OPENING REMARKS

Prepared for delivery by

Mr. Peter Challan
Deputy Associate Administrator for Air Traffic Services
Federal Aviation Administration (FAA)

During the

Aviation Weather User Forum
"Aviation Weather: Opportunities for Implementation"

Thank you, Sam (Samuel P. Williamson, Federal Coordinator for Meteorology), for the kind introduction. I am privileged to be here today to speak before such a distinguished audience. Monte Belger sends his regrets and his regards. He had a previous personal commitment that could not be postponed.

Events such as this one, where issues are discussed in an open forum, show the cooperation and partnership that Administrator Jane Garvey, the Deputy Administrator Monte Belger, my boss Steve Brown, and I believe should be encouraged in the aviation community.

The cooperation and support of all the Federal agencies and industry represented in this room today and on the agenda, for the rest of the meeting, is a testament to the progress that has been made in the last few years. You have done planning and strategic thinking but there is a lot of practical work ahead. For instance, last month, June was one of the worst months in aviation history for thunderstorms. Weather accounted for 79 percent of all aviation delays. During the month, the FAA instituted special air traffic programs to deal with severe weather in the Northeast on 19 days, compared with five days in June 1999. The month set two records: 12 consecutive days of severe weather and on one day, as you are probably aware, on June 27, the National Weather Service issued 281 thunderstorm warnings.

Some days, this summer, I felt like George Clooney in "The Perfect Storm." In actuality, the air traffic control system is a victim of the robust economy of the last 7 years. The demand for air travel has increased dramatically and by all projections will continue to grow. Flying has become a form of mass transit--for passengers and cargo. Because of this, we are in a period where demand for air traffic services, in so many places and at some peak times, is more than the system can handle without difficulty. And when there is an additional factor, such as convective weather, the system simply gets backed-up.

Tracking FAA progress towards fulfilling NRC recommendations

Five years ago, the National Research Council made a number of recommendations which are published in the "*Aviation Weather Services: A Call for Federal Leadership and Action*." I am here to tell you that we have made a lot of progress towards fulfilling most of those recommendations. The NRC recommended and I quote, *the* "*FAA should provide leadership, establish priorities, and ensure the funding needed to improve weather services for aviation users and to strengthen related research."*

As you know, the FAA established the Aviation Weather Directorate (ARW) within my organization, Air Traffic Services. This office, located in our Air Traffic Requirements Service, serves as a focal point for all aviation weather across the agency, as well as interagency and international matters. ARW has provided leadership in all areas of aviation weather: policy, requirements setting, interagency liaison particularly with NWS, international and domestic standards setting--working with RTCA, quality assurance, and all aspects of system acquisition including maintenance.

The FAA/ARW has played a key role in formulation, coordination, and implementation of the Flight Information Services (FIS) policy. Last Friday, in Richmond, Virginia, the first FIS system was tested. This system will provide weather and aeronautical information through data link for GA pilots primarily. This is a joint industry and an FAA endeavor. The FAA is providing VHF frequencies and a protected spectrum for this project. The industry provides the value-added FIS products. We are pleased that this test was successful.

ARW participated and provided leadership under the auspices of OFCM in the development of two very important planning documents: the "*National Aviation Weather Strategic Plan"* and the "*National Aviation Weather Initiatives."* Creating these documents was difficult and intensive. I believe the results are outstanding and worth every drop of sweat.

The NRC also recommended, "The FAA should aggressively exercise its responsibility for coordinating user needs and expressing requirements for meteorological services to the NWS." The FAA and NWS have made progress in upgrading the level of coordination that is required to ensure that aviation weather service needs and requirements are better delineated and communicated.

FAA and NWS established the PRMT (Policy and Requirements Management Team) consisting of the cognizant members of the management team of both agencies. Mr. Jim Washington, Director of the Air Traffic System Requirements Service, ably represents the FAA. The PRMT has been meeting on a quarterly basis and addressing important needs, requirements, and other important operational issues.

