

# **U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE**

**CONTRACT NO:** AG-024B-C-08-9340(FS)

**PROJECT:** NATIONAL EXCLUSIVE USE  
LARGE FIRE SUPPORT  
HELICOPTER SERVICES

**CONTRACTOR:** CARSON HELICOPTERS, INC.  
828 BROOKSIDE BLVD  
GRANTS PASS, OR 97526  
Phone: 800-344-7930  
Fax: 541-955-9205

**AWARDING OFFICE:** US FOREST SERVICE  
National Interagency Fire Center  
3833 S Development Ave  
Boise, ID 83705



FS-6300-46 (10/73)

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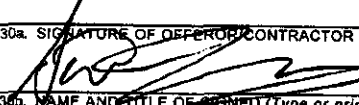
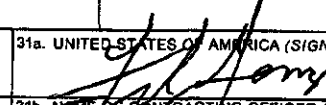
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**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**One to thirty-four (34) Standard or Restricted Category, Heavy (Type I) or Medium (Type II) Helicopters** fully operated, meeting the requirements of this Schedule and the specifications for operation at the host base, and during the periods shown below. Award of helicopters make and model will be based on best value to the Government. The performance requirements are a minimum and the Aircraft will be evaluated for overall best value including price. The Government will determine best value.

It is the intent of this solicitation to secure a Fixed Price with Economic Price Adjustment contract not to exceed 1 base year and 3 option period for the daily availability rate. The flight rate will be an indefinite quantity with no guarantee of flight hours given by the Government. The Government may award a single contract or multiple awards based on the outcome of the evaluation process. The Government reserves the right to award any combination of items and or number of items.

**Pre-work Meeting/Aircraft Inspections-all equipment needing to be inspected will be at the inspection point at least 2 days prior to (to be Determined).**

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <b>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</b>					1. REQUISITION NUMBER		PAGE 1 OF 203		
2. CONTRACT NO. <b>AG-024B-C-08-9340</b>		3. AWARD/EFFECTIVE DATE <b>June 6, 2008</b>		4. ORDER NUMBER		5. SOLICITATION NUMBER <b>AG-024B-S-08-9003</b>		6. SOLICITATION ISSUE DATE <b>March 3, 2008</b>	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME <b>Frank Gomez</b>				b. TELEPHONE NUMBER (No collect calls) <b>(208) 387-5347</b>		8. OFFER DUE DATE <b>April 14, 2008 4:30 p.m. MST</b>	
9. ISSUED BY  <b>US FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S. DEVELOPMENT AVENUE BOISE, ID 83705-5354</b>					10. THIS ACQUISITION IS <input type="checkbox"/> UNRESTRICTED OR <input checked="" type="checkbox"/> SET ASIDE: 100% FOR: <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> EMERGING SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUSINESS NAICS: 481212 SIZE STANDARD: 1500 Employees <input type="checkbox"/> SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS <input type="checkbox"/> 8(A) <input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER OPAS (15 CFR 700)				
11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input checked="" type="checkbox"/> SEE SCHEDULE		12. DISCOUNT TERMS		13b. RATING					
15. DELIVER TO <b>US FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S. DEVELOPMENT AVENUE BOISE, ID 83705-5354</b>		14. METHOD OF SOLICITATION <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP							
17a. CONTRACTOR/OFFEROR <b>Carson Helicopters, Inc. 828 Brookside Blvd. Grants Pass, OR 97526 (800) 344-7930 801509621</b> TELEPHONE NO. NINE-DIGIT DUNS NO. FACSIMILE NO.				16. ADMINISTERED BY  <b>See Block 9</b>					
17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER				18a. PAYMENT WILL BE MADE BY  <b>ALBUQUERQUE SERVICE CENTER INCIDENT BUSINESS - CONTRACTS 101B SUN AVENUE, NE ALBUQUERQUE, NM 87109</b>					
19. ITEM NO.				20. SCHEDULE OF SUPPLIES/SERVICES				21. QUANTITY	
				<b>SEE SECTION B (ATTACHED) Heavy or Medium Helicopters - Tanked or Bucket Large Fire Support</b>				22. UNIT	
								23. UNIT PRICE	
								24. AMOUNT	
(Use Reverse and/or Attach Additional Sheets as Necessary)									
25. ACCOUNTING AND APPROPRIATION DATA <b>Items # 11 Hemet, # 12 Casitas, # 13 Van Nuys, # 14 San Bernardino, # 23 Mariposa</b>					26. TOTAL AWARD AMOUNT (For Govt. Use Only) <b>WFSU 70 (1302) \$ 9,432,000.00</b>				
<input checked="" type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED									
<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED									
<input type="checkbox"/> 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.					<input type="checkbox"/> 29. AWARD OF CONTRACT: REF. OFFER DATED YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:				
30a. SIGNATURE OF OFFEROR/CONTRACTOR 					31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER) 				
30b. NAME AND TITLE OF OFFEROR (Type or print) <b>Steve Metheny Exec. Vice President</b>			30c. DATE SIGNED <b>4/11/08</b>		31b. NAME OF CONTRACTING OFFICER (Type or print)			31c. DATE SIGNED <b>6/6/08</b>	

