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Department of the Interior and Department of Agriculture  
Fire Aviation Programs  

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INTRODUCTION

Mr. Chairman and members of the Committee, thank you for the opportunity to meet with you today to discuss the Department of Agriculture Forest Service and the Department of the Interior (DOI) fire aviation program. Since the two Departments work closely together in fire management, we are providing a joint statement. The fire aviation program is an important and multifaceted component of our overall firefighting strategy, and is used in tandem and in support of other firefighting operations. In our testimony today, we will discuss our aviation resources, responses to reports and recommendations to improve the fire aviation program, progress on our long-term aviation plans, and the outlook for the upcoming fire season.

BACKGROUND

The fire aviation program has undergone significant changes since the spring of 2004 when contracts for large airtankers were terminated in the wake of the National Transportation Safety Board (NTSB) report addressing airworthiness issues. In 2004 and 2005, we made greater use of smaller Single Engine Air Tankers (SEATs) and both large and medium helicopters. This strategy, combined with the certification and return to service of 16 large air tankers has served us well. The mix of aircraft, including large air tankers, SEATs, helicopters, and other aircraft provided aerial support to our firefighters in achieving an initial attack success rate of 98.2 percent in 2003, 99.1 percent in 2004, and 98.5 percent in 2005.

The increasing accuracy of interagency predictive services capabilities assists in the refinement of fire aviation management. Advances in technology, data-gathering, and data analysis, combined with increased collaboration between interagency meteorologists and fire behavior and fuels specialists, provide greater accuracy in predicting the potential for, and severity of, fire activity. In turn, this allows managers to move and place aircraft where the needs are greatest and aviation resources can be most effective.
The Forest Service and DOI continue to have the firefighters, equipment, and aircraft necessary to achieve a high rate of success in suppressing fires on initial attack. We have increased our fleet of firefighting aircraft to assist ground firefighters, particularly during extended attack. As you know, during any year, the vast majority of wildland fires – numbering in the thousands - are suppressed without the benefit of air support. If a fire continues to grow and locally available resources are inadequate, fire managers request additional resources, including aviation support. Aviation assets are managed through the National Multiagency Coordination Group and prioritized for prepositioning, initial attack, and extended attack.

In calendar year 2005, more than 66,000 fires burned 8.7 million acres of Federal, State and private lands. In calendar year 2005, Federal suppression costs totaled $966 million. Wildland fire use - by which fire was used to achieve resource management objectives in predefined geographic areas - accounted for an additional 489,000 acres.

**AVIATION RESOURCES**

**Large Airtankers** - Large airtankers are only one of the many tools we use to suppress wildland fires. The primary role of large airtankers is to rapidly deliver a large amount of retardant in the initial attack of a wildfire. In May 2004, the Forest Service and Bureau of Land Management (BLM) terminated the contracts for 33 large airtankers based on the recommendations of the NTSB regarding the airworthiness of these firefighting aircraft; the NTSB recommendations were the result of investigations of three large airtanker crashes. The report noted the need to have maintenance and inspection programs for all firefighting aircraft based on their operational service life in the firefighting environment. It was the opinion of NTSB that the Federal Aviation Administration, the Forest Service, and DOI all have a role in ensuring airworthiness for aircraft used in firefighting operations, but that the primary role for assuring the airworthiness of large air tankers rests with the Forest Service.

At the time of the NTSB report, the mechanisms to ensure airworthiness of firefighting aircraft were not fully developed. Consequently, the contracts for 33 large airtankers were terminated. Two subsequent actions were immediately taken: first, the Departments developed a strategy of utilizing SEATs and additional large and medium helicopters to provide aerial support; this reconfigured fleet performed successfully albeit at a higher per hour cost during the 2004 fire season. Second, a process to address airworthiness was developed by the Forest Service through contracting with aviation technical experts.

