
The Combat
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Engine Fire!
Are You Ready?

The Combat EDGE

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Cover photo digitally created by SSgt. Neil Armstrong

ACCent on Safety

DRIVING HOME YOUR SAFETY MESSAGE

ACC just recently chalked-up another "off duty" ground mishap fatality. ACC's leading causes of accidents and death continues to be "drinking and driving, failure to wear seat belts, excessive speed for conditions, and violation of our traffic laws."

Four out of ACC's last five ground fatalities involved vehicle accidents where the individual failed to use their seat belt. Three of the four were A1C's. The number of young folks involved in serious mishaps highlights the need for commanders and supervisors to regularly and continually emphasize the basics like seat belt usage and motorcycle safety.

Supervisors, friends, and coworkers need to keep transmitting safety messages over-and-over until our new folks have smart safety practices ingrained in their habit patterns.

I encourage each of you to use the month of November to stop the growing trend in ground mishaps. Once a mishap occurs it is too late to worry about what we could have done differently to prevent a tragedy. We need to act now to break the chain of events that lead to mishaps. Communicating safety to everyone in your organization is the key. You may never know if your words save a life, but the reverse is unfortunately all too often painfully true. So don't lose the opportunity to get the safety message out!

Colonel Kevin Smith
ACC Chief of Safety

Photo by SSgt. Christopher Mathews

My biggest fear at the time was that either the fire would spread forward towards us or that the jet would simply explode.

"Two! The Fire's S

In April, I was truly worried for the first time in almost 1,800 hours of F-15E time.

The planned mission was an F-15E formal training unit, night surface attack tactics syllabus sortie with student pilot. Takeoff, en route, and letdown to low level were all non-eventful. I even remember thinking how calm the sortie was since the night traffic and radio chatter were less than normal. Approximately 40 minutes after letdown, flying east towards the coast over marshy, lowland areas, I heard a very loud "bang," perceived smoke/haze in the cockpit, and immediately noticed a Master Caution light indicating a right engine fire light, and heard our aural warning system declare "WARNING,

Still Burning..."

By Capt Neil Allen, Seymour Johnson AFB, N.C.

Digitally created by SSgt. Neil Armstrong

ENGINE FIRE, RIGHT." At the time, neither the student nor I knew what had happened, but we both knew it was serious. Not until several minutes later did I correctly assume we had hit a bird. In fact, later video review confirmed a direct hit on 15 to 20 ducks, flying in close formation.

After impact, the student began an immediate climb away from the ground. He noticed the bright reflection of the fire and began pulling the engines back to idle one-by-one. (In comparison, the reflection was very close to the reflection of both engines in full afterburner at night.) He pulled back the left engine first. As the reflection remained the same, he quickly placed the left throttle back to military power (MIL)

and pulled the right throttle back to idle. During this time, I reached for the aft cockpit throttles to confirm both were in MIL during the climb, but instead felt only the left engine in idle. I verbally confirmed the right engine was on fire, which meant the right throttle should have also been in idle. All this occurred in less than 20 seconds. Also, in this time, I called "knock-it-off" on our flight discreet frequency, told lead we were on fire, and cleared him to rejoin.

I directed a turn to 240 degrees to our home base of Seymour Johnson. Within 30 seconds of the bird strike, the student shut the right engine down and armed the fire bottle. By the time we got pointed for home, we were within 60 miles of the runway. Over the next 2 to 3 minutes, we completed checklist items for an in-flight engine fire, visually confirmed the fire was still burning, and contacted the Supervisor of Flying (SOF) to alert him of our condition.

Aviate, Navigate, and Communicate

Aviate: Other than checking the throttles in military power, I never touched the flight controls for the rest of the flight. The student did an excellent job of aviating by climbing away from the ground without hesitation. Several minutes later, the student switched our IFF to EMERGENCY (7700). I must be honest and admit that never crossed my mind until he told me he'd done it. The student later said he was even thinking of correct VFR hemispheric altitudes as he climbed from 4,500 to 6,500 feet to avoid a light scud deck. The student certainly had his hands full simply flying the jet home, but did a fine job of aviating. Once on speed, he had a very smooth night landing.

Navigate: Since weapon systems officers (WSOs) do indeed wear "navigator" wings, you won't be surprised to know one of my first actions was to input steering to our closest emergency base — Seymour Johnson. As stated before, I was actually surprised at how close we already were to base. I fear I speak for many F-15E aircrews when I say I've sometimes been complacent on keeping track of the closest emergency divert. This is likely due to our large fuel capacity, two reliable engines, and comfort in the local area. I do remember noticing bright ground lights below our flight path, but thought nothing of them until my lead passively reminded us to try and avoid populated areas. Since the light from our engine fire had our attention more than the city of Greenville, we opted to maintain our current course. Based on the number of 911 calls from Greenville UFO spotters, I'm confident we were spotted.

Communicate: I've questioned my actions in this area quite a bit since the flight. After 10 years of flying fighters, I've learned that whoever is flying the jet should also run the radios. As stated before, I normally try to abide by this. On this particular night, I was convinced my student had his hands full just flying the jet and wasn't confident he would handle the task of communicating promptly and concisely to my satisfaction. I guess you can say my instinct took over, which included taking the radios. I believe my decision to use the SOF, as a common frequency, was sound. It effectively avoided any additional frequency changes on at least one radio. After talking to my student later, I must agree that I may have rushed the "communicate" phase instead of concentrating on timely, correct, inter-cockpit communication to handle the emergency we had.

At 20 miles from base, the fire was still burning brightly. In fact, a 2,000 to 3,000 foot stream of sparks was trailing our aircraft. Further, every 5 to 10 seconds, the right engine would "pop" sparks in all directions, as if a handful of firecrackers had been thrown into a fire. This was the only time that I seriously considered ejecting.

My biggest fear at the time was that either the fire would spread forward towards us or that the jet would simply explode. However, the student and I were both taking positive steps to land the jet, and more importantly, the jet was still flying. At one point on final, our lead mentioned the possibility of taking an approach-end cable in order to get stopped faster. While it seemed like a reasonable input, we were so close to the base already, we decided not to complicate our situation even more with a barrier engagement. To make a long story short, 12 1/2 minutes after the bird strike, we landed. Thirty seconds after touchdown, we successfully egressed the jet and were standing behind a fire truck.

Between the bird strike and engine shutdown, we had over 30 caution lights and aural tones to digest. In addition, this fire was hot. During the ground egress, I distinctly remember looking up under the jet and seeing molten material dripping onto the runway. I later found out this was the titanium engine casing, which melts at about 1,800 degrees Fahrenheit. The damage to the aircraft included severe fire and structural damage to the right engine, engine bay, conformal fuel tank, and fuselage. The left

The Forward Looking Infared (FLIR) image captured the flock of ducks just milliseconds before impact.

engine also sustained severe Foreign Object Damage (FOD), but continued to run. Additionally, there was structural damage to the canopy bow, the left inlet ramp, the lower fuselage, and both the navigation and targeting pods. The good news was that both the student and I were alive and our F-15E was on the ground.

From day one at initial flight training, we're taught to "aviate, navigate, and communicate," in that order. This adage of aviation holds true whenever airborne, especially during an emergency. We did some things right and some things wrong.

As a crew member, I'm also convinced I leaned too far outside the jet before first talking to my crewmate. In fact, it was nearly 5 full minutes before I asked, "How's the jet?" Although it felt good enough to me (minus the left engine vibrations), my student later expressed serious concern about the left engine. Had I known his thoughts in flight, I'd have certainly emphasized that particular situation more.

As a two-ship, I cannot stress how good it was to have another F-15E there to support us. Their checklist support, navigation backup, and visual confirmation of our situation were all timely and vital pieces of information. That night, Seymour Johnson's active runway would not have helped us because we were heading 245 degrees to get home. There was never a question in our minds that we'd land on the opposite runway, but we never talked to anyone about it. I was very happy when I heard my flight lead remind the SOF of that fact.

Additionally, our lead never told us to eject because he's a professional and understood the importance of not flying our jet. Had it been two students on a crew solo, he may have acted differently.

The SOF also played an important role that night. This particular SOF was on his second tour ever with roughly 20 jets airborne. To complicate matters further, he had a two-ship on the active runway on short final about to land with a gear stuck down. He quickly sent them to their closest divert and ensured the lights were brought up for our opposite direction landing. Most importantly, he got the information he needed, and then remained silent! I believe, in this case, he would have complicated the issue even more had he tried to "climb into the jet" with us.

