

**STATEMENT OF
CHRISTOPHER BOLKCOM
SPECIALIST IN NATIONAL DEFENSE
CONGRESSIONAL RESEARCH SERVICE**

**BEFORE THE
SENATE COMMITTEE ON
COMMERCE, SCIENCE, AND TRANSPORTATION
HEARING ON THE KC-767 LEASE PROPOSAL
SEPTEMBER 3, 2003**

Mr. Chairman, distinguished members of the committee, thank you for inviting me to speak to you today about our study of the proposed KC-767 lease. Before I begin, I would like to recognize my colleagues Amy Belasco, Daniel Else, and Ronald O'Rourke, who are co-authors of CRS's recent report on this subject, and are here today to lend their expertise to this testimony. Importantly, while CRS undertook this analysis to inform the debate on congressional options, CRS takes no position on any particular legislative option.

In this testimony I would like to emphasize four points that you will find treated at length in the CRS report published August 29th. Our assessment suggests that there are four key issues that Congress may wish to address when considering the lease proposal:

- First, whether there is an urgent need to replace the KC-135E fleet
- Second, whether the KC-767 is the best airplane for the job
- Third, whether the cost comparison the Air Force has made between leasing and procurement is authoritative, and
- Fourth, whether this lease captures the government's full budgetary obligation and is a good deal for the government.

Is there an urgent need?

The Air Force bases much of its argument in support of this lease on its assertion of an urgent need to replace the KC-135E fleet. The Air Force indicates that leasing will result in faster deliveries than outright purchasing.

The Air Force makes five arguments for why replacing the KC-135Es must be done as soon as possible. First, because KC-135E operations and support costs are rising quickly. Recent Air Force studies project KC-135 O&S costs will be 50 percent higher than projections two years ago. Second, these aircraft are increasingly difficult to maintain. They will spend more time in maintenance depots, and less time in the hands of our warfighters. Third, that these aging aircraft are becoming increasingly prone to catastrophic failures that could unexpectedly ground a large segment of the tanker fleet. The Air Force's difficulties in addressing the KC-135's corrosion problems are most frequently mentioned as an unpredictable problem that could ground the fleet. Air Force officials say that they have "no confidence" in the KC-135E aircraft. Fourth, the Air Force argues that Boeing's 767 production line could close in the near future, and if the Air Force doesn't act now, the aircraft may not be available in the future. Finally, KC-135 usage rates in the post September 11th environment are higher than ever anticipated, which is prematurely wearing out these aircraft. The global war on terrorism may require the military Services to engage our adversaries in far flung theaters with little or unreliable in-theater basing. Without strategic aerial refueling capabilities, the Air Force argues, the United States would be nothing more than a regional power.

As part of its analysis, CRS found many counter arguments to the Air Force's position on urgency. Critics of the Air Force position note that the KC-767 lease only results in faster deliveries of the aircraft than procurement because of the Air Force's self imposed budgetary constraints. Procuring these aircraft could result in deliveries at the same rate as leasing, but, the Air Force would have to decrease near-term funding for other procurement programs. Thus, if the Air Force truly had an urgent need, critics assert, the Air Force would find other programs in its current plan that were less important, and make

them bill payers for the KC-767. Along this same line of reasoning, lease critics argue that the Air Force has for years downplayed the need to recapitalize the KC-135 fleet, despite encouragement by organizations like the GAO, which has argued since 1996 that the Air Force should make recapitalization a higher priority.

