

# FAA News



Washington, D.C.

Friday, December 2, 1994

Contact: Pat Cariseo  
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## **FAA Statement on ATR Aircraft**

In a letter released today to National Transportation Safety Board chairman Jim Hall, FAA Administrator David R. Hinson said the agency has moved swiftly to respond to the board's recommendations following the Oct. 31 ATR aircraft accident at Roselawn, Ind.

"We've been working continuously and will continue to commit all of our resources until we're satisfied we've addressed all safety issues. The American public deserves no less," Hinson said. "The FAA acted quickly to implement actions responsive to NTSB recommendations."

On Nov. 4, four days after the accident, the FAA issued new ATR aircraft operating procedures to minimize exposure to potentially adverse weather conditions.

On the same day, Hinson announced that the FAA would convene a meeting on Nov. 9 of key personnel from ATR operators.

On Nov. 7, the NTSB issued emergency recommendations which the FAA immediately implemented. The FAA had already taken several actions before the recommendations were issued.

On Nov. 9, FAA met in Washington with about 50 aviation experts and airline operating officials from several countries including France, Italy, and the U.S. to stress the importance of compliance with FAA's Nov. 4 advisory and discuss the operation of the ATR in icing conditions.

As NTSB recommended, the FAA on Nov. 9 immediately assembled a special ATR certification review team of engineers, test pilots, and specialists in aircraft performance. The certification team is in France, the country which produces and certified the ATR 72, and is analyzing the airplane's performance during icing conditions.

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The FAA has sent four aviation safety experts to work with three French officials to complete the review within 8-10 weeks. Working in concert with aviation regulators from France and Switzerland, the FAA also has initiated small-scale model testing of the aircraft in simulated icing conditions. The tests are being conducted in a wind tunnel in Toulouse, France.

On Nov. 11, FAA issued a notice to all air traffic controllers to provide expedited services to all ATR pilots who request route, altitude, or airspeed deviations to avoid icing conditions. Priority in landing is also given to these aircraft to minimize airborne holding.

On Nov. 16, the FAA issued a telegraphic airworthiness directive which prohibits the use of the autopilot in icing conditions or in moderate or greater turbulence and procedures in the to be used in the event of unusual trim situations. Compliance was required within 48 hours.

On Nov. 18, FAA issued a revised Flight Standards bulletin outlining operating procedures in icing conditions for aircraft. The bulletin advises pilots that during icing conditions, the use of the autopilot is prohibited and special procedures must be followed for flap configuration, airspeed, propeller speed, and aircraft maneuvering.

On Nov. 28, the FAA stepped up its inspection surveillance of airlines, pilots, and dispatchers who use ATR aircraft and air traffic controllers who handle ATR aircraft.

This surveillance by FAA inspectors includes riding on ATR aircraft to ensure that everyone understands and is complying with the series of FAA procedures, airworthiness directives and safety bulletins issued since the crash.

Inspectors are also analyzing suggestions from ATR flight and ground crews and controllers on how to improve ATR safety during icing conditions.

Also on Nov. 28, immediately after reports of an alleged "incident" involving in-flight loss of roll control on a ATR-42 aircraft which it was descending to Chicago O'Hare, FAA coordinated an investigation of the incident with the NTSB, pilots, and airline.

Upon detailed review of the pilot's statement, discussion with the pilots, review of air traffic control data, analysis of the aircraft flight recorder, and consultation with technical experts, the FAA said the event was a normal encounter with air turbulence. The pilots were able to control the aircraft completely. The investigation concluded that there was no loss of control involved.

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# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE  
Wednesday, December 7, 1994

Contact: Sandra Allen  
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## **FAA Statement on ATR Aircraft**

The Federal Aviation Administration continues to give the highest priority to its collaborative examination of the ATR aircraft. The top-to-bottom examination is being conducted in conjunction with aviation experts from the National Transportation Safety Board, NASA, the civil aviation authority from France, French government researchers, the manufacturer, operators and pilot organizations.

