popa

Pilatus Owners & Pilots Association

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In This Issue...

NOTE: Cover Photo Courtesy of Pilatus Aircraft, Ltd.

From The President ...

Following our successful 2011 Convention in Broomfield, Colorado, your Board of Directors, Executive Director and Advisors convened in Jackson Hole, Wyoming in early August for a two-day planning meeting to develop priorities for the next five years.

POPA has a number of assets to help accomplish our priorities. We already have effective communication vehicles (our convention, website, magazine and emails), a seasoned executive director, an experienced and committed board with 12,700 collective flight hours and 5,400 hours in PC-12s (representing two legacy and two NG PC-12s). Also six experienced and committed advisors with many additional hours of flying experience, very close ties with Pilatus, Pratt & Whitney, Honeywell, and a sound balance sheet.

POPA is all about the **Safety of the Fleet**. As a result of our planning meeting, we are concentrating our efforts to I**mprove our Educational Content, Enhance our Communication to Members,** and **Increase our Membership.**

Our near term priorities are next year's convention at the Sarasota, Florida Ritz Carlton on June 7-9th, and provide savings exclusive to POPA members. Longer-term priorities will focus on enhancing our website and quarterly magazine, and increasing our membership that now only comprises approximately a quarter of the fleet.

We already have commitments from several companies providing savings in excess of the cost of the POPA membership. We believe these savings should benefit current members and create incentives for non-member PC-12 owners and operators to join POPA.

With increased membership, POPA should have the opportunity to reach a wider Pilatus audience, improve our education content and enhance the safety of the fleet. The savings plan will be announced on our website in the near future.

On September 13th, Pilatus had its sixth Regional Operators Conference (ROC 2011) in Thunder Bay, ONT, Canada. This ROC was hosted by Pilatus Centre Canada (previously V. Kelner Pilatus Center), and was the most successful ROC yet with over sixty attendees. Attendees were evenly split between owner/operators and Pilatus and suppliers. The presentations were primarily technical and had excellent content.

Canada is one of the harshest environment in which the PC-12 resides, and is the leading edge for finding and resolving complexities. POPA pilots should keep Pilatus Centre Canada with its unique experience base on their radar.

Although POPA has not altered its Mission, we have adopted a new motto:

"POPA... We Elevate The Pilatus Experience".

Pete Welles
POPA President

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Ask Lance Toland...

I was approached by a client who was selling his PC-12, and wanted to deliver the aircraft to the new owner. At first glance this looks simple enough, but actually it can be very complex with disastrous results if not understood completely. Depending on your method of selling and any casual contractual agreement you enter into, you may create liabilities which are not covered by insurance. There are a number of ways to transact the sale. Typically one chooses his Pilatus dealer to facilitate, includes a pre-purchase inspection, as well as setting up an escrow agent to facilitate the transfer of deposits and title transfer with the FAA and Cape Town, along with competent legal advice from an aviation bar-certified attorney.

In the case of a dealer and escrow agent selling your PC-12, you have some protection both financially and legally in knowing that title has transferred and your liabilities cease. Additionally, if any damage is discovered during the pre-purchase inspection, this can be dealt with prior to sale instead of post sale which might result in claims against you, which could be contested. Most aviation insurance contracts are occurrence based. You must demonstrate that the covered damage occurred during your policy period. It is not uncommon to see some engine FOD claims (remember domestic FOD is not covered, i.e. internal parts failure due to wear and tear) arise out of inspections which is usually a insured event. Again, if it were discovered post sale with the new owner it is almost impossible to recover based on an occurrence based policy. In the case of a casual sale unassisted by a dealer or an attorney, you might leave yourself open to claims of withholding and who knows what else. I have used this wording in all of my personal casual sales, (mostly limited to war birds and classics), it seems to get the point across as to my offer and the purchaser's acceptance.

Let's assume you do casually sell your aircraft and the new owner solicits your assistance in relocating the aircraft. There are several serious operational issues to address. As you have sold the aircraft and most likely advised your aviation insurance agent to cancel coverage, is coverage canceled? Additionally, what risk are you assuming with the new owner?

Assuming you have sold your aircraft and transferred monies on casual sale and then agree to relocate the aircraft for expenses, you have just teed yourself up for a non-owned aircraft liability exposure…which can bite you hard. If you discussed this sale in detail with your aviation insurance professional, hopefully he would advise you in two areas. First, if you do surrender your actual policy or sign a lost policy receipt to the company, you have no coverage whatsoever. If you just advise your agent or Broker of the sale and retain the policy, certain provisions of Part One of your policy will remain in effect, specifically non-owned legal liability which would cover you for liabilities arising out of the operation of a non-owned aircraft as defined in the policy. Second, and arguably the best approach to insulating yourself from liability, is to have the new owner's policy name you as an additional insured, approve you as a named pilot and provide you with an unlimited waiver of subrogation, maintaining at least the same limits of legal liability you carried on your policy. To determine if these items are properly in place ***demand*** a certificate of insurance from the new owner's company. DO NOT ACCEPT A LETTER OR CERTIFICATE OF INSURANCE FROM THE AGENT. Otherwise, if you have an accident on delivery post sale, YOU WILL PAY! Always have your agent or Broker review as a last measure. Do not depart without his blessings. Better yet…let the new owner get the machine home. It is one last flight worth the hassle.

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SERIAL NUMBER:_____REGISTRATION NUMBER:_____

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2) *Purchaser* agrees to pay the *Seller* the total sales price of $_____

Less: Down Pymt_____
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Serial Number:_____
Registration Number:_____
Total Unpaid Balance: $_____

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Purchaser

_____
Seller

FAA Makes it Harder to Block Flight Data

By Christine Knauer

Until now, the FAA allowed owners and operators to block their flight data from public view by adding their aircraft to what was essentially a "Do Not Track My Flight List." Most who did were concerned that real-time tracking could compromise their privacy and provide valuable information to competitors, protestors and others.

Their fears weren't unwarranted. Today's sophisticated Web flight tracking software allows public users to learn the location, altitude, airspeed, destination, tail number and estimated time of arrival of unblocked aircraft, all with just a simple smartphone or laptop. The software taps into the FAA's Aircraft Situation Display to Industry (ASDI) and National Airspace System Status Information (NASSI) data feeds containing flight information on air carrier and general aviation aircraft operating IFR within the U.S., Canada, the Caribbean, and the United Kingdom.

Despite protests by virtually all aviation industry trade groups, the FAA and Department of Transportation eliminated the Block Aircraft Registration Request (BARR) program in August. The move makes it harder for aircraft owners and operators to opt-out and shield their flight information.

Now aircraft operators are required to show a "valid security concern" to keep their flight data from being made available to the public. The standard for what counts as a valid security concern is a fairly tough one, and quite specific.

According to the FAA, a valid security concern is described as "… a verifiable threat to person, property, or company, including a threat of death, kidnapping or serious bodily harm against an individual, a recent history of violent terrorist activity in the geographic area in which the transportation is provided, or a threat against a company."

A "generalized, non-specific security concern" does not qualify, plus aircraft owners and operators must re-certify annually, showing a specific and timely threat.

Industry groups continue to speak out against the change. The National Business Aircraft Association and the Aircraft Owners and Pilots Association have joined forces to fight the elimination of BARR in court.

To learn more about the changes to the BARR program or request your aircraft's flight information to be blocked from public view, visit **www.fly.faa.gov/ASDI/asdi.html** or email **asdi-program-office@faa.gov**.

