

Published by the Pilatus Owners  
& Pilots Association

Summer 2003 Issue

# POPA Update

Volume 6, No. 3

## From the President

Welcome to the New Year; it may sound odd for June, but in fact the POPA business year begins July 1, so Happy New Year! This "New Year" for POPA brings many changes and many opportunities.

Among the changes is the annual "changing of the guard" on the Board of Directors. Four members of the board reached the limit of their tenure at this year's convention and have resigned/retired from the board. It is with great sense of remorse that we have accepted the resignations of Jim Allen, George Antoniadis, Dick Foreman, and Bob Wilson. These gentlemen were among the founding fathers of POPA, and certainly were the backbone that enabled this fledgling organization to stand up and get moving forward. Their dedication, insight, and humor will be dearly missed at our board meetings. Fortunately, none of them are giving up their PC-12s, so we will still have them around to call on for sagely wisdom, assistance, and rapier like humor when required. In all seriousness, we all owe them a huge amount of gratitude for getting us to this point in the life of the organization.

### 2003-2004 POPA Board of Directors

Phil Rosenbaum - President  
Lee Morse - Vice President  
Roger Block - Immediate Past President  
Ty Carter - Board Member  
Dick Wikert - Board Member

I encourage all of you to feel free to contact any or all of us with any issue you feel important. We are here to serve the membership. It is easiest for us to accomplish the goal of serving you if we can hear from you what service you want us to provide. Without that input, we fall prey to becoming a self-serving entity forced to "guess" what the membership needs or wants.

As the organization continues to grow, I see an interesting, yet predictable, metamorphosis that presents challenging opportunities for POPA. We are developing a significant population of owners dealing with the more sophisticated and challenging issues of maturing aircraft. At the same time, we are seeing an increasing number of "newbies" added each year, who need introduction to this class of aircraft ownership and operation issues.



I believe this bimodal population distribution creates valuable roles for POPA in serving the members. To that end, I am challenging the Board of Directors to develop plans in the following areas:

- On-going seminars addressing issues critical to rapid "ramp up" of the knowledge of the PC-12 and its optimum operation.
- Better on-going communications with Pilatus (Stans) and PilBal (Denver) to develop more owner/user perspective in the decision-making that affects our planes and their market value.
- A working plan with the insurance industry that will assure the best most rational treatment of PC-12 owner/operators.
- Investigation of the opportunities to ally with other organizations similar to ours for the increased benefit of all.
- Increasing participation in POPA; both number of members and activity level of members.
- Increasing the quality of communication with the membership.
- Assuring the membership is getting a good return for the investment they make in POPA.

The above represent items on my personal agenda for POPA's board. I am sure each of the other board members has their favorite issue or two, and I believe our next board meeting (probably already having occurred as you read this newsletter) will be a fun one!!

I will pledge the following to our membership. In every newsletter, and via the website, we will keep you informed as to the doings of the Board. I will encourage you to reciprocate by keeping us informed as to your satisfaction with our choice of issues, and our accomplishment against those issues.

Aviation is entering its 100th year. POPA its 8th. The industry has a large head start on us; but we intend to paddle hard, and keep up the pace. So grab your oar, get on board, and let's move forward!

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

# Press Releases



Front row: Buzz Rabatin. Standing left to right - Larry Bardon, Jed Johnson, Dave Domenico, Carol Germanotta

February 6, 2003  
Denver, CO

## **"AVIATION SALES - NO. 1 IN WORLDWIDE SALES OF NEW PILATUS PC-12s IN 2002"**

On February 6, 2003 at the Annual Pilatus Sales Meeting Banquet, Mr. Thomas Bosshard, President of Pilatus Business Aircraft, Ltd. bestowed the honor of their first place award to Aviation Sales, Inc. This achievement was symbolized with the presentation of a beautiful two foot bronze statue of Captain Elrey B. Jeppesen. Pilatus Aircraft Ltd., of Stans, Switzerland appointed Aviation Sales, Inc. as the first Pilatus PC-12 Dealer. Aviation Sales was the first dealer to sell PC-12s in the Northern Hemisphere with serial number 5. Since the beginning of its association with the PC-12 program, ASI has consistently achieved high sales records each year.

May 13, 2003  
Atlanta, GA

## **"EPPS AVIATION RECEIVES SECOND CONSECUTIVE DIAMOND AWARD"**

Epps Aviation is pleased to announce that it has received its second consecutive Aviation Maintenance Technician (AMT) Diamond Award from the Federal Aviation Administration (FAA). Epps Aviations newly appointed Avionics Manager, Mike LaConto received an independent Diamond Award.

The FAA Diamond Award is the agency's highest honor presented for a company's commitment to training, and recognizes training levels for aircraft maintenance professionals throughout the aviation industry.



