

Published by the Pilatus Owners
& Pilots Association

Fall 2002 Issue

POPA Update

Volume 5, No. 4

From the President

Things have been somewhat quiet for me. I was unable to attend Oshkosh this year and help Pilatus at their display booth. They were probably relieved not to have my comments and questions. I did get a chance to fly to the Arlington Washington EAA show. I chose to fly our C182, not our PC-12. I am glad I did because the PC-12 would have been a little out-of-place parked on a dusty field amidst campers. I must say Gayle and I were disappointed. We imagined a small Oshkosh, but it was smaller than we thought. We left a day early and glad we did, since the weather for our planned return day had thunderstorms.

It looks like AOPA is trying to get the FAA to ease in the DRVSM requirements. As of this writing, AOPA is asking for FL350 to 390 to be in use by 2004 and the full FL290 to 410 by 2006. This should give us some time to determine if flying at FL290 is really worth the equipment and maintenance costs.

In case you have not visited the web page, Hilton Head won the vote for our next POPA convention. If you are interested in helping or know of a potential PC-12 owner in the Hilton Head area who can help us with the planning, of this convention (read -run it) please step forward and be ye known to all! Otherwise, we will manage somehow. A good article on Hilton Head is in the Fall 2002 issue of "Pilot Getaways". Speaking of articles, is there an interest in getting permission to reprint the history of the PT-6 that was published in March issue of "Business & Commercial Aviation"?

Lastly, on our web site I placed a request of anyone in need of a strobe replacement to contact me. We have our STC ready to go but are in need of an aircraft. This would incorporate a US manufactured Whelen strobe that is readily available and at a lower cost.

Roger Block
POPA President
S/N #185
Washoe Valley, NV



FOR WHOM THE BELL TOLLS....

It is sad, but I suppose it is inevitable as the fleet size increases. On September 14, 2002, we experienced the first fatality in an accident involving a PC-12 in the United States.

I will not dwell on the details, nor will I speculate on circumstances or causes. I will direct you to the extensive NTSB report (http://www.nts.gov/ntsb/brief.asp?ev_id=20020927X05238&key=1) to find out more of the facts. Realize that this report is the NTSB Preliminary Report. It has very extensive details of the facts that were discovered about the accident but it makes no determination on how or why the accident occurred. There is no guarantee we will ever find out.

There will be much speculation and hangar discussions about "what happened": Was it weather related? Was it pilot error? Was it a catastrophic medical issue? Was it lightning? Was it aliens in a UFO? Perhaps a ground-based terrorist plot? I reach to the extreme, brinking on the ridiculous, because until some valid determination is discovered, it makes little sense for us to speculate.

What we can and should do is determine what impact this may have on the fleet, and decide what actions we can take to prevent any punitive reaction. My main concern falls in the insurance arena.

As we heard at the Annual Convention this spring, the insurance industry finds itself in a precarious financial situation. Any opportunity to reduce risks and increase revenues will be pursued by the insurance companies with vigor. I fear that without definitive determination of the cause of this recent accident, they will find a way to actuarially punish us all. Single pilot operations in IMC? BAAAADDD!!! Single professional pilot part 91 operations? BAAAADDD!!! Solo operations with less than 200 hours time-in-type? BAAAADDD!!! Get out your wallets...

So what can we do? We can ALL respond to the insurance survey published in the previous newsletter. The response so far has been

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Members Forum

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more than disappointing; it has been miserable. We need this data to begin to assemble our case to take to the industry. Without the data to back our case, we are birds on a wire and the insurers are guys with big ugly guns; we don't stand a chance? Please, please, please send in the forms! We can't do a thing without your support and data! If you need another form, contact Laura at the POPA Home office.

Once we have the capability, we can go forward and work with the insurers. Hopefully we still have the time and attention to get ahead of the problems and recommended programs (training, operations manuals, maintenance procedures, etc.) that will satisfy the insurers needs and allow them to continue to make insurance affordable to our fleet and POPA members.

It is sad that it takes the loss of human life to get us to rally. However, if perhaps we view this as a way of attaching a longer lasting tribute to this unfortunate loss we can find some solace in that loss. It's up to you to decide!

Phil Rosenbaum
POPA Vice President
PC-12, S/N #289
Austin, TX

TECH CORNER

Have you ever taken off from an uncontrolled field and half way down the runway you see another plane coming towards you? How can this happen with both pilots making radio calls? Easy! Our radios are not the most wonderful piece of engineering; they have their faults. One is called front-end overload, and another associated with that is called receiver desense (decreased receiver sensitivity).

It just so happened, a month ago, I helped get Carson City's (KCXP) AWOS back on the air after some vandals smashed the ceilometer's window glass. I also found a tweaked antenna. Thinking this was also part of the vandalism, I removed the antenna to take it home to sweep the VSWR. The antenna was badly tuned and I knew something else was wrong other than the visible tweak. Cellwave (the manufacturer) sent the cut sheet for the antenna and I found the radials had been mis-measured. I removed three inches from each of the four radials and the antenna's VSWR was fine.