By the time I truly absorbed the severity of the problem, we were inside 30 nautical miles. While over Greenville, with the sparks and fire apparently worsening, I seriously contemplated ejecting. I guess the fact that pulling those handles seemed more "unknown" to me than staying in a burning F-15E was a major reason I didn't. I was later asked what it would have taken for me to eject. I believe the dark of night influenced my decision; I've never met anyone who relishes the "silk letdown," especially at night. My eyes were riveted to the fire for most of the recovery. Had it grown larger or caused larger explosions, I likely would have pulled my handles. Had I heard my student tell me the jet was not responding to control inputs or the left engine was failing, that would also have made my decision easier. We learn in life support training to make the

ejection decision on the ground. I thought I'd made mine, but when the time came, I decided not to. I learned the "line in the sand" we've all drawn for ourselves may very well change depending on the situation. In fact, it may change several times before the emergency is over. The bottom line is: we used our best judgment in a difficult situation.

Finally, I must mention a thought that both the student and I had on short final. We were indeed in a hurry to get home. At 10 miles, we were still at 250 knots calibrated airspeed without the gear down. We both remember thinking of the "horror video" we'd seen in Fighter Resource Management (FRM) training about the F-15C that landed fast and ran off the end of the runway. In fact, after an on-speed landing, the student had the jet stopped with near-max braking in just over 7,000 feet with 5,000 feeet of runway remaining. Chalk one up for FRM!

It took a few days for the entire thing to sink in. During this time, I moved from elation to near depression. Two days later, I realized how close I came to leaving my wife, two kids, and unborn baby alone to spend the rest of their lives asking, "Why didn't he just follow the checklist and eject?" Watching the videotape and seeing the jet have definitely helped put it all in perspective. It's also given me a new appreciation for ensuring things are "right at home" each and every day I go to work.

Do I consider either of us heroes? No, I do not. Were we lucky? Absolutely. Had we taken the exact same actions the next week, the results could have been vastly different. At the end of the day, we must fall back on our training, absorb outside advice, and make our own decisions.

Had we applied the checklist from start to finish, we'd have handed the jet back to the taxpayers in some farmer's field. We chose to stay with it and return it to maintenance. I reiterate how important it was that we followed the checklist procedures to the best of our ability while at the same time tempering our decisions and actions with the same professionalism and airmanship the Air Force has spent millions of dollars ingraining in each of us.

I've spent the better part of my 10 years flying involved somehow in weapons and tactics. Sure, I listen at the safety meeting, do my Situational Emergency Procedures Training, and log my required simulators, but that's about it. The next day, I mentioned to an instructor pilot that I didn't feel like my emergency procedure knowledge was what it should have been. I walked quickly to the first Dash-1 I could find and spent the rest of the afternoon reading about fuel systems and engine fires.

I've also had a chance to see the jet in impound since the accident. As I peered at the trays of metal fragments, burned engine bays, and unrecognizable parts, I remembered some wise words from a former instructor: "Never let your guard down at the flying training unit ... those young pilots will kill you." How ironic, I thought, that the young pilot I was with that night did the exact opposite. I take little credit for the recovery of the aircraft. I give much credit to everyone who's had a hand in training the student I was with. We both did some things right and wrong that night. But we did enough right that we're both around to fly another day.

It was estimated from the remains that at least three ducks were ingested into the number one engine causing severe damage to fan blades throughout the engine.

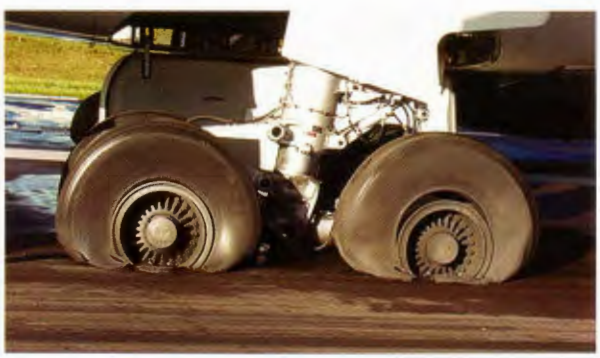
Lajes Field runway supports emergency landing

EMERGENCY Landing

LAJES FIELD, Azores — The pilot of a civilian Airbus A330 declared an in-flight emergency due to diminished fuel levels and engine problems and diverted to Lajes Field, landing on the runway without power.

The unlit aircraft approached Lajes Field at high speeds and at a higher-than-normal altitude, but the pilot was able to safely land the plane, which had approximately 290 passengers on board.

The plane, part of the Air Transat fleet operating from Canada, departed from Toronto and was en route to Lisbon, but experienced system problems over the Atlantic ocean and diverted toward Lajes Field.



A member of the base command post alerted senior leadership and emergency responders that a plane was "about 5 minutes out with only 2 minutes of fuel."

"He came in, and he was high, and we didn't know if he was going to go by," said Staff Sgt. Tony Yuresko, Aerospace Ground Equipment apprentice. "He hit the pavement and bounced along until coming to a stop with about 2,500 feet of runway remaining."

As the base safety officer, Maj. Lyle Decker, was arriving on scene from his home, he said, he saw the plane approach the runway and then lost sight of it because of the hilly terrain. He said emergency response people told him the plane's wheels hit the ground and then the entire landing gear burst into flames.

"It was obvious the plane didn't have any power, because it was completely dark, and it seemed like the pilot glided in and then slammed on the brakes," he said. Shortly after landing the fire enveloping the wheels and landing gear was extinguished, and the passengers and crew left the aircraft using inflatable chutes.

"Everyone exited the plane quickly and safely," Decker said.

Most of the passengers were taken to the civilian airport terminal, but nine were transported to a local medical clinic for minor injuries and symptoms related to shock.

Once the plane was safely evacuated, officials started working to determine the amount of aircraft damage. The decision was made to close the runway for 48 hours to make repairs and to acquire equipment to move the crippled plane.

"The company who owns the plane is flying equipment in from Canada to lift the plane and help us remove it from the runway," said Lt. Col. Tim Green, 65th Operational Support Squadron commander. "We believe structural damage occurred that will not permit us to just change the tires and tow the plane."

People were being called in to fix the damage to the pavement of the runway as soon as possible, so when the plane is able to move the runway will be operational without further delay, Green said.

He said a similar incident occurred here a few years ago when a similar airframe made an emergency landing after experiencing total nose gear failure.

Collision avoidance is one of the most basic responsibilities of a pilot.

Midair! How to Avoid

Digitally created by SSgt. Neil Armstrong

EDITOR'S NOTE: The following article is a compilation of midair avoidance information gathered from numerous sources, some military and others civilian. Although the statistics and specific techniques are not equally applicable to all types of aircraft (especially top-line fighters), an understanding of the issues addressed will be of benefit to all audiences, if only to understand the perspective of a different type aircraft.

See and avoid is one of the most basic responsibilities of a pilot operating an aircraft. Most midair collisions occur in daylight and in visual flight rule conditions between 10:00 a.m. and 5:00 p.m. on weekends during the warmer months. Most also occur within 5 miles of an airport, with about 77 percent occurring at or below 3,000 feet above ground level, and 49 percent occurring at or below 500 feet. It may also surprise you to learn that the closing speed at which aircraft collide is typically relatively slow. Midairs are rarely head-on and usually involve two aircraft going in the same general direction.

Studies have found that 82 percent of the collisions occurred when a faster aircraft overtook and hit a slower moving airplane. About 35 percent occurred when the aircraft had zero to 10 degrees convergence angle, that is, almost straight from behind. Only five percent were from a head-on angle.

Midair Causes

No pilot is invulnerable to an in-flight collision. Failure of a pilot to see another aircraft is the leading cause of most midairs. Increased traffic densities and large speed differentials represent the highest potential for midair collision. For instance, if a jet and a light

a Collision

twin have a closing speed of about 750 miles per hour, it takes a minimum of 10 seconds for a pilot to spot traffic, identify it, realize it's a collision threat, react, and have the aircraft respond. In that time, they've closed 2 miles of the distance between them.

With only 10 seconds to react, it's critical that pilots constantly maintain situational awareness. In most midairs, at least one of the pilots involved could have seen the other in time to avoid contact, if they had just been scanning properly. One of the most important guards against such mishaps is to know the limitations of the eye and how to scan effectively for other traffic.

Learn to Scan

The human eye is one of the most important and complex systems in the world. Its job is to accept images from the outside world and transmit them to the brain for recognition and storage. It's estimated that 80 percent of our total information intake is through the eyes.