Opponents of the lease are also critical of the five Air Force arguments outlined earlier. Critics state that the KC-135 operating costs are controllable and will be far lower than the overall costs of leasing the 767. Critics also say that while availability has been a problem for the KC-135 for some time, mission capable rates for the aircraft have been more than satisfactory, and that improvements to the KC-135 depots in 1999 and 2000 are now paying off in terms of faster maintenance turn around times. Lease critics say that the Air Force's depiction of the KC-135's corrosion is exaggerated, especially in terms of predictability. Some point to the Navy, which has been dealing with corrosion problems for years, and considers corrosion a "known challenge" that can be dealt with proactively. Some opponents characterize the KC-135's vulnerability to catastrophic failure as no worse today than it was two years ago, when the KC-135 Economic Service Life Study found it acceptable. Finally, lease critics say that Boeing's 767 production line is not in imminent danger of shutting down; that it is viable until at least until 2006, perhaps until 2008 and even beyond.

Is the KC-767 the right airplane?

If acquired, the KC-767 may be in DOD's inventory for 50 years. Therefore, the aircraft's capabilities and characteristics are an important consideration. Servicemen and women decades in the future will live with decisions made today.

Because the Air Force has characterized its need as urgent, supporters of the KC-767 say that the number of tanker aircraft platform choices is limited to some degree. Designing and building an aerial refueling aircraft from scratch, for instance, would take too long. The 767 is the best aircraft available right now, lease supporters say.

The Air Force says that the KC-767 is a much better aircraft than the KC-135. It is more capable, and flexible. It will offload more fuel, operate from shorter runways, and carry more cargo and personnel than the KC-135. Unlike the aircraft it will replace, the KC-767 is itself refuelable, and can use both the Air Force refueling boom and the Navy refueling probe and drogue system on the same mission. The Air Force projects that the KC-767 will be more available than the KC-135. It will have a higher mission capable rate, and spend less time in maintenance depots.

Newer aircraft always compare favorably to old aircraft, say lease critics. What really counts, they say, is how well the KC-767 meets the Air Force's, Navy's and Marine Corps' operational requirements. Critics argue that the KC-767 fails to meet a few key criteria. The KC-767 will not, for example, be able to simultaneously refuel two aircraft with the probe and drogue system. Opponents also say that significant numbers of inexpensive surplus commercial aircraft are available that may be even better than the KC-767. Some assert that surplus DC-10 aircraft could be purchased on the commercial market and converted into very capable KC-10 tankers for much less than the KC-767 lease. KC-10s are roughly twice as capable as the KC-135. Furthermore, because the Air Force already operates 59 KC-10s today, it has already invested in the operations, maintenance, personnel and training infrastructure.

The Air Force opposes re-engining KC-135E models, arguing that it is economically unviable. Too little military capability is gained for the financial investment, and re-engining

does not address the most basic need, which is to extend the KC-135's lifetime. Lease opponents look at the economics of re-engining and come to the opposite conclusion. It is much cheaper, they say, than leasing KC-767s. Re-engining merits consideration, lease opponents say, and note that Congress has provided funds to re-engine KC-135E aircraft for years.

Is the Air Force comparison of lease and procurement costs authoritative?

The Air Force's July 10th report to Congress states that leasing the 767s would be about \$150 million, or about 1%, more expensive than purchasing them, when calculated on a net present value basis.

The report presents this \$150-million difference (calculated on a net present value basis) as a single answer to the question of how the costs of leasing vs. purchasing the 767s compared to one another. The calculation, however, includes a number of assumptions and factors that, if treated differently, could change the outcome of the cost comparison, in several cases by hundreds of millions of dollars.

Some of these assumptions could change the calculation to favor either the lease option or the procurement option. But other assumptions, if treated differently, would more likely change the calculation in only one direction – in favor of the procurement option.

Perhaps the most significant factor we examined was the discount rate used in the net present value calculation. The Air Force used a 9-year Treasury bond rate. Our analysis indicated that an arguably more appropriate discount rate would be a Treasury bond rate for bonds having an average maturity equal to the bonds that the U.S. government would likely use if the government needed to raise the funds for the cash flows involved in the lease arrangement. Jane Gravelle, a CRS senior specialist who is an expert on discount rates assisted in this part of the study.

