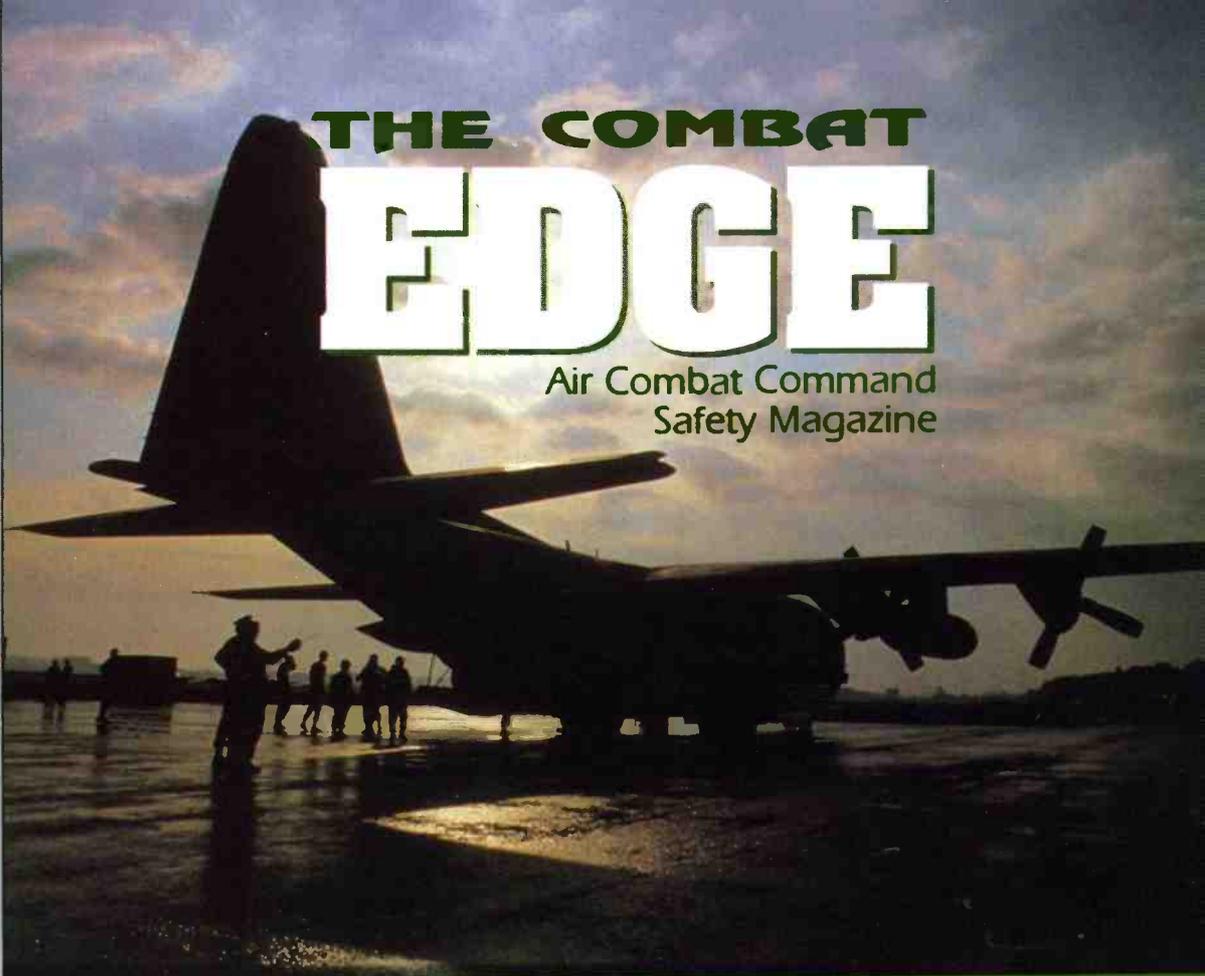


THE COMBAT EDGE

OCTOBER 1993





THE COMBAT EDGE

Air Combat Command
Safety Magazine

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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 \$24 (\$30 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, or call DSN 574-3658/commercial (804) 764-3658. The editors reserve the right to edit all manuscripts for readability and good taste.

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ACCent on Safety

First and foremost, I'd like to welcome our new C-130 teammates into Air Combat Command. We in ACC Safety are looking forward to supporting and working with what has historically been a very professional and safe part of the operational force. This transition once again highlights the ongoing "turbulence" in our lifestyles and reinforces the need for all of us to recognize and handle the challenges that come with changes such as these.

October kicks off our new fiscal year flying program. We've just completed a very productive '93 capped off by what I hope was a productive ACC-Wide Safety Day on 27 September. I charge you all to take the lessons gleaned from the Safety Day analysis and start FY 94 off with an improved focus on realistic and risk-free operations. I'd say more about realistic training, but will instead invite you to read General Boese's superb article on the sub-

ject in this issue -- he says it all!

The months ahead, however, pose some new challenges. We're starting the transition into the fall/winter flying months. Rapidly changing weather patterns, shortened daylight flying windows, and associated operating hazards (cold weather, ice, etc.) pose challenges which can certainly impact a safe flying operation. The key as always is to plan ahead, use good common sense, and **don't press!** Our people and our equipment are critical to preserving combat capability -- do your part to take care of each.

Finally, I'd like to congratulate everyone in the command for their work in contributing to another successful year both from an operational and a safety standpoint. You **all** faced many tough challenges this year as ACC continued to grow and change and did it with true ACC style and professionalism -- **good on you all!**

*Colonel Bob Jones
Chief of Safety*



ABOUT THE COVER

On 1 October 1993, over 300 C-130 aircraft transferred to Air Combat Command. The transfer of C-130's to ACC allows the command to better integrate combat forces in support of theater commanders. Covering the globe in its travels, the C-130 is capable of hauling more than 42,000 pounds of cargo. It can drop cargo loads ranging from 200-pound packages to 42,000-pound vehicles, using a variety of parachute delivery techniques.

Prepare For Realistically



*Maj Gen Lawrence E. Boese
HQ ACC/DO
Langley AFB VA*

Let's get real. How often have you heard that statement? Well, ACC is getting realistic in our approach to training. We cannot afford to wait for a mishap to show us our training programs are broken; we need to be proactive and fix the system before an accident. The realistic training approach quite simply is: train the way you fight, but do it safely. We, on the ACC staff, are working everyday to make this training concept a reality. The following information will provide you the level of effort and detailed approach we are taking to improve our combat readiness.

The realistic training approach came to life in May 1992 after a quality review of the entire **tasking to training** process. Representatives throughout the ACC staff reviewed the training process from the Joint Strategic Capabilities Plan (JSCP) tasking all the way to individual unit training. A primary recommendation of the team was to establish the Realistic Training Review Board. The Realistic Training Review Board is held semiannually and brings together all facets of unit tasking to ensure they are realistic. During the board, safety trends and training risks are reviewed to see where problems lie. Where necessary, we adjust safety margins through changes in aircraft, training limitations, or currencies via an FCIF or Safety Supplement. These changes are later incorporated into our formal publications. The board looks at all aspects of training and makes adjustments, where necessary, to match the wartime mission. If the tasking is unrealistic, we request a change in the tasking. If the unit training does not reflect the way we go to war, we change the

training. For example, the demise of a single powerful threat and the need to be worldwide deployable has changed the way we train. Very low level training was changed not because of the training risks, but because the threat changed.

Members of the ACC Operations staff periodically visit operational units to review training plans and scenarios to ensure they are consistent with and meet the unit tasking. They are the focal point between the units and the ACC Operations staff. They review mishap prevention programs and assist, when needed, in strengthening these programs. Since we started this approach, the ACC Operations staff has conducted over 62 visits to 31 bases. Because they visit many units, they are able to provide a cross flow of information. The staff also reviews strong programs for possible command-wide implementation.

The effectiveness of mishap prevention programs and the strength of ACC guidance get a thorough review when a mishap occurs. **We have suffered 18 aircraft destroyed with 7 fatalities for a 2.1 mishap rate per**

Combat --



100,000 flying hours for ACC and ACC gained units (as of 3 Sep 93). ACC/DOT aircraft experts convene into a mishap response team (MRT) immediately after a mishap occurs. The team gathers information on the mishap to advise us on possible immediate courses of action. In most cases, we wait for the formal board's recommendations. However, if a shortfall in guidance or procedures is identified, the guidance is changed immediately. The MRT stays involved right through to the final briefings to the ACC Commander to ensure we understand what happened, why it happened, and what we can do to prevent further occurrences.

