1. The purpose of this Memorandum of Understanding (MOU) is to establish guidelines to facilitate establishment of rates for passenger, cargo, and combi, and aeromedical evacuation airlift services with certificated air carriers willing to participate in the Civil Reserve Air Fleet (CRAF) program. The objectives of the CRAF program are to augment the airlift capability of United States Transportation Command (USTRANSCOM) and to assure a mobilization base of aircraft available to the Department of Defense for use in the event of any level of national security contingency.

2. The origins of the CRAF program can be traced to Executive Order No. 10219, 2 March 1951, 16 F. R. 1983. In this order, the Secretary of Commerce was directed to formulate plans and programs to meet the requirements for civil air transportation to include plans for the transfer or assignment of aircraft from civil air carriers to the Department of Defense to meet defense mobilization needs. By joint agreement on 15 December 1951, the Secretaries of Commerce and Defense established the CRAF program to augment military airlift capability in times of emergency. Several years later, Executive Order 10999, 20 February 1962, 27 F.R. 1527, directed the Secretary of Commerce to prepare plans with respect to all degrees of national emergency. As a result, the 15 December 1951 MOU was rescinded by an MOU dated 8 August 1963 in which the Secretaries of Commerce and Defense jointly recognized “the requirement for incremental activation of the CRAF to meet varying defense emergency needs for the civil airlift augmentation to the military airlift capability.” To meet this requirement,
USTRANSCOM structures award of aircraft service contracts to insure that a mobilization base of aircraft is capable of responding to any level of defense emergency. Executive Order 11490, 30 October 1969, 34 F.R. 17567 rescinded Executive Order 10999 and designated the Secretary of Transportation responsible for developing plans to utilize civil air transportation resources to meet civil and military needs during national and defense-oriented emergencies. Executive Order 12656, 18 November 1988, 53 F.R. 47491 rescinded Executive Order 11490 and further defined emergency preparedness functions of various government departments and agencies. The 8 August 1963 MOU was rescinded by an MOU between the Secretaries of Transportation and Defense dated 7 May 1981. The 7 May 1981 MOU defined responsibilities of both secretaries and established a five-year review cycle for the MOU. The 7 May 1981 MOU was rescinded by an MOU dated 15 September 1987. The current MOU between the Secretaries of Transportation and Defense, dated 10 November 1998, concerns departmental cooperation on the CRAF program and remains in effect indefinitely, unless amended by mutual agreement or terminated.

3. The history of ratemaking to price DOD airlift service is nearly as long as the history of CRAF. Between 1955 and 1962, the DOD relied upon price competition to meet its commercial airlift needs. However, this procurement method resulted in predatory pricing issues and failed to provide service meeting safety and performance requirements. Congressional Subcommittee hearings held at the time determined price competition to be non-compensatory and destructive to the industry. As a result, the ratemaking process was implemented under the regulatory authority of the Civil Aeronautics Board (CAB). Ratemaking continued under CAB until deregulation in 1980. At that time, civil air carriers and DOD’s contracting agency for long-term international airlift, Military Airlift Command (MAC), agreed by MOU, that CAB methodologies by which rates for DOD airlift were established produced fair and reasonable rates and furthered the objectives of the CRAF program; and, therefore, the parties agreed to continue to use CAB methodologies for establishing MAC uniform negotiated rates under a MOU renewed every five years. MAC became Air Mobility Command (AMC) on 1 June 1992. Ratemaking continued under AMC until 1 January 2007 when DOD’s contracting authority for long-term international airlift was transferred from AMC to USTRANSCOM. On 31 December 2011 the FY12 National Defense Authorization Act (FY12 NDAA) was signed into law. The.
law authorizes the Secretary of Defense to establish fair and reasonable rates for payments made to participants in the CRAF program. The FY12 NDAA states in Section 366, “Chapter 931 of title 10, United States Code is amended by inserting after section 9511, the following new section” 9511a. “The Secretary of Defense shall determine a fair and reasonable rate of payment for airlift services provided to the Department of Defense by air carriers who are participants in the Civil Reserve Air Fleet Program.” In addition, the FY12 NDAA adds “the Secretary of Defense shall prescribe regulations for purposes of subsection (a.)” The DAR Council communicated to USTRANSCOM that it believes it is appropriate for USTRANSCOM to implement Section 366 into the USTRANSCOM Supplement as it relates only to the USTRANSCOM CRAF contracts. Title 32, Code of Federal Regulations was amended on 28 May 2015 by adding part 243, Department of Defense Ratemaking Procedures for Civil Reserve Air Fleet Contracts.

