

PREMIUM ON SAFETY

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INSURING SAFE SKIES

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A MESSAGE FROM USAIG

Greetings!
I'm excited to share with you, hot off the press, this first quarterly USAIG Newsletter produced in collaboration with the AOPA Air Safety Foundation.

Enjoy a collection of safety topics ranging from aircraft technologies to accident statistics to physiology. An example of the latter, we took a closer look at the impact of sleep deprivation in "Fighting Fatigue" (page 7). Coping with busy schedules we may sometimes close our eyes to how fatigue can play havoc with our ability to safely navigate the skies.

Give us your reaction and topics you'd like to see; just shoot a note to our editors (asf@aopa.org). Safe skies and stay alert.

David L. McKay
President and COO, USAIG



Eye in the Sky

In the eye of the beholder

BY MACHTELD A. SMITH

Flying along in nice weather—light haze barely discernible on the horizon—the airplane moves along effortlessly. You should reach your destination before nightfall. Life is good.

The haze gradually deepens. Adjusting your seat, you squint to identify terrain and landmarks passing below. Although you are flying in visual meteorological conditions (VMC), this is not exactly the good visibility that was forecast. On the contrary, it's becoming increasingly difficult to see landmarks, let alone obstacles, now that dusk is settling in. And so an otherwise comfortable flight becomes slightly stressful. X-ray vision would be nice to have as you descend into the murky air below.



Seeing beyond the cockpit

Enter enhanced vision systems (EVS) and synthetic vision systems (SVS). Once reserved for military and commercial aviation, EVS and SVS have begun to infiltrate the general aviation market: They are avail-

able with various glass cockpit avionics packages and installed on many of the new-generation technologically advanced airplanes (TAA). If you want increased situational awareness—a clear image inside the cockpit of what's really outside your airplane's windows—look no further. EVS and SVS technologies provide truly eye-opening clarity helping you negotiate low visibility in flight and on the ground. How?

EVS uses forward-looking infrared (FLIR) sensors, a technology borrowed from the military, to detect heat emanated from terrain and obstacles. The system uses a cockpit display to provide an instant view of surrounding terrain. You can clearly see lakes, trees, and power lines obscured by fog, mist, or darkness.

SVS uses terrain, obstacle, hydrological, and navigation databases to draw three-dimensional images, resulting in a realistic depiction of your flight path in relation to surrounding terrain and obstacles. The scenery, constantly updated via GPS signals, moves along with your flight and is viewable on primary flight display (PFD) and multi-function display (MFD) units. Terrain and obstacles are contoured on the

(continued on page 2)

DID YOU KNOW?

OWNER MAINTENANCE: TIRES

“By performing routine maintenance on our own aircraft we not only gain personal satisfaction but also become better educated about the equipment we fly, making us better and safer pilots.” This quote from *A Pilot’s Guide to Preventive Maintenance* on AOPA’s Web site sums up the benefits of getting up-close and personal with your aircraft.

But before you plunge in and borrow your mechanic’s tool box, be aware of your privileges and responsibilities, including documents, equipment, and recording and sign-off requirements. This is detailed in FAR Part 43, Appendix A, Paragraph C and Advisory Circular: AC 43-12A, available online (www.asf.org/maintenance). Good news: There are 32 items you can work on, providing they do not involve complex assembly operations. At the top of the list: Removal, installation, and repair of landing gear tires.

Sounds pretty simple? Sure, but here are some things you’ll want to consider carefully before wielding the wrench:

- Have a mechanic or knowledgeable person oversee your work the first time.
- Consult your aircraft service manual and study the proper jacking procedure before you get to work.
- Select an enclosed hangar to jack the aircraft; if that is not possible, pay close attention to your surroundings, including wind and nearby taxiways.
- Will removing the wheel pants affect other aircraft systems?
- Understand the aircraft’s brake system and how it may affect wheel removal and installation.
- You will want to first deflate the tire, or it could ‘explode’ when the wheel halves are split open.
- Before you remove and install the wheel-retaining nut, ask your mechanic to demonstrate how freely the wheel should rotate after installation.
- Now is a good time to replace the old cotter pin with a new one—of course one of the proper size.

