

FIREFIGHTING AIRCRAFT

HEARING
BEFORE THE
SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS
OF THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED NINTH CONGRESS

SECOND SESSION

TO

REVIEW PROGRESS MADE ON THE DEVELOPMENT OF INTERIM AND
LONG TERM PLANS FOR USE OF FIRE RETARDANT AIRCRAFT IN FED-
ERAL WILDFIRE SUPPRESSION OPERATIONS

FEBRUARY 15, 2006



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE

27-215 PDF

WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

COMMITTEE ON ENERGY AND NATURAL RESOURCES

PETE V. DOMENICI, *New Mexico, Chairman*

LARRY E. CRAIG, Idaho	JEFF BINGAMAN, New Mexico
CRAIG THOMAS, Wyoming	DANIEL K. AKAKA, Hawaii
LAMAR ALEXANDER, Tennessee	BYRON L. DORGAN, North Dakota
LISA MURKOWSKI, Alaska	RON WYDEN, Oregon
RICHARD M. BURR, North Carolina,	TIM JOHNSON, South Dakota
MEL MARTINEZ, Florida	MARY L. LANDRIEU, Louisiana
JAMES M. TALENT, Missouri	DIANNE FEINSTEIN, California
CONRAD BURNS, Montana	MARIA CANTWELL, Washington
GEORGE ALLEN, Virginia	KEN SALAZAR, Colorado
GORDON SMITH, Oregon	ROBERT MENENDEZ, New Jersey
JIM BUNNING, Kentucky	

ALEX FLINT, STAFF DIRECTOR

JUDITH K. PENSABENE, CHIEF COUNSEL

ROBERT M. SIMON, DEMOCRATIC STAFF DIRECTOR

SAM E. FOWLER, DEMOCRATIC CHIEF COUNSEL

SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS

LARRY E. CRAIG, Idaho, *Chairman*

CONRAD R. BURNS, Montana, *Vice Chairman*

CRAIG THOMAS, Wyoming	RON WYDEN, Oregon
JAMES M. TALENT, Missouri	DANIEL K. AKAKA, Hawaii
GORDON SMITH, Oregon	BYRON L. DORGAN, North Dakota
LAMAR ALEXANDER, Tennessee	TIM JOHNSON, South Dakota
LISA MURKOWSKI, Alaska	MARY L. LANDRIEU, Louisiana
GEORGE ALLEN, Virginia	DIANNE FEINSTEIN, California
	MARIA CANTWELL, Washington

PETE V. DOMENICI and JEFF BINGAMAN are Ex Officio Members of the Subcommittee

FRANK GLADICS, *Professional Staff Member*

SCOTT MILLER, *Democratic Counsel*

CONTENTS

STATEMENTS

	Page
Burns, Hon. Conrad R., U.S. Senator from Montana	2
Craig, Hon. Larry E., U.S. Senator from Idaho	1
Hall, James, Hall & Associates, LLC	20
Hatfield, Nina Rose, Deputy Assistant Secretary, Policy, Management and Budget, Department of the Interior	7
Hull, James B., President, National Association of State Foresters	27
Murkowski, Hon. Lisa, U.S. Senator from Alaska	2
Rey, Mark, Under Secretary for Natural Resources and the Environment, Department of Agriculture	5
Salazar, Hon. Ken, U.S. Senator from Colorado	4

APPENDIX

Responses to additional questions	33
-----------------------------------------	----

FIREFIGHTING AIRCRAFT

WEDNESDAY, FEBRUARY 15, 2006

U.S. SENATE,
SUBCOMMITTEE ON PUBLIC LAND AND FORESTS,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met at 2:30 p.m. in room SD-366, Dirksen Senate Office Building, Hon. Larry E. Craig presiding.

OPENING STATEMENT OF HON. LARRY E. CRAIG, U.S. SENATOR FROM IDAHO

Senator CRAIG. Good afternoon, everyone, and welcome to today's Public Lands and Forests Subcommittee hearing. Today we will take testimony from the Department of Agriculture's Under Secretary of Natural Resources and the Environment, Mark Rey, and the Department of the Interior's Deputy Assistant Secretary of Policy Management and Budget, Nina Rose Hatfield. Tom Harbour, I understand, is a backup resource for the U.S. Forest Service.

I also want to welcome back to our hearing room Mr. Jim Hall of Hall & Associates and Mr. Jim Hull, the Texas State Forester. They provided excellent testimony on the Blue Ribbon Panel on Federal Aerial Firefighting Assisting Safety and Effectiveness Report in our 2003 meeting and I expect that same type of testimony today. Mr. Hull, if you also want to give us a quick update on your experiences in the recent fires in both Texas and Oklahoma this winter, I think the committee and the record would appreciate that.

I've called this hearing for four reasons. First, the Blue Ribbon Panel called for the agencies to develop a plan to replace retardant aircraft with non-military aircraft.

In 2004, Congress directed the agency to develop a long-term strategy and report back to Congress by March 2005. What do the agencies plan on doing to resolve this issue? What will the cost be to move away from the old paradigm by using old military aircraft to do whatever it is the agencies plan and are recommending?

Next, the Forest Service has acquired three Navy P-3 Orions that it plans to convert into retardant aircraft and contract with a company or companies to operate and maintain these aircraft. It would seem to me that this acquisition might tell us what the long-term strategy is, but we need to discuss the costs and the implication of this strategy.

Third, the blue ribbon report included a number of other important recommendations and I will explore some of them in my questions with our witnesses this afternoon.

Last, I see that the BLM is moving toward a higher number of exclusive use contracts for its single-engine retardant aircraft. Given the uproar that engulfed the Forest Service last year regarding helicopter contracts, I want to know that the BLM has learned from the Forest Service's tantrum of last year. Additionally, you need to help me understand the shift to larger single-engine retardant aircraft and what that means.

Mr. Hall will have to leave us earlier to make his flight. Thus I may move him forward in the hearing in relation to questions. We will see how we're progressing and I'll let, of course, him know, but I don't think that we're going to extend beyond his time limit.

Finally, I know that many of the members may want to take this opportunity to ask Under Secretary Rey about the administration's proposal to sell Forest Service lands in order to finance payments to counties. So far, those Senators have not showed up. We'll see how that progresses. Mark, I would suggest one might need to be prepared to respond to those kinds of questions.

Mr. Rey and the Chief of the Forest Service are scheduled for a hearing on February 28 at 10 a.m. here on budget issues. That would be the more appropriate time for us to discuss that. I will maintain a 5-minute clock for testimony and questions of the committee. We'll make both your written and oral testimonies a part of our record, so I urge you to resist referring to your full testimony, giving us the opportunity to move to the necessary and appropriate questions.

Again, welcome before the committee. And before I turn to Nina and Mark, let me turn to Senator Lisa Murkowski.

Senator Murkowski.

[The prepared statement of Senator Burns follows:]

PREPARED STATEMENT OF HON. CONRAD R. BURNS, U.S. SENATOR FROM MONTANA

Chairman Craig, thank you for calling this hearing to discuss wildland aviation fire safety and thanks to our witnesses for traveling to be here today.

Firefighting aircraft play an integral role in wildland fire management. In Montana, we understand the dangers associated with catastrophic wildfires and firefighting. The crews of these planes take exceptional risk and perform a great service to our state. Since the Blue Ribbon report was published in 2002, this subcommittee has met several times to track the Forest Service's progress in implementing the findings of the report.

I am also concerned with the rising cost of aerial operations. In recent years the Forest Service has expended as little as \$155 million dollars in FY 2004 and as much as \$255 million in FY 2002 for all aviation activities. It is estimated the cost could be in excess of \$280 million in a bad fire season. With rising costs, it is important the Forest Service has a strategy plan in place for procuring and managing its aviation assets in the future. Congress has asked for this plan and is still waiting.

I am also interested to hear more about the Forest Service's plan for the recently acquired Lockheed P-3 Orion Aircraft. I am primarily concerned about whether or not the government will face liability in the event of an accident.

Thank you again for joining us here today. I look forward to your testimony.

**STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR
FROM ALASKA**

Senator MURKOWSKI. Thank you, Mr. Chairman. I appreciate the opportunity to speak this afternoon. Welcome. It's always nice to see and talk about issues that are important to us up north, and as you know, things have been warm up there the past couple of summers. But, Senator Craig, I want to thank you, as the chair-

man of the subcommittee, for holding the hearing so early this year. What has been happening up north is that it appears that our fire season seems to be coming just a little bit earlier year after year. So it is appropriate for the subcommittee to conduct the oversight hearings while we can still influence the Federal fire managers for the upcoming season.

Now, we always seem to refer to the 2004 fire season in Alaska as the toughest fire season on record. We lost about seven million acres burned up there, mostly in the interior, but really last year wasn't much better. We lost 4.1 million acres. It was the third busiest fire season on record and it was also very significant in that fire managers were battling two very significant fires in May. We never used to think about May as being fire season in Alaska, but we saw them in Kenai and the Northway fires.

While the number of acres burned in 2005 was less than in 2004, what we saw from the smoke and Alaskans suffering from the smoke, I felt it was increased. I spent a little bit of time in the interior in both July and in August doing my other duties—that of being a soccer mom—and had the misfortune of being in conditions where the soccer tournaments were canceled, where I had people coming up to me and saying, yes, we appreciate that the job is all about protecting property, protecting life, but the quality of life is such that we can't go outside. We're canceling the sporting events, they're advising seniors and young children to stay indoors if you've got any kind of respiratory issues. It was an issue where I had people coming to me saying, I live here in the interior, suffer through the long, cold winters because we know during the summertime we can go out and enjoy the sunshine, enjoy the heat of the interior, and people couldn't go outside because of the air quality issues.

So, really, we still see the lack of availability of the heavy airtankers during the fire season and that's irritating people as much as the smoke. They're saying, where are the tankers, what's going on? Now, we have contracted with the heavy airtankers from Canada for the past several seasons, but there remains this arguing, quibbling with the Federal Government about where the tankers can be used.

And we've had great discussion in this committee about the interagency operations. As we know, the firefighting in Alaska is uniformly interagency. The State has the lead in south-central, the Federal Government has the lead in the interior, but the resources are used Statewide. We believe, the State firmly believes, that the tankers are safe to fly on fires anywhere in the State and that the rigor of the Canadian regulation assures that they're safe.

We've brought this issue up now for several years, 3 years running. We still don't have an entirely straight answer. Last year, Mr. Rey, you testified the problem was resolved, but then we got a letter from Lynn Scarlett saying that, in fact, it wasn't fixed. So I do look forward to the agency's plans for the 2006 fire season. We certainly hope that a long-term solution to the tanker availability problem is going to be resolved and we see that problem disappear. So I appreciate your testimony here this afternoon. And I appreciate the opportunity, Mr. Chair, to make a few comments.

Senator CRAIG. Senator, thank you very much. Now let us turn to our colleague, Ken Salazar, Senator Salazar of Colorado.

**STATEMENT OF HON. KEN SALAZAR, U.S. SENATOR
FROM COLORADO**

Senator SALAZAR. Thank you very much, Chairman Craig, and thank you for your leadership, not only on this subcommittee, but also on this issue. It's good to know that you're out front before the heat of the fire season starts making sure that we're ready to do what we need to do.