"This examination is being given our full focus and attention," said Anthony Broderick, the FAA's associate administrator for regulation and certification. "We have been working day and night during this comprehensive investigation to turn up information from all possible sources. We've also taken steps to ensure flight crew compliance with operating procedures in icing conditions, by providing detailed guidance to them. We are conducting surveillance to ensure that the guidance has been received, understood and is being followed. We are simultaneously working with dispatchers and airline management as well.

"Based on the information we've amassed to this point, we believe that these actions are sufficient to ensure flight safety. We will continue to examine our actions as new information emerges and adjust them as appropriate."

The examination includes check rides by FAA inspectors on ATR aircraft to ensure compliance with procedures, airworthiness directives and safety bulletins issued since the crash. FAA inspectors also have been accepting and reviewing suggestions from ATR flight and ground crews, airline dispatchers and controllers on how to enhance ATR safety during icing conditions.

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The FAA also is working closely with French officials on a review of ATR performance and design, which should conclude by mid-February. Using a wind tunnel in Toulouse, France, the design review team also has initiated scale model testing of the aircraft in simulated flight conditions.

Flight tests have been under way for two weeks in France. In-flight tests in artificial icing conditions at California's Edwards Flight Test Center are expected to be conducted within the next two weeks.

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# FAA News

Washington, D.C.



**FOR IMMEDIATE RELEASE**

Thursday, December 8, 1994

Contact: Fraser Jones

Tel.: (202) 267-8521

## **FAA APPROVES USE OF SATELLITE TECHNOLOGY FOR PRIMARY OCEANIC AND REMOTE AVIATION NAVIGATION**

Continuing its effort to speed up the use of satellite technology in aviation, the Federal Aviation Administration (FAA) today announced approval of the Global Positioning System (GPS) as a primary means of navigation for over-the-ocean and remote aircraft operations, with certain restrictions.

"The use of GPS as the primary means of navigation greatly benefits the aviation community, including increased navigational accuracy compared to previous systems, and lower equiptage and maintenance costs," said FAA Administrator David R. Hinson. "This is another important step in our trek toward improved aviation safety and efficiency in the 21st century."

"This initiative, which is six months ahead of schedule, is vital to the expansion of GPS and will be quickly embraced by the aviation community," Hinson predicted.

Hinson said the FAA is preparing guidance to evaluate installation of GPS navigation equipment as a primary means of navigation in oceanic and remote operations which are out of reach of ground-based radar. This guidance will also include a thorough review of an applicant's airworthiness approval, navigation procedures, training, maintenance, and other operational issues related to GPS.

The FAA's Satellite Operational Implementation Team and members of the aviation community developed the minimum performance standards and operational restrictions after coordination with representatives of the GPS receiver manufacturing industry.

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Last February Hinson announced initial operating capability for civil use of GPS. In June, the FAA issued a request for proposal to industry to build a Wide Area Augmentation System to provide a network of ground stations and communication systems that enhance the integrity, accuracy, and availability of GPS signals.

In October, a joint government-industry program demonstrated that GPS can meet civil aviation's most stringent accuracy requirements for navigation, approach and precision landing.

GPS is a constellation of 24 satellites in orbit 11,000 miles above the earth. It is a "space based" system that may eventually replace all ground-based navigational aids.

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# FAA News

Washington, D.C.



Thursday, December 8, 1994

Contact: Liz Neblett

Tel.: (202) 267-8521

## **FAA TO STANDARDIZE CREW TRAINING FOR LARGE AND COMMUTER AIR CARRIERS**

The Federal Aviation Administration (FAA) today took a major step toward one level of safety for all air carriers by proposing commuter airlines with ten or more seats comply with standards set for training crewmembers on large aircraft. The notice of proposed rulemaking also added a requirement for crew resource management (CRM) training.

Following through on a commitment made earlier this year--and confirmed within weeks of National Transportation Safety Board recommendations on Nov. 15--the FAA proposed the rule changes to make training requirements for commuters as comprehensive as those for larger air carriers. The rule contains a CRM training requirement which aims at better crew communication and coordination. The rule also encourages all carriers to use sophisticated aircraft simulators in their training.

"The agency wants one level of safety for all air carriers," said FAA Administrator David R. Hinson. "This change in pilot and training requirements is a major step toward that goal and should make the safest mode of transportation even safer."