In the air, we depend on our eyes to provide most of the basic input necessary for performing during a flight — attitude, speed, direction, and proximity to things (like the ground), and opposing air traffic. To avoid a midair, the most important habit a pilot can develop is the ability to use their eyes to scan effectively.

In normal flight, you can usually avoid the threat of an in-flight collision by scanning an area 60 degrees to the left and right of your center of vision. But, this doesn't mean you should forget the rest of the sky. Scanning 10 degrees above and below your flight path will also allow you to spot any aircraft that is at an altitude that might conflict with your own.

Scan Patterns

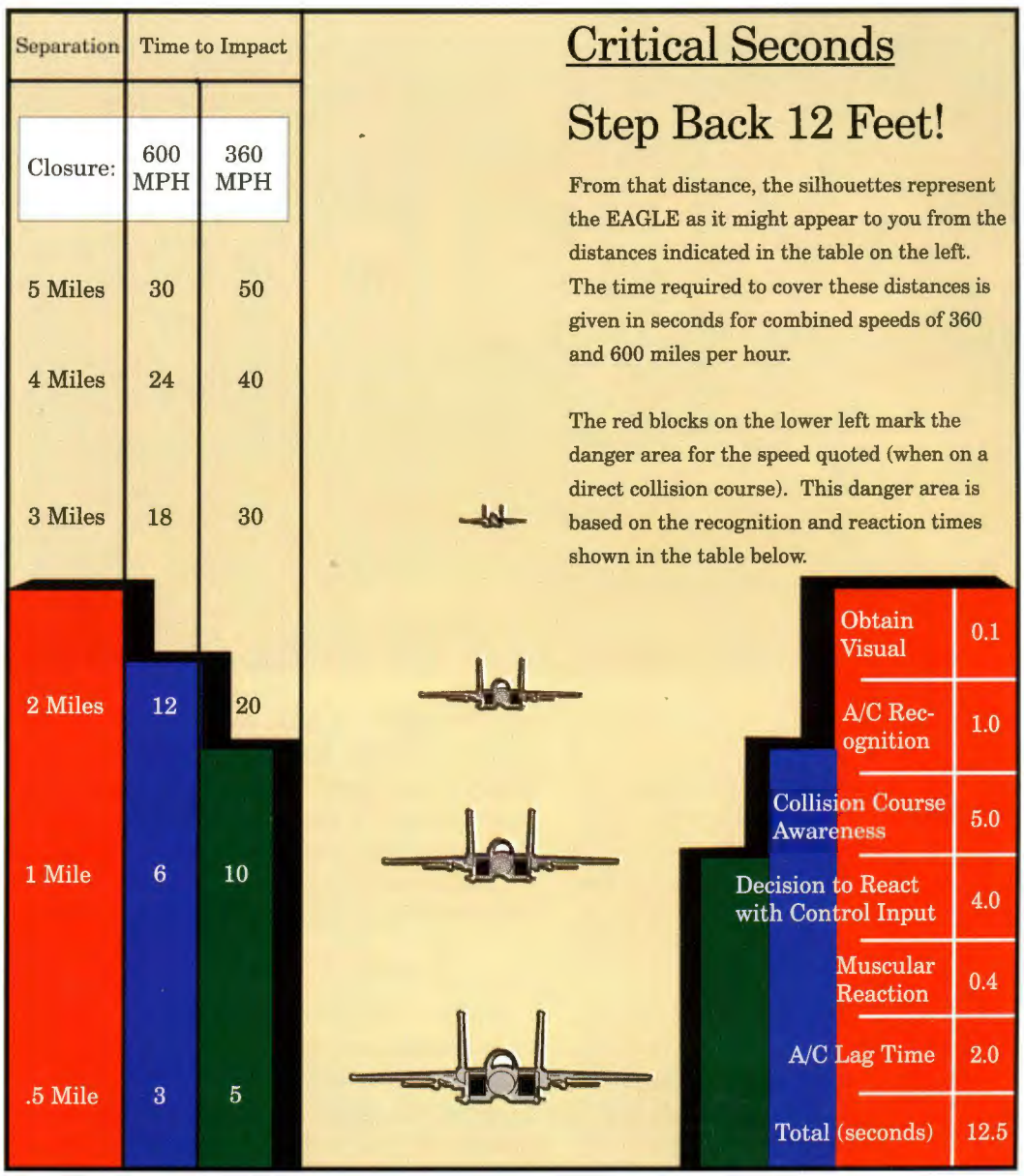
Now knowing that your best defense against in-flight collisions is an efficient scan pattern, there are two basic methods that have proved best for most pilots and both employ the "block" system of scanning. This type of scan is based on the theory that traffic detection can be made only through a series of eye fixations at different points in space. Each of these fixes becomes the focal point of your field of vision (a block 10 to 15 degrees wide). This gives you 9 to 12 "blocks" in your scan area, each requiring a minimum of 1 to 2 seconds for accommodation and detection.

One method of block scanning is the "side-to-side" motion. Start at the far left of your visual area and make a methodical sweep to the right, pausing in each block to focus.

The second form is the "front-to-side" version. Start with a fixation in the center block of your visual field (approximately the center of the front windshield in front of the pilot). Move your eyes to the left, focusing in each block, swing quickly back to the center block, and repeat the performance to the right. Remember to pause briefly in each block, because when the head is in motion, vision is blurred and the mind will not register targets.

Avoid Complacency

Remember, there is no guarantee that everyone is flying by the rules, or that anyone is where they are supposed to be. It is a pilot's primary responsibility to "see and avoid" other aircraft. Contact your flight safety office to bone up on the Midair Collision Avoidance (MACA) information specific to your area.



COLLISION AVOIDANCE CHECKLIST

Collision avoidance involves much more than proper eyeball techniques. You can be the most conscientious scanner in the world and still have an in-flight collision if you neglect other important factors in the overall see-and-avoid picture. It might be helpful to use a collision avoidance checklist as religiously as you do the takeoff and landing checklists. Such a checklist might include the following items:

CHECK YOURSELF

Start with a check of your own condition. Your safety depends on your physical and mental condition and corresponding readiness to fly.

PLAN AHEAD

Plan your flight ahead of time. Thoroughly check your maps and the special, general, and area notices in the Aeronautical Information Manual or or Flight Information Publications. In advance for restricted areas, jet training areas, military training routes, and other high density areas.

Obtain a MACA pamphlet from base operations or the unit safety office to familiarize yourself with local procedures, aircraft, and military operations areas.

Be familiar with headings, frequencies, distances, etc. on your flight log so you spend minimum time with your head down in the charts. Have charts folded in proper sequence and within handy reach. Keep your cockpit free of clutter.

CLEAN WINDOWS

During the walk around, make sure your windshield is clean. Even little bug spots can block your view of an approaching aircraft in your flight path. In flight, keep all windows clear of obstructions.

ADHERE TO SOPs

Stick to standard operating procedures (SOP) and observe the regulations of flight, such as correct altitudes and proper pattern practices. In most in-flight collisions, at least one of the pilots involved was not where they were supposed to be.

COMPENSATE FOR DESIGN

Compensate for your aircraft's design limitations. All planes have blind spots — know yours!

TALK AND LISTEN

Use your radios as well as your eyes. When approaching an airport, whether or not you're going to land, call on the appropriate frequency at least 15 miles out and relay your position, altitude, and intentions. Since detecting a small aircraft at a distance is not easy, make use of any hints you get over the radio. A pilot reporting their position to a tower is also reporting to you! If your traffic is moving in your windscreen, you're probably not on a collision course so continue your scan and watch that traffic from time to time. However, if that traffic appears to be stationary in your windscreen, you're probably on a collision course with it. Be prepared to take evasive action. And of course, once you have previous traffic in sight, don't forget the rest of the sky.

SCAN! SCAN! SCAN!

The most important part of your checklist, of course, is to keep looking where you're going and to watch for traffic. Scan continuously!!