Following the work of the aviation technical contractors, a determination on the airworthiness of two models of large airtankers was made and these aircraft returned to service. The Forest Service spent considerable time and effort with the owners and operators of all large airtankers to respond to the NTSB findings. We have been unsuccessful in assessing the operational service life for fourteen Douglas DC-4, 6, and 7 aircraft. Without confidence in a method of determining the structural strength and fatigue life of the Douglas aircraft, neither the Forest Service nor other Federal firefighting organizations can be reasonably assured of their safety. Therefore, consistent with the manufacturer's (Boeing Corporation) advice, the DC-7 that was flown experimentally in 2004 and 2005 will not be Federally-contracted during 2006.
In January 2006, three Lockheed P3B large aircraft became available from the U.S. Navy. Ownership of these aircraft has been transferred to the Forest Service. The Forest Service, on behalf of the firefighting agencies, will pursue competitive bids to install tanks and operate the aircraft. Conversion and inspections of these aircraft could take a year. They are expected to be available for the 2007 fire season.

Airworthiness efforts related to airtankers and other aircraft are continuing. The Forest Service plans to have all airtankers and agency owned aircraft instrumented with Operational Loads Monitoring Systems by the end of 2006. The Forest Service’s Operational Loads Monitoring Program collected, converted, and disseminated over 800 hours of flight loads data and expects that figure will quadruple for 2006. These data will be analyzed by aviation technical experts to identify aerial firefighting environment. The long-term goal is to gather and analyze data regarding operational loads and continue to use that data to enhance the continuing airworthiness of aircraft used in aerial firefighting. The data collected and its analysis were instrumental in the reintroduction of the Lockheed P2V aircraft and have helped validate its use for the next 5-10 years. All of the airtankers have been configured with traffic collision avoidance systems.

During the 2006 fire season, we expect to have available 16 large airtankers, subject to testing and inspection, and 4 military C-130 aircraft equipped with modular airborne firefighting systems (MAFFS). An additional 4 MAFFS will be available when maintenance and inspections are complete in the early summer.

**Helicopters** — Along with SEATs, additional large (Type I) helicopters and medium helicopters have allowed us to fight wildland fires even with the reduction in the number of large airtankers. While the large fixed-wing airtankers have the ability to fly faster and go longer distances to deliver retardant, a Type I helicopter, with a close suppressant retardant supply, can exceed a fixed wing airtanker in capacity and effectiveness. This provides improved operational effectiveness through quick turnarounds, precision drops, and increased gallons delivered.

For the 2006 fire season, the Forest Service and DOI plan to have available 15 exclusive use and 94 call-when-needed large helitankers and helicopters, as well as 39 exclusive use and 110 call-when-needed medium helicopters. Seventy three smaller (Type III) exclusive use helicopters are stationed around the country for local use in areas of high fire potential. There are also a large number of call-when-needed Type III helicopters available.

**Single Engine Airtankers** - For the 2006 fire season, the BLM, which manages the vast majority of the DOI fire aviation program, will implement a refined aviation program that will achieve greater operational efficiencies by focusing on faster, higher-capacity aircraft, and by enhancing collaboration and cooperation to position these aircraft where the need is greatest. The overall number of aircraft will essentially remain unchanged from last year, but they will be managed in a more efficient manner.

Vendors are gradually transitioning from piston aircraft to the faster turbine aircraft which have a higher capacity, are more reliable, and perform better at higher altitudes. By using faster, higher-capacity aircraft and extending the lengths of the exclusive-use contracts, the BLM will achieve the same or greater capacity than in 2005. For example, two 800-gallon SEATs would replace three 500-gallon SEATs. Additionally, these aircraft will be contracted at the national level, allowing for
improved cooperation at all organizational levels and for greater flexibility in positioning and utilizing the aircraft where they are most needed. The net result is that all geographic areas will have greater access than in previous years to more aircraft when the need arises.

Additionally, in a separate effort the BLM has initiated a program to collect flight data encountered in firefighting operations. This program, which stems from the findings of the Blue Ribbon Commission (discussed below in more detail), is in the process of evaluating each type of aircraft and its use in the Department’s fleet. BLM instrumented two aircraft in 2005 to monitor structural conditions and gather data regarding operations in the fire environment. A third aircraft will be equipped in 2006. The long-term goal is to gather and analyze data regarding structural conditions and continuing airworthiness in the fire environment for each aircraft’s particular mission, whether it is smokejumper aircraft, helicopters, aerial supervision, or other types of aircraft and missions.