Many regional carriers with smaller aircraft now operate under the stricter training rules of the larger carriers.

Comments on this notice should be mailed in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-200), Docket No. 27993, 800 Independence Ave., S.W., Washington, DC 20591. The comment period will last 90 days.

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# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE

Thursday, December 8, 1994

Contact: Pat. Cariseo

Tel: (202) 267-8521

FAA PICKS U. OF ILLINOIS  
FOR PAVEMENT RESEARCH CENTER

In an outreach program to academic institutions aimed at broadening research in support of critical aviation technologies, Federal Aviation Administrator David Hinson today announced the award of a \$1.5 million grant to the University of Illinois to establish an FAA Center of Excellence for airport pavement research.

The FAA award is the second grant awarded under a program initiated by the Congress in 1992 to enhance FAA's access to resources and research facilities available at colleges, universities and nonprofit research institutions.

"We see this partnership as a means to foster and expand the FAA's capability to meet crucial technology demands," said FAA Administrator David Hinson. "The partnership with the University of Illinois will increase the FAA's ability to take aggressive measures to bring airport pavement technology in line with advances in aircraft technology."

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Together with airport operators and industry, the FAA spends nearly \$2 billion annually for airport construction and maintenance. Plans for the introduction of new, larger, and heavier aircraft weighing in excess of one million pounds have required reexamination of the current pavement design methodologies. The University of Illinois at Champaign-Urbana will assist the FAA in the pursuit of developing advanced design methodologies that will be validated through full-scale testing.

Earlier, the Congress established the first Center of Excellence for Computational Modeling of Aircraft Structures, and designated Rutgers University and the Georgia Institute of Technology to conduct joint research on aging aircraft. Centers are funded by continuing grants which are awarded on a 50/50 matching basis for a period of 3-10 years.

The University of Illinois was selected after a rigorous evaluation of qualifying academic institutions. The selection criteria establishing an FAA Center of Excellence are mandated by Congress and includes demonstration of the institution's ability to:

- conduct research on-site and through extension resources;
- provide leadership in making national and regional contributions to the solution of immediate and long range airport pavement technology problems;
- disseminate results of research and educational programs through a continuing education program.

The institution also must have an established air transportation program in place.



# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE

Thursday, December 8, 1994

Contact: Hank Price

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## **MAILLETT, RIVERA NAMED TO TOP FAA POSTS**

As part of the Federal Aviation Administration's (FAA) recent reorganization, Administrator David R. Hinson today announced the appointment of Louise Maillett and Fanny Rivera to top international policy and civil rights posts.

"Promotion of diversity and harmonization of international aviation policies are top priorities at the FAA. The appointments of Louise and Fanny to these positions show the agency's strong commitment to diversity and the expanding importance of global aviation," Hinson said.

Maillett becomes deputy assistant administrator for policy, planning and international aviation, a post previously held by Dale McDaniel. McDaniel was recently named as acting associate administrator for administration, a new position under the reorganization plan.

Rivera has been named to a new post as deputy assistant administrator for civil rights to direct the agency's diversity program and underscore FAA's continued commitment to its diversity goals.

Maillett was previously director of FAA headquarters' office of environment and energy, which is responsible for setting FAA-wide policy on environmental issues and agency employee safety matters. Maillett has 10 years' experience as an attorney for the federal government and was involved in issues ranging from aircraft noise to international agreements. She received her law degree from the University of Maine School of Law.

Rivera previously held the position of deputy assistant administrator for information technology at FAA headquarters. Prior to this assignment, she served as acting regional administrator for the Western-Pacific Region in Los Angeles. She was also the Western-Pacific deputy regional administrator. Rivera has a master's degree in mathematics from the University of Miami.

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# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE  
December 8, 1994

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## PRESS AND MEDIA

### ADVANCE

#### FAA TO RELEASE AIR TRAFFIC CONTROL TAPES OF USAIR FLIGHT 427

The Federal Aviation Administration (FAA) will release the air traffic control tapes of the accident involving USAir Flight 427 near Pittsburgh, Pennsylvania. The agency will allow reporters to record the tapes and will provide them with transcripts at 10 a.m. on Friday, December 9, in Room 9ABC at FAA Headquarters, 800 Independence Avenue, SW. in Washington, DC.