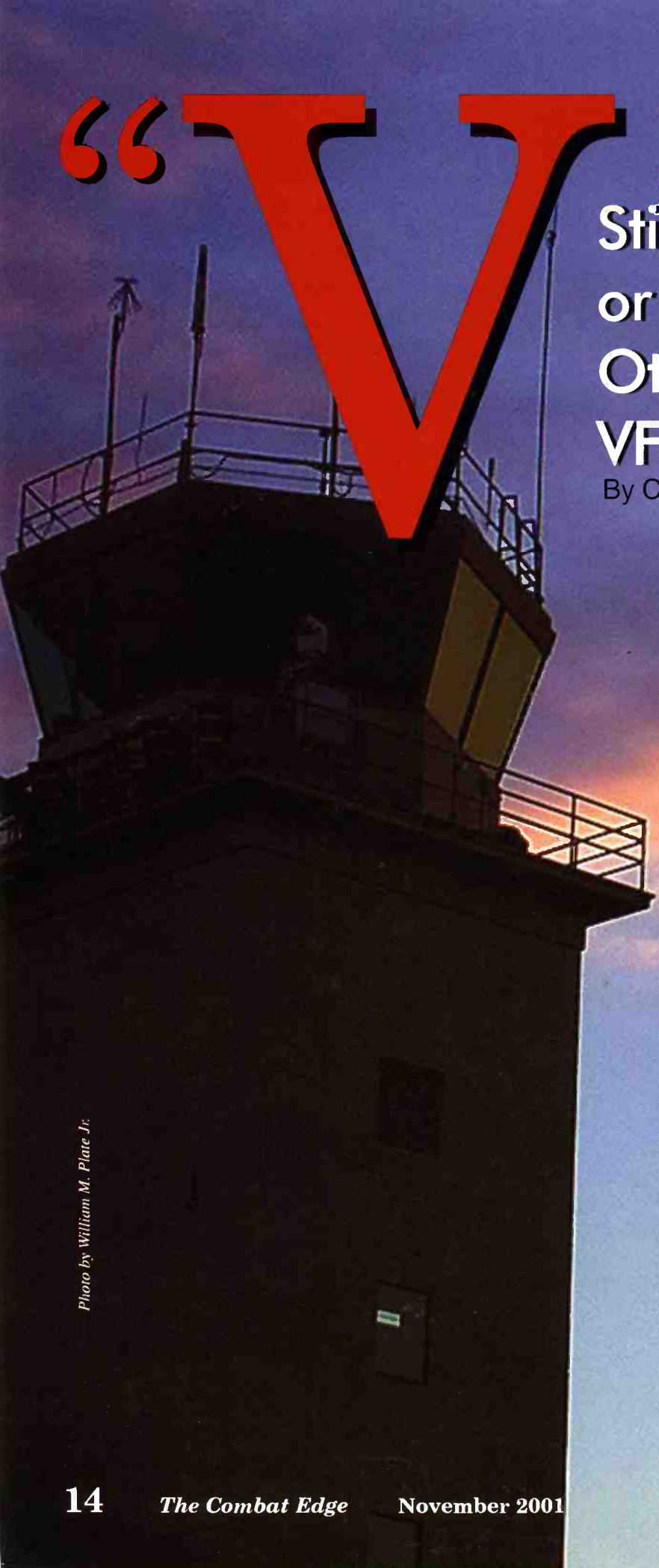


Photo by William M. Plate Jr.

"V" Still Means "Tally Ho" or "Watch Out for the Other Guy" in the VFR Pattern

By Capt. Neil MacLauchlan

There I was, several years ago, returning from a surface attack range ride on a clear sunny day. I was number three in a four-ship of A-10 mighty hogs (subsonic all weather day/night ground attack aircraft). We had all dropped nine BDU-33 practice bombs and strafed 100 rounds of 30 mm on the conventional range. The sortie had been basically uneventful with good bomb scores and excellent strafe scores. The range bet was standard, and I had lost track of who was the big winner. We flew most of the way back to base at 500 feet above ground level and then split into separate two-ship elements so we could accomplish different approach and landing requirements.

When we arrived back at base, the Visual Flight Rules (VFR) pattern was busy, as usual. Lead chased number two through a simulated single-engine approach and then went out to reenter the VFR pattern. I led number four up initial, and tower informed us that we were following a three-ship of F-111s. I had the F-111s in sight, so we fell in behind them.

As they pitched out to land, I called "initial" and tower cleared me to break behind the last F-111. I waited until the last F-111 was abeam me and then I pitched out, with number four pitching out 5 seconds later. As I rolled out on inside downwind, I realized the pattern was messed up. I had taken normal spacing (for an A-10 following an A-10), but the F-111s were flying a much wider pattern than the A-10 usually flies. It was no big deal; however, we just angled out on downwind and followed them to base leg. By this time, number one had reentered and was on a straight-in, 5-mile final approach. Tower cleared him to land following the second A-10 on a left base (number four).

The tower was obviously not familiar with larger F-111 pattern either because there was no way number one was going to have enough spacing to land behind me and number four. All three of the F-111s did a low approach and then stayed right on the deck and did what they do best — go fast. I landed as the second F-111 pulled closed to inside downwind. The last F-111 pulled closed almost 2 miles beyond the departure end of the runway as number one went over me for insufficient spacing. Number one requested "closed" and tower cleared him closed "following the third F-111."

Number one looked over his left shoulder and saw one of the F-111s on the perch, and the second one at midfield downwind; so he assumed the other one had already turned base. Since F-111s are hard to see from the pointy end, he did not see the third F-111 that had pulled his closed 2 miles past the departure end and was still almost a mile past the departure end. Number one pulled closed and pitched up right in front of the third F-111. There was no radio call made by tower or the Supervisor of Flying (SOF).

The next radio call, which was not clear, was the F-111 saying something about "A-10 in sight!" Number one's hair stood up on the back of his neck, and he rolled out of his bank and picked up the F-111 pointing right at him. He bunted over hard and deconflicted with the F-111 in sight and was breaking out. No radio calls were made from the tower during this period. All three F-111s landed and number one reentered and landed uneventfully.

So, can we learn any lessons from a "close call" like this? Actually, we can learn quite a few.

There is no replacement for good visual lookout with the old Mark-1 eyeballs. We must be ever vigilant and search not only where we usually see traffic, but also where we seldom see traffic — especially in the VFR pattern at a very busy base. In this case, it seems everyone involved was conditioned to see what we get used to seeing almost every day — A-10s in the pattern flying A-10-sized patterns! I pitched out with spacing that would work if following another A-10, but not an F-111.

Tower cleared number one to land from a 5-mile final following three F-111s and two A-10s. This might have worked if all five aircraft were hogs flying smaller hog patterns, but it obviously did not work with the F-111s flying a larger pattern and forcing me and number four to fly a larger pattern to keep adequate spacing. Then, when the pattern got really stretched out and messed up, tower used the same verbiage they always used, not giving the pilot any indication that the pattern was really stretched out. Perhaps tower should have expanded their call to say, "cleared closed following the third F-111 on downwind, 1 mile past the departure end." This would have given number one a heads up that the pattern was messed up and a clue as to where to look for the traffic he was to follow.

Number one's hair stood up on the back of his neck, and he rolled out of his bank and picked up the F-111 pointing right at him.

Lastly, when number one pulled closed, someone in the tower should have seen the conflict and made a radio call. Pilots, controllers, and SOFs must all be on the alert for the dangerous situations that can develop so rapidly in the aviation world. We cannot allow ourselves to get "conditioned" to expect the same old thing. We cannot allow "conditioning" to turn a good range ride into a mishap — nobody wins that range bet.

AC-130H

The AC-130 gunship's primary missions are close air support, air interdiction, and force protection. Missions in close air support are troops in contact, convoy escort, and urban operations. Air interdiction missions are conducted against preplanned targets or targets of opportunity. Force protection missions include air base defense and facilities defense.

Primary Function: Close air support, air interdiction and force protection • Builder: Lockheed/Boeing Corp. • Power Plant: Four Allison T56-A-15 turboprop engines • Thrust: 4,910 shaft horsepower each engine • Length: 97 feet, 9 inches • Height: 38 feet, 6 inches • Wingspan: 132 feet, 7 inches • Speed: 300 mph • Range: Approximately 1,300 nautical miles • Ceiling: 33,000 feet • Maximum Takeoff Weight: 155,000 pounds • Range: 2,700 nautical miles • Ceiling: 25,000 feet • Maximum Take off Weight: 155,000 pounds • Armament: AC-130H/U: 40mm cannon and 105mm cannon; AC-130U: 25mm gun warfare officer and eight enlisted (flight engineer, TV operator, infrared detection set operator, loadmaster, four aerial gunners) • Deployment Date: AC-130H, 1972 • Unit Cost: AC-130H, $132.4 million; • Inventory: Active duty, 8