Christine Knauer, a freelance aviation writer, has more than 13 years experience writing for and about aircraft and avionics manufacturers, flight service centers, aviation technology and industry-related issues. A contributing editor for Avionics News, her articles also have appeared in Twin & Turbine Magazine, AutoPilot Magazine, American Bonanza Society Magazine, International Federation of Airline Pilots Association New Technology Journal and other industry publications.

Some Websites allow users to search and review flight data and post photos of the actual aircraft. According to FlightAware.com, on August 9 at 10:30 p.m. Central Time, three unblocked PC-12 operators were airborne over the United States.

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Beyond the Maintenance Sign-Off: Test Flight

The Pilatus PC-12 has proven itself a highly capable aircraft rewarding its owners with the reliability and performance that make turbine products legendary. Simplified and redundant systems are paired with robust components allowing the Pilatus to almost effortlessly perform its mission. But like all aircraft, proper maintenance is necessary to ensure continued-safe operation.

The world of turbine aircraft is a fast paced one full of schedules, clients and commitments. As such the maintenance cycles often are configured for minimum disruption at intervals that allow for phase-type checks of components designed to limit extended periods of downtime. Oftentimes when the check is completed the aircraft is inserted directly into the system again to earn its keep. Airlines, charter operators and even some Part 91 operations just can't afford (either financially or professionally) to delay a return to service any longer than is necessary. The flight following a maintenance event is sometimes a true "in-service" flight or at least a reposition to the next launching point. An honest test flight is never performed. Thankfully this isn't the case with most of the airplanes in our fleet.

According to FAR 91.407 (Operation after Maintenance, Preventive Maintenance, Rebuilding, or Alteration), general maintenance that has not altered the flight characteristics of the aircraft requires only an authorization for return to service by a qualified inspector and a record entry to be kept. When it comes to the safety of yourself and those who place their trust in you, is a "sign-off" really good enough?

To most owners and premiere maintenance shops that provide this service the answer is unequivocally "No". A test flight - or Post-Maintenance Functional Check Flight (FCF) in some circles – is designed to avoid rude surprises for those persons not being paid to take those risks. During a test flight the pilot is looking for (and hopefully unsurprised by) glitches, whereas a line pilot or someone endeavoring to complete a routine mission would tend to trust that the aircraft is operating in its normal parameters. The reason a test flight is performed is to prove that everything is operating the way it is intended to operate. As Murphy has proven, the one time you need a component in peak shape is just the time it won't be. It is best to be prepared with a fully functional aircraft.

Preparing for the Test Flight

The case can be made that the general feel of every test flight can look the same regardless of aircraft model and that is true. However, there are items on every model that demand specific attention and need not to be missed. Start every test flight with the mechanic or maintenance team that performed the work on your aircraft. A thorough review of the discrepancies noted during the inspection and the subsequent work performed is absolutely necessary to stage a proper test flight. Combine any specific areas of interest with all normal areas of concern to form a checklist to take with you. The checklist is necessary not only as a means to ensure you touch on all areas but also it can be used as a point of reference during the year to compare how indications and parameters may have changed.

Items that should always be included on the Pilatus PC-12 checklist include but are not limited to:

- ***Ensure all paperwork is complete and necessary documents have been returned to the aircraft.***
- ***Proper tire pressures and a tight (no excessive play) rudder pedal feel when taxiing.***
- ***Note starting battery volts (Battery 1 & 2).***
- ***Check O2 level in PSI and functionality of mask (was it moved during the inspection?)***
- ***EIS Codes.***
- ***Note starting temperature and OAT (Primary and Secondary Degrees).***
- ***Note Ground Idle (ECS OFF) NP RPM.***
- ***Note Flight Idle (ECS OFF) NP RPM.***
- ***Generator 1 and 2 operation.***
- ***AHARS 1 and 2 comparisons. What difference is noted if any?***
- ***Does the airplane make full T.O. power?***
- ***Ensure proper operation of the Hot and Cold ECS temperature control.***
- ***Test the Low Power and Gear Warning and note at what torque setting and KIAS it activates. Also check for proper operation of the silencer.***
- ***Flaps 30 gear warning.***
- ***Note the KIAS for Stall Warning and Shaker Speeds in both the dirty and clean configuration.***
- ***Verify Cabin Pressure Operation.***
- ***Proper operation of peanut instruments.***
- ***Check anti-ice equipment operation.***

Prior to flying, a thorough pre-flight is absolutely necessary. Inspect the engine compartment, sump the tanks and look for any loose ends or tools left behind. Even the best of shops or experienced mechanics can make a mistake. We've all heard the stories of wrenches left in engine compartments. Don't let an easy issue affect your flight because you didn't look.

If at all possible, the flight portion should be planned in uncontrolled, non-busy airspace. In addition, test flights into IFR conditions are not recommended. In today's advanced General Aviation aircraft it is common to spend a good portion of the flight using the autopilot. The autopilot should be inspected for proper operation during a test flight, but it is

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imperative that the overall "hand-feel" of the aircraft is observed and determined to be proper. Control rigging and cable tensioning, among other items, can change the flight characteristics of your airplane and now is the time to determine if more tweaking is desired. Concerning the crash of a regional airliner some years ago, Air Safety Week published: "The discussion on the elevator rigging problem that was present on the crash of an Air Midwest Beech 1900D ends with this statement, 'There is a simple means of guarding against catastrophe. Any adjustment to flight controls should involve a dedicated flight test to prove the controls are set up correctly'."

Required Maintenance

All airplanes are complex machines that demand regular service attention to perform to the standards we come to expect for performance and safety. The Pilatus, like every airplane, has its unique areas of interest that owners and operators need to pay attention to. Whether you perform 100-hr, annual inspections or even general maintenance to critical systems, the test flight is an extension of the "required" maintenance needed to keep your aircraft airworthy.