Since the accident is under investigation by the National Transportation Safety Board (NTSB), no FAA interviews are permitted regarding any matters relating to the accident.

**Editors' Note:** The tapes and transcripts will only be released at FAA's Washington Headquarters. No tapes will be released regionally.

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# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE

Friday, December 9, 1994

Contact: Sandra Allen

(202) 267-3883

## **EVIDENCE PROMPTS FAA PROHIBITION OF ATR OPERATION IN ICE**

After reviewing evidence from tests begun earlier this week, Administrator David R. Hinson issued an airworthiness directive prohibiting ATR-42 and ATR-72 aircraft from flying when icing conditions are forecast or present. The directive results from an accelerated effort to review ATR certification following the Oct. 31 accident at Roselawn, Ind., and is another step in a long list of FAA actions.

"The FAA has been working day and night to develop any information about this accident," Hinson said. "When we have the data, we take all necessary safety action," Hinson said. "The information that we have now accumulated calls for immediate and direct action."

The new evidence provides for the first time a specific mechanism by which icing could cause severe control problems. Although the exact cause of the accident is still undetermined by the NTSB, icing is indicated as a likely element.

The information comes from tests conducted by the manufacturer at the request of accident investigators from the French and U.S. governments. The French-U.S. certification review team was convened by the FAA and France to analyze the airplane's performance during icing conditions. The team is conducting a top-to-bottom review.

The airworthiness directive tightens a previous FAA order issued November 16 that prohibited the operation of the ATR autopilot during icing conditions and moderate or greater turbulence.

On Nov. 4, four days after the accident, the FAA issued new ATR aircraft operating procedures to minimize exposure to potentially adverse weather conditions.

On the same day, Hinson announced that the FAA would convene a meeting on Nov. 9 of key personnel from ATR operators.

On Nov. 7, the NTSB issued emergency recommendations which the FAA immediately implemented. The FAA had already taken several actions before the recommendations were issued.

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On Nov. 9, FAA met in Washington with about 50 aviation experts and airline operating officials from several countries including France, Italy, and the U.S. to stress the importance of compliance with FAA's Nov. 4 advisory and discuss the operation of the ATR in icing conditions.

As NTSB recommended, the FAA on Nov. 9 immediately assembled a special ATR certification review team of engineers, test pilots, and specialists in aircraft performance. The certification team is in France, the country which produces and certified the ATR 72, and is analyzing the airplane's performance during icing conditions.

The FAA sent four aviation safety experts to work with three French officials to complete the review within 8-10 weeks. Working in concert with aviation regulators from France, the teams also have initiated small-scale model testing of the aircraft in simulated icing conditions. The tests are being conducted in a wind tunnel in Toulouse, France.

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On Nov. 28, the FAA stepped up its inspection surveillance of airlines, pilots, and dispatchers who use ATR aircraft and air traffic controllers who handle ATR aircraft. The examination includes check rides by FAA inspectors on ATR aircraft to ensure compliance with procedures, airworthiness directives and safety bulletins issued since the crash.

The FAA will take such action as is required when safety data demonstrate a need to do so regarding any aircraft.

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*Note to Editors:* Operators of ATR-42 and ATR-72 aircraft in the United States are: Trans World Express, Trans States Airlines, Continental Express, Atlantic Southeast Airlines, Summit Airlines, and, operating as American Eagle: Flagship, Executive and Simmons.

## **U.S. Operators of Avions de Transport Regional (ATR) Aircraft**

There are 42 ATR-72s and 111 ATR-42s for a total of 153 ATRs operated by United States carriers. The following is a list of the operators followed by the number of ATR aircraft they use:

- Atlantic Southeast

12 ATR-42

- Continental Express

42 ATR-42

2 ATR-72

- Executive Airlines\*

7 ATR-42

2 ATR-72

- Flagship Airlines\*

14 ATR-42

- Mahalo Air

4 ATR-42

- Simmons\*

25 ATR-42

23 ATR-72

- Summit Aviation

3 ATR-42

- Trans States

8 ATR-42

3 ATR-72

- Trans World Express

11 ATR-42

\* American Eagle operators



# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE

Tuesday, December 13, 1994

Contact: Pat Cariseo

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## **FAA REOPENS COMMENT PERIOD, SCHEDULES EXTRA HEARINGS TO GIVE PUBLIC MORE TIME TO REVIEW NEWARK AIRSPACE PROPOSALS**

To allow the public ample time to review two proposals to reroute departing Newark Airport aircraft, the Federal Aviation Administration (FAA) has reopened the public comment period and scheduled additional hearings on the plans.