WORKING TOWARD THE FUTURE

In 2002, prior to the NTSB study, the Forest Service and DOI co-sponsored a Blue Ribbon Panel to review all aspects of the aviation program. Both Departments appreciate the efforts of Mr. Hall and Mr. Hull who were Co-Chairs of the Blue Ribbon Panel. As a result of the NTSB and Blue Ribbon Panel reports, the Departments have a number of efforts underway to anticipate and address the long-term aviation needs of the fire community, and for the continued protection of lives, property, and resources. The feasibility of aircraft such as the S3 Viking and other aircraft for use as airtankers is being studied.

Large airtankers, helicopters, and SEATS have specific missions in responding to wildland fires, ranging from the delivery of crews and supplies, providing a management platform, to dropping water and retardants. The collection and analysis of flight data will aid us in improving aviation safety for the future. It will also provide a foundation for discussions about “purpose-built” air tankers, or air tankers specifically designed and built for missions and operations in the fire environment. The data we are gathering will be analyzed by independent aviation experts, either original manufacturers or other experts. We will limit our aircraft to those having the structural strength to operate safely in the fire environment.

In response to the Blue Ribbon Panel findings, both DOI and the Forest Service modified its aircraft contracting process to focus on obtaining the best value without compromising safety considerations. In addition, DOI and the Forest Service have progressed in the implementation of training, including on-line training for SEAT contract pilots. Additional training modules for helicopter pilots, air tactical supervision pilots, and others are scheduled to be completed and available in the future. Prior to the 2006 fire season the Forest Service will train nearly 300 agency and contract pilots through its sponsored crew resource management courses and the National Aerial Firefighter Academy.

An interagency work group chartered by the National Fire and Aviation Executive Board, comprised of the Agency Fire Directors and the National Association of State Foresters, is identifying unified and consistent mission standards, as well as assessing the long-term needs of the aviation program. Recognizing the evolution and changing needs of the aviation program, the National Fire and Aviation Executive Board chartered a group to address the next 10 to 15 years of interagency fire aviation
needs. The first phase of this group’s work, which provides a broad overview of the entire aviation program, including large air tankers, is currently underway.

Phase 2 of the group’s work will address the Congress’s direction for a strategic plan and will contain more specific elements such as the issues surrounding “purpose-built” air tankers; the anticipated numbers and types of airtankers that will be needed; the infrastructure that will be required to support a future air tanker fleet; acquisition, infrastructure, maintenances, and other associated costs; and acquisition and management models.

Phase 3 of this effort will be the creation of an implementation plan that will be developed shortly after completion and approval of Phase 2. We anticipate initial implementation to occur in fiscal year 2007, with full implementation phased in over a number of years.

OUTLOOK FOR THE 2006 FIRE SEASON

The 2006 fire season is shaping up to be another challenging year. Drought conditions continue across much of the southwest and fire activity is expected to begin early and remain above normal through June into July. Below normal fire potential exists in the northeast based on a wet winter. In Alaska, the Kenai Peninsula continues to be an area of concern with higher than normal fire potential. We expect to have firefighting resources - firefighters, equipment, and aircraft - comparable to those available in 2005. If local areas experience severe fire risk, we will increase firefighting ability by staging or deploying our firefighters and equipment as needed.

SUMMARY

In conclusion, we would again like to thank you for the opportunity to discuss these aviation issues with you today. Each aerial resource, whether fixed wing or helicopter, fills a key role in the multifaceted interagency fire suppression strategy. We have shown that we have the capability of adjusting for the short-term as we complete our long-range plans. We are keenly aware of the challenges we face regarding fire aviation and aerial support of our firefighters on the ground in protecting lives, property, and resources. We are facing these challenges head-on and with determination, and we are pursuing every possible avenue to maintain and improve the safety, efficiency, and effectiveness we’ve all come to expect from the fire aviation community. We appreciate your continued support and look forward to working with you as we move through this process toward an ever more modern and efficient fire and aviation program for the future. I would be happy to answer any questions you may have.