Several current projects illustrate the realistic training approach to safety. After a B-1 mishap, we did a wall-to-wall review of fly-up procedures in terrain following (TF) systems and LANTIRN equipped aircraft. We found that the procedures were not the same for each MDS and were even different between units with similar aircraft. We thoroughly reviewed procedures and standardized those we could. A recent F-15 mishap involving a departure from controlled flight, led to a review of F-15 advanced handling characteristics (AHC) training. We are collecting reports of F-15 departures to determine if we have a problem with the aircraft or our training. We found that the F-15 generally behaves as expected, but we needed to re-emphasize AHC training so that our pilots can recognize regions of decreased stability and avoid inputs that might cause a departure.

Several mishaps in recent years can be attributed to a lack of what we call **basic airmanship**. These are the events and skills you first learned when you began flying your aircraft. You use these skills on every sortie, but rarely discuss or brief them in detail. Some of these events are: basic formation, rejoins, trail departures, takeoffs, landings, crossunders, and lead

changes. Inattention while performing these basic skills caused two mishaps this year alone. We are spreading the word and looking for good basic airmanship programs. We must continue to teach and hone these basic skills.

The realistic training approach process was applied to the command when the Air Force IG conducted a recent functional management review (FMR) of all ACC and ACC-gained flying unit procedures. This review yielded over 40 differences in procedures between ACC and ACC-gained units. We recognize that there will always be some differences, but we are attempting to standardize what we can so total force integration is easier and safer. This will allow us to consolidate all of our procedures and guidance and provide a safe and realistic approach to our training and tactics.

The realistic concept is still evolving, but we are here to help you, the operational units. Unit perceptions and feedback about the realistic training mission have been very positive to date. Maximizing the quality of your training is the goal of the realistic training process. Continued review of your training programs and mission scenarios ensures the training you receive is consistent with your wartime tasking. Equally important, it provides continuous feedback between you and the ACC Operations staff.

Mishap prevention is everybody's job. Train the way you fight is still our goal -- training realistically is a must. ■

Editor's note: Contractors and COMACC are aware of the aircrew's need for the latest information on departures for our aircraft. The C-130 fleet has the "C-130 Low-Speed Flying Qualities" Lockheed handbook. The B-52 has the Boeing "Time For Action, Again" publication, and there are other excellent guides to the larger picture of how to get the most performance out of your aircraft, without departing controlled flight. COMACC has directed further studies be conducted at high AOA (Angle of Attack), departure and spin tests for the F-15E. This information will be passed to our crews as soon as it is developed, to give you the most current information on how best to fly your aircraft.



IS IT REALLY
MAX PERFORMANCE
OF YOUR AIRCRAFT,
OR JUST PLAIN OLD

BUFFOONERY?

*Lt Col James D. Teigen
HQ ACC/SEF
Langley AFB VA*



The contractor Safety guy stood there telling us how to depart the aircraft and how in recent times our aircrews had accomplished this feat. It tied together a tasker from COMACC and my experience on aircraft departures and airmanship. Lest you heavy drivers think this story is for fighter/trainer type aircraft, the contractor was talking about C-130's and his stories were bone chilling. Please read on; this article is laced with buffoonery, for fighters, trainers and larger aircraft.

The C-130 Hercules departure stories were incredible. Each of the stories had one thing in common. The aircrews involved in the incidents were attempting to get the most out of their aircraft to max perform a maneuver. Each incident was a self-designed adaptation of some basic maneuver which when coupled together resulted in a departure, or worse, a smoking hole. The first story unfolded along the following lines: the aircrew was performing a low level tactic and wanted to avoid highlighting themselves as they crested the ridgeline. As the aircraft crested the ridgeline, the pilot went to flight idle on the two engines on one wing, he added full rudder into the "dead" engines and to add insult to injury, added aileron in the same direction. The Hercules responded with the contractor adding that the bird does respond quickly to certain inputs. The aircraft immediately departed and rolled over onto its back! The roll continued into a completed barrel roll, rolling out before the aircrew could react. Since the flight controls were commanding a roll, the Hercules responded by performing a second barrel roll. By now the aircrew took out their pro-rolling inputs and stopped the beast. The aircraft recovered with altitude to spare, but just barely. They were lucky, very lucky. The valley on the other side afforded the aircrew altitude to depart and recover the aircraft. The comments from aviators and instructor pilots around the table could be summed up in one disbelieving observation; proof positive that this crew exhibited buffoonery. The next aircrew wasn't so lucky.

The aircrew felt they could get more out of the aircraft than the Dash 1 said they could. The instructors on board the aircraft felt their "oats"

or maybe had eaten their Wheaties that morning but basically felt invincible, or so they thought. In the pattern, they also utilized asymmetrical engines to turn quicker. The Hercules did exactly as requested and turned on a dime. I'm sure it was a complete surprise to the aircrew, catching them unaware. The aircraft pivoted on its wing and with the loss of lift incurred by that maneuver, plummeted to the ground. All on board died upon impact or in the resulting fire. The comments around the table were more muted, but buffoonery was still the leading contender.

The aircraft recovered with altitude to spare, but just barely. They were lucky, very lucky. The valley on the other side afforded the aircrew altitude to depart and recover the aircraft.

Lest you think this story is only about heavies, from the fighter side of the house we have several similar stories to relate. COMACC recently asked about the history of F-15 out-of-control mishaps. In doing the research for the answer, I discovered several significant aspects that tie into this departure article. From the perspective of recent (last three years worth) mishap data, the F-15 has experienced 6 out-of-control mishaps resulting in smoking holes. Four of those were pilot induced; the other 2 were logistics related.

Couple this data with the departure mishap data (reported through safety channels) from Class C mishaps for the last 2 years and a picture begins to develop. In the Class C database, there were 18 reported departures or out-of-control mishaps. Only 3 were pilot-induced departures; the remainder were identified as logistic in nature, such as misrigging or hard mechanical failure of an actuator. It was interesting to note that in the big scheme of things, departures/out-of-control mishaps were the second leading category of all Class C reported mishaps in the F-15 community.

In the arena of departures or out-of-control

incidents (that were reported), the pilots all insisted that the maneuver setup was normal. They were max performing their aircraft when suddenly the aircraft either became unresponsive to control inputs or rapidly departed controlled flight and began to rotate. Not all of the scenarios developed this way, but a few did fall into the following generic category.

The aircraft was engaged in a BFM (Basic Fighter Maneuver) engagement versus an adversary. The pilot went vertical during the engagement and attempted to maneuver the aircraft by max performing it. As the energy and airspeed were depleting, the mishap pilots all commented they had used full rudder and/or ailerons into the turn. Suddenly the aircraft stopped responding to control inputs, the nose departed and the aircraft began to rotate. Following each of the mishaps the corrective action was to re-rig the aircraft. It is truly amazing, at this point in time, that we would have so many mis-rigged aircraft out in our fleets. The root cause couldn't possibly be that the pilots attempted to maneuver the aircraft past its abilities and the aircraft just ceased to operate?

Years ago in the pilot training environment, I had the "pleasure" of teaching spins to fledgling pilots. Looking back it wasn't as bad as it would seem, but memory is one of the first things to go. In teaching spins and departing the aircraft, there were some basic fundamentals which bear repeating. Departure of an aircraft can occur at nearly any time, speed or altitude. Awareness on the part of the aviator is the key to preventing departures. Certainly adverse yaw and a stall are essential in the production of a departure, and in some instances it results in rotation or spin. As the student was taught the setup, we would routinely work to put in full aileron and

rudder (per the syllabus) as the aircraft stalled. There were always the exceptions. There have been departures as a result of snatching the stick and using full rudder at higher airspeeds which produced startling results, not unlike some of those previously recounted by the C-130's and the F-15's. The bottom line to this is that the laws of aerodynamics cannot be fooled by mere mortals, be they trainer, fighter or heavy driver.