Photo by SSgt. Andy Dunaway

Pilot Safety Award of Distinction

On June 5, 2001, Capt. John Foncannon was operating as number two bandit in an F-15 2-verses-2 air combat training mission. Foncannon heard a "bang" noise that he thought was an afterburner blowout. He noticed that the number one engine was operating normally and the engine oil pressure on his number two engine was pegged above the scale. He called for a flight knock-it-off, deselected afterburner, and turned his aircraft towards home base. He pulled the number two engine throttle to idle and noted that the oil pressure indicated 100 psi that exceeded engine-operating limits. He informed his flight lead of his situation and began to accomplish the oil system malfunction checklist. With the engine still reading well above normal limits, Foncannon shutdown the number two engine, and received a battle damage check from his flight lead. He and his flight lead finished the checklist cleanup items for the number two engine shutdown, declared an emergency and began the recovery to home station. Foncannon began to dump fuel, and the two-ship briefed the Supervisor of Flying on the game plan. During the approach, Foncannon perceived that he was low on glide path and attempted to correct by increasing the power on the number one engine. As he increased power, the engine stalled, produced several loud "bangs," and shot flames from the exhaust section that was seen by ground personnel and his flight lead. Foncannon scanned the engine instruments and noted no anomalies. Uncertain where the "bangs" were coming from, Foncannon elected to abort the approach to allow time for his flight lead to complete a second battle damage check. During the go-around, the engine continued to produce loud "bangs," and his lead stated that the number one engine was shooting flames from the exhaust. Foncannon retarded the throttle and determined that at a reduced power setting the engine seemed to operate normally. Climbing to pattern altitude and with the field still in sight, he set himself up for a second single-engine approach with limited thrust from the operating engine. Capt. Foncannon expertly executed a second single-engine straight-in approach to a full stop landing.

Capt. John W. Foncannon
58th Fighter Squadron
33rd Fighter Wing
Eglin AFB, Fla.

Crew Chief Safety Award of Distinction

While performing duties as a dedicated crew chief, SrA. Christopher Rice undoubtedly saved a valuable combat asset while he conducted a routine start sequence to get his F-15 jet airborne. During the pilot's pre-flight checklist procedures, the pilot noticed a series of abnormal warning lights throughout the cockpit. At the same time, Rice noticed black smoke emanating from the Bay 15 panel on the outer skin of the aircraft. In order to investigate the smoke, he directed the pilot to disengage the number one engine. Nearing the vicinity of the panel, Rice recognized the distinct acrid odor of burnt wiring. His astute recognition of the fire led him to direct the pilot to shutdown the number two engine, in order to minimize any further damage, and safely egress the aircraft. With the engine shut down, electrical power was removed from the aircraft and the fire ceased. Rice's prompt recognition and actions resulted in negligible damage to the aircraft. SrA. Rice's quick response to a dangerous electrical fire not only saved a $37 million combat asset, but also averted serious injury to both the pilot and maintenance personnel.

SrA. Christopher R. Rice
58th Fighter Squadron
33rd Fighter Wing
Eglin AFB, Fla.

ACC is proud of our monthly safety honorees

Flightline Safety Award of Distinction

While serving as an End of Runway (EOR) inspection team member, SSgt. Ronnie Robinson observed an F-16 entering the EOR inspection area after landing with both main brake stacks glowing; a serious hot brake condition which could result in a brake fire. Realizing the extreme seriousness of the situation, Robinson immediately alerted the EOR team to prepare for an impending fire emergency. Shortly thereafter, the aircraft's right brake stack sparked and exploded into flames. Robinson directed SrA. Ruben Martinez and A1C. John Johnson to man the emergency fire bottle and proceed to the distressed aircraft. In order to prevent the aircraft from entering the temporary EOR area and endangering other de-arming F-16 aircraft, Robinson ran to alert the pilot of the fire and stop the aircraft in a safe location away from the other aircraft. Martinez and Johnson arrived with the fire extinguisher and, without benefit of any flame retardant fire gear, fought the fire that was now just inches from the aircraft's external fuel tanks. Working together as a team, the three were able to quickly extinguish the fire and prevent further potentially catastrophic damage until fire trucks could respond to the aircraft. The quick thinking, and courageous response of SSgt. Robinson, SrA. Martinez, and A1C. Johnson saved an F-16 from serious damage.

From left to right: SSgt. Ronnie Robinson, SrA. Ruben Martinez, A1C. John Johnson, 27th Operations Support Squadron, 522nd Fighter Squadron, 524th Fighter Squadron, 27th Fighter Wing, Cannon AFB, N.M.

Unit Safety Award of Distinction

On July 12, 2001, Kansas City Air Route Traffic Control Center (Center) advised Whiteman Radar Approach Control Facility (RAPCON) of a crippled air carrier jet that needed to land immediately. The airliner, an MD-80 with 138 passengers and crew, lost its left engine and had smoke in the cabin and cockpit. The RAPCON coordinator, TSgt. Robert White, immediately relayed this information to TSgt. James Williams, in the Whiteman control tower, who activated the crash phone. With the emergency response agencies notified, the controllers went to work. Center was reluctant to change the disabled jet to approach frequency, yet had lost radar contact due to the jet's low altitude. RAPCON had radar contact so White gave vectors to Center, who relayed them to the jet. At 4 miles the jet had the runway in sight and was switched to tower. The tower local controller, SrA. Christopher Hay, cleared the jet to land, and A1C. Bethany Bryant, the ground controller, expedited the runway entry of crash fire rescue and security forces units after landing roll. The superb coordination of RAPCON, Center, and tower contributed to a successful emergency recovery. Credit for the flight's safety goes not only to those individuals named, but to the critical crew resource concepts applied by the Whiteman Air Traffic Control team.

Tower personnel (front row) left to right: SrA. Christopher Hay, TSgt. James Williams, A1C. Bethany Bryant. RAPCON personnel (back row) left to right: MSgt. Thomas Heffernan, TSgt. Robert White, SrA. Michelle Thigpen, A1C. Fabrice Bazilme, 509th Operations Support Squadron, 509th Bomb Wing, Whiteman AFB, Mo.

Aircrew Safety Award of Distinction

On May 30, 2001, an RC-135S crew was prepared to fly a routine training mission from Offutt AFB, Neb. Mission preparation went as usual with nothing abnormal to note. The weather was such that a full-power takeoff was required. The takeoff roll was normal, but at approximately 300 feet above ground level, there was a loud bang with associated yaw to the right. Immediately recognizing the loss of the number four engine at high thrust setting, the aircraft commander retarded the number four throttle to idle, advanced the three remaining engines, and raised the flaps to gain airspeed. The crew ran the appropriate engine failure after takeoff checklist and shut down the number four engine. At slow airspeeds, on a humid day and at high gross weight (285,000 lbs) margins of safety were reduced. Once the aircraft was safely climbing away and clear of the 1,000 foot bluffs less than 8 miles from the runway, the copilot was directed to declare an emergency and inform Air Traffic Control of their intentions to climb out on heading. The crew was able to climb to only 9,000 feet mean sea level given the weight and weather conditions and began to further analyze the situation. No immediate cause was apparent and the crew began to trouble shoot any possible additional malfunctions while the Inflight Maintenance Technicians (IMTs) scanned the engines for any visible damage. The IMTs reported some smoke but no visible damage. The crew determined there were no further problems with the aircraft and proceeded to reduce gross weight. They then reviewed all technical order guidance and checklists for landing with an engine out. The crew discussed all possible scenarios resulting from the loss of the number four engine and how this might affect their approach and landing. The entire crew was briefed and they commenced the approach. The weather was warm with an 800 to 1,000 foot overcast ceiling and gusty crosswinds. The approach and landing were uneventful and the crew and aircraft were recovered safely.

Capt. Peter J. Fagan, Capt. Jeffery A. O'Grady, Capt. Bryan J. Doppenberg, 1st Lt. Erin J. Anderson, Lt. Col. Robert M. Morrison, Capt. Matthew D. Buehler, Capt. Erich J. Kessler, Lt. Col. Steve A. Cornelison, Capt. Jose Gutierrez, 1st Lt. Chirstopher M. Floyd, MSgt. Lenord Galloway, MSgt. Keith E. Maciorowski, 45th Reconnaissance Squadron, 55th Wing, Offutt AFB, Neb.

Weapons Safety Award of Distinction

SrA. Brandon Christian was assigned as aircraft launch crew assistant on an F-15C. Prior to pilot arrival at the aircraft, this highly motivated airman decided to do an additional check of the aircraft stores. Christian proved his exceptional attention to detail while inspecting the Captive Air Training Missiles (CATM) and discovered that the front lug of one of the CATMs was broken. Christian immediately reported the situation to his expediter and assisted with the safing and downloading of the defective CATM and subsequent uploading of a serviceable CATM. Christian's keen awareness, high standards and dedication not only allowed his assigned aircraft to fly its scheduled sortie, he averted the destruction of a valuable combat training resource and possible loss of life.

