

[Site Map](#)[Contact Us](#)[Links](#)[Home](#)[About Us](#)[Business Guide](#)[Gallery](#)[Applications](#)[Our Projects](#)[Newsroom](#) 

Newsletter

[Newsletter Archive](#) | [Subscribe](#) | [Unsubscribe](#) | [Edit Email](#)

Volume 2, Issue 2

April 2002

TABLE OF CONTENTS

1. [Safety First: FAA to Study NTSB Recommendations](#)
Would eliminating the practice of "Taxi into Position and Hold" (TIPH) and changing to new rules for runway crossings make for safer U.S. airports? What would be the impact on airport capacity, efficiency, and controller workload? FutureFlight will test these National Transportation Safety Board (NTSB) recommendations this summer.
2. [Software Upgrades to Enhance Realism](#)
FutureFlight's simulation software provider, Adacel Inc. is completing upgrades designed to offer more realistic ground movement, improved weather modeling, and other improvements.
3. [Staff Profiles: FFC'S Air Traffic Control Analyst](#)
In this issue we highlight the expertise of one our long-time team members, Jim McClenahan, Air Traffic Control Analyst for NASA FutureFlight Central since 1994.
4. [NASA Administrator Visits FFC](#)
The new NASA Administrator, Sean O'Keefe, visited Ames and FutureFlight Central on his February 1 tour of Ames facilities.
5. [Upcoming Events & Conferences](#)
6. [Thinking of Doing Business With FutureFlight Central?](#)

1. Safety First: FAA to Study NTSB Recommendations

Would eliminating the practice of "Taxi into Position and Hold" (TIPH) and changing to new

rules for runway crossings make for safer U.S. airports? What would be the impact on airport capacity, efficiency, and controller workload?

In the summer of 2002, the Federal Aviation Administration (FAA) will study, through a simulation at NASA FutureFlight Central, the impact of adopting two National Transportation Safety Board (NTSB) recommendations: "Taxi into Position and Hold" (TIPH) and new rules for runway crossings that would eliminate "implied" crossings.

FAA researchers will evaluate the controller human factors and validate airport capacity predictions involved in these changes, using the east side of Dallas/Fort Worth (DFW) as the simulation test-bed. FutureFlight will give DFW controllers a very realistic working experience with its 360-degree out-the-window views of the airport surface and surrounding air space. The aerial photograph below shows a typical eastside DFW south flow arriving traffic route with runway crossings. (Only a portion of the east side is depicted.)



Current practice allows controllers to taxi aircraft into position and then hold. FutureFlight will evaluate the TIPH procedure, simulating the NTSB recommendation that the FAA "discontinue the practice of allowing departing aircraft to hold on active runways at nighttime or at any time when ceiling and visibility conditions preclude arriving aircraft from seeing traffic on the runway in time to initiate a safe go-around maneuver." (Safety Recommendation A-00-69)

FutureFlight will also study the NTSB recommendation that all runway crossings be "authorized only by specific air traffic control clearance" and that "when aircraft need to cross multiple runways, air traffic controllers issue an explicit crossing instruction for each runway after the previous runway has been crossed." (Safety Recommendations A-00-67 and A-00-68)

NASA and the FAA are collaborating with the Volpe National Transportation Systems Center, MITRE Corporation's Center for Advanced Aviation System Development (MITRE/CAASD), and Booz-Allen & Hamilton Inc. in this research.

The National Transportation Safety Board is an independent U.S. Federal agency that investigates every civil aviation accident in the United States and significant accidents in other modes of transportation, conducts special investigations and safety studies, and issues safety recommendations to prevent future accidents.

2. Software Upgrades to Enhance Realism

FutureFlight's simulation software provider, Adacel Inc. will soon be releasing its MaxSim Version 3 air traffic control software with new features designed to offer more realistic ground movement, improved weather modeling, and other improvements.