Once the AWOS was back on the air, reception reports were coming in at 60+ miles; not bad for a 3-watt transmitter to a unity gain antenna 15-feet up. Everything was great since the AWOS had never worked properly since its installation.

The AWOS is located midfield, just north of the runway. The runway has a hump and you cannot see the opposite end. I had my digital

voice recorder on since engine start. It recorded our radio call as we taxied onto runway 9. Flight idle and engine instruments were good as we began our roll.

As we continued our roll out, a weak radio signal was just barely breaking in and out of squelch. (This also was recorded just as we heard it.) I made the comment to Gayle, my co-pilot that I was not going to worry about the call because it is too weak and it must be some one coming into the area. Nose wheel release, air speed alive, 60, 70, 80, and Gayle says OH \$#^+! There is another plane coming at us! Seeing the plane, I decided the safest thing was to rotate and not to try stopping. As we rotated so did he and I noted his turn to his left.

So much for the rules of going right, I too went to my left. Fly the plane. Wheels up and locked, flaps up at 500 and take your heading. Now talk. I asked if he was on frequency. He was and with this radio call, his signal was fine. He said he did not hear anyone on frequency and he has not had any poor radio reports. I reported we had heard a very weak, unreadable and broken signal just as we began our roll. Gayle thought maybe he had just turned on his radio, gave a call and missed our call, which was just prior to his. I purposely called Oakland Center using that radio. Everything was normal.

Then my radio engineering "wheels" began to turn. Could the AWOS be so strong as to block out the other plane's radio signal? The AWOS was just a little over 3 MHz away. Or could the Class C noise from the AWOS transmitter covered our CTAF frequency. Upon my return two weeks later, I spoke to the airport manager and told her that I had made a cassette recording of digital voice recorder. I told her my suspicions. I brought my spectrum analyzer to the airport and looked at the CTAF frequency at least 80dB down from the carrier. I did not see any noise from the AWOS transmitter. It was clean! This leaves only two reasons for not being able to hear the other planes signal. Front-end overload, which caused the AGC (automatic gain control) to turn down the receiver's sensitivity or the fact the other plane, an experimental taildragger, had a sweptback, top mounted dorsal fin antenna.

This type of antenna on a taildragger that is facing you will place the base of the antenna towards you. This is a null on the antenna's pattern! This null can be down 30dB or more. Looking at our link budget, even a two-watt hand held transmitter should deliver one watt or +33dBm to the antenna. My receiver (threshold) should make -110dBm for a 10dB SNR signal, which is enough to open the auto squelch. The free space loss is about 80dB for the 5,900-foot long runway distance; add in 10dB loss for non line-of-sight ground losses. So with a total loss of 90dB, we subtract this from the +33dBm, which is -57dBm. This is 53 dB above the receiver threshold! Even if we add a 30dB loss for an antenna null, the signal would still be 23dB, above threshold. Unless we just happened to be at some crazy null from a building reflection, this leaves the AWOS as the culprit causing "de-sense".

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Member Forum Cont.

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We will be getting with the airport manager again to prove this theory by briefly turning off the AWOS and seeing if the reception improves, but until then, I have learned a hard lesson. Never trust the fact that a signal just breaking squelch is far away! Hope this helps you!

Roger Block
POPA President
S/N #185
Washoe Valley, NV



HOME BASED SIMULATION FOR THE PC-12

I recently joined POPA after becoming involved with the acquisition of S/N #391. Phil Rosenbaum encouraged me to write on this subject because of comments posted on the POPA Web Forum. During SimCom training, I had a chance to discuss hardware and software with the person on call and in charge of running the PC-12 Simulator. As you know, the Simulator is based on visual projections and runs on a PC-type computer. The programming code is already written and presents the multiple emergency scenarios rather well. Whether that code is useful for a Windows environment needs to be explored.

We are not far from having proficiency training at home for the PC-12. I am talking about serious simulation, not a computer game. It will allow us to practice normal, as well as all the emergency procedures. You could simulate the performance of the real aircraft and be able to fly and practice IFR routes and approaches of your choice. Ideally, you would be able to have scenarios with emergencies and skill testing, written as program scripts.

I have some experience with MS Flight Simulator® and FlitePro® from Jeppesen. The later excels in the IFR environment. The database for world scenery, available from MS Flight Simulator®

is excellent and compact. Navigation, approach with complete IFR data, is now Jeppesen based for both programs. The design of a photo-realistic panel to simulate the PC-12 cabin, should be an easy task. If you browse the Web, you will be amazed at how computer and aviation enthusiasts are able to design panels emulating the major airlines. MS Flight Simulator® allows developers to build such panels that can match, in a photo-realistic manner and with digital accuracy, those of the original airplanes.

A power quadrant could be part of the virtual cabin or better yet, a physical piece of hardware from any good manufacturer of simulation hardware. The AFCS yoke and throttle control system (formerly AETI) from Vmax Flight Systems (www.simpilot.com/index.html) works with any simulator and PC with USB input, and has the feel and look of the PC-12 yoke.