The additional 60-day comment period on the FAA's supplemental to the draft environmental impact statement on the Expanded East Coast Plan (EECP) began Dec. 12 and ends Feb. 9. Public hearings will be held in Morris and Bergen counties on Jan. 18 and 19. These are in addition to public hearings previously held in Cranford, Tinton Falls and Bridgewater, N.J. and the public meeting held in New York City on Nov. 30.

At the hearings, public comment -- both oral and written -- will be taken on the "Solberg Mitigation Proposal" which would change routes of some aircraft currently flying over Union County, N.J., and the New Jersey Citizens Against Aircraft Noise (NJCAAN) proposal to reroute departing Newark traffic over the ocean.

The FAA said it originally believed the November 30 deadline for comments was sufficient, but the agency received requests last month from the public, NJCAAN, members of the New Jersey congressional delegation, and local and state officials asking for more time to analyze the proposals and comment on them. The extension is in response to these requests.

"We are firmly committed to moving quickly on the final environmental impact statement and feel the additional 60 days is important to assure maximum public input without compromising our pledge to finish the process as soon as possible," said Barry Valentine, FAA assistant administrator for policy, planning and international aviation.

The noise mitigation proposal, the analysis of an over-the-ocean routing proposal and specific noise levels for every New Jersey census block are all new information contained in a supplemental to the draft environmental impact statement on the Expanded east Coast Plan (EECP), which the FAA issued on Sept. 30.

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On Wednesday, Jan. 18 public hearings will be held from 1 to 4 p.m. and from 7 to 10 p.m. at the Holiday Inn, Route 45 East, Parsippany. On Thursday, Jan. 19, hearings also will be held from 1 to 4 p.m. and from 7 to 10 p.m. at the Ramada Inn, 375 W. Passaic St., Rochelle Park.

The Solberg proposal, named for the Solberg navigational aid near Readington, N.J., would make several changes to current routing procedures to reduce noise for 18,755 Union County residents -- approximately 40 percent of the 45,600 people who experienced higher noise levels when the EECF was implemented -- without a comparable increase in noise for other residents. Continuing most of the current EECF routes and procedures would benefit 1.46 million New Jersey residents who would experience higher noise levels if the EECF were rolled back.

The EECF, implemented in 1987, was a comprehensive revision of the air route structure and air traffic procedures in 19 states and the District of Columbia to increase system efficiency and reduce aircraft delays at New York metropolitan airports. More than 6,000 aircraft a day use the metropolitan airspace. Three major airports, Newark, Kennedy and LaGuardia, are located within two minutes flying time of each other.

Although an alternative similar to the NJCAAN proposal was dismissed as not operationally feasible in the draft EIS issued last year, the FAA has analyzed the NJCAAN proposal in detail because of the extraordinary public interest in it and the use of federal funds to prepare the NJCAAN comments. Now, the FAA has reopened the public docket to allow NJCAAN and others more time to comment on the FAA's analysis of the proposal.

The NJCAAN proposal would move the majority of Newark traffic over Raritan Bay, across the Sandy Hook National Recreation Area, and over the Atlantic Ocean southward along the New Jersey coast. These route changes would effectively result in all Newark departures avoiding flying over the western half of Essex, Union and Middlesex counties and all counties to the west.

Operational modeling revealed that the proposal has substantial safety problems and appears not to be operationally feasible because of numerous air traffic conflicts throughout the metropolitan area.

Public comment will be accepted through Feb. 9. Comments on the supplemental draft EIS may be hand-delivered or mailed to the Federal Aviation Administration, Office of the Chief Counsel, Docket No. 27649, 800 Independence Ave., S.W., Washington, D.C. 20591.