4. USTRANSCOM is required to contract with certificated air carriers by Section 401 of the Federal Aviation Act of 1958. Accordingly, carriers holding authority to engage in air transportation pursuant to Section 401 of the Federal Aviation Act of 1958 are required by 14 CFR, Part 241 to comply with a Uniform System of Accounts and Reports (USAR) for certificated air carriers. This comprehensive system of accounts and reports was established to provide uniformity and consistency in a regulated industry. With the demise of the CAB, the responsibility for accounts and reports was transferred to the Department of Transportation (DOT). The USAR under DOT is called Research & Special Programs Administration (RSPA) reports. USAR was the foundation for the CAB’s economic regulations and policy statements. USTRANSCOM continues to use RSPA reports, formerly USAR, in the development of the annual uniform negotiated rates.

5. The DOD augments its airlift capacity by using commercial airlift in a manner that contributes to sound economic development of an increased, modern civil airlift capability and enhances the ability of civil carriers to support the military forces in time of war with maximum effectiveness. USTRANSCOM accomplishes this through the negotiation and award of DOD airlift service contracts to U.S. air carriers which own or otherwise control aircraft suitable for
allocation to the CRAFT. These contracts are awarded using uniform rates to promote the objectives of the CRAFT program.

6. USTRANSCOM uses ratemaking methodologies found in Attachment 1 for establishing pricing of airlift services. The parties to this MOU agree that these methodologies are effective means of establishing fair and reasonable rates and furthering the objectives of the CRAFT program. The parties, therefore, agree to these ratemaking methodologies in negotiating rates for future DOD airlift services. In furtherance of this agreement, and as a condition of its continued participation in the CRAFT program each carrier agrees to furnish USTRANSCOM with the financial and operational information required by USTRANSCOM to adequately make a determination of fairness and reasonableness of price. USTRANSCOM also agrees to conduct an annual review of this information and to negotiate with the carrier to determine its projected cost that would properly be allocable to any future DOD airlift service contract. To facilitate negotiation between the parties, USTRANSCOM may issue proposed rates for carrier comments. USTRANSCOM will consider all carrier comments and then issue final rates. Carriers should first address their concerns to the ratemaking team for resolution. Ratemaking issues that are not resolved to the carrier’s satisfaction through discussions with the ratemaking team may be directed to the contracting officer. If resolution cannot be made by the contracting officer, concerned parties may contact the ombudsman appointed to hear and facilitate the resolution of such concerns. Please refer to your USTRANSCOM contract for the contact information of the ombudsman. In the event a ratemaking issue is not resolved through the ombudsman process, the issue will be forwarded to the Director of Acquisition, USTRANSCOM, for the final agency resolution.

7. This MOU will be effective 1 October 2018 through 30 October 2022. Either party may terminate this MOU by giving the other party 90-days written notice, subject to continuation of any obligations of the carrier pursuant to the terms of a contract or separate agreement that references, incorporates, or otherwise relies on the terms of this MOU.

8. USTRANSCOM will allocate appropriate military peacetime airlift among participating CRAFT carriers. Carrier participation in the USTRANSCOM Peacetime Airlift Program will be
wholly voluntary. Any properly certified and DOD-approved carrier may participate in the CRAF program if it offers aircraft useful to CRAF, agrees to and complies with the conditions of this MOU, and executes a USTRANSCOM contract.

9. The parties understand that this MOU imposes no financial or contractual obligation upon either party. Placement and pricing of DOD airlift services and commitment of aircraft to the CRAF program will be accomplished via contracts awarded after solicitation and negotiation in compliance with applicable laws and regulations.
10. This MOU supersedes prior ratemaking MOUs between DOD and the carrier.