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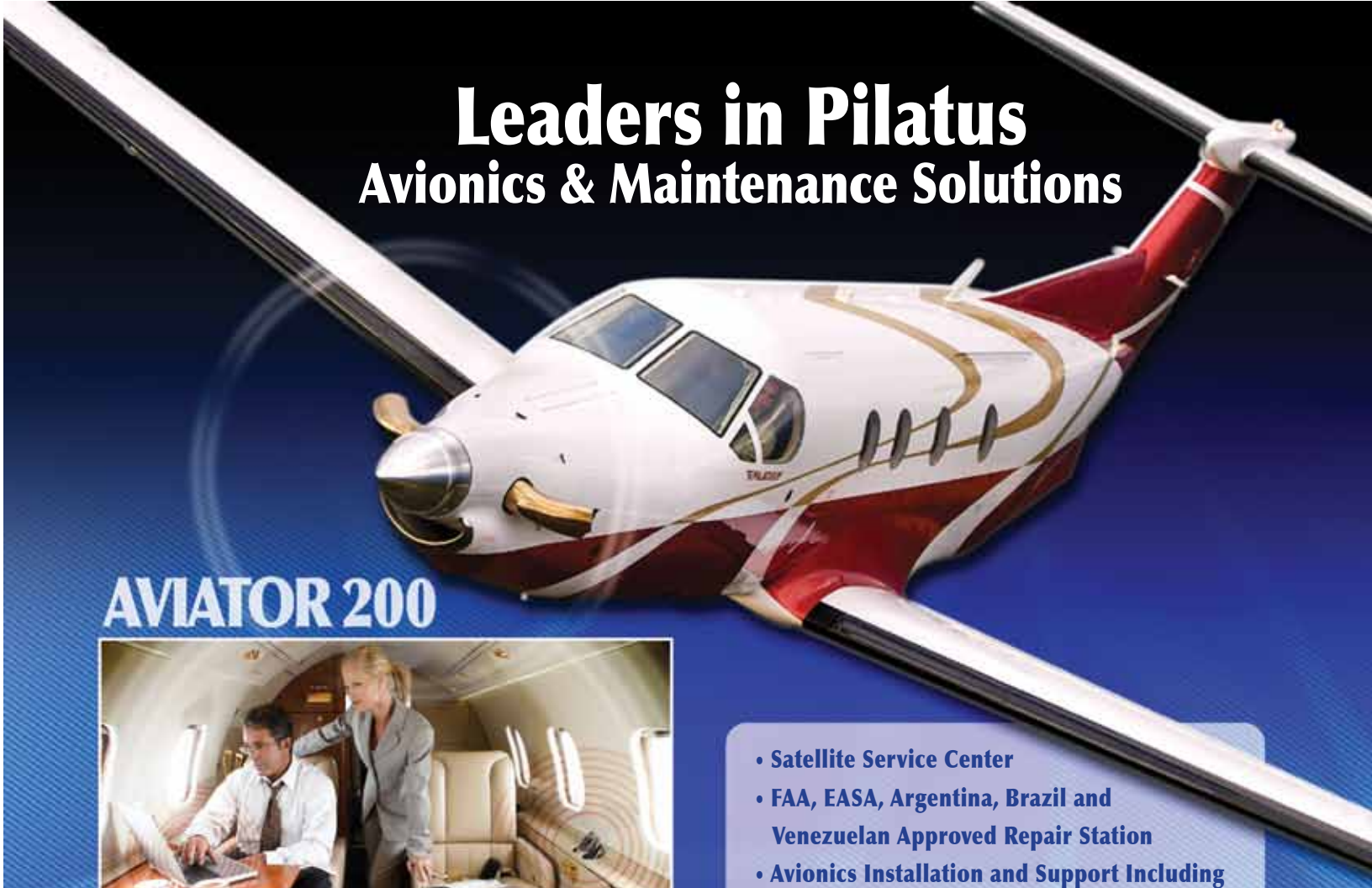

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Stall Awareness

By John Morris

Since the recovery of the Air France Flight 447 cockpit data and voice recorders, the worldwide aviation community has been having vigorous discussions about stall recognition and the training philosophies associated with the (stall) recognition and recovery phase. This accident is one of several in the past few years involving, worldwide, transport category aircraft entering a stalling condition, usually during the landing phase, and then not successfully recovering from it.

The primary change, still under review at this time, is to alter the concept of immediate altitude recovery after the onset/recovery from the stall. What *now* appears to be the answer is to regain sufficient airspeed first, via maintained reduced angle-of attack (AOA), and only after this recovery will the pilot attempt to recover to the previous altitude before the stall.

For general aviation the preceding paragraph should be a question mark since we already practice what the transport community wants to preach. At least I hope so!

Interestingly this appears, to me anyway, as a classic training cycle. Do you recall when the B-737 lost control due to rudder hard over and crashed outside Pittsburg [09/94]? After that accident upset, training was requested/required. Is it still? Or the DC-10 accident in Chicago [05/79] - one of the sticking points of this accident was the training to fly with the stick shaker active to regain/maintain altitude [the pilots did not know that the aircraft had physically lost an engine and damaged some of the leading-edge flaps]. It was proven in the DC-10 simulators that a reduction in AOA with the then resultant increasing airspeed would have been sufficient to recover. Of course this was after-the-fact but I believe training was altered after. Are the transports still adhering to this after accident training philosophy? Aircraft design and engines have improved but wings and aerodynamics are still the same. So the stall training cycle is back, again. It should never have gone away, but lack of regular, subjective training, not enough compelling accidents, and complacency always seem to prevail.

So what does this have to do with the PC-12? It is a single-engine, non-transport category, less than 12,500 lbs. aircraft. Plus we have a Stick Shaker/Pusher system that will keep us out of trouble. No worries.

That is true most of the time, but as we should all know, a stall is a function of angle-of-attack (AOA), along with unwelcomed help coming from weight/balance/CG and acceleration (G's) in a turn or hard pull/push. A stall can happen in what appears to be near level flight if the relative wind shifts or is dramatically reduced (instances that can occur at flight levels as well as near to landing). And lets not forget icing, which will increase stall due to wing contamination, instrument error (possible cause of Air France 447) or both.

Why was the Stick Shaker/Pusher installed, since the PC-12 is a single-engine? Because those single engine/propeller combinations can produces a large yawing force around the vertical axis called "P"-Factor, or wing drop. While stall testing the PC-12, it was determined with approximately 20% power the wing drop was less than 15° from level flight in both the clean and landing configuration. However, if 60% or more power was used, the wing drop was near 45° in the clean configuration and greater than 90° in the landing configuration.

That is something I would rather not experience! So to counter these effects, and gain certification, the installation of a Stick Shaker/Pusher System was added. The basic idea of the system is to cause a reduction in AOA by pushing the nose down before the aircraft reaches the natural stall point.

No one intends to stall an aircraft during the normal course of flying, but "stuff" happens. We also expect if "stuff" does happen, we will receive some kind of an alert or indication prior to onset of a natural stall. On that account, we do know how to (and train to) recover before we even reach the "push".

Do you know how to recover if the PC-12 does "push"? Or worse, what if the aircraft just suddenly drops a wing for no apparent reason? Can't happen, right. There are many publications relating to the recovery technique. All have the same answer. The recovery is quite basic: reduce angle-of-attack. That's it. Well, maybe not quite. We also need to increase airspeed, usually by adding power. How about if you are IMC, and somehow a stall or wing drop happens? What would your first reaction be? Be honest!

If the Stick Pusher activates, the recovery is to follow through with the push, then smoothly recover, once airspeed is increasing and positive control are established, with power to a wings level then positive rate of climb, as needed. However, if the aircraft drops a wing first, with no other indication, then we have to reduce the AOA (and possibly reduce power-depending on the amount at the time). Actually, the AOA is being reduced for us since the wing dropped and we are falling, right? Not. *And* we are in the beginnings of a possible spin or spiral if we do not stop the potential turning tendency. Has anybody not seen the Pilatus video of a PC-12 entering a wings-level, natural stall, at approximately 55% power?

What we, the PC-12 drivers, have to be careful of is when you introduce power or if you were already at a high power setting thereby possibly reducing power. With the amount of "P" factor possible, we need to positively reduce the AOA and increase airspeed before using (more) power. Also, with no reference to the horizon, we need to know how to stop a turn by use of our flight instruments. With electronic instrumentation our best bet is the sky pointer. Look for it and step on it. A good source for reviewing stall awareness is from the FAA, AC 61-67C CHG 1, Stall and Spin Awareness training.

"A safe pilot is always learning."

John Morris – Formerly with Simcom Training Centers-Orlando for 14 years with 1999 being the first year teaching the PC-12. Program Coordinator for the PC-12 from 2000 until resigning in 2007 to start ACFT Services. ***ACFT Services provides training ONLY for PC-12s.***

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Naked airplanes and nekkid airplane owners

By Jeff Rhodes

The late Southern humorist, Lewis Grizzard, used to say, "Naked is when you ain't got no clothes on. Nekkid is when you ain't got no clothes on, and you're up to something." These days, we're seeing quite a number of corporate aircraft being parked for extended periods of time. For various reasons, mostly economic, many aircraft owners are no longer flying their aircraft. Because values have plummeted as well, the aircraft can no longer practically be sold, either. The answer for many–long term storage. When the aircraft insurance policy expires, many owners of stored aircraft ask the question, "should I renew the coverage, or just go naked (hopefully not nekkid)?"