## **NEWS - FOR IMMEDIATE RELEASE**

### **PILATUS AIRCRAFT AND HONEYWELL ANNOUNCE JOINT RVSM CERTIFICATION PROGRAM FOR THE PC-12**

Pilatus Aircraft and Honeywell announced the launch of their joint development effort to attain RVSM certification for the Pilatus PC-12 single engine turboprop. The program, which includes both factory new PC-12s and a retrofit package for existing PC-12 business aircraft, will enable them to fly at fuel-efficient higher altitudes under the new Reduced Vertical Separation Minimums (RVSM) rules. The STC program begins in April 2003 with equipment available for PC-12 aircraft in the fourth quarter of 2003.

The Pilatus PC-12 RVSM package entails replacing the existing Pilot and Co-Pilot altimeters with two Honeywell AM-250 altimeter/air data computers. The AM-250 altimeters will be integrated with the Bendix/King KFC 325 Flight Control and Altitude Preselect System, programmed for Static Source Error Correction (SSEC) and provide full air data functionality for GPS, FMS, EGPWS, and Traffic Systems. Each AM-250 combines an altimeter and air data computer in a single case to save space and wiring. Honeywell will obtain group RVSM certification, which will save individual aircraft owners five to 10 hours of test flights required for a single aircraft certification.

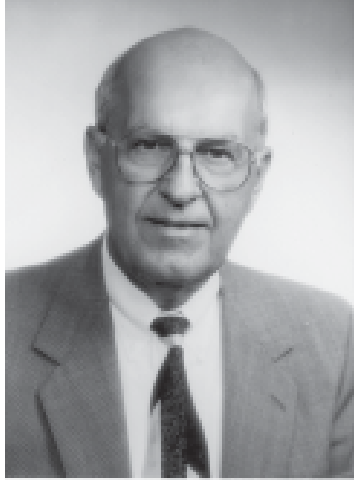
RVSM is part of the evolving new worldwide airspace structure designed to accommodate increased traffic while improving safety. With RVSM, air traffic controllers will layer airplanes every 1,000 feet in altitude inside RVSM Airspace rather than every 2,000 feet as at present. Airplanes flying at these altitudes must be capable of measuring their altitude with greater precision. RVSM rules are in effect in Europe and will be in effect for the contiguous United States, Alaska and U.S.-controlled airspace in the Gulf of Mexico by December 2004. Costs for the factory installed and retrofit RVSM kits have not been finalized at this time, but will be available in the fourth quarter of 2003.

*This release contains forward-looking statements as defined in Section 21E of the Securities Exchange Act of 1934, including statements about future business operations, financial performance and market conditions. Such forward-looking statements involve risks and uncertainties inherent in business forecasts as further described in our filings under the Securities Exchange Act.*

# Member Forum Cont.

## NEW BOARD MEMBER RICHARD WIKERT

Richard O. "Dick" Wikert of Fremont, NE, is a 1961 graduate of Morningside College in Sioux City, Iowa. Dick is semi-retired, but still has many business interests in the United States and Brazil. Currently his business interests include Agriculture, Banking, and Leasing. Dick serves as Chairman of the Board for American National Bank of Fremont, the President and Chairman for Nebraska-Brazil, a farming operation in the Northeast of Brazil. He also serves as a member of the Board of Directors of Liberty Banshares, Inc., West Des Moines, IA, and the Mid-America Council of the Boy Scouts of America, Morningside College of Sioux City, IA, the Greater Fremont Development Council, and the Fremont Area Medical Center Foundation. As time allows, Dick and his wife, Marty, travel to Canada and Colorado, in the warmer months, and Arizona in the winter months. The Wikerts have been PC-12 owners since January 1998, and currently own serial #404. Dick started his flying career in the Air Force in the late 1950s and he has flown extensively since then while pursuing business endeavors.



## NEW BOARD MEMBER TY CARTER

Mr. Carter founded The Prospect Group, Inc. in 1994 as a merger and acquisition consulting firm, focusing on emerging business and industries providing clients with superior intermediary services. The firm has grown to be a respected full service investment banking firm focusing on mergers and acquisitions, debt restructuring and private equity to middle market companies. Mr. Carter earned an executive MBA for the University Of Kansas. Prior to founding The Prospect Group, Inc. Mr. Carter was the Managing Director of Right Management Consultants heartland region.

Mr. Carter serves as the legal liaison and acting secretary for the Board of S.T. Carter, Inc. Carter is a member of the Board of Directors for Angel Flight Central, a non-profit organization which provides charitable medical air transportation to those in need. Ty Carter received the award for Pilot of the Year in 1997. As a licensed pilot, Ty provides voluntary air transportation for Angel Flight Central and three other non-profit agencies.

He has also been active in Junior Achievement of Mid-America. He has participated in teaching business principles and economics to students at several local schools.