FAA/ARW has constituted a disciplined methodology for assessing the user needs and requirements. This methodology is based on identification of users, users' decision making processes, and the weather information needs that support user decisions. An

example of this is the TMU Users Needs Analysis. This assessment has been completed and NWS and FAA are currently collaborating to determine how best to address its findings.

A third recommendation states, "*The FAA should provide the leadership needed to support and focus research and development efforts by government, academic, and industrial institutions on key aviation weather issues.*" The FAA has been successful in systematically increasing its aviation weather R&D budget over the last several years. This is despite being in a generally low trending budget environment. Understand that a portion of the budget is always earmarked by Congress for particular projects, so there's limited discretion in how the funds can be allocated. For FY00 the total funding was $19.3 million.

We believe that we have established a very credible aviation weather R&D program. We are not letting it go at that, we are constantly engaged in assessing the R&D priorities to ensure we are getting the biggest bang for the dollars we spent. It is noteworthy to mention that there is a direct link between the planning efforts that have been going on under the auspices of the OFCM and our R&D priorities. You will find that many of the highest and most important national aviation weather initiatives identified are being addressed with our existing R&D program.

Some of the recent successes of the FAA's Aviation Weather Research Program include the Weather Support to Deicing Decision-Making System, which enhances aircraft safety and reduces ground delay. This program was recently selected as a winner of a Government Technology Leadership Award.

Another is a new preflight weather-briefing tool that is currently hosted on the NWS Aviation Weather Center's web site. For example, pilots can access a flight path tool that provides vertical cross sections of significant weather along their proposed route of flight.

The automated National Convective Weather Forecast and the Terminal Convective Growth and Decay Product are two additional research programs that provide short-term forecasts of thunderstorm activity. They are currently in the demonstration phase.

Weather Delays and FAA's Approach to Mitigate Them

As I stated earlier and as you are all aware, during the 2000 thunderstorm season, there has been a significant increase in the delays nationally due to this year's convective activity. On June 27, the Aviation Weather Center of the National Weather Service issued a record 281 warnings of thunderstorm activity. About 160 of those were in the eastern third of the country.

Due to the increasing delays, FAA has charged the Herndon Command Center (ATCSCC) to set aside a cadre of specialists to deal directly and independently with problems caused by severe weather. The ATCSCC has established severe weather

management teams, who participate in an overall team called the Strategic Planning Team (SPT) to accomplish this task.

FAA/ARW has spearheaded the implementation of the Collaborative Convective Forecast Product, a key planning tool that is used daily to plan traffic flow strategies to reduce weather delays. This product has gained considerable popularity within the airline industry, and has become an important component of the Spring/Summer 2000 initiative.

We have learned a lot from the events of last summer. We are using this information to define and streamline our Spring/Summer 2000 initiative.

It is important to note the progress that has been made over the last few years. The FAA has worked hard to provide new services and systems to increase the accuracy and timeliness of weather information that is available. The "*Strategic Plan"* and *"Initiatives*" planning documents prepared under the auspices of OFCM have brought aviation weather agency stakeholders together. I doubt whether anyone would say that there is a lack of consensus and cooperation among the government agencies, private weather services research organization and user groups.

I know Administrator Jane Garvey and Monte Belger are 100 percent supportive of the cooperation that exists within the government stakeholders and the industry.

As US Transportation Secretary Rodney Slater told delegates attending a global aviation summit in Washington, DC last fall, "As the world economy expands, aviation must rise to the challenge of an expected tidal wave of additional passengers and cargo."

We at the FAA understand what is ahead of us and without cooperation or as Administrator Garvey said, "constructive collaboration" among the aviation sectors we cannot solve the many complex and overlapping problems that we will all face now and will continue in this new century.

We are anxious to move ahead quickly to implement the new tools, the new software, the new technologies, the new processes to help the aviation industry deal with convective weather in the 21st century. We appreciate your participation, support and hard work.