Senator CRAIG. Well, looking at that map, you're kind of in it feet first, I guess. Is that how we say it?

Senator SALAZAR. I was trying to calculate the percentage. It looks like about 66 percent, about two-thirds of us, are right there in that danger zone.

Senator CRAIG. Okay.

Senator SALAZAR. So I am concerned. And I very much appreciate you holding the hearing. I was noticing—let me see, how much of Idaho is in there? Well, not very much. Thank you, sir, for holding this hearing. I know Alaska's right in there, too, so I think there are a number of our States that are in there. I think it's an important hearing because, even though we now have 10 feet of snow in many of our mountain ranges, we know that that will all disappear and we'll be in the fire season again sooner than we expect.

For me, from a perspective of Colorado, I witnessed in 1994 a Storm King tragedy which resulted in 14 men and women dying on Storm King Mountain near Glenwood Springs. I also, during the time I was attorney general, participated in some of the efforts concerning two huge fires in Colorado. One, which was the Hayman fire, was started by one of the Federal employees and burned 138,000 acres. Also in that tragedy, there were four young men and women who died on their way to fighting that fire. And, finally, in 2002, we lost two crew members when a helicopter and a tanker crashed in the Big Elk fire near Estes Park.

And so it's an issue of great concern to me and I look forward to hearing from the agency what plans we have with respect to these slurry bombers in the year ahead.

Thank you very much, Mr. Chairman. And I have some questions that I would ask, if I could submit them for the record, and then if the agency could respond to those questions, Mr. Chairman.

Senator CRAIG. Certainly questions will become a part of the record for their response. We appreciate that.

Senator SALAZAR. Thank you.

Senator CRAIG. Now let us proceed with our witnesses. Aerial fire assault has become a very major part of your fire budgets and the quality of the aircraft is in question and, of course, we've been through several iterations of this now, so let us proceed. Let me turn first to Mark Rey, Under Secretary for Natural Resources and the Environment, Department of Agriculture. Again, Mark, welcome before the committee. Please proceed.

STATEMENT OF MARK REY, UNDER SECRETARY FOR NATURAL RESOURCES AND THE ENVIRONMENT, DEPARTMENT OF AGRICULTURE

Mr. REY. Thank you, Mr. Chairman. Thank you for the opportunity to talk about our Department's aviation programs today. We'll be submitting a single statement and we'll both summarize elements of it. In the statements, we'll 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.

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 NTSB report addressing airworthiness issues. In 2004 and 2005, we made greater use of small single-engine airtankers and both large and medium helicopters. This strategy, combined with the certification and return to service of 16 large tankers, has served us well. The mix of aircraft, including large airtankers, 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. So our 2 years of experience in 2004 and 2005 with our modified aviation fleet has proven successful results. We continue to have the firefighter's equipment and aircraft necessary to achieve a high rate of success in suppressing fires on initial attack, and we expect that will continue during the 2006 fire season.

As I indicated, in May 2004, we terminated the contracts for 33 large airtankers, based on the recommendation of the NTSB regarding the airworthiness of these aircraft. The NTSB's recommendation were the result of investigations of three large airtanker crashes. The report noted the need to have maintenance and investigation—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 FAA, the Forest Service and DOI all have a role in ensuring airworthiness for aircraft use in firefighting operations, but that the primary role for assuring the airworthiness of large airtankers rests with the Forest Service.

At the time of the NTSB report, mechanisms to assure airworthiness of firefighting aircraft were not fully developed. Consequently, the contracts for 33 large airtankers were terminated. Two subsequent actions were immediately taken. First, we developed a strategy of utilizing SEATs and helicopters to provide additional aerial support, and second, we began a lengthy process to address the airworthiness of the large airtankers. Following that work, a determination on the airworthiness of two models of large tankers was made and these aircraft were turned into service.

We have been unsuccessful in assessing the operational service life for 14 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 any other firefighting organization, can be reasonably assured of their safety. Therefore, consistent with the manufacturer's advice—that would be the Boeing Corporation—the DC-7 that was flown experi-

mentally in 2004 and 2005 will not be federally contracted for 2006.

In January 2006, three additional Lockheed P-3B aircraft were made 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 inspections of these aircraft could take several months. They are expected to be available for the 2007 fire season. In response to your question, this is not part of our long-term strategy, but it's an effort in the interim to add some additional flexibility to our airtanker fleet.

During the 2006 fire season, we expect to have available 16 large airtankers, subject to testing and inspection, and four military C-130 aircraft equipped with modular airborne firefighting systems. An additional four of these C-130 aircraft will be available when maintenance and inspections are completed in the early summer and they will thereafter be added to the firefighting fleet.

Along with the heavy tankers and the 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 retardant supply can exceed fixed-wing airtankers in capacity and effectiveness.

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.

I'll take just a second to respond to the clarification that Senator Murkowski requested about the availability of tankers in Alaska. First and foremost, all of our large airtankers and all of—virtually all of our aviation assets are national assets and if they are needed in Alaska, they will be directed there, as they're requested by incident commanders in the State.

Additionally, the State of Alaska also flies aircraft. At one time last year, we thought they were going to be flying the CL-215's, which are certificated for air safety and would not have been restricted in any fashion. Later, the State changed its mind and contracted with some DC-6's. As I said earlier, we have not been able to assure the operational service life of the DC-6's, so those won't be flown in Federal incidences. As long as they're flown under State control, however, they would not be restricted for use in Alaska.

With that, I turn the microphone over to Ms. Hatfield for the balance of our statement.

Ms. HATFIELD. Thank you, Mark.
Senator CRAIG. Please proceed.

STATEMENT OF NINA ROSE HATFIELD, DEPUTY ASSISTANT SECRETARY, POLICY MANAGEMENT AND BUDGET, DEPARTMENT OF THE INTERIOR

Ms. HATFIELD. Mr. Chairman and members of the committee, thank you for this opportunity to meet with you today to discuss the Department of Agriculture's Forest Service and the Department of the Interior's Fire Aviation Program. As Mr. Rey stated, the fire aviation program is an important and multi-faceted component of our overall firefighting strategy and is used in tandem and in support of our other firefighting operations.

Today, I'd like to address our refinement in the use of single-engine airtankers, or SEATs, in our firefighting efforts, our response to the report of the blue ribbon panel, and the 2006 outlook for the fire season. In 2006, the BLM will implement a refined aviation program that will achieve greater operational efficiencies by focusing on faster, higher-capacity aircraft and enhancing collaboration and cooperation to position these aircraft where the need is the greatest.

The overall number of aircraft will essentially remain unchanged from last year, but they'll be managed in a more efficient manner. 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 in this new strategy.

As a result, all the geographic areas will continue to have access, as they have in previous years, to more aircraft when the need arises. BLM is also initiating a program to collect flight data encountered in firefighting operations with the long-term goal to gather and analyze data regarding the structural conditions and continuing airworthiness in the fire environment for each aircraft's particular mission, whether it's a smokejumper aircraft, helicopters, aerial supervision, or other types of aircraft and missions.

We referred earlier today to the NTSB study, which the Forest Service and DOI co-sponsored, and to a blue ribbon panel to review all aspects of the aviation program. Both Departments appreciate the efforts of Mr. Hall and Mr. Hull, who are 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 S-3 Viking and other aircraft, for the use of airtankers is being studied. In addition, both the Forest Service and DOI are collecting and analyzing flight data that will help us in improving aviation's safety for the future. This data will also provide a foundation for the discussion of purpose-built airtankers, or airtankers specifically designed and built for missions and operations in the fire environment.

In response to the blue ribbon panel findings, both DOI and the Forest Service have modified its contracting procedures for aircraft to focus on obtaining the best value without compromising safety considerations.

In addition, both DOI and the Forest Service have progressed in the implementation of training, including online training for our

SEAT contract pilots. Prior to the 2006 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 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, this group will 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 airtankers, is currently underway. Phase two will address congressional direction for a strategic plan and will contain more specific elements, such as the issues surrounding purpose-built airtankers. Phase three of this effort will be the creation of an implementation plan that will be developed shortly after the completion and approval of phase two. We anticipate initial implementation to occur in fiscal year 2007, with full implementation phased in over a number of years.

Now, as we turn our attention to the outlook for the 2006 fire season, as you have already noted, this map demonstrates that our 2006 fire season is shaping up to be another challenging year. The areas in maroon represent those areas in which we believe there's an above normal potential for fire activity. And then in the North-east area, you will see that the predictive services indicate that we think we'll have less than a normal fire year. So this certainly does reflect the drought conditions that continue across much of the Southwest and the fire activity that is expected to begin early and remain above normal through June and into July.

However, Alaska, as you can see, especially in the Kenai Peninsula, continues to have areas of concern where we expect to have higher than normal fire potential. We do expect to have firefighting resources, firefighters, equipment, and aircraft that are comparable to those that were available in 2005. If local areas experience severe fire risks, we will continue to increase firefighting ability by staging or deploying our firefighters and equipment as it is needed. Each aerial resource, whether fixed-wing or helicopter, fields a key role in that multifaceted interagency fire suppression strategy.

We have shown that we have the capability for adjusting for the short-term as we complete our long-range plan using the kind of information that is behind the construction of this map. We certainly are keenly aware of the challenges that we face regarding fire aviation and aerial support of our firefighters on the ground in protecting lives, property, and resources, and we are facing these challenges head-on.

We appreciate your continued support and look forward to working with you as we move forward through this process toward an ever more modern and efficient fire and aviation program for the future. We'd like to thank you again for the opportunity to discuss these aviation issues with you today and we'd be happy to answer your questions. Thank you.

[The prepared joint statement of Mr. Rey and Ms. Hatfield follows:]

PREPARED STATEMENT OF NINA ROSE HATFIELD, DEPUTY ASSISTANT SECRETARY, POLICY, MANAGEMENT AND BUDGET, DEPARTMENT OF THE INTERIOR, AND MARK REY, UNDER SECRETARY, NATURAL RESOURCES AND ENVIRONMENT, DEPARTMENT OF AGRICULTURE

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 suc-

cessfully 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.

Senator CRAIG. Secretary Hatfield, thank you very much. Both Secretary Rey and Secretary Hatfield, thank you. We've been joined by two more of our colleagues, Senator Conrad Burns of Montana and Senator John Kyl of Arizona. If you two are not on a hard timeline, we'll move right into questions and allow you to make any opening statements along with your questions; okay? If not, we'll give you the floor. All right, thank you all very much.

Mark, the blue ribbon report suggested that the Forest Service and BLM develop a strategy to replace the aging ex-military retardant aircraft with a plane developed specifically for the purpose of dropping retardant on fires on Federal land. The blue ribbon panel report was critical of the repeated reliance on ex-military aircraft for conversion into airtankers.

In view of this—and you partly explained this, but I wish you'd broaden your explanation—why is the Forest Service contemplating issuing a contract for the conversion of P-3 aircraft to airtankers and investigating the feasibility of converting S-3 Viking antisubmarine tracking aircraft into airtankers?

Mr. REY. The blue ribbon panel made several very useful recommendations, many of which we're following and we'll probably talk about today. But with all due respect to the panel, we believe that both the P-3 and the S-3 are built stronger than commercial aircraft and are better able to withstand the stress loads—stress and loads encountered in the firefighting environment.