# FAA News



Washington, D.C.

FOR IMMEDIATE RELEASE

Thursday, December 15, 1994

Contact: Holly Baker

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## AIRLINE FLIGHTS STOPPED FOLLOWING FAA INSPECTION

Kiwi International Airlines, Inc., a Newark, NJ-based air carrier, today suspended all flights following a special safety inspection by the Federal Aviation Administration. During routine surveillance, FAA inspectors uncovered problems with Kiwi's pilot training records that merited a special safety inspection. Following a more in-depth inspection, the agency determined that Kiwi's records were insufficient to establish compliance with FAA regulations.

The airline will not be permitted to resume flights until it has satisfied the agency that it meets the high safety standards set by FAA pilot training rules. The FAA will monitor Kiwi's efforts to bring operations into full compliance with regulations. The agency will work closely with Kiwi to expedite the process.

"While we recognize that this action will inconvenience some passengers, safety of the traveling public is paramount," said Anthony J. Broderick, associate administrator for regulations and certification.

Kiwi holds FAA operating authority as a Part 121 commercial air carrier operator. The carrier has operated scheduled flights between Atlanta, Chicago, Newark, NJ, Orlando, San Juan, Tampa and West Palm Beach. The airline has 11 Boeing 727 aircraft in its fleet.

Passengers booked on Kiwi flights should contact the airline or FAA's consumer affairs hotline at (202) 366-2220 for additional information.

# FAA News

Washington, D.C.



## Fact Sheet

### FAA Certifies First Explosives Detection System

- \* The FAA has led a vigorous program to develop and eventually certify explosives detection systems (EDS) for inspecting checked baggage.
- \* On December 9, 1994, the FAA reached a major milestone. It certified the InVision CTX-5000 -- a "computed tomography" system -- the *first* EDS to be approved by the FAA.
- \* Certification of the CTX-5000 followed nine years of research and development. During that time the FAA has invested \$90 million in explosives detection and nearly \$8.6 million in this specific technology. There have been considerable technical challenges in developing a system which can automatically screen bags for small amounts of explosives, with a high probability of detection, and a low false alarm rate.
- \* The standards and testing protocols against which the CTX-5000 have been certified are rigorous. After a thorough review by a wide range of intelligence, scientific and industry experts, FAA published national standards along with an independent testing protocol developed for it by a panel of experts under the auspices of the National Academy of Sciences. The unclassified portions of the certification provisions were published in the *Federal Register* on Sept. 10, 1993.
- \* The standards and the protocols were developed in response to the Aviation Security Improvement Act of 1990. That act implemented many of the recommendations of the President's Commission on Aviation Security and Terrorism, which was established to investigate the destruction of Pan Am Flight 103 in December 1988 by plastic explosives hidden in a checked bag.
- \* The act requires that FAA test and certify the performance of explosives detection systems prior to mandating their wide scale use by U.S. air carriers to screen checked baggage on international flights. It also required that testing follow an independently developed protocol.

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\* The FAA's standard has been adopted by the European Civil Aviation Conference (ECAC). Several representatives of ECAC authorities observed the tests and their governments are likely to recognize the certificate. The tests were also observed, and the results verified, by an independent observer who headed the National Academy of Sciences' panel that developed the testing protocol.

\* The FAA's next step will be to conduct at least two operational trials of the CTX-5000, each of one year duration, beginning in 1995 and ending in 1997. The purpose is to solve the operational challenges involved in integrating an EDS into a baggage system and to validate the estimated costs of wide scale deployment of EDS.

\* After that, the FAA will decide where, and when, EDS should be deployed on international flights (for which it has existing regulatory authority), and also on domestic flights. A full range of cost data will be needed for those decisions, which is one product of the operational demonstration.

\* The FAA also anticipates further developments by that time. CTX-5000 and other computed tomography machines may be improved, or additional systems presented for certification. However, the FAA is not committed to a particular technology; it is committed to the intelligent deployment of certified, effective explosives detection systems.

\* Foreign authorities are moving along parallel tracks to test and deploy advanced baggage screening systems. The FAA is cooperating fully with these foreign authorities to ensure the adoption of common standards and harmonization of security procedures.