The reasoning behind the consideration of going without aviation insurance coverage on a stored aircraft can seem logical. The aircraft is locked in a secure building. It's not being flown. It's not going to hurt any one or be involved in an accident. Insurance is very expensive , and the aircraft most likely wouldn't be in storage if the owner was flush with cash. But is going naked a good idea?

One of the most commonly held misconceptions is that the FBO's insurance will take care of damage to your aircraft while it's stored in their hangar. The FBO may (or may not) carry insurance to protect THEM. As an aircraft owner, successfully collecting from an FBO's liability insurer means that you have sued them in court and proven that the FBO was negligent, or that you have negotiated a settlement because the FBO's negligence was fairly evident. Either way, the dealings with the insurer will be adversarial and neither the FBO, nor their insurer have any incentive to be helpful in solving your problem – they are defending themselves against you. When the tornado comes and levels the building in which your million dollar asset is parked, the FBO most likely will carry no responsibility for the damage – take it up with the Weather Man.

If your aircraft will be in long term storage, consider carrying at least ground (*not in motion* or *not in flight*) coverage. A few bucks cheaper than *in flight* coverage, the policy will belong to you and will pay for your damaged aircraft, whatever the reason. If the FBO is at fault, the insurers will work it out behind the scenes, but you will have been made whole.

If your current situation dictates that your aircraft will not be used as it once was, don't quit taking calls from your insurance agent. Just as before, you need to have an intentional and well thought out risk management plan in place.
Don't go nekkid – Cover your assets!

Jeff Rhodes
jrhodes@chappellsmith.com

Jeff Rhodes is an aviation insurance specialist who has a rich personal and professional background in aviation. He has experience in professional aircraft management and flight school management. He is an instrument rated private airplane pilot and active glider pilot. Jeff earned a bachelor's degree in management from Georgia Tech. He has been approved by the Georgia Insurance Department as an instructor of aviation insurance continuing education courses.

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CORE SKILLS

By Bo Corby

Advancement of technology has made what are considered significant strides in making aircraft safer, including tools to not only assist but in some cases prohibit the pilot from venturing near the edges of the aircraft operational envelope. Stick pushers, bank limiters, stall warning stick shakers, pictorial attitude recovery devices and other components; all designed to keep the aircraft in the operational envelope despite a pilot's inputs or inadvertent manipulations. Each time there is an accident, the engineers shout…we can fix that; and design another device that is thought to correct the problem.

Engineers are great at addressing individual problems or issues from a technical standpoint but not so good at predicting the unintended results from combined systems in the operational environment. The plethora of safety devices also runs the risk of pilot assumptions that they are protected under all circumstances. So, even with all of these devices, why do we continue to see accidents where a perfectly operating airplane is allowed to come into contact with the earth unexpectedly? Accidents of this nature are getting a lot of attention, especially in Washington, where the standard approach is more legislation to cure an unanticipated ill.

But while the advancement in technology has attempted to provide a defense against poor piloting skill, little has been done to improve pilot skills in manual flight and in fact, has contributed to the continuing degradation of pilot performance due to the lack of understanding and/or use. There have been no effective study results on how to better teach the most basic of aircraft operations…aircraft control…since needle ball and airspeed was taught in the 30's and 40's. The quest to add more and more of these safety devices, created a trend that is consistently eroding opportunities for the pilot to directly control the aircraft, especially when the control devices can operate the aircraft with more fidelity than the average pilot. As this automation bleeds into the basic training arena, which it has, the stage is set for an over reliance on automation and core skills are not only eroding, they are increasingly becoming absent from the basic flight training environment.

The Air France Flight 440 accident is only one example of pilots in the most sophisticated of aircraft not applying the most basic of all instincts to a stalled aircraft….lower the nose. With all due respect to the flight crew, the situation was confusing, admittedly however, it was a long way down and there was an abundance of opportunity to ignore the automation and fly the airplane. Being a whiz at avionics will enable any computer savvy individual to fly today's sophisticated aircraft but, there needs to be more behind the sunglasses than technological knowledge.

Not only do we suffer from skill fade but to some the skill is not there in the first place; not through the fault of the individual in every case, but often in the basic training that is administered by the flight training organization. Sadly to say, in very many cases the training is provided by the uninitiated to the uninitiated. Flight training is often provided by instrument instructors, who hold the credentials but lack the experience themselves, not only in instrument flying but most often teaching as well. It's the perfect storm that industry is spending millions of dollars (if not billions) to crutch out with technology. Would that money not be better spent improving the training system we use today and come up with more effective teaching tools, concepts and expertise?

Core skills…many say this starts with practice but it does not start with practice. Core skills start with knowing and applying the most efficient techniques to master aircraft control. For example, instrument scan. If you learn an inefficient method of instrument scan, practicing that method will only complicate one's ability to manually fly with sole reference to the flight instruments. Practicing inefficient fingering technique on the banjo is not going to improve your picking speed…it's going to inhibit it, so why practice an inefficient technique? Likewise, if you read and learn the FAA's Instrument Flying Handbook suggested technique for instrument scan you will never fly the aircraft manually at maximum efficiency.

In my airline life as the ALPA Training Committee Chairman, I was able to review the training difficulties of hundreds of pilots. Many times instructor comments indicated that the student needed to "speed up" their instrument scan when in fact, they needed to stop collecting information they did not need to know.

In the next series of articles, we will explore some techniques that use the same information provided in the 30's, updated to the present day. Remember, an airplane is an airplane and they all fly the same way. Turn off the automatics and they still have two wings, a tail and engines. Aerodynamically, they all can be manipulated in one way or another. You just have to know what the airframe has to do and figure a way to get it where you want it, when you want it there!!

As a homework assignment and interesting thought process, sit down in a quiet place and put to writing how you scan the instruments. How do you do it, what do you look at and when. Do you use what is called a scan pattern; and if so what is it? Writing this down will help you understand what you are really doing and be a great reference point for the next article on "Instrument Scan".

(Continued on Page 22)

How to Survive a Tax Audit of your Aircraft

First in a Series – Federal Income Tax Examinations

Introduction

There has been an increase in federal income tax audit activity for high net-worth individuals and profitable small businesses. This often extends to all business activity, including aircraft operations. Such examinations generally last for months and require education of the auditor in the business interrelationship between the aircraft and the underlying business it supports.

Business Deductions from Aircraft Operations

A business typically is entitled to deduct both the depreciation and operating expenses of aircraft usage in furtherance of the trade or business. The principle limitation on any business deduction is that expenses will not be allowed if they are not ordinary, necessary, and reasonable in amount. It is the burden of the taxpayer to substantiate both the incurrence of the expenditure as well as its business relationship as reflected through adequate records. For a variety of non-tax reasons, including FAA restrictions, DOT limitations, state and local issues, and liability concerns, to name a few, aircraft are often not owned and operated directly by the businesses they serve. Without proper planning, there is a potential for income tax disadvantages resulting from the business needs of separation of aircraft ownership and operations.