Scenarios for flying the PC-12 in different conditions can be written on a periodic basis, allowing the user to test their skills. This could be made available as "Continuing Aviation Education" similar to how physicians keep up with medical knowledge. An instructor can load in a flight or mission variable factors; such as weather, endurance, altitude, icing, traffic, instrument malfunctions, etc.

Companies like Garmin, Honeywell, BF Goodrich, and others could promote their products (already available for the PC-12) by sponsoring scripts written, for our airplane. SimCom instructors are a valuable source of continuing education; they could benefit by authoring such scripts.

I would start with the owner of the rights for the PC-12 computer training computer program at SimCom and find out if that program is useful for PCs running Windows®. Another approach would be to consult with Jeppesen FlitePro® and encourage them to add the PC-12 to their fleet of supported airplanes. Following that, SimCom and Pilatus instructors could help with the script development.

As an alternative and independent avenue, we could involve some of the leading developers for PC simulation add-ons for the MS Flight Simulator®. Their names are available in magazines developed for flight simulation such as Micro Wings (<https://www.microwings.com/>). Jonathan Stern, Peter James and Charles Gulick are regular gurus reviewing software. Helge Schroeder developed FS Navigator (<https://www.fsnavigator.com/>), an excellent add-on. I am sure he or someone like him could adapt a good simulator program to our needs.

For a taste of what is available, check the site: http://www.linkhitlist.com/cgi/LHL_E.exe?SLHL&ListNo=28678169918.

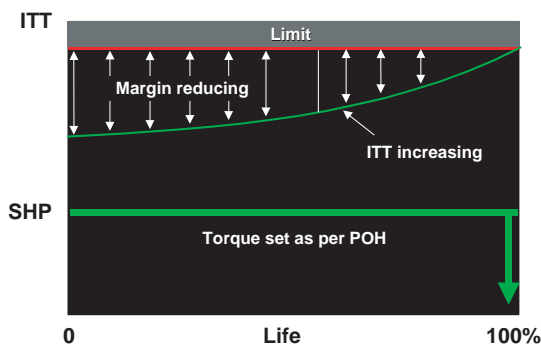
Dr. Douglas Bournigal
S/N #391
Dominican Republic - Santo Domingo, Caribbean

Members Forum Cont.

OPERATE THE ENGINE ON TORQUE AND NOT ON ITT?

It was a pleasure meeting you all at the POPA Conference in Austin Texas. We would like to take this opportunity to clarify the following question that was raised by many of you: "Why does the PT67A-67B POH (Pilot Operating Handbook) recommend to operate the engine on Torque and not on ITT?"

All PT6 turboprop applications use engine output torque as a primary power setting parameter. The POH & AFM (Airplane Flight Manual) contains power setting information which must be used to determine the torque setting for all ratings in accordance with



altitude, ambient temperature and aircraft weight. The PT6 will deliver the power specified in the POH/AFM without exceeding other engine limits throughout the overhaul life of the engine.

If the engine is operated on ITT, the operator will have additional power, but the engine will be hotter than when operated by torque, which will result in accelerated deterioration of the hot section hardware. The effect is cumulative and eventually leads to the engine being unable to reach the power settings specified in the POH/AFM. At which time, the ITT margin is depleted and the engine will be operating with a fully deteriorated Hot Section. An engine overhaul or replacement of hot section components is required to restore the engine performance. Since engine service life is reduced hourly operating costs have increased.

Should you have any additional questions please feel free to contact Pratt & Whitney at (450) 647-2711, fax: (450) 647-2928 or via e-mail at andre.goossens@pwc.ca.

Andre Goossens
Paola Del Grande
Pratt & Whitney Canada

DON'T CREATE AN AIRLINE UNLESS... YOU INTEND TO CREATE AN AIRLINE!

So you finally purchased that shiny new Pilatus PC-12 (or who knows what other silly aircraft) that you intend to use for business purposes. Your accountant (or your really smart brother-in-law) has recommended that due to the high potential for civil liability in the use of the asset, and the recent predisposition of juries to award high damages, you ought to create a separated entity (such as an LLC) to own and operate the aircraft, thereby creating a buffer to protect the remainder of your assets.

Three months later, you feel really smart (and protected) but saddened. The terribly unfortunate situation you hoped would never happen has happened. Late at night, the end of a long flight day, your pilot crashes on an approach to a remote airport. One of the unlucky souls on board who died in the accident was a wealthy business associate who on occasion flew in the aircraft and shared in the direct costs. The terrible loss of a friend, of an aircraft and crew is at least not compounded by the loss of your total net worth in a civil lawsuit by his surviving estate, because you were savvy enough to have created that LLC, right? Unfortunately, the answer is probably not what you want to hear...