December 20, 1994

Contact: Marcia Adams (202) 267-8521

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# FAA News

Washington, D.C.



## Background

### Development of Computed Tomography Technology

\* The idea of using computed tomography to detect explosives in checked baggage has been explored by the FAA working with the corporate team of InVision Technologies, Foster City, CA, and Imatron Federal Systems, Burke, VA, since 1985.

\* The basic idea has changed little in the last 10 years -- measure the fundamental properties of an explosive concealed in a checked bag and differentiate the explosive material from all of the other things that people carry in their luggage.

\* The system developed by InVision builds on technology first used in the medical field. Computed tomographic images -- often referred to as CAT scans -- are obtained by taking multiple views of an object and combining these views to create cross sectional images or "slices". A powerful computer is used to reconstruct the slices and display the computed densities of the objects in the slices.

\* Unlike a transmission x-ray -- which produces a shadow graph where the images of overlapping objects are superimposed -- the computed tomography system displays the separate densities of each object in the slice. However, the examination is conducted one thin slice (perhaps one centimeter) at a time.

\* Early work in the 1980's included using a medical computed tomography scanner to collect data on the contents of hundreds of passenger bags at an airport and the unique properties of over a hundred explosives at the Bureau of Mines Laboratory in Pittsburg. The data convinced the developers that the problem was solvable.

\* The demanding conditions of airline baggage screening have driven this technology to solutions beyond those used in medical scanners. The challenge is even greater than just detecting the explosive -- the challenge is to distinguish the explosive from the many things travelers take in their luggage, to do it quickly and efficiently, and to do so with a manageable level of nuisance alarms. The speed and sophistication in computer software and hardware used in the CTX would have made a system like this impossible to field even a few years ago.

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\* The InVision CTX-5000 uses transmission x-ray data to acquire an overall map of the objects in the luggage. It then positions strategic computer tomography slices to identify objects that may be explosives. The technical challenges of increasing the size of the scanner opening to accommodate large bags and engineering a constantly rotating (rather than reciprocating) gantry were solved, making it possible to scan passenger bags in seconds rather than the minutes previously required for a medical scan.

\* A major distinction between medical systems and the CTX-5000 is that the CTX automatically recognizes the unique properties of explosives in a cluttered passenger bag, whereas the medical system reconstructs an image to be presented to a radiologist for evaluation. The computing power of the CTX-5000 makes these automated decisions possible.

\* FAA funded research and development of computed tomography over the past nine years has totaled nearly \$8.6 million, most of which was through competitive contracts. There has also been cooperation on the part of air carriers and airports to allow access to actual passenger checked baggage.

December 20, 1994

Contact: Marcia Adams (202) 267-8521

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**Tuesday, December 20, 1994**

### **FAA ENSURES SANTA'S SAFE TO FLY**

The Federal Aviation Administration today announced its Flight Standards Division, is beginning an annual inspection of the St. Nick flight operations. A team of FAA airworthiness, avionics, and operations safety inspection is currently enroute to the North Pole from the Eastern Region to verify Santa's qualifications and the safety of his sleigh, reindeer, and other equipment.

The purpose of the special annual inspection conducted by FAA is to ensure the safety of the public this Christmas Eve, as Santa Claus take to the skies to deliver toys to good girls and boys. The operations inspection will check to see that Santa holds a current medical certificate and valid pilot license. They will also perform a check ride to evaluate Santa's skill in handling the sleigh, including many tricky roof-top landings. Airworthiness inspectors will check to see that engines, that his reindeer, are in excellent operating condition. Avionics inspectors will check Santa's navigation equipment to ensure that it meets stringent safety standards and to determine that all required equipment is installed.

A Certificate of Waiver or Authorization has already been issued by FAA, to be effective only on Christmas Eve, which allows Santa to deviate from the Federal Aviation Regulation that prohibits flight below 1,000 feet. Due to the unique characteristics of Santa's activities, it has been determined that this is necessary to allow him to land on rooftops across the country.

To further enhance safety, inspectors across the country have been asked to increase surveillance of Santa Claus as he travels through their area.