## PEACE OF MIND BUDGETING FOR YOUR PT6A-67A B ENGINE MAINTENANCE

Pratt & Whitney Canada's ESP® Program is a pay-by-the-hour engine maintenance budget program with various plan options to provide operators of the PT6A-67B powered PC-12 with something we all need a little more of ... Peace of Mind. We have listened to operators' experience with various engine service plans, and applied that experience to develop for you what we believe is the most competitive, comprehensive engine service plans available today.

ESP® offers four plans depending on the level of coverage desired, each with its corresponding hourly rate. On a monthly basis, operators enrolled in the ESP® program submit to P&WC a monthly report of their flying hours and calculate their monthly payment due. In return, P&WC provides coverage of specified engine maintenance expenses. ESP® provides the operator with a smooth and steady payment schedule which is intended to eliminate spikes in engine maintenance expenses (e.g. HSI/overhaul). With ESP®, we have virtually eliminated the risk of high cost surprises, and engine maintenance expenses become much more predictable.

Other advantages include transferability on resale to subsequent operators, and renewability at the end of each five (5) year contract term. The transferability of your ESP® plan at the time of re-sale should help to enhance the re-sale value of your aircraft. In fact, if you are the first enrolled operator, and you sell to an operator who does not wish to continue in the plan, all is not lost! ESP® provides the first enrolled operator the option not to transfer the plan and to receive in return either a cash reimbursement or an account credit with P&WC. The cash reimbursement is based on 60% of any remaining positive reserves, whereas the account credit (non-refundable) is based on 85% of the positive reserves. (Note: Certain conditions apply. Contact ESP® Admin for more information).

Here is a summary of events that are covered in all ESP® plans:

- Scheduled hot section inspection/refurbishment
- Scheduled engine overhaul/refurbishment
- Basic unscheduled engine maintenance.
- Basic unscheduled LRU/accessory maintenance
- Required product support improvements at engine shop visit.

ESP® offers several plans to suit your individual requirements. Gold Plan offers the most comprehensive coverage, and includes:

- All required engine parts for the aforementioned engine events, including Life Limited Parts (disks, rotors, impellers, etc.)
- Engine shop labor
- Rental engines at ESP® rates
- Troubleshooting labor allowance
- Removal and installation labour allowance for engines and line replaceable units/accessories
- Freight for engine and engine parts

# Member Forum Cont.

## **Approach Briefing**

In the previous issue of the POPA Update, I mentioned several ways my organization in Africa took care of recurrent training in our turbine twins without the benefit of a simulator. I also talked a little about the procedures we used to keep up-to-speed with normal and emergency procedures. In this issue I'd like to review what we used as a standard for instrument approach briefings.

Whether flying alone or with another crewmember, pilots need to carefully consider the characteristics of any instrument approach. Conducting a briefing for every approach using a standard format each time helps a pilot to become more fully aware of what he is about to perform and the specific procedures to follow. It helps to prevent missing something important by doing it the same way every time.

Now I fly single crew almost all the time, but I still talk to myself as if I have another crewmember on board participating in the process. It seems to make things more clear to me if I hear myself talking. In addition, if I ever do go back to a two-crew situation, I won't need to change anything that might cause confusion.

### ***Weather***

How will you get it? ATIS, AWOS, FSS? If you've already received the current weather, what is it? How will it affect your choice of approach, and the likelihood of a missed approach?

### ***Radios***

How are you planning to set up your avionics so they will be the most useful and least confusing? Proceed through all the aids in a logical sequence. In each case consider the frequency or setting and, if able, and the time is right, go ahead and set or tune. Make note of the items that may need to be changed during the approach or during a missed approach.

### ***Altitudes***

Consider the MSA, the crossing altitude at the FAF, the DH or MDA, and the airport elevation.

### ***Times***

What is the time to the MAP and where does the timing start? Has an EFC time been given?

### ***Headings***

STARs that may be expected, expected vectors, procedure turn, inbound course to the FAF, outbound course from the FAF.

### ***Missed Approach***

What is the procedure? In what direction should the initial climb be made? In the event of a missed approach, then what? Try another approach? Go to an alternate?

## **Remarks**

Are there any special notes or cautions on the approach plate? How will they affect you? For example, do the minimums change if the altimeter setting for a different airport is used? Can the approach be used at night? Is circling not available in a specific quadrant of the airport?

## **Airport**

Look at the airport diagram. Which runway would you prefer if it isn't already assigned? Is it long enough? Runway lighting How do you turn it on? Where are you going to park.

Keep in mind that not all of this briefing format may apply in every case, and probably won't. Not every section covers all you might want to know, but will give you an idea of what to start thinking about. I look at all of it and will consider each step, even if I immediately discard it if it doesn't apply on that particular day.

There are certainly many other ways to conduct a briefing, and I've only offered a suggestion for you to consider. If you have a good procedure that you use now, stick with it if it works for you.