We all know that there are 14-CFR Part 91 operations (commonly referred to as Part 91) and then there are those other regulations (14-CFR Part 121 and 14-CFR Part 135) that are really cumbersome and difficult to deal with. The basic theory underlying the differences between Part 91 and the other more restrictive Parts 121 and 135 is that if you are flying yourself and your guests around at your own expense in your own aircraft then you have sufficient incentive and ability to act in a safe manner. Therefore, there is a reduced public interest in enforcing extensive regulatory oversight over your private operations, and you can therefore operate under the Part 91 general aviation rules.

If you are not the aircraft operator but you are providing compensation to someone to operate air aircraft for your use (even if you own it, but turn over "operational control" to a separate entity) or you are accepting compensation for the use, then the operation has become a commercial carrier operation, and must be operated under Part 121 or Part 135. The key question becomes what is compensation?

The FAA originally defined compensation as transfer of anything of value, even quid pro quo, even if no profit motive was involved. Then, about 30 years ago as businesses started utilizing more and more private aircraft in the furthering of business, the FAA reevaluated the situation and created Subpart F to Part 91 regulations. The essence of this Subpart (para 91.501(b)) creates a set of narrow exemptions to the "compensation or hire" rules. The effect was to allow Part 91 operations and still allow for "cost allocation" to different related entities utilizing the aircraft. The key was that the aircraft was being operated "within the scope of and incidental

Members Forum Cont.

QUICK RESPONSE TO A CUSTOMER IN NEED!

A rare weather phenomenon occurred at an airport in the Southwest on this past July. The micro burst that originated from a passing weather front arrived without warning and devastated the south and north sides of the field. Winds up to 70 MPH destroyed hangars and airplanes across the field. In all, twelve aircraft were damaged including two PC-12s operated by a Western Aircraft customer.

Early the next morning, the customer called Lee Miles at Western Aircraft located in Boise, Idaho to inform him of the damage and asked for help. Lee immediately contacted Brian Rehberg, Western's Director of Maintenance, and a plan was put in place to fly to the customer, assess the damage and develop a plan to best help our customer. The team from Western left shortly after noon and arrived at the airfield a few hours later.

What they found was like a scene from a war zone. The customer's hangar had been severely damaged with part of the roof blown off and a section of the main hangar door blown in and resting on the wing of a PC-12.

Once the team from Western assessed the damage, they put a plan in motion to de-mate the wings and horizontal stabilizers, get the aircraft loaded on trucks and drive to Western's facility. Both aircraft arrived in Boise within three days. An in-depth assessment of all damage was made, all necessary parts were ordered and work began in earnest.

The aircraft that was parked closest to the hangar door sustained severe structural damage to the fuselage and the right wing. Because the right wing spar was so severely damaged the entire wing had to be replaced. The right fuselage had extensive damage to a window frame, ribs, stringers and skin and the entire center cabin skin on the right side had to be replaced. Also both windshields had to be replaced. The second aircraft had sustained damage to the right front side of the fuselage, the right wing, the propeller and the engine. The skin damage also included part of the firewall and its support structure. Damage to the wing included ribs, stringers and both top and bottom skins at the fuel filler. Since the wing is a "wet wing" it made for a more complicated repair. One propeller blade had to be replaced and the power section was sent out for evaluation.

Western's structural repair team along with the help of two technicians from Stans, removed the damaged components and initiated the repairs. Because of the knowledge and depth of experience of the structural team, both aircraft will be returned to service before the end of October. This is a fine example of the professional team who are dedicated to exceed the expectations of their customer.

Dan Odlum
Western Aircraft
Boise, ID



Photos courtesy of Dan Odlum

Member Forum Cont.

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to" the primary business of the company or operator, and that the business of the company or operator was not the transportation of people or property by air.

So, now we return to the original problem: The LLC created to own the aircraft to create a liability shield for the true owner/operator. The FAA has repeatedly stated that a company created for the sole purpose of owning and operating an aircraft is a company whose business is, by definition, transportation by air. Because such a company has the sole purpose of transportation by air, any compensation (in any form) is compensation for providing air transport services. And, therefore, operating the flights under Part 91 regulations is illegal. This can expose the owner to penalties of over \$11,000 per flight, as well as amplified tort liabilities (which, in theory, was what the original construction was trying to shelter you from!). The FAA could pursue a fraudulent operations case. A civil suit for conducting commercial operations in violation of the regulations could be looked upon as very bad behavior by a jury. Your insurance company would immediately abandon you for providing operations outside the scope of your insurance policy. It would be a very bad hair day, indeed...

So, be careful with how you own and operate your aircraft. Make sure you are not creating a commercial operation by mistake. And if you decide that you really need to have a truly separate entity that looks commercial, operate it under the proper regulations, or be ready to pay the piper!

Phil Rosenbaum
POPA Vice President
S/N #289
Austin, TX

This article was excerpted (with permission) from an article published in the April 2002 Texas BAR Journal. The original article was written by David T. Norton, a practicing counsel in the Dallas office of Akin, Gump, Strauss, Hauer & Feld, LLP. Beyond his law experience, David is an ATP with a DC10 type rating, and a CFII-MEI. For further information, he can be reached at 214-969-2800 or dnorton@akingump.com.

