

DEPARTMENT OF THE AIR FORCE
PRESENTATION TO THE COMMITTEE ON ARMED SERVICES
PROJECTION FORCES SUBCOMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: TANKER RECAPITALIZATION

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Chairman Bartlett, Congressman Taylor, distinguished committee members, thank you for the opportunity to appear before you today. General Hoffman and I are proud to come before you to discuss the Air Force Tanker Acquisition and Recapitalization Program. As the Vice Commander of Air Mobility Command (AMC), I will cover daily tanker operations, joint tanker requirements, and the impact of our aging tanker fleet on mission accomplishment.

At an average age of over 46 years, our “Eisenhower Era” KC-135 fleet is the oldest combat weapon system in the United States Air Force (USAF). It is a fact of life, that our tanker fleet continues to age and we are challenged every day to support the global warfighters’ tanker requirements. Yet, thanks to the tireless efforts of our Total Force Airmen, our civilians and contractors, supported by a “state of the art” Tanker Airlift Control Center we manage this task 24/7, every day of the year, and we accomplish this task with little fanfare or notice. We are very proud of our Air Force’s air refueling fleet...it clearly provides our Nation and its leaders DAY ONE options!

Daily KC-135 Operations

The KC-135 continues to be one of the highest tasked fleets in the mobility portfolio. Since 9/11 our tanker fleet has provided fuel for our air defense fighters patrolling the skies over our nation; it has supported combat operations over Iraq and Afghanistan; and it has performed a myriad of other life saving, humanitarian, and support roles supporting our national interests. Of the 531 KC-135s in the fleet today, 24 are fully employed training and experiencing pipeline aircrews at Altus Air Force Base, 104 are operationally “CHOP’ed” (Change of Operational Command) to United States Air Forces Europe (USAFE) and Pacific Air Force (PACAF) missions, 80 are in depot repair, and 19 are undergoing some sort of modification. This leaves

304 combat ready aircraft available to be tasked (65% are assigned to the Air Force Reserve and Air National Guard). The average daily commitment rate for the KC-135 fleet is 80%.

A realistic breakdown of the 304 combat ready tails on an average day in 2005, shows about 20 aircraft being used for Operation Noble Eagle (homeland defense), 20 held in reserve for force deterrent options, 119 at home station performing proficiency training, and 70 are non-mission capable due to maintenance repairs or inspections. Support for ongoing operations in Iraq and Afghanistan requires about 50 aircraft to support the Air Tasking Order, and another 25 are on call for Combatant Commander high priority taskings. The refueling capability provided by this busy fleet of KC-135s is essential to support our Joint/Combined Combat Air Forces.

Joint Tanker Requirements

Air Refueling enables the Joint warfighter, it gives our nation the ability to rapidly respond to crisis anywhere on the globe and deliver lethal and nonlethal power in support of U.S. national interests. The baseline requirement for the Air Force's contribution to air refueling is defined in the 2005 Mobility Capabilities Study (MCS-05). The study, completed in December 2005 by the Office of the Secretary of Defense, Program Analysis and Evaluation (OSD (PA&E)), was conducted to assess end-to-end, full-spectrum mobility needs for all aspects of the National Defense Strategy (NDS).

The total air refueling requirement is based on mission roles and scenarios to support the National Military Strategy (NMS). The NMS during the timeframe of the study was based on supporting the 1-4-2-1 Force Sizing Construct and the 10-30-30 Joint Swiftness Goals. The definition of 1-4-2-1 is: "1- Defend the United States and Territories, 4- Deter forward in four critical regions, 2- Swiftly defeat the effort in overlapping major conflicts, 1- Upon the President's direction, win decisively one of the conflicts." The 10-30-30 Joint Swiftness Goals

represent “the ability to seize the initiative in a conflict in any theater within 10 days of a decision to initiate a campaign, defeat the adversary within a total of 30 days, and reconstitute and redeploy within another 30 days.”