Also see: “Safety Brief: Tire Tactics,” on page 3.

Eye in the Sky (continued from page 1)



display and turn appropriate threat-level colors to warn of hazards in close proximity to your position.

Fly wisely

Being able to see the trees below your final approach path—or see and avoid stray wildlife on the runway during a dark, moonless night—is exciting stuff, but not a substitute for sound decision-making. While we’re incorporating the latest, hottest gizmos into our avionics panels, we have got to continue to practice risk assessment and approach each flight with care.

The following sobering examples from the AOPA Air Safety Foundation accident database illustrate the risks associated with flight during less than optimum lighting conditions in known high-risk environments. Could these accidents have been prevented with EVS and SVS technology? You be the judge. This nifty technology can contribute significantly in enhancing situational awareness—provided good judgment prevails.

Controlled flight into terrain (CFIT)

Date: January 17, 2006; *Location:* Big Pine, California; *Aircraft:* Cessna 182P.

The pilot frequently used the airplane to commute through the valley, accruing thousands of hours on those flights. The flight route was north-south, oriented the same direction as a nearby, well-traveled highway running adjacent to a hill. On this fatal night, the moon was blocked by mountains to the east. There were no lights to distinguish the

rising terrain. The airplane struck the hill about 34 miles north of the destination. The accident occurred under dark, nighttime VMC. The National Transportation Safety Board (NTSB) determined the probable cause of the accident to be the pilot’s failure to maintain adequate terrain clearance during a cruise descent that resulted in controlled flight into terrain. Contributing factors were the rising mountainous terrain and the dark, nighttime lighting condition.

Wildlife on the runway

Date: August 18, 2004; *Location:* Show Low, Arizona; *Aircraft:* Pilatus PC-12-45.

The air ambulance positioning flight had been on a night flight during VMC. The pilot reported landing on Runway 6. During the landing roll one elk crossed the runway. A second elk stopped in front of the airplane, hitting it directly on the nose. The airplane’s indicated airspeed was approximately 70 to 80 knots. The elk was thrown into the left wing’s leading edge and the airplane veered to the left. The ATP-rated pilot and three flight nurses were not injured. At the time of the accident approximately 3 percent of the moon’s visible disk was illuminated. The *FAA Airport/Facility Directory* recommended a clearing pass over the runway after dark to inspect for deer, elk, and antelope. The air ambulance company did not instruct its pilots to make a low pass because it would create an unsafe situation for the high-performance airplane.

Safety Brief: Tire Tactics

Playing it safe under pressure

Aircraft tires, those little black doughnuts carrying the aircraft's load during taxi, takeoff, and landing, are often the least alluring airplane component. They certainly don't mesmerize passengers like a cockpit panel or aircraft interior, which usually have much more interesting things to offer. But you should pay close attention to your aircraft's tires before and after each flight and care for them to extend their useful life and make them perform as



advertised. You wouldn't run in a marathon wearing worn running shoes, would you? Neither should you allow your aircraft to don worn, improperly cared-for tires, which could quit under high-impact stresses caused by landing and taxiing, and undesirable situations such as high speed taxis, sharp turns, or other side-loading maneuvers.

According to *Goodyear's Aircraft Tire Care and Maintenance Manual* the most important factor in good tire care is correct inflation pressure.

- **Over-inflation** causes uneven tread wear, reduces traction, makes the tread more susceptible to cutting, and increases tire size and stress on aircraft wheels.
- **Under-inflation** produces uneven tire wear and greatly increases stress and flex heating in the tire, which shortens tire life and can lead to blowouts.