SrA. Brandon Christian
58th Fighter Squadron
33rd Fighter Wing
Eglin AFB, Fla.

Ground Safety Award of Distinction

Only weeks after graduating from Safety Tech School and arriving at the base to assume duties in the Wing Ground Safety Shop, SSgts. Theresa Shockley and Roderick Walker were given the task of organizing the Wing Safety Day to highlight the risks of the "101 Critical Days of Summer." To combat the boredom associated with a dry briefing, they created a game show entitled "Who wants to be a Safety Millionaire." They developed questions which addressed the hazards associated with heat-related stress, water sports, and highway safety. Their efforts also raised awareness for Command Safe Ride programs, suicide prevention concerns, and also emphasized the importance of seat belt usage. They coordinated with the Network Communications Center in the Communications Squadron for the development of a computer program that would present the questions along with visual and audio special effects packaged to give the impression of an actual television game show. Additionally, they coordinated the donations of contestant gifts valued at thousands of dollars from the BX, Commissary, Services Squadron, and various private organizations on the base. They auditioned "game show hosts" throughout the wing and selected an individual with the ability to get out the "safety message" and simultaneously maintain everyone's interest. They even oversaw the production of a video commercial which highlighted the base Sober Ride program during the game show's intermission. This program was presented six times during the day to allow complete exposure. Over the six sessions, 48 randomly selected contestants competed in front of the Wing. Every contestant won a prize and everyone in the auditorium was creatively taught the targeted material. The effort was a tremendous success. The Wing Safety Office received countless comments regarding the outstanding Safety Day presentation. Thanks to SSgts. Shockley and Walker's innovation and creativity, the 347th Rescue Wing was able to highlight the hazards of the 101 Critical Days of Summer at a level of success never before achieved.

SSgt. Roderick O. Walker
347th Rescue Wing
Moody AFB, Ga.

SSgt. Theresa A. Shockley
347th Rescue Wing
Moody AFB, Ga.

ACC Safety is Proud of All Our Award Nominees

TSgt. Dennis R. Schlitter
Repair and Reclamation Craftsman
33 MXS, 33 FW
Eglin AFB, Fla.

SSgt. John A. Haden
Dedicated Crew Chief
A1C. Robert A. Peterson
Assistant Dedicated Crew Chief
58 FS, 33 FW
Eglin AFB, Fla.

SrA. Jimmy R. Docherty
F-16 Aerospace Propulsion
Systems Journeyman
522 FS, 27 FW
Cannon AFB, N.M.

SSgt. Michael J. Brien is assigned to the 52 CCS, 5 CCG not the 52 CCG as misprinted in the September 2001 issue. We apologize for the error.

Winter Sports 101

By Abraham Lustgarten

EDITOR'S NOTE: We resisted the strong desire to computer insert helmets on the glamorous winter sports photos. We in ACC Safety would like to see the skiing and snowboarding industry act responsibly and mandate the use of protective helmets.

It was February, with cobalt skies, snappy air, and a fresh blanket of snow. My friends and I had hiked high above the last lift at Aspen Highlands in search of an untouched powder cache, and we found it. Dropping off a cornice and into the steeps, I immediately settled into a rhythm, the edges of my skis cutting through the knee-deep powder like butter. Yelping with joy, I bounced by one tree, swerved around another and suddenly I was buried, coughing snow from deep in my lungs, unable to hear, see or breathe.

I had skied under a buried branch, pinning my skis and boots underneath, and pitching my body downhill and into the ground. At first, I couldn't tell up from down and began to panic. I pushed against the ground but my arms just sank into the soft mass of snow. With my feet trapped in my bindings I couldn't move. Luckily, a friend was there to pull me out, not sparing me a few laughs from the rest of our crew.

Sound like just another ski story? Well, consider the fact that every year in North America roughly 40 skiers die and hundreds more are injured while skiing within a resort's boundaries.

Maneuvers like face plants, front flips, back flips, cartwheels, butt flops, and headstands aren't rad new acrobatics. They're some of the clumsy maneuvers I somehow manage to perform every time I strap on my snowboard — and they hurt. I've learned never to underestimate the ability of a snowboard to coax my body into violent contortions and strange episodic wipeouts. Statistically, snowboarding is no more dangerous than skiing, but somehow the impact of a fall always seems more sudden, harder, and less forgiving.

Not to say skiing and snowboarding aren't worth it. There's nothing like carving your single-track autograph on the slope, your body swaying like a new-age dance when you find that melody of balance and rhythm. It's simple, serene, and fast. Skiing and snowboarding are risky sports, but there are some basic things you can do to

decrease your chances of serious injury or death. Taking some practical rules to heart will help keep you safe as you enjoy your winter sports.

Follow the Buddy System

No regression to grade school days here; skiing and snowboarding with a friend can save your life. In my earlier ski story, if I hadn't been pulled from the depths, I may have suffocated beneath the soft snow — more than a handful of skiers die this way in the United States every year. Additionally, 2 years ago in Aspen, Colorado, an expert snowboarder was taking one last run on his own. He lost control and fell upside down into a wind-carved hole in the snow around a tree trunk. The coroner said he would have been fine had he been found 2 days earlier. So, whether you smack a tree, get buried in a tree-well, or sprain your knee, having a friend or wingman there to get help might make all the difference.

Know Your Limits

Almost all ski and snowboarding-related injuries are the result of excessive speed and losing control. Unfamiliar conditions or heavy snow, steep slopes, fatigue, crowds, and weather all contribute to your ability to ski proficiently — so evaluate the environment around you, and don't get cocky.

According to the National Ski Patrol more than 75 percent of ski area deaths are the result of advanced skiers and snowboarders losing control while pushing the limits of intermediate terrain.

Tune Your Gear

Keeping those ski edges sharp and bases waxed will help you make those crucial turns, not to mention carry you safely over surprise ice patches. Adjust your bindings to match both the conditions, and your weight and ability level. According to the National Ski Patrol, a skier's risk of tearing their Anterior Cruciate Ligament or ACL is about the same as a division one college football player. Skiers are 365 times as likely to tear a knee ligament than non-skiers. Tuning your equipment may be the thing that keeps you walking next summer.

Dress Appropriately

Skiing and snowboarding usually mean you're in the mountains, and mountain weather can be unpredictable and extreme. Layer your clothing. Strip down to stay cool in the hot sun, but plan for the worst, and pile up should the clouds turn against you. Heavy waterproof gloves or mittens are great for snowboarders who often spend a lot of time on the ground. Use goggles or sunglasses to protect against UV radiation and blowing snow, and don't be shy with the sunscreen.

Camel Up

Staying hydrated and well energized are the keys to safety in winter outdoor exercise. The fatigue that comes with dehydration or a skipped meal can leave you cold, or stranded, or even affect your decision making in life-threatening situations. Drink regularly, aiming for one quart each hour, even in cold conditions. And stock up on carbohydrates whenever you get the chance. In the mountains, lots of fluid helps your body adjust to changing altitudes and prevents associated sicknesses, headaches, and pulmonary edema.

Wear a Helmet

You wouldn't go for a bike ride without one, but skiing and snowboarding speeds often exceed 50 miles per hour. Helmets are becoming the norm on slopes everywhere, and new designs are lightweight and comfortable. If you like to ski or snowboard the trees and the steeps, then a brain bucket is only common sense.