We also believe that an aircraft's hours flown, or the operational service life, rather than the year it was manufactured is the more appropriate measure for deciding when it's time to retire an aircraft. And the three P-3's that we've got access to have very low flight hours on them, so they give us a very cost-effective way of adding some flexibility to our existing fleet.

One area where we, and I guess the Blue Ribbon Commission, don't completely agree is on the utility of former military aircraft. We think that they have demonstrated capabilities, they're built stronger than most commercial aircraft, and as they have been used within their operational service life, they have generally performed well. That having been said, there are in the market a number of contractors and entrepreneurs who are trying to develop a fire service-based aircraft and we're in relatively constant communications with them. And to the extent that—and at the point that—they are able to achieve certification from the FAA and from the tanker board, we'll consider adding those aircraft to our fleet as well. The idea is to have as much variety and as much flexibility in the fleet as we can get. And I can provide to the committee a list of all of the known contractors and entrepreneurs who are currently working on different aircraft models, some former military,

and other aircraft that are specifically built for this purpose in other countries.

Senator CRAIG. Well, we would appreciate the list, but don't give out our phone number.

[Laughter.]

Senator CRAIG. Both Mr. Hall and Mr. Hull will testify there is still a strong need to designate one agency in charge of aviation. Both also continue to insist that the FAA must play a greater role in firefighting aviation safety certification. Do you agree with their testimony, and if so, which agency should be put in charge and how do we get the FAA to do more?

Mr. REY. I don't think we completely agree with their testimony, in the sense that I don't think there's a great deal of utility to be—or benefit to be garnered from either of those recommendations, and here's why.

First off, in terms of coordination of aviation assets, there are only two agencies involved, the Forest Service and the Bureau of Land Management. We operate through a unified command system, so I don't think you're going to see much change if you decide that one or the other of us is going to have to manage all of the aviation assets and all of the aviation contracts. In a sense, right now, our operations are seamless.

Moreover, there are a number of States that also manage aviation assets and this recommendation wouldn't change that. Indeed, to some degree, the fact that we have had to develop a unified command system to coordinate our two agencies' efforts has helped ensure and encourage the States to participate accordingly. So you've already, I think, gotten as much unification or coordination as you're going to get, and adding one more step isn't probably going to materially improve how well we use these assets.

With regard to the role of the FAA, they're already involved. Much of the work that we've done to certificate the safety of the large airtankers and now the other aviation assets has been closely advised by the FAA. And indeed, to the extent that we've retained outside experts, they've been experts that have been recommended and approved by the FAA. But to the extent that you want the FAA more directly involved, that's really an issue for Congress to decide, because under the relevant legislation that governs the FAA's activities, they're now only responsible for the civil fleet and not for public use aircraft. But, again, I think the bottom line is we've achieved most of the goals of those recommendations, even if we haven't achieved exactly those recommendations as they were offered.

Senator CRAIG. Thank you. I'll have more questions in the next round. Let me turn to Senator Murkowski.

Senator MURKOWSKI. Thank you, Mr. Chairman. Well, I'm sitting here looking at your map with great concern, because last year, if you'll recall, at this hearing, you had highlighted the Kenai Peninsula as being the one area in the State that was vulnerable, and you were right on the money. And so I'm looking at this, and perhaps the map isn't as accurate as last year, but if you are even close to being right, I am greatly concerned and I think my constituents back home are going to be even more concerned, because we want to believe that there is going to be a relief in sight and

we're going to be able to enjoy the summer, but that's a large swath and that runs through the population centers in the interior down in south central, in Anchorage, certainly on the Kenai Peninsula, so that's a great concern. So my question is, in terms of stationing aviation assets, what can you tell me that we can expect in the 2006 fire season in terms of those assets that would be on the ground in Alaska?

Ms. HATFIELD. I'd like to start by mentioning again that the aviation assets vitally important in Alaska certainly are only one piece of the infrastructure that we have in place to fight fires in Alaska. We also are going to have three hotshot crews, a number of firefighting crews and other emergency crews that are available. And so now we're looking at working with the State to evaluate what additional resources we might need to bring in, in light of this map, which was done as of February 8. We can give you a list of particular aircraft that are there now and will be available, but, again, as we are structuring our strategy, we would be able to move aircraft to Alaska as we needed it and as the season erupted. So our whole strategy is really built on being able to pre-position and then making other resources available as it becomes necessary.

Senator MURKOWSKI. Well, we were in a position last year of not having any Federal retardant tankers in the State, and I think that was an issue of basically having to requisition the assets. I think it would be helpful and certainly I appreciate the opportunity to do the sit-down before the fire season begins so that we do have an understanding as to what assets will be positioned up north, recognizing again we've got earlier fire seasons coming, we have a huge area that we have to cover, and we're still a long way from the lower 48 even when you're flying there. So it is something that we want to be able to resolve before we have a crisis.

Ms. HATFIELD. We would be glad to sit down with you. I might mention, in terms of airtankers, we do have two airtankers already pre-positioned or planned to be pre-positioned in Alaska.

Senator MURKOWSKI. Okay. That is helpful to know. As far as the comment you had made, Mr. Rey, about the DC-6's that the State had contracted with last year, I understand those are still on contract with the State. Under what conditions will the State be able to utilize the contracted tankers on federally managed lands, on those fires that are on those lands?

Mr. REY. The issue is not the land, it's who has operational control of the fire. If this is an incident where the State is running the incident, in the unified command structure this is a State-controlled fire. It's their incident command team that's running it. If they want to contract for use of those tankers, then that's not a Federal issue.

Where we have the operational responsibility for the fire, following the recommendations of the NTSB, we do not believe that we can guarantee the operational safety of a DC-6 and so we won't have it flown on a Federal fire, because we don't want to accept the risk or the liability associated with that. We do not know today the operational life of any of the DC aircraft that may be flown by any other firefighting agency. As contrast, we know with the P-3's, the P-2V's and the military's C-130H's when it is no longer safe to fly

that aircraft because of the flight hours that that specific aircraft has acquired.

Senator MURKOWSKI. Well, the difficulty, as you know, is the Alaskan on the ground doesn't care who's managing the fire, just take care of the fire, protect the property, protect the life, and the issue of the air quality that I spoke to at the beginning is really a major irritant. And it's not just that it's smoky out there, it is literally unsafe to be outside. And I think this is what perhaps is not getting through, this recognition that the fires that we are seeing and the smoke levels that we are seeing are not just an inconvenience, but that they are stopping us from being able to really move around and do what you would consider to be normal business.

And so there is this—there's this wall, this problem that we have in working through this Federal interagency. I do hope that we can have some good, long sit-downs, again, before the fire season, to work out these things because we talk about them ahead of time and then the fires come and nothing seems to be any different than it was the previous fire season. So, again, we need to do something that's going to be different this year.

Mr. REY. I think that we should sit down, because the issue that you're describing goes beyond the use of large airtankers to the overall decisions about when and how to attack fires. And, you know, in reality, I don't think the issue is the availability of large airtankers, it's the need to walk through what our current suppression and attack strategies are and see if you agree with them and then see what we can do about it if you don't.

Senator MURKOWSKI. Okay. I will look forward to some of those meetings.

Thank you, Mr. Chairman.

Senator CRAIG. Thank you.

Senator Burns.

Senator BURNS. Secretary Rey, I've just got a couple of questions and I guess they have to do with the blue ribbon report. It was supposed to be up here the first of March. When can we expect that report?

Mr. REY. Not the blue ribbon report, which is a report we contracted, but the report on the—

Senator BURNS. Yes, I'm sorry. I got the wrong one.

Mr. REY. When did you say that would be available?

Ms. HATFIELD. I think it's by the end of the year.

Mr. REY. We'll have it probably sometime in the fall.

Senator BURNS. Okay.

Mr. REY. This report isn't going to affect this year's firefighting.

Senator BURNS. Okay. Now, on the Lockheed P-3's, you bought those from the Navy. Have we worked out the liability issue on that—on those airplanes?

Mr. REY. Yes. We hold the liability for their use.

Senator BURNS. Okay.

Mr. REY. And the responsibility to assure their safety. The Navy gave them to us, we didn't—no money changed hands.

Senator BURNS. No money changed hands.

Mr. REY. No money changed hands.

Senator BURNS. I'll send you out on a—I've got to buy another car. I'll send you.

[Laughter.]

Senator BURNS. But I was just wondering if that report and the firefighting and the assessment of—how big does this aviation fleet—what do you see? How far do we go on that and are we better off owning our own or contracting?

Mr. REY. We think we're better off contracting. We think the Government gets better service at a more reasonable price.

Senator BURNS. Now, these P-3's. If you've decided that and if you have them equipped so they can haul retardant, do you have the authorization to sell those P-3's to a private contractor?

Mr. REY. We don't. You would have to give us that authorization through additional legislation, but we do have the authority to contract to have a private operator fly it. So absent legislation to allow us to convey these three P-3's into private ownership—

Senator BURNS. You do have that authority though? You can contract those airplanes out.

Mr. REY. We can contract with private contractors to fly them for us.

Senator BURNS. Okay. That's about the only thing that I was concerned about, just how far we're going to go with this with the size of our air force for the Forest Service.

Mr. REY. We can give you the aviation plan for this year, which includes the number of large tankers, helicopters, and single-engine tankers.

Senator BURNS. Okay. Helicopters, I realize, are a lot more efficient whenever you start—they put the retardant closer to the fire and they can spot it a lot quicker and are a lot more accurate with it, although they do have a range problem. I'm aware of that.

Mr. REY. Right. Each aircraft has its advantages and disadvantages, that's why we try to have some variety in the fleet for different tactical purposes.

Senator BURNS. Well, it's important and I think you know that we're coming up on a fire season, and it looks like you've got a big season down south. For the first time in many years we have read about the range fires in Texas and Oklahoma and so their conditions have not really improved a lot down there as we move into the summer months. But I would hope that we can be ahead of this thing a little bit this year in pre-positioning where we think the problems are going to be and to get on those fires a lot quicker. I know the worst fire we had in Montana, in 1988, could have been stopped. It burned from an old snag for 4 or 5 days before it decided to really blow up and go. So we need to react a lot faster. Thank you.

Senator CRAIG. Senator Burns, thank you. Senator Kyl, you're burning. I have a feeling that's probably why you're here. Welcome to the committee.

Senator KYL. Well, it's one of the reasons. Mr. Chairman, thank you. As a former member of this committee, I appreciate your courtesy in letting me sit in.

Senator CRAIG. Certainly.

Senator KYL. It's always good to visit with Mark Rey. Thank you for being here and for all of the cooperation that you've given to

my office and to our State over the years. We appreciate it very much.

It is, in fact, true that we are just mopping up the first fire that actually began on February 7. It's the earliest on record. It's called the February fire. It burned about 4,200 acres, \$3.3 million in cost, had 539 personnel, 11 type II crews, a couple of airtankers, and six helicopters, plus a lot of other equipment that helped to fight it.

Fortunately, it was a combination of mixed—well, it was primarily ponderosa pine and some pine pinyon in both the Coconino and Tonto Forests. The point is, that area has not had moisture in about 4 months, any significant amount. And the point is that what it presages is a very long and very dangerous season. As you noted, the type of aircraft that can be utilized, each have their purposes, but there's no question in your mind that the large airtanker is a significant contributor in fighting the fires; that's correct, isn't it?