Proper inflation care (source: Goodyear)

- **Check tires daily when cool.** It can take several hours after a flight for tire temperatures to return to normal. In addition, tires can lose as much as 5-percent inflation pressure in a 24-hour period and still be considered normal. Even a tire which does not normally lose pressure can become damaged by foreign object debris (FOD) or other outside factors causing pressure loss.
- **Inflate to worst conditions.** When you fly to a warmer climate inflation pressure should be adjusted to worst case before take-off. Maintain minimum required inflation for the cooler climate; readjust pressure in the warmer climate. Before returning to the

cooler climate, adjust inflation pressure for the lower temperature. A 5°F (3°C) ambient temperature change produces approximately 1-percent pressure change.

- **Use dry nitrogen gas (when required).** Nitrogen will not sustain combustion and will reduce degradation of the liner material, casing plies, and wheel because of oxidation.
- **Increase pressure 4 percent for tires under load.** Determine if "loaded" or "unloaded" pressure has been specified by your manufacturer. When a tire is under load, the gas chamber volume is reduced because of tire deflection. For unloaded pressure that number should be increased by 4 percent to obtain the equivalent loaded inflation pressure. For loaded pressure that number should be reduced by 4 percent if the tire is being inflated while unloaded.
- **Allow 12 hours after mounting.** All tires stretch after initial mounting resulting in a pressure drop. Recheck pressure after a minimum of 12 hours and re-inflate if necessary.
- **Never reduce pressure on a hot tire.** Excess inflation pressure should never be bled off from hot tires.
- **Equal pressure for dual-mounted tires.** To prevent one tire from carrying extra load and wearing unevenly, all tires on a single gear should be inflated equally.
- **Calibrate inflation gauge regularly.** Use an accurate, calibrated gauge; inaccurate gauges are a major source of improper inflation problems.

Check your owner's manual or POH for tire-inflation values and inspect tires for uneven tread wear. You can demount and turn a tire to prolong use, provided there is no exposed fabric. See page 2, "Did You Know? Owner Maintenance: Tires," for tips on owner-performed maintenance.

Tire pressure gauges come in different styles and prices, and can be purchased from most aviation tool catalogs. Consult your aircraft mechanic for recommendations and make sure the gauge is calibrated correctly for your aircraft's tires. You might even keep two gauges handy in your hangar when one needs to be recalibrated.





Real Pilot Stories

Lessons from the Cockpit

Pinch Hitting a King Air

Imagine being forced to take over the flight controls of a Beechcraft King Air 200 if you'd never flown anything larger than a Cessna 172.

It happened to Doug White on April 12, 2009, when he and his family were returning home from his brother's funeral. White was a right-seat passenger in the King Air's cockpit, with his wife and two teenage daughters in the passenger cabin, when the pilot, Joe Cabuk, died during the climbout.

Listen to White describe the ordeal in this latest Real Pilot Story (www.asf.org/kingair).

Dense Air? Take Care

The low-down on high density altitude



Let's not beat around the bush. High-density-altitude conditions rob a non-turbocharged aircraft of a critical asset—performance. And, as temperatures and terrain climb, performance degrades considerably, even to the point where the aircraft can no longer out-climb terrain and obstacles. But don't think you have to fly in the Rockies to experience this phenomenon. Flatlanders have to consider the effects of rising temperatures, available runway length, departure runway obstacles, and aircraft weight during sweltering summer months, when conditions at lower elevations sometimes imitate the mountains' thin air.

Consider this accident at Saint Mary's County Regional Airport, in Leonardtown, Maryland, on August 9, 2007. The pilot and owner of a Piper PA-22-160 attempted to take off from the 142-foot elevation airport during high temperatures and high humidity. The surface weather observation reported the wind calm, outside air temperature 82 degrees Fahrenheit, and the dew point 72 degrees Fahrenheit. The density altitude was 1,755 feet and the pressure altitude 180 feet.

