

United States General Accounting Office
Washington, DC 20548

May 15, 2002

The Honorable Carl Levin
Chairman
The Honorable John Warner
Ranking Minority Member
Committee on Armed Services
United States Senate

The Honorable John McCain
United States Senate

Subject: Air Force Aircraft: Preliminary Information on Air Force Tanker Leasing

In your April 10, 2002, letter, you asked us to assess the Air Force's plan to replace a portion of its KC-135 aerial refueling tanker fleet with leased Boeing 767 aircraft. You asked us to assess

- aerial refueling tanker requirements;
- the cost-effectiveness of different options (lease, purchase, modify, or extend the service life of the fleet);
- the policy for leasing major defense acquisition programs;
- the costs associated with infrastructure improvements; and
- the depot maintenance backlog.

Recognizing that the full extent of this analysis could not be done before the terms of the lease were negotiated, you asked that we provide the preliminary results of our efforts by May 15, 2002. We provided an oral briefing accompanied by the enclosed slide presentation to your staff on May 2, 2002. The briefing and this letter respond to your request for preliminary information.

In February 2002, the Air Force requested information from the Boeing Company and from Airbus of North America on the potential for leasing tanker aircraft. The Air Force's request recognized that in the aftermath of the September 11, 2001, attacks on the World Trade Center and the Pentagon, commercial aircraft manufacturers were faced with the prospect of reduced or cancelled orders as a result of projected declines in air passenger travel. According to the Air Force, this situation presented a possibly unique opportunity to accelerate Air Force tanker replacement and to address the increasingly acute challenges of maintaining the KC-135 as a viable, cost-effective platform. In response to this emerging opportunity, Congress included language in section 8159 of the fiscal year 2002 Defense Appropriations Act allowing the Air Force to establish a multiyear pilot program for leasing Boeing 767 aircraft.

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Abstract In your April 10, 2002, letter, you asked us to assess the Air Forces plan to replace a portion of its KC-135 aerial refueling tanker fleet with leased Boeing 767 aircraft. You asked us to assess aerial refueling tanker requirements; the cost-effectiveness of different options (lease, purchase, modify, or extend the service life of the fleet); the policy for leasing major defense acquisition programs; the costs associated with infrastructure improvements; and the depot maintenance backlog. Recognizing that the full extent of this analysis could not be done before the terms of the lease were negotiated, you asked that we provide the preliminary results of our efforts by May 15, 2002. We provided an oral briefing accompanied by the enclosed slide presentation to your staff on May 2, 2002. The briefing and this letter respond to your request for preliminary information.		
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Congress also required the Air Force to submit a report to the congressional defense committees, at least 30 days before lease arrangements may commence, outlining plans for implementation; describing expected savings, if any; and comparing total costs of leasing with the costs of purchasing.

As we discussed at the May 2 briefing, we want to emphasize that the attached presentation provides preliminary information that is based on a short period of work. We relied extensively on data provided by the Air Force and have not verified most of the data. Importantly, because the Air Force is still negotiating with Boeing over the terms, including cost, length of lease, and other issues, more current, definitive information is not yet available. Because details of the lease are not finalized, we were not able to carry out an independent cost analysis or reach final conclusions on many aspects of the proposed lease. For example, to make a meaningful cost-analysis, many assumptions would have been necessary on our part concerning, among other aspects, lease details, aircraft basing plans, retirement schedules for the KC-135, and potential purchase price costs and schedules. In this regard, a preliminary report by the Congressional Budget Office (CBO), was provided on May 7, 2002, to Senator McCain. This report, which was based on a number of CBO assumptions since lease negotiations are still underway, concluded that a long-term lease of tanker aircraft would be significantly more expensive than a direct purchase of such aircraft.

Despite these limitations, we were able to obtain some information on each of the issues raised in your request. To address tanker issues and leasing proposals, the Air Force provided briefings and data on the KC-135 fleet, a general outline of leasing proposals, its rationale, and KC-135 depot maintenance activity. We visited Air Mobility Command officials at Scott Air Force Base. We discussed cost-benefit analysis and leasing issues with Office of Management and Budget and Congressional Budget Office officials and leasing issues with Boeing representatives. We coordinated our work with the Department of Defense Office of Inspector General. We benefited from work we already had under way for the House Armed Services Committee on aerial refueling tanker requirements, and we relied on our 1996 work on tanker requirements¹ and on leasing of assets by the federal government.