Could it be that we are trying to fly the aircraft beyond its capabilities? Why do these aircrew

try to reinvent the wheel? The Human Factors part of the question can be divided into the perceived need to be the best, or one upmanship, and the concept of "I can do no wrong." This is more commonly seen as the halo effect which we note after a mishap. The mishap pilot or aircrew is viewed with rose colored glasses as the best aviator(s), and would never do anything wrong. As we review the command-controlled mishaps for ACC (since its inception), there is a growing list of buffoonery on the part of some of the finest aviators gathered today. As a community of aviators, whether from heavy or fighter background, we cannot stand for poor airmanship, lack of flight discipline and disregard for rules, guidance

or directives. Freewheeling on the part of a few results in erosion or loss on the part of the remaining aircraft and aircrew. We as a community of aviators need to work within the system of rules and regulations to prevent the freewheeling and the resultant buffoonery. Like the old aviation adage goes...with the loss of every aviator, we lose a part of ourselves. We each had a part in the training, supervision and possible modification of each aviator who bought the farm. So when it comes down to it, you've got to ask yourself is it really max performing your aircraft, or is it just plain old buffoonery?

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HUMAN FACTORS MISHAPS

Conscious Prevention Is Your Responsibility

*Capt Dave Brawley
363 FW/SEF
Shaw AFB SC*

"Oh #*@!, I can't believe I just did that!" Ever said that in the cockpit just after doing something dumb? Good thing no one else is in the jet with you. From mine and other cockpit tapes that I've heard in debriefs, I'd venture to guess that most pilots have said that more than once. A vast majority of the time, these errors don't cause any major problems -- just some sort of mission degradation and a lesson learned. But, sometimes it's worse as we see when browsing through the Blue Four News. If I asked you what contributed to over 50 percent of USAF accidents, could you tell me? I'm not sure I can tell you either, but I'll try. Notice I said contributed, not caused. More on that later.

Let's talk about how and why human factors related mishaps happen and some preventive techniques for single-seat aircraft. This is an environment where crew coordination is nonexistent and accident rates are higher. Let's also assume pilot proficiency is good. Sound like you? It should. The two main types of human errors (translated to pilot-ese) are thinking errors (mistakes) and reflexive errors (slips). No two dollar words here. Thinking mistakes are what you see and talk about most of the time in debrief. Only experience, training, and discipline will reduce those. Your IP's probably have many words

on that subject. The reflexive errors (slips) that I'll discuss are more elusive and harder to prevent because of their unpredictable nature.

Some slips occur when a wrong action is carried out but the mind made the correct decision. For example: hitting the target designate switch when you meant to pickle, because of the close proximity of the switches. Sound like a switch error? Yep, in the classic sense. The way to prevent those is to gain experience in that environment and practice the action with focus on that

event. Other slips occur when an inappropriate split-second decision is made and carried out; but it was the wrong course of action. This is the tough one. Sometimes it's no big deal, but other times it's costly. The percentage of slip-contributed mishaps are on the rise in relation to the total number of mishaps because of increased aircraft reliability and unpredictable human capability.

Let's take the example of a mishap where a fighter pilot raised his landing gear on landing roll-out during the aerobrake

What in the world would possess anyone to raise their gear on the ground? Did you know that most fighter aircraft's landing gear can be raised during the aerobrake maneuver?

maneuver. What in the world would possess anyone to raise their gear on the ground? Did you know that most fighter aircraft's landing gear can be raised during the aerobrake maneuver? The pilot was on the first ride in flight-lead upgrade, so he was brand new

at leading flights. The mission went OK until the landing phase. The upgrading flight lead had the IP on his right wing for his first formation landing as a leader. He started his transition to landing early which resulted in a long touchdown. When the IP saw what was happening, he let the young flight lead land and he went around, announcing it with a radio call. This distracted the leader and confused him as to why number 2 was going around. Although he didn't land all that long, subconsciously, he began to accept the fact that he would be going around. His frame-of-mind shifted to a wingman role, reinforced by the visual recognition of an aircraft slightly forward and high of his position, with landing gear retracting. This caused the tendency to raise his landing gear for a go-around. He lost SA about where he was for an instant and executed the tendency. All these fancy analytical terms combined to sustain the sequence, but the bottom line is that he made a very quick but, unfortunately, bad decision and was the only one responsible for it. Should the IP have gone around or directed the flight to do so? You debate that one.

The key is to watch out for those critical areas when you are doing something else in the cockpit, i.e., watch for the gotcha's. This is where I say Human Factors don't cause accidents, they contribute to them; sustaining the sequence of events that are caused by a triggering event(s). Triggering event(s) can be anything; and I'll bet money that during ANY accident sequence there are human factors events to be considered no matter the final cause. In this case, as in many others, the pilot's confusion caused the sequence of events to be triggered, and he did not catch himself in time. Incidentally, he immediately lowered the gear, but it was too late.

Prevention of these types of slips starts with you, the individual, and your attitude toward yourself. What I mean is, how prone are you to letting subconscious inputs make you react before you catch yourself? Do you slam the brake when someone next to you rolls backward as you look at them from your car, even though you are sitting still? Some people are more prone to these subconscious inputs than others. Match your acceptance of that vulnerability with walking yourself through your missions for a few minutes or more and you have the basis for slip prevention. That

shouldn't sound new either. You wouldn't believe how many mistakes pilots commit as a group.

Now to the meat, Conscious Prevention, what is that? They say that flying the jet should become second nature after awhile. I disagree with that philosophy to an extent. When you gain experience in a single-seat fighter, your basic flying skills don't really get that much better after the first year or so. You just get smarter and more capable of handling the extra workload that fighters require. This is the time when flying tends to become second nature, but it shouldn't. This is evidenced by mostly experienced pilots in the fatality file. The most important job you are doing is the one you are doing at that instant in time and slightly into the future. You are the only one that can consciously balance your monitoring of the current environment and figure out how you are going to gun this bonehead in front of you at the same time. That's what conscious prevention is all about; monitoring the basic task at hand a little more. You'll find that if you think just a couple of seconds about the routine tasks, check your attitude, look at that switch before you throw it if you have time, focus your attention on what your jet is doing now, your capability to project into the future won't be affected because your mental crosscheck will re-develop and adapt.

Pilots kill themselves quite often because they forget the task at hand while thinking about something else. That is not complacency, it is just a failure to consciously monitor your environment first while flying the jet before employing it. When I first started flying, a very experienced IP (5800 hours, no kidding) told me that when you sign that signout log, you must think of that airplane as your own vehicle, like your car, and treat it as such until you park it. This sounds corny, but over the years it has made me and many others think about our responsibility. Remember there is nobody in that cockpit to second guess you or help you. Think your actions through and focus your conscious attention in that very brief time before you execute. I realize that some actions should become programmed, but I suggest you never let a critical action become so automatic that you execute it brainlessly. Chew on that for a while and check 12, then check 6! ■



Pilot Safety Award of Distinction

During an air-to-air engagement, Captain Gard noticed his F-16 C/D's heads-up-display (HUD) and radar cycle on and off. He also noticed the dual Flight Control System (FLCS) warning light. He immediately called knock-it-off and turned his aircraft toward Hill AFB. He attempted to reset the FLCS with no success. Further investigation revealed that many of the aircraft's instruments were non-functional, including Attitude Director Indicator, Horizontal Situation Indicator, Angle of Attack Indicator, Up Front Control, and Fuel Flow Indicator, to name a few. Captain Gard, in radio conference with Hill AFB's supervisor of flight, concluded that the aircraft had a partial electrical failure without the associated electrical caution and warning lights. He proceeded to prepare for a high altitude modified straight in approach. With the electrical problems, he discovered that normal gear extension was impossible, leading edge flaps were in a fixed position and speed brakes were non-functional. He turned on the Emergency Power Unit and was able to properly configure the aircraft for an uneventful landing. Captain Gard's quick thinking and analysis of this potentially unforgiving situation make him deserving of the ACC Pilot Safety Award of Distinction.



***Capt Rod Gard
4 FS, 388 FW
Hill AFB UT***

Flightline Safety Award of Distinction



"While deployed to Nellis AFB NV in support of F-117A Night Vision Goggles (NVG) test, an extremely critical ground emergency occurred. The aircraft was preparing for the night test mission consisting of an F-117A and an F-16C. The Nellis ramp was in the middle of a Night Green Flag Exercise launch of over 38 aircraft taxiing on the aerodrome proper and conducting takeoff operations. As the pilot of the F-117A, I initiated auxiliary power unit (APU) startup. The first attempt at APU start resulted in a false start requiring the pressurized air start system (PASS) bottle to be recharged. It is probable that while the recharge procedure was taking place, an operation that takes about 5 minutes, the APU fuel was continuing to pump JP-4 at the rate of approximately 1 gallon per minute into the APU. As I attempted a second APU start, a serious malfunction occurred where the ignition process lit approximately 6 gallons of JP-4 creating a fireball that totally engulfed the vertical fins (approximately 16' into the air) and continuing approximately halfway up the spine of the fuselage. The fire was of such intensity that only

the quick reaction of the entire ground crew and a transient alert ground troop observing engine start, prevented the loss of a national asset. Their quick reaction in notifying me of an aircraft fire allowed me to exit the aircraft within 60 seconds after the fire began. By the time airfield emergency crews arrived at the aircraft, the fire had been extin-

guished by the aircraft ground crew. Not only did this ground crew save an F-117A, it should be reemphasized that the Nellis ramp was crowded with aircraft in all states of pre-start and start readiness. Their quick reaction prevented the possibility of a chain reaction fire situation."



