolds' quality ideas and tremendous efforts have paid off in a new and entertaining way of educating and reinforcing safety practices which have enhanced his unit's mission accomplishments.

***SrA Kevin B. Reynolds***  
***81 RCS, 475 WEG***  
***Tyndall AFB FL***



# UNIT SAFETY AWARD OF DISTINCTION



Since its reactivation in Jun 94, the 95 RS has maintained an intense operations tempo supporting theater and national command authorities in priority reconnaissance, command and control, and treaty verification taskings. While satisfying these national objectives, the 95 RS flew over 5,000 flight hours without a single Class A, B, or C mishap! The 55 WG's busiest forward operating location, the 95 RS area of responsibility covers all of Europe and the Mediterranean, including combat support missions for Operations PROVIDE PROMISE, DENY FLIGHT, and DELIBERATE FORCE. Missions normally range from 8 to 12 hours, but some contingency operations necessitate up to 18 hour missions with multiple air refuelings required. During operation DELIBERATE FORCE, 95 RS crews flew 24 sorties totaling 333.8 hours during a 19 day period. In fact, 95th crews were airborne for 73 percent of the entire operation!

One of the unit's most innovative initiatives is the development of an innovative Risk Management training program. This training allows each duty section to enhance mission effectiveness by incorporating Risk Management into their mission inputs. This approach is especially useful in developing support plans for our expanding command and control and treaty verification missions, but also allows hazard identification in existing programs. For instance, after discovering deficiencies in the NSA Souda Bay host mishap response plan, we established interim procedures while drafting our own mishap response plan. Another hazard identification tool is our aircrew "human factors" feedback survey which helps up channel temporary duty crew member concerns to 95 RS and 55 OG leadership. The big Risk Management success though is our crews and maintainers. They are the backbone of our safety success. The 95 RS/LG provided invaluable expertise in tracking down the source of fleet-wide RC-135 fuel contamination problems and suggesting a local procedure to inspect for recurrences. Another suggestion resulted in a local procedure to prevent fuel spills during ground refueling by visually checking the dump tube for fuel during the post flight inspection. Finally, 95 RS aircrews are probably the most important element of our flight safety program. Time and time again, a crew's good judgment and outstanding execution have turned a potentially dangerous aircraft system problem into an uneventful landing.

The 95 RS is also a leader in ground safety. When base transportation support was unable to meet our requirements, the unit Vehicle Control Non-Commissioned Officer (VCNCO) designed and implemented an in-unit flightline drivers training program to meet aircrew transportation needs to and from operational aircraft missions. The VCNCO was also essential in identifying problems with flightline traffic flow changes and enforcing the new flightline driving policies. The 95 RS Ground Safety program also takes an aggressive approach to Air Force Occupational Safety and Health requirements for hazard identification, worker education, and program compliance. The 100 ARW Safety Inspectors recognized these efforts with zero discrepancies noted and an OUTSTANDING rating during the unit's annual ground safety inspection!

Through these types of superior preparation and performance, the 95 RS has maintained an outstanding safety record under challenging conditions. It is the professionalism and discipline of 95 RS personnel, and deployed crews from the 55 WG, which will carry on this standard of excellence and safety.

***95th Reconnaissance Squadron  
55 WG  
Offutt AFB NE***





*Seyr*

*son 478 NC*



SJ

AF 0229








# DEBRIEF

## EVERYONE'S RESPONSIBILITY

*Anonymous*



**A** long time ago a B-52 crew was scheduled for an out-and-back mission that included a Maple Flag sortie with recovery at a northern tier base and return to the "home drome" the next day. The crew consisted of an upgrading (i.e., unqualified) pilot, an upgrading radar navigator, an experienced Instructor Pilot (IP), Instructor Radar Navigator (IR), naviga-

tor, copilot, and two brand new instructors in the EW and gunner positions. The SPINS for Maple Flag specifically prohibited upgrade training, but the IP briefed that it wouldn't be a problem. I assumed that meant that the upgradees would not be in the seat for the Maple Flag portion of the mission (mistake # 1).