Summary

The preliminary information for the five areas you requested is presented below. Where appropriate, we raise a number of issues based on our preliminary work.

- **Requirements.** Although the Air Force has a long-term requirement to replace its aging fleet of KC-135 tankers, the urgency of the need in the short term is unclear. The Air Force states that the leasing arrangement would allow it to acquire new tankers 3 years earlier than through its most recent procurement plan. This would allow the Air Force to retire old, less capable KC-135s, thus saving maintenance costs on those aircraft. According to the Air Force, KC-135 operations have increased significantly since September 11, with aircraft flying 45 percent more than during the same period in the

¹ U.S. General Accounting Office. *U.S. Combat Airpower: Aging Refueling Aircraft Are Costly to Maintain and Operate*, [GAO/NSIAD-96-160](#) (Washington, D.C.: Aug. 8, 1996).

previous year. However, tankers had not been a high Air Force priority, and the Air Force had not planned to begin replacing the tankers until 2009. In fact, in responding to our 1996 report, the Air Force said that with proper maintenance and upgrades, the aircraft could be sustainable for another 35 years.

- **Cost-effectiveness.** Because the Air Force is still negotiating the lease details, it could not provide information on the cost-effectiveness of leasing aircraft instead of purchasing them. However, a key consideration in comparing these two options is that the appropriations act requires that lease agreements for the aircraft shall not exceed 10 years. This will leave a long-term (i.e., after the 10 year lease expires) shortfall of 100 aircraft that the Air Force must somehow replace to sustain its tanker capacity. The cost of this replacement could be substantial and should be a factor when comparing the costs of leasing versus purchasing. In addition, although the act requires only a comparison of leasing and purchasing, there are other possible options for the Air Force to consider, such as modifications and upgrades to some existing KC-135s.
- **Policy of leasing major defense items.** We have not taken a position on the overall policy of leasing versus purchasing defense equipment; and such an analysis would have to consider many issues in addition to cost, such as the nature of the equipment, the criticality of the need, readiness impacts, and industrial base issues. However, when we studied past leasing proposals, we found that—from a cost standpoint—leasing is usually more expensive in the long run. Our most closely related work has been on Navy proposals to lease some ships. In three reports issued over several years,² we consistently reported that leases would be more expensive than outright purchases. We have also reported that in order to make good judgments on resource allocation, decisionmakers need accurate comparisons of the relative long-term affects of acquisition decisions. Operating leases could obscure those comparisons. The Air Force, as required by Section 8159, is negotiating this lease under terms and conditions consistent with the criteria for an operating lease as defined in OMB Circular A-11. Under an operating lease, the Air Force would not be required to set aside funds for the full term of the lease (as it would for a purchase). In addition, since leasing would most likely be paid through the operation and maintenance budget, the lease would not have to compete for procurement funding with other Air Force and defense priorities.
- **Infrastructure improvement costs.** Because the 767 aircraft is larger than the KC-135, there will be some infrastructure improvement costs, such as for building or modifying hangars, taxiways, and runway aprons. Additional costs would likely include simulators and project management. The only available estimate of such costs, provided by the Office of Management and Budget in December 2001, involved one-time costs estimated at about \$1.7 billion. In

² U.S. General Accounting Office. *Build and Charter Program for Nine Tanker Ships*, B-174839 (Washington, D.C.: Aug. 15, 1973); *Improved Analyses Needed to Evaluate DOD's Proposed Long-Term Leases of Capital Equipment*, [GAO/PLRD-83-84](#) (June 28, 1983); and *Defense Acquisitions: Historical Analyses of Navy Ship Leases*, [GAO/NSIAD-99-125](#) (June 25, 1999).

recent discussions, Air Force officials told us that the December estimate was outdated and probably overstated but that they could not provide more recent estimates. They said these costs will largely depend on where the new aircraft would be based and the condition of those facilities. Basing decisions have not yet been made.

- **Depot maintenance backlog.** We have only limited information on depot maintenance issues. The oldest models of the KC-135s are clearly expensive to maintain and operate. Their mission capable rates are lower than those of the rest of the fleet, and they spend increasingly long periods undergoing periodic depot maintenance. The depots have undertaken some measures to speed up their maintenance and repair times, but we do not know the extent to which these actions are helping or whether other measures could be taken.

