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NEWS RELEASE

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May 28, 1999

Synthetic Vision Could Help General Aviation Pilots Steer Clear of Fatalities

Hampton, Virginia -- Research Triangle Institute and six companies are teaming up to develop revolutionary new general aviation cockpit displays to give pilots clear views of their surroundings in bad weather and darkness.

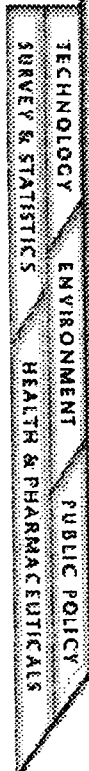
The RTI Team includes Flight International, Inc., Newport News, Virginia. (a GA aircraft user) and Archangel Systems, Inc., Auburn, Alabama, who are committed to early commercialization and will make significant cost share contributions. The starting point for the new system is Archangel's TSO'd and STC'd Cockpit Display System.

RTI also has teamed with Seagull Technology, Inc., Los Gatos, California (a GPS and attitude/heading reference system technology firm), Crew Systems, Inc., San Marcos, Texas, (a designer of low-cost head up displays), and Dubbs & Severino, Inc., Irvine, California (an award-winning terrain database design company). In addition, FLIR Systems, Inc., Portland, Oregon (an infrared instrument manufacturer) has agreed to evaluate the costs and benefits of existing weather penetrating sensor technology.

Limited visibility is the greatest factor in most fatal aircraft accidents, according to the Aviation Safety Program at NASA's Langley Research Center in Hampton, VA. The RTI team is among six selected by NASA to develop different applications of Synthetic Vision.

The RTI team will design, develop, and certify a Synthetic Vision system for general aviation aircraft. The purpose is to reduce or eliminate controlled flight into terrain caused by visibility-induced human error.

Synthetic Vision is a display system that will offer pilots an



electronic picture of what's outside their windows, no matter the weather or time of day. The system combines Global Positioning Satellite signals with terrain databases and graphical displays to draw three-dimensional moving scenes that will show pilots exactly what's outside.

The NASA Aviation Safety Program envisions a system that incorporates multiple sources of data into cockpit displays. The displays would show hazardous terrain, air traffic, landing and approach patterns, runway surfaces and other obstacles that could affect an aircraft's flight.

The NASA Aviation Safety Program is a partnership with the FAA, aircraft manufacturers, airlines and the Department of Defense. This partnership supports the national goal announced by President Clinton to reduce the fatal aircraft accident rate by 80 percent in 10 years and by 90 percent over 25 years.

Research Triangle Institute is an independent, not-for-profit organization that conducts R&D and provides technical services to industry and government. With a staff of more than 1,600 people, RTI is active in aerospace and many other fields of applied technology. RTI was created in 1958 as the centerpiece of North Carolina's Research Triangle Park, where its headquarters are located. RTI's Aerospace Technology Center in Hampton, Virginia, will carry out the Synthetic Vision project.

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FOR IMMEDIATE RELEASE

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NASA SELECTS AVIDYNE AND AVROTEC TO LEAD SYNTHETIC VISION PROGRAM

Synthetic Vision improves air safety by providing pilots with "sunny day" visibility in darkness and in the worst of weather conditions

LINCOLN, Mass. —July 19, 1999—Avidyne Corporation of Lincoln, Mass. and AvroTec, Inc. of Portland, Ore. today announced that NASA has selected the companies as a team to develop Synthetic Vision technology for the general aviation industry.

Synthetic Vision provides pilots an ultra high-resolution image of what is outside their cockpit, no matter the weather or time of day. This technology will dramatically reduce aviation accidents caused by controlled flight into terrain. The Synthetic Vision contract is part of an overall effort by NASA and the aviation industry to improve aviation safety by providing pilots with vastly improved information on vivid, intuitive cockpit displays.

"We're very excited to have been chosen again by NASA to develop the most advanced situational awareness products in the general aviation market," said Dan Schwinn, president of Avidyne. "The Synthetic Vision technology we're developing with AvroTec will dramatically increase air safety by providing pilots with a simulated, clear, sunny-day display of the view ahead, regardless of how visibility may be impaired when you look out the cockpit window."

The NASA Synthetic Vision contract complements the NASA "Highway in the Sky" (HITS) contract which Avidyne and AvroTec were awarded in January 1999. Both the Synthetic Vision and the Highway in the Sky initiatives are sponsored by NASA's Langley Research Center in Hampton, Virginia. The Highway in the Sky contract calls upon Avidyne, AvroTec and its partners to develop affordable glass cockpit technology that provides pilots with direct access to all the information needed to safely determine their routes, speeds and proximity to adverse weather conditions, terrain and other aircraft. Synthetic Vision technology will significantly improve the detail and accuracy of 3-D terrain imagery utilized by Highway in the Sky technology, making it an even more powerful tool for increasing safety and utility.

"This new award from NASA will enable us to design the highest performance situation display systems available," added Mary Nolan, president of AvroTec. "When we deliver the first Synthetic Vision products, pilots will have the advantage of clear visibility at any time of day and in the worst of weather conditions. Together with Avidyne, we are taking what was once considered advanced military aircraft technology and making it available for the GA market today."

"Avidyne has clearly established itself as a leader in bringing advanced technology to the GA market," said Mark Sandeen, director of business development at Avidyne. "This Synthetic Vision selection is not only good news for Avidyne, it's great news for our customers. This program will accelerate our ability to bring advanced terrain awareness functionality to GA."

