

Islip Avionics, Inc.
135 Schaeffer Drive.
L.I. Mac Arthur Airport
Ronkonkoma, NY 11779

Holiday Newsletter 2004

Hello fellow aviator,

It has been a few years since we published a newsletter. We have been busy upgrading our Repair Station to comply with changes to the FAA regulations. These changes went into effect earlier this year and have kept us busy.

A few personal milestones have passed at IAI. William was born to Beth and Paul VanThomme and Haley was born to Liz and Rich Quinn earlier this year. Jason Piastuck graduated from Rensselaer Polytech with a Computer Engineering degree. We welcomed Jakov Klanac to our staff. Jake is a graduate of College of Aeronautics. Rick Kattermann received Boy Scout's award of Eagle Scout. Rick is attending college majoring in Electrical and Audio Engineering.

Jason has further developed our website at islipavionics.com to include links to many manufacturers and other resources. These links provide information about avionics and general information for pilots.

New York State Aviation Sales Tax Exemption:

A New York State tax exemption went into effect December 1, 2004 on aircraft maintenance. This applies to labor, parts, equipment and materials used in the maintenance and upgrades to aircraft. It also applies to headsets used by the flight crew. The exemption does not apply to uninstalled equipment or to other portable equipment.

Garmin 430/530:

The Garmin GNS 430 and GNS 530 remain the leading radios in popularity. The ease of use of these sophisticated navigational tools is wonderful. Many pilots have said to us "How did we ever fly IFR before?"

Avionics Airworthiness Directives:

Garmin GTX-330 transponders are subject to AD 2004-10-15. The pilot can determine if the AD is due on his system by observing the software level displayed on system start up. If the software is version 3.03 or higher, the AD does not apply. Garmin will pay for any required software upgrade. This AD was due for compliance no later than August 8, 2004. The most recent software level is 3.06. If your unit is not at 3.06, contact Daren for an appointment to have it upgraded.

Narco AT-150 transponders are subject to AD2004-08-16. This AD applies to s/n 10000 to 12598. Please check your log books for the installed serial number. This AD was due for compliance no later than December 1, 2004.

NEXRAD is here!

Weather data link systems are here. Most companies are using satellite based systems. Honeywell is using a ground based system. Most systems operate on continuous broadcast. What this means is that you select weather on your display and it is there for you.

The concept of live weather availability in the cockpit is great. Nexrad should provide viable and safe weather avoidance for the VFR pilot and the average general aviation IFR pilot. I am not sure that this form of weather avoidance is the total solution for the hard core IFR pilot. These new products along with airborne weather radar and thunderstorm detection equipment should provide a seamless and safe solution.

The IFR pilot's goal is to avoid hazardous weather. These hazards include heavy precipitation, turbulence, lightning associated with convective activity and avoidance of icing conditions. Nexrad is a radar based system. The system provides the intensity of precipitation and the movement trends of the precipitation. The typical weather displayed is 6 to 10 minutes old. Although there is a delay, this leaves plenty of time for early planning and weather avoidance.

We as pilots need to develop a new mind set. In the past, instrument rated pilots flew up to bad weather to within about 25 miles and then made decisions how to deviate to avoid the severe parts of the weather. Many times this involved 90 degree turns and a lot of zigzags. With Nexrad data available we can look at the weather picture about 100 miles away. In most cases, this will allow the planning to deviate 5 to 10 degrees and avoid the bad weather all together. With the modern world of GPS navigation, distant deviations are much easier both for pilots and Air Traffic controllers.

Current service providers that have equipment approved for installation in certified aircraft are WSI, Garmin/ EchoFlight and Honeywell Bendix King. The WSI systems display on the Garmin AT MX-20 and can also display on the Garmin GNS-400 and 500 series units. Weather Worx, XM radio, will have an approved interface in the near future to the Avidyne EX-500. Garmin has announced that they have an agreement with Weather Worx and will be making an interface to display on the GNS-400 and 500 series during 2005. The Honeywell product displays on their multi function displays.

Traffic Avoidance:

The FAA is now broadcasting traffic data. This service is known as Traffic Information Service. TIS is a re-broadcast of the data that the Air Traffic Control has on their radar. TIS broadcast is limited to the primary radar sites of most Class B and C airspace and works well out to about 60 miles. There are also altitude limitations. The TIS data is received by a Mode S transponder installed in the aircraft and is displayed on a Multi Function Display. There are currently 2 systems on the market. The Garmin GTX-330 transponder displays traffic on the Garmin GNS-530/ 430 and on the Garmin AT MX-20. In the near future it will also display on the Avidyne EX-500. The Honeywell/ Bendix King KT-73 displays traffic on the KMD-250/550 and 850 displays.