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**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 11 Helicopter equipped with a fixed tank.**

**Host Base(s)**

Name: **Hemet, CA** National Forest: **Cleveland**  
Location: **Hemet, CA Airport**

**Mandatory Availability Period and Net Days**

**BASE YEAR**

July 1, 2008 – November 27, 2008

150 Days

Mandatory Availability Period

**OPTION YEARS**

July 1 – November 27

150 Days

Mandatory Availability Period

**Daily Availability Offer Rate**

SERVICES	QUANTITY	UNIT PRICE	TOTAL	YEAR
Daily Availability Base Year 2008	150 DAYS	\$ 13,500.00 ✓	\$ 2,025,000.00	BASE 2008
Daily Availability Option Year 1 2009	150 DAYS	\$ 13,600.00 ✓	\$ 2,040,000.00	Option 1 2009
Daily Availability Option Year 2 2010	150 DAYS	\$ 13,700.00 ✓	\$ 2,055,000.00	Option 2 2010
Daily Availability Option Year 3 2011	150 DAYS	\$ 13,800.00 ✓	\$ 2,070,000.00	Option 3 2011
Specified Hourly Flight Rate	*375 Hours	See Exhibit 12	\$	
**Optional Use Rate Base Year 2008	HR	\$	N/A	BASE 2008
**Optional Use Rate Option Year 1 2009	HR	\$	N/A	Option 1 2009
**Optional Use Rate Option Year 2 2010	HR	\$	N/A	Option 2 2010
**Optional Use Rate Option Year 3 2011	HR	\$	N/A	Option 3 2011

\*Estimated number of flight hours per year is for estimation purposes only, the Government does not guarantee any flight hours under this contract.

\*\*Optional Use Rate will not be used in the evaluation of proposals.

**ITEM NO. 11**

Make: Sikorsky  
Model: S-61  
Series: N Model  
N Number See Attached

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 11**

**Contracted Helicopter Equipped Weight**

Equipped Weight (see definition) See Attached lbs is required

Equipped Weight with tank and snorkel See Attached lbs is required

or

Equipped Weight with Bucket N/A lbs is required  
Includes any associated suspension hardware (cables, connectors,

**Approved HOGE Performance**

HOGE with bucket= (enter maximum allowable payload) N/A

or

HOGE with tank= (enter maximum allowable payload) See Attached

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, applicable FAA approved Performance Charts shall be used.

**Relief Crew Costs Per Person**

Cost from Contractors Home Base to Host Base for contract relief costs, per person,  
\$ 228.00 (see C.42). The relief costs will be reviewed prior to award and prior to  
each renewal option period.

Amendment 01  
Dated April 4, 2008



## EXTERNAL TANKED AIRCRAFT

ITEM NUMBER - 11

Aircraft	Aircraft Equipped Wt.	External Tank Equipped Wt.	Bucket Equipped Wt.	HOGE	Tank Payload	Bucket Payload
N4503E (S)	11027	12013	N/A	18800	4602	N/A
N116AZ (S)	11023	12009	N/A	18800	4606	N/A
N612RM (S)	11026	12012	N/A	18800	4603	N/A
N7011M (S)	11018	12004	N/A	18800	4611	N/A
N612AZ (S)	11027	12013	N/A	18800	4602	N/A
N103WF (S)	11012	11998	N/A	18800	4617	N/A
N61NH (S)	11024	12010	N/A	18800	4605	N/A
N410GH (S)	11526	12512	N/A	18800	4103	N/A
N905AL (S)	11283	12269	N/A	18800	4346	N/A
N725JH (S)	11694	12680	N/A	18800	3935	N/A