***Randy Stephens***

***S/N #261***

***Vail, CO***



***2003 Queen Of The Fleet!***

# Members Forum Cont.

## THE TECH CORNER

It was our best-attended conference! POPA 2003 will be tough to beat! Now that I am no longer your President, I can say it has been a tough two-year period with 9-11 and several PC-12 accidents. We have a different economy and we can't take our flying for granted. I am happy to have served as your President. I feel we have made some progress, but there is more that needs to be done. Active participation from you can, and will make the difference. Ask questions, share your thoughts and encourage other PC-12 owners to join and participate in POPA. The more diversity we have among our members the more input and views we will have regarding the direction and the future of POPA.

At this convention, we learned about replacement parts, and how important it is to tell the service center whether you want new or reconditioned parts and tell them whether you have an upper limit on the total time on those reconditioned parts.

All in all, it was an interesting Pilatus meeting. Pilatus told us of their work towards having suppliers with better Mean Time Before Failure (MTBF). We have a new Temperature Control Valve (CTV), the MTBF will hopefully be better but the price will not. The rest of the conference was great, but since this is the Tech Corner, I will stick to technical issues. RVSM is still being worked on.

One issue I would like to see cleared up is in our POH, the "tyre" also known as tire pressure, is listed as 55 lbs. The plane's placard reads 60 lbs. Was this overlooked when the PC-12 became the PC-12/45? We had one plane land at the convention with a nose wheel strut problem. I have also had a left main strut problem. How many others in the fleet have had strut problems? If you have had problems, to what level do you inflate your tires? Maybe there is a link? Did the problem occur after a hard landing? This is the type of information we can share as operators to help determine the best way to operate and prevent costly maintenance.

Speaking of sharing information: Having flap problems? Try stopping and remain stopped while retracting your flaps. This may help prevent future problems. SimCom trains us to put flaps at 15° before taxi. Since our max G forces are less with flaps out, could this be the cause of concern for bumpy taxiways? This may go back to the tire pressure question, since the harder the tire, the more bumps are transferred to the airframe.

Are your landing and taxi lights burning out? Try turning them off before your retract the gear. I question if bumpy taxiways and harder tires affects lamp life too!

CAWS panel lights burning out? I cruise at altitude with the panel dimmed when in VMC, calm conditions. The bulbs will last much longer if dimmed. If a problem occurs, the audible sound and the warning lights will direct you to the CAWS panel. If you have too much ambient light to see it, you can take it off the dim position. I find I can still see the lit CAWS lights so long as the sun is not

directly on them. During the other phases of flight, they are on bright for quick, no guesswork response and when in turbulence (fuel pumps on), IMC, or whenever prop, boots or initial separator is open, they are set to bright.

We also learned at this convention about the AOA heaters. They should not be turned on and left on for long periods before flight. If they are, the thermostats will limit the temperature by interrupting the high heater current, which causes arcing at the contacts. This arcing degrades the contacts and over time, may lead to a failure. Test them and turn them off until the roll out or flight.

On the trip to Hilton Head, six hours and 45 minutes non-stop from Carson City, we flew by many convective clouds with spherics received on the storm scope. I was surprised to see those all pop up on the MFD as soon as I turned on the storm scope. This tells me the WX-1000E is "on" whenever the avionics switches are "on". I always thought I was saving energy by not turning on the storm scope, just like not turning on the radar when it was not needed. While this is true for the radar, I don't think I am saving anything by not having the storm scope information displayed. If I am wrong on this, please, people in the know, let me know!

On the trip home against winds at 280, I nudged the cabin pressure to the top of the green arc rather than the altitude plus 500 feet. This gives just a little less, about 300 feet on my plane, cabin altitude. The extra pressurization helped on the long, 8 plus hour (with fuel stop at Wilson Air) flight home. Of course I live and play tennis at 5,000 feet. I can't imagine a flatlander doing this long a flight without regular puffs on the O2 mask, just to stay alert.

A few years back we had Archie Trammell give a POPA presentation on how to best use your weather radar. A year or so after that, POPA convention attendees viewed a United training tape on weather radar. Honeywell gave out a working aid type slide rule to visually show the limits of tilt for ground returns and cloud tops. If there is an interest in having this again, please show it by e-mail or comments on the POPA website. I will be happy to put together a video showing how to best use our weather radar.

The Series 10 aircraft has their share of fixes. The overhead switches and the EIS panel, just to name a few of the problems that we don't (still) have on the earlier series. I do not own a Series 10 aircraft and I sometimes find it hard to relate to the problems of this series. I feel it is a disservice, to the POPA members who own a Series 10, in that I am not addressing your issues in the Tech Corner. I would like to see a Series 10 owner step forward to write a separate Tech Corner for their aircraft. Any takers?