The Perspective of the Revenue Agent

Due to the complexity of the Internal Revenue Code, IRS agents are often assigned to handle examinations where they have little or no experience with the more complex underlying tax issues. This is certainly true with respect to the subtleties involved in the use of an aircraft in a trade or business. In the interest of educating IRS agents the Internal Revenue Manual includes a "MSSP Training Guide" dedicated to aviation. This guide is available to public (and available for review in .pdf form at www.advocatetax.com). This document attempts to educate the agent on the basic outline of federal aviation regulations as well as attempting to differentiate them from income and excise tax definitions of compensation. Chapter 8 - Corporate Flight Departments is worthwhile reading for a taxpayer who has been selected for examination to review the examining agent's underlying education on aviation matters. The appendix of the MSSP training guide includes a synopsis of the tax rules related to federal excise tax on aviation from the government's perspective. This too might prove interesting background reading for a taxpayer who may be exposed to federal excise tax liability for carriage of persons or property.

Beyond Ordinary and Necessary and Reasonable In Amount

In addition to the potential ordinary-and-necessary challenge, there are a number of other avenues IRS agents might use to attempt to disallow aircraft deductions. For example, the typical IRS agent might also examine the airplane activity from the perspective of determining it to be a hobby rather than a trade or business. Again an MSSP Training Guide has been written to assist the agents on understanding "hobby-loss" rules. If the agent can successfully characterize the airplane activity as a hobby, then all deductions in excess of related income can be subject to disallowance. Furthermore, even the deductions that are allowed to the extent of the income may be of less use to the taxpayer due to classification as miscellaneous itemized deductions, rather than business expenses. Another fertile ground for attack by the examining agent is the passive activity rule. A loss from a passive activity is limited to other passive income until the activity is disposed of. Because business reasons often dictate the separation of an aircraft from a primary business, taxpayers may inadvertently create needless passive activity loss classification exposure. Fortunately, the regulations governing passive activities provide an opportunity to group qualifying separate business undertakings for purposes of the passive activity rules. However, the IRS has issued a revenue procedure holding that a taxpayer who fails to make an affirmative election on his or her 1040 tax return to group undertakings for purposes of the passive activity rules may inadvertently lose this benefit, causing some losses that would otherwise be active to be passive. Again, this is an area in which the taxpayer must prepare for examination long before the IRS letter arrives.

The next area of attack by the IRS is often whether the business flights have been "substantiated." It is not enough that the aircraft be actually used for business; you must be able to demonstrate the nature of that usage. Aircraft falls into a special category of property for which the percentage of business use must be proved through records that show (1) the business reason for the travel, including the business benefit expected from it, (2) the dates of departure and return, and the number of days away spent on business, (3) the location, and (4) the amount of your aircraft expenses. You are able to show the expense amounts through an aggregation rule where all the aircraft expenses are added together and then prorated across the aircraft usage.

Preparing To Defend

As outlined above, securing income tax deductions for the operation of the aircraft requires more than that the aircraft be used in the furtherance of a trade or business. How it is owned and what elections are made are critical to securing your income tax deductions. These strategies and elections must often be accomplished at the time expense is incurred, and may not be rectified at the time of examination.

Once the Notice is Received

It is essential the taxpayer under examination understand the reasons an examining agent is asking the particular questions raised. A taxpayer may believe the agent is merely trying to understand the nature of the business, while his real goal is to develop a theory that will allow him to charge more taxes. Although a taxpayer may understand the nature of his business, and operation of his aircraft, far better than the examining agent, he often won't understand the potential income and excise tax consequences of the questions. All answers must be accurate and honest, and also mindful that an unfortunate choice of wording could create a damaging misunderstanding that might be difficult or impossible to correct. The complexity of the law should alert a taxpayer of the need for representation by a law firm with knowledge in this specialized area.

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Advocate Consulting Legal Group, PLLC
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CORE SKILLS (Continued from Page 20)

True Story

I was flying for a Supplemental Airline in Egypt in 1975 on the 707. One time we pulled into the hardstand parking area and shut down the engines. As the stair came up and the ground agent boarded, he stuck his head in the cockpit and said "check your shot records, three people on the last crew were put on airport quarantine by immigration because their shot records were not up to date. We all checked ours and low and behold, my yellow fever was out of date. Instant panic, as airport quarantine in the Cairo airport for three weeks was not a pretty thought. The Captain, Al Harris,(who called everybody "Bub" so he always knew your name), said pass up the shot record.

Al wrote something in the next line of my shot record, took off his shoe and with a ball point pen, inked over the shoe logo. He then put my shot record over the armrest and slammed down his shoe over his signature. The stamp said Buster Brown but I sailed through security with no quarantine! He was Dr. Al Harris for a few weeks after that incident.

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Last Call for 100% Bonus Deppreciation?

This has been a hot topic around Washington D.C. and in national news recently: cutting tax subsidies for corporate jet owners. Politics aside, we will take a look at current law, explain the proposed changes, and discuss some planning ideas.

Current Law – Bonus Depreciation

President Obama signed H.R. 4853 into law in December 2010. This legislation allows 100% bonus deprecation for new business aircraft. The law is retroactive for new aircraft purchased after September 8, 2010 and will be in effect until December 31, 2011. The aircraft has to be placed in service by December 31, 2011. Bonus depreciation is 50% for new business aircraft for 2012 purchase.

Bonus depreciation is simply a form of accelerated depreciation. 100% of the purchase price of a business aircraft can be deducted in the year of acquisition, provided that a taxpayer meets the requirements and provisions of the tax code – justification of business use, placed in service date, passive activity loss and related party rental regulations, etc.

Current Law – Regular Depreciation

Federal Aviation Regulations Part 91 operator depreciates a business aircraft using MACRS (Modified Accelerated Cost Recovery System) double declining method with a five year live. Part 135 commercial aircraft operator depreciates a business aircraft with a 7 year live.

	5-year Depreciation	7-year Depreciation
Year 1	**20.00%**	**14.29%**
Year 2	**32.00%**	**24.49%**
Year 3	**19.20%**	**17.49%**
Year 4	**11.52%**	**12.49%**
Year 5	**11.52%**	**8.93%**
Year 6	**5.76%**	**8.92%**
Year 7	**0.00%**	**8.93%**
Year 8	**0.00%**	**4.46%**
	100.00%	**100.00%**

PROPOSED CHANGES

The President has proposed to change the depreciable live of "corporate jets" from five to seven years. It is unclear if new business aircraft will be prohibited from utilizing bonus depreciation or if this will affect turboprops and piston aircraft. The effect of changing depreciable lives will create a timing difference for taxpayers – depreciation deductions will be spread out over a slightly longer time frame, from six tax years to eight tax years. For businesses that have experienced losses during this recession, spreading out depreciation over a longer period may not have a material impact to its tax situation.

	5-year Depreciation	7-year Depreciation	Adjustment
Year 1	**20.00%**	**14.29%**	**-5.71%**
Year 2	**32.00%**	**24.49%**	**-7.51%**
Year 3	**19.20%**	**17.49%**	**-1.71%**
Year 4	**11.52%**	**12.49%**	**0.97%**
Year 5	**11.52%**	**8.93%**	**-2.59%**
Year 6	**5.76%**	**8.92%**	**3.16%**
Year 7	**0.00%**	**8.93%**	**8.93%**
Year 8	**0.00%**	**4.46%**	**4.46%**
	100.00%	**100.00%**	**0.00%**

The table above illustrates the timing differences of changing the depreciable live of a business aircraft from five to seven years. Depreciation deductions will decrease in four of the first five tax years, but it will catch up in tax years six to eight.