Our analysis calculates this average maturity at something between 3.5 and 4 years, rather than the 9-year rate used by the Air Force. Using a 3.5- or 4-year Treasury bond rate would favor the procurement option by an additional \$500 to \$600 million.

A second major factor we examined was whether multiyear procurement should be used in estimating the cost of the procurement option. The Air Force report offers some arguments as to why multiyear procurement should not be used. But there are also arguments one could make as to why multiyear procurement *should* be used, including the fact that the lease inherently involves making a multiyear commitment, and that acquiring the aircraft through a multiyear procurement arguably would represent no more of a procedural innovation, and arguably less of one, than acquiring them through a lease.

If multiyear procurement were used in estimating the cost of the procurement option, it would favor the procurement option by an additional \$600 million to \$1.2 billion.

The use of multiyear procurement, if combined with the change in discount rate just mentioned, could shift the cost comparison in favor of the procurement option by a total of \$1.1 billion to \$1.8 billion.

The five other factors we examined included the following:

- The progress payment schedule, which if done to reflect other Air Force aircraft procurement programs, could favor the procurement option by an additional \$200

million

- The treatment of inflation on the progress payments, which if done differently could favor the procurement option by an additional \$500 million
- The interest rates on the bonds issued by the SPE, which could shift the cost comparison by about \$270 million in either direction for each ½-point difference between projected interest rates in the Air Force calculation and the actual rates that occur when the bonds are issued
- The interest rates on the construction loans, which might shift the cost comparison by several tens of millions of dollars in either direction for each ½-point difference between the projected rates in the Air Force calculation and the actual rates that occur when the loans are taken out

and

- The imputed self-insurance cost that is included in the procurement option. This estimate could prove to be either too high or too low, possibly by tens of millions of dollars.

The two principal implications of CRS's assessment of the Air Force cost comparison are as follows:

- First, the \$150-million difference in net present value between lease and purchase options that is presented in the Air Force report is one of many possible answers to the question of how the cost of the lease and purchase options compare to one another. Calculating the net present values of these two options involves several assumptions and factors that can shift the cost comparison, in several cases by hundreds of millions of dollars.
- Second, while some of the assumptions used in the calculation could change the outcome to favor either the lease option or the purchase option, other factors, if treated differently, are more likely to change the cost calculation in only one direction – in favor of the procurement option.

What budget oversight concerns are raised by the lease?

Consideration of the Air Force tanker leasing program has been unconventional. The Department of Defense (DOD) did not request any funds for the tanker lease in either FY2003 or FY2004, and has not included funding for the lease in its planning document, the Future Years Defense Program (FYDP).¹ The Air Force is relying on a provision in the FY2003 DOD Authorization Act that allows it to submit for approval a new start notification to the four congressional defense committees.²

¹ The Air Force did include \$4.1 billion between FY2003 and FY2009 to buy a KC-X, an unidentified new tanker.

² Section 133 of P.L. 107-314, the FY2004 DOD Authorization Act gives the Air Force two ways to obtain approval of the lease: get specific authorization and appropriation language or get approval of a new start notification submitted as a reprogramming request.

If the four congressional defense committees approve the Air Force request to spend \$720,000 in 2003 for a study of tanker maintenance and training requirements, the Air Force will sign a contract with Boeing to spend \$24.6 billion in current year dollars between 2003 and 2017 on its new 767 tanker leasing program according to the Air Force. This would be an unusual if not unprecedented way to approve a major defense program.

First, it appears that the tanker lease may not alleviate the competition among programs in the Air Force budget. Operating leases are attractive because agencies can make smaller payments initially and spread out their payments rather than paying up front for a purchase. While the lease approach reduces Air Force budget requirements in the short-term, it does so by pushing costs out into future years when potential trade-offs among programs are less visible to policy makers but may be equally difficult. Under the Air Force's plan, \$5.5 billion would be needed in the first seven years of the lease -- from FY2003 to FY2009 -- but \$19.9 billion would be needed in the second seven years of the lease -- from FY2010 to FY2017.