Survive

If you ski in a commercial area, the risks are substantially reduced but not eliminated. Take your sport to the backcountry, and you'll need advanced knowledge of avalanche analysis, appropriate safety gear like shovels and transceivers, and a first aid kit. Carry a cell phone if you have one, as well as basic medical supplies, a map, compass, and an emergency blanket. Consider taking a backcountry safety course at your local ski area or your local park ranger station. ▶

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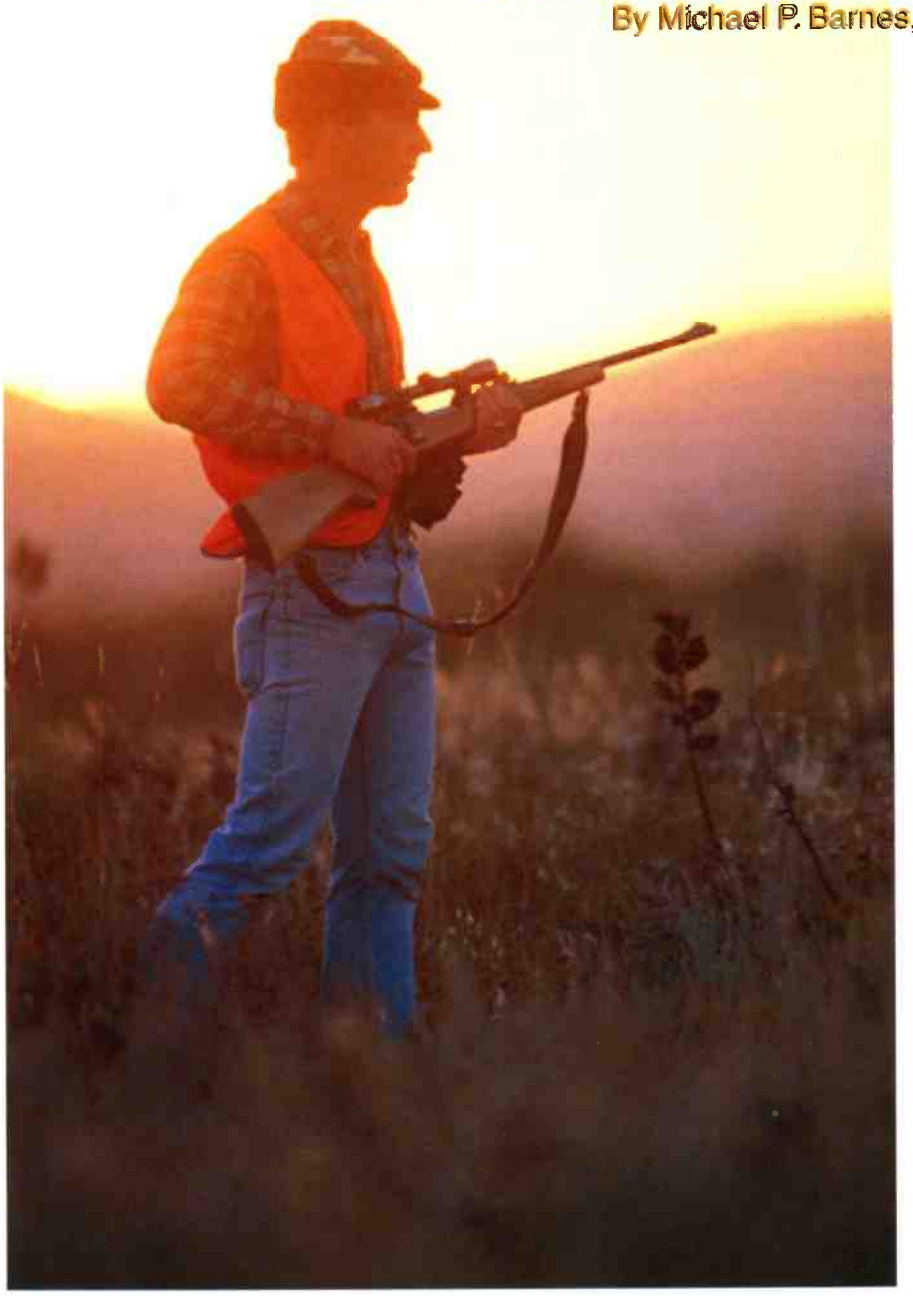
Let's Go Hunting!

By Michael P. Barnes, Davis-Monthan AFB, Ariz.



Whether you've hunted for years or this is your first time, each hunting adventure always brings a "new experience!" It can be good or bad depending on the WHO, WHAT, WHEN, WHERE, and HOW.

WHO you hunt with is important as far as their experience, habits, and general knowledge of wild game and its habitat. Normally, an experienced hunter will ask a potential partner tons of questions to determine whether they want to go hunting with them or not. This is especially important when you consider that around 40 percent of the hunters injured each year are accidentally shot by their hunting partner while another 35 percent figure out ways to shoot themselves! For the sake of your own safety — as well as that of your partner — make sure you take into account both parties' skill levels and knowledge base.

WHAT type of wild game are you planning to hunt? Some of the most common are deer, elk, bear, duck, turkey, quail, pheasant, squirrel, rabbits, grouse, fox, and raccoon — not to mention skunk, boar, woodchuck, coyote, weasel, and porcupine! And guess what? The seasons overlap each other. So, if you're not careful, there's a big window of opportunity out there for you to become some hunter's trophy! Keep in mind, however, that the most serious accidents typically occur during deer season. This is mainly because of the greater shooting distance and destructive power associated with high velocity rifles.

WHEN are you going hunting? You may want to consider scheduling your foray when the level of activity for big game — like deer or bear — is low. Since the total number of hunters is highest when big game season first opens up, scheduling your hunt in the middle or last part of hunting season will reduce your risk of accidentally being shot by another hunter.

WHERE you hunt could be the difference between life and death! It would seem totally ridiculous for hunters to just jump in a 4x4 and drive for hours to hunt in a place they

have never been before or haven't visited since last season, but it happens. You need to do some pre-hunt scouting to visually check the areas you plan to hunt. This includes checking to make sure the land is open to hunting; checking for trails, ponds, game, etc.; determining if your cellular phone operates or locating occupied areas where telephones or help may be available; and talking with local officials and residents.

HOW you hunt will largely determine whether you succeed or not. Just as seasons overlap, the weapons you use to hunt with may also have some overlap. You can use muzzleloaders, assorted firearms, and the good old bow and arrow (archery), as long as you obey the rules and guidelines set by each state. Each state usually publishes their hunting regulations and includes pamphlets with special game permits that are a "must read" for all hunters. Cellular phones, two-way radios, etc., are very important in keeping hunters in contact and obtaining help in the event of an emergency.

Also, a backpack with food, water, first aid kit, flashlight, blankets, tools, etc., always comes in handy. It's not a bad idea to include signaling devices such as mirrors, flares, etc., whether you are in a remote location or not! Most states also ask or require you to wear hunter orange clothing. This helps other hunters to be absolutely positive of their target. Consider what is behind your targeted game to ensure your projectile doesn't glide through buildings, people, or in the direction of a road. One of the oldest safety messages is the control of your firearm's muzzle. Just like the safety mechanism on your firearm can fail, the assumption that a "firearm isn't loaded" has failed many. Moreover, take advantage of the opportunity to attend any and all hunting safety courses, obey strict attention to proper firearm handling, and use proper target identification techniques — if it moves and makes noise, it's probably another hunter!

To summarize, don't forget to communicate your planned courses of action for any potential situations, wear that hunter orange clothing, pick your hunting buddies with care, and "keep your gun barrel pointed in the right direction!"

Firearms Safety

Courtesy Michigan Department of Natural Resources

- Treat every firearm as if it was loaded. You can never guarantee that your chamber is unloaded. Give an unloaded firearm the same respect you would give a loaded firearm.
- Watch where you point your firearm muzzle. Never point the muzzle of your firearm at yourself or anyone else, even if it is unloaded.
- Know your firearm and its ammunition. Before you load, be sure your firearm is in safe operating condition and the barrel is free of obstructions. Double check the specifications of your ammunition to be sure it fits your firearm.
- Do not load your firearm before you are ready. Why take chances? When traveling to and from your hunting blind, take down or have your actions open, and always carry your firearms unloaded in their cases.
- Be sure of your target and beyond before you squeeze the trigger. Be sure that you have carefully identified your target, then look past it to be sure it is safe to shoot. Hunters need to keep track of buildings, roadways, and other hunters.
- Beware of fatigue when hunting. When you've been out in the woods a long time, fatigue can cause accidents. A loaded firearm can accidentally fire with a single, unexpected jar so watch your step.
- Don't take chances with a loaded firearm. Never step over fences, jump ditches, or make other awkward or unbalanced moves while holding a loaded firearm.
- Use care when practicing. When shooting for practice, make sure your backstop will prevent ricochets and protect bystanders. Bullets can ricochet off water, rocks, trees, metal, and other hard surfaces.

Photos by TSgt. Andrew Gates

Setting up a combat communications deployed site takes a lot of equipment — 200 to 300 tons of equipment. To move that massive amount of equipment to a contingency, a deployment, or a real-world war requires large, unwieldy tactical vehicles — huge noisy behemoths that belch black smoke, move slowly, and have a lot of momentum, especially when fully loaded.

COMBAT COMM!

MINIMIZE DEPLOYED RISK

By TSgt. Andrew Gates, Robins AFB, Ga.

There's a lot of risk when more than 20 tons of truck, load and equipment head down the highway. These vehicles don't stop quickly, nor easily. It's the responsibility of the group's vehicle operations and maintenance branch to make sure that the combat communicators who normally drive the equipment and set it up at the deployed location face as little risk as possible while on, or off, the road.