The mission proceeded normally up to the Maple Flag low level route, during which the unqualified crewmembers remained in the seat. Since they were doing well, no one objected and it was "great training" for them (mistake # 2). Upon exiting the low level, the B-52 was involved in a "close encounter" with a Canadian L-1011 (mistake # 3) which the airliner reported to ATC. The crew proceeded to their recovery base, landed, and set a time and place to assemble the next day for the return leg of the mission.

At the appointed hour, the crew met and proceeded to base ops... except for the IP, who could not be found. Base ops was located in several trailers (the permanent



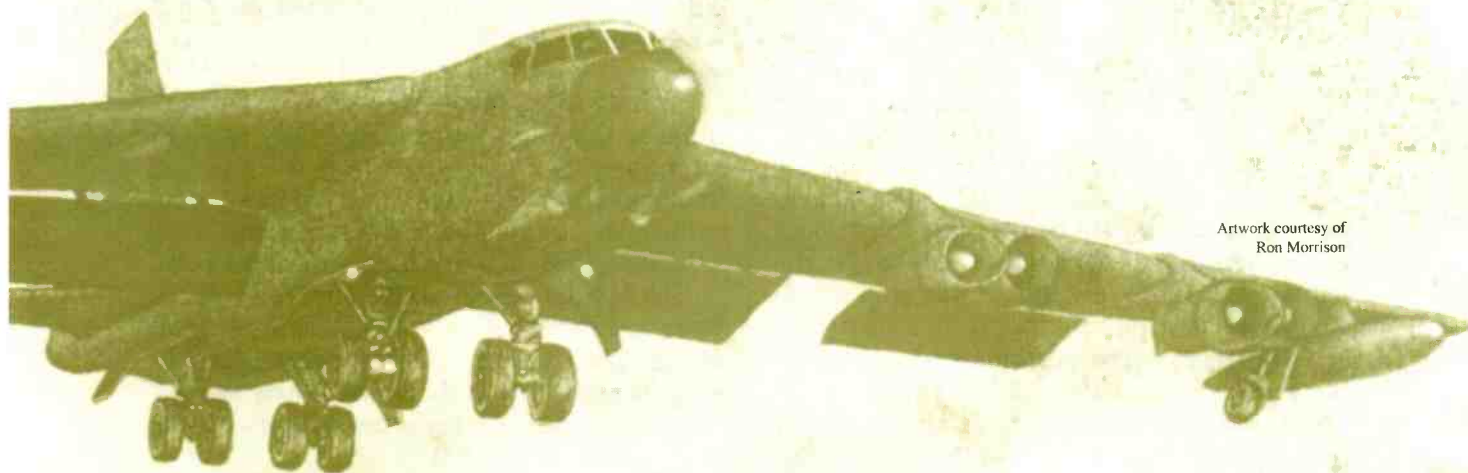
facility was being renovated). As a result, mission planning was not a smooth operation. Valuable time was wasted trying to figure out where we needed to go to get a weather briefing, file the flight plan, etc. Compounding the difficulties was the absence of the IP, who arrived shortly before step time, explaining that he had looked up an old buddy.

We stepped to the jet, preflighted, and took off for home. On the way, the IP got into a discussion with the IR about the latter's intention to leave the Air Force in the near future. The discussion culminated in an invitation by the IP for the IR (a pri-

that two other crewmembers had expressed similar concerns to the IP and had gotten a similar response.

How would you have dealt with this scenario? When in the sequence of events would you have objected? Would the fact that the IP was also the squadron commander change your approach to the problem?

