

The [U.S.] national airspace system simply cannot consistently meet the demand for air transportation today, much less what we expect to see in the future. As airline pilots, every day we experience an outmoded infrastructure and antiquated facilities and procedures. We grow increasingly frustrated that we have technology in the cockpits of our aircraft that we cannot use to its full advantage.”

That’s the message that ALPA’s president, Capt. Lee Moak, took to Congress on October 5, testifying at the U.S. House Committee on Transportation and Infrastructure’s Subcommittee on Aviation hearing titled, “A

Comprehensive Review of FAA’s NextGen Program: Costs, Benefits, Progress, and Management.”

ALPA has advocated for modernizing the U.S. national airspace system for decades and has been fully engaged in efforts to design and implement the Next Generation Air Transportation System (NextGen) for several years. Moak’s testimony reiterated that message and ALPA’s continuing engagement with all stakeholders in making NextGen a success. He was joined at the hearing by other expert witnesses, all of whom emphasized the critical importance of NextGen to the U.S. economy, job generation, efficiency, and safety.

The business case

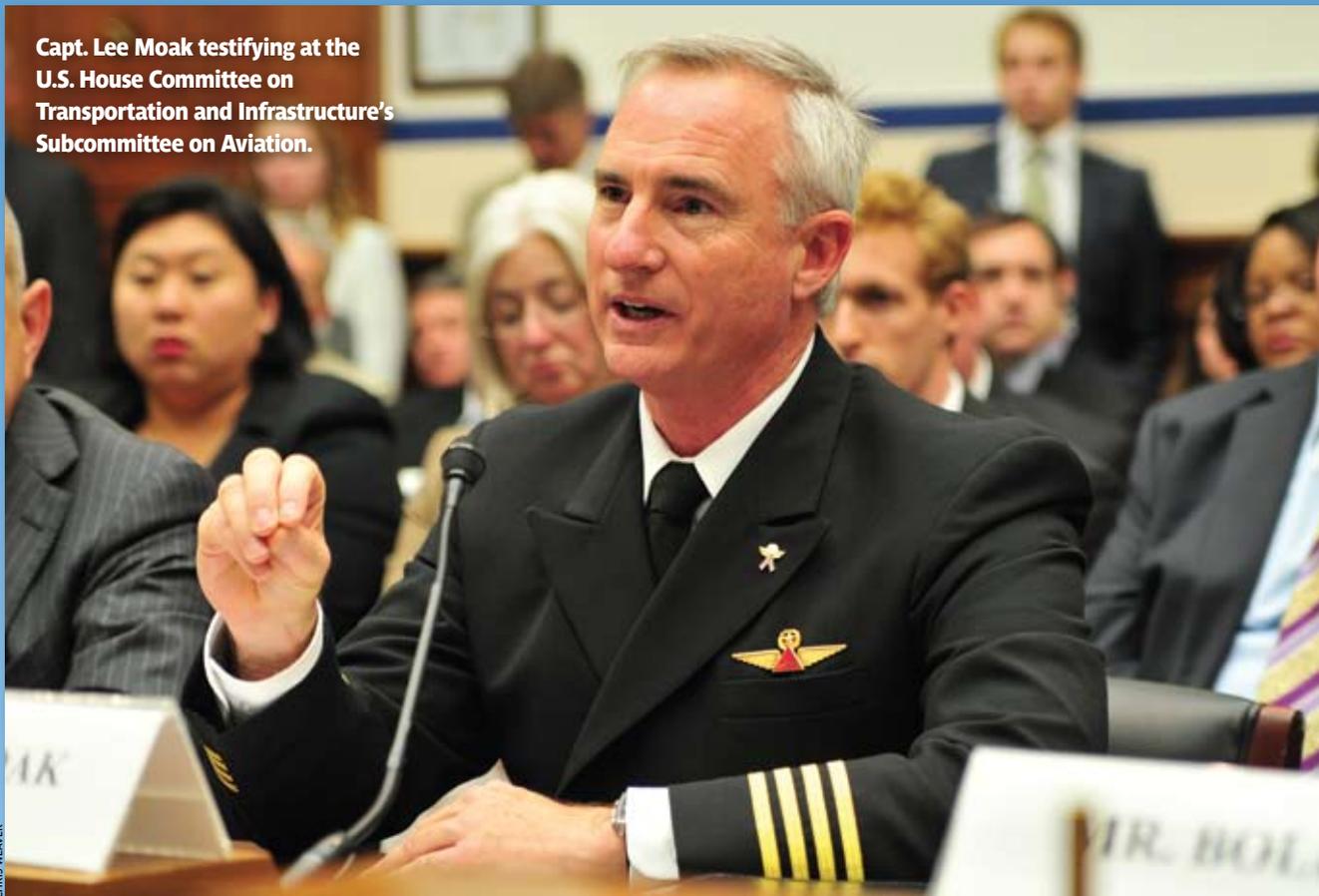
Tom Captain, vice chairman, principal, and aerospace and defense sector leader at consulting firm Deloitte LLP, discussed an extensive study that Deloitte conducted independently on the business case for NextGen, published in May. He concluded, “The business case appears to be an open-and-shut case. The real challenge is in its execution.”