We have had the opportunity to install and fly quite a few of these safety systems. They work great in the covered areas. Pilots need to remember the see and avoid techniques we have learned and not get distracted by all of the new stuff in the cockpit.

L-3 Avionics, formerly BF Goodrich, continues to provide great traffic avoidance performance with their Skywatch systems. Ryan International continues to provide great traffic avoidance with their TCAD systems.

Upgrade/ Trade-In Programs:

Avidyne has a trade in program for the earlier Flight Max displays. The program expires December 31, 2004. You can go to www.avidyne.com or call us for more details. Avidyne also has a software upgrade due out shortly that will allow Jeppesen Chart View approach plates to display on the MFD.

FAA Mandates:

TAWS. Operators of turbine powered aircraft with 6 or more passenger seats, excluding pilot and copilot, are required to install a Terrain Avoidance Warning System by March 28, 2005. TAWS systems have visual and audio warnings for terrain. Most TAWS have optional terrain display. Honeywell/Bendix King, Sandel Avionics, Garmin and L-3 Avionics currently have FAA Approved TAWS solutions. Garmin announced that they are now shipping an FAA approved GNS-530 TAWS system. Existing GNS-530 units can be upgraded to meet the requirements. Additional TAWS requirement may apply to aircraft operated under Part 135.

If you operate a turbine aircraft it would be advised to get TAWS on order. The FAA deadline for having a TAWS system installed will be here soon. The FAA has stated that there will be no extensions.

D-RVSM. Any aircraft operating from Flight Level 290 to 410 in United States Domestic and Canadian Airspace must meet the requirements for Domestic Reduced Vertical Separation Minimums by January 20, 2005. The RVSM requirement has been in place for North Atlantic crossings and in Europe for several years.

Terrain Avoidance:

TAWS systems are FAA mandated for turbine aircraft as noted above. They are optional for piston aircraft and are a great safety item. The basic terrain awareness systems provide a display of surrounding terrain giving the pilot visual warning that they are too low to safely clear terrain. Garmin will have a terrain display upgrade for the GNS-430 and 530 during the first quarter of 2005. A new company, Aspen Avionics, will have a terrain display system available during 2005. The Garmin AT MX-20 and the Avidyne EX-500 presently have terrain displays. It should be noted that most terrain "awareness" systems do not meet the requirements for TAWS.

Did you know?

A magnetic direction indicator or wet compass is a required instrument for any flight. A compass is a primary instrument for both VFR and IFR flight. The weather related temperature fluctuations of spring and fall is a frequent cause of compass failure. This is due to the expansion and contraction of the fluid against the seals inside the compass. Air bubbles form as the fluid drains and evaporates. As the fluid leaks out, the compass becomes un-dampened and erratic.

About 1/3 of reported directional gyro failures are actually due to the wet compass being out of calibration. The pilot thinks the DG is precessing after making a few turns and resetting the DG to the magnetic compass. In these cases the DG is correct and the deviation card for the compass is in error.

Training:

Operation Rain Check is an informative training seminar given by the FAA Wings program. New and current operating procedures in the NY airspace will be discussed. Islip Avioincs will be hosting the FAA's Operation Rain Check between the hours of 9 am to 1 pm on *Saturday, March 13* and *Sunday, April 3, 2005*. Coffee and refreshments will be provided.

Flying and Scuba Diving:

As divers, we must always consider the limitations of flying after diving. To be absolutely safe you should wait 12 hours after any dive before flying.

Over the years of talking with our customers, I have found that many pilots are also scuba divers. I suppose that we like adventure in many fashions. I recommend Long Island Scuba for your scuba needs. They are located at 895 Wellwood Avenue in Lindenhurst. You can visit their web site at www.longislandscuba.com . For more information you can call Ralph or Jeff at 631-225-8450. Mention that Fred sent you!

Email us at sales@islipavionics.com

We are updating our customer database with email addresses. In the future we would like to send our newsletter via email. Please put IAI Customer in the remarks box. We would like to read about your ideas and questions concerning avionics and flying. This would also be a great time to provide new phone numbers and address changes.

Feature Installations:

N28622 a Grumman Tiger owned by *Joe Gabriel* received a PM-7000B and GNS-430.
N718HS a Beech A36 owned by *Hal Staniloff* received a GTX-330.
N2015Q a Cessna Cardinal RG owned by *Greg Meyer* received an STEC 55X and WX-500.
N2085C a Beech 95 owned by *Ray Wallman* received a GNS-530.
N2852V a Piper Archer owned by *Dave Owen* and *Bob Carballal* received a GNS-430, KX-155 and STEC 60-2.
N11GQ a Cessna 210 owned by *Nick Noto* received a custom panel along with a KCS-55A and EDM-700.
N276RB a North American AT-6D owned by *Bob* and *Chris Baranaskas* received a GNS-530, GTX-330 and GDL-49 along with a custom instrument panel.
N4752S a Cessna Skylane RG owned by *John Navarra* and *Rich Mallen* received a PM-7000B and GNS-530.