**Roger Block**  
**POPA Board Member**  
**S/N #185**  
**Reno, NV**

# Members Forum Cont.

## RAAS REPORT

It was my pleasure to attend the POPA Convention in Hilton Head. What a beautiful spot! Thanks to Roger Block, Phil Rosenbaum, Lee Morse, Laura Mason, and the POPA Board for all their hard work. Thanks as well to all our speakers, and the vendors who were there to share their knowledge and wares with us.

I was gone on the first day, however, I understand you were introduced to the Honeywell Runway Awareness and Advisory System (RAAS). This system provides supplemental information to the flight crew regarding aircraft position relative to runways during surface operations, and on final approach.

RAAS was the subject of a presentation at the 48th Corporate Aviation Safety Seminar (CASS), held in April 22-24 in Hollywood, Florida. The CASS is a joint effort of the Flight Safety Foundation (see: <http://www.flightsafety.org/home.html>) and the NBAA. Except as noted, statistics cited herein are from the Proceedings of the 48th Annual Corporate Aviation Safety Seminar (CASS).

For those of you who missed the POPA Convention, or those who seek additional information, I will attempt to shed some light on the history of runway incursions, and the abilities of the RAAS. I am very excited about this system, and the potential it brings to the cockpit in trapping human errors, and diminishing incursions. Runway Incursions have been a "HOT" item with the FAA for a number of years now. Many of you have been to Safety Seminars that dealt with this type of incident. The FAA's concern is well founded. As can be seen from the table below, Runway Incursions have been on the rise since 1988. As of June 10th, 2003, there had been 221 such events. Chart source FAA.

Runway Incursion Totals by Category, 1988-2002				
Year	OE	PD	VPD	Total
1988	89	68	30	187
1989	80	83	60	223
1990	100	119	62	281
1991	74	102	66	242
1992	90	92	37	219
1993	74	84	28	186
1994	83	66	51	200
1995	65	125	50	240
1996	69	146	60	275
1997	87	132	73	292
1998	90	185	50	325
1999	78	182	61	321
2000	87	259	85	431
2001	88	214	81	383
2002	70	196	70	336

SOURCE: RUNWAY SAFETY PROGRAM OFFICE

**Key:**

OE = Operational Error  
 PD = Pilot Deviation  
 VPD = Vehicle / Pedestrian

Why do Runway Incursions occur? In preparation for developing the RAAS, Honeywell studied one hundred and fifty runway incursions. The results of the study caused them to make the following observation: *"Runway incursions arise as a consequence of a multitude of causal factors. Safety data clearly indicate that lack of spatial situational awareness during surface operations is a major contributory factor."* The Honeywell study made other observations.

Runway Incursion Data indicate that:

- 44% of incursions involved poor crew position awareness;
- 12% of all take-offs were from the incorrect runway, and;
- 7% of take-offs and landings were from/onto a taxiway.

Positional awareness (a lack of) is often compounded by other factors such as:

- Poor CRM resulting in inadequate reference to critical data such as heading, raw ILS deviations, and airport signage (27%);
- Low visibility (23%);
- Low light (34%);
- Snow/ice covering surface markings (9%);
- Unfamiliar airport (13%);
- Confusing/missing airport markings (8%) and;
- Confusing intersections (11%).

Many will note that the above percentages total more than 100%. This is because these factors are often found in combination. As an example, low visibility, and low light conditions often exist simultaneously. When any, or multiples of the other four items are thrown into the mix, is it any wonder that we err? It appears that this "lack of spatial situational awareness during surface operations" is what Honeywell sought to address. They also sought to increase situational awareness aloft (on final).

Previous to this work by Honeywell, emphasis on preventing Runway Incursions has been in the area of improved procedures and training for ATC and pilots; improved lighting, signage, and markings; design of more intuitive airport charts; and developments in ATC technology such as Airport Surface Detection Equipment (ASDE).

Presently, the Mitre Corporation, working under contract with the FAA, is conducting an evaluation of Enhanced Surface Markings at the Providence, Rhode Island airport. ([http://www.mitrecaasd.org/pvdmarkings/Cockpit\\_View.html](http://www.mitrecaasd.org/pvdmarkings/Cockpit_View.html)).

### What is RAAS, and what does it do?

- The system is an aural advisory function housed within the Enhanced Ground Proximity Warning System (EGPWS) and uses GPS inputs.
- Its development addresses one of the NTSB's "Most Wanted" safety improvements (a ten-year item).

*(Continued on Page 7)*

# Members Forum Cont.

(Continued From Page 6)

- The NTSB and the Commercial Aviation Safety Team (CAST) have both advocated for advanced flight deck runway incursion prevention systems.
- The system is a "software upgrade" and requires no new screens, buttons, or aircraft wiring changes.
- Builds on installed base of 15,000 plus EGPWS units.
- An aural advisory system that allows pilots to remain head-up.
- Practical and inexpensive. No additional hardware required.
- Addresses a significant part of the runway incursion problem.
- Available in a very short time frame - 2003.
- System has undergone extensive flight tests with over 100 pilots from worldwide corporate, regional airlines, major carriers and aircraft manufacturers.
- Pilot input and extensive human factors considerations have driven system design.
- Widespread industry support for RAAS concept.

