

**STATEMENT OF NICHOLAS SABATINI, ASSOCIATE ADMINISTRATOR
FOR AVIATION SAFETY BEFORE THE HOUSE COMMITTEE ON
TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON
AVIATION ON THE FEDERAL AVIATION ADMINISTRATION'S
OVERSIGHT OF OUTSOURCED AVIATION MAINTENANCE, ON
MARCH 29, 2007.**

Chairman Costello, Congressman Petri, Members of the Subcommittee:

I am pleased to appear before you once again, this time to discuss the Federal Aviation Administration's (FAA) oversight of air carrier maintenance that is outsourced to repair stations, both domestically and abroad. (Just to be clear, outsourcing is any maintenance performed for an air carrier by any individuals who are not employed by the air carrier here and abroad.) I know the industry trend to outsource more of its maintenance in recent years has been a concern for some of you. To some, outsourcing equates to cutting corners to save a few dollars. To some, less costly maintenance means less safe maintenance. To some, repair stations represent lesser quality maintenance. All these assumptions imply that safety is being compromised as more maintenance is outsourced. I am here today to reassure you that the quality of maintenance is not compromised simply because it is not being done by an air carrier. No less an authority than the former Department of Transportation Inspector General (IG), Ken Meade, testified before Congress that use of these stations is not a question of quality, but rather an issue of oversight. We agree, which is why the FAA is continually improving and refining our oversight of maintenance, no matter where it is performed or by whom.

Let me start by stating the obvious. The system is safe. As this subcommittee well knows, we have achieved the highest safety standards in the history of aviation. Even so,

our goal is – as always – to continue to improve safety. I would like to share with you a chart that goes to the heart of this hearing. (See the attachment at the end of the statement.) The lines represent the percent of maintenance that is being outsourced and the accident rate, per million operations. I think this picture is worth a million words. Although the percentage of outsourcing has never been higher, the accident rate has never been lower. These statistics amply demonstrate that aviation safety is not dependent on airlines performing their own maintenance.

Before I explain the specifics of FAA's oversight of outsourced maintenance, let me take a moment to describe the office of aviation safety. Last year, after years hard work, my office achieved ISO 9001 certification. This certification ensures that, worldwide, FAA safety offices provide standardized service and products, and that we adhere to the same safety standards as those businesses we regulate. We are the only federal organization of our size, scope and complexity to have achieved ISO certification under a single quality management system. It was through my employees' dedication and hard work that we achieved ISO certification. Not one milestone was missed on our road to certification. So, our oversight of maintenance is part of an independently validated approach to holding ourselves to some pretty high standards.

Previously, our oversight was based largely on inspector knowledge and information that was available as the result of individual inspections. This approach was the best we could do at the time, but it was far from comprehensive. The effectiveness of our oversight could vary from facility to facility. What we are doing now is managing risk

and requiring system safety. Just as we have worked the concept of system safety with the airlines, we are currently introducing the concept to repair stations.

Let me explain what I mean by system safety. System safety is extremely comprehensive. It sounds like a simple list of requirements, but in reality, it is a sophisticated approach to ensuring that everything is in place to obtain the information that can identify vulnerability in time to address it before safety is compromised. System safety requires the following attributes. It must be clear who is responsible for different aspects of the operation. The responsible person must have the authority to take necessary action. There must be procedures in place to execute required actions. There must be controls in place to insure that a consistent product or service is being provided. There must be oversight/auditing procedures in place to independently evaluate the effectiveness and consistency of the operation. And lastly, there must be interface procedures in place to ensure that different parts of the organization are effectively talking to each other. Consistency is the goal. Inconsistency signals the need for a closer look and can provide us the early warning we need to get ahead of problems that could affect safety.

In addition, these attributes must be supported by a written Safety Policy expressing senior management's commitment to continually improve safety and includes safety risk management processes, safety assurances, and safety promotion. Safety risk management processes are used to assess system design and verify that safety risk management is integrated into all processes. Safety assurances continually identify new

hazards and ensure risk controls achieve their intended objective. Safety promotion ensures an environment where action is taken to create a positive safety culture where people acknowledge their accountability and act on their own individual responsibility for safety.

This is what we requiring of all organizations for which we have safety oversight responsibility, whether it be an airline, a manufacturer or a repair station. With these elements in place, our inspectors can perform hazard analyses and identify risk so that threats can be pre-empted. Instead of relying solely on information from individual inspections alone, we now perform a sophisticated analysis of anomalies identified and entered into the system. The analysis can provide us trend information that effectively targets our oversight. This is a much more comprehensive approach than what we were able to do previously. It allows us to get in front of potential problems in order to prevent them. This is not only a better use of FAA resources, it enhances safety.