The entire crew was guilty of letting the mission proceed to its conclusion without question or objection to the chain of events. We allowed the seniority and experience of the IP and IR to intimidate us and override our concerns, even after our incident with



Artwork courtesy of  
Ron Morrison

vate pilot) to come up front for a pattern. I assumed this meant the IR would occupy the IP position (are we still counting the mistakes?). As I soon discovered, my assumption was wrong. The IR hopped in the pilot's seat and flew a touch-and-go with the IP assisting from the copilot's seat. Again, no one objected.

The mission finally ended with an uneventful landing. During the crew debriefing, very little was mentioned about the "irregularities" of the past two days.

Shocking? It was to me in retrospect. A couple of days later I talked to the IP about the mission in private. I stated my concerns over the numerous violations of directives and flight discipline and the example it set for the rest of the crew. He responded by suggesting that I might have a fear of flying and should consider whether I was cut out to continue in aviation. I later learned

the L-1011. Fortunately, no damage or physical harm came to the participants.

It is everyone's responsibility to step in and stop breaches of directives or lapses of discipline when they are observed. By not intervening, you exacerbate the situation and allow others to believe that such actions are acceptable. Our people and planes are too valuable to tolerate such behavior. Whether you're an aviator or maintainer, a supervisor or the new guy, it is your responsibility to prevent others from knowingly disregarding or violating tech orders, regulation or other directives. It's not always easy or pleasant, especially when the violator is senior to you and in your chain of command. But, it is necessary. The guidance is there for a good reason. Heed it, and make sure those you work with heed it too! If you don't, you may not be as fortunate as I was. ■



# SMART MOVE SAVES AIRMEN'S LIVES



*Courtesy of USAF News Service*

**T**wo airmen made the smartest decisions of their young lives when they got out of the car of an acquaintance they believed was driving too fast. Five minutes later, the car crashed. The passenger in the car who stayed along for the ride died after lingering in a coma for a week. The convertible sports car was dragged nearly 50 feet when a truck carrying 8 tons of scrap metal hit it broadside.

Five minutes earlier, two other passengers were riding cramped behind the front seats of the small car. They got a ride when the driver stopped his car near a bus stop where they were waiting.

"We talked a few minutes and he offered us a ride," they said. The two crammed themselves into the back of the two-seat sports car. The driver turned the car onto the nearly empty boulevard and gunned the engine. "I don't know how fast he was going, but it seemed really fast," one of the airmen said. "He may have been only going 50 miles per hour, but these streets aren't made for going that fast." Both new passengers asked the driver to slow down, but he wouldn't listen. Finally, the pair had enough. "When we said, 'This is it,' he pulled over," they said.

The two airmen got out of the car about 5 miles from the base. Neither could say exactly why they got out of the car, except that they were uncomfortable with the driving. "We've sat in the briefings and heard people tell us to get out of situations where people were being reckless or were drunk," they said. "Sadly enough, we've been in other situations where things weren't right, but we stayed. You can't take someone's keys away from them for driving too fast," they said. "If either one of us would've thought he was drunk, we would've tried to take his keys."

Wing legal officials said the driver's blood alcohol level was over 0.10, the legal limit in most states. However, the two airmen said

they had no indication the driver was intoxicated. In fact, when they asked him to help them get their belongings out of the vehicle's trunk, he seemed normal to him. "He got out, came around to the trunk, and put his key in the trunk lock on the first try," they said.

Shortly after they began the 5-mile walk to base, they arrived at a sign they thought might signify a bus stop. They were picked up about 5 minutes later by a small bus-like vehicle that seats about 15 passengers. The vehicle took them to within a mile of the base.

That's where they saw the wrecked vehicle. They said the driver's side looked normal except for a flat tire, and the two thought that was the malfunction that halted their friends' trip. When they saw the other side, they knew it was more than a flat.

A group of people at the corner pointed the two toward the base hospital. They ran the mile to the front gate, where they caught a cab to the hospital. "When we got to the hospital, they still didn't know who the passenger was," they said. "We told them."

Neither are sure if they want to point to fate, God, Air Force training, or just dumb luck that made them get out of the car. "It could have happened before we got out," they said. "We were dumb to get in there in the first place. The way we were situated in the car, we'd be dead because we couldn't even buckle up."