PLANNING IDEAS

If your business is reporting significant taxable income and you have a need for a business aircraft, completing a purchase of a new aircraft by December 31, 2011 will result in immediate income tax savings. Managing your business use and minimizing personal use in 2011 is of paramount importance.

In the current credit market environment, it is wise to begin financing application and get pre-approved for an aircraft loan. Aircraft manufacturers have reduced production in recent years. To ensure delivery by December 31, you should determine the aircraft that fits your business needs and place the order sooner than later.

Getting your legal, finance and tax advisors together to determine the optimal structure for the aircraft acquisition should also begin as the myriad of federal, state and FAA regulations will require a thorough review of your current corporate structure.

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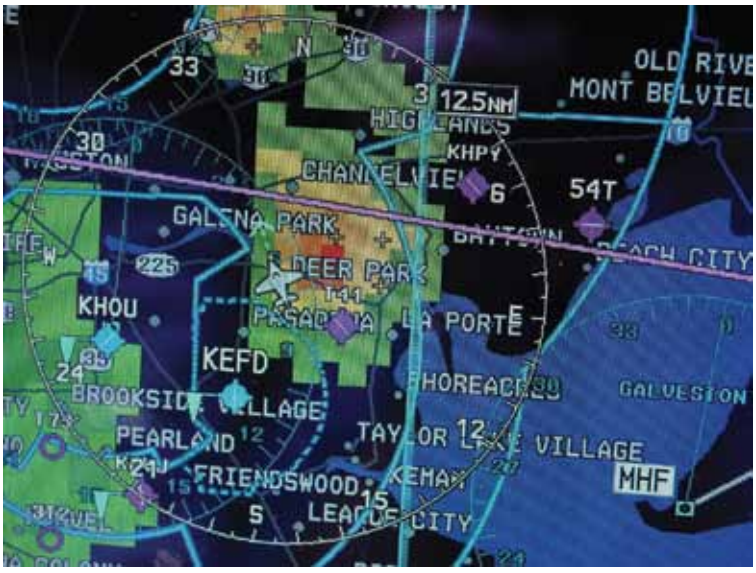
Integrating Satellite Weather into the Cockpit

by Scott C. Dennstaedt

Knowing how to interpret and operate airborne weather avoidance radar is dependent on the pilot having a full understanding of its capabilities and limitations. Radar attenuation, use of the radar's gain and tilt controls are factors that can affect the accuracy of the resulting image. Even when operated by the book, pilots are often surprised by the adverse weather that is not accurately depicted on their airborne radar including severe turbulence, lightning, in-flight icing, large hail and microbursts. While satellite-delivered weather doesn't promise to eliminate all of the surprises, let's examine how it might complement your airborne radar to help minimize your exposure to adverse weather.

Flying in a convective environment often requires a lot of finesse and a little good fortune sometimes. Negotiating your way around the tallest buildups while en route isn't all that complicated, but that's not the case when you come face-to-face with a solid line of cells, embedded cells or when entering or exiting the terminal area. Here's where satellite-delivered radar keeps you comfortably in the driver's seat without creating a ton of extra workload.

Think about satellite-delivered weather as providing a birds-eye view; a view that allows the pilot to strategically eliminate routes that don't look particularly promising. With high glance value it's a good tool to stack the deck in your favor while optimizing situational awareness within the convective environment.



The G1000 does a nice job displaying satellite-delivered weather. As we were making our IFR descent from the east into the West Houston Airport (KIWS) there were two not-so-nice-looking cells in our way. The controller's plan was to send us in between these two cells. However, based on our view outside of the cockpit and the satellite-delivered radar product we asked ATC for a deviation to the south of both cells given that the weather was tracking to the north. This decision kept us in smooth air and in visual meteorological conditions the entire time although it appears we were vectored right on the edge of this cell. That's due to the latency of the product; the actual storm had already moved several miles to the north by the time we got to this point.

When satellite-delivered weather first hit the market about 5 or 6 years ago, the primary consumer was the guy flying the small single-engine aircraft at altitudes below 12,000 feet. The pilot flying the faster multi-engine or high-end single didn't have a burning need for this new technology. After all, why should they pay for a subscription and get all tied up with wires when they already have good weather information with their expensive airborne weather radar? Or it could have been a little brazen defiance initially from this crowd. Now the market has expanded into the cockpits of even the most expensive craft. They key is to squeeze as much decision-making utility out of both without abusing either. The first step is to understand the limitations of satellite-delivered radar.

If you hang around someone long enough who has owned satellite-delivered weather you'll hear a vignette or two about the latency (delay) of the ground-based radar product. The topic of latency is perhaps just as ubiquitous as attenuation is in the airborne radar world. If you are used to a nearly instant update with airborne radar, the satellite-delivered radar updates will seem like an eternity. Consequently, it's easy to penetrate an entire line of cells and pop out on the other side in between satellite broadcasts. That's why using it for tactical avoidance is specious. Your airborne radar will provide you with the most accurate image of the precipitation in your immediate vicinity both temporally and spatially. Even approach control's ground-based weather radar can't match your airborne equipment in that respect.

The satellite-delivered radar image is typically three minutes and thirty seconds old on average by the time it reaches your receiver. Then you get to stare at this image for another five minutes waiting for the next update. It's fair to say the radar image could be as old as eight minutes assuming you don't miss any updates–which is a common problem for some portable installations. Fast moving cells have the most error when it comes to the cell's position shown on display. In eight minutes a cell clipping along at 40 knots will have moved over five nautical miles from its original position. Once you've ascertained the cell's direction of movement, it's always better to fly around the back side of the cell rather than try to maneuver around the front where the uncertainty and danger is greater. Often by flying right toward the center of a fast moving cell, it will have departed the area by the time you reach this location.

The satellite-delivered radar image is built from the NWS WSR-88D NEXRAD Doppler radars. With a 28-foot diameter radar dish, these radars do not suffer from attenuation like the small antenna found on most airborne weather radars. Moreover, you are seeing a mosaic product built from the combination of all ground-based radars. To top it off, the XM-delivered radar mosaic considers all of the elevation scans of the radar, not just the lowest elevation. So there's very little chance a thunderstorm can hide from this "network" of Doppler radars. It all comes down to interpretation of the mosaic radar image that gets broadcast once every five minutes.

(Continued on Page 29)

(Continued fromPage 28)

One of the first things to notice is the appearance of the radar image. While not an absolute rule, the higher the reflectivity the rougher the ride. If the cell or line of cells has reflectivity values over 40 dBZ, it goes without saying that these are not good candidates for penetration. Wet-coated hail is a good radar reflector. A reflectivity value greater than or equal to 70 dBZ is a good indicator of a potential hail shaft. You'll certainly want to keep your distance from these intense signatures, especially when flying downwind of these cells. With this in mind, the goal is to aim for those locations with lower reflectivity values keeping in mind the position error due to latency.

Pay particular attention to any cells that exhibit a hook-like signature although this is normally masked out by composite radar images. These likely contain a mesoscale circulation and may be hiding a funnel cloud or tornado. Also stay away from any cells that have a right- or left-turning characteristic. That is, they are moving counter to the rest of the cells in the region. Cells that exhibit this kind of movement are often associated with severe thunderstorms.

Fly carefully around the remnants of land-falling tropical systems. Even after they are downgraded to a depression or become extra-tropical, the reflectivity signature from the band of cells often looks benign with little or no lightning. Don't be fooled, however. These cells can often produce high shear profiles to include small EF0 or EF1 tornadoes.