The past few years have been about continuing forward and making adjustments to an already robust system. We have been working closely with the Department of Transportation Inspector General's (IG) office since their issuance in 2003 of the report "Review of Air Carriers' Use of Aircraft Repair Stations." The report identified specific areas where the IG felt improvements could be made. In response to the report, we made a number of changes to our oversight of repair stations. In 2004, we revised the regulations that apply to repair stations. The rule improved quality control requirements, equipment requirements, and provided more detailed requirements on the use by repair

stations of external maintenance providers. In 2005, we issued guidance to enhance oversight of repair stations based on system safety requirements and risk assessment. In 2006, we developed and implemented software to further enhance oversight, risk assessment, and risk management processes used in our oversight. We've improved our Safety Performance Analysis System to provide sharing of information between the inspectors assigned to the repair station, and those assigned to the air carrier. We've also improved the training requirements for certain repair station personnel.

We are currently testing a different way to oversee the work performed by complex repair stations. We call this approach the Certificate Management Unit (CMU) concept. CMU is a model of oversight for complex repair stations that parallels the way we conduct oversight of air carriers. It is currently in place at two of the country's most complex repair stations. CMU will provide for dedicated inspectors providing oversight at the assigned repair station. This addresses the criticism that FAA has failed to adapt its oversight of repair stations to reflect their increasing use by air carriers. Having assigned inspectors at these repair stations will further reduce the differences between the way we oversee major repair stations versus major airlines. We will continue to evaluate, modify and expand this concept as appropriate.

I mentioned at the outset that my office is ISO certified. Part of what this means is that, as an organization, we must continually evaluate what we are doing to identify where we can improve. So I fully expect ongoing modifications to our oversight procedures and analysis as we learn more and develop new and better tools.

I would now like to turn my focus to foreign repair stations because I know they have been of particular interest to this subcommittee. As is the case with domestic repair stations, there is an incorrect perception that a carrier's use of a foreign repair station is somehow unsafe or done solely to reduce maintenance costs. I know there have been a number of efforts to restrict a U.S. carrier's ability to use foreign repair stations, but I do not believe these efforts would enhance safety. It is important to understand that FAA only certifies a foreign repair station if a U.S. carrier wants to use it. So there is a need element in place. The repair station must meet the same standards that we apply to repair stations in the United States or we will not certify it. Safety is addressed because we require that all aircraft that are registered in the United States be maintained to U.S. standards, regardless of where they operate. Due to the global nature of aviation, we must have repair stations that meet U.S. standards throughout the world. It is an essential element of the U.S. being a leading provider of international transportation services. Finally, keep in mind that, as is the case when a carrier uses a domestic repair station, the carrier has the ultimate responsibility to ensure that the maintenance is being performed appropriately. All of this adds up to a great deal of supervision. The repair station has internal controls, foreign government oversight, airline oversight, and FAA oversight.

In three countries (France, Ireland and Germany) where we have Bilateral Aviation Safety Agreements (BASA), we have outlined maintenance information procedures (MIP) to ensure that foreign inspectors are placing appropriate emphasis on the Federal Aviation Regulations when conducting review of work done on U.S. aircraft. We have a

long history and experience with these aviation authorities. In these countries, we rely on the oversight of the aviation authority in addition to our periodic inspections. We are also working to ensure that these foreign aviation authorities inform us and seek FAA approval of changes to repair station operations if they directly impact FAA requirements.

In response to the IG, we have also made some changes to our oversight of foreign repair stations. For example, we eliminated the 10% sampling requirement on FAA's inspection of repair stations in countries where there is a BASA/MIP in place. In FY 2006, FAA conducted sampling inspections in 21% of the repair stations located in these countries. We have also developed and implemented policy and procedures in the BASA/MIP countries to capture and document the results from the inspections conducted by foreign authorities for inclusion in the Program Tracking and Reporting System.

It is also important to remember that, by its nature, aviation is truly an international enterprise. An aircraft, especially in commercial aviation, contains parts manufactured all around the world. The original equipment manufactures (OEMs) have a wealth of expertise in repairing their products. In addition, their parts may have warranties. It would be extremely unwise to restrict a U.S. carrier's ability to use OEM maintenance, even if the OEM is abroad.

There are a number of other reasons for air carriers to choose to outsource some maintenance and repair activities. The expertise of OEMs is so considerable and their

work is so consistent that maintenance is often outsourced to them, regardless of whether the maintenance being performed is on a part they manufactured. In other cases, overseas repair and maintenance facilities may provide a great deal of expertise, or lower costs. Nevertheless, just as aviation safety is in no way compromised by allowing U.S. carriers to fly aircraft made in Europe, in Brazil, or in Canada, so too is safety in no way compromised by allowing other countries to conduct repair and maintenance on our aircraft.