PC-12 LONG RANGE AERO-AMBULANCE

The mission called for a transfer from Santo Domingo, Dominican Republic located in the Caribbean basin, to the reknown Cleveland Clinic Heart Center in Ohio, off the shore of Lake Erie. On board was a 68- year old gentleman with coronary artery disease requiring open-heart surgery for multiple by-pass.

The usual Lifeguard aircraft, are Lear Jets, most of them models older than 20 years. The cabin space is very limited. They can cruise above 400 knots, however are limited in range and require longer runways to takeoff with full payload making a fuel stop mandatory at the East coast.

We chose our Pilatus PC-12 S/N 391; a very versatile aeroplane based in MDHE, the local executive airport in the city of Santo Domingo. S/N 391 is usually configured as an Executive 6 seater aircraft, but can be readily transformed to a Commuter aircraft with 8 leather seats, or to a Cargo aircraft with an STC that allows loading aft of the main passenger door, or to a Medical Evacuation aircraft with a Lifeport System that includes provisions for AC current, oxygen, suction, compressed air and all medical monitoring equipment necessary for the intensive care of a very ill patient. Lifeport manufactures a medical station specifically for the Pilatus; it is secured on the floor rails, main cabin, mid section and right side. The right middle seat has to be taken out.

We had a distance of about 1700 nm via airways and 1500 by direct GPS great circle navigation. The departure point was MDHE airfield with 4000 feet runway. We lifted with full fuel at max takeoff weight. It was 8:00AM with a temp of 24 Celsius. Souls on board included 2 pilots, 2 medical crew and 2 family members plus the patient.

We filed for FL280 and departed on a NW heading. After a 38-minute cruise climb, we were cleared by Miami Center to intersection NUCAR (150nm East of Cape Canaveral) and then on to Cleveland. The flight took 6:12 hours at an average Max Cruise True airspeed of 253 knots. We had the benefit of tailwinds most of the time providing ground speeds in the 280 knot range.

The performance a few hours while in cruise from our trend monitoring notes: FL280, Temp -26C, Weight 8,000#, Torque: 22.9, ITT 702, FF 326, IAS 156k, True 253k, Wind 24k tail, GS 277k.

Cabin pressure is a critical factor for oxygen saturation in the cardiac patient. The Pilatus can maintain seal level pressure close to 14,000 feet. From there on we have gradual rise in cabin pressure to around 9,000 feet dictated by the differential of 5.75 PSI on the aircraft system. Supplemental oxygen then becomes necessary for the patient to maintain oxygen saturation above 95%. This is achieved in most cases with 2-4 liters/min of oxygen.

The Pilatus cabin is big enough to accommodate all the medical hardware and more important, to allow ample space to work with

Members Forum Cont.

N33JA (#261) PART 135 OPERATION REPORT

We have been operating Part 135 for almost two years. The plane continues to perform well, with some minor problems showing up every once in a while. I continue to have a good relationship with the Denver FSDO. My Principal Operations Inspector has been a pleasure to deal with since we began Part 135 operations, and my check pilot whom I fly with every six months couldn't be better. I'm fortunate to work with such professionals.

There are a few things in our Approved Aircraft Inspection Program that I'd like to get changed. The big one would be getting the aircraft onto a 150-hour inspection cycle. The 100-hour inspections seem to come along far too frequently. A change to 150-hours would make scheduling the airplane in advance much more convenient and cost effective. We just finished an inspection and I already have flights booked which total more than 100 hours. I have to decide whether to accept all of the flights, or in this case do a 100-hour inspection just weeks before the annual is due.

Minor squawks with the airplane hasn't slowed us down. The most prominent problem was the erratic behavior of the encoding altimeter. After about an hour in the air, the transponder would decide to show ATC a different Flight Level than the one at which we were flying. I could be at FL240 and the transponder would suddenly indicate FL215, which would shortly show up on the controller's screen. It would sometimes correct itself after I did some quick explaining to the controller about what was happening. At times the controller would ask me to discontinue squawking Mode C. At other times, I'd be at low level being vectored for an approach and the encoder would indicate 1500' higher than we actually were. The most disconcerting problem with the encoder is it would decide on its own to change (increase or decrease) the descent rate that I had programmed. Several times while I was descending at 1000 fpm, the nose of the aircraft would lower abruptly on its own and head for the deck at an alarming rate.

A couple of weeks ago on the way home after a 100-hour inspection, I got a Pusher CAWS light in flight. I had tested the system successfully before takeoff, and tested it again on the ground at the home base (EGE) after landing. A few days later on the way to the NBAA in Orlando, I got the Pusher CAWS again. The CAWS light eventually went out on its own, later turned on again and continued this cycle for the remainder of the flight.

I'm in the process of getting a Canadian Foreign Air Operator Certificate to allow me to do charters in and out of Canada. I've had to get a couple of Ops Specs changes and additions from the Denver FSDO to meet the requirements of Transport Canada. I'm waiting on two more Ops Specs on the maintenance side and I'll go ahead and finish the application process.