"You can rest assured that the FAA Flight Standards Division is doing their part to ensure that, even on Christmas Eve, the U.S. continues to have the safest skies in the world," said Eastern Regional Administrator Arlene B. Feldman.



U.S. Department of State  
Office of the Spokesman

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For Immediate Release

December 21, 1994

PUBLIC ANNOUNCEMENT - OVERFLIGHTS OF AFGHANISTAN

Because of safety and security concerns arising from the civil conflict in Afghanistan, all U.S. airlines and aircraft operators are prohibited by the Federal Aviation Administration from overflying Afghanistan. However, many foreign air carriers continue to overfly Afghanistan on routes between Asia and Europe. American citizens who are flying between Asia and Europe should be aware of the risks involved in taking these flights.

The International Civil Aviation Organization (ICAO) has advised that there are no reliable communications with Kabul air traffic control. Should an air disaster occur in Afghanistan, the ICAO advises, adjacent countries would most likely become aware only when an aircraft failed to exit the country. In that event, because there is no U.S. embassy in Afghanistan, and no third country represents United States interests, the United States government is unable to accord consular protective services to U.S. citizens there. Moreover, any search and rescue efforts cannot be expected as it is also not possible for neighboring states to obtain permission to enter Afghanistan in search of the survivors of an accident.

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Note: In May, the FAA notified all US airmen that commercial flights were prohibited from overflying Afghanistan.



# FAA News

Washington, D.C.



FOR IMMEDIATE RELEASE

Thursday, December 29, 1994

Contact: Liz Neblett

Tel.: (202) 267-8521

## **FAA SEEKS COMMENTS ON POLICY CHANGE FOR DIABETIC AIRMEN**

The Federal Aviation Administration (FAA) is considering a change in policy to permit issuing airman medical certificates to insulin-using diabetic individuals.

Under current FAA regulations an individual who requires insulin or any other hypoglycemic drug to control diabetes mellitus is disqualified from holding a medical certificate. The FAA is currently considering under what circumstances a special issuance of a medical certificate -- or waiver -- might be granted to a person who requires insulin.

Before undertaking a policy change, the FAA invites comment on a medical evaluation and monitoring protocol. The protocol was developed by a panel of distinguished endocrinologists at the request of the FAA's Federal Air Surgeon. The panel has recommended the protocol as the basis of a possible change of policy.

A description of the protocol is in the Dec. 29 Federal Register. Comments on the proposed protocol or possible policy change must be received on or before March 29, 1995. Mail comments on this notice in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-200), Docket No. 26493, 800 Independence Ave., S.W., Washington, D.C., 20591.

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# FAA News

Washington, D.C.



**FOR IMMEDIATE RELEASE**  
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## **Statement**

The Federal Aviation Administration (FAA), the National Transportation Safety Board (NTSB) and their counterparts from France, and representatives of the Canadian Department of Transport today completed a three-day meeting to review the results of tests on ATR aircraft recently conducted in France and at Edwards Air Force Base, Calif. Also attending the meetings were management representatives, pilots and dispatchers of U.S. and Canadian airlines operating ATR aircraft.

The ATR manufacturer presented a plan intended to enable the ATR aircraft to operate safely in known icing conditions. The FAA is currently reviewing the proposals and expects to decide in early January whether to modify the ban on flights of ATR aircraft into icing conditions. Until a decision is made, the existing prohibition against operating in known or forecast icing condition remains in place.

The proposal's centerpiece is a plan to retrofit the wings of ATR-42 and -72 aircraft with improved deicing boots that approximately double the amount of the wing area protected from ice.

The manufacturer of the aircraft has stated that installation of the hardware could begin immediately after its approval by the U.S. and French certification authorities. Pending approval, the manufacturer stated the retrofits could be completed before Spring 1995.

The plan also includes proposed interim procedural changes for dispatch and operation of the aircraft into known or forecast icing conditions and additional training for pilots and dispatchers who operate and dispatch the aircraft.

"Safety of the traveling public is the FAA's highest priority," said Administrator David Hinson. "We will continue to follow a thorough, logical process in its evaluation of the operation of the ATR aircraft."

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