*Sgt Mark Acord, TSgt Ronald Machado, SSgt Carl Harris, SSgt Peter Wojtak
SSgt Lowell Ashlock, MSgt Michael Parker, Sgt David Holloway
49 FW*

Holloman AFB NM

Not Pictured: TSgt Ralph Poole, 57 FW, Nellis AFB NV



Crew Chief Excellence Award

Technical Sergeant Ricardo Garcia was dispatched to perform a routine 7-level engine bay inspection prior to engine installation after a time compliance technical order was completed on F-15E aircraft 89-0478. During the foreign object damage inspection, he detected a hairline crack at the intersection of the fuselage along the airframe keel. The crack at fuselage station 657 and waterline 109 is an extremely difficult area in the engine bay access. It is also an area that bears a great deal of stress for the entire airframe and has had no history of cracks in any F-15 model aircraft. When the nondestructive inspection verified the cracked area, technical directives led structural maintenance to be performed at the depot level only. The depot team required an impression of the cracked area. The 4th Medical Group dental clinic assisted in making the impression; it was forwarded to the depot at Warner Robins AFB GA where the mold was used to construct a stress patch. Once the patch was installed, the aircraft was returned to full service. Sergeant Garcia's expertise, thorough inspection, and paying close attention to detail, saved a valuable Air Force asset. The crack eventually would have propagated further and caused catastrophic failure and possible loss of life or serious injury.



*TSgt Ricardo Garcia
335 FS, 4 WG
Seymour Johnson AFB NC*

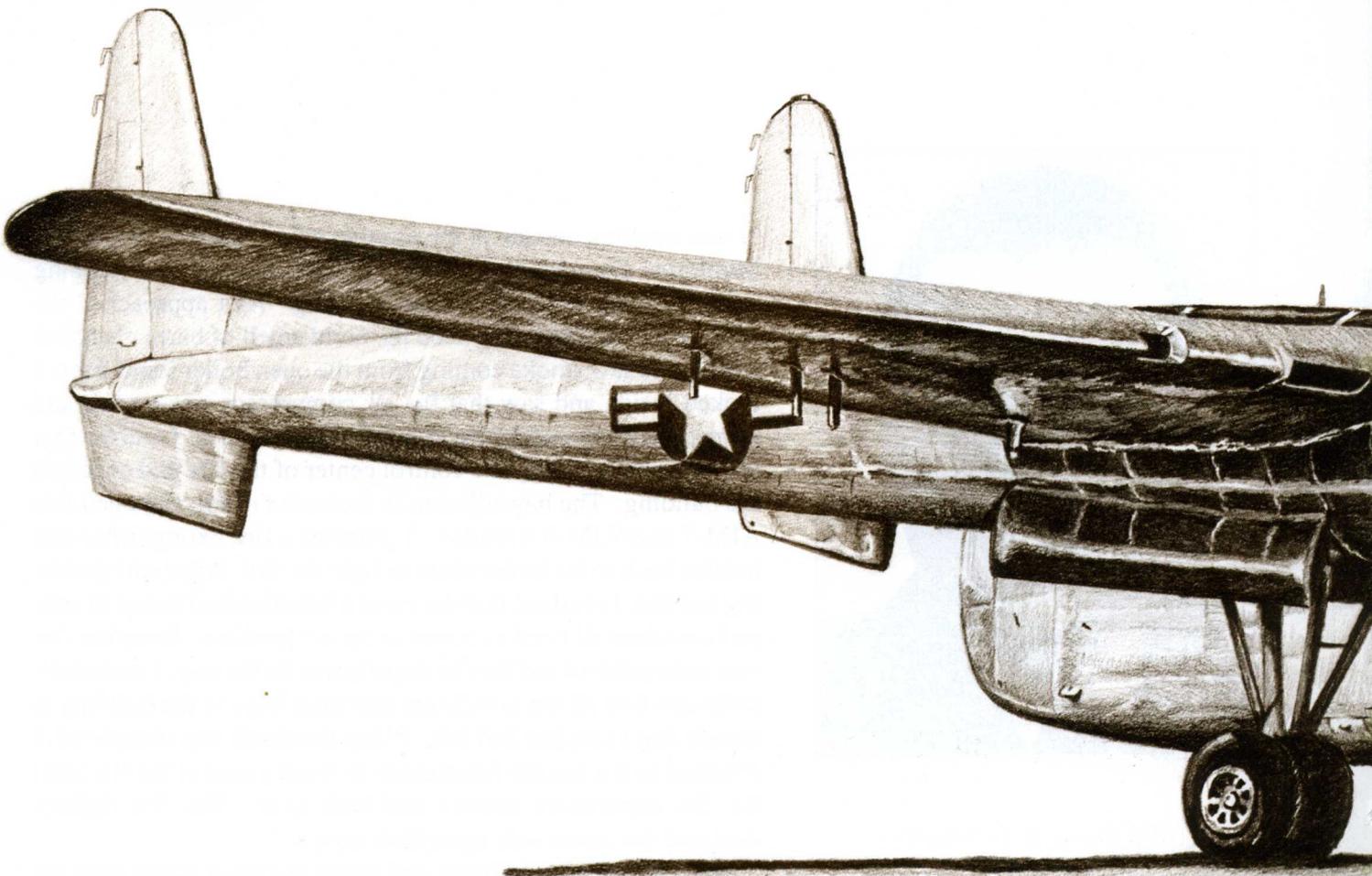
Ground Safety Individual Award of Distinction



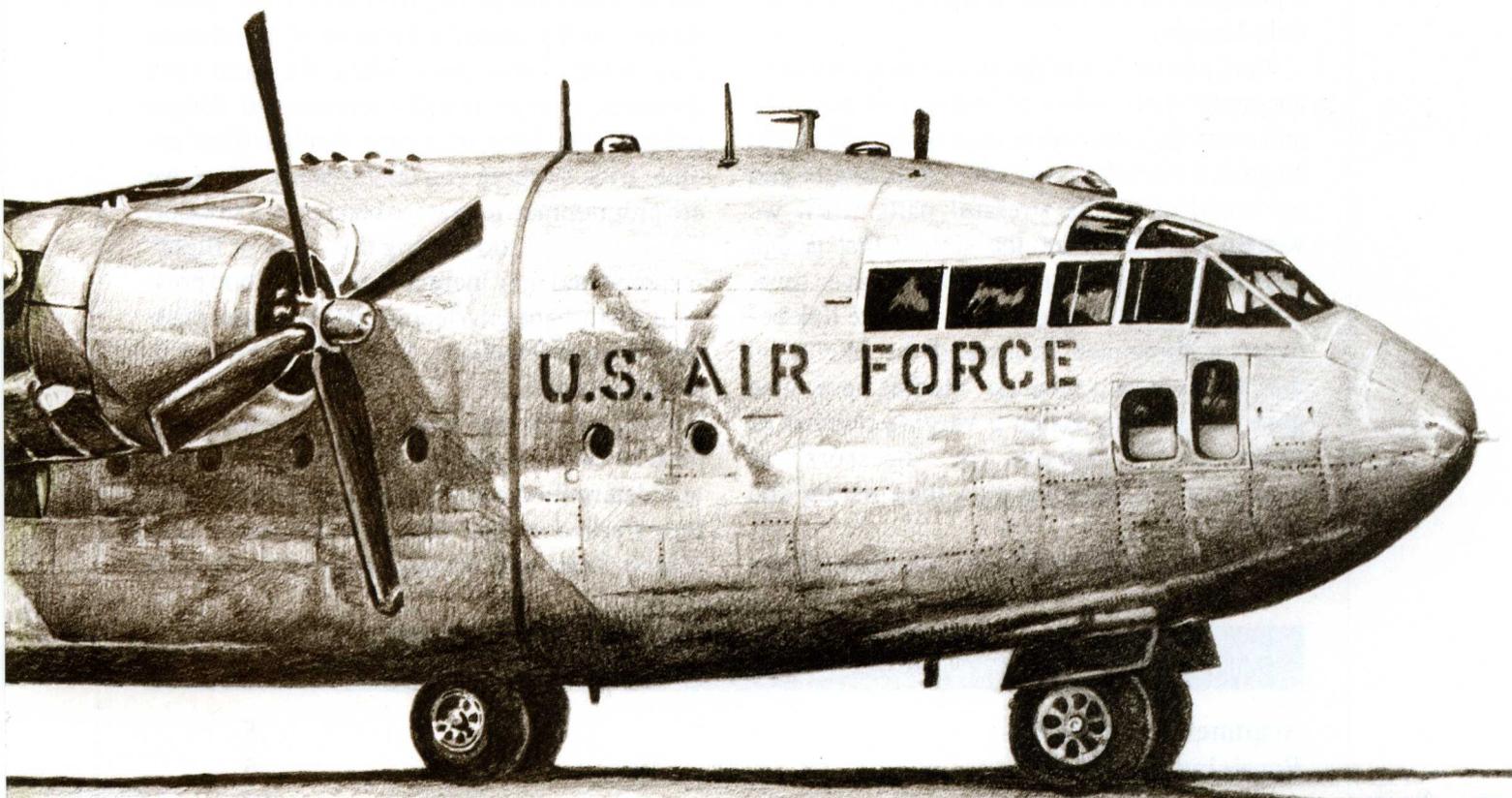
*SSgt Robert M. G. Wheeler
35 MS
NAS Keflavik, Iceland*