Randy Stephens
S/N #261
Edwards, CO

DATALINK WEATHER FOR THE PC-12

One of the great qualities of the PC-12 is its ability to fly for hours upon hours. However, during the course of the long flight it is very likely to encounter several weather systems. As usual the weather can also change at a moments notice. Invariably, the pilot will need to make multiple deviations, possibly hold, or divert. For me, making frequent trips from Denver to the east coast is always a little frustrating. For within the 4-½ to 5-½ hours from when I depart, the radar picture has changed significantly. Datalink to the rescue!

Datalink or Flight Information Service (FIS) offers a real time or nearly so (minutes old) weather picture using Nexrad radar, Metars and TAFs to be displayed on a multifunction unit like the KMD 850 or the Garmin 430 and 530. Garmin calls their service Datalink. Honeywell also uses Datalink in their literature but to differentiate from them Garmin now uses the term FIS. For consistency/sanity I'll use Datalink to describe both in this article. These services allow the pilot the ability to look out hundreds of miles in advance to determine if the weather will be affecting them upon their arrival. I got the chance to use this system on the way down to Orlando for NBAA. Tropical Storm Eduardo was spinning off the coast of Florida producing bands of showers and thunderstorms in the area. Without the Datalink I would have been relegated to calling flight watch and have to interpolate the position of the storms, which invariably gets confusing, as well as, continue on until the radar picks up the returns usually about 80 miles from the system. Without Datalink I would have had to make drastic changes to my course, having to fly 40 or 50 miles out of my way to make it around the weather. Instead, Datalink allowed me to see the weather hours before I was to encounter it, see its trends, and make a slight correction hundreds of miles away. I am convinced it saved me 30 minutes of vectoring, while allowing me to see and pick the holes, where I wanted to go through. Once closer, the radar would assist the Nexrad so that I could make very precise deviations. I also was able to pick out alternates and read the Metars being reported. Allowing me greater flexibility to see the best alternate if I had to deviate. Datalink definitely provides the pilot the greatest weather situational awareness one can ask for.

The difference in the Honeywell versus Garmin service is minute. Honeywell's system is based upon uplink technology and Garmin upon downlink. Basically, you have to prompt the Garmin to get you the information when you want it. Honeywell is continuous. However you can set up intervals when you want the Garmin Datalink to provide information, say every 15 minutes or so. Monthly subscription is very reasonable...not much more than cable TV.

If you get the chance, go and get a demo of their capabilities. Or you can go online and read more of what they have to offer. It's worth the look and would possibly pay for itself in fuel savings.

Peter Duncan
Pilatus Flight Department
Broomfield, CO

Members Forum Cont.

PC-12 LONG RANGE AERO-AMBULANCE

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the patient. The gargantuan cargo door is matched to an accessory ramp that attaches to the Lifeport system, allowing the medical stretcher to slide on its Teflon surface effortlessly. The safety mechanism and ease of use are ingenious.

The environmental system is controlled by the pilots. From the main cabin, there should be a way to control the thermostat and fan especially for the flood center unit. During the climb, the cabin pressure and temp falls, which turns the humidity into ice around the inner fuselage walls. It did melt during the descent and the cabin dripped water from the top. I later found that if you do not let the cabin cool too much during the flight and if the air conditioner is turned on before the descent, the cabin air can hold again the water vapor and the cooling system has time to remove excess humidity. This may prevent a rapid ice melt down.

We arrived with more than 500 pounds of fuel, a stable patient and a not so tired family and medical crew. The medical mission was unprecedented; the first airplane to achieve such a mission. To many it could not be done. The local pilots now look at the new Pilatus on the field and take pride at the endurance and payload it can accomplish. We all wish it could fly faster, but until then, look for that silent rear engine called tail wind.

Dr. Douglas R. Bournigal
Cardiovascular and Aeronautical Medicine
S/N #391
Dominican Republic - Santa Domingo, Caribbean

ENTRY DOOR LIGHTING

As you know, your PC-12 comes equipped with a switch at the entry door which when depressed will provide illumination in the cockpit area through the overhead spot beams. Boarding during night hours, there is still a significant problem with the lack of lighting at the entry door. Indeed there is a light over the entry door, but unfortunately it is on the cabin lighting bus, as hard wired from the factory.

A simple, low cost improvement to this problem is to have your shop install a wire to the light above from the step switch below, which will allow ample light at the entry area.

Boarding at night becomes much easier with the entry stairway and doorway being illuminated through the existing light above, activated from the step switch mod.