Mr. REY. It's the most cost-effective asset for initial attack, but we do get good results from other aircraft as well.

Senator KYL. Sure. It's just that you'd like to have a good combination of all of the different types of aircrafts you have and, I guess let me put it this way, if you had the ability to get more of the large tankers, given the fact that we're already in the fire season and it's only the middle of February, in a world in which you could have what you wanted, you would have more large tankers, would you not?

Mr. REY. Well, we're actually evaluating that in the context of putting together our long-term plan. It's not as simple as it seems because we're balancing the capabilities of each of the three categories of aircraft and also looking at what new technologies are being brought online to increase the efficiency of the single-engine airtankers and helicopters. What I tell you is this, we seem to be sort of heading toward a future where we think the optimal number of large airtankers would be somewhere between 22 and 24. This year we'll have probably close to that many available if we add the military aircraft. We have 17 of our own and then eight available from the military.

Senator KYL. Well, we certainly hope that that's enough. I hope that next September, Mr. Chairman, we can come back together and say, wow, that was just great, we only had a few fires and we were able to get to them quickly and didn't have any problems. But judging on the basis of what we've seen so far, I'd be very happy if that prediction or anything close to it came true.

Just one other thought. I've written a letter to the President and sent you a copy that raises two concerns, but let me give you one bit of good news first. In fighting this particular fire, once again we find that earlier treatments were of significant help. In fact, in the report from the Tonto Forest—I'll just read these two sentences—there were over 5,000 acres of previously treated land right in the vicinity of this fire and the writer says, "the thinned areas and previously burned areas were instrumental in stopping advance of the February fire in several locations. The areas also provided secure anchor points for fire line construction." A point that you've made many times, and that is that the more we can treat

the forests, the better we are to prevent the fires in the first instance.

Now, in the President's budget, there's a reduction both in the amount of money for treatment and in the amount of money for fighting fires, and that's the point of my letter to the President. We just can't continue in these kinds of circumstances to reduce the amount of money available.

The second problem is that in the wet Northwest, which is not colored on your map, there is an oversupply of money compared to the very dry and the dangerous Southwest, which has already been noted is a significant part of the map there and which includes my State, which has already had fires. What this suggests to me is that during the course of this year and early on, if possible, there could be a readjustment of money made available. We have thousands of acres of NEPA-ready land for treatment in the Tonto Forest alone, where this fire burned. I met with the local forester ranger there the Saturday before this fire was reported a day or two later and he noted that it was strictly a matter of money, that they were ready to go and we were ready to do some more treatments, but the money is not available.

And so what I would ask you to do is to work with us to transfer money from the Northwest to the extent that that's possible to do, and to support the plus subs which we will be seeking, both for restoration as well as for firefighting in this particular year, because clearly in the Southwest we're going to need those resources. I suspect you haven't seen my letter yet.

Mr. REY. No, I've seen it.

Senator KYL. Oh, you have? Good. Okay. Great. That's good news in and of itself, the speed with which you got the communique, and I appreciate that. Any comment on that right now?

Mr. REY. Let me comment on both the preparedness issue as well as the fuels treatment issue. For preparedness, since the fire season typically begins in the Southwest, we are already starting to move assets and send severity funding to Arizona and New Mexico.

Last week we sent an additional \$1.25 million to Arizona for severity funding. Presently deployed in the State is somewhere in the neighborhood of 560 engines, 21 single-engine airtankers, seven large helicopters, and six large airtankers. Additionally, by the end of the month, that is to say before March 1, we will be pre-positioning 10 type I crews. Those are the most experienced and sophisticated crews in our firefighting force. So we think with the pre-positioning of assets, we will be in good shape. Unfortunately, your hope that there will be few fires is one I don't think will be realized, but I feel reasonably confident that we will be able to realize your second hope and that is that we maintain a level of success at initial attack at around the 99 percent level.

With regard to fuels funding, actually our overall budget, the two Departments combined, shows a slight increase in fuels funding from fiscal year 2006. The totality of what we devoted to implementing the President's Healthy Forest Initiative in 2005 was \$835 million. The totality in 2006 was \$907 million. The totality of what we've proposed for 2007 is \$902 million.

Now, in our fiscal year 2007 request, we did request a boost for the Pacific Northwest, but not in fuels treatment, per se, but rather

in the forest management program to increase commercial timber sales to meet the President's commitment to fully implement the Northwest Forest Plan. So much of that work would not be fuels-related, although some of it will have an ancillary fuels treatment benefit. All of our regions showed slight increases in fuels treatment, and obviously as the appropriations process continues, we'll be happy to work with you to look at adjustments for how that money is distributed throughout the country.

Senator KYL. Thank you very much, Mr. Secretary.

Thank you, Mr. Chairman.

Senator CRAIG. Thank you for being with us. We know you're in a critical situation in your State and in the Southwest and we'll monitor it very closely. Thank you. A couple more questions for this panel and then I need to get to our next panel because of their time constraints.

Secretary Hatfield, what steps has the BLM and the National Interagency Fire Center taken to ensure that companies that might be affected are notified well in advance of any of the changes that you're making as it relates to the contracting that you're looking at, and by that I'm referencing plans to move away from the call-as-needed contract to the exclusive-use contracts and to a shift to larger, single-engine retardant aircraft?

Ms. HATFIELD. Well, the first thing is our strategy, as refined, would actually decrease the number of exclusive-use contracts and supplement those exclusive-use contracts with more call-when-needed contracts.

Senator CRAIG. Okay.

Ms. HATFIELD. The exclusive-use contracts would be for the larger planes that carry more retardant. In the process of doing that refinement of our strategy, we have talked with all of the vendors and all the States and explained what we were doing and what that would mean in terms of the contracting process for them. We're currently in that contracting process, so I think in terms of vendor impact, it's difficult for us to tell, at this point, that it's going to have very much of an impact on them. To the extent that a vendor does not have an exclusive-use contract, the vendor will still be in the pool that would be available for the call-when-needed contracts. So it's really a matter of a difference in terms of the vehicle we'll use and in terms of having the resources there we need when we need them.

Senator CRAIG. Well, I thank you for that. We'll monitor that closely with you. Last year, when the Forest Service announced a similar shift in its contracting for helicopters, I think we received a significant amount of complaints from helicopter operators in Oregon and in Idaho and we hope that you are advancing this in a way that will give effective pre-notice and all of that.

Ms. HATFIELD. Right. Well, we have talked to them and they are aware of the shift and how we're going to approach this fire year.

Senator CRAIG. Secretary Rey, one last question of you. Has the U.S. Forest Service sought the ongoing participation and involvement of existing and potential airtanker operators in your strategic planning process?

Mr. REY. Yes. That's something we do on an ongoing basis. We meet with a variety of current operators, that is, people who are

flying aircraft under contract for us now as well as people who would like to be future operators, that is, people who have an aircraft that they're testing and trying to bring online for firefighting purposes. One of the things that we're going to announce in short order is an aviation day that's similar to what the Air Force does when they invite all of the various potential and current vendors for military aircraft to come and give them some ideas about where they think the future of the industry is headed and what sorts of new models they have that they want to bring online and what the capabilities are. So you'll hear more about that later as we have the first Federal Firefighting Aircraft Aviation Day, modeled after the Air Force approach.

Senator CRAIG. Well, thank you. Thank you both very much for being with us this afternoon. We'll obviously stay tuned and monitor this very closely as we proceed—I won't say into the fire season, it's obvious we're already into it—but as the fire season spreads North and West. Thank you both.

Mr. REY. Thank you.

Ms. HATFIELD. Thank you.

Senator CRAIG. Now let me call James Hall of Hall & Associates, Washington, DC, co-chair of the Blue Ribbon Report on Aerial Firefighting Safety, along with James Hull, a Texas State forester, College Station, Texas, co-chair, again, along with Mr. Hall of the Blue Ribbon Report for Aerial Firefighting Safety.

Mr. Hall, we understand you're the one time-sensitive. We're going to allow you to proceed first and I'll ask some questions of you, then you'll be free to leave and we'll turn to Mr. Hull.

STATEMENT OF JAMES HALL, HALL & ASSOCIATES, LLC

Mr. HALL. Thank you very much, Senator, and I greatly appreciate that courtesy and my wife appreciates it more. As chairman of the 2002 blue ribbon panel that reviewed the safety of Federal aerial firefighting, I'm pleased to appear before you for the second time with my co-chair, Jim Hull. We have submitted a document that reflects the views of all the panel members and contains more detail on each of the items that I will discuss today. I would appreciate it if our long testimony and an article submitted by one of our members could be placed in the record.

Senator CRAIG. All of your material testimonies will become a part of the permanent record.

Mr. HALL. Mr. Chairman, simply put, there has been some progress in dealing with the safety and effectiveness of aerial firefighting, but much less than we had hoped for. We have little direct information comparing the cost and effectiveness of the more recent operations that have been characterized by fewer large airtankers, the introduction of single-engine tankers, and increased numbers of large helicopter tankers, as opposed to earlier operations using mostly large airtankers and some large helicopters. We are concerned, Mr. Chairman, about the acquisition of additional P-3 aircraft for conversion to airtankers, given that the most recent fatal large airtanker accident involving a P-3 occurred April 20, 2005, killing three crew members, and we consider this particularly troubling considering that the NTSB has not yet released its report on the accident.

The panel's first finding was that the safety record of airtankers was unacceptable. Some aircraft types are no longer given contracts and others have had more intense inspections, but the safety of the aircraft used in aerial firefighting has not been assured. The loss of the P-3 as well as a number of helicopters since the report was submitted demonstrates that the record remains unacceptable.

Our second finding noted that the wildland environment has changed so that controlling wildland fires could not be considered an auxiliary mission to land management. The Forest Service has produced a strategic plan, but it has not led to the resources necessary for the overhaul of the aerial firefighting activity.

The panel's third finding was that under the present arrangement for certification, contracting, and operation, key elements of the fleet are unsustainable. There has been some work, but no real progress.

Our fourth finding noted that a variety of philosophies, missions, and standards created a mission muddle that seriously undermined the effectiveness of wild land firefighting. While work on this complex problem is underway, not much headway appears to have been made.

The panel's fifth finding concluded that the culture, organizational structure, and management of the agencies conducting the aerial firefighting was inappropriate to the task. Little seems to have changed and the accidents continue.

Our sixth finding noted that the FAA had a minimal role in certifying the public aircraft use in firefighting. This leaves the Forest Service in the untenable position of being both operator and regulator of firefighting aircraft. It has neither the resources nor the skills to provide the safety oversight of this fleet.

The seventh finding of the panel noted that the contracting procedures did not recognize the business and operational realities of aerial firefighting and did not produce incentives to conduct safe operations. From what we have been able to determine, there have been minor improvements in contracting, but the fundamental problems remain.

Our final finding was that training was underfunded and inadequately specified. Again, while there have been some improvements, we are not aware of any comprehensive plan based on validated training needs.

In conclusion, the Forest Service is composed of many dedicated individuals who are experts in land management, but have limited aviation expertise. I want to thank the work of the individuals in the Forest Service Office of Fire and Aviation Management who have spent countless hours working in an attempt to address the issues raised in our 2002 report. However, one cannot expect such an organization to possess the resources nor the expertise of the Federal Aviation Administration in aircraft certification and the oversight of airworthiness.