RAAS addresses 7 common situations leading to incursion events:

1. Lack of positional awareness relative to a proximate runway edge.
2. Line up and/or landing on the incorrect runway.
3. Insufficient Runway Length for Take-off/Incorrect Runway.  
- 24% of runway incursion take-offs involved intersection departures.  
- Wrong direction Take-offs
4. Approaching Short Runway - In the air.
5. Extended Holding On Runway.
6. Taxiway Take-off
7. Runway Distance Remaining

## RAAS Advisories - Normal

- Runway Identification on ground - "On Runway Four Left"
- Approaching Runway in air - "Approaching Two-Four Left" approximately 3 miles from the threshold on final.
- Approaching Runway on ground - Approaching Runway on ground "Approaching One-One" as you approach the hold-short line enhancing your situational awareness.

## RAAS Advisories - Non-Normal

- Insufficient Runway Length for Take-off/Incorrect Runway - "On Runway two-seven, two thousand remaining". The advisory is to the nearest 100 feet. The system has performance information for your particular aircraft.
- Approaching Short Runway - In the air - "Approaching Two Seven three thousand remaining".
- Extended Holding on Runway - an advisory after ninety seconds in position to remind crew of extended holding - "Holding three-four - Holding Three four"

- On Taxiway- armed at forty knots, announces "On Taxiway- On Taxiway". It should be noted that some airports use taxiways as runways seasonally, or for special events. Lakeland, Florida during the "Sun and Fun Fly-In" for example. This advisory is given only once at 40 knots ground speed.
- Runway Distance Remaining - counts down the runway remaining. Does so in on the last half of the runway in 1000 ft increments when groundspeed is higher than 40 kts
- ("4000...3000...2000... 1000...500"). These distance remaining calls are also given during a rejected take-off.

Following actual flight testing of the system, pilots stated:

- When asked to "Rate the Degree to which Normal Annunciations Aided Situational Awareness" (a subjective rating) 80% said High, or Very High.
- When asked to "Rate the Degree to Which Non-normal Annunciations Aided Situational Awareness" the High or Very High ratings totaled ~ 86%.
- When asked to "Rate the Degree of Mental Workload Imposed by RAAS" 80% responded None, while >10% stated that RAAS reduced Mental Workload.

## Ratings of the Acceptability of RAAS Advisories

	<i>Beneficial</i>	<i>Distracting</i>
	%	%
On runway	100	0
Approaching runway - on ground	100	0
Approaching runway - in air	93	7
Insufficient runway length/incorrect runway	98	2
Approaching short runway - in air	94	6
Extended holding on runway	86	14
On taxiway - on taxiway	100	0

Pending availability of RAAS, what can you do to reduce the likelihood of a Runway Incursion event? The author's opinion is to be ALERT for any of the following, especially in combination:

- Airports with parallel runway operations
- Airports with simultaneous operations from/to intersecting runways
- Intersection departures (especially during low light/low visibility)
- No ATC Facility (Non-towered airports)
- ATC employees speaking English as a second language
- ATC using two languages (Quebec for instance)
- Low visibility
- Low light
- Snow/Ice covering surface markings
- Unfamiliar airport
- Confusing/missing airport markings
- Confusing intersections

# Members Forum Cont.

(Continued From Page 7)

I do not know Mr. Don Bateman of Honeywell. From what I am told, he sounds like my kind of Safety Advocate. Mr. Bateman is the "Father" of both the Ground Proximity Warning System (GPWS), and the Enhanced Ground Proximity Warning System (EGPWS). It was he who tasked Honeywell's safety engineers with developing a cockpit-based system that would enhance the situational awareness of pilots, and decrease Runway Incursions.

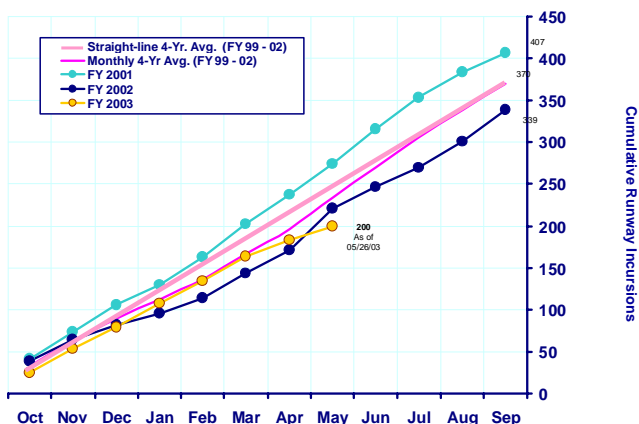
Thank you Mr. Bateman, Kevin Conner, Dr. Ratan Khatwa, Captain Markus Johnson, John Poe and all the other Honeywell employees who worked on developing the RAAS. As it has with GPWS, and EGPWS, your work will save lives.