In a telephone interview with the NTSB, the pilot stated that he had mentally gone over the weight

and balance, and he had considered the density altitude and pressure altitude but did not consider them a factor. He said the ground roll was slower than normal and he pushed the control wheel down in an effort to increase airspeed. The airplane was about 3,000 feet down the runway before rotating at 80 mph. The pilot was concerned about clearing the trees at the runway's departure end. He lowered one notch of flaps and just before reaching the trees he deployed full flaps. The airplane skimmed the tree tops, and subsequently collided with the ground, collapsed the landing gear, slid about 66 feet, and turned 90 degrees to the right before it stopped. A post-crash fire destroyed the airplane.

The private pilot and one passenger had minor injuries. The rear-seat passenger later died as a result of severe traumatic brain injury.

The NTSB determined the probable cause to be the pilot's inadequate performance planning and failure to abort the takeoff.

Of note is a statement the pilot made initially and later wished to retract: *"It was my fault, I made a bad choice, the airplane was heavy, it was hot, and very humid."*



GROUND SCHOOL Winged Tips #1

DA performance measures

It is common for non-turbocharged aircraft to climb at only 200 or 300 feet per minute in high-density-altitude conditions. In mountainous terrain, or when hot temperatures and high humidity exist, leave yourself ample room: Calculate your aircraft's feet-per-nautical-mile climb rate. To do this multiply vertical speed by 60, then divide by calculated groundspeed (e.g., for a 500-fpm vertical speed and a groundspeed of 120 knots, the feet-per-mile climb rate would be 250 fpm [$500 \times 60 / 120 = 250$]). Don't do math? Download and print a kneeboard-formatted "Rate-of-Climb Table" online (www.asf.org/summerwx).

Safety News: ELT to the Rescue?

Satellite-based monitoring of the 121.5/243-MHz frequencies used by emergency locator transmitters (ELTs) was discontinued earlier this year, and distress signals are now only detected by ground-based receivers such as local airport and ATC facilities, or overflying aircraft—not so good if you were to crash in a remote area.

To improve your chances of being found, you might consider investing in a 406 MHz ELT. Although not currently required for aircraft flying in the U.S., a 406 ELT is a much more accurate alternative to the 121.5 transmitter, but it is also more costly.

In addition, stock your survival kit with a personal locator beacon (PLB). These relatively inexpensive portable devices are priceless if the ELT fails or when you need to evacuate the crash site. Check your favorite aviation supply catalogs and online resources for various models and price ranges.

ELT policies abroad

Even though the FAA has not mandated use of 406 MHz ELTs, be aware of policies in other countries:

- Canada – Allows use of 121.5 MHz or 406 MHz ELTs.
- Mexico – As of October 1, 2009, 406 MHz ELTs are required.
- Bahamas – Allows use of 121.5 MHz ELTs until 2/1/2011.



ASF Safety Seminar Schedule

What Went Wrong? seminar debuts

Sometimes the cause of an aircraft accident is obvious. Other times, it takes everything from CSI-style forensics to old-fashioned sleuthing to figure out where things went awry. ASF's latest seminar looks at general aviation accidents through the eyes of the investigator—starting at the scene and working backward to reconnect the shattered links of the accident chain. Visit www.asf.org/seminars for confirmed dates and locations.

Data Diving: Density Altitude

Accidents in review

Tip: Don't forget your after-takeoff climb rate: It is just as important as the takeoff and landing distance calculations when you are operating in high-density-altitude conditions.

Results from the ASF's accident database show that DA accidents happen for a number of reasons, but of 129 accidents between 1999 and 2008, the take-off phase topped the charts (68 percent). Others resulted from aircraft maneuvering in high-density-altitude conditions and forced landings by aircraft that could not out-climb terrain. Overweight airplane configurations were dominant factors in at least eight accidents of which four proved fatal. All told, 35 accidents were fatal, causing 70 fatalities and 60 serious injuries.

Don't become a DA statistic: Study your aircraft's performance figures before each flight. (Note: Data is for fixed-wing aircraft under 12,500 pounds.)