Additional Work We Will Carry Out

The Air Force is required to submit a report to the congressional defense committees, at least 30 days before lease arrangements may commence, outlining its plans for the lease and comparing the total costs of purchasing versus leasing. As discussed with your staff on May 2, 2002, our future work will focus on the adequacy of the case presented by the Air Force to either lease tanker aircraft or take another approach. We will provide our analysis of the Air Force's study and will examine other options for meeting the Air Force's needs.

We met with Air Force officials to discuss the results of our work. They subsequently provided the letter reproduced in Enclosure II, and we have incorporated their comments in this letter and the enclosed slide presentation where appropriate.

We will send copies of this letter to the chairmen and ranking minority members of the Committee on Armed Services, House of Representatives, and the Defense Subcommittees of the Senate and House Committees on Appropriations. We will also send a copy to the Chairman, Subcommittee on Readiness, House Committee on Armed Services for whom we are conducting a broader body of work in this area. This letter will also be available at no charge on the GAO Web site at <http://www.gao.gov>.

We appreciate this opportunity to be of assistance. If you or your staff have any questions regarding the briefing or this letter, please contact me at (202) 512-4914 or William C. Meredith, Assistant Director, at (202) 512-4275. Other key contributors to this review were Christine E. Bonham, Joseph J. Faley, Kenneth W. Newell, Kenneth E. Patton, and Charles W. Perdue.



Neal P. Curtin, Director
Defense Capabilities and Management

Enclosures

Briefing for Senate Armed Services Committee, May 2002



Preliminary Information on AF Tanker Leasing Issues

**Briefing for Senate Armed Services Committee
May 2002**



Five Areas Highlighted in Committee Request

- Aerial refueling tanker requirements
- Cost-effectiveness of acquisition options
 - Leasing arrangement
 - Purchase
 - Modification or service life extension of existing fleet
- Policy of leasing major defense acquisition programs
- Cost of infrastructure improvements and other associated costs
- Depot maintenance backlog



Scope and Methodology

- Air Force (AF) officials provided us briefings and data
 - Current KC-135 fleet statistics
 - General outline of leasing proposal and AF rationale for leasing
 - Depot maintenance issues
- There was not time to verify most data provided by AF
- Looked at completed and on-going GAO work related to these issues
 - Had work underway for House Armed Services Committee on tanker requirements
- Visited Air Mobility Command at Scott Air Force Base
- Met with officials of Office of Management and Budget and Congressional Budget Office to discuss cost-benefit analysis and leasing issues
- Met with Boeing representatives
- Coordinated with Department of Defense Inspector General office



Scope and Methodology

Limitations

- We were unable to do independent cost analysis or reach conclusions on many aspects of the proposed lease, because
 - Details of lease not finalized
 - Basing details not finalized
 - Would have to make many assumptions – lease costs and provisions, basing plan, retirement schedule for KC-135s, potential purchase price, costs and schedule



Tanker Requirements



Requirements

AF Has 545 KC-135 Tankers



E Models – 134

R Models - 411

Source: Air Force Photo



Requirements

AF Leasing Proposal

- Lease 100 Boeing 767 Tanker/Transport aircraft to replace 127 E Models of KC-135
- Boeing has developed this Tanker/Transport version of 767 and marketed it to militaries world-wide
 - Italy and Japan have committed to acquire tanker
- Deliveries would begin to AF in FY 2006
- AF is negotiating lease arrangement so that it will conform to legislation or will ask for legislative changes if it would make the leasing arrangement more advantageous to the government
- Still in negotiation; details not known
 - Lease amount and leasing agent
 - Provisions of lease
 - Maintenance arrangements



Requirements

AF Reasons for Leasing Arrangement

- “Kick starts” recapitalization of tanker fleet
 - Leasing arrangement allows replacement to start at least 3 years sooner than purchase and acquire 100 aircraft about 6 years sooner than purchase based on current AF procurement plans
- KC-135 aircraft are old, need to be replaced
 - KC-135E models are least capable, most in need of replacement
 - Replacement would avoid future maintenance costs on KC-135Es
- Flying hours increased 45% in FY 02 compared to same period in FY 01 (CONUS-based aircraft)



Requirements

KC-135 Fleet Data

- 134 E Models in inventory as of April 2002
- All E Models are in reserve component; active AF has more capable R Models
- First acquired – 1957
- Average age – 41 years
- AF projects lifetime flying hours limit of 36,000 hours for E Models (39,000 for R Models)
 - AF says only a few KC-135s would reach this limit before 2040
 - As of 1995, majority of the fleet had between 12,000 and 14,000 flight hours
 - Fleet averaging about 300 hours per year since then (CONUS-based aircraft)