With the passenger dead and the driver facing months of rehabilitation and a possible stretch in federal prison if convicted of negligent homicide charges, officials point to the two airmen as the only positive aspects of this case. "These guys set a great example by getting out of a really bad situation," said the wing staff judge advocate. "Hopefully, somebody, somewhere can see the example they set and learn from it." ■



# DEATH OF AN IDEA

Mr. Cal Faile  
HQ ACC/SEG  
Langley AFB VA

**A**s I was driving home the other day, I kept thinking about my discussion with *The Combat Edge* editor. "Where is that article you promised me?" he had asked. My reply was "I've been too busy putting out grass fires and I haven't gotten around to it." Deep down, I knew that if I had tried just a little, I could have written an article for him. I was feeling kind of guilty.

About half way home I had an idea for a good topic to write about; but couldn't stop to write it down. Oh well, I'll make a note when I get home.

Five minutes later I arrived home. My wife was waiting for me at the door. "The dryer's broken and I have to dry some clothes. Could you look at it before dinner?" she asked. As I was changing clothes, I remembered the topic I wanted to write about; but I didn't write it down because I was in a hurry to get the dryer fixed. After dinner I would write the article for *The Combat Edge*.

I checked the dryer. Sure enough, it didn't start when I pushed the button. I checked the circuit breaker and it was OK. Being in a hurry, I forgot to trip it to off. I

raised the top of the dryer to check the electric wires to the timer and start button. As it came to the full open position, a shower of sparks erupted from the back side of the dryer. After picking myself off the floor, I went to the circuit breaker panel and saw that the breaker had tripped — probably saving my life. Further analysis of the dryer problem revealed that one of the wires from the overload switch to the start button had disconnected at the terminal behind the timer; and when the lid was raised, it shorted out against the lid and tripped the breaker. The short had melted the end connector off, so I had to replace it. When I finished and turned the power on, the dryer worked fine.

It was a while before I could eat. I was a little shaky from the experience I'd just had. After finishing dinner, I tried to recall the topic I wanted to write about, but could not, for the life of me, remember what it was. Then I thought, "Well, if I can't remember that one, I'll write about the experience I just had." One I will not soon forget! When was the last time you had a good idea for *The Combat Edge*? Did you let it die? ■



# WANTED

Harried, over-worked, time pressed, under-paid Editor of world famous mishap prevention magazine needs "Stories From The Desert" for May 1996 *Special Edition!!*

**IMMEDIATELY** mail, fax, or e-mail YOUR desert articles to:

HQ ACC/SEP  
130 Andrews St Ste 301  
Langley AFB VA 23665-2786

DSN: 574-6362  
COM FAX: (804) 764-6362  
E-MAIL: beardn@hqaccse.langley.af.mil

Questions — Call DSN 574-3658 or  
Com (804) 764-3658





# Air Combat Command Office of Safety

## **Flight Safety Branch (SEF)**

Lt Col (Col Sel) John T. Davee (Chief)  
Ms. Pamela J. Williams  
Lt Col Larrie N. Sykes  
Lt Col Ezequiel Parrilla, Jr.  
Maj Mark A. Lee  
Capt (Maj Sel) Bradley J. Robert  
Capt (Maj Sel) Lori J. Pulaski  
7031

## **Reserve Forces Safety Advisor (SER)**

Maj Ronald J. Kuriger  
9772

## **Weapons Safety Branch (SEW)**

Lt Col John R. Wysowski (Chief)  
CMSgt Melvin E. Hill, Jr.  
SMSgt Curtis Allen Fair  
SMSgt William A. Hodgson  
MSgt Neil P. Sipe  
3767/6066