Year	Accidents	Deaths	Serious injuries
1999	30	16	8
2000	17	5	9
2001	15	6	11
2002	19	18	10
2003	8	4	3
2004	11	8	9
2005	8	0	1
2006	5	1	6
2007	10	5	0
2008	6	7	3

ASF ONLINE eAPIS eXPLAINED ASF's course helps you cross borders (sans hassle)

Pay close attention if you're planning a flight abroad but have not yet used eAPIS—the electronic Advance Passenger Information System.

As of May 18, 2009, pilots of private aircraft are required to electronically submit passenger/crew manifests and flight information to Customs and Border Protection (CBP) if the flight departs or enters the United States.

Don't worry. You're in good hands with ASF's *Understanding eAPIS: A Pilot's Guide to Online Customs Reporting*. With step-by-step guidance, including helpful screen images to familiarize you with the look and feel of the system, you should ace your eAPIS registration and subsequent manifest submissions. The ASF course uses Microsoft Flight Simulator to provide a realistic view of arrival, departure, and diversion scenarios. And, the frequently asked questions section will help you tackle the e-forms with ease.

Take the course (www.asf.org/eapis) and enroll with eAPIS (<https://eapis.cbp.dhs.gov>) at least one week before your next trip out of the country (it may take five to seven days to receive registration information necessary to activate and use your account). Remember to submit manifest information at least 60 minutes before departure. Phone won't do. And failure to comply can severely hurt your pocketbook, with fines for a first offense at \$5,000 and subsequent infractions at \$10,000 each. Bon voyage! (www.asf.org/courses)

Summary of key changes for international flights

- In the past, pilots of private aircraft were required to notify CBP within 60 minutes of their arrival in the U.S. Notification is now required 60 minutes before the flight leaves the ground.
- Notification used to be possible from the air or via telephone, whereas electronic submission is now mandatory.
- Private flights leaving the U.S. did not previously require a departure clearance. They now need one.

DID YOU KNOW? TURBINE TIPS: Fuel Contemplation

If good fuel prices are good, best fuel prices are better—especially if you're taking on a whopping tank-full of Jet A.

Where to find best prices?

Fuel card companies often give their customers an FBO directory. That's great if you make stops where their participating fuel providers are located, but what if you need to fuel up elsewhere?

AOPA members can check AOPA's *Airport Directory Online* (www.aopa.org/members/airports), select "Jet" from the fuel drop-down list and complete the radius search boxes for best prices near their destination, complete airport and FBO data, and an overview of what to expect upon touchdown.

You can also visit some excellent airport directory Web sites that make it their business to land your jet at their FBOs. Ac-u-kwik has some great pocket-size printed directories, and expanded FBO listings Online—even for international destinations (www.acukwik.com). Jeppesen is well-known for its Airway Manuals, and recently added fuel prices to its Jeppesen Mobile PDA product (www.jeppesen.com). Other great resources for FBO and fuel prices are www.airnav.com, www.aeroplanner.com, www.fboweb.com, and www.flightguide.com.

Converting pounds to gallons:

You land, but how do you tell the line boy how many gallons to pump to replace the pounds of jet fuel you burned? Go ahead and pull out a calculator. Or, just use this clever rule of thumb:

Let's say you need 2,500 pounds. Drop the last zero; this gives you 250. Add half that amount (250 plus 125 equals 375 gallons). To check your figures, multiply total gallons by 6.7 (the weight in pounds of a gallon of Jet A, assuming standard temperatures). The result is 2,512 pounds.

Want more turbine tips? Go online www.aopa.org/pilot/turbine/index.html

Pilot Peril: Hypoxia High Don't let it fool you: Hypoxia's bamboozling effect

Hypoxia, a physiological condition insidious in onset and deadly when undetected, begins when oxygen deficiency in the body creates a false sense of well-being. The impairment is generally associated with flights above 12,000 feet, but smoking and fatigue, for example, can reduce a pilot's altitude tolerance, increasing the chances of subtle incapacitation at altitudes as low as 5,000 feet.