In later years, the Air Force could face a squeeze on funding because of its plans to buy the Joint Strike Fighter, the F/A-22, R&D on a long-range bomber and a replacement of the Minuteman intercontinental missile, and other programs. A recent CBO report predicts that funding for Air Force investment programs would need to grow from an average of \$58 billion in FY2009 to \$64 billion annually between 2010 and 2020 in 2004 dollars in order to fund its planned program.³

DOD might also face constraints on its total resources if the defense budget were to rise more modestly in later years. The FY2004 congressional budget resolution predicts that annual increases in spending on national defense will fall from the \$20 billion to \$10 billion or less beginning in FY2009. Although those estimates could well change in later years, pressures on defense spending could re-surface starting at the end of the decade with the retirement of the baby boom generation.

Second, the cost of the tanker lease program is uncertain. The total cost of the program could rise by \$4.4 billion, from \$24.6 billion to \$29 billion in current year dollars if the Air Force decides to buy the planes as appears likely. Although the cost of DOD programs, and other government programs as well, often change over time, the Air Force proposal to lease rather than buy the planes appears to subject the government to the volatility of the bond markets. If interest rates for all three tranches of bonds to be sold on the market were to be higher or lower than anticipated, the cost of the program would change. An increase (or decrease) of .5% in interest rates would change costs by \$400 million and a 1.5% increase (or decrease) would change the program's cost by about \$1.3 billion. A straight purchase would not be affected by changes in interest rates. The Air Force also has not funded potential termination liabilities, which in 2011, at the height of the lease, could be \$2.7 billion for the aircraft alone according to the Air Force's current estimates.⁴

Third, it is unclear whether the proposed lease complies with statutory and OMB requirements. To guard against agencies using operating leases to "buy on the installment plan," the government adopted guidelines that specify the types of arrangements that qualify as operating leases. Those rules are set out in OMB's Circular A-11 and reflect the

³ Congressional Budget Office, *The Long-Term Implications of Current Defense Plans: Summary Update for Fiscal Year 2004*, July 2003, p. 12.

⁴ Air Force model 1, Business Case Analysis, July 2003. Termination liabilities could be substantially more if the support cost contract is included.

1997 Budget Enforcement Act. Some observers have questioned whether the proposed tanker lease complies with those rules.

Operating leases must be for commercial items with a private sector market. To support its case, the Air Force notes that the 767 was commercially developed and that Italy and Japan have bought several aerial refueling tankers and some other countries and commercial buyers have expressed interest. Critics of the lease argue that the Air Force variant would be substantially different from the commercial version (as indicated by both specific features and the difference in price) and suggest that the commercial market is likely to be small.

In order to distinguish operating leases from lease/purchases or capital leases, OMB's Circular A-11 Score keeping Guidelines also specify that in operating leases, the government is not to plan to transfer ownership or buy the asset shortly after the end of the lease.⁵ The Air Force states that it would have to get authorization and appropriation of funds from Congress to buy the planes. DOD is committed to earmark an additional \$2 billion in FY2008 and FY2009 to purchase the plane according to the Air Force's July 10, 2003 report to Congress.⁶

OMB's guidelines also specify that the lease is not to include a bargain price for later purchase so that the lease would be a way to buy the plane at a later point. The option price for the Air Force to buy the plane is about 15% below the price that the Air Force predicts the plane would command on the commercial market.⁷

To ensure that decision makers see the government obligations, OMB's scoring rules – for counting the budget authority for the program -- are different for operating leases than for lease/purchases or a capital lease. The government's obligation in an operating lease is simply the annual payments whereas in a lease/purchase, OMB scores the government's obligations based on the value of the assets because the government plans to buy the asset at the end of the lease. In a capital lease, the full value of the government's obligations in present value terms is scored up front.