N8710E a Piper Pathfinder owned by *Todd Harvey* received a WX-500.
N326RM a Cessna Caravan owned by *Enterprise Aviation* received a Goodrich I-Linc, Landmark 8100 TAWS, Shadin ADC-2000 and AV-200.
N8626N a Piper Cherokee owned by *Lance Lieberman* and *Rich Margiano* received a GNS-430.
N3434Q a Piper Pathfinder owned by *Rick Kasper* received a KCS-55A and a GTX-330.
N38213 a Piper Archer owned by *Marty Lerner* received a GMA-340 and GNS-430.
N207MJ a Morane Saulnier Paris Jet owned by *Jack Bart* received a VNS-1000.
N77X a Cessna Caravan owned by *Walter Gezari* received an Aircell Satphone, MX-20, KGP-560 TAWS and an AV-200.
N87UP a Piper Seneca V owned by *Vinnie Pacifico* received a GNS-430, GTX-330, KNI-582, EDM-760, AV-200 and copilot's instruments.

N4455S a Beech B55 owned by *Tony Roman* received a GNS-430, GTX-330 and EX-500.
N7765N a Beech 18 owned by *Don Binns* received a PM-7000B, GNS-530, KCS-55A, STEC 50 and a WX-500.
N47259 a Cessna 152 owned by *Rich Sobel* received a Garmin GNC-300XL.
N1897L a Beech B55 owned by *Joan* and *Manny Scarpinato* received a PM-7000B, GNS-530, GTX-330 and AV-200.
N790RB a Beech King Air E90 owned by *Bob Baranaskas* received a PM-7000B, GNS-530, RDR-2000, I-Linc, Landmark 8100 TAWS, WX-500, Skywatch, ADC-2000 and a PAV-80.
N5691D a Beech Twin Bonanza owned by *Mike McMahon* received a GNS-530.
N241GT a Socata TB-21 owned by *Hermes Anazco* received a GTX-330 and AV-200.
N210LP a Cessna 210 owned by *Jeff Ellis* received a GPS-400.

N2197L a Beech B55 owned by *Mike Cain* received a WX-500.
N4MA a Cessna 185 amphibian owned by *Nick Menutti* received a PM-7000B, PCD-7100, GNS-430 and GTX-327.
N7735P a Piper Comanche owned by *Rich Giannotti* received an STEC 50.
N4204B a Bellanca owned by *Rich Koos* received a GNS-430.
N718JB a Beech E55 owned by *Dean Edelman* received a GTX-330.
N58SE a Beech 58 owned by *Steve Faber* received a GNS-530, GTX-330 and GTX-327.
N600VP a Beech B55 owned by *Larry Krutick* received a PM-7000B, GNS-530, GTX-330, KCS-55A and a WX-500.
N192SB a Cessna 206 owned by *Steve Corwin* received a KT-73.

N2380S a Cessna 210 owned by *Frank Pinter* received a PM-7000B and GNS-530.
N6117N a Cessna 182 owned by *Steve Stern* received a GNS-530 and Shadin MiniFlow.
N56410 a Piper Arrow owned by *Andrew Ehrler* received an STEC 50.
N4311F a Piper Warrior owned by *Bob Kearns* and partners received a GNS-430.
N4629C a Cessna 210 owned by *Air Hamptons* received a GPS-155XL.
N5WE a Beech B55 owned by *Hal Fuchs* received a PM-7000B and GNS-530.
N74108 an American General AA-5B owned by *Spiro Paulakis* received an STEC 50.
N8261H a Piper Archer owned by *Mike Castellano* received an STEC 50.
N691JH a Beech 58P owned by *Jack Herrick* received a KGP-560, GTX-330 and ADC-2000.
N751RB a North American P51D owned by *Bob Baranaskas* received a GNS-530 and GDL-49.

We hope you and your families are well and are having a happy holiday season.

We are grateful to have provided another year of avionics and instrument service for you and all of our customers.

Happy Flying,

Fred and the crew of Islip Avionics: Tres, Pat, Paul, Daren, Max, Danny, Tom, Rich, Jason & Jake

FAA CRS# FJ1R141K

Phone: 631-588-3543

Fax: 631-588-1313

email: sales@islipavionics.com