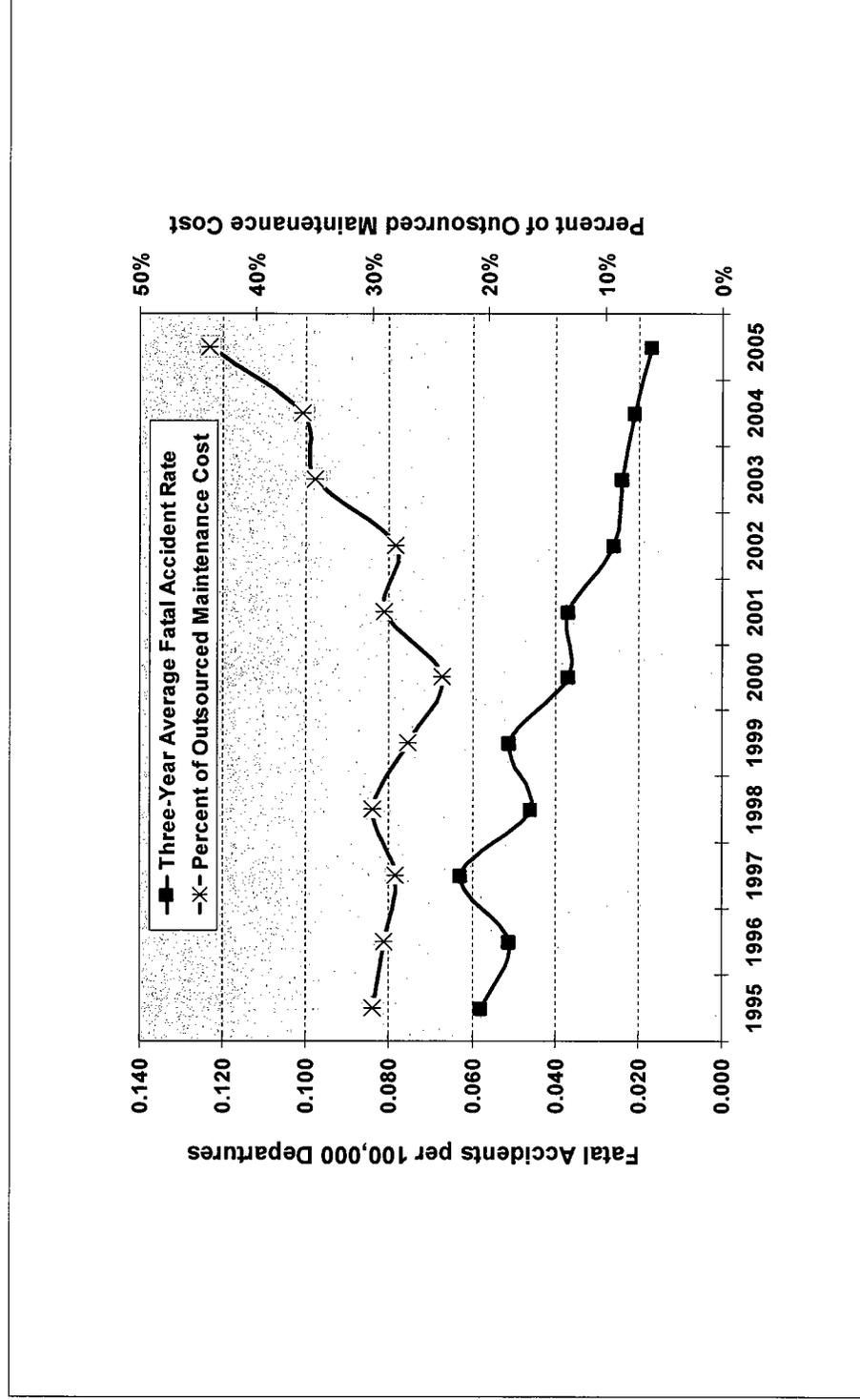
I would like to conclude this morning by saying that our work with the IG's office in the past few years has been productive. We have made a number of adjustments that I think have improved the effectiveness of our oversight. That can only improve safety. I think we generally agree that we are moving in the right direction. Certainly, the chart I talked about reflects that airline use of repair stations has not compromised safety.

I understand and appreciate this subcommittee's concern about the increased use of repair stations in this country and abroad. Obviously, we share a common goal to find ways to improve safety at a historically safe period in U.S. aviation. I can assure you that my office is totally committed to making whatever adjustments the situation demands when it comes to safety oversight. Hearings like the one today continue a necessary dialogue. I do not claim to have all the answers. I think the changes we have made in recent years are good ones. But we can't sit still. There will always be ways to improve and we will continue to look for them.

This concludes my statement. I will be happy to answer your questions at this time.

Contract Maintenance & Accidents

Source: NTSB & Bureau of Transportation Statistics



The FAA's Oversight of Outsourced Air Carrier Maintenance
 March 29, 2007



Federal Aviation
 Administration