If a spherics device such as a Stormscope is missing from your panel, ground-based lightning from satellite-delivered weather can provide some additional help. With airborne radar, one thing you do not absolutely know is how rough the ride is going to be. Sure, you learned some signatures to avoid, but the very best signature is the presence of lightning in and around a cell. A cell that is exhibiting cloud-to-ground lightning (even a single strike) is indicative of severe or extreme convective turbulence and should be avoided. Keep in mind that the satellite-delivered lightning only shows cloud-to-ground lightning and doesn't show any intra-cloud lightning strikes. If installed, your Stormscope will show both.

If you are flying with satellite-delivered weather from XM Radio, you may have seen Storm Cell Identification Tracks (SCITs). SCITs are not part of the raw NWS NEXRAD data. They are value-added data using a patented algorithm that defines thunderstorm cells that are exhibiting severe characteristics such as large rain rate, hail and shear. They are updated every 1 minute and 25 seconds.

Additionally, the SCIT includes a direction of cell movement and speed of movement typically represented by an arrow originating from the center of the severe storm cell. Even though SCITs can come and go for a particular cell it is a good idea to avoid any cells that have been identified as having these severe characteristics. A word of warning:

If you have satellite-delivered weather through XM Radio, you might have noticed some little arrows on your display (not all vendors display SCITs). These arrows are called storm cell identification tracks (SCITs). SCITs are derived from the NWS WSR-88D NEXRAD Doppler base reflectivity and velocity data using a patented algorithm. The algorithm attempts to pinpoint cells that exhibit certain severe storm characteristics such as high rain rate, hail and shear. Here's an example display from the WxWorx on Wings software running on my tablet PC. By clicking on the small box at the tail of the orange arrow in the center of this display, a little window pops up in the upper left of the display that is labeled "Shear Storm." This is a likely candidate for a cell with a mesoscale rotation and one that should obviously be avoided.

when a cell or line of cells is just forming, SCITs are often a bit chaotic especially in the direction of movement of the cell. It is common to see two adjacent cells with direction arrows 180 degrees to each other.

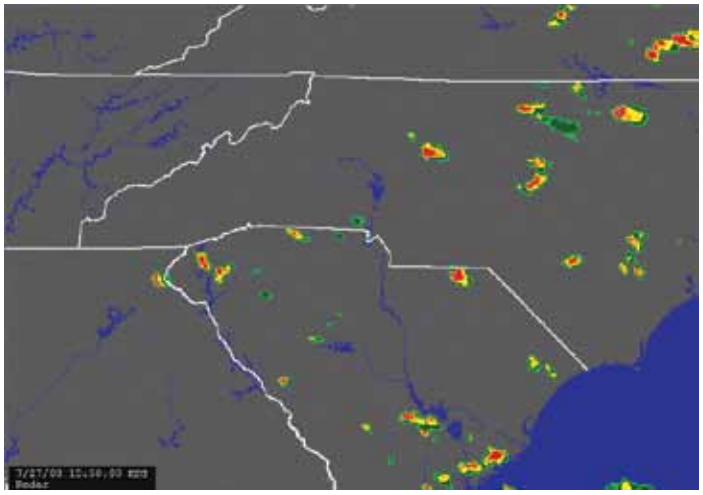
Echo tops are also available from satellite-delivered weather. They are derived from the same WSR-88D NEXRAD Doppler radars and can also help ascertain cells to avoid. Echo tops are coarser in resolution as compared to the reflectivity product and are shown at 5,000 ft. intervals. Any cell that exhibits echo tops of 30,000 feet or greater should be avoided. Even an echo top of 25,000 feet is likely to spill your coffee.

Even so, false echo tops do occur. Be suspicious of any 40,000 or 45,000 foot echo top that comes and goes with each update. Better yet, compare the echo tops display to the infrared satellite display which uses temperature to determine cloud tops. The satellite image tends to be more reliable.

Airborne radar has the distinct disadvantage in that you must generally be pointed at the weather to sample it. Satellite-delivered radar, on the other hand, doesn't have such a limitation. There are several scenarios where this comes in handy.

(Continued on Page 30)

Integrating Satellite Weather *(Cont. from Page 29)*



If you are too lazy to fire up the onboard radar, satellite-delivered weather is a good way to augment what you see outside of the other important piece of glass in the cockpit.

The first is when you are parked at the FBO before receiving your IFR clearance from ATC. Be sure to switch on your satellite weather receive as soon as possible. After about 12 minutes, most of the weather products should be available. Before you even taxi (or while taxiing), you are already starting to mentally fly the route. This also may allow you to negotiate a change in your IFR clearance before you depart or shortly after departure which really decreases your workload during a busy phase of flight. Also consider the case where there's high terrain between you and the weather. On the surface, your airborne radar might not provide any help until you gain some altitude or level off.

The other benefit occurs after you've made your final descent into the terminal area. Most of the time, you only care about the cells that are your immediate flight path. In the terminal area it is common to be radar vectored in such a way that you may not be able to scan the weather with your airborne radar very effectively until you are lined up on final approach. Satellite-delivered radar allows you to keep a constant watch on the movement and development of the cells that concern you the most, even if they are behind you. Don't forget a potential missed approach. A missed approach may require a 180 degree turn or if serious weather occupies the missed approach holding point, you may want to negotiate alternate missed approach instructions prior to your approach; they exist on most ILS approaches, so don't be afraid to ask.

If you are doing any international travel, the satellite-delivered radar image ends about 124 nm from the border. Canadian radar data is available at this point, but you may find that the quality of the image may not be as good as the one in the U.S. WxWorx, who supplies the data for XM Radio, has implemented a masking algorithm that helps to remove some of the clutter and anomalous propagation that occurs with Canadian radar.

In addition to your airborne radar and satellite-delivered radar, your eyeballs are still your best offense to stay out of the bumps. Staying visual almost always engenders the smoothest ride, but may lead you to visit airspace well off your route that you had not intended to occupy. ATC can also lend a hand from time to time. Airport surveillance radar (such as the ASR-9 and ASR-11) is a dual fan beam Doppler radar that has very little latency and can provide that tactical assistance through the terminal area. Learning to integrate all of these resources with your onboard radar will hopefully minimize the spillage in the back.

Scott C. Dennstaedt is a nationwide instrument flight instructor and former NWS research meteorologist who teaches aviation weather online. You can reach him by visiting his website at http://avwxworkshops.com.

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PILATUS

News, Announcements, Notes...

WELCOME NEW POPA MEMBERS

#216 - N216KC	Ronald Moore - Benton, AR
#478 - N26VW	Tim Pond - Miamisburg, OH
#487 - N487PC	Curtis Helms & George Passela - Houston, TX
#1244 - N244WA	Jeff Kutsch - Fresno, CA
#1254 - N7112M	Brad Sulik & Tim Napoli - Oxford, CT
#1259 - N259PC	John Cooper - Olathe, KS
#1272 - N272NG	Mark Mastrov -Lafayette, CA

Pilatus Trade Show Dates

September 14-18	*Reno Air Races (Reno, NV)*
September 16-18	*Breitling Sion Air Show (Sion, Switzerland)*
September 22-24	*AOPA (Hartford, CT)*
October 10-12	*NBAA (Las Vegas, NV)*
October 22-26	*IACP (Chicago, IL)*
November 13-17	*Dubai AirShow (Dubia, UAE)*
December 6-10	*LIMA (Langkawi, Malaysia)*

Photo by Chris Vanderhoof

Press Releases...