“I was working outside of the missile maintenance facility in the Munitions Storage Area when I heard cracking and zapping noises coming from behind the building. As I approached the back of the building, I noticed the acrid smell of burnt electrical wiring and saw smoke coming from the open boiler room door. I looked inside and saw that the air compressor was on fire and immediately entered the building to raise the alarm. I told the first person I saw to notify the control center of the fire and evacuate the building. The bay adjacent to the boiler room contained live AIM-7 and AIM-9 missiles. I grabbed a fire extinguisher and headed back to the boiler room to fight the fire. After extinguishing the fire, I realized that the circuit breakers had failed to pop, so I switched all breaker boxes to the off position. Since the fire was extinguished and the fire department on the way, I systematically checked all the missile maintenance bays in the building to ensure that everyone had left. When the check was completed, I returned to the smoke-filled room to stand guard at the site until the fire department arrived and took over. The fire fighters declared the scene safe upon their arrival.”

SSgt Wheeler’s vigilance and rapid response minimized the fire’s damage. He prevented the loss of valuable equipment, possibly the building, and ensured the safety of his co-workers.



FAIRCHILD C-119



FLYING BOXCAR

Are You A TIME BOMB

Your boss is mad because you missed a suspense, your car wouldn't start this morning, and your neighbor just yelled at you because your dog ate his cat. By the time your day's over, you feel like a pressure cooker ready to boil over. And it's only Monday!

Well, join the rest of the human race. All of us encounter daily stress of one sort or the other and some days are worse than others. It would be great if our brains were like chalk boards and we could erase the stressful parts when we wanted to. However, the simple fact is that stress is cumulative and it builds up over time.

Psychologists have proven a definite link between accumulated stress and the likelihood that you'll have a mishap. Studies have even gone so far as to assign a varying number of points to life stresses (or "stressors" in psychospeak), depending on their nature and severity.

Here's a sample list of some life stressors and

their associated points:

"Wait a minute," you say, "getting a promotion and going on vacation are good things." Not necessarily so, say the researchers.

The common link between all the stressors above is the **change** they represent. Even "good" things can be stressful because of the change they entail. Way back when we were cave dwellers, change usually represented danger (often in the form of a cave dweller from another tribe bopping you on the head). Thus, we are programmed to react to change as a stressor. Our reactions follow along the "fight or flight" response and may include increased blood pressure, disturbance in sleeping patterns, and other anxiety manifestations. So what's all this got to do with mishaps?

Well, in another study a researcher interviewed each member of an NFL football team and determined each player's total points. He was amazed to find that, over the course of a season, those with the most points were the first

Stressor	Points
Argument with the boss	5
Receiving a traffic ticket	5
Argument with your spouse	10
Going on vacation	15
Permanent change of assignment	25
Receiving a promotion	25
Getting fired from your job	25
Divorce	50
Death of a loved one	60

to be injured, and tended to sustain more severe injuries.

This and other studies show that, in a way we don't exactly understand, having all these stressor points running around inside your cranium increases the probability that you'll have a mishap.

I think this has some important implications for those of us in the Air Force. A change in the normal pattern of your life always carries with it a certain amount of stress. We are a service tasked to go anywhere, anytime, and we each have to be equipped to deal with the personal stresses involved.

If you've been exposed to a lot of stressors recently, you're at higher risk for a mishap. Sometimes you'll notice the excessive stress symptoms within yourself; mental slowness, inability to concentrate, absent-mindedness. However, more often than not, you'll be unaware that you're functioning below your normal levels, and that's when the world is apt to bite you.

You aren't powerless in the face of stresses. Although you can't eliminate them or their effect on you, you can diminish the number of points you absorb. How?

First, you can do things which allow you to decrease the pressure in your personal pressure cooker. Exercise is a proven de-pressurizer provid-

A change in the normal pattern of your life always carries with it a certain amount of stress. We are a service tasked to go anywhere, anytime, and we each have to be equipped to deal with the personal stresses involved.

ing additional health benefits like lowered blood pressure and weight reduction.

Talking about stress with your friends or loved ones is also a good way to let off steam. Chances are it'll allow them to vent some stress too.

Third, everyone has things that he or she likes to do that help them to unwind. For some, reading is a great outlet. For others a little "personal time" for quiet reflection or pursuit of a hobby is the key to relaxing. For me, closing the door to my office and screaming at the top of my lungs often works wonders. No, choking the living daylights out of your boss isn't an approved solution, although it would probably knock off 50 or more points.

The most important thing I'd like you to take from this article is an awareness of the effect of stress on the probability of you being involved in an accident, on or off duty. When you've accumulated lots of points, you're a walking mishap waiting to happen; and only you know exactly how many stressors you're carrying around inside you. If you're edging up toward the high numbers, back off and use one of the pressure relief valves I talked about. And don't be alarmed at the screams issuing forth from my office. ■



Weapons Safety Award of Distinction

“While TDY in support of a GLOBAL CRUISE test mission, I was downloading a non-tactical instrumentation kit (NTIK) from an AGM-86 Air-Launched Cruise Missile (ALCM). While performing this procedure, I noticed the lithium battery had vented. I led the team to safety and successfully completed the download, but noted deficiencies in technical data guidance. Upon researching the applicable tech data, I discovered the tech orders failed to direct proper safety precautions for battery disposal.”

If, while performing maintenance in the upper bay area, the battery vents, personnel would be placed at significant risk from toxic fumes and liquid released into the payload bay area. No procedures existed to determine if a battery had vented and released toxic fumes or liquid prior to the technician entering the weapons bay. Sgt Hamilton did extensive research and found that extreme health hazards can result from contact with chemicals vented from a lithium battery. His investigation found that tech data directed the battery be turned over to explosive ordnance disposal for destruction. This is incorrect as lithium is a hazardous metal. All lithium batteries must be sent to the Defense Reutilization and Management Office for disposal. He determined that steps must be developed for observation, removal, packaging, and disposal of a vented battery. He then obtained information from battery experts, put together a package, and submitted it in the form of a technical order improvement report, AFTO 22. His procedures are currently being reviewed by engineering for incorporation into appropriate tech orders. Sergeant Hamilton’s commitment to safety identified this hazardous working condition and initiated the process to significantly reduce the potential for a mishap to maintenance personnel.



*SSgt Bruce W. Hamilton
49 TESTS, USAFAWC
Eglin AFB FL*

Unit Safety Award of Distinction



The USAF Thunderbirds have completed 42 quarters of accident-free flying, totaling over 35,000 safe flying hours. The team's safety record has been unblemished since they converted to the F-16 "Fighting Falcon" early in 1983.

In 1984, the team performed in Europe for the first time in 13 years. More than 3.2 million people viewed aerial demonstrations in 11 countries, including the team's first visit to Norway.