I appreciate the opportunity to present again before the committee.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF JAMES HALL, HALL & ASSOCIATES, LLC

REVIEW OF THE PROGRESS MADE ON THE DEVELOPMENT OF INTERIM AND LONG-TERM PLANS FOR THE USE OF FIRE RETARDANT AIRCRAFT FOR FIREFIGHTING ON FEDERAL LAND

The Blue Ribbon Panel has not been directly involved with the work of the USDA-FS since it submitted its report in December of 2002, nor has the Panel remained formally constituted since the publication of its report. However, members of the Panel did assemble in Washington on December 17, 2003 for a progress briefing that was given by the USDA-FS.

Information in our presentation is based on published information and on a listening watch of progress toward a safe, affordable, and effective fleet of retardant/water dropping firefighting and related support aircraft. We have also considered a document provided to us by the USDA-FS titled 'Actions Taken in Response to the Findings of the Blue Ribbon Panel,' dated October 2005.

There has been some progress in both the safety and effectiveness of aerial firefighting. The USDA-FS has increased its emphasis on initial attack and made changes to the mix of aircraft types. The change in the mix of aircraft types is partly because some of the large tankers have been disqualified from eligibility for contracts. We have been told that the present mix of large tankers, single-engine tankers and helicopter tankers seems to be improving the effectiveness of firefighting operations. While progress has been made toward determining what is necessary to keep aging aircraft airworthy and training has been improved, accidents continue to take place. The involvement of the FAA in assuring the airworthiness of the air tankers remains minimal.

You have indicated that you want to review the costs and effectiveness of utilizing single-engine fire retardant aircraft and heavy-lift helicopters as opposed to the Forest Service's reliance on multi-engine retardant aircraft in earlier seasons. Most recently, the approach has been to use fewer large multi-engine tankers, supplemented by single-engine tankers, and an increased number of heavy-lift helicopters. In the earlier fire seasons the mix included a larger number of large multi-engine aircraft and fewer heavy-lift helicopters. Thus, there is not a clear distinction between the traditional and the most recent practices. We have been informed that the single-engine tankers were effective for initial attack—in some regions. We have also been advised that teaming a few single-engine tankers with a large airtanker made a positive difference in controlling a number of fires. However, we do not have access to the financial information or the measured effectiveness of the different operations to assist you with the comparisons that you wish to make. We are advised that the USDA-FS Pacific South-West region is making progress in analyzing aging aircraft problems and introducing new technology into both training and firefighting operations.

We have not been provided with the USDA-FS long-term strategy for replacing aging multi-engine aircraft. We understand that the USDA-FS is prepared to conduct a three-year study of its aviation assets.

Unfortunately, we cannot be of great assistance in assessing the three recently acquired P-3 aircraft. The earlier model P-3s that have been in service were seen as effective and were the newest aircraft type in the heavy airtanker fleet. However, there was a fatal P-3 airtanker accident in April 2005 and the NTSB has not released its analysis of that accident. We have no way of ascertaining whether aircraft design, performance, or airworthiness were among the factors involved in the P-3 accident. It does seem risky to acquire more of the same aircraft type involved in this most recent accident before learning what factors contributed to that accident. In the following parts of this submission, we comment on the low probability that the USDA-FS is capable of conducting and controlling a safe aviation operation. As the operator of the public aircraft employed in aerial fire suppression, the Forest Service appears particularly unprepared to assure their airworthiness.

As our major product was our December 2002 Report, we will structure our comments in the context of the Panel's findings and the progress, or lack thereof, in addressing the Panel's findings through its consultations.

The Panel's first finding was: *The safety record of fixed-wing aircraft and helicopters used in wildland fire management is unacceptable.*

In our March 26, 2003 report to this subcommittee, we noted that contractor personnel flying the large airtankers were subject to lower safety standards than were government personnel flying the lead planes and smoke jumper aircraft. We also noted that both contractor and government aerial firefighting was being conducted at lower safety standards than we feel could be justified.

Sadly, since our last appearance, a four-engine P-3 airtanker crashed, killing its crew, in addition to a number of helicopter accidents. Each aircraft was attempting to support the wildland fire management program. The safety record, after more than three years since the release of our report, remains unacceptable.

Efforts were made by the USDA-FS to assess the structural integrity of the aircraft, and some types are no longer eligible for firefighting contracts. Some structural assessments have been carried out under contract, and some in-flight data has been gathered from a sampling of aircraft that were fitted with stress recording devices. We understand that the information from the instrumentation was fairly limited, and while it may provide useful data, it will be, on its own, far from sufficient to call for detailed measures that will assure the airworthiness of the airtankers. We are unaware whether the data from the instrumented aircraft has been analyzed. In any event, we have no indications that the data has been put to much use.

Some aircraft operated by the Forest Service have been fitted with airborne collision avoidance devices.

The USDA-FS notes in its progress report that “safety as a core value” was a goal and that they will develop a systems-safety approach. We are dismayed to see “safety as a core value” still listed as a *goal* when it should have immediately been adopted as a core value—even as *the* paramount core value. In our view, three years after our report and with continuing accidents and fatalities in the fleet it operates, this is a feeble and telling response to the Forest Service’s unacceptable safety record.

The USDA-FS has discontinued the use of the two aircraft types that experienced structural failure accidents in 2002. The rationale for that decision does not seem to be related to the suitability of those aircraft, if appropriately maintained, but due solely to the fact that they had accidents. The use of fewer large airtankers has been offset by the greater use of SEATS (Single Engine Airtankers) and helicopters, without any apparent assessing of the structural effects of more intense use of these aircraft. There appears to have been no consideration of the mid-sized twin-engine tankers like the S-2s used by California and other states.

Flight load monitoring devices (which gather data on in-flight stresses and are quite different from flight data recorders that capture altitude, speed, and control positions, etc. for accident investigation purposes) have been installed on a small sample of the large multi-engine tankers. Flight load data has been gathered, but to our knowledge it has not been validated and analyzed. As far as we know, none of the USDA-FS aircraft have been fitted with flight data recorders to assist in accident investigations. From what we have seen, the concern of the Forest Service is with aircraft exceeding certain maximum ‘g’ acceleration criteria and not the cumulative effect of low-level turbulence. Literature suggests the low-level turbulence is as great a concern in generating structural fatigue as the exceeding of the maximum allowed for ‘g’ levels.

There appears to be an increasing amount of public opposition to the dropping of water mixed with retardants. The mixture is much more effective in fire suppression than water alone. However, concerns are being expressed about the contamination of lakes and rivers as well as risks to both communities and firefighters. It may be that tankers will, in the future, be restricted to dropping water. If so, there will likely be more emphasis on helicopters and ‘scooper’ aircraft that are typically able to scoop up water from lakes and rivers without stopping to be loaded.

We have received information that various elements of the Forest Service and some regional offices have been working on some of these problems, but in an uncoordinated manner and without central direction.

The Panel’s second finding was: *Because the wildland environment has changed significantly, controlling wildland fires cannot be considered an auxiliary mission to land management. Wildland firefighting has grown to a level of importance that warrants the attention of national leaders.*

From what we have been able to gather, the Forest Service has obtained some climate forecasts that predict a continuation, for at least several years, of the dry conditions recently experienced in much of the United States. How that information has been employed to justify the resources necessary to maintain a safe, efficient fleet of fire suppression aircraft is not known. A viewpoint that allows the natural regeneration of forests through periodic fires and more attention to the presence of fuels in unwanted areas appears to be gaining prominence—but we have seen little indication of progress. Our 2002 comment that “fire policy to address all of this is not evolving at a rate that is essential to address the situation,” remains valid.

The USDA-FS has developed a strategic plan to address the appropriate mix of aircraft (the composition of which has not been made available to us) to meet new environmental requirements, but has reported no change other than increasing em-

phasis on initial attack. This seems to us to be a very slow response to the fatal aircraft accidents, the loss of homes at the wildland urban interface, and the loss of many millions of dollars worth of commercially valuable forest.

The Panel's third finding was: *Under the current system of aircraft certification, contracting and operation, key elements of the aerial wildland firefighting fleet are unsustainable.*

Considerable sums have been spent on attempting to assure the structural integrity of the air tanker fleet. Some aircraft types that were part of the fleet in 2002 are no longer used. The original fleet of lead planes has been disposed of. To our knowledge, no method has been validated that will determine the remaining operational service life of the large airtankers and many of the other aircraft used in aerial firefighting. There have been some attempts to work more effectively with the FAA on the initial certification of the air tankers, but we have seen nothing to suggest that there is an effective way to ensure the continuing structural integrity of the aircraft. The FAA, we understand, has been making efforts to cooperate with the Forest Service, but its involvement in assuring the airworthiness of the firefighting aircraft has changed little since the time of the Blue Ribbon Panel. There is no formal understanding between the FAA and the Forest Service. The additional role of the FAA, we are informed, is limited to such matters as providing lists of individuals and firms that the Forest Service may choose to engage to assist them.

The Panel's fourth finding was: *The variety of missions, philosophies, and unclear standards of federal land management agencies creates a "mission muddle" that seriously compromises the safety and effectiveness of wildland fire management.*

We noted in our last appearance that no single body was in charge of fire suppression aviation activities, with the result being that risks associated with unclear command and control were higher than necessary. That situation remains. Some progress has been made toward creating improved interagency coordinating bodies, but there is still no one agency in charge.

A recent Quadrennial Fire and Fuel Review Report that was developed with the assistance of the Brookings Institution is the first substantive attempt to deal with the very difficult question of what our Panel characterized as "mission muddle." While the Report created a blueprint for change, the mandate for the quadrennial review depends, as it must, on interagency cooperation. As the interests of the various agencies become affected, the principles outlined in the blueprint will become irrelevant unless there is a decision to allow one agency to have the final word in setting priorities and allocating resources to fire management. Discussing who is to do what while fires rage cannot be allowed.

The Panel's fifth finding noted: *The culture, organizational structure and management of federal wildland fire management agencies are ill-suited to conduct safe and effective aviation operations in the current environment.*

At our last appearance we noted that a clearly articulated and widely understood safety culture seemed to be either absent or, as in the case of the mission, muddled. We noted that the lack of knowledge of aircraft condition, together with insufficient training, inspection, and maintenance, has resulted in the deplorable safety record for airtankers and a less than acceptable record for other aircraft.

We have seen no evidence of substantive improvement.

The Panel's sixth finding related to *the very limited role of the FAA in certifying public aircraft.*

We noted that there had been a misunderstanding of the role of the FAA. The operators believed that the FAA had a much more significant role than it does for the certification and continuing airworthiness of public aircraft. The absence of real airworthiness oversight by the FAA puts the Forest Service in the untenable position of being both the operator and the regulator of its fleet of firefighting aircraft.