MEDIA RELEASE
Broomfield, CO, USA

August 23, 2011

PILATUS AIRCRAFT LTD EARNS TOP RANKING IN PRODUCT SUPPORT FOR THE 10th CONSECUTIVE YEAR

In the 2011 Corporate Aircraft Product Support Survey of business aircraft operators, conducted annually by Professional Pilot magazine, Pilatus earned the top ranking in the turboprop division for the 10th year in a row. The annual survey has been conducted for jet aircraft since 1991. Turboprop aircraft began participation in the survey in 1998. Since that time, Pilatus has earned first place in the turboprop category every year except 2000, when no turboprop aircraft were included in the survey. In five of those years, operators of Pilatus aircraft ranked their customer service experience even higher than perennial jet division winners Gulfstream and Cessna Citation. "It is a great honor for our service team to win this award for the 10th consecutive year," said Piotr "Pete" Wolak, Vice President of Customer Service for Pilatus Business Aircraft. "There really is no magic formula, though. We have a great group of dedicated people who simply listen to our customers and work extremely hard to solve their problems. It is difficult to beat the combination of Swiss-craftsmanship built into every PC-12 and the pride taken by those who support it." Wolak also cited the experience and knowledge of Pilatus' worldwide network of service centers as a tremendous asset for its customers. The majority of Pilatus Centers have been with Pilatus since the PC-12's introduction in 1994. Not content to rest on its laurels, Pilatus aims to continuously raise the bar to ensure customers never regret their decision to own and operate a Pilatus aircraft. Wolak stated, "Being on top is great, but it increases the pressure on us to constantly improve what we do so that we can remain there. Our performance after the sale is a key driver in new aircraft sales and retention of asset value for our customers. We can't afford to let down anybody in that chain."

Duncan Aviation Installs First-Ever Touch-Screen Technology in a Pilatus PC-12 Cockpit

July 28, 2011

LINCOLN, NEB — Duncan Aviation's Avionics Satellite Shop in Denver, Colo., recently completed an installation of the new Garmin GTN-750 and GTN-650 touch-screen fully integrated GPS/NAV/COMM systems in a Pilatus PC-12/45 cockpit. This was the first Pilatus PC-12 to have this new system installed in it.

Bob Hazy, Duncan Avionics Satellite Shop Manager, anticipates the demand for this system upgrade will begin to rise for this airframe. "There are more than 800 PC-12 legacy aircraft in operation. Most have the Garmin GNS-530 and GNS-430 systems installed. As touch-screen technology becomes more popular, the interest will grow. "

Hazy goes on to explain how the Denver Satellite shop made this glass cockpit retrofit more convenient for the pilot. "With the FAA's approval, we moved the engine instruments to the right of the center panel and installed the touch-screen units to the left." Because the Pilatus can be flown with just one pilot, having the touch-screens closer to them is very important.

For more information on this system, contact Wayne Sand, Denver Satellite Install Team Leader at 303.210.6249 or any of Duncan Aviation's Avionics Satellites locations at http://www.duncanaviation.aero/contact/duncan_avionics.php.

Duncan Aviation is an aircraft service provider supporting the aviation needs of government and business operators and other service providers. Services include major and minor airframe inspections and maintenance, engine services, major retrofits for cabin and cockpit systems in addition to full paint and interior services and aircraft sales and acquisitions. Duncan Aviation also has aircraft components solutions experts available 24/7/365 at 800.228.1836 or 402.475.4125 (international) who can handle any aircraft system problem with immediate exchanges, rotables, loaners or avionics/instrument/accessory/propeller repairs and overhauls.

SIMCOM TRAINING CENTERS

Q &A
By Ted Otto

SUMMER 2011 Q & A!

Question #1
Are we allowed to use the TA Traffic Display to initiate evasive maneuvers?

Answer #1
TCAS is intended as an aid to see and avoid concept. Once an intruder is visually acquired, it's the pilots job to maneuver as required to maintain safe separation.

Question #2
Can we get heading information on the ESIS?

Answer #2
After SER #1271, the ESIS has a heading tape and slip and skid ball.

Question #3
What is the procedure for an EIS chip light, or ODM CAS message?

Answer #3
Check and monitor engine parameters, reduce power to minimum required for safe flight, land as soon as practical. Complete engine inspection and comply with SB79-007, which removed the ODM system.

Question #4
When must the autopilot be disconnected on approaches?

Answer #4
For the NG, the autopilot is to be connected at 200' for ILS approaches, approaches with vertical guidance in the VGP mode at 200' and 400' on non-precision approaches. For legacy PC-12s, it is 200' on ILS, and 1000' on non-precision approaches.

FALL 2011 QUESTIONS

Question #1
Which system has auto priority? TAWC or TCAS?

Question #2
When must the oxygen lever be in the on position?

Question #3
Does the windshield heat have to functon for flight?

Question #4
What trims must function for each flight?

NEWS RELEASE

Release Date: IMMEDIATELY

SIMCOM TRAINING CENTERS ANNOUNCES GPS/WAAS AND VISUAL UPGRADES TO ITS SIMULATOR FLEET

ORLANDO, FL, JULY 18, 2011— SimCom Training Centers, headquartered in Orlando, Florida, has announced recent enhancements to its fleet of simulators representing turboprop and piston-powered aircraft. Improvements to the visual systems in these devices give pilots a more realistic view of the outside world, providing them a more effective training experience than ever before. And new WAAS capable GPS installations in these devices give pilots the ability to learn and practice advanced instrument approach procedures using this technology.

"Our new visual display systems place our simulator customers in the middle of the action," says Tom Evans, Orlando Training Center Manager. "Our turboprop and piston training customers now see very realistic scenery that rivals the view from our most advanced jet simulators. Using high resolution satellite imagery, the new visual displays also provide for a worldwide choice of recognizable terrain from which to operate. Our instructors can select weather conditions for all operating environments from VFR to IFR with thunderstorms, fog, rain, snow and icing conditions. Customers making their first visual approach into Aspen's airport are amazed with the realism of the experience. We've had several pilots on the edge of their seats until they are safely on the simulated runway."

In addition to improvements to the outside visual displays, recent avionics upgrades include the installation of Garmin 530 or 430 GPS/WAAS in most of SimCom's piston and turboprop devices. WAAS, or Wide Area Augmentation System, provides pilots with GPS-derived vertical guidance, enabling precision approaches to smaller airports in adverse weather without ground based precision approach equipment installed. The installation of WAAS capability in SimCom's turboprop and piston-powered simulator fleet enables pilots to train for and understand GPS/WAAS procedures and how to best benefit from this technology.

"With these enhancements, our simulators are now operating at a very advanced technological level," says Wally David, President and CEO of SimCom. "That's the way it should be. From jets to pistons, operational safety is our driving goal at SimCom. We desire to expose our customers to the most realistic flight training experience possible in the comfort and safety of our simulators. The addition of new visual displays and WAAS capability to our flight training devices does just that."

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Non-Profit Status

The Pilatus Owners & Pilots Association has been granted exemption from income tax under Section 501(c)(7) of the United Stated Internal Revenue Code. The Internal Revenue Service (IRS) has classified POPA as a "social club" and has assigned Employer Identification Number EIN #31-1582506 to our Association. Annual dues are not deductible as a charitable contribution, but members will likely be able to deduct annual dues as a business expense. Consult your tax advisor for details.

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