Requirements

KC-135 Fleet Data

- Mission Capable rates (FY 02 through March)
 - Active - 85%
 - Reserve R Models – 77.9%
 - National Guard R Models – 77.8%
 - Reserve E Models – 70.4%
 - National Guard E Models – 75.5%
- AF says it has not requested funds for re-engining since 1993; Defense Department and Congress have added funds to upgrade approximately 2 E Models per year to R Models at cost of about \$29 million per aircraft
 - AF estimates it will have 127 E Models to replace when leased 767s become available; according to AF, this should provide similar refueling capacity
- AF estimates that by 2005, average number of non-available aircraft will reach 206 of 545 KC-135s



Requirements

Observations on Requirements

- There is an overall tanker capacity shortfall for 2 MTW (Major Theater Wars) strategy, but shortfall not known for new strategy
 - AF does not have current study of long-term tanker needs
 - Leasing would replace, not add to capacity
- Average age is high, but hours of use relatively low – Air National Guard plans only 270 flying hours per aircraft in FY 03; active AF plans 349 flying hours
- E Models have old engines, less capacity, higher maintenance cost than R Models
- Kosovo and Afghanistan operations supported with current fleet, but AF worries about increasing risk of fleet-wide grounding as aircraft age



Requirements

Prior AF Plans for Replacing KC-135s

- Urgency of replacement is not clear; AF says Sept 11 increased their concern about age of fleet
- At the time of 1996 GAO report, AF planned to begin replacing KC-135s with new tankers in 2013
- In 2001, AF officials said start of replacement was moved up to 2009 with some "seed" money appearing in the budget beginning in 2005
- Limited funds requested in 2002 President's budget to study replacements alternatives; replacement tanker was not on the AF's unfunded requirements list until March 2002
- If need for improved capability is urgent, quickest solution may be to re-engine and upgrade to R Models (approx. 2 year lead-time); AF says upgrade does not address underlying issue of the aging aircraft fleet



Requirements

DOD Response to 1996 GAO Report

- Letter dated July 1, 1996, Office of the Secretary of Defense response to draft of GAO/NSIAD-96-160:

“...While the KC-135 is an average of 35 years old, its airframe hours and cycles are relatively low. With proper maintenance and upgrades, we believe the aircraft may be sustainable for another 35 years.”



Requirements

Options for KC-135E Modernization

- Re-engine and other modifications to upgrade E Models to R Models
 - AF estimates cost to be \$29 million per aircraft
 - Are E Models worth investing more money?
- Purchase new tanker aircraft to replace E Models
 - Cost unknown (for example, Boeing web page cites cost range for the 767 Tanker/Transport of \$150-225 million, based on quantities, features, etc.)



Requirements

Options for KC-135E Modernization

- Purchase used aircraft and convert to tankers
 - Cost and availability unknown
- Contract for refueling services to replace some organic capability
 - Navy using contractor on small scale
 - Not clear whether wider use of contractors is feasible
- Lease tanker aircraft as proposed



Cost Effectiveness Analysis



Need Detailed Data to Compare Cost Effectiveness Options

- Data not available yet; negotiations still on-going with Boeing
- Therefore, we have not done a cost-effectiveness analysis; however, CBO provided an analysis to Sen. McCain in a May 7, 2002, letter showing purchase to be the least expensive option
- AF must report to Congress before committing to lease
 - AF report required to describe the terms and conditions of proposed contracts and expected savings, if any, compared to purchase
 - AF can proceed with lease after Congress has its report for at least 30 days



Requirements

Sec. 8159 Changed Required Report

- Exempts AF from 10 U.S.C. 2401 and 2401a
- Sec. 2401 generally requires Secretary of a military department to notify Congress of a lease of an aircraft or vessel with a term 5 years or longer
- Sec. 2401 also requires DOD to provide a detailed description of the terms of the lease and to justify entering into the lease rather than a contract to purchase the aircraft or vessel
- Sec. 2401a requires a written determination that a lease of vehicles, equipment, vessels, or aircraft for longer than 18 months is in the best interest of the Government
- Section 8159, on the other hand, requires a report describing the terms and conditions of proposed leasing contracts and expected savings, if any, compared to purchase