In 1987, the largest crowd to see a performance was at Coney Island NY, on July 4, where more than 2.25 million people viewed the demonstration. Also in 1987, the Thunderbirds performed an additional 15 demonstrations in 11 countries, including China -- the first time any US military demonstration team performed in a communist country.

In 1990, the team surpassed the 600th demonstration mark in the F-16, flying 63 performances in 31 states. More than 8.7 million people viewed these demonstrations in 1990.

In 1991, the team performed 75 demonstrations before more than

9.5 million people in 30 states and eight European countries, including first-time visits for the team to Switzerland, Poland, and Hungary. During the 30-day tour, more than one million people viewed the red, white, and blue F-16s. All totaled, almost 10 million people viewed their air demonstrations in 1991. Over the team's history, 3,131 air demonstrations have been flown, including 676 in the F-16A.



*USAF Air Demonstration Squadron
57 WG, USAFWTC
NELLIS AFB NV*

In 1992, the Thunderbirds transitioned to the F-16C and completed 75 aerial demonstrations, including a 17-day tour in Central and South America. Each jet logged more than 98,000 air miles while performing for more than 6.6 million people. The F-16Cs performed at a 93.9 percent fully-mission-capable rate, 10 percent above Air Force standards.

With the beginning of the 1993 season, the team started its 40th year of performing with plans for 72 precision aerial demonstrations in 50 cities across 28 states and Canada. Rapid deployment, high sortie rates, and timely, effective maintenance is inherent in Thunderbird operations to meet the demands of a rigorous air demonstration schedule. In their long and proud history, the "Ambassadors in Blue" have never canceled a performance for maintenance reasons. It takes exceptional people to meet this type of challenge; these people are the Thunderbirds.

In over 10 years of flying the F-16, the Thunderbirds have achieved an unparalleled flying safety record.

YOUR Safety Awards

*Barbara Taylor
ACC/SEP
Langley AFB VA*

Should you be one of the many Air Combat Command Safety Award winners? Have you saved an aircraft from destruction? Did you initiate a TCTO changing an unsafe procedure(s)? Have you improved the safety environment of your office, work place, or unit? Or better yet, have your actions prevented injury to someone? Well, how did it happen? What's your story? How did it end? If it was "more than just your job" then it is probably worthy of recognition in the form of an ACC Safety Award.

It's been one year since the Air Combat Safety Awards Program was formally launched, and what a year it's been! Overall, we've had good participation from the field; and with your continued support, I see it getting even better! We've encountered a few problems; some great suggestions; we said farewell to the missileers; and welcome to Air Rescue Service. We would also like to take this time to say welcome aboard to the C-130 gang. We look forward to your active participation in this very important program.

The Awards Program was briefed at the ACC Safety Conference in June. Attendees were given a handout that includes Air Force, National Safety Council, and Air Combat Command awards. Everything from award selection criteria to photograph and unit illustration requirements is included in the handout. For those of you who weren't at the conference, and especially the new C-130 units, there are some handouts left -- you are welcome to them (for you new people, it's a "must have") -- just give me a call at DSN 574-3658 or (804) 764-3658 and I'll put one in the mail. Also, my fax number is (804) 764-3102.

There have been some changes since we published our 3 May 93 Supplement to AFR 900-26. The photograph and unit patch requirements have changed. Award nominations (except pilot and aircrew) must be accompanied by **one** 8- by 10-inch head-and-shoulder portrait type photograph. The Pilot Safety Award of Distinction and Aircrew Safety Award of Distinction nominations must be accompanied by **two** 8- by 10-inch head-and-shoulder portrait type or beside the aircraft photographs. One photograph will be forwarded to HQ AFSA/SEF with the Well Done Award nomination. **All nominations** including more than two individuals should be a group photograph. Unit nominations must be accompanied by a repro-quality, black-and-white line illustration or color decal (silk screen or process color) of unit patch. If these are not available, a cloth patch or color print of same may be substituted. We are awaiting publication of AFI 36-2833 (was AFR 900-26). When this is published, we will put out a new ACC supplement.

The following are helpful hints for award nominations:

1. Gather the facts and draft the nomination when the event occurs.
2. Prepare and coordinate the final nomination well ahead of the suspense date.
3. Use specific accomplishments!
4. State specific facts, statistics, or methods used.
5. Avoid gross generalizations.
6. Ensure appropriate photographs or unit patch illustrations are included with nomination. Failure to do so will delay the process and maybe, in some cases, prevent timely recognition.
7. Ensure individual/group/unit recommended are not just doing their job.
8. Ensure nominations are routed through the proper

channels (i.e., WG/SE, WG/CC, NAF/SE, ACC/SEP).

9. Units, do not hesitate to call your NAF or Center if you have questions.

10. Use the supplement and handout for guidance in submitting nominations.

11. Take the time to recognize deserving people and units!

While the purpose of the awards program is to

recognize deserving individuals/groups/units for their mishap prevention efforts, we also want to give our readers the who, what, when, where, why, and how things turned out. In addition to serving as recognition, awards nominations and write-ups provide valuable lessons learned for our readers. The information could save another from a similar situation/hazard/mishap.

The following is a current list of ACC safety Awards:

ANNUAL AWARDS

Commander's Award for Safety
Flight Safety Award
Safety Sustained Superior Performance Award
Safety Office of the Year Award (Category I & II)
Distinguished Chief of Safety Award
Distinguished Pilot Safety Award
Distinguished Aircrew Safety Award
Outstanding Achievement Safety Award
Distinguished Flight Safety Officer Award
Distinguished Flight Safety NCO Award
Distinguished Crew Chief of the Year Award
Distinguished Flightline Safety Achievement Award
Distinguished Ground Safety Achievement Award
Exceptional Ground Safety Leadership Award
Superior Performer in Ground Safety
CMSgt Paul A. Palombo Award for Distinguished Ground Safety Newcomer
Annual Unit Ground Safety Award (Category I & II)
Annual Traffic Safety Award (Category I & II)
Exceptional Weapons Safety Officer Award
Exceptional Weapons Safety NCO Award
Distinguished Weapons Safety Achievement Award
Outstanding Unit Weapons Safety Award (Category I & II)

MONTHLY AWARDS

Pilot Safety Award of Distinction
Aircrew Safety Award of Distinction
Crew Chief Excellence Award
Flightline Safety Award of Distinction
Unit Safety Award of Distinction
Ground Safety Individual Award of Distinction
Weapons Safety Award of Distinction

QUARTERLY AWARDS

Flight Safety Award of the Quarter
Ground Safety Award of the Quarter
Weapons Safety Award of the Quarter

RECOGNITION

Safety Team Salute

ACC annual award nominations are due by 15 December. USAF annual award nominations are due to me by 1 November. ACC monthly awards are due by the 1st of each month. ACC quarterly awards are due by the 1st of January, April, July, and October.

This is **your** program! We need your input to provide you with a quality product. If you expect to win awards, you must submit nominations.

Tell us what we can do to make this program better for you! ■

MSGT Daniel R. McCormick
33 F/WSEG
Eglin AFB FL

FALLING For a Deer



Wednesday, October 14, 1992, started out cold and rainy, with a light breeze. By late afternoon, the rain had turned to drizzle, making it a perfect afternoon for deer hunting. The stage was set and all the elements were in place for a self-made disaster.

Being an avid deer hunter is an understatement to describe my actions when deer season arrives in early October. By July I'm building deer stands which my wife says I don't need, but I always seem to need one more. My ladder style deer stands average 14-feet in height with a wide platform on top fitted with a 5-gallon bucket for a seat. The stand is then placed against the tree and secured with tie-down straps. Just one more stand was all I needed.

The old style stand was changed: the top 2x4 step was replaced with a small 12x20 inch board for standing on. The top of the stand was now my seat. The new stand was 16-feet high to allow for my change in style. In August the stand was placed in the woods and I climbed it once to see if everything was set.

I called this my big buck stand. On October 14 my son and I were on our way.