Hypoxia often masks lapses in judgment, memory, and coordination to such a degree that the affected

History: A nasal cannula connected to the airplane's installed oxygen system was found near the pilot, who wore an oxygen mask connected to a portable oxygen bottle found on the floor next to him. The portable bottle, manufactured for industrial use, was modified with an oxygen-system fitting; the regulator was manufactured for the medical industry. A journal kept by the pilot revealed he flew at high altitudes for efficiency and used an oximeter to monitor blood oxygen. He had used a nasal cannula at altitudes



person cannot recognize his unhinged condition. Sometimes the lapse in judgment emerges before takeoff.

Winfield, West Virginia—March 17, 2006—BE56/58TC

Flight: The pilot was on the last leg of a flight to St. Paul Downtown Airport, St. Paul, Minnesota. He had flown the non-pressurized airplane earlier that day at cruise altitudes up to 27,000 feet from Havre City Airport, Havre, Montana, to Dawson Community Airport, Montana.

Warning: ATC advised the pilot that he was 400 feet above his assigned altitude. He responded, "Lima, Lima, Roger, I was just trying to look behind me and it's the first time I've ever noticed that I'm making contrails." He was cleared to and leveled at FL270. Approximately half an hour later, ATC received this last transmission from the pilot: "Did you hear me call in a few times?"

Attempted rescue: After multiple attempts to contact the pilot, ATC requested assistance from the North American Aerospace Defense Command (NORAD). The NORAD pilots intercepted the aircraft and observed illuminated position lights and strobes—the interior lights appeared to be dimmed. They were not able to see the pilot, nor could they gain his attention by firing flares and performing an afterburner flyby.

Outcome: The Beechcraft Baron eventually struck terrain and was substantially damaged. The private pilot was fatally injured.

exceeding 18,000 feet and a cannula and mask up to 31,000 feet.

His hangar housed an aircraft oxygen tank and welding tank plumbed to an oxygen-service fitting. The airplane's oxygen system and portable bottle had not been serviced in accordance with *Advisory Circular (AC) 61-107A*, "Operations of Aircraft at Altitudes Above 25,000 Feet MSL and/or Mach Numbers Greater Than .75."

Am I hypoxic?

A headache, lightheadedness, nausea, tingling, blurred or tunnel vision, and the inability to concentrate or make decisions are warning signs. Also look for bluish fingernails and lips. If you suspect hypoxia, descend immediately; if the aircraft is equipped with oxygen and/or pressurization systems, descend immediately if you cannot correct a possible malfunction.

For an incredible ATC audio recording of a hypoxia-afflicted Learjet pilot being saved by a remarkable ATC assist, visit www.asf.org/learjet.

Learn more

Attend the FAA Civil Aeromedical Institute's physiological training program (www.faa.gov/pilots/training/airman_education/aerospace_physiology/index.cfm), and take this ASF Online quiz to understand the causes and effects of hypoxia (www.asf.org/hypoxiaquiz).

Fighting Fatigue

BY BRIAN D. PETERSON

At one time or another we've all experienced an overwhelming desire to sleep. It's the most pronounced symptom of fatigue, and it's a decidedly uncomfortable feeling when you're at the controls of an airplane. In reality, though, there's a lot more to it than the risk of dozing off in the cockpit. "Fatigue" is a catch-all term for an often insidious condition that can degrade pilot performance in a number of different areas, from vision and coordination to memory, concentration, mood, and judgment. A study published in *Nature* magazine showed that people who stay awake for 17 hours straight function at a level similar to those with a blood-alcohol content of 0.05 percent—beyond the legal limit for flying.

The most obvious cause of fatigue is a lack of sleep. Different people need different amounts of sleep, but for most adults the critical amount is between seven and eight hours a night. Modern life being what it is, though, it's easy to get less than you need... and if "run-down" becomes "normal," you may not realize how diminished your faculties have become. Difficult as it can be, though, the only real cure is getting a full night's rest on a consistent basis: One good night of sleep won't make up for days of sleep deprivation.

Still, quantity and quality of sleep aren't always the same thing. That's true for several reasons, one of which is the fact that the human body has its own internal clock, a "circadian rhythm" set by external cues (primarily daylight and darkness). It's the reason why we're generally sleepy at night and active during the day.