Thank you.

Opening Remarks

Prepared for delivery by

Mr. Scott B. Gudes
Deputy Under Secretary of Commerce for Oceans and Atmosphere

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I'd like to thank Sam Williamson and OFCM for inviting me to help open up this important forum on Aviation Weather this morning. Actually, I am going to say very little...I REALLY came here to spend the morning here listening to you folks and LEARN about aviation weather services. And I'd like to thank you Sam... for providing this important forum on Aviation Weather Services. I know that you've serviced NOAA in other capacities for over 20 years. As the Federal Coordinator since March 1998, you provide an invaluable service to this nation by leading the coordination of operational weather requirements and services, and supporting research among 14 other federal agencies. I know how hard it is to coordinate services within ONE agency. You're doing it with 14 and you're doing a superb job and I thank you.

As you all know, aviation is vital to the nation's economy, national security and to the safety of life and property. Aviation weather services are used to support:

a. Our national defense and humanitarian missions.

b. Transportation of people and commerce.

c. Hurricane reconnaissance.

d. Flight for life helicopter missions assisting those that are injured on our highways.

e. Basically EVERY flight from the newest student pilot to our shuttle missions.

NOAA's National Weather Service has an Aviation Weather Support Team. I'd also like to express my appreciation and thanks to John Jones, the National Weather Service Deputy Assistant Administrator for his expert leadership in heading up the National Weather Service Aviation Weather Services..... and for his tireless efforts in developing our aviation programs to serve our nation into this next century.

Our 121 Weather Forecast Offices provide specific terminal and route forecasts. At each of the 21 FAA Air Route Traffic Control Centers there is a Center Weather Service Unit (CWSU). Our CWSU's consist of 4 NWS meteorologists that provide the latest weather information to regional traffic managers and air traffic controllers. In Kansas City, MO, the Aviation Weather Center provides national and international aviation weather forecasts.

In addition to the National Weather Service, other components of NOAA also partner with other agencies to provide excellent service. Under our Oceanic and Atmospheric Research Office, the Forecast Systems Lab, the National Severe Storms Lab, the Office of Global Programs and the Air Resources Lab (in conjunction with our National Center for Environmental Prediction) provide an aviation digital data service, information on severe hazards, such as downburst predictions, a moisture sensing system and information on volcanic ash transport. Also, our Satellite Services Division (NESDIS) uses satellite and surface temperature data to provide information on low ceilings and visibility and provide information for icing potential.

We are here today addressing three of the biggest concerns expressed to us by the aviation community: providing graphical weather products, increased accuracy in our forecasts, and improved training for forecasters and pilots. It is clear that Aviation weather support and research can not be done by a single agency. We need coordination and cooperation between the government agencies, the private sector and the universities.

In conclusion, since the Wright brothers' first flight at Kitty Hawk, weather has been an important part of aviation. Tremendous progress in weather observing and forecasting has occurred since the first flight. We have:

a. Upper air soundings and wind profilers.
b. Meteorological satellites.
c. Weather radars and automated observing systems.
d. Tremendous advances that have occurred in numerical weather prediction.
e. Advances in our knowledge gained through the support of research.

But, as Brig Gen (ret) Jack Kelly, the Director of the National Weather Service stated in the NWS 2002 budget request, our predictions that concern Aviation Weather have NOT progressed as quickly as our progress in hurricane or tornado predictions have over the past decades. So, clearly, we have to re-energize our efforts and provide the next generation of services that YOU, the aviation community users need NOW and in the coming decades. We must work together to continue progress towards improving aviation weather services. We must move quickly to implement new technologies and techniques into the aviation weather infrastructure. We want to move quickly to implement those technologies, techniques and processes that are ready and to integrate them into our infrastructure.

On behalf of NOAA, I appreciate your participation and support. I hope you have an informative forum.