NOTE: S = Standard Category

Tank payload represents performance @ 7000' and =20C

**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 12 Helicopter equipped with a fixed tank.**

**Host Base(s)**

Name: **Casitas, CA** National Forest: **Los Padres**  
Location: **Casitas Helibase**

**Mandatory Availability Period and Net Days**

**BASE YEAR**

July 1, 2008 – November 27, 2008 150 Days  
Mandatory Availability Period

**OPTION YEARS**

July 1 – November 27 150 Days  
Mandatory Availability Period

**Daily Availability Offer Rate**

SERVICES	QUANTITY	UNIT PRICE	TOTAL	YEAR
Daily Availability Base Year 2008	150 DAYS	\$ 13,500.00 ✓	\$ 2,025,000.00	BASE 2008
Daily Availability Option Year 1 2009	150 DAYS	\$ 13,600.00 ✓	\$ 2,040,000.00	Option 1 2009
Daily Availability Option Year 2 2010	150 DAYS	\$ 13,700.00 ✓	\$ 2,055,000.00	Option 2 2010
Daily Availability Option Year 3 2011	150 DAYS	\$ 13,800.00 ✓	\$ 2,070,000.00	Option 3 2011
Specified Hourly Flight Rate	*375 Hours	See Exhibit 12	\$	
**Optional Use Rate Base Year 2008	HR	\$	N/A	BASE 2008
**Optional Use Rate Option Year 1 2009	HR	\$	N/A	Option 1 2009
**Optional Use Rate Option Year 2 2010	HR	\$	N/A	Option 2 2010
**Optional Use Rate Option Year 3 2011	HR	\$	N/A	Option 3 2011

\*Estimated number of flight hours per year is for estimation purposes only, the Government does not guarantee any flight hours under this contract.

\*\*Optional Use Rate will not be used in the evaluation of proposals.

**ITEM NO. 12**

Make: Sikorsky  
Model: S-61  
Series: N Model  
N Number See Attached

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 12**

**Contracted Helicopter Equipped Weight**

Equipped Weight (see definition) See Attached lbs is required

Equipped Weight with tank and snorkel See Attached lbs is required

or

Equipped Weight with Bucket N/A lbs is required  
Includes any associated suspension hardware (cables, connectors,

**Approved HOGE Performance**

HOGE with bucket= (enter maximum allowable payload) N/A

or

HOGE with tank= (enter maximum allowable payload) See Attached

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, applicable FAA approved Performance Charts shall be used.

**Relief Crew Costs Per Person**

Cost from Contractors Home Base to Host Base for contract relief costs, per person,  
\$ 228.00 (see C.42). The relief costs will be reviewed prior to award and prior to  
each renewal option period.

Amendment 01  
Dated April 4, 2008



## EXTERNAL TANKED AIRCRAFT

### ITEM NUMBER - 12

Aircraft	Aircraft Equipped Wt.	External Tank Equipped Wt.	Bucket Equipped Wt.	HOGE	Tank Payload	Bucket Payload
N4503E (S)	11027	12013	N/A	18800	4602	N/A
N116AZ (S)	11023	12009	N/A	18800	4606	N/A
N612RM (S)	11026	12012	N/A	18800	4603	N/A
N7011M (S)	11018	12004	N/A	18800	4611	N/A
N612AZ (S)	11027	12013	N/A	18800	4602	N/A
N103WF (S)	11012	11998	N/A	18800	4617	N/A
N61NH (S)	11024	12010	N/A	18800	4605	N/A
N410GH (S)	11526	12512	N/A	18800	4103	N/A
N905AL (S)	11283	12269	N/A	18800	4346	N/A
N725JH (S)	11694	12680	N/A	18800	3935	N/A

NOTE: S = Standard Category

Tank payload represents performance @ 7000' and =20C

**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 13 Helicopter equipped with a fixed tank.**

**Host Base(s)**

Name: **Van Nuys, CA** National Forest: **Angeles**  
Location: **Van Nuys National Guard Base**