Using a special purpose entity (SPE) also makes it more difficult to have visibility on the government's obligations. According to a CBO report, other agencies who have relied on special purpose entities have launched programs without "scoring" or counting the full potential scope of the government's obligations. DOD, for example, used a public/private venture to obtain about \$2.3 billion in military housing while recording \$255 million in obligations, almost a ten to one ratio.

For the proposed lease, an issue is: are the payments for the planes that the Trust makes to Boeing essentially governmental obligations? The Air Force contends that the non-profit Wilmington Trust is a separate entity that will raise funds on the bond market to purchase the aircraft from Boeing and to receive lease payments from the Air Force to pay off those loans. Some observers, however, have suggested that Wilmington Trust is basically a conduit for the Air Force, or essentially an extension of the government. Under OMB's *new*

⁵ OMB, Circular A-11, Appendix A, *Scorekeeping Guidelines* (2002); these guidelines follow language in the conference report on the 1997 Budget Enforcement Act, H. Rept. 105-217, p. 1010 - p. 1011, and are followed by both OMB and CBO.

⁶ U.S. Air Force, *Report to the Congressional Defense Committees on KC767A Air Refueling Aircraft Multi-Year Lease Pilot Program*, July 10, 2003, p. A2-1.

⁷ CRS calculation based on Air Force Model 1, Business Case Analysis, July 2003.

guidelines issued in July after the Air Force submitted its lease proposal, it appears that the Wilmington Trust could be considered a governmental entity and the buy of the aircraft be scored as an Air Force obligation, with far larger budget requirements than annual lease payments.

Fourth, and in conclusion, it is not clear that this lease is a good deal for the government. Some observers have questioned whether the proposed lease is a good deal for the government -- either compared to a multiyear purchase of the aircraft or as a lease. GAO and others have raised concerns about the lack of competition for both the \$17 billion lease and the \$8 billion in support costs, much of which would also go to Boeing.

Compared to a multiyear buy, is the lease a good deal for the government in current year dollars? CRS estimates that a multiyear buy would cost \$15.4 billion while a lease followed by a buy of the aircraft would cost \$21.1 billion; thus the lease option would be \$5.7 billion or 27% more costly than a multiyear buy.⁸ If the Air Force were to spend those funds on aircraft rather than relying on an operating lease in order to pay less in earlier years, those dollars would purchase about 35 more tankers.

As a lease, it appears that the Air Force's price may be questioned as being above commercial rates especially in light of today's oversupply of commercial aircraft. Based on a formula for commercial leases presented by John Plueger, CEO of the International Lease Finance Corporation, a commercial airliner operating lease company, the cost of the Air Force six-year lease would be expected to range from \$59 million to \$95 million per aircraft or about 35% to 57% of the value of the aircraft. The Air Force's lease, however, is estimated to be about \$166 million in current year dollars or about 90% of its market value.⁹

Why is the Air Force's price so much higher than might be expected? The price of the lease appears to be designed to minimize the amount of the loan that would be outstanding at the end of the lease, and hence the riskiest funds to borrow, an Air Force concern. OMB's guidelines cap that level at 90% of the value of the aircraft. Bondholders who finance that last 10% of the value of the aircraft will only be paid when and if the Air Force buys the plane. Because the decision about that final purchase has not been made and depends on congressional action, the Air Force believes that those bonds would require a high interest rate of about 10%. The Air Force leasing price is intended to minimize the amount of funds that would require that high rate.

Mr. Chairman, distinguished members of the committee, this concludes my testimony, and I look forward to addressing any questions that you may have.

⁸ CRS calculations based on Air Force Model 1, Business Case Analysis, July 2003.

⁹ CRS calculations based on testimony by John Plueger before the House Armed Services Committee, July 23, 2003, and CRS calculations based on Air Force Briefing to CRS, "KC767A Report to Congress, Status Brief," July 15, 2003.