Captain noted, “We found that successful implementation of NextGen by 2025, using reasonably conservative assumptions about future demand for travel, price increases of oil, and other factors, results in an estimated net present value (NPV) of \$281.3 billion and an

ALPA: Future of U.S. Airline Industry Depends on NextGen

By Jan W. Steenblik, Technical Editor

Capt. Lee Moak testifying at the U.S. House Committee on Transportation and Infrastructure’s Subcommittee on Aviation.



CHRIS WEAVER

internal rate of return of 44.8 percent. By 2026, the study found \$29 billion of first-year net benefits, which only increases each year thereafter. This is made up



Captain

of 830 million gallons of jet fuel savings, 900 thousand hours of time saved, and 6.8 million metric tons of carbon emissions avoided.” Deloitte also examined three NextGen schedule scenarios: (1) implementing as planned by 2025, (2) accelerating implementation by five years to 2020, and (3) delaying completion by five years until 2030. Accelerating NextGen, Captain said, would increase NPV by \$19.8 billion and internal rate of return by 21.7 percent. On the other hand, delayed implementation still produced a positive business case but reduced NPV by \$47.6 billion and internal rate of return by 13.5 percent. The Deloitte study also determined that net benefits to constituents would be 35.2 percent to airlines, 58.5 to passengers, 5.2 percent to the government, and 19.1 to the general economy.

What NextGen costs

Michael Huerta, FAA deputy administrator, said that Congress had appropriated about \$2.8 billion for NextGen between 2007 and 2011, and that the FAA estimates NextGen funding needs between 2012 and 2025 will be \$20–27 billion. He said the FAA estimates that “by 2018, we will recoup our investment and NextGen air traffic management improvements



Huerta

More Cockpit Perspective

Asked about the proposal by LightSquared, a telecommunications company, to blanket the United States with high-powered ground stations that would use frequencies directly above and below the GPS frequency spectrum, Moak was blunt. “The bottom line is, we need to protect GPS,” he said. “GPS is fundamental to the success of NextGen. We’re opposed to the LightSquared proposal.”

will reduce total delays, in flight and on the ground, about 35 percent, compared with what would happen if we did nothing.”

But some analyses, Moak noted, raise the specter of the final cost of NextGen ballooning to somewhere between \$40 billion and \$160 billion. “With that big a price tag,” Moak declared, “we must get NextGen right the first time.”

Cost overruns and delays

Dr. Gerald Dillingham, director of physical infrastructure issues for the U.S. General Accountability Office (GAO), testified that the FAA “has made some progress” in implementing NextGen, but that “delays threaten to [affect] costs and benefits.” He added, “In some areas, the FAA has implemented NextGen capabilities that have demonstrated measurable benefits for system users, such as fuel savings. The FAA has also made progress in streamlining its processes, improving its capacity to develop new flight procedures, and focusing its efforts on specific procedures that are needed in key metropolitan areas.”