**Mandatory Availability Period and Net Days**

**BASE YEAR**

July 1, 2008 – November 27, 2008 150 Days  
Mandatory Availability Period

**OPTION YEARS**

July 1 – November 27 150 Days  
Mandatory Availability Period

**Daily Availability Offer Rate**

SERVICES	QUANTITY	UNIT PRICE	TOTAL	YEAR
Daily Availability Base Year 2008	150 DAYS	\$ 13,500.00 ✓	\$ 2,025,000.00	BASE 2008
Daily Availability Option Year 1 2009	150 DAYS	\$ 13,600.00 ✓	\$ 2,040,000.00	Option 1 2009
Daily Availability Option Year 2 2010	150 DAYS	\$ 13,700.00 ✓	\$ 2,055,000.00	Option 2 2010
Daily Availability Option Year 3 2011	150 DAYS	\$ 13,800.00 ✓	\$ 2,070,000.00	Option 3 2011
Specified Hourly Flight Rate	*375 Hours	See Exhibit 12	\$	
**Optional Use Rate Base Year 2008	HR	\$	N/A	BASE 2008
**Optional Use Rate Option Year 1 2009	HR	\$	N/A	Option 1 2009
**Optional Use Rate Option Year 2 2010	HR	\$	N/A	Option 2 2010
**Optional Use Rate Option Year 3 2011	HR	\$	N/A	Option 3 2011

\*Estimated number of flight hours per year is for estimation purposes only, the Government does not guarantee any flight hours under this contract.

\*\*Optional Use Rate will not be used in the evaluation of proposals.

**ITEM NO. 13**

Make: Sikorsky  
Model: S-61  
Series: N Model  
N Number See Attached

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 13**

**Contracted Helicopter Equipped Weight**

Equipped Weight (see definition) See Attached lbs is required

Equipped Weight with tank and snorkel See Attached lbs is required

or

Equipped Weight with Bucket N/A lbs is required  
Includes any associated suspension hardware (cables, connectors,

**Approved HOGE Performance**

HOGE with bucket= (enter maximum allowable payload) N/A

or

HOGE with tank= (enter maximum allowable payload) See Attached

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, applicable FAA approved Performance Charts shall be used.

**Relief Crew Costs Per Person**

Cost from Contractors Home Base to Host Base for contract relief costs, per person,  
\$ 228.00 (see C.42). The relief costs will be reviewed prior to award and prior to  
each renewal option period.





## EXTERNAL TANKED AIRCRAFT

ITEM NUMBER - 13

Aircraft	Aircraft Equipped Wt.	External Tank Equipped Wt.	Bucket Equipped Wt.	HOGE	Tank Payload	Bucket Payload
N4503E (S)	11027	12013	N/A	18800	4602	N/A
N116AZ (S)	11023	12009	N/A	18800	4606	N/A
N612RM (S)	11026	12012	N/A	18800	4603	N/A
N7011M (S)	11018	12004	N/A	18800	4611	N/A
N612AZ (S)	11027	12013	N/A	18800	4602	N/A
N103WF (S)	11012	11998	N/A	18800	4617	N/A
N61NH (S)	11024	12010	N/A	18800	4605	N/A
N410GH (S)	11526	12512	N/A	18800	4103	N/A
N905AL (S)	11283	12269	N/A	18800	4346	N/A
N725JH (S)	11694	12680	N/A	18800	3935	N/A

NOTE: S = Standard Category

Tank payload represents performance @ 7000' and =20C

**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 16 Helicopter equipped with a fixed tank.**

**Host Base(s)**

Name: **San Bernardino, CA** National Forest: **San Bernardino**  
Location: **San Bernardino, Airport**

**Mandatory Availability Period and Net Days**

**BASE YEAR**

July 1, 2008 – November 27, 2008 150 Days  
Mandatory Availability Period

**OPTION YEARS**

July 1 – November 27 150 Days  
Mandatory Availability Period

**Daily Availability Offer Rate**

SERVICES	QUANTITY	UNIT PRICE	TOTAL	YEAR
Daily Availability Base Year 2008	150 DAYS	\$ 13,500.00 ✓	\$ 2,025,000.00	BASE 2008
Daily Availability Option Year 1 2009	150 DAYS	\$ 13,600.00 ✓	\$ 2,040,000.00	Option 1 2009
Daily Availability Option Year 2 2010	150 DAYS	\$ 13,700.00 ✓	\$ 2,055,000.00	Option 2 2010
Daily Availability Option Year 3 2011	150 DAYS	\$ 13,800.00 ✓	\$ 2,070,000.00	Option 3 2011
Specified Hourly Flight Rate	*375 Hours	See Exhibit 12	\$	
**Optional Use Rate Base Year 2008	HR	\$	N/A	BASE 2008
**Optional Use Rate Option Year 1 2009	HR	\$	N/A	Option 1 2009
**Optional Use Rate Option Year 2 2010	HR	\$	N/A	Option 2 2010
**Optional Use Rate Option Year 3 2011	HR	\$	N/A	Option 3 2011

\*Estimated number of flight hours per year is for estimation purposes only, the Government does not guarantee any flight hours under this contract.