(Carrier Name)  
By  
(Signature)  
(Name/Title)  
(Date)  

United States Transportation Command  
By  
(Signature)  
(Name/Title)  
(Date)  

Attachment:  
International USTRANSCOM Ratemaking Methodology
## ATTACHMENT
### INTERNATIONAL USTRANSCOM RATEMAKING METHODOLOGY

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Rate of Return</td>
<td>1</td>
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<tr>
<td>Minimum Return Profit</td>
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<td>54</td>
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<td>Weighting of Rate</td>
<td>65</td>
</tr>
<tr>
<td>Participation</td>
<td>76</td>
</tr>
</tbody>
</table>
1. **FULL RATE OF RETURN (ROI).** ROI for USTRANSCOM service will be computed using the capital structure of 45 percent debt and 55 percent equity. The cost-of-debt and cost-of-equity are calculated from revenues of major carriers as reported to the Department of Transportation. Below is an example of how the cost of debt, and cost of equity are computed:

1.1 **COST-OF-DEBT (COD) COMPUTATION.**

\[ \text{COD} = \text{Risk Free Rate (RFR)} + \left( \frac{\text{Weighted Debt Spread}}{100} \right) \]

\[ \text{RFR} = \text{Return on 20 Year U.S. Treasury Yields. Treasury yields in affect at time of the proposed and final rates will be used.} \]

\[ \text{Weighted Debt Spread} = \text{Carrier’s Spread for Transportation} \times \text{Carrier’s Revenue Weighting} \]

The Weighted Debt Spread is converted to a percentage by dividing the Weighted Debt Spread by 100. The following table provides examples of the Weighted Debt Spread calculation and the Weighted Beta Calculation:

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Beta (^1)</th>
<th>Credit Ratings (^2)</th>
<th>Spread for Transportation (^3)</th>
<th>Carrier’s Revenues (^4)</th>
<th>Weighting</th>
<th>Weighted Debt Spread</th>
<th>Weighted Beta (^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.70</td>
<td>D</td>
<td>625</td>
<td>$10,400</td>
<td>17.28%</td>
<td>108</td>
<td>0.8122</td>
</tr>
<tr>
<td>B</td>
<td>3.70</td>
<td>B-</td>
<td>440</td>
<td>$18,100</td>
<td>30.07%</td>
<td>132</td>
<td>1.1126</td>
</tr>
<tr>
<td>C</td>
<td>1.50</td>
<td>BBB</td>
<td>186</td>
<td>$1,700</td>
<td>2.82%</td>
<td>—5</td>
<td>0.0423</td>
</tr>
<tr>
<td>D</td>
<td>2.50</td>
<td>B</td>
<td>360</td>
<td>$30,000</td>
<td>49.83%</td>
<td>179</td>
<td>1.2458</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$60,200</td>
<td>100.00%</td>
<td>424</td>
<td>3.2129</td>
</tr>
</tbody>
</table>

1. Betas (B) are obtained from Value Line Investment Survey. Beta factors at time of proposed rate and final rate are applied.
2. Source for carrier’s credit ratings is Standard & Poor’s. Credit ratings in effect at proposed and final rates are applied.
3. Reuter’s is the source for Corporate Spreads for Transportation. Corporate Spreads for Transportation in effect at time of proposed and final rates are applied.
4. The debt spread is weighted by revenues for Department of Transportation’s Major carriers.
5. The beta is weighted by revenues for Department of Transportation’s Major carriers.

1.2 **COST-OF-EQUITY (KE) COMPUTATION.**

\[ \text{KE} = \left( \text{RFR} + (B \times \text{Equity Risk Premium (ERP)}) \right) + \text{Future Expected Risk Premium (FERP)} \]

\[ \text{RFR} = \text{Return on 20 Year U.S. Treasury Yields. Treasury yields in affect at time of the proposed and final rates will be used.} \]
B = Weighted Betas will be obtained from Value Line’s Investment Survey for the majority of the Department of Transportation’s Major (Group 3) carriers

ERP = Equity Risk Premium = Annualized S&P 500 Return – RFR

FERP = Published Expected Equity Risk Premium – Historical Equity Risk Premium

1.3. OWNED/CAPITAL/LONG-TERM LEASED AIRCRAFT. New airframes and related support parts will receive full ROI on the net book value of equipment at mid-point of forecast year. USTRANSCOM will apply the economic service life standards of 14 years and 16 years with 2 percent and 10 percent residual for narrowbody and widebody aircraft, respectively. USTRANSCOM will apply an economic service life of 10 years and 5 percent residual for used older airframes and related support parts. The 10 year and 5 percent residual applies to recently acquired narrowbody and widebody aircraft that exceed the 14 years and 16 years from production date. USTRANSCOM will also consider individual carrier’s internal depreciation policies supported by their accounting system.

1.4. SHORT-TERM LEASED AIRCRAFT. Short-term leased equipment will receive the Full Return on Investment less the treasury cost of money mandated by the Office of Management and Budget as a return on annual lease payments.