Dillingham noted that “several NextGen-related acquisitions are generally on time and on budget. However, some acquisitions have been delayed, which has [affected] the time lines of other dependent systems, and the potential exists for other acquisitions to also encounter delays. These delays have resulted in increased costs and reduced benefits.”

Calvin L. Scovel III, DOT inspector general, said the FAA’s three biggest challenges in implementing NextGen were (1) completing the agency’s metroplex initiative, a seven-year effort to redesign

In some areas, the FAA has implemented NextGen capabilities that have demonstrated measurable benefits for system users, such as fuel savings.

—Dr. Gerald Dillingham, director of physical infrastructure issues for the U.S. General Accountability Office

airspace at 21 U.S. metropolitan areas, (2) resolving serious technical problems, cost overruns, and schedule delays in implementing En Route Automation Modernization (ERAM), a \$2.1 billion system for processing flight data, and (3) managing costs and schedules of other “transformational” NextGen programs. He cited the “complex interdependencies” of these and existing programs, as did other witnesses.

Scovel said that Lockheed-Martin delivered an incomplete ERAM software package to the FAA Technical Center, which did not have the capability to fully and properly test it. He asserted that the FAA approved ERAM anyway and sent it to all 20 U.S. air route traffic control centers, where controllers have had to use cumbersome workarounds to make the system work. ERAM is being used now only in Salt Lake City and Seattle Centers. Currently a few years behind schedule and billions of dollars over budget, ERAM is a “foundational” system for NextGen.

Who pays—and who’s accountable?

Rep. Jerry Costello (D-Ill.), ranking member on the Subcommittee, cautioned against reducing the priority of NextGen funding. “Because many NextGen programs are dependent on one or more systems, delays in one program mean delays in others,” he noted. “My concern is, What happens when we add severe budget constraints on top of logistical program delays?”

Costello acknowledged, “Simply providing more funding is not the entire solution to successful NextGen implementation.” However, he warned, “at what point is ‘doing more with less’ just adding to the problem and making it even more difficult for it to succeed on time and on budget?”

Rep. John L. Mica (R-Fla.), chairman of the House Transportation and Infrastructure Committee, added, “This is

not all an issue of money. It’s a failure of management.”

Huerta noted that Congress approved the request his agency submitted earlier this year to change the FAA’s reporting structure and make other organizational changes. The congressional approval, he said, allowed the FAA to create a NextGen office that will report directly to him and to create an assistant administrator for NextGen.

Dillingham said that the GAO is “confident” that FAA’s recent changes in NextGen program management will bring “greater and more focused accountability.”

\$100 per takeoff!

Two days after the House hearing, Moak applauded Senate Majority Leader Harry Reid (D-Nev.) for introducing the American Jobs Act in the U.S. Senate without including any new aviation taxes to offset the spending in the bill, as initially proposed by the administration. However, the Association’s leaders believe that this was only the first round of what will be a long fight as Congress looks for ways to decrease the federal budget deficit (see “ALPA Wins Round One on Proposed New Aviation Taxes,” page 8).

Tom Hendricks, senior vice president for safety, security, and operations for the Air Transport Association (ATA), noted that U.S. airline tickets are subject to 17 taxes and fees already. These taxes and fees, he added, today make up \$61 of every \$300 ticket—a higher rate than the so-called “sin taxes” on tobacco and alcoholic beverages. Hendricks said that’s a heavy burden on an industry that has lost \$55 billion and 160,000 jobs since 9/11.

Hendricks said ATA member airlines’ priorities were to (1) accelerate implementation of RNAV and RNP navigation, (2) streamline the process for developing and approving performance-based navigation (PBN) procedures, and (3) develop metrics to measure success. 🌐



To read ALPA’s full statement to the Subcommittee, scan the QR code and click on the testimony document dated Oct. 5, 2011.