\*\*Optional Use Rate will not be used in the evaluation of proposals.

**ITEM NO. 16**

Make: Sikorsky  
Model: S-61  
Series: N Model  
N Number See Attached

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 16**

**Contracted Helicopter Equipped Weight**

Equipped Weight (see definition) See Attached lbs is required

Equipped Weight with tank and snorkel See Attached lbs is required

or

Equipped Weight with Bucket N/A lbs is required  
Includes any associated suspension hardware (cables, connectors,

**Approved HOGE Performance**

HOGE with bucket= (enter maximum allowable payload) N/A

or

HOGE with tank= (enter maximum allowable payload) See Attached

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, applicable FAA approved Performance Charts shall be used.

**Relief Crew Costs Per Person**

Cost from Contractors Home Base to Host Base for contract relief costs, per person,  
\$ 228.00 (see C.42). The relief costs will be reviewed prior to award and prior to  
each renewal option period.



## EXTERNAL TANKED AIRCRAFT

### ITEM NUMBER - 16

Aircraft	Aircraft Equipped Wt.	External Tank Equipped Wt.	Bucket Equipped Wt.	HOGE	Tank Payload	Bucket Payload
N4503E (S)	11027	12013	N/A	18800	4602	N/A
N116AZ (S)	11023	12009	N/A	18800	4606	N/A
N612RM (S)	11026	12012	N/A	18800	4603	N/A
N7011M (S)	11018	12004	N/A	18800	4611	N/A
N612AZ (S)	11027	12013	N/A	18800	4602	N/A
N103WF (S)	11012	11998	N/A	18800	4617	N/A
N61NH (S)	11024	12010	N/A	18800	4605	N/A
N410GH (S)	11526	12512	N/A	18800	4103	N/A
N905AL (S)	11283	12269	N/A	18800	4346	N/A
N725JH (S)	11694	12680	N/A	18800	3935	N/A

NOTE: S = Standard Category

Tank payload represents performance @ 7000' and =20C

**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 23 Helicopter equipped with a fixed tank.**

**Host Base(s)**

Name: **Mariposa, CA** National Forest: **Sierra**  
Location: **Mariposa Airport**

**Mandatory Availability Period and Net Days**

**BASE YEAR**

July 3, 2008 – September 30, 2008  
Mandatory Availability Period

90 Days

**OPTION YEARS**

July 3 – September 30  
Mandatory Availability Period

90 Days

**Daily Availability Offer Rate**

SERVICES	QUANTITY	UNIT PRICE	TOTAL	YEAR
Daily Availability Base Year 2008	90 DAYS	\$ 14,800.00 ✓	\$ 1,332,000.00	BASE 2008
Daily Availability Option Year 1 2009	90 DAYS	\$ 14,900.00 ✓	\$ 1,341,000.00	Option 1 2009
Daily Availability Option Year 2 2010	90 DAYS	\$ 15,000.00 ✓	\$ 1,350,000.00	Option 2 2010
Daily Availability Option Year 3 2011	90 DAYS	\$ 15,100.00 ✓	\$ 1,359,000.00	Option 3 2011
Specified Hourly Flight Rate	*300 Hours	See Exhibit 12	\$	
**Optional Use Rate Base Year 2008	HR	\$	N/A	BASE 2008
**Optional Use Rate Option Year 1 2009	HR	\$	N/A	Option 1 2009
**Optional Use Rate Option Year 2 2010	HR	\$	N/A	Option 2 2010
**Optional Use Rate Option Year 3 2011	HR	\$	N/A	Option 3 2011

\*Estimated number of flight hours per year is for estimation purposes only, the Government does not guarantee any flight hours under this contract.

\*\*Optional Use Rate will not be used in the evaluation of proposals.