1.5. WORKING CAPITAL. Working capital will be provided in the investment base at 23 days cash operating expense. This will be computed on total operating cash less non-cash expenses (depreciation) shown on USTRANSCOM adjusted column of contractor’s cost in the rate review package.

21. MINIMUM RETURNPROFIT. USTRANSCOM will calculate minimum return profit based on the weighted guidelines methodology established in Defense Federal Acquisition Regulations 215.404. In cases where a carrier’s investment base no longer yields a return on investment equal to or greater than the minimum return percent of total operating cost then the minimum return based upon the weighted guidelines will be provided. For purposes of total operating cost in the minimum returnprofit, fuel cost will be the carrier’s fuel burn rate multiplied by the fuel cap amount, as indicated in paragraph 21.1.2.1 below.

21.1. WEIGHTED GUIDELINES. The weighted guidelines will be applied separately to operating costs less fuel and then to fuel costs.

The weighted guidelines assigns profit percentages to method focuses on four profit factors areas of risks based upon a structured approach. The four profit factors include performance risk, contract type risk, facilities capital employed, and cost efficiency factor.
21.1.1 APPLICATION TO OPERATING COSTS LESS FUEL.

21.1.1.1 PERFORMANCE RISK. Performance risk is broken down into two categories, technical and management/cost control.

21.1.1.1.1 TECHNICAL. All non-fuel cost will consist of a 60% weighting. Assigned rates will range between 3% and 7% dependent on carrier input along with TCAQ-P analysis.

21.1.1.1.2 MANAGEMENT/COST CONTROL. All non-fuel cost will consist of a 40% weighting. Assigned rates will range between 3% and 7% dependent on carrier input along with TCAQ-P analysis.

21.1.1.2 CONTRACT TYPE RISK. Operating cost less fuel will be assigned 5% for contract type risk.

21.1.1.3 FACILITIES CAPITAL EMPLOYED. The assigned range for equipment will be dependent on the carrier’s average age of the fleet, which may consider modern equipment upgrades, and based upon the table below:

<table>
<thead>
<tr>
<th>A/C Age</th>
<th>&lt;5YR</th>
<th>5 to &lt;10Yr</th>
<th>10 to &lt;15Yr</th>
<th>15 to &lt;20 Yr</th>
<th>20 to &lt;25 Yr</th>
<th>≥ 25 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>20%</td>
<td>17.5%</td>
<td>15%</td>
<td>12.5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

21.1.1.4 COST EFFICIENCY FACTOR. A cost efficiency factor will be assigned based upon the individual carrier’s percentage decrease in total operating cost less fuel compared to the carrier’s total operating cost less fuel used in the immediately preceding final published Uniform Rates and Rules. The assigned percentage will be based upon the table below:

<table>
<thead>
<tr>
<th>≥ Prior Cost</th>
<th>Cost Savings up to 3%</th>
<th>Cost Savings ≥3% to 6%</th>
<th>Cost Savings &gt;6% to 9%</th>
<th>Cost Savings &gt;9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

If this table does not adequately predict cost efficiency such as when a carrier’s year-over-year increase is a result of operations to high cost locations or a carrier has introduced a fuel efficient aircraft with no prior year’s comparisons, carriers are encouraged to provide a narrative explaining justification for a higher cost efficiency rating. Supporting documentation of the proposed cost efficiency factor must be included. Any narrative provided is limited to 10 pages in length.

21.1.2 APPLICATION TO FUEL COST.

21.1.2.1 MAXIMUM FUEL PROFIT. Profit on fuel will be applied up to a maximum amount per gallon, or cap. The cap will be calculated as a five-year rolling average of fuel paid by CRAF carriers as reported on fuel reconciliation summary reports, from April through March for the previous 5 years, and tracked in the TCAQ-P fuel database. Significant incidents of abnormally low or high fuel cost through DESC will be evaluated and adjusted as necessary.
In the event the fuel pegged rate is greater than the cap amount, the cap will be used in determining fuel profit. If the fuel pegged rate is less than the cap, the actual fuel pegged rate will be used to determine fuel profit.