## **Chief of Safety (SE)**

Col Zak Tomczak

## **Secretary (SEC)**

Ms. Eileen G. Bland  
4354/5859

## **Executive Officer (SEE)**

Maj Brian S. Cumming  
4354/5859

## **Information Management (SEEA)**

SSgt Gary W. Rucker  
2611

## **Analysis Branch (SES)**

TSgt Cody R. Steadman III  
3814

## **Israeli Liaison Officer (SEI)**

Lt Col Shmuel Angel  
6181

## **Quality (SEQ)**

SSgt Terry M. Pope  
3373

## **Publications Branch (SEP)**

Lt Col Nellie Beard (Chief)  
Ms. Barbara J. Taylor  
Mr. Ronald R. Smith  
Sgt Mark S. Bailey  
3658/6483

## **Ground Safety Branch (SEG)**

CMSgt Wallace King (Chief)  
Ms. Betty J. Titus  
MSgt Benjamin J. Chua  
TSgt Michael K. May  
Mr. Michael Mehalko  
Mr. Clarence O. Faile  
3501/3502

## **HQ ACC/SE TELEPHONE/FAX NUMBERS**

DSN: 574-XXXX  
COMM: (804) 764-XXXX

DSN FAX: 574-3102/6362  
COMM FAX: (804) 764-3102/6362



# ACColades

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

	TOTAL			ACC			ANG			AFR		
	JAN	THRU JAN		JAN	THRU JAN		JAN	THRU JAN		JAN	THRU JAN	
		FY96	FY95		FY96	FY95		FY96	FY95		FY96	FY95
CLASS A MISHAPS	1	3	1	0	1	1	1	2	0	0	0	0
AIRCREW FATALITIES	0	0	0	0	0	0	0	0	0	0	0	0
* IN THE ENVELOPE EJECTIONS	1/0	3/0	1/0	0	1/0	1/0	1/0	2/0	0	0	0	0
* OUT OF ENVELOPE EJECTIONS	0	0	0	0	0	0	0	0	0	0	0	0

\* (SUCCESSFUL/UNSUCCESSFUL)

## CLASS A MISHAP COMPARISON RATE

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

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

(BASED ON PROGRAMED HOURS FLOWN)



# ACColades

## HONOR ROLL

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

1 FW  
5 BW  
24 WG  
28 BW  
55 WG  
79 TEG  
85 WG  
93 BW  
99 WG  
102 FW  
103 FG  
104 FG  
106 RQG  
109 AG  
113 FW  
114 FG  
116 FW  
117 RW

118 AW  
119 FG  
120 FG  
122 FW  
123 AW  
124 FG  
125 FG  
129 RQG  
130 AG  
132 FW  
133 AW  
135 AG  
136 AW  
137 AW  
138 FG  
139 AG  
142 FG

143 AG  
144 FW  
145 AG  
146 AW  
147 FG  
148 FG  
150 FG  
152 ACG  
152 RG  
153 AG  
154 ACG  
156 FG  
157 ACG  
165 AG  
166 AG  
167 AG  
169 FG  
174 FW

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

440 AW  
442 FW  
482 FW  
507 FG  
509 BW  
552 ACW  
906 FG  
908 AG  
910 AW  
911 AG  
913 AW  
914 AW  
916 ARW  
924 FW  
926 FW  
928 AW  
934 AW  
939 RQW

(As of 1 November 1995)



YOU GUYS HEAR THE BIG NEWS?

WHAT'S THAT?

GENERAL RALSTON IS LEAVING US.

TH' HECK YOU SAY?

YEAH... I HEAR HE'S BEEN PICKED TO GO TO TH' MAIN BUILDING.

TH' PENTAGON, HUH.

THEY ARE GETTING A GOOD MAN.

YOU CAN SAY THAT AGAIN. I WUZ JUST GETTING USED TO HAVING HIM AROUND.

I SURE HATE TO SEE HIM GO BUT I WISH HIM TH' BEST.

THEY ARE GETTING A GOOD MAN.

I SAID THAT ALREADY.

OH YEAH.