**ITEM NO. 23**

Make: Sikorsky  
Model: S-61  
Series: N, R or A Model  
N Number: See Attached

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**ITEM NO. 23**

**Contracted Helicopter Equipped Weight**

Equipped Weight (**see definition**) See Attached lbs is required

Equipped Weight with tank and snorkel See Attached lbs is required

or

Equipped Weight with Bucket N/A lbs is required  
Includes any associated suspension hardware (cables, connectors,

**Approved HOGE Performance**

HOGE with bucket= (enter maximum allowable payload) N/A

or

HOGE with tank= (enter maximum allowable payload) See Attached

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, applicable FAA approved Performance Charts shall be used.

**Relief Crew Costs Per Person**

Cost from Contractors Home Base to Host Base for contract relief costs, per person,  
\$ 228.00 (**see C.42**). The relief costs will be reviewed prior to award and prior to  
each renewal option period.



## EXTERNAL TANKED AIRCRAFT

### ITEM NUMBER - 23

Aircraft	Aircraft Equipped Wt.	External Tank Equipped Wt.	Bucket Equipped Wt.	HOGES	Tank Payload	Bucket Payload
N4503E (S)	11027	12013	N/A	18800	4602	N/A
N116AZ (S)	11023	12009	N/A	18800	4606	N/A
N612RM (S)	11026	12012	N/A	18800	4603	N/A
N7011M (S)	11018	12004	N/A	18800	4611	N/A
N612AZ (S)	11027	12013	N/A	18800	4602	N/A
N103WF (S)	11012	11998	N/A	18800	4617	N/A
N61NH (S)	11024	12010	N/A	18800	4605	N/A
N410GH (S)	11526	12512	N/A	18800	4103	N/A
N905AL (S)	11283	12269	N/A	18800	4346	N/A
N725JH (S)	11694	12680	N/A	18800	3935	N/A
N3173U(R)	10837	11823	N/A	18500	4492	N/A

NOTE: S = Standard Category, R = Restricted Category

Tank payload represents performance @ 5000' and =30C

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**B-2 Bidders May Qualify Their Bids.** Bidders shall indicate below the maximum number of items willing to accept.

CHI has Twelve (12) Aircraft for consideration on this RFP. Ten (10)
of the Twelve (12) Aircraft meet the qualifications for Items # 11 -
18, and all Twelve (12) Aircraft for consideration on Items # 19 - 34.

**B-3 Aircraft Performance Specifications (Minimum) to be used for proposal evaluation purposes**

Aircraft performance shall be based on minimum engine specification. Aircraft performance capabilities shall be determined by using the Standard Interagency Helicopter Load Calculation Method. (Exhibit 13, Interagency Helicopter Load Calculation)

Performance enhancing data (Power Assurance Checks, wind charts, etc) shall not be used and will not be considered for the evaluation of proposals. Only FAA approved charts based on minimum specification engine performance shall be used. As an example, Kaman K-1200 helicopters shall only use minimum specification engine performance data calculated from Rotorcraft FMS NO. 1, (USFS Fire Fighting).

Use (Exhibit 13, Interagency Helicopter Load Calculation) and (Exhibit 12, Hourly Flight Rates, Fuel consumption, and Weight Reduction Chart) per aircraft type and the applicable Hover Ceiling Charts (HOGE) and (HIGE) from the approved Rotorcraft Flight Manual.

The helicopter-equipped weight shall be based on the actual weighing of the aircraft and shall meet the following requirements:

The weighing shall be accomplished prior to submission of the bid. The weighing must take place within 24 months prior to the beginning of the first mandatory availability period (MAP).

Helicopter(s) under initially awarded contract(s) under this solicitation shall remain at or below contracted helicopter equipped weight as bid. Helicopters will be allowed 1% above the awarded contracted helicopter equipped weight during the contract option period(s). The aircraft's equipped weight is determined using weight and balance data which was determined by actual weighing of the aircraft within 24 months preceding the starting date of the MAP and 36 months thereafter or following any major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft. Cowlings, doors and fairings shall not be removed to meet Contract equipped weight for performance. If the government requires additional equipment after contract award no penalty will be assessed.



**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**Items 1 through 10**

**CAPABILITY OF**

1.

☐ Hovering in ground effect (HIGE)

Or

☒ Hovering out of ground effect (HOGE)

At 8,000 feet pressure altitude and 25 °C with ☐ non-jettisonable ☒ jettisonable  
Payload of 5000 pounds, as determined by Exhibit 13, Standard Interagency Load Calculation  
form, using a standard pilot weight of 200 pounds and fuel for one hour and 30 minutes (01+30)  
as determined by Exhibit 12, Hourly Flight Rates, Fuel consumption, and Weight Reduction  
Chart.