Additional thanks to Dr. Ratan Khatwa for reviewing much of what is offered within this article. Dr. Khatwa is the author of the paper entitled "Flight Test Evaluation of the Runway Awareness and Advisory System (RAAS): A Human Factors Assessment of Pilot Acceptability". He presented the paper at the 48th Annual Corporate Aviation Safety Seminar in Hollywood, Florida on April 24th, 2003.

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## Runway Incursion Comparison

FY 2001 / FY 2002 / FY 2003



DATA ARE PRELIMINARY AND SUBJECT TO CHANGE

(Continued From Page 3)

Over the years, operators of the PC-12 have shown a preference for enrollment in the ESP® Gold Lite plan. This plan includes everything that the Gold plan offers except coverage for the life cycle limited rotating parts (e.g. disks, impeller).

ESP PLAN Coverage <sup>(3)</sup>	Silver Lite	Silver	Gold Lite	Gold
Overhaul/refurbishment, scheduled	X	X	X	X
Engine repair, basic unscheduled (BUER)	X	X	X	X
Hot Section Inspection, scheduled or required	X	X	X	X
Service Bulletins, required <sup>(2)</sup>	X	X	X	X
Engine shop labour	X	X	X	X
Troubleshooting labour <sup>(1)</sup> (Silver up to 10 hours; Gold plans, as required)	X	X	X	X
Engine parts, excluding Life Limited Parts <sup>(2)</sup>	X	X	X	X
Engine accessories, P&WC supplied (overhaul, BUER)	X	X	X	X
Rental/lease engine coverage (overhaul, BUER)	X	X	X	X
Engine Condition Trend Monitoring (ECTM®)	X	X	X	X
Life Limited Parts <sup>(2)</sup> (eg. disks, impeller, etc.)		X		X
Line removal/installation/access labour, engine and accessories <sup>(1)</sup>			X	X
Freight for engine, engine parts, accessories (surface, unless AOG, excluding insurance)			X	X
Mobile Repair Team for unscheduled AOG <sup>(2)</sup>			X	X

1) Allocation in labour hours per engine event as described in the ESP® agreement.

2) Subject to provisions described in the ESP® agreement.

3) Actual coverage may vary depending on the workscope described in the ESP® agreement.

Since ESP® is transferable on resale to subsequent owners or operators, ESP® becomes a portable asset to potentially enhance your aircraft resale value, and improves the potential for buyer consideration. With ESP® the operator is buying what we call VFR/IFR (Value For Reliability/ Investment For Restoration). Future purchasers will be assured that engine maintenance has been performed in accordance with P&WC's requirements, and that the engine has been backed and supported by the engine's manufacturer. In addition, the ESP® card introduces you to the worldwide P&WC Service Centres as a valued customer deserving special attention. They will know that you are backed by the OEM, and the finest engine maintenance service program in the industry.

For further information about ESP®, or to enroll, here is how to contact us. We will look forward to hearing from you.

Dan Dixon  
 Manager, ESP® Sales and Marketing  
 USA and Canada: 1-888-4 PWC ESP (1-888-479-2377)  
 International: +1 (450) 468-3771 or +1 (450) 647-8000  
 Website: www.pwc.ca

# Announcements - Events

## NEW MEMBER WELCOME!

*On behalf of the entire POPA Board and general membership, we extend our sincere Welcome!*

S/N #172 Fred & Ruth Locker  
N172PB Muleshoe, TX

S/N #299 Jeffrey Jacober  
N770G Providence, RI

S/N #401 Ron & Charlotte Boehm  
N491PD Donovan Thomas  
Shady Grove, OR

S/N #456 Bob Cummins  
N456PC Spring Hill, KS

S/N #459 Alan Ross  
N459PC Tulsa, OK

S/N #462 Mike Dennis  
N462PC Scappoose, OR

S/N #465 Henry Fischer  
N465PC Sebastian, FL

S/N #473 Jams Cozzetto  
N944BT Pat Warren  
Vancouver, WA

S/N #478 David & Victoria Wilson  
N478PC Lionel Fram  
West Hartford, CT

*Visit the "Members Only" Section  
of our website at  
[www.pilatusowners.com](http://www.pilatusowners.com).*

### Please Note!

*All Members and Associate Members are invited to submit articles on any subject for the POPA Update. The deadline for the Fall Issue is September 1st, 2003.*

*Submit your articles to the POPA home office at [POPAPC12@aol.com](mailto:POPAPC12@aol.com).*

## Annual Membership Dues!

*POPA dues run from July 1st to June 30th. Please complete the renewal form enclosed with this newsletter and return with your payment.*

*Thank you very much for your interest in, and support of POPA!*

## SimCom News!

The Series 10 Simulator is on schedule to be installed at the Scottsdale facility in October 2003. Classes to begin November 2003.