Dick Foreman
POPA Board Member
S/N #114
Stamford, CT

Welcome New POPA Members

S/N #348 - N348PC	Virgil & Dorothy Kreder Port Washington, WI
S/N #376 - N376KC	Stan Crader & Bill Beard Marble Hill, MO
S/N #391 - N391EC	Dr. Douglas Bournigal Fernado Viyella Santa Domingo, Caribbean
S/N #452 - N452MD	Mike Riley & Buddy Bullock Columbia, MS
S/N #446 - N131JN	Joseph & Danita Noel Houston, TX
S/N #456 - N456PC	Bob Cummins Spring Hills, KS
S/N #463 - N463JT	Jim Thompson & Tom Travis Dallas, TX

Welcome New Associate Members

Ronald Cox
Vero Beach, FL

Daniel & Pansy Muller
Middlesex, NJ

***Thank you for your interest in POPA
and Welcome!***



2002 Queen of the Fleet
Jimmy & Patty Barrier
Bellevue, WA

Pilatus News

PILATUS INTRODUCES SERVICEWORXSM CUSTOMER SUPPORT PROGRAMS

Orlando, Florida, September 2002 - Pilatus Aircraft announces an expanding suite of maintenance support choices for PC-12 aircraft under the umbrella name of ServiceWorxSM. Options include PlaneTraxSM Electronic Maintenance & Flight Data Tracking and DiagnostixSM Propulsion Monitoring. Both programs are offered at no charge to customers of new PC-12 aircraft for the first year of ownership.

PlaneTraxSM forecasts maintenance requirements and documents actions taken as part of the aircraft's digital record. It allows operators to log their flight time and access aircraft information in real time via a standard web browser. Currently in final testing with Pilatus' Authorized Service Centers, PlaneTraxSM service will soon be available to current PC-12 customers.

The PlaneTraxSM software used by Pilatus was custom-developed by Component Control, Inc. of San Diego California. It is powered by state-of-the-art Quantum ControlTM software and fully integrated with database applications at Pilatus' operations in Colorado.

The DiagnostixSM Propulsion Monitoring service helps identify engine related issues, allowing for proactive and preventative maintenance actions. Utilizing the latest technology of engine data acquisition and retrieval, Pilatus is able to automate engine condition monitoring and provide feedback to customers on recommended measures. Offered in cooperation with The Trend Group - a Pratt & Whitney Canada Designated Analysis Center, DiagnostixSM is web-enabled and integrated into PlaneTraxSM.



Jon Eriksson Youngblut

PILATUS MAINTENANCE TRAINING COURSE

The following are the remaining dates for 2002. Please call Pilatus Business Aircraft Training Department at (303) 438-5985 for details and course registration.

10/21 - 10/31	- Standard Course
11/04 - 11/06	- Trouble-Shooting Course
11/26 - 12/06	- Standard Course
12/09 - 12/11	- Trouble-Shooting Course

New Simulator

SimCom Training Centers, in partnership with Pilatus Business Aircraft, is developing a second Pilatus PC-12 simulator. The new simulator will have actual aircraft parts in the interior and panel. It also will be equipped with a wrap-around visual motion cueing system, day/night/all-weather visuals and a range of flight profiles for the PC-12. The simulator will be installed at SimCom's facility in Scottsdale, Arizona, in fall 2003. The two companies are also working to upgrade the first simulator, located at SimCom's Orlando center.

Pilatus Product Support #1

Pilatus has just been ranked number one for product support in 2002. In the annual Pro Pilot magazine corporate aircraft product support survey, Pilatus achieved the outstanding overall rating of 8.46 points in the newly created category turbo props (in the jet category, Cessna was ranked number one with 7.83 points).

"We are extremely delighted that our customers voted Pilatus the number one product support program in business aviation in the recent survey conducted by Professional Pilot magazine," said Ken Schaelchlin, Manager of Customer Support for Pilatus. "However, we're by no means resting on our laurels. We have many additional programs planned to make ownership of a PC-12 far easier and less costly than any other aircraft on the market today."

We would like to thank all POPA members who took their time to fill out and return the survey cards to Pro Pilot!

News - Events - Announcements



PC-12 POPULAR WITH SUN AVIATION'S PRIVATE CHARTER CUSTOMERS

Sun Aviation in Vero Beach, Florida was one of the first Pilatus Service Centers in the USA and has been providing full FBO services to the aviation community since 1929. In January of this year, Sun's owner H.R. (Bump) Holman added a PC-12 to Sun's charter fleet. His decision was made after a study of the capabilities of the PC-12 and the needs of his charter customers.

Sun's maintenance facility was expanded, including the addition of technicians, equipment and technology to better serve maintenance and avionics customers including the PC-12 fleet. It was a good decision. Adding the PC-12 did not dilute the existing charter fleet...it complemented it. The space and baggage capability in the PC-12 can accommodate customers traveling with business equipment, families, friends and frequently pets. The popularity of the PC-12 has been so well accepted that Sun is considering adding a second PC-12 to the private charter group.

With eight years as a Pilatus service center, recent facilities expansion and a friendly, professional staff, Sun Aviation is ready to serve the Pilatus community.