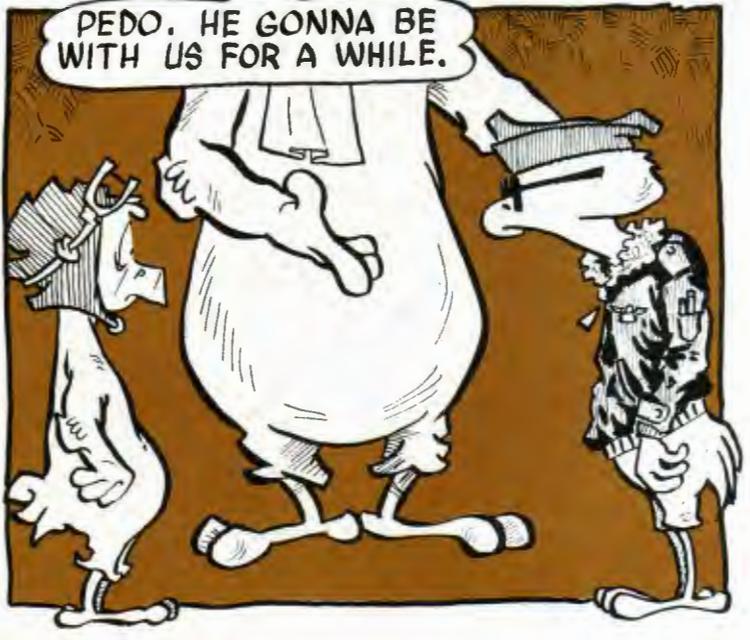
I was sporting my new large brimmed hat to keep the rain off my head. My son's stand was nearby and as we parted I told him, "If you hear my call, come running."

Standing at the bottom of the stand I couldn't locate my rope for pulling my bow up. My conscience told me my actions were unsafe, but I pressed on. With that in mind and my bow in my left hand, I started up the tree stand. I was unable to see above me due to my new hat, so I carefully reached up with one hand and slowly climbed to the top of my stand. As I reached for the last step, I pushed up with my legs. My hand felt the board and as I tried to curl my fingers around the back of the board, my hand slipped. I quickly remembered the last step was a 12x20 board not a 2x4 step. The upward motion of my legs pushed me away from the stand, and I fell backwards. I held my bow high and away from my body. It seemed I would fall forever when the sud-

den stop from hitting the ground reminded me of the law of gravity. I landed on the heels of my feet and my gluteus maximus. I lost my grip on my bow, and it fell into the bushes. Immediately, I felt a sharp pain in my lower back and right forearm. I called 3 times to my son before he heard me and came running. As I sat there in the rain trying to evaluate my condition, I realized how stupid I had been and thought of all the safety rules I had broken. With the help of my son, I managed to walk to my truck. The ride home was rough. I felt the effects of shock and thought I was going to die. Wet and muddy, I sat frustrated about my near fatal mistake. I went home and went to bed. The next day the doctor told me I had fractured my tail bone and severely strained my right forearm. The healing process has been slow for both my injury and my pride.

I have climbed hundreds of stands and listened to thousands of people who have said, "It will never happen to me." Being the victim of my own mistakes is living proof -- **it could happen to you!** ■

Freagle



TRENDS?

*Maj Bob Sampson
502 ABWISF
Maxwell AFB AL*

The wreckage seemed to go on forever. From his vantage point, looking down into the valley, the pieces of debris looked like confetti thrown around during a wild party. However, he knew this was not the result of a celebration: eight crew members were dead with millions of dollars of military hardware destroyed. Why did it happen? As the accident investigation officer, it was his job to find out why. He also knew another important part of his job was to identify accident trends. He knew from experience it was easier to get action when you could prove by trend analysis that another accident was likely to occur.

Climbing down the hill and going through the wreckage, he couldn't help feeling like a vulture picking at the remains of a great fallen bird -- a trespasser. Having a job to do, he put those thoughts aside.

He reviewed everything he knew about the crash. He had already listened to the cockpit recorder and knew that whatever happened, happened quickly for the crew's last conversation among themselves was about the upcoming leave they were going to take after this run. The mission profile was a standard one.

They were to drop off supplies at a remote research station and return home. The crew members were all well trained and, from all reports, worked well together. Maintenance didn't seem to be a factor. All the forms at pre-flight looked good, and the mission commander stated to the crew chief right before takeoff that "the ship looked in great shape." This left one possibility, catastrophic structural failure. His first impression was of an in-flight breakup. That would explain the wreckage pattern and why the crew had no time to send out a distress call.

What could cause that kind of failure? A design flaw? Computer failure? That would be ironic! When computers were first developed, many thought accidents due to human error couldn't happen any more. After reviewing accidents caused by computer failure, he knew computers just added another dimension to accident investigation. He also knew the answer to this crash wouldn't be one factor but a combination of several factors. Accidents don't just happen, they are a result of smaller events, some by themselves quite harmless, that come together with the synergistic effect resulting in a mishap. He knew he would discover that chain, link by link, until it led



him to the solution to this mishap. Glancing at his watch, he noticed it was time to check in with HQ and get the metallurgy report.

Walking over to the field shelter, he recalled that the weather in this area was known for dangerous storms. Three hundred mile per hour winds were common this time of year and could come up fast. No craft could withstand that kind of force. Were they caught in a storm? With an experienced crew like that, it seemed hard to believe. But, it wouldn't be the first time an experienced crew did something dumb. Since there was no satellite coverage for this area, he would have to wait for the weather computer to complete its reconstruction program before knowing what the weather was like at the time of the accident. With any luck it should be done by now, along with the other information requested from the computer.

Stepping into the shelter, he removed his helmet and walked over to the computer terminal. He requested the metallurgy data and his answer was immediate. The exterior of the craft was subjected to intense magnetic stress. He quickly called up the weather information and read that the conditions at the time of the crash were perfect for a MagStorm. With excite-

ment building inside him, he input the data from the metallurgy report with the weather report and then included information on the crash pattern. In a matter of seconds, the computer correlated all the information and displayed its conclusion: CRAFT DESTROYED BY ENCOUNTER WITH MAGNETIC STORM. Now he knew the crew had been caught in a powerful magnetic storm that tore them to pieces. The reason they got into the storm would be harder to find. Was their weather detection equipment not working? Did they think they could work their way around it? Were they preoccupied by some other event? Well, these questions would have to wait till later. He was already late for his commlink slot, and at this distance it would take 15 minutes for the comm beam to get to headquarters.

While waiting, he thought about the accident and why it happened. Maybe someday machines won't fail and people won't make mistakes; but for now, things still go wrong and people die. With that thought, he turned and looked out the window at the row of new graves and thought that for those eight crew members Mars was a lonely place to die and he hoped he wasn't seeing a trend. ■



*MSgt Donald L. Bigelow
HQ 8 AFISEW
Barksdale AFB LA*

SAFETY CULTURE

A Goal of Zero Mishaps

As most of you know, the business end of Safety is mishap prevention -- to protect our resources by preventing personal injury or damage to equipment. Mishap prevention must be part of everyone's business if we're going to accomplish the Air Force mission. Everyone's heard these statements in one facet or another, but are we really striving to do our best in this demanding arena?

For almost nine years as a safety professional, I've seen the mishap prevention effort in action. We've made great strides in mishap reduction and the statistics speak for themselves. However, we can, and must do better; especially during this time of budget cuts, restructuring, and force reductions. So, what should we do?

In light of the Quality Air Force culture, we must have a vision and establish a goal. When it comes to mishap prevention -- that goal must be zero mishaps! It's always been my belief as a safety professional that we can't accept anything less. To do so is accepting defeat. But this is a hard sell. There are a lot of folks who believe a goal of zero mishaps is unrealistic considering the risks of our jobs and the American lifestyle. I say "You must be an optimist, not a pessimist, be pro-active, and strive to prevent all mishaps!" To emphasize this philosophy and my stand, I offer the following hypothetical examples that were addressed at an Air Force Ground Safety Management Course I attended in 1991.

- Without a goal of zero, we'd have to accept:
- * 1 hour of unsafe drinking water every month.
 - * 2 unsafe plane landings per day at O'Hare Airport in Chicago.
 - * 16,000 pieces of mail lost by the U.S. Postal Service every hour.
 - * 20,000 incorrect drug prescriptions per year.
 - * 500 incorrect surgical operations each week.
 - * 50 newborn babies dropped at birth by doctors every day.
 - * 22,000 checks deducted from the wrong bank accounts each hour.
 - * 32,000 missed heartbeats per person per year.
 - * No electricity, water, or heat for about 15 minutes each day.
 - * No telephone service or television transmission for nearly 15 minutes each day.
 - * Nine misspelled words on every page of a magazine.

Suddenly, the goal of zero mishaps makes a lot of sense.