About the Synthetic Vision Team

AvroTec will serve as the team lead. Avidyne will serve as technical lead and will oversee all software development. Other members of the team include Lancair, MIT, Raytheon Aircraft, Seagull Technologies

and the FAA Civil Aeronautical Medical Institute (CAMI). The Synthetic Vision program is scheduled to begin in October 1999.

About AvroTec, Inc.

A founding member of the AGATE Alliance, AvroTec, Inc. (www.avrotec.com) is an acknowledged leader in affordable display technology. Founded by pilots, AvroTec is committed to making powerful technology available to all general aviation pilots. The AvroTec FlightMonitor FMP 300 is a flight situation display that incorporates Avidyne's current and future situational awareness products and is available on the Lancair Columbia 300. The AvroTec FlightMonitor FMP 200 is a panel-mount multi-function display that is popular for installation in experimental aircraft. The AvroTec Traveler is a portable electronic device with a very large (10.4" diagonal), high-resolution sunlight-readable display for cockpit information management. It is widely used in piston-engine airplanes, small business jets and rotorcraft.

About Avidyne Corporation

Based in Lincoln, Mass., Avidyne Corporation (www.avidyne.com) is revolutionizing the future of flight for business and commercial aviation through the power of today's most advanced technology. The company is leading the avionics industry with innovative products that greatly enhance pilots' situational awareness and safety during every phase of flight. Avidyne's core situation awareness tool, Avidyne Flight Situation Display (FSD), is a highly flexible, open-systems solution for displaying and managing vital weather and navigation information through a full-color, five-inch LCD panel. The Avidyne FSD is a very cost-effective, space-efficient situation awareness product that can be easily upgraded to incorporate future technologies such as datalink, long-range traffic and terrain avoidance.

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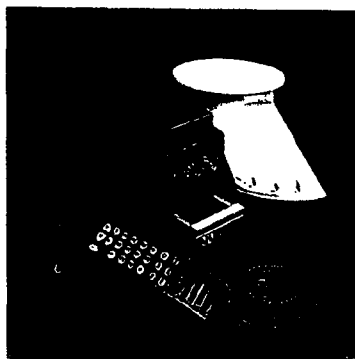
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Aviation News
July, 1999

UP FRONT

SYNTHETIC VISION COULD HELP GENERAL AVIATION PILOTS STEER CLEAR OF FATALITIES

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for general aviation aircraft. The purpose is to reduce or eliminate controlled flight into terrain caused by visibility-induced human error.

Synthetic Vision is a display system that will offer pilots an electronic picture of what's outside their windows, no matter the weather or time of day. The system combines Global Positioning Satellite signals with terrain databases and graphical displays to draw three-dimensional moving scenes that will show pilots exactly what's outside.

For more information contact Research Triangle at (919) 541-7044 or visit the website at www.hq.nasa.gov/office/aero/oastthp/programs/avsaf/avsafpro.htm



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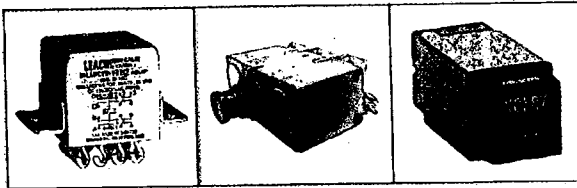
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Press Release 5/13/99

NASA Award Granted to RTI/Archangel Team

SYNTHETIC VISION COULD HELP PILOTS STEER CLEAR OF FATALITIES

Archangel Systems, Inc. will provide hardware and software technology as a member of one of the winning Synthetic Vision Industry Teams chosen by NASA to develop a revolutionary cockpit display for General Aviation. The members of this team include:

Research Triangle Institute, Research Triangle Park, North Carolina
Archangel Systems, Inc., Auburn, Alabama
Flight International, Inc., Newport News, Virginia
Seagull Technologies, Inc., Los Gatos, California
Dubbs & Severino, Inc., Irvine, California
Crew Systems, Inc., San Marcos, Texas
FLIR Systems, Inc., Portland, Oregon

The goal of the program is to give airplane crews clear views of their surroundings in bad weather and darkness, which could help prevent deadly aviation accidents. Synthetic Vision, a virtual-reality display system for cockpits, will offer pilots an electronic picture of what's outside their windows, no matter the weather or time of day.

"With Global Positioning Satellite signals, pilots now can know exactly where they are," said Michael Lewis, director of the Aviation Safety Program at NASA's Langley Research Center. "Add super-accurate terrain databases and graphical displays and we can draw three-dimensional moving scenes that will show pilots exactly what's outside. The type of accidents that happen in poor visibility just don't happen when pilots can see the terrain hazards ahead."

The NASA Aviation Safety Program envisions a system that would use new and existing technologies to incorporate data into displays in aircraft cockpits. The displays would show hazardous terrain, air traffic, landing and approach patterns, runway surfaces and other obstacles that could affect an aircraft's flight.

Industry teams submitted 27 proposals in four categories: commercial transports and business jets, general aviation aircraft, database development and enabling technologies. NASA and researchers from the Federal Aviation Administration and Department of Defense evaluated the proposals' technical merit, cost and feasibility.

NASA has committed \$5.2 million that will be matched by \$5.5 million in industry funds to advance Synthetic Vision projects over the next 18 months. More money is expected to be designated later to accelerate commercialization and make some systems available within four to six years.

The Aviation Safety Program is a partnership with the FAA, aircraft manufacturers, airlines

and the Department of Defense. This partnership supports the national goal announced by President Clinton to reduce the fatal aircraft accident rate by 80 percent in 10 years and by 90 percent over 25 years.

For sales call Shannon Wood at 334-826-8008 ext. 2
For technical questions call Don Heimark at 610-647-8671

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