Bill Joiner
Sun Aviation Service Administrator
Vero Beach, FL



EPPS AVIATION OPENS NEW MAINTENANCE FACILITY IN COLUMBUS, GA

Epps Aviation opened a new maintenance facility at Columbus, GA (CSG) airport on September 3, 2002. The focus in Columbus will be piston service and inspections on the full range of single engine and twin aircraft, and selected turbine services.

Epps Aviation has operated a maintenance, avionics and parts facility for over 36 years at the Dekalb Peachtree Airport (PDK). This is the first maintenance expansion in the history of Epps Aviation.

Inaugural NBAA M&O

Pilatus held the first annual Pilatus PC-12 Maintenance and Operations (M&O) seminar at the NBAA convention in September.

The M&O session covered a broad range of topics, focusing on maintenance issues that positively impact cost of operation and operational tips from the Pilatus Flight Department. In addition, Pilatus provided an overview of new maintenance and diagnostic programs available to operators.

Judging by the turnout, the seminar is an effective way to communicate with operators. Pilatus will continue to use the NBAA M&O forum in the future.

PilatusServiceworx.com

A new web page is now available as a portal for Pilatus' interactive services that includes, but is not limited to Planetrax and User Forum. The new URL is designed to streamline web access to popular applications used by owners/operators.

Pilatus expects the web site to grow in the near future and improve communications with operators. Visit: <http://www.pilatusserviceworx.com/>

[www. PilatusGear.com](http://www.PilatusGear.com)

Please visit the Pilatus
branded merchandise
website at
www.PilatusGear.com.
You'll find lots of items for
the Pilatus enthusiast!

Pilatus User Forum

The interactive user forum membership had grown to 70 members ranging from Owners, Operators, Pilots and Pilatus employees. Visit: <http://www.pilatusserviceworx.com/>

News - Events - Announcements



BANYAN ACQUIRES CAV-AIR AT FT. LAUDERDALE EXEC

Banyan Air Service president Don Campion announced that his FBO has acquired the assets and adjoining leasehold formerly owned by Cav-Air at Ft. Lauderdale Executive Airport (FXE). The new real estate adds 35 acres of prime centerfield area to Banyan's existing 50 acres. Assets included in the deal were Cav-Air's fixed-wing maintenance division, parts distribution business and line-service concession. Campion said, "The new centerfield location, larger ramp area and additional fuel storage will complement our business paving the way for a new terminal as the nerve center supporting one million square feet of hangars serving approximately 500 based aircraft." Banyan has been in business for 22 years.

PRATT & WHITNEY CANADA

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### **PILOT FAMILIARIZATION BOOKLETS**

Free copies of the PTGA-67B Pilot Customer Training Booklets are available from Pratt & Whitney. Please contact the POPA Home Office to receive a copy.

### **AOPA EXPO 2002 (October 24th-26th)**

AOPA Expo 2002, the annual convention and trade show sponsored by the Aircraft Owners and Pilots Association is set for October 24th-26th in Palm Springs, California.

Up-to-date information about AOPA Expo 2002 can be found on the web at [www.aopa.org/expo](http://www.aopa.org/expo).

### **[www.pilatusowners.com](http://www.pilatusowners.com)**

Please utilize the POPA website. It is a valuable tool to both owners and pilots. Should you have any problems logging onto the website, please contact Laura Mason at the POPA Home Office (520) 299-7485 or via e-mail at [POPAPC12@aol.com](mailto:POPAPC12@aol.com).



"Relentlessly Swiss" a factory-new PC-12, is the 1500th single-engine turboprop manufactured by Pilatus.

# Publishing Notes

## NON-PROFIT ORGANIZATION STATUS

The Pilatus Owners & Pilots Association has been granted exemption from income tax under Section 501(c)(7) of the United States 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. A first-year return was filed in May, 1998. Our next return was filed in 2001, as our income has exceeded the IRS-mandated \$25,000 per year. A copy of that return is available through the POPA Home Office. 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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## Newsletter Submission Deadlines

All Members and Associates are invited to submit articles on any subject. The deadlines for receiving articles are:

| <u>Issue</u> | <u>Period</u> | <u>Deadline</u> |
|--------------|---------------|-----------------|
| Spring       | Jan. - Mar.   | Mar. 1          |
| Summer       | Apr. - Jun.   | Jun. 1          |
| Fall         | Jul. - Sept.  | Sept. 1         |
| Winter       | Oct. - Dec.   | Dec. 1          |

**We reserve the right to edit, correct, or delete information to fit the POPA newsletter format.**

## DISCLAIMER

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Neither the Association, nor its directors, officers, nor the editor or publisher gives any official sanction to any of the articles, stories, letters or information contained herein.

THE PILOT IN COMMAND (P.I.C.) IS RESPONSIBLE FOR THE SAFE AND PROPER OPERATION OF HIS OR HER AIRCRAFT. IT IS THE RESPONSIBILITY OF THE P.I.C. TO OPERATE THAT AIRCRAFT IN COMPLIANCE WITH THAT AIRCRAFT'S PILOTS OPERATING HANDBOOK AND OTHER OFFICIAL MANUALS AND DIRECTIVES.