MCS-05 sets the air refueling tanker requirement at 520-640 total aircraft inventory. A critical assumption of MCS-05 is that tanker assets would swing to a new theater before the end of hostilities in the first theater, and that this mission sharing would provide a savings in tanker aircraft requirements. MCS-05 also shows a tanker shortfall in all scenarios except for one stand-alone OPLAN where no other operations are being accomplished. AMC believes that the 520 MCS is the minimum requirement based on MCS-05. The USAF has identified air refueling as a Tier 1 capability shortfall in the 2005 Integrated-Capability Review and Risk Assessment.

Joint Publication 3-17 states “Air refueling is an integral part of US airpower across the range of military operations. It significantly expands the employment options available to a commander by increasing the range, payload, and flexibility of air forces. Therefore, aerial refueling is an essential capability in the conduct of air operations worldwide and is especially important when overseas basing is limited or not available.” The *Global Mobility Concept of Operations* (CONOPS) describes the primary mission of air refueling as providing worldwide, day/night, adverse weather, probe/drogue, and boom air refueling on the same sortie to receiver capable U.S., allied, and coalition military aircraft (including unmanned aircraft). Tankers are employed to support global attack, air bridge, deployment, redeployment, homeland defense, theater support to joint, allied, and coalition air forces, and specialized national defense missions. Tankers are also used to support special operations and U.S. nuclear forces. To fully support nuclear and special operations, tankers must have additional capabilities such as electro-magnetic pulse (EMP) protection and specialized communication equipment. Tankers must be capable of operations as single ship, within a tanker formation, or in a mixed formation of tanker and/or

receiver aircraft. Tankers with defensive systems and inherent cargo floors and cargo doors allow for mixing of secondary missions including airlift, aeromedical evacuation (AE), and network-centric voice/data communication “gateway” services.

Tankers support the National Security Strategy, the National Military Strategy, the Strategic Planning Guidance (SPG) and Joint and Air Force (AF) Doctrine. Air refueling is a “key enabler” of force application through delivery of fuel to the warfighter reliably, safely and efficiently. U.S. and allied/coalition fighter, bomber, attack, assault support, and interdiction aircraft continue to rely on air refueling, which not only extends their combat range but allows them to provide persistent air support and cover over the battlefield. Airborne command and control assets; intelligence, surveillance and reconnaissance assets; and airborne electronic attack assets also benefit from extended loiter time provided by air refueling giving the Combatant Commanders vital intelligence and decision-making information. Air refueling also supports air mobility operations and focused logistics, delivering critical combat support and combat service support and personnel wherever the warfighter needs them.

The USAF possesses the overwhelming preponderance of common-user air refueling assets. Air refueling acts as a force enabler, permitting aircraft to operate beyond their unrefueled ranges. It is a force multiplier, permitting delivery of larger payloads and added endurance; significantly increasing the combat potential and effectiveness of Joint airpower. Force extension is the air refueling of one tanker by another. The most efficient means to provide deployment support, given a limited number of tanker aircraft, is force extension. Force extension enhances the ability of tankers performing dual role missions and reduces the number of tankers necessary for deployment support.

Impact of An Aging Tanker Fleet On Mission Accomplishment

Several recent studies have analyzed our aging KC-135 fleet. These studies include the KC-135 Fleet Viability Board (FVB), 2005 (USAF); Defense Science Board (DSB) Study on Air Refueling, 2004; KC-135 Recapitalization Analysis of Alternatives (AoA), 2005 (DOD); Defense Science Board Study on Mobility, 2005; FY2005 Quadrennial Defense Review (DOD); and the Mobility Capability Study, 2005 (DOD) which are summarized below.