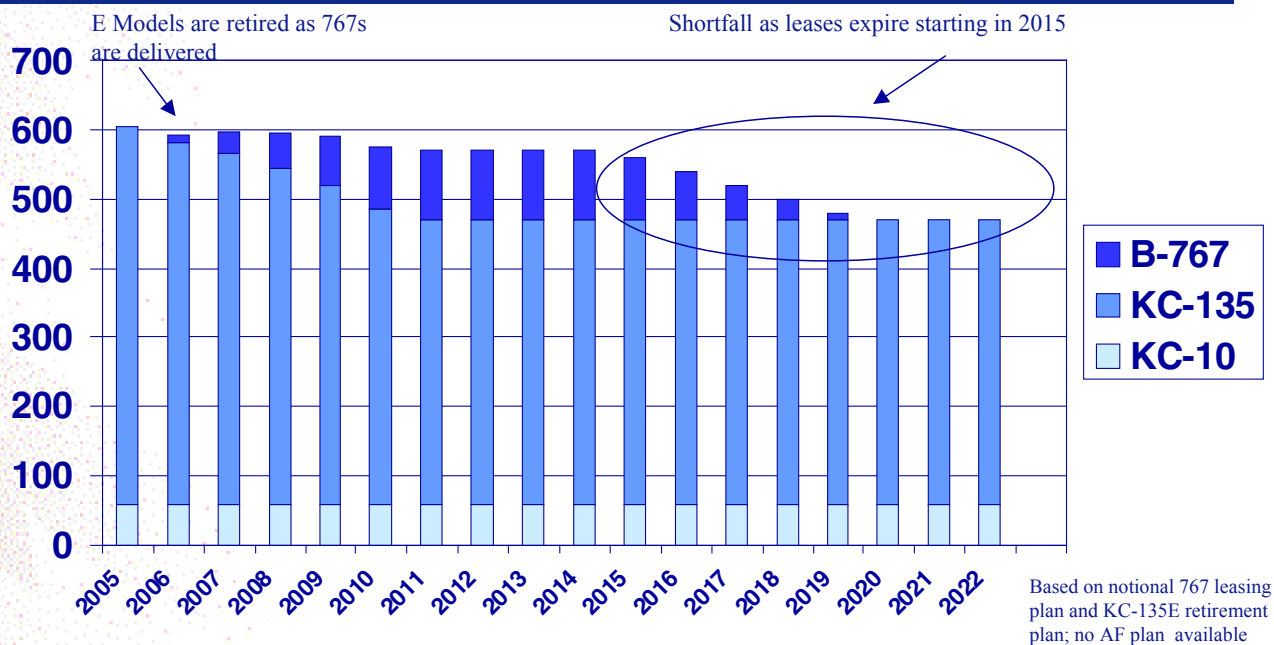


Cost Effectiveness

Key Cost Considerations

- Independent analysis by GAO not possible without details of lease arrangement, but there are several key considerations in cost effectiveness analysis:
- How are 100 leased aircraft replaced at expiration, since AF has long-term need for aerial refueling tankers?
 - Will have to be re-leased, purchased at residual value, or replaced with new aircraft
 - How is that cost estimated?
 - Without replacing leased aircraft, impact on tanker fleet is considerable
 - Chart on next slide illustrates that tanker fleet would shrink starting in 2015 as leased tankers are returned, unless AF takes further action

Impact on AF Tanker Fleet When 767s Are Returned at End of Lease Period





Cost Effectiveness

Additional Cost Considerations

- What is useful life of a 767 Tanker?
 - Current tanker fleet used for 40+ years
- What does AF use as purchase cost for comparison?
 - Boeing information indicates purchase price of \$150 to \$225 million
 - Price used would greatly impact comparison
- Converting E Models to R Models (which AF says is feasible for about 100 of the 127 aircraft) at \$29 million per aircraft could probably be accomplished sooner than leasing aircraft
 - Sec. 8159 does not require AF to consider this option



Cost Effectiveness

Some Cost Data

- OMB analysis based on December 2001 data from AF
 - Total cost over life of program estimated at \$26 billion in “then-year” dollars, not present value
 - About \$1.7 billion of that amount would be incurred whether purchase or lease (infrastructure, etc.)
- AF says these figures are outdated and overstated, but it will not have more current data until negotiations and its analysis are done



