AIRPORTS COUNCIL INTERNATIONAL

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before the

House Transportation and Infrastructure Committee
Subcommittee on Aviation
"Runway Safety"

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Chairman Costello, Ranking Member Petri, members and staff of the House Transportation and Infrastructure Subcommittee on Aviation, thank you for allowing Airports Council International-North America (ACI-NA) the opportunity to participate in this important hearing on runway safety. My name is Greg Principato and I serve as President of ACI-NA. Our 360 member airports enplane more than 95 percent of the domestic and virtually all of the international airline passenger and cargo traffic in North America. Nearly 400 aviation related businesses are also members of ACI-NA.

ACI-NA applauds the Committee for its tireless work on H.R. 2881, the "Federal Aviation Administration Reauthorization Act of 2007." We especially thank the Committee for including a provision on runways incursions, as found in Section 305, which requires the FAA Administrator to submit a report containing a plan for the installation and deployment of systems to alert flight crews and air traffic controllers of runway incursions. ACI-NA thanks you for your leadership and commitment to both airports and the aviation community and we commend both the Committee and House of Representatives for passing H.R. 2881 in expeditiously and timely manner.

In Fiscal Year 2007, the Federal Aviation Administration (FAA) reported 24 serious runway incursions out of more than 61 million operations in fiscal year 2007. Although the nation's airport runways remain safe, reducing the risk of runway incursions is a top priority and airports have taken a particularly aggressive stance in addressing this safety concern.

FAA "Call to Action" Meeting

Last August, more than forty aviation leaders including ACI-NA, airports, airlines, aerospace manufacturers, as well as air traffic control and pilot unions participated in FAA's "*Call to Action*" Task Force meeting, which provided an important forum for focusing the industry's attention on runway safety. ACI-NA was pleased to work with FAA to organize and facilitate airport participation in this important meeting, to reach a consensus on an achievable list of short, medium and long term initiatives that could be undertaken to further improve the safety of operations at America's airports. Additionally, the Task Force agreed to quickly implement a five-point, short-term plan to improve runway safety.

Short-Term Actions

One component of the *Call to Action* plan included a sixty-day initiative to review runway safety procedures, airport markings and other potentially confusing areas at twenty airports with a history of runway issues. Some of this nation's busiest airports were included, such as Atlanta, Boston, Chicago O'Hare, Dallas/Fort Worth, Fort Lauderdale, Las Vegas, Los Angeles, Miami, New York Kennedy, Orlando, Philadelphia, and San Francisco. Within sixty days, all twenty airports identified by FAA as having high incursions potential completed intensive runway safety reviews of runway incursion and factors leading to the potential use of a wrong runway.

In addition, by June 30, 2008, the FAA is requiring 75 large and medium airports to paint red markings on the taxiway side of the traditional black and yellow hold line to identify

the approach of the specifically marked runway. FAA is also requiring these airports to improve centerline painting and markings on all airport taxiways to give differential color distinctions to ensure taxiways are easily seen by taxiing pilots at night or under poor weather conditions.

Short-term actions in the *Call to Action* plan include voluntarily accelerating the June 30, 2008 deadline requirement. Although the call to accelerate these new markings and signs is voluntary, to date, seventy-one of the targeted seventy-five airports have completed painting. An additional four airports have committed to completing the upgrade well before the June deadline.

The FAA is not requiring new taxiway painting and markings for small airports certificated under Part 139. However, the *Call to Action* plan calls upon smaller airports to develop plans to voluntarily upgrade existing markings. I am pleased to inform you that as of today, 28 small airports have already voluntarily upgraded their markings, 173 airports plan to upgrade by June 2008, and an additional 50 airports plan to complete the work by the end of 2008. Another, 29 airports have committed to enhancing their markings in 2009, while 28 airports have expressed interest but have not yet provided a target completion date. As you may know, many smaller airports work with private contractors for painting and, given the fact that no Airport Improvement Program (AIP) grants are being approved or distributed, airports are unable to contract for these services at this time.

In general, ACI-NA supports FAA's proposed Advisory Circular that would extend the enhanced taxiway centerline requirements to all certificated airports. However, we have heard from some of our members at smaller airports that, because of issues like their need to contract for painting services, acceleration of this requirement may entail hardship, which should certainly be given consideration in implementing the final requirements.

Mid-Term Actions

• **Runway Status Lights (RWSL)**: Mid-term runway safety actions specific to airports include the accelerated installation of runway status lights (RWSL). RWSL uses runway and taxiway centerline illuminated lights to warn pilots of potential runway conflicts and prompt them to notify the tower before proceeding if a contradicting clearance has been issued. Using Airport Surface Detection Equipment-Model X (ASDE-X) technology, external surveillance information is taken from three sources that provide position and other vital information for aircraft vehicles on or near the airport surface. RWSL processes the surveillance information and commands the field lighting system to turn the runway status lights on and off in accordance with the motion of the detected traffic. Essential attributes of RWSL include timely warning of potential conflicts, automated information and no interference with air traffic operations.