21.1.2.2. PERFORMANCE RISK. Performance risk is broken down into two categories, technical and management/cost control.

21.1.2.2.1 TECHNICAL. Fuel cost will consist of a 30% weighting with an assigned rate of 4%.

21.1.2.2.2 MANAGEMENT/COST CONTROL. Fuel cost will consist of a 70% weighting with an assigned rate of 5.5%.

21.1.2.3. CONTRACT TYPE RISK. Fuel cost will be assigned 0% rate for contract type risk.

32. DEPRECIATION. USTRANSCOM will apply economic life standards for new aircraft at 14 years, 2 percent residual (narrowbody) and 16 years and 10 percent residual (widebody) aircraft. USTRANSCOM will apply economic life standards for used aircraft at 10 years and 5 percent residual (narrowbody and widebody aircraft). USTRANSCOM’s definition of used older aircraft is aircraft that exceed the 14 years (narrowbody) and 16 years (widebody) from aircraft’s production date. USTRANSCOM will also consider a shorter depreciation cycle supported by carrier’s actual accounting system. One example of this would be recently acquired older aircraft out of production which may be affected by aging aircraft issues. USTRANSCOM will apply economic life standards for rotables acquired after 1 July 2010 at 10 years, zero percent residual. Rotables acquired prior to the 1 July 2010 will continue previously established economic life standards at 16 years and 10 percent residual.

43. UTILIZATION. The carrier’s system average aircraft utilization by aircraft type as reflected on Schedule B-1, “All Services” of the request for cost data package, will be used to compute unit costs per plane mile for fixed costs and investment. USTRANSCOM will also accept utilization in USTRANSCOM service if the carrier provides support for USTRANSCOM utilization. Any carrier proposing USTRANSCOM utilization versus system utilization will be required to provide documentation on how utilization is tracked, to include the carrier’s methodology for allocating down time to various customers. Carriers proposing utilization in USTRANSCOM service which is accepted in the rate due to sufficient supporting documentation will be required to consistently propose and support utilization derived from USTRANSCOM service from the year it is proposed to the end of the MOU period. Where applicable, the traffic data shown on Schedule B-1 must coincide with those statistics reported on Form 41 reports and monthly USTRANSCOM worksheets for round-trips and one-ways. In the event a carrier’s average system utilization for a particular aircraft type is below the lower limit of 5 hours per day, then the minimum limit of 5 hours shall apply for ratemaking purposes.

54. COST ESCALATION. A general cost escalation factor will be computed each year using a weighted factor comprised of the following indices (all rounded to the nearest tenth of a percentage point).

11
54.1. **TRAVEL COST INDEX.** Percentage change in GII Travel Cost Index, as published by Global Insight, Inc. The percentage change is calculated by dividing the average index of the four quarters of the forecast period by the average index of the four quarters of the base period. This index will receive a 20 percent weighting.

54.2. **SCHEDULED FREIGHT AIR TRANSPORTATION INDEX.** Percentage change in the GII – Scheduled Freight Air Transportation Index, NAIC 481112, as published by Global Insight, Inc., adjusted to remove fuel, direct labor, and capital equipment. The percentage change is calculated by dividing the average adjusted index of the four quarters of the forecast period by the average adjusted index of the four quarters of the base period. This index will receive an 80 percent weighting.

65. **WEIGHTING OF RATE.** Forecast rates will be weighted on current fiscal year dollars plus prior fiscal year dollars of the aircraft included in the participation threshold defined in paragraph 76. Scheduled service cargo dollars flown at the uniform rate will be placed in the weighting of aircraft that the cargo moved on.

76. **PARTICIPATION.** Carriers participating in the USTRANSCOM forecast year business shall provide cost and pricing data for USTRANSCOM rate reviews. However, carriers may submit cost and pricing data under any circumstances.

Data is required for carriers with revenues equating to five percent (5%) or greater of the class weighting (Large, Medium, Small) for one aircraft type (i.e., B-747-400, MD11, etc.) in charter passenger or cargo service. USTRANSCOM/TCAQ-C’s COINS database will be used to determine carrier business level as of 30 days after the close of the base period. For example, Fiscal Year 2013-2016 rate review participation was determined by fiscal year-to-date dollar levels as of 31 July 2014.

USTRANSCOM will allow 60 days for carriers to prepare data, and USTRANSCOM will not make this request until 30 days after the close of the base period for which data is being requested. For each day the cost package is late (for determination of lateness, the provisions of the solicitation which deals with late receipt of offers will be used), the carriers’ entitlement will be reduced by one percentage point per day up to a maximum of 30 percent for forecast year business. Where a carrier is a passive member of a teaming arrangement and not providing air transportation services for USTRANSCOM, they will not be required to provide cost and pricing data. For active members of a teaming arrangement providing air transportation service for USTRANSCOM, cost and pricing data will be required when the above conditions are met.