"Driving a 2.5-ton or a 5-ton truck is not like climbing into your car and driving down the road," said SSgt. Allen Frederick, one of the 5th Combat Communications Group vehicle control noncommissioned officers. "You are dealing with a much bigger piece of equipment as well as capability differences. For instance, the 2.5-ton truck has no power steering and uses a manual shift. The larger truck, the 5-ton, has power steering and

"HE TAKES A LOT OF CARE TO MAKE SURE THAT THE PEOPLE WHO ARE TRAINED

is automatic, but is still a huge vehicle."

The first step in minimizing the risk of driving these huge vehicles is to make sure that the people who certify the drivers are the best possible vehicle operators the group has. "We look at each of our four mission squadrons and see who is the most qualified in each piece of equipment," Frederick said. "We give the commander a list of the most qualified people in their squadron, who they appoint as certifiers for vehicles." He explains that with that method, they can ensure that those people, who know the most about the vehicle and who have continuously demonstrated their capability, are the ones who can verify that a new driver is qualified with a particular piece of equipment.

The second step in minimizing that risk is to make sure that both the trainer and the trainee review comprehensive lesson plans for each portion of the training, said Frederick. These lesson plans draw from appropriate Air Force instructions, as well as incorporating safety standards. This ensures both people involved are aware of just what is required to become proficient. "For instance, we suggest that both the trainer and the trainee sit down, in an office, and read through the plan before ever getting into the truck. Then, the new driver will be familiar with the controls, familiar with the potential challenges which may arise while driving, and know exactly what dangers to which he or she must pay attention. "The trainee should know what is expected of them in each step of the lesson, and through the entire certification process," said Frederick. "We want to minimize any surprises for our drivers.

Thirdly, each of the lesson plans uses a building block approach. The certifier makes sure the driver has mastered the previous lessons before moving on. For instance, the driver must be able to handle the M-35, about 3 tons of vehicle, before learning how to handle the vehicle with its 2.5-ton load. Once the driver has mastered that particular combination, the certifier would train him or her on operations with a tow. Since the M-35 can tow up to 10,000 pounds, a 200-pound driver could potentially be controlling 21,000-pounds of vehicle and payload — without the benefit of power steering. When the driver moves to the 9,000-pound M-923, adding 5 tons of payload and a 5-ton tow can have that same driver controlling up to 29,000 pounds of vehicle and payload. This can't be simulated either, warns Frederick. "When our folks train on driving a vehicle with a tow — for instance a mobilizer — you have to use the mobilizer. Nothing else will handle quite like that particular piece of equipment and has specific tendencies of which the driver needs to be aware." With the stepping stone process they advocate, drivers get more competent and more confident as they complete each step of the lesson plan.

Of course, the final element of risk management in the overall training program is the human factor. The vehicle management team has created a minimum number of hours a driver must log before they can possibly be certified in the vehicle. However, if either the trainer or the trainee believes that the driver needs a little more time in the vehicle before becoming certified, either one has the option of postponing certification for additional training. "That way, we make sure that the program is individually tailored to each driver's capabilities," said Frederick.

Group-wide, the vehicle training program has provided fairly good results, according to Frederick. In the past year, the

group has had eight accidents during the training process — about one every 30,000 miles. None of these accidents, however, were reportable or resulted in the loss of life. "What I find incredibly interesting," Frederick adds, "is that we have had no accidents during the group's quarterly exercises, which is when the group actually forms up and convoys vehicles up to 180 miles from the base."

Of course, having a plan for training is only part of the entire story. The individual trainers and certifiers are where, literally, the rubber meets the road. One of the group's best trainers/certifiers, according to Frederick is SSgt. Andrew Lethco, 54th Combat Communications Squadron. "He has a great program," Frederick said, for instance using the jacks, removing tires and tightening batteries. "I usually have the operators take off at least one tire — so they can see for themselves how big and heavy it is. This isn't like a car tire. I do that, though, to stress why we have a second person riding with them whenever these vehicles are taken out. If one person changes these tires, there is a very good chance of them hurting themselves."

Equally as important as determining the safe ways to perform operator maintenance, is knowing what isn't considered operator maintenance, Lethco said. "Part of this familiarization time is to tell the operators that if certain things need fixing, they need to make sure the vehicle is taken to vehicle operations. That way, the operators don't get over their heads when maintaining the vehicle."

Normally, operators get about 4 to 6 hours of training on a particular piece of equipment. According to Lethco that time is spent driving around on base, starting and stopping the equipment, shifting gears, and getting a good handle on driving. The operator isn't limited to that time, though. If he or she, or the instructor, feels that the operator needs more time, the two of them can increase the training time until the operator feels comfortable.

At the end of the training "time," Lethco sets the training group to their practical test — a 30-mile convoy on a Georgia highway. "When we get to the turn-around point, we stop, get together and talk about what we did right or the things we did wrong that could have caused problems," he said. "We want to try to prevent the same concerns on the trip back. When we've got a good handle on the trip, we head back to base and then repeat our debrief at the end of the convoy. We want to make sure that we give feedback to the new operators and get some feedback on the training process so we can improve it as we need to." After all, minimizing the risk is what the training is all about.

"...SURE THAT THE PEOPLE INVOLVED ARE TRAINED SAFELY..."

"He takes a lot of care to make sure that the people involved are trained safely, yet adequately."

"We usually take about a week to teach a particular vehicle — let's take, for example, the M-35," said Lethco. "I go through the squadron's training database to find out who in the squadron needs training on a particular vehicle. Then, I take the group out and spend about 2 hours going over the vehicle."

During that initial familiarization, Lethco says he goes over every aspect of the vehicle that the operator might face —


Fleagle
THIS IS TH' YEAR I CONQUER JACK-KNIFE HILL.
FIRST TURN COMING UP!
WHOA!
©STAN HARRISON 2001
OH NO! TREES!!
KRRASH!
HARNISON
JACK-KNIFE HILL?
SHUT UP.

Flight Notes

Although final numbers are still being crunched, Air Force and ACC Class A flight mishaps and mishap rates will prove only slightly less favorable than in FY00 — relatively low numbers by historical standards, as FY00 was our best year ever.

However, **destroyed aircraft and aircrew fatalities have increased 50 percent or more when compared to FY00.** This is due largely to fatal midair collisions, Controlled Flight into Terrain (CFIT), and G-Induced Loss of Consciousness (G-LOC). Simply stated, our **flight mishaps tended to be more serious in FY01, and we failed to improve our mishap rates overall.**

Ground Notes

ACC tied for the best year for Class A mishaps at 16.

ACC's worst year was FY93 with 42 Class A mishaps.

Lack of personnel protective equipment (seat belts/helmets) was a factor in 7 of the 12 Class A motor vehicle mishaps.

ACC's Ground Safety Target Area for FY02 is seat belt

Flight

As of October 1, 2001

8 AF	
9 AF	
12 AF	
AWFC	
ANG	
AFRC	
Aircrew Fatalities	

Ground

As of October 1, 2001

	Class A Fatality	Class A Injury or Equip.	Class B	Class C
8 AF	0	0	0	147
9 AF		0	0	129
12 AF				219
DRU			0	46

Weapons

As of October 1, 2001

	Class A	Class B	Class C	Fatalities
8 AF	0	0		0
9 AF	0	0		0
12 AF	0	0		0
AWFC	0		0	0
ACC Totals	0			0

Class A - Fatality; Permanent Total Disability; Property Damage $1,000,000 or more
Class B - Permanent Partial Disability; Property Damage between $200,000 and $1,000,000
Class C - Lost Workday; Property Damage between $20,000 and $200,000

F-15 Predator A-10 F-16 Aircrew Fatality Ground Fatality Injury Permanent Injury Missile Mishap

Ground Notes (cont.)

usage. This area will be evaluated during a unit's safety program management evaluation.

Weapons Notes

Great News!

FY01 had the lowest mishap rates for the command in recent history. Mishap rates were actually reduced by an amazing 54 percent from previous reporting record. For FY00 there were a total of 53 events. For FY01 we accumulated only 24 events.

No Class A events for the entire reporting period — a first for the command. Overall losses were a bit over $623 thousand — another first, since costs have never been below $1 million.

Class C events spiked considerably during the second quarter then went away.

Class D and HAP events took the overall lead in event classes. Reports are more timely and accurate and causal factors are in line with the findings in the reports — leading cause; personnel error.

Let's press to keep them even lower in the upcoming FY.

There are thousands of safety related stories out there in Air Combat Command and around the world.
Send them to me!

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