My challenge to everyone in Air Combat Command and the Air Force is to establish a personal goal of zero mishaps in your life, both on and off the job. In addition, strive to identify and improve areas that could cause mishaps and do it before a mishap occurs, not just after. With that in mind, we will take a giant step towards truly creating a culture of safety throughout the entire Air Force and reach a goal of zero mishaps. ■

Accolades

QUESTIONS OR COMMENTS CONCERNING DATA ON THIS PAGE SHOULD BE ADDRESSED TO HQ ACC/SEA, DSN: 574-3814

	TOTAL			ACC			ANG			AFR		
	AUG	THRU AUG		AUG	THRU AUG		AUG	THRU AUG		AUG	THRU AUG	
		FY93	FY92		FY93	FY92		FY93	FY92		FY93	FY92
CLASS A MISHAPS	2	18	29	1	9	14	1	8	11	0	1	4
AIRCREW FATALITIES	1	7	14	1	6	4	0	1	7	0	0	3
* IN THE ENVELOPE EJECTIONS	1/0	17/0	15/1	0	7/0	7/0	1/0	9/0	6/1	0	1/0	2/0
* OUT OF ENVELOPE EJECTIONS	0	0	0/4	0	0	0/2	0	0	0/1	0	0	0/1

* (SUCCESSFUL/UNSUCCESSFUL)

CLASS A MISHAP COMPARISON RATE

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

		MONTH											
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ACC	FY 92	3.4	1.9	2.0	2.5	2.0	2.0	2.0	2.3	2.5	2.4	2.6	2.5
	FY 93	2.0	3.2	2.2	1.6	1.8	2.2	1.8	1.9	1.9	1.6	1.6	
1 AF	FY 92	0	0	0	0	0	0	0	0	0	0	0	0
	FY 93	0	0	0	0	0	9.5	7.9	6.8	6.0	5.3	4.8	
2 AF	FY 92	0	0	0	0	0	0	0	*	29.1	16.4	11.2	7.8
	FY 93	0	0	0	0	0	0	0	0	0	0	0	
8 AF	FY 92	0	0	0	0	0	8.9	7.6	6.6	7.9	5.8	4.4	5.2
	FY 93	0	5.2	3.7	2.8	2.2	1.8	1.5	1.3	1.2	1.2	0.9	
9 AF	FY 92	4.4	2.4	3.4	2.6	2.1	1.7	2.2	2.6	2.4	2.7	2.4	2.0
	FY 93	6.7	6.5	4.4	3.3	3.9	3.2	2.7	2.4	2.8	2.4	2.1	
12 AF	FY 92	0	0	0	1.5	1.3	1.0	.9	.8	1.4	1.3	1.8	2.1
	FY 93	0	0	0	0	0	0	0	0	0	0	0	
ANG	FY 92	0	6.7	6.3	8.8	7.1	6.6	5.6	5.5	4.9	4.9	4.9	4.9
	FY 93	0	2.2	2.9	2.1	3.5	2.9	3.1	2.7	3.4	3.0	3.2	
AFR	FY 92	0	10.9	7.7	5.7	4.7	3.9	6.7	8.7	7.8	7.0	8.4	7.7
	FY 93	0	0	8.0	5.9	4.8	4.0	3.4	3.0	2.7	2.4	2.2	
TOTAL	FY 92	2.3	3.7	3.5	4.3	3.5	3.3	3.3	3.6	3.5	3.4	3.6	3.4
	FY 93	1.3	2.7	2.7	2.1	2.5	2.5	2.3	2.2	2.4	2.1	2.1	

* (HOURS NOT AVAILABLE)

A DARK AND STORMY NIGHT

*Capt Ronald B. Panting
24 RSICCE
Offutt AFB NE*



“There are people who are dead, people who are dying, and people who are badly hurt. This is no joke - this place is a real mess.”

These words, uttered by Lt Col Rich Wilson over the brick, were the first official words we heard that morning - they jolted us into the beginning of a very long day. This is the story of Crew R-03, 24th Reconnaissance Squadron, Offutt AFB, being in the right place at the right time to help someone in need.

"It was a dark and stormy night" is a phrase normally associated with a Peanuts comic strip. In our case, it happened to be true. It WAS dark and stormy that April night at Shemya AFB, Alaska, far exceeding our weather operating limitations; but that's not unusual. "THE ROCK," a small island located on the western tip of the Aleutian Island chain, is not known for its benign weather conditions. Our crew's 2 1/2 week rotation was coming to what we thought was an uneventful close. We had "cheated death" again and again, flying missions despite the usual high crosswinds, constant low ceilings, and serious turbulence. Our replacement crew had arrived earlier that day, and we were looking forward to going home. Little did we know that about the time we were going to bed, a China Eastern Airlines MD-11 en route from Shanghai to Los Angeles was encountering severe turbulence over the North Pacific. A few seconds of massive buffeting killed one person and injured 156 of the 260 people on board.

The first news that something was up came at 0330 when we awoke to pounding on our doors. The initial thought that it was just the resident practical joker quickly disappeared with the urgent sound of the detachment Ops Officer's voice. He informed the crew to prepare for a MEDIVAC (emergency medical evacuation) to Elmendorf AFB, Alaska. We soon learned that the Chinese pilot of Flight 538, in touch with oceanic air traffic controllers in Oakland, California, injured and fearing major structural damage, had declared an IFE and requested vectors to the nearest airport. He was directed to Shemya AFB. After shaking the cob-

webs out of our heads, we pressed into action and preflighted our TC-135S, a training version of our RC-135 mission aircraft. It was ready within 15 minutes.

As we rechecked weather, routing, and speeds, the injured airliner passengers were undergoing triage to determine which patients required immediate airlift to a hospital bigger than our 2-room, 1 flight surgeon clinic. We helped in any way we could: gutting the aircraft of non-essential equipment to make the most room, scrounging blankets and oxygen bottles, making and carrying litters, refilling used oxygen bottles, and comforting the injured as best we could.

Twenty-seven of the most critically injured, stabilized just enough to attempt the 3-hour flight, were quickly loaded on the jet. We knew that time meant virtual life or death to some of the most seriously injured. (In fact, the doctor on board was forced to perform meatball surgery en route to keep 2 individuals alive.) Our crewmembers and maintainers carefully placed the litters on the jet, knowing that there weren't enough tie-down straps and seat belts to accommodate more than a few patients--the rest would be held down by extra crewmembers who were also holding IV bottles. We all knew that despite the weather, this flight had to be the smoothest possible, otherwise we'd have people and things rolling around like pinballs. Miraculously, the weather softened to within limits as we cranked the motors, and we carefully departed into ice-laden clouds. The race for life was on!

En route to Elmendorf AFB, we pushed the jet to the virtual edge. We kept getting messages from the doctor on board that unless we hurried, people were going to die. Talk about motivation! It was like driving at high speed on a foggy road, requiring THE MAXIMUM attention possible from ALL crewmembers. We also provided continuous HF radio communications between the airborne medical team and

those on the ground, passing requests/demands for IMMEDIATE surgery on those needing it. This proved essential in the quickest possible dispersal of the patients to local hospitals. There was another communication problem: only 1 of our foreign national passengers spoke English. We could only imagine the thoughts of these people, beaten up by one airplane and now waking up inside another with strange people in strange clothes. It was amazing to see that although we couldn't converse with our patients, simply holding their hands calmed them, conveying our concern for them as human beings.

Skill and the weather at Elmendorf contributed to a flawlessly smooth approach and landing. As we approached the parking area, we could see what had to be close to 100 emergency vehicles there to meet us -- a sight out of some disaster movie! After engine shutdown, our small contribution to the immense effort to save lives was almost over. A crowd of Elmendorf medical folks and base supervisors ran up to the jet as our cargo door opened. Some of us helped carry litters to the waiting ambulances while others saw to the care and servicing of the plane. (The jet suffered no ill effects from our mad dash for life.) The return to Shemya was uneventful and quiet, as air transportation from our sister commands and services was procured for the rest of the injured. When we landed, our day was over 17 hours long. Our packing resumed once we returned to our rooms and none of us had any trouble sleeping that night, knowing what we helped to accomplish.

This is the aircrew's story. Sure, we've received kudos, from COMACC on down, but we just happened to be there when needed. As with any successful disaster response, everyone who took part in the rescue was a hero and helped save lives. Our training and ability to react as a professional team and doing what needed to be done saved lives, and that just plain feels **GOOD!**