**Items 11 through 18**

**CAPABILITY OF**

1.

☐ Hovering in ground effect (HIGE)

Or

☒ Hovering out of ground effect (HOGE)

At 7,000 feet pressure altitude and 20 °C with ☐ non-jettisonable ☒ jettisonable  
Payload of 3,000 pounds, as determined by Exhibit 13, Standard Interagency Load Calculation  
form, using a standard pilot weight of 200 pounds and fuel for one hour and 30 minutes (01+30)  
as determined by Exhibit 12, Hourly Flight Rates, Fuel consumption, and Weight Reduction  
Chart.

**Items 19 through 34**

**CAPABILITY OF**

1.

☐ Hovering in ground effect (HIGE)

Or

☒ Hovering out of ground effect (HOGE)

At 5,000 feet pressure altitude and 30 °C with ☐ non-jettisonable ☒ jettisonable  
Payload of 2300 pounds, as determined by Exhibit 13, Standard Interagency Load Calculation  
form, using a standard pilot weight of 200 pounds and fuel for one hour and 30 minutes (01+30)  
as determined by Exhibit 12, Hourly Flight Rates, Fuel consumption, and Weight Reduction  
Chart.

## SECTION B SUPPLIES OR SERVICES AND PRICES

### B-4 Engine Requirements (Shown by an X in the Block)

- ☒ Single turbine engine  
OR  
☒ Twin turbine engine

### B-5 CREW Coverage

☒ One Pilot Crew or ☒ Two Pilot crew or ☐ Three Pilot crew

And

☒ With Relief Pilot(s) ☐ Without Relief Pilot(s)

☐ 6-Day Coverage (See Chart Below)  
☒ 7-Day Coverage (See Chart Below) ☐ A ☐ B OR ☒ C

COVERAGE	FUEL SERVICING VEHICLE DRIVER	MECHANIC
6-Day	6-Day Coverage No Relief Required	3-Hour Call-up
7-Day A.	FSVD Required Relief FSVD Required	3-Hour Call-up
B.	FSVD Required Relief FSVD Required	Mechanic Required at Host Base/Alternate Base (May serve as FSVD) Relief Mechanic 3-Hour Call-up
C.	Full Time FSVD Required at Host Base/Alternate Base	Full Time Mechanic Required at Host Base/Alternate Base

### B-6 Maximum Complement of Personnel by Aircraft Type

(Minimum is number required to staff and support the aircraft)

Type I (Heavy) Helicopter- A maximum of 10-personnel may be paid as per the payment clause.

Type II (Medium) Helicopter- A maximum of 4-personnel may be paid as per the payment clause.

The number of persons, by position, being offered to staff and support the helicopter will be the minimum complement of personnel while operating under this contract.

Personnel	Number
Pilot(s):	
Co-pilot(s):	
Maintenance Crew Chief (Interagency Approved Mech)	
Mechanic(s): (A&P)	
Fuel Service Driver(s):	
Pilot Trainee	

Amendment 01  
Dated April 4, 2008

## SECTION B SUPPLIES OR SERVICES AND PRICES

### B-4 Engine Requirements (Shown by an X in the Block)

- ☒ Single turbine engine  
OR  
☒ Twin turbine engine

### B-5 CREW Coverage

☒ One Pilot Crew or ☒ Two Pilot crew or ☐ Three Pilot crew

And

☒ With Relief Pilot(s) ☐ Without Relief Pilot(s)

☐ 6-Day Coverage (See Chart Below)

☒ 7-Day Coverage (See Chart Below) ☐ A ☐ B OR ☒ C

6-Day	6-Day Coverage No Relief Required	3-Hour Call-up
7-Day	FSVD Required Relief FSVD Required	3-Hour Call-up
B.	FSVD Required Relief FSVD Required	Mechanic Required at Host Base/Alternate Base (May serve as FSVD) Relief Mechanic 3-Hour Call-up
C.	Full Time FSVD Required at Host Base/Alternate Base	Full Time Mechanic Required at Host Base/Alternate Base

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The number of persons, by position, being offered to staff and support the helicopter will be the minimum complement of personnel while operating under this contract.