There have been several initiatives by the Forest Service in the area of continuing airworthiness, and it has hired some additional staff. However, the Forest Service does not have the expertise or experience of the FAA, and it is, in our view, most unlikely that it ever will be an effective airworthiness authority for a fleet of large, old aircraft that are being employed in a role that is much harsher than they were designed for. The USDA-FS reports increased cooperation with the FAA, but as far as we can tell, the continuing airworthiness responsibility remains with the USDA-FS, an organization that is suited to—and respected for—plant life management rather than the airworthiness of aircraft. In this country we have the world's most outstanding airworthiness authority in the FAA. It seems completely unreasonable not to provide the resources to the FAA and give it the mandate to employ its expertise in ensuring the necessary standards and oversight of airtanker airworthiness.

The Forest Service reports that it is also examining strategies for obtaining needed funding to maintain and/or replace old airtankers. That a plan for this has not

been formulated three years after the release of Blue Ribbon Panel Report is so slow as to be baffling.

The Panel's seventh finding was: *Government contracts for airtanker and helicopter fire management services do not adequately recognize business and operational realities or aircraft limitations. As a result, contract provisions contain disincentives to flight safety.*

At our previous appearance we noted the importance of the contracting process as the only effective means of enforcing the airworthiness and safety requirements of the Forest Service. We also noted that the process as it was did not provide incentives for safe operation. Even by using its contracts to assure airworthiness, it is in our view, very unlikely that the Forest Service will possess the aviation knowledge necessary to include the appropriate language in its airtanker contracts. Even if it does develop suitable contract language, the Forest Service does not have, and cannot be expected to develop, an FAA-like capability of providing the necessary airworthiness safety oversight. There are still no multi-year contracts that will allow contractors to obtain adequate financing.

We are aware of some minor changes in the contracting process but have seen nothing to give us confidence that it has been changed sufficiently to take on the functions, which at the time of our Panel were presumed by the USDA-FS to have been vested in the FAA.

The Panel's final finding was: *Training is underfunded and inadequately specified for helicopters, large airtankers, and other fixed-wing operations.*

When we were here in 2003, we noted that the training deficiencies remained. We are aware of some minor changes but the situation remains much as it was.

Summary/Proposal: The Forest Service and the other agencies involved with wildland fire protection appear to have made little progress in three years. Progress toward resolving airtanker safety and effectiveness has been unacceptably slow. We say this with full knowledge that the Forest Service and other agencies are staffed with dedicated individuals who are knowledgeable in their primary fields of endeavor. The problem at the time we did our work, and which remains today, is largely institutional and is associated more with mandates and appropriate expertise than with a lack of will.

It is time to cut the Gordian knot rather than continue to try to unravel it. One approach would be for authority to be put into the USDA-FS and other agencies to deal with command and control problems that are necessary to ensure that one agency is clearly in charge. However, this would still leave the fundamental question of who should provide the airworthiness standards and aviation safety oversight. Alternately, and probably preferably, the government land management agencies could get out of the aircraft operating business and simply state their operational requirements. Those requirements, which could be handled entirely by competent aviation operators, would leave the land management people to their established expertise. This latter approach would be contingent on some assurance that the industry would be capable of providing the needed service on a safe, effective and reliable basis. Whatever approach is taken, our view is that significant additional resources will be required; but before additional funding is provided, the institutional arrangements need to be changed so that aviation operations can be effectively and efficiently carried out.

Finally, we believe there is need for an independent external body that can speak freely and advocate necessary change. It could advise and work with the Forest Service and the related agencies to speed up the resolution of the problems that were identified in our 2002 Report. We believe that institutional problems like these (e.g., multiple agencies and limited aviation expertise) cannot be solved from within.

Senator CRAIG. Mr. Hall, again, thank you very much for your commitment to this and obviously your continued critical and constructive observation. You suggest that the Government land agencies get out of the aircraft operating business. That would suggest that either—that some Federal agency, like the FAA, take over the job of providing the firefighting aircraft or, as you suggest, have the aircraft provided by a competent aviation operator. I presume that the FAA would still be required to certify the airworthiness of aircraft operated by the competent aviation operator, is that not correct?

Mr. HALL. Mr. Chairman, let me point out that if the FAA—and maybe clarify—were to operate the aircraft, they would be both the

operator and the regulator of this aircraft, which would produce a conflict of responsibilities, and operation by the FAA would not be a good idea. If a competent operator were to operate the aircraft, it would depend on whether the aircraft was classified as a public aircraft. If they continue to be considered public aircraft, little would change unless the FAA received additional funding for the airworthiness oversight function.

I might add, Mr. Chairman, since 1993, in my presence on the board, I've been talking on this because we have the black hole of safety, which is public-use aircraft, that exists, not just with the Forest Service and BLM, but with other Federal agencies.

Senator CRAIG. Well, you're absolutely right. And I guess, given the FAA's reluctance to take over responsibility for checking airworthiness of government-operated aircraft, other than outright legislation that would require this to happen, do you have any other suggestions?

Mr. HALL. Well, obviously, congressional action with appropriate funding for the FAA to do the job. My understanding from conversations with two administrators, and I'm certainly—this is my understanding, my conversations with them is they would be very reluctant to take on the airworthiness oversight of the aircraft unless they were provided additional funding to perform the function, and the overnment money would have to be spent also to provide airworthiness oversight. And I believe if that's done, the FAA is an agency already sitting there with that expertise. Personally, I believe from a public policy perspective, it would make good sense to provide the FAA money to do the airworthiness oversight job that they already do in commercial aviation.

Senator CRAIG. You've also recommended an independent external body to help address the other institutional concerns that surfaced in the blue ribbon report which, as you correctly point out, have not been resolved. Do you have an organization in mind?

Mr. HALL. Mr. Chairman, let me point out that I had the honor for 8 years to serve an independent body that was set up by Congress that I personally believe functioned very well and we all worked very hard at our responsibilities. I think when Congress goes to agencies—operating agencies and asks for oversight and recommendations that that is ineffective. I think you need an independent look and an independent look that reports directly to the oversight committees.

How that would be structured with the funding of a report through OMB, I'm not sure, but I don't believe that you will get any independence—the structure of that, obviously, the BRP could be reconstituted or a new panel could be created to look at some of these things that are put on the table before you all, like the effectiveness of initial attack.

As you know, those numbers—the 99 percent numbers are based on fires all over the United States, many of those very small fires in the South or in Tennessee, where I'm from, and it skews the numbers and presentations for the committee for representatives from States where forest fires can actually be major, major killers.

Senator CRAIG. Well, again, Mr. Hall, thank you very much for staying involved in this. We'll continue to work with you and your expertise.

Mr. HALL. Mr. Chairman, anything we can do. And let me apologize to my co-chairman and beg his indulgence for not being here to listen to his excellent testimony, which I've already read. Thank you.

Senator CRAIG. Fair enough. Thank you very much. Now, let's turn to Jim Hull, Texas State forester, College Station, Texas, co-chair of the Blue Ribbon Aerial Firefighting Safety Panel. Again, welcome before the committee, Mr. Hull.

**STATEMENT OF JAMES B. HULL, PRESIDENT, NATIONAL
ASSOCIATION OF STATE FORESTERS**

Mr. HULL. Thank you, Mr. Chairman. Good to be back. I would present testimony somewhat on behalf of the blue ribbon panel, but also State foresters. As you know, over two-thirds of the forests in the United States are in State and private ownership. State foresters have the primary responsibility for protecting these acres from wildfire, along with most other private lands in America, and a lot of Federal land, for that matter. It's essential that we have access to aerial firefighting resources if we're going to do our job successfully.

In Texas, we saw significant wildfires in 2005, however, on New Year's Day of this year, 2006, 1 day, we saw more wildfire destruction, acres burned, than we did in all of 2005 put together. I was very appalled that during the week of Christmas, between the week of Christmas and New Year's, that we saw 345 homes destroyed by wildfire. We saw three fatalities. We saw two and a half entire communities destroyed by wildfire, hundreds of cars, tractors, barns, livestock. This was more wildfire destruction in Texas than I've seen in my entire 40-year career combined, and that happened in 1 week. It happened largely because of 40, 50 mile-an-hour winds restricted our use of aerial firefighting resources. As drought, fuels, and population increase across our Nation, it becomes more and more critical that we have reliable, high quality, sustainable aerial firefighting resources. It's in this context that I would offer three specific points.

First, we must all work together, both Federal and State, in developing an interagency long-term strategy for our Nation's aerial firefighting resources. We need a strategy that will provide a diverse fleet of helicopters and fixed-wing aircraft, and we need to do so in a manner that provides adequate numbers to allow and, in fact, encourage scheduled maintenance and time off for pilots to relieve stress and fatigue. Neither of those is the case right now. This strategy must be designed to meet the needs of our wildfire suppression mission and do so in a safe, airworthy, and sustainable manner over the long-term. To this end, you've heard about the fire directors and State foresters working together to initiate such a strategy to develop its interagency fire program, and I am hopeful that by the end of this fiscal year that we will have that report available.

My second point addresses the issue of certifying airworthiness. Like all the other findings of the 2003 blue ribbon panel report, the National Association of State Foresters strongly supports the position that the current program of relying on aging former military and surplus commercial aircraft is not sustainable.

Ideally, I think this would mean funding and support for aircraft that are designed, engineered, and purpose built specifically for delivering fire retardant products. As a State forester, I am very much aware of fiscal constraints, but we must not arbitrarily rule out the fact that purpose-built planes are too expensive. I firmly believe that the free enterprise system in this country is capable and poised to provide such aircraft if appropriate contractual assurances are provided.

And the third point that I would make is that State foresters, along with the blue ribbon panel, believe that the missing link in this entire issue is the role of the Federal Aviation Administration. As the premier aviation agency, whether limited by law or merely a perceived lack of responsibility or funding, we feel like that the FAA must provide the leadership essential to assuring complete airworthiness of these public-use aircraft. The Federal land management agencies cannot and should not attempt to duplicate the expertise of the FAA when it comes to assuring sustained airworthiness of firefighting aircraft. Therefore, I'm urging Congress to specifically charge the FAA with the responsibility for certifying the airworthiness of public-use aircraft, especially airtankers.

In closing, the National Association of State Foresters pledges to work with our Federal partners in any way that we possibly can in this entire effort. However, ultimately, it seems to me that the ultimate success will depend on Congress providing the necessary support and funding to implement whatever strategy is developed.

I very much appreciate the opportunity to work with this committee, Congress, and the administration in this entire effort and look forward to addressing questions.

[The prepared statement of Mr. Hull follows:]

PREPARED STATEMENT OF JAMES B. HULL, PRESIDENT, NATIONAL ASSOCIATION OF STATE FORESTERS

Mr. Chairman and Members of the Subcommittee: On behalf of the National Association of State Foresters (NASF), I am pleased to offer the following statement for the hearing record. NASF is a non-profit organization that represents the directors of the fifty state forestry agencies, eight U.S. territories, and the District of Columbia. State Foresters manage and protect state and private forests across the U.S.

Aerial firefighting resources are essential to the fire protection programs of most states and territories represented by NASF. Over two-thirds of the forests in the United States are in state and private ownerships. State Foresters are not only responsible for protecting these vast forests, but in most states we are also responsible for wildfire protection on all rural lands and, in some states, considerable federal land as well.