Some details:

- An event system that triggers on time, location, or aircraft state
- Forward tug movement
- Aircraft go around and reentry into the air traffic pattern
- Dynamic deceleration speeds
- Programmed start or delay times
- Improved aircraft taxi speed modeling
- Environmental sound effects
- Enhanced weather with lightning, snow accumulation, and sleet
- Automatic aircraft separation on the ground

FutureFlight customers can look forward to these benefits by the fall of 2002. Adacel's other customers include the FAA Academy, the FAA Hughes Technical Center, the U.S. Air Force, and the Universities of Alaska, North Dakota, and Embry Riddle.

3. Staff Profiles: FFC's Air Traffic Control Analyst

In this issue we highlight the expertise of one our long-time team members, Jim McClenahan. As Air Traffic Control Analyst for NASA FutureFlight Central since 1994, Jim brings thirty-two years of air traffic controller expertise to his position. Prior to his retirement from the FAA, Jim served as Assistant Air Traffic Manager at the San Francisco International Airport Tower for three years.

In his years at NASA, Jim has lent his on-the-job experience in all areas of air traffic control to the development of new technology, aimed at making the controllers' job more efficient. In addition to FutureFlight, he has supported the development of other air traffic control technologies such as the Surface Movement Advisor (SMA), Airport Approach Zone Camera System (AAZCS), and the Center-TRACON Automation System (CTAS).

Jim will brief the conference attendees about FutureFlight's upcoming simulations at the "Communicating for Safety Conference," to be held April 30 - May 1, 2002 in Kansas City. The National Air Traffic Controllers Association National Safety Committee is sponsoring the conference.



To meet the complete FutureFlight team, visit [FFC's Team page](#)

4. NASA Administrator Visits FutureFlight Central

The new NASA Administrator, Sean O'Keefe, visited Ames and FutureFlight Central on his February 1 tour of Ames facilities. In his talk to Ames employees, he praised the energy, enthusiasm, passion, and professionalism with which the Ames' staff works. He touched on the need to form collaborations with industry and universities, particularly in aerospace. In the coming months, the agency will engage in a process of formulating strategic objectives.

To see his complete "All Hands Address," visit <http://artists.arc.nasa.gov/Video2.html>

5. Upcoming Events and Trade Shows

NASA FutureFlight Central will be participating in the following events:

- NATCA's Communicating for Safety Conference, April 30 - May 1, 2002, at Kansas City, Missouri. The conference web site is located at: <http://safety.natca.net>
- 2002 FAA Airport Technology Transfer Conference, May 5-8, 2002 at Atlantic City, New Jersey. The conference web site is located at: <http://www.airportnet.org/depts/meetings/calendar/calpub.htm>
- AIAA Modeling and Simulation Technologies Conference August 5-8, 2002 at Monterey, California. The conference web site is located at: <http://www.aiaa.org/calendar/index4.cfm>

If you are attending any of these events and would like to book an appointment in advance to speak with us, please call Nancy Tucker at 650.604.5575 or send an email to: ntucker@mail.arc.nasa.gov

6. Thinking of Doing Business with FutureFlight Central?

Contact **Nancy Dorigi**, FutureFlight Central Manager, Nancy.S.Dorigi@nasa.gov or phone **650.604.3258** for more information and to explore what we can do for your needs.

We hope you enjoyed receiving this message. However, if you'd rather not receive future email updates from NASA FutureFlight Central, please click here: <http://ffc.arc.nasa.gov/unsubscribe.html>

The Team at NASA FutureFlight Central <http://ffc.arc.nasa.gov>

Experience the Future of Your Airport!

[Home](#) | [Site Map](#) | [Contact Us](#) | [Links](#) | [About Us](#)
[Business Guide](#) | [Gallery](#) | [Applications](#) | [Our Projects](#) | [Newsroom](#)

Updated: 12/09/02 Curator: [Patrice Hansen](#) Responsible Official: [Nancy Dorigi](#) [Privacy Statement](#)