	Recap Needed	Start Now	Re-engine KC-135E Models
Fleet Viability Board	YES	YES	NO
DSB on Air Refueling	YES	Use AoA/MCS	Consider, only if needed
KC-135 Recapitalization AoA	YES	Base Decision on Risk/Affordability Issues	Only If Re-Engined Aircraft Flown Into Late 2030s
DSB on Mobility	YES	YES	NO
FY 2005 Quadrennial Defense Review	YES	NOT ADDRESSED	NOT ADDRESSED
Mobility Capability Study	YES 520-640	Use AoA	NOT ADDRESSED

Table 1: Major Studies

All studies found that the KC-135 fleet needed to be recapitalized. In addition, all the studies that addressed “when to start” found that we need to start now or that an AoA should be accomplished to answer that question. Even though the recently completed KC-135 recapitalization AoA was indifferent concerning when to start recapitalization, it recommended, “...the decision of when to replace the KC-135s should be based on considerations other than present-value life-cycle costs.” These other considerations were identified as operational risk, technical risk, and affordability.

Operational risk equates to the warfighter needs. These needs, identified by the COCOMs, have been vetted through the Joint Capabilities Integration and Development System. The Joint Requirements Oversight Council (JROC) has identified several gaps and shortfalls of the aging tanker fleet:

COCOM Tanker Gaps/Shortfalls	KC-135E 114	KC-135R 417	KC-10 59	RTA
Defensive Systems	R	R	R	G
Real Time Information in the Cockpit	R	R	R	G
Same Sortie Boom/Drogue	R	R	G	G
Receiver Air Refueling	R	R	G	G
Aeromedical Evacuation	Y	Y	Y	G
Night Vision Operations	R	R	R	G
Forward Area Refueling Point	Y	Y	Y	G

Table 2: Required Operational Capability

The KC-135 constitutes the bulk of the current tanker force, embodying about 80% of U.S. aerial refueling capability. The KC-135 fleet is over 46 years old, and it has exhibited major technical difficulties with increased costs of operation and decreased aircraft availability, which in turn increases operational risk. The Fleet Viability Report identifies a window for replacing the KC-135 fleet by the 2023-2030 timeframe. AFMC depot forecasts show that an additional \$46.8B will be needed to sustain the current KC-135 fleet through the year 2040 without addressing the identified gaps and shortfalls that exist today, as indicated in Table 2.

Affordability is an area of concern. Today our total obligation authority (TOA) will allow us to buy 12-15 new aircraft per year at costs ranging between \$150M-\$200M per aircraft. At 12 aircraft per year, it would take over 38 years to replace the KC-135 fleet capability to meet the minimum MCS requirement, with an annual procurement outlay of \$1.9B - \$3.2B. This annual funding outlay increases with every year we delay the replacement program decision.

The KC-135E fleet provides minimal capability at a rapidly increasing cost. The FVB estimates cost avoidance (through 2030) of \$6.1B and can be realized by retiring E-models by 2010. This \$6.1B cost avoidance would buy 50 new tanker aircraft, which would deliver significantly higher capability than the current 114 KC-135E aircraft. A decision to retire the KC-135E fleet is a prudent risk management step. Increasing maintenance costs and decreasing

reliability and maintainability have already reached the point where it no longer makes sense to continue to invest in limited resources to keep the oldest and least capable KC-135 tankers flying. The Air Force simply cannot accept the risk of unknown systemic failures that could ground our tanker fleet and seriously impede our nation's ability to respond.

Conclusion

In order to continue support of our National Military Strategy, the Air Force must retire its oldest and least capable KC-135E fleet as planned. While the KC-135R fleet will be flown until 2040 or longer, the need to sustain this critical capability suggests the Air Force must start replacing the KC-135 fleet with a more modern, more capable, and more cost-effective multi-mission fleet to meet current and future warfighter requirements.

On behalf of the men and women of Air Mobility Command, we appreciate the support provided by Congress and look forward to working with this committee to meet our air refueling obligations and satisfy our future Joint warfighter needs. The Air Force will acquire any replacement tankers through a fair and open competition of all alternatives. Thank you for the opportunity to provide this statement for the record. I look forward to answering your questions.