Fire protection in America is neither uniquely a western states' event nor is it confined predominately to federal lands. More than 80,000 wildfires occur annually across our nation. Well over 60% of those occur in non-western states and over 75% occur on non-federal lands. The key point, however, is that no single entity, including federal, state, or local government, has the capacity to handle all responses to wildfires within their jurisdictional area of responsibility. All fire protection programs are thus, by necessity, strategically integrated to most effectively and economically serve all rural lands of the nation. Aerial firefighting resources are utilized in exactly the same way; in other words, we are all in this together. Therefore, at this time it is critical that we all work together, federal and state, in developing an interagency, long-term strategy for our nation's aerial firefighting resources. We need a strategy that will provide a diverse fleet of helicopters and fixed-wing aircraft that will meet the needs of our wildfire suppression mission, and do so in a safe and airworthy and sustainable manner over the long-term.

In this context, you asked me to address three specific topics this afternoon. First, you asked me to address the effectiveness of using additional single-engine air tankers (SEATs) and heavy lift (Type 1) helicopters to compensate for the loss of ap-

proximately 50% of the nation's large, multi-engine air tanker fleet. In 2004 and 2005 the combination of additional SEATs and Type 1 helicopters along with the remaining 17 heavy air tankers allowed federal and state wildland fire agencies to achieve an initial attack success rate similar to that of previous years. However, I must caution that statement by reminding you that in both 2004 and 2005 we experienced relatively moderate fire seasons when viewed at a national level. We have yet to test this new mix of aviation resources in a long, severe fire season. In other words, we don't really know if we can continue to be effective with only 16-17 large, multi-engine air tankers, regardless of how many SEATs and Type 1 helicopters we have available. The capabilities of each of these aircraft types are not entirely interchangeable. Each has specific strengths and weaknesses. Therefore, it is essential that we develop a long-term strategy that includes a sufficient number and variety of safe and effective firefighting aircraft in order to protect this nation's forests and communities.

This leads me to your second question regarding progress on a long-term strategy. The Fire Directors of the Forest Service, the Bureau of Land Management, the US Fish & Wildlife Service, the National Park Service, the Bureau of Indian Affairs, and the National Association of State Foresters, acting together as the National Fire & Aviation Executive Board, have recently chartered a group of agency aviation experts to develop this desperately needed, long-term aviation strategy for the inter-agency fire program. This strategy, tentatively scheduled for completion by the end of this fiscal year, will continue work the Forest Service has already initiated by evaluating all realistic alternatives and making recommendations on: (1) the mix or diversity of aircraft that are needed; (2) the specific make and model of aircraft that meet the identified specifications; (3) the quantity of each needed; and (4) the appropriate business model for acquisition and management.

Although this strategy will address all types of aircraft and all aviation missions in support of fire suppression, it will focus heavily on the large air tanker program. As the Subcommittee is well aware, in response to three tragic air tanker crashes (one in 1994 and two in 2002), the Forest Service and the Bureau of Land Management (BLM) chartered a Blue Ribbon Panel to evaluate aviation safety issues. In its 2002 report the Panel, which I co-chaired, called into question the airworthiness of the fixed-wing heavy air tanker fleet. Subsequently on April 23, 2004, the National Transportation Safety Board (NTSB) released the report of its investigation and sent its findings and recommendations in a letter to the Secretaries of Agriculture and the Interior. Because the two Departments did not have the personnel, expertise, or funding to comply with the NTSB recommendations, they terminated the contracts for the entire fleet of 33 large air tankers in May of 2004. Since then, through a program of independent analysis and increased inspections, the Forest Service has been able to gradually return some of the less ancient former military aircraft to service. At the current time, 16 large air tankers are approved and available for contract—all of which are aging, former military aircraft.

Lastly, you asked me to comment on the Forest Service's recent acquisition of three former U.S. Navy P-3 Orion aircraft for conversion as air tankers and my thoughts regarding certification of air worthiness. In regard to the P-3 acquisition, even though the long-term strategy has not yet been completed, we need to make operational decisions in the short-term in order to continue to provide the best aerial response to wildfire that we can. In this context, the P-3—may—serve us well as a bridge aircraft to the next generation of large, multi-engine air tankers. However, until the strategy has been completed, we won't know whether or not the P-3 aircraft will have a role over the long term. This is yet another reason why it is critical that we complete the long-term strategy as quickly as possible.

In regard to certifying airworthiness, it is time, in fact far past time, for a better answer. NASF strongly believes that our nation needs a safe, modern, and effective aerial firefighting program. As was clearly stated in the 2002 Blue Ribbon Panel report on "Federal Aerial Firefighting", the current program of relying on aging, former military and surplus commercial aircraft is not sustainable. Continued reliance on older aircraft adapted for firefighting use will merely perpetuate the problem over the long term. Ideally, this would mean funding and support for aircraft that are designed and engineered specifically for delivering fire retardant products. However, we do understand that we are currently in a time where fiscal constraint is necessary, and it is therefore only prudent to thoroughly examine all available sources of aircraft to ensure a cost-effective strategy. But, we must not arbitrarily rule out purpose-built aircraft as too expensive. We believe that the free enterprise system in this country is capable and poised to provide such aircraft if appropriate contractual assurances are provided.

Further, we believe that the missing link in this entire issue is the role of the Federal Aviation Administration. Whether limited by law or merely a perceived lack

of responsibility or funding, the FAA, as the world's premier aviation agency, must provide the leadership essential to assuring complete airworthiness of public use aircraft, including air tankers, to the same standards that have brought such resounding success to the overall airline industry around the world. The federal land management agencies cannot, and should not, attempt to duplicate the expertise of the FAA when it comes to assuring sustained airworthiness of firefighting aircraft that are such a vital part of protecting our nation. Therefore, we further encourage Congress to specifically charge the FAA with the responsibility for certifying the airworthiness of public use aircraft, including air tankers.

In closing, I want to reiterate that it is absolutely essential that we use an interagency process to develop this national aviation strategy; one that includes the Forest Service, the Department of the Interior Bureaus, and the National Association of State Foresters. To accomplish this, NASF pledges our support to work together with the federal agencies in developing an interagency long-term strategy for our nation's aerial firefighting resources; a strategy that will cost-effectively provide a diverse fleet of helicopters and fixed-wing aircraft that will meet the needs of our wildfire suppression mission in a safe and airworthy and sustainable manner over the long term. Therefore, we urge the Subcommittee to support sufficient funding for the federal wildland fire programs to ensure our collective ability, state and federal, to quickly and safely respond to wildfires across our country, and to provide for the safety of our communities, our firefighters, and the pilots and crew of our aircraft.

We appreciate the opportunity to offer our testimony and look forward to the opportunity to work with Congress and the Administration to address this critical issue.

Senator CRAIG. Well, Jim, thank you very much for your testimony. First of all, I neglected to congratulate you on becoming president of the Association of State Foresters.

Mr. HULL. Thank you.

Senator CRAIG. I won't suggest your year will be interesting. It sounds like it's already been interesting and tremendously challenging.

Mr. HULL. It has been that.

Senator CRAIG. The fires you've had down in your region. Like Mr. Hall, you make a strong point for having the FAA take responsibility for certification of these aircraft and their continued airworthiness. I'm sure you're aware that the FAA has resisted taking that duty on with government operated aircraft because of the cost and number of aircraft involved. I'm told the Forest Service has over 250 aircraft alone that are mostly assigned to States and counties.

I'm wondering if you think it might be reasonable to have the FAA only deal with those aircraft involved in the delivery of retardant as a way to reduce the burden that might come if we were to charge the FAA with that responsibility?

Mr. HULL. Yes, I think that'd be a great start. The real problem that we have right now is with airtankers, and I would like to see very much that change specifically in that area.

Senator CRAIG. Okay. What about the other recommendations in the blue ribbon report? Are you comfortable that sufficient progress is being made in addressing these recommendations?

Mr. HULL. I think, like co-chairman Jim Hall mentioned, the bottom line is no. I think that the entire response to me seems to be in slow motion to the point that at times I wonder if we're going anywhere, to tell you the truth.

I must say that we have a great group of folks that are working on this that are dedicated, committed to what they're doing. These are without a doubt the finest folks in the world at managing any kind of disaster, and they've proved that over and over, whether

it's wildfire, hurricanes, tornadoes, it makes no difference. They do a great job there. Unfortunately, I don't think they have the expertise to deal with aviation as it must be dealt with. It's a highly specialized area and so I really get the feeling that basically we're in this proverbial time warp. It just seems to me like the recommendations that I continue to see are the same types of recommendations that we've seen virtually ever since the aviation program started back in the 1950's. And to me, I can really see great efforts, but it all seems to point toward the same cycles of disaster that we've experienced time and time again.

Senator CRAIG. Okay. In your testimony, you mentioned that we cannot arbitrarily rule out propose-built aircraft as prohibitively expensive. How do you suggest this option be pursued in a cost-effective manner?

Mr. HULL. I think first you have to define what cost effectiveness really is. Fire protection of any kind is not cheap, unless you're talking about fire prevention, and fire prevention is one of the greatest tools that we have, regardless of what form that takes. But fire protection itself is very expensive until you factor in the enormous values being protected, and those values are increasing every single day. To be cost-effective, particularly in the area of firefighting assets, I think four or five things have to be there.

No. 1, it has to be safe, it has to be reliable, it has to be sustainable, and it has to be affordable. And I would have to think that under the current system, the program is affordable, but that's the only ingredient that's there. Safety is not there, reliability is not there, and sustainability is certainly not there. So I would say the current system is not reliable. I guess my suggestion to encourage this to happen lies in the free enterprise system to solve the problem. And in that I would see these factors taking place.

No. 2, tell the private sector what needs to be accomplished, provide them long-term contracts and incentives to allow them to make the investments that are essential to develop these kind of aircrafts to solve the problem, insist that the FAA provide the certification to make sure the airworthiness is there, and then get out of the way and let the private sector develop it.

I've heard one possible scenario that might save some money in this process and that would be to take some of the current airframes as they are being developed at the factory and at that point add tanks to them. I have no idea if that's a possibility. It's way beyond my understanding, but the main thing in this is I know that the aircraft industry is poised and ready to develop aircraft that are purpose built for this purpose. We just need to give them the incentives and the contractual arrangements that allow them to do it.

Senator CRAIG. Well, once again, thank you very much for coming up to testify. We appreciate it. Your expertise, your experience in these areas, we'll continue to tap it as we nudge, push, and pull this program along. It's obviously a very critical component in firefighting and you've listed the criteria from which we need to review it. And reliability and safety are critical, and having obviously the resources available at the time necessary becomes awfully important, too. Again, thank you very much. We'll keep the committee open for how long for questions?

Mr. GLADICS. Ten days.

Senator CRAIG. Ten days and the record will remain open for the purposes of questions to be addressed to any of the witnesses of the panels.

Thank you all very much. The subcommittee will stand adjourned.

[Whereupon, at 3:50 p.m., the hearing was adjourned.]

APPENDIX
RESPONSES TO ADDITIONAL QUESTIONS

RESPONSE OF MIKE JOHANNIS, SECRETARY, DEPARTMENT OF AGRICULTURE, TO
QUESTION FROM SENATOR WYDEN

Question 1. In the FY 2005 Interior Appropriation Act (S. 2804) the Senate report (S. Rpt. 108-341) directed the Forest Service to develop a strategic plan for procuring and managing large air tankers, as follows: "The Committee believes action taken by the Forest Service to ground large airtankers at the beginning of the 2004 fire season has hampered the ability of land management agencies to mobilize efficiently the equipment necessary to protect natural resources and communities. The Committee expects the Forest Service to move aggressively to address its future needs for aviation assets, and work with the Committee to ensure that all necessary components of the aviation fleet, including both large airtankers and rotor aircraft, are available to maximize firefighting capability. The Committee directs the Forest Service to provide it with a strategic plan by March 1, 2005 for procuring and managing these critical assets, and further directs that this plan be developed with alternatives that include input provided by private industry."