HARRISON



# Child Passenger Safety

*Courtesy of the National Highway Traffic Safety Administration/National 3D Prevention Month Coalition*

**E**ach year, motor vehicle crashes injure or kill more children than any disease, and most of these incidents can be prevented by the simple act of using a child safety seat. When installed and used correctly, child safety seats reduce the risk of death in a motor vehicle crash by 71 percent. Not to mention it's the law in all states.

Yet hundreds of children die annually in this country because they are not properly restrained in a child safety seat, and the National Highway Traffic Safety Administration reports that at least one in four seats is grossly misused and as many as four out of five are misused to some extent. Clearly, we need to get the word out to all our citizens on the importance of using child restraints.

Sadly, many parents don't recognize the potential harm involved when driving with an unrestrained child. In fact, many parents still believe that holding their children on their lap is a safe way to travel. This myth couldn't be further from the truth. Whether belted or unbelted, the child loses either way in a crash. In a crash or sudden stop, an unbuckled adult holding a baby can crush the child into the windshield or dashboard, leaving little chance of survival. In a 30 mph crash, a 10-pound baby could be ripped from a belted adult's arms with a force of almost 200 pounds and hurled into the dashboard or windshield. No one is strong enough to hold onto a child under those circumstances.

If you have a young child and aren't using a child safety seat, please buy or borrow one and learn how to use it. Encourage your friends and family with young children to do the same.

To avoid misuse, follow the safety seat manufacturer's instructions carefully and read your vehicle owner's manual. Then test

for a snug fit when you install the child safety seat in your car. Use the child safety seat every time, on every trip. Don't make the deadly mistake of using a car

seat only on freeways or for long trips. Most car crashes happen within 25 miles of home.

Contact your local hospitals and encourage them to include information about child safety seats in their education of new and expectant mothers. Work with them to put together a reduced-price seat program for families who can't afford to purchase a safety seat at regular price. Try to get local businesses to help defer costs.

Work to improve the laws in your state. Encourage law enforcement to actively enforce the laws and issue citations to those driving with unrestrained children.

Encourage citizens to report drivers of unrestrained children. In Arizona, the Governor's Office of Highway Safety's (GOHS) Buckle-Up Baby program asks residents to call into a 1-800 number with the license plate of the car and the location of the children in the vehicle. GOHS then coordinates with the motor vehicle department to find the address of the driver and sends him/her a packet of information on the dangers of not using child seats and a coupon to purchase a seat at a discount. The packet is in both English and Spanish. If your state or community doesn't have a similar program, help start one. ■





# Safety Messages From History...

What they really meant to say...

**Editor's Note:** Are there safety messages we can glean from historical visionaries such as Confucius, Sophocles, Sun Tzu, Frederick the Great, and Napoleon? We believe there are and offer the following quotes along with their "safety" interpretation. We will apologize in advance to the historians and purists. Our intent is not to change, alter, or demean the words or concepts of these great people. Our only purpose is an attempt to take a slightly different approach to spreading the safety message and provide some "food for thought."

*Principles of War are only the principles of common sense applied to war.*

*J.C. Slessor*

Had Slessor been speaking about safety, he would have said, "Principles of mishap prevention are only the principles of common sense applied to everything we do."

*The ultimate object of mobility is to obtain superior power in battle.*

*Maurice de Saxe*

What de Saxe really meant to say was, "The ultimate object of safety is to obtain superior power in battle."

*War is not an affair of chance. A great deal of knowledge, study, and meditation is necessary to conduct it well.*

*Frederick the Great*



Like war, safety is not an affair of chance. It also requires knowledge, study, and thought.

*No study is possible on the battlefield.*

*Ferdinand Foch*

Mishap prevention requires forethought and study. The middle of an emergency is probably not the best time to be developing or learning safety principles.

*When you surround an army, leave an outlet free. Do not press a desperate foe too hard.*

*Sun Tzu*

Always leave yourself an "out." Never, never, put yourself or your people into a situation where everything must work perfectly for the plan to succeed — it won't.