Cost Effectiveness

Benefits to Consider

- Cost avoidance – difference between 767 operation and support costs and KC-135E projected costs
 - No AF estimate available
 - Applies to lease or purchase
- Having more capable tankers in the fleet sooner
 - Mission Capable rates would likely be higher
 - E Models replaced about 3-6 years sooner than purchase, within current budget projections
 - 767s would have ability to refuel AF, Navy, and allied aircraft on same mission



Policy of Leasing Major Equipment Items



Policy

Some Policy Considerations For Leasing

- GAO has not taken a position on the policy of leasing defense major acquisitions
- We have looked at several proposals by the Navy to lease auxiliary ships or acquire them with "incremental" funding
 - In these Navy ship cases, we found leasing more expensive than purchase when there was a long-term need for the asset
- In addition to costs, there are other issues that would have to be considered in assessing policy (see next slide)



Policy

Other Issues In Leasing Defense Assets

- In addition to cost, there are many considerations involved in policy of leasing major defense equipment, such as:
 - Nature of equipment
 - Criticality of need
 - Timing and duration of need
 - Operational and readiness issues
 - Industrial base issues



Policy

Criteria for Operating Leases

- OMB has specified budget scorekeeping criteria for using operating leases (see next slide)
- Appropriations Act Sec. 8159, which establishes the leasing program, laid out requirements which are consistent with OMB criteria
- OMB will have to decide whether AF leasing agreement with Boeing meets the criteria



OMB Criteria for Operating Lease

- Ownership of the asset remains with the lessor during the lease period, and is not transferred to the government at or shortly after the end of the lease period
- Lease does not contain a bargain-price purchase option
- Lease term does not exceed 75 percent of the estimated economic lifetime of the asset
- Present value of the minimum lease payments over the life of the lease does not exceed 90 percent of the fair market value of the asset at inception
- Asset is a general purpose asset rather than being for a special purpose of the government and is not built to unique specification for the Government as lessee
- There is a private sector market for the asset



Policy

DOD Leasing Review Panel

- Established November 2001; headed jointly by Undersecretary for Acquisition and Comptroller
- Reportedly, Panel was established to act like the Defense Acquisition Board (DAB) on leasing proposals
- AF has met with Panel representatives to discuss leasing proposal
- AF must present its decision and supporting study to Panel before going forward
- We were told the only leases now under consideration are for Boeing 767s and 737s (737s were included in same provision of Appropriation Act)



Associated Costs



Associated Costs

Not Much Data Available Yet

- Specifics on infrastructure costs depend on AF basing plans, which AF has not completed
- Only source is OMB December 2001 estimate
 - Military Construction - \$1.1 billion
 - Other Costs (spare parts, simulators, and program management costs) - \$610 million
- These costs would be incurred for lease or purchase, but not for modification of current fleet



Associated Costs

Other Potential Associated Costs

- Other costs that AF says it is considering in its analysis:
 - Training – no estimate currently available
 - Personnel – AF says 767 crew size is same as for KC-135; personnel costs could be a “wash”
 - Disposal of KC-135Es



Depot Maintenance



Depot Maintenance

KC-135s Are High Maintenance

- AF study reported total costs to operate and maintain a KC-135E was \$4.6 million in FY 2001, vs. \$3.6 million for R Models per aircraft
- Average days in depot increased
 - Fleet-wide increased from 158 days in '91 to about 400 days in FY '01
 - E Models averaged 428 days in FY '01
 - Depot “work package” doubled from 1991 to 2000 – from 16,000 labor hours to 32,000
- AF recently reported over 100 KC-135s in depot simultaneously



Depot Maintenance

KC-135s Maintained at Three Depots

- Tinker AFB in Oklahoma City, private contractors in Birmingham, AL and San Antonio, TX perform depot maintenance
- AF told us that Oklahoma City is working two shifts and two contractor facilities are each working three shifts
 - We do not know how long these facilities have worked multiple shifts or whether these extra shifts are fully staffed



Depot Maintenance

AF Efforts to Reduce Depot Time

- AF told us that depots have made some improvements that should reduce depot time in the short run; for example,
 - Increased labor at all sites
 - Increased number of major structural repairs done concurrently during depot work
 - Reflowed critical path
- In long run, AF believes aging planes will require more depot time

Air Force Response to GAO Preliminary Analysis



Office Of The Assistant Secretary

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

13 MAY 2002

SAF/AQ
1060 Air Force Pentagon
Washington DC 20330-1060

Neal P. Curtin
Director, Defense Capabilities and Management
U.S. General Accounting Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Curtin,

Thank you for the opportunity to provide agency comments to your preliminary analysis on Air Force Air Refueling Tankers. The Air Force appreciates the GAO's balanced assessment and pledges to continue providing the GAO with full support throughout the analysis effort. There are three areas within the draft letter and briefing that we would like to clarify and/or correct. These are (1) the rationale for proceeding with a tanker replacement as early as possible, (2) the viability of another reengining of the 43-year-old fleet of KC-135E aircraft and (3) the timing of funding to start recapitalizing the air refueling fleet.