It's not difficult to throw your clock out of sync. Pilots of fast, long-range aircraft can easily cross several time zones in a single bound, disrupting their circadian rhythms and miring themselves in a groggy, low-energy state commonly known as jet lag.

But jet lag isn't the only way to end up at cross-purposes with your body's clock. For general aviation pilots, end-of-the-day flights are more often the problem. Here's a common scenario: A pilot makes an early-morning departure, flies several hours, spends the day in a meeting, and then flies home the same evening.

Consider just a few of the potential problems. It can be difficult to sleep the night before an important trip. Preparing for a cross-country flight can be stressful, particularly if the weather is marginal and it's important to get to the destination. There always seem to be delays: Airplanes have mechanical problems; weather leads to ATC reroutes; rental car reservations get mixed up. To make up for lost time, meals get skipped. And that's just getting to the meeting, which may itself involve conflict and difficult decisions.

With that in mind, take another look at the situation. By the time the meeting is finished, the pilot will have been awake for more than 12 stressful hours (a good portion of which was spent at altitude). Now he or she will be flying single-pilot IFR, at night, in a high-performance airplane—and doing it at a time when the body naturally wants to "call it a day." It's a situation that can easily demand more than a pilot is physically or mentally able to give.

Simple as it sounds, the best advice is to stick to as normal a schedule as possible. Don't put yourself in "need to get home" situations. If you know it's going to be a long day, plan to spend the night and depart the following morning. Avoid flights that arrive after 10 p.m., and if you can't make an effort to get plenty of preemptive rest and consider bringing another pilot along to help out. Whatever the situation, remember that the flight can always be delayed. If you feel any serious concern about your level of fatigue, stay on the ground.



AIRPLANE CHUTE: PLAYING IT SAFE?

BY BRUCE LANDSBERG
President, AOPA Air Safety
Foundation

Debating the safety benefits of airframe parachutes will probably continue for years. Opponents scream *danger!* Pilots might be lulled into a false sense of safety, taking risks they otherwise might not entertain, but risk takers are often prone to taking them anyway. Proponents note that appropriate risk-assessment training combined with improved decision-making skills should quell improper pilot behavior. Perhaps.

On October 3, 2002, a Cirrus SR22 pilot encountered a flight-control malfunction after routine maintenance when the left aileron became separated at one hinge-attach point. He flew toward an unpopulated area, shut down the engine, and pulled the chute. The parachute set down the airplane and the pilot walked away. That worked.

But we've had several instances where pilots flew into bad conditions and crashed either under or out of control and the chute did nothing for them.

In "Cirrus Chute—Come Back With Your Shield or On It?" *Safety eJournal* March 26, 2009 (www.asf.org/parachute), I wrote about the hotly-debated March 2009 Cirrus SR22 accident at Montgomery County Airpark, in Gaithersburg, Maryland. The aircraft took off during IMC and a door popped open. When the pilot attempted to close the door he lost control of the aircraft. He deployed the parachute and the aircraft drifted safely down to earth. Without that option, there certainly would have been a fatality and very possible damage or fatality on the ground.

Join the debate. See what others think (www.asf.org/parachute). There's more to be said and we'd like to hear your views.



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Premium on Safety: Insuring Safe Skies

Premium on Safety is intended to provide safety subjects, insights, and tips relevant to aircraft owners. Now that you've had a chance to get acquainted with the newsletter, what do you think? We'd love to hear your first impression and receive your unbridled reaction.

Do you like the format? How about the content: Are there special topics you'd like to see covered? Is the layout easy to read?



Send your comments to: ASF Editor, *Premium on Safety*, 421 Aviation Way, Frederick, Maryland 21701, or send e-mail to asf@aopa.org. We welcome your feedback as we plan the editorial lineup for upcoming editions.

Don't forget to look for the next issue in your mailbox in December. Your letter may be featured in this spot!

—The Newsletter Production Team

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