Why hasn't this Plan been completed? How can you propose, for the 2006 fire season, a combination of large airtankers, helitankers, and single engine air tankers to make up for the capability lost by the reduction in the number of large airtankers contracted, but you have no long term plan on which to base this proposal?

Answer. A comprehensive, long-term plan is under development by the National Interagency Aviation Council (NIAC) with strategic options that consider all aspects of the wildland fire mission. The analysis considers all aircraft types in current use and assesses options for providing effective and cost-efficient aircraft that will meet interagency suppression and fuels management goals in the future. The planned completion date is December, 2006.

Each year we adjust the kinds, types and numbers of resources to best meet the anticipated needs of the current fire season. In 2006, we plan to have sufficient resources to maintain an equivalent level of effectiveness as we have achieved on initial attack in previous years.

RESPONSES OF MIKE JOHANNIS, SECRETARY, DEPARTMENT OF AGRICULTURE, TO
QUESTIONS FROM SENATOR SALAZAR

Question 1a. How has the retirement of certain makes and models of aircraft, such as the Beechcraft Baron, affected the availability of aircraft to suppress wildfires?

Answer. We have effectively substituted other aircraft as replacements. Consequently, there has been minimal impact on wildfire operations.

Question 1b. Are there less aircraft available? More? The same?

Answer. Yes, however, there have been no shortages or unfilled orders for aviation assets. Overall, our initial attack rate has remained stable since 2003.

Question 2. The USFS acquired 3 Lockheed P-3 Orion aircraft from the Navy to use as large retardant aircraft. Will those aircraft be converted and available this fire season? Where will those aircraft be based?

Answer. The three Lockheed P-3 Orion aircraft will require extensive modifications and are likely not to be available for this year's wildfire season. We will conduct a thorough analysis and assessment of these resources and, should that confirm the modification and maintenance of these aircraft be shown to be cost-effective and cost-efficient, would perform the modifications with an anticipated aircraft availability 2007.

RESPONSES OF MIKE JOHANNIS, SECRETARY, DEPARTMENT OF AGRICULTURE, TO
QUESTIONS FROM SENATOR BURNS

Question 1. In the Fiscal Year 2005 Interior Appropriations bill, the Forest Service was directed to develop a report on the future composition of the aviation fleet. This report was due on March 1, 2005. Can you give me any insight to what is holding this report up and what the contents of the report are?

Answer. A comprehensive, long-term plan is under development by the National Interagency Aviation Council (NIAC) with strategic options that consider all aspects of the wildland fire mission. The analysis considers all aircraft types in current use and assesses options to providing effective and cost-efficient aircraft that will meet interagency suppression and fuels management goals in the future. Identifying and coordinating the needs of the various Federal wildfire agencies as well as coordination with the States have proven to be the greatest challenge in completing this task. The planned completion date is December, 2006.

Question 2. I am also concerned about the future use of military surplus aircraft. When do you expect to let these contracts and how much it will cost to retrofit the planes?

Answer. The cost of retrofitting these aircraft is currently being evaluated. An accurate estimate of the cost will be available as soon as the aircraft can be thoroughly inspected later this month. We anticipate awarding a contract by early summer 2006 for the conversion of the aircraft. The actual conversion effort will take approximately 12 months. We anticipate the aircraft being available for the 2007 fire season.

Question 3. Will the government still hold title to these aircraft?

Answer. Yes, the Forest Service plans to maintain ownership of these aircraft and offer operation and maintenance contract to commercial operators. Once these contracts are awarded, the aircraft will be provided to successful bidders as government furnished equipment.

Question 3a. If so, will the government be liable if there are accidents with these aircraft rather than if they were solely owned by the operator?

Answer. If the government retains title to the aircraft, it might be sued for negligent maintenance or negligently entrusting it to incompetent personnel. If the government does not retain title, such allegations cannot be made. As a practical matter, this does not appear to be a significant risk. Aircraft accidents involving such aircraft generally are caused by either pilot error or mechanical failure, including metal fatigue. Regardless of who owns the aircraft, they will be piloted by contractor employee; thus, the Government will not be liable for pilot error. Similarly, the Government will not be conducting maintenance of the aircraft, so the Government should not be liable for any mechanical failure. The two most recent accidents were caused by breakup of the aircraft in flight caused by metal fatigue cracks. Again, even where the Government holds title, the contractors will be responsible for inspections to detect such cracks. Accordingly, the Government should not be liable for such failures.

Question 3b. Does it make sense to give the agency the authority to sell these aircraft to operators in order to avoid additional government liability?

Answer. Transferring the aircraft to private contractors would not avoid Government liability. Any decision whether to retain ownership or sell the aircraft to private contractors should be based on other factors.

Question 3c. Would that require a change in law?

Answer. Yes, the Forest Service, like other agencies, lacks authority to sell property directly to private contractors except under very limited circumstances. Congress would need to amend the Federal Property and Administrative Services Act.

Question 3d. If we did allow sale would we need to give the Forest Service the authority to enter into longer term contracts so that operators would know if they bought the aircraft they would get a return on their investment since they would be guaranteed that they would fly the planes for long enough time to capitalize their investment?

Answer. Currently, Forest Service has authority to enter into three-year contracts for air tanker services. For many years, private contractors have acquired aircraft and competed for such contracts every three years. However, acquisition costs have generally been very low. Whether the contractors will need longer term contracts to spread the acquisition and conversion costs over a longer term and thus lower the price for their contracts will depend on the acquisition costs and other financial factors. In the past, the Forest Service has used nearly all aircraft available for air tanker services. Thus, the contractors might compete every three years for a specific contract, but could count on receiving a contract for their aircraft in at least some locations. Generally, the contractors could then spread their fixed costs over many

years. If contractors could not rely on having contracts for at least some aircraft for a longer time period, one alternative would be to enter into longer term contracts. Congress would need to give authority to the Forest Service to enter into such longer term contracts.

RESPONSE OF JAMES HALL AND JAMES B. HULL TO QUESTION FROM SENATOR SALAZAR

Question 1. Not long ago, the 9/11 Commission graded the federal government on the implementation of its recommendations. If you were to do the same type of thing for the Blue Ribbon Commission's Report, what grade would you hand out to the agencies and why?

Answer. We are very pleased that the question asked us to grade the federal government and while Mr. Salazar mentioned the agencies, we think it is essential to expand the grading to include the full scope of those we addressed in our report, that is, the USDA Forest Service, the Department of the Interior's Bureau of Land Management, the Federal Aviation Administration, Congress and the Administration. Therefore, on behalf of the Panel I will provide you with a grade for each, from our perspective:

1) *USDA Forest Service and DOI Bureau of Land Management*—At best we would give these agencies a grade of "C-". They clearly realize the seriousness of the situation and the vital role that aerial fire fighting resources play in the nation's wildfire suppression responsibilities. At least they are attempting to do something, even if it is to sustain a very old and archaic aviation program, but that seems to be their only choice given financial constraints and administrative and political realities.

These federal agencies appear to either be in slow motion in fully addressing the Blue Ribbon Panel's report, or in the proverbial "time warp"—trying to reinvent the same old aviation system that has for 50 plus years now proven over and over to be unsustainable.

As we testified, some minor progress has been made in the area of safety, but accidents continue to happen and the safety record remains unacceptable. For further information on this, please refer to the written testimony that I submitted on behalf of the panel prior to the hearing of 2/15/06.

We also reported that under the current system of aircraft certification, contracting, and operation, key elements of the aerial fire fighting fleet are unsustainable. Contracting still leaves much to be desired as it sets up a "value based" assessment that seems unduly influenced by price. Moreover, it provides little encouragement for scheduled maintenance and time off for pilots to relieve stress and fatigue. In the long term, it provides no incentive for the free enterprise system to work to develop a purpose built plane(s) to replace the failed approach that repeatedly sees the agencies having to rely on old surplus military or commercial aircraft for conversion to air tankers.

Mission muddle amongst the agencies, which is caused by differences in culture, organizational structure and philosophical matters, and land management objectives, continues today and is not conducive to solving the problem. However, the most dominant problem is that these outstanding land management professionals do not have the technical expertise necessary to oversee and conduct a highly complex and much needed quality aviation program from the ground up. This is not to be confused with their phenomenal expertise in the tactical use of aircraft, as the premier emergency response management organizations in the world.

Bottom line, the current aerial fire fighting system is not sustainable, and it is not possible for these federal land management agencies to improve their grade of "C-" by themselves.

2) *Federal Aviation Administration*—We would also have to give the FAA a maximum grade of "C-" in response to the Blue Ribbon Panel's report. We spent extensive time describing the FAA's lack of attention to certification of air tankers and argued that a vital safety link is missing when the FAA does not certify airtankers. Whether limited by law or merely a perceived lack of responsibility or funding—we feel that the FAA should have aggressively sought to rectify this deplorable situation instead of rationalizing its way around taking no responsibility for it. We give the FAA a grade of "C-" for taking some actions to help the USDA Forest Service get connected with some aviation specialists and because apparently it does not in fact have the statutory authority to deal with public use aircraft.

3) *Congress and The Administration*—The Blue Ribbon Panel went into considerable detail with our Finding #2 dealing with the fact that wild land fire-fighting has grown to a level of importance and magnitude that warrants the attention of national leaders. It is impossible for any of the federal agencies to adequately address this massive situation by themselves, or even collectively, without strong support, commitment and funding from the Administration and Congress. After three years there is no tangible evidence that our national leadership has any inclination to help provide a sustainable aerial fire-fighting program for the nation.

A safe and efficient aviation program requires at least three basic characteristics: 1) It must be reliable; 2) It must be sustainable; and 3) It must be affordable. The current system that Congress and the Administration seem to favor meets only one of these criteria—it is affordable. In fact, we would express it as a very “cheap” way of trying to do business. This is not good enough.

The puzzling part of this scenario is that we have a private free enterprise aviation system in this country that seems to be poised and ready to develop the type of purpose built aviation aircraft and program that would sustain us for decades to come, but they cannot make the required private investments without some sort of commitment from the federal government that the products will be utilized in such a manner as to make it feasible for the long term.

We need to get the federal land management agencies out of the aviation business so that they can concentrate on their areas of expertise. This would provide our citizens with the most effective and efficient aerial fire protection available.

We would suggest that the Congress and Administration jointly form another Blue Ribbon Panel to study and outline how a privately oriented aerial fire fighting (large air tanker) program might be developed, funded and operated to serve the federal land management agencies, not be controlled by them. This matter is urgent, and continuing down the current path is a waste of time and places the American public at greater risk every day, to say nothing of the pilots and others that are charged with flying old converted military and commercial air tankers.

By the way, we will resist the urge to give Congress and the Administration a grade for their lack of taking action to set in place a workable solution to resolving the aerial fire-fighting dilemma.

○