In the preliminary briefing provided to the SASC professional staffers, GAO notes "*Urgency of replacement is not clear; AF says Sept 11 increased their concern about the age of fleet.*" The Air Force recognizes the need to begin replacing its large, aging fleet of KC-135s as soon as possible. The 545 KC-135s have the oldest average fleet age of any USAF combat aircraft, and the current War on Terrorism heightens our aging-aircraft concerns. The heightened tempo of operations is likely to continue for the foreseeable future. In the opening campaign of this war, every bomb, bullet and bayonet brought into the theater got there thanks to our aging air refueling tanker fleet extending the range of USAF airlifters, sensor aircraft and Navy, Marine and USAF strike aircraft.

The requirement for new tankers is documented with a Mission Need Statement validated by the Joint Requirements Oversight Council (JROC) in October 2001, and an Operational Requirement Document, which was approved by the Air Force Requirements Council in March 2002. Rising costs and decreasing availability of these aircraft drive the timing of the replacement. While the Air Force has programmed funds for a traditional replacement program providing for new aircraft entering the fleet in FY09, recent legislation offers us an opportunity to "jump-start" the recapitalization effort. Regardless of when we start, it will take over 25 years to completely recapitalize the existing fleet. Due to the sheer number of aircraft required, we

will still be relying on some (by then) 70-year-old-plus combat aircraft. The ongoing war and the advanced age of our fleet drive our urgency to recapitalize as soon as possible.

Also in the preliminary briefing provided to the SASC professional staffers, GAO notes, *"If requirement to replace KC-135Es is urgent, quickest solution may be to reengine and upgrade to R models."* Reengining the KC-135Es will not replace or effectively reduce the aging aircraft risk. The large fleet would continue to age, and by the time a theoretical reengining of the aircraft might be completed, the fleet average age would be 49 years. Reengining is a modernization effort, not a replacement option. It might provide an increase in operational capability, but it fails to mitigate aging aircraft issues such as corrosion, technical obsolescence and supportability. Worse, each aircraft would be removed from the ongoing operations for at least six months if reengining were pursued. Reengining would decrease the availability of air refueling tankers when the USAF has the highest demand on tankers – now, during a war.

Lastly, in the preliminary briefing provided to the SASC professional staffers, GAO notes: *"Replacement of the KC-135Es was never in the AF budget or unfunded requirements list until March 2002."* In fact, recapitalization of the fleet has been in our budgets since 2001. The FY02 President's Budget included approximately \$18M to start tanker recapitalization, and the FY03 budget estimate includes \$750M to begin a traditional procurement program. Replacement of the KC-135Es was in the prior years budgets and is in the FY03 President's Budget.

Maintaining and operating a fleet of 545 aircraft between their 40th and 80th years of service is uncharted territory. Six years ago, GAO stated *"Long-term serviceability of the KC-135 tanker fleet is questionable, because the aircraft are 30 to 40 years old and, as a result, are taking progressively more time and money to maintain and operate."* Since that report was published, your predictions have come to pass, but unfortunately for the USAF, the required effort and cost to maintain the aging KC-135 fleet have risen significantly higher than your projections in flying hour costs, depot flow days, operations and maintenance costs and total tanker fleet costs. The oldest and least capable KC-135Es have higher costs and lower mission capable rates than the rest of the fleet.

It is the Air Force's position that the uncertainty in maintainability and reliability, increased demands of the ongoing war, rising costs and the unknown possibility of systemic failure with the 40-year-old-plus KC-135 fleet demand our beginning to recapitalize the oldest combat fleet in our nation's history as soon as possible.

Sincerely



STEPHEN B. PLUMMER, Lt Gen, USAF
Principal Deputy, Assistant Secretary
of the Air Force (Acquisition)