*I have flown in just about everything, with all kinds of pilots in all parts of the world — British, French, Pakistani, Iranian, Japanese, Chinese — and there wasn't a dime's worth of difference between any of them except for one unchanging, certain fact: the best, most skillful pilot had the most experience.*

*Chuck Yeager*

Aviation skill and experience are synergistic in all aircraft and all air forces. However, don't take either one for granted.

*Training is light and lack of training is darkness. The problem fears the expert. A trained man is worth three untrained: that's too little — say six; six is too little — say ten to one....*

*Alexander Suvorov*

Properly trained and supervised people will do things the right way — safely.

*If I always appear prepared, it is because before entering on an undertaking, I have meditated for long and have foreseen what may occur. It is not genius which reveals to me suddenly and secretly what I should do in circumstances unexpected by others; it is thought and preparation.*

*Napoleon*

*Knowledge is power.*

*Francis Bacon*



*Fortune favors the prepared mind.*

*Louis Pasteur*

Napoleon, Bacon, and Pasteur all recognized the inherent value and importance of knowledge, thought and preparation — three key safety tenets. Plan your actions ahead of time and think about what you're doing. Is it safe and sensible? If not — don't do it.

*Quick decisions are unsafe decisions.*

*Sophocles*

Always, always, always think through what you're about to do before you do it.

*A wise man learns from his experience; a wiser man learns from the experience of others.*

*Confucius*

This embodies the essence of our mishap prevention efforts — to learn without experiencing the pain of personal loss and tragedy.

*The ordinary man is much more likely to do the right thing if he really understands why he is doing it, and what will probably happen if he does something else; and the best basis for sound judgment is a knowledge of what has been done in the past, and with what results.*

*J.C. Slessor*

We have proven time-and-again that pain, suffering, tragedy, and senseless losses are the results of not doing the "right thing." Let's take those lessons to heart and build our "sound judgment" collectively and individually.

*All the numerous applications of physics, chemistry, engineering, etc., which make up the modern arsenal are, in fact, at the mercy of humans, the soldiers who use or direct them.*

*S.T. Das*

Human factors continue to be a leading cause of mishaps and, perhaps, the hardest to understand. We must all realize that we are responsible for our actions. We use the tools, operate the machinery, and direct the weapons. We are responsible for safety — not the machine.

*In war, important events result from trivial causes.*

*Julius Caesar*



*A battle sometimes decides everything; and sometimes the most trifling thing decides the fate of a battle.*

*Napoleon*

*For want of a nail, the shoe was lost;  
For want of a shoe, the horse was lost;  
For want of a horse, the rider was lost;  
For want of a rider the battle was lost.*

*Benjamin Franklin*

*The tiniest deviations at the beginning of a motion can lead to huge differences at later times — in other words, miniscule causes can produce enormous effects after a certain time interval. Of course, we know from everyday life that this is occasionally the case; the investigation of dynamical systems has shown us that this is typical of natural processes.*

*Gert Eilenberger*

Many times in the subsequent investigation of a mishap, we find a chain of events leading to the disaster that provided multiple opportunities for someone to disrupt the sequence and prevent the mishap. We must all be alert and constantly looking for these sequences and the opportunity to forestall tragedy.

*To me an unnecessary action, or shot, or casualty, was not only waste but sin.*

*T.E. Lawrence*

To accomplish the mission we need people and equipment. Safety's purpose is to protect people and preserve resources in order to accomplish the mission.

*Engines of war have long since reached their limits, and I see no further hope of any improvement in the art.*

*Frontinus, 90 A.D.*

There are undoubtedly some who feel that our mishap prevention efforts have progressed as far as they can. However, as we've seen from history — we can always do better.

*Determine that the thing can and shall be done, and then we shall find the way.*

*Abraham Lincoln*

Our goal is zero mishaps. Now, we must find the way to make it a reality. ■