Since March 1, 2005 the FAA has tested runway safety lights at Dallas/Forth Worth (DFW), as well as installed the experimental light system on San Diego's single oceanfront runway (December 2006). Just recently, the Department of Transportation's Office of the Inspector General (DOT OIG) conducted an audit to determine RWSL's viability for reducing runway incursions at DFW. The January 17, 2008 report noted that

runway incursions on DFW's test runway (18L/36R) decreased by 70 percent after runway safety lights were installed. Due to this success, in early December DFW began construction of runway safety status light systems on two additional runways. The Massachusetts Port Authority has also committed to fast track the implementation of runway status light and ASDE-X at Boston.

• **Final Approach Runway Occupancy Status Lights (FAROS):** Similar to runway status lights, Final Approach Runway Occupancy Status Lights (FAROS) is a test-concept, utilizing surveillance via commonly used highway pavement traffic sensors to provide pilots on final approach to an airfield notification that their identified runway for landing is occupied. FAROS flashes the existing Precision Approach Path Indicator (PAPI) lights to give direct notification to the pilots that the runway is occupied and unsafe for landing. FAA continues FAROS operational evaluation at both Dallas/Fort Worth and Long Beach.

Whether RWSL, FAROS or other runway safety technological advancements, ACI-NA strongly encourages uniform deployment at all commercial service airports. The absence of such technological improvements could create inverse effect as pilots may become more reliant on such technology where it is available.

Long-Term Actions

• **Full Deployment of ASDE-X by 2010:** We recognize that technological solutions including ASDE-X will be a key component of airport runway safety programs and ACI-

NA supports FAA's decision to accelerate full deployment of ASDE-X by a full year from 2011 to 2010.

• **Moving Aircraft Maps**: Additionally, there is a growing universal acceptance of the adoption of moving map displays in cockpits to further facilitate pilots' situational awareness. ACI-NA supports moving map displays as a first step to enable pilots to better understand where they are on the airfield, with other capabilities added over time.

• **ADSB-IN:** FAA recently issued a NPRM that would require the installation of ADSB-OUT as a means of providing high quality, rapid update rate surveillance information to ATC facilities. However, in order to fully realize the safety and efficiency capabilities of ADS-B, it is essential that the program be expanded to include ADS-B-IN capability in a timely manner. ADS-B-IN provides the crucial ability for aircraft to see the location, not only of their own ship on an airport's surface, but also the position of all other equipped aircraft, whether on the airport surface or about to touch down. In addition it provides the ability for both controllers and air crews to see the position of equipped airport surface vehicles, such as maintenance, police, operations or crash fire rescue vehicles operating n the airport at night or in low visibility conditions.

• **Cockpit Display of Traffic Information:** CDTI is a crucial technology that fuses information from GPS and ADS-B-IN to provide air crews with situational awareness of all aircraft and vehicles in their vicinity. The benefit lies in reduced risk of runway incursion and increased ability for air crews to maintain optimal separation from traffic.

In turn, this has been demonstrated in the UPS Louisville demonstration to increase airport efficiency.

Airport Specific Actions

Independent of the FAA mandates and technological evaluations, airports are taking independent action to mitigate runway safety.

• **Perimeter Taxiways**: One of the most effective ways to prevent runway incursions is to minimize the need for aircraft to cross runways. Last year, Atlanta completed its end-around perimeter taxiway, essentially eliminating 650 daily runway crossings on the north side of the airfield. Additionally, the new perimeter taxiway has helped alleviate congestion in airport ramps and reduced the amount of fuel burned while aircraft sit idling, waiting for a clearance to cross an active runway. Dallas/Fort Worth has begun construction of a perimeter taxiway that mirrors Atlanta's end-around design.

• **Construction Program Enhancements:** Airports are also examining creative ways to enhance runway safety. As part of their airport expansion program, Minneapolis, Pittsburgh and Grand Rapids have constructed tunnels under their respective runways to eliminate the need to cross runways on the surface. Airport personnel can now completely eliminate potential vehicle-aircraft conflict situations.

• **Increased Driving Training on Airports**: In order to eliminate vehicle and pedestrian deviations, airports continue to provide recurrent training for all airport employees who operate vehicles on the movement area of the airfield. Additionally, ACI-NA supports

FAA proposed Advisory Circular, which strongly recommends regular recurrent driver training for all persons with access to the AOA.

• **Commercial Aviation Safety Team (CAST):** In addition to airport specific actions, ACI-NA's Senior Advisor, Richard Marchi, recently joined the Commercial Aviation Safety Team (CAST), a cooperative government/industry initiative co-chaired by FAA's Deputy Associate Administrator for Aviation safety. CAST is a voluntary partnership consisting of all commercial aviation stakeholders — government agencies, airlines, aircraft manufacturers, aviation associations , employee representatives, and others—with a mission is to increase safety using an integrated, data-driven approach based on analyzing accident causes, identifying ways to make positive changes and implementing improvements.

CAST continues to apply its integrated, data-driven strategy to reduce the risk of commercial aviation fatalities in the United States and promote new government and industry safety initiatives throughout the world. Using aviation industry data, CAST is identifying emerging airport safety concerns and, working with ACI-NA, will take a more proactive risk assessment role.

Summary

In closing, ACI-NA and its member airports thank you for the opportunity to share our views on this important matter. We look forward to working with you as addressing this important issue is critical for the future of the aviation industry.