The new simulator will have all the latest upgrades in software (and sound) to further enhance the training experience.

## **Celebrating 100 Years of Powered Flight!**

**Oshkosh 2003**

July 29th - August 4th

For more information contact:

-<http://www.airventure.org>  
-or call (920) 426-4800

## **Reno Air Races**

**40th National Air Races and Air Show  
Stead Field**

September 11-14th

For more information contract:

-<http://www.airrace.org>  
-or call (775) 972-6663

## **NBAA 56th Annual Convention Celebrates 100 Years of Flight!**

October 7, 8, 9, 2003

Orlando, FL

Web: [www.nbaa.org](http://www.nbaa.org)

E-Mail: [info@nbaa.org](mailto:info@nbaa.org)

Phone: (202) 783-9000

# 2003 Convention Photos!

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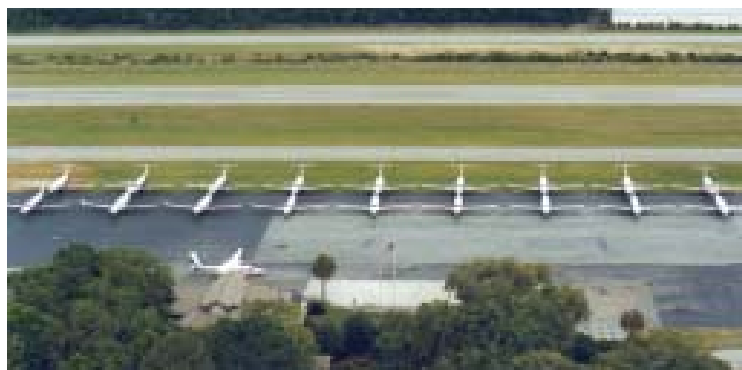
**2003 Queen of the Fleet!**  
*Photo Courtesy of Jim Hart*



**2003 Queen of the Fleet Winners!**  
*Lisa & Jim Hart, Jim Cozzetto & Pat Warren*



*Photo Courtesy of ProPhoto*



*Photo Courtesy of ProPhoto*



*Photo by Ben Cage* 10



*Photo by Ben Cage*

# 2003 Convention Wrap-Up!



Photo Courtesy of ProPhoto

## **Fleet Photos!**

Fleet Convention photos are available at [www.scottmoodyphotography.com](http://www.scottmoodyphotography.com). Go to proofs and type in the password "air". A 5x7 is \$10; 8x10 is \$20 and 11x14 is \$50, plus shipping and handling.



Photo by Ben Cage

## **INTERNET-BASED WEATHER FORECASTING**

Karsten Shein's 2003 POPA presentation is available at <https://enso.geo.msu.edu/popa2003/>. The actual PowerPoint file will be named popa2003.ppt. in the above directory.



## **SIMCOM RECURRENCE CERTIFICATES!**

The lucky bidders of the Recurrency Training Certificates from PanAm/SimCom Training Centers were Peter Welles (S/N #267) and Jim Thompson (S/N #463). Thank you again to Peter and Jim, as well as SimCom for their generosity in donating the certificates.

**THANK YOU  
FOR YOUR SUPPORT!**

***On behalf of the board, we would like to thank all the sponsors for their support in making the 2003 POPA Convention such a success. We couldn't do it without you!***

# Publishing Notes

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## 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. Future returns are filled in a timely manner in accordance with IRS-mandated rules. 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.

**Executive Director** - Laura Mason  
**Publisher** - Pilatus Owners & Pilots Association  
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Tucson, AZ 85750

**Phone:** ..... (520) 299-7485  
**FAX:** ..... (877) 745-1694  
**E-Mail:** ..... POPAPC12@aol.com

*Send all comments and future articles of interest to the Executive Director.*

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## **POPA BOARD MEMBERS**

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**Fax:** (512) 306-9187  
**E-Mail:** Phil@PondeRosenbaum.com

**Vice President: Lee Morse**  
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**Fax:** (703) 759-1472  
**E-Mail:** lmorse@orchid.com

**Immediate Past President: Roger Block**  
**Phone:** (775) 841-9370  
**Fax:** (775) 841-9375  
**E-Mail:** roger.block@att.net

**Board Members:** Dick Wikert  
Ty Carter

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## **Newsletter Submission Deadlines**

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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

The comments, articles, stories, letters and information contained in this newsletter are the personal opinions of the writers, and are not construed to be official policy or commentary of Pilatus Owners & Pilots Association, Inc.

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.

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