Personnel	Number
Pilot(s):	
Co-pilot(s):	
Maintenance Crew Chief (Interagency Approved Mech)	
Mechanic(s): (A&P)	
Fuel Service Driver(s):	
Pilot Trainee	

Amendment 01  
Dated April 4, 2008

**SECTION B  
SUPPLIES OR SERVICES AND PRICES**

**B-7 Acceptable Work Schedules**

Exclusive Use ☐ 12/2 ☐ 12/12 ☒ Other

If "Other" is checked, Identify requested schedule, which is subject to approval by Contracting Officer.

**Note: All personnel shall be under the same work schedule. Day's off schedule may vary.**

**B-8 Standby Hours Per Day**

9 Hours Standby per day

**B-9 Extended Standby Hourly Rate**

\$43.00 per hour

**B-10 Overnight Allowance (Specified)**

Rates as published in Federal Travel Regulations See Section C

**B-11 Standard Per Diem Rate (Specified)**

Rates as published in Federal Travel Regulations See Section C.

**B-12 Contractor Furnished Special Requirements (Note: CO check those that apply)**

- ☒ **Weight of the passenger seats will not be included in the equipped weight.**
- ☐ Rappel Capability (Exhibit 17)
- ☐ Litter Kit with Litter(s)
- ☒ Wire Cutters if available (Exhibit 5)
- ☐ FAA Over water Kit (in accordance with 14 CFR Part 91.33 Part b (11))
  - OVER WATER SPECIALIZED EQUIPMENT REQUIREMENTS DESCRIBED BELOW:
  - Per 14 CFR Part 91.509(b) to include: Life raft(s) capable of transporting all occupants (Maximum seating capability). Personal Flotation Device (MAE WEST) for all occupants. Life raft (s) and personal flotation devices must meet all applicable Federal Aviation Regulations for certification and recertification.
- ☐ Fixed Suppressant/Retardant Delivery Tank (Exhibit 5)
- ☒ Fixed Suppressant/Retardant Tank with Self-Filling Capability (Exhibit 5)
- Or**
- ☐ Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements
- ☐ Extended Height landing gear applies to type II helicopters with fixed tank only, e.g. cross tubes, similar to DART extended height 39 inch Landing Gear Kit, part number D205-594-011, that insures a minimum of 12 inches clearance between the attached delivery tank and level ground. Dart Extended Height Access Step or equivalent must be provided with minimum of one step half the distance to the skid.
- ☒ If aircraft is standard category and equipped with fixed tank, landing gear configuration must insure a minimum of 12 inches clearance between the attached delivery tank and level ground. (Does not apply to Standard category aircraft offered as limited use)

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

**B-7 Acceptable Work Schedules**

Exclusive Use ☐ 12/2 ☐ 12/12 ☐ Other

If "Other" is checked, Identify requested schedule, which is subject to approval by Contracting Officer.

**Note: All personnel shall be under the same work schedule. Day's off schedule may vary.**

**B-8 Standby Hours Per Day**

9 Hours Standby per day

**B-9 Extended Standby Hourly Rate**

\$43.00 per hour

**B-10 Overnight Allowance (Specified)**

Rates as published in Federal Travel Regulations See Section C

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Rates as published in Federal Travel Regulations See Section C.

**B-12 Contractor Furnished Special Requirements (Note: CO check those that apply)**

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☐ Litter Kit with Litter(s)

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☐ FAA Over water Kit (in accordance with 14 CFR Part 91.33 Part b (11))

OVER WATER SPECIALIZED EQUIPMENT REQUIREMENTS DESCRIBED BELOW:

Per 14 CFR Part 91.509(b) to include: Life raft(s) capable of transporting all occupants (Maximum seating capability). Personal Flotation Device (MAE WEST) for all occupants.

Life raft (s) and personal flotation devices must meet all applicable Federal Aviation Regulations for certification and recertification.

☐ Fixed Suppressant/Retardant Delivery Tank (Exhibit 5)

☒ Fixed Suppressant/Retardant Tank with Self-Filling Capability (Exhibit 5)

Or

Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements

☐ Extended Height landing gear applies to type II helicopters with fixed tank only, e.g. cross tubes, similar to DART extended height 39 inch Landing Gear Kit, part number D205-594-011, that insures a minimum of 12 inches clearance between the attached delivery tank and level ground. Dart Extended Height Access Step or equivalent must be provided with minimum of one step half the distance to the skid.

☒ If aircraft is standard category and equipped with fixed tank, landing gear configuration must insure a minimum of 12 inches clearance between the attached delivery tank and level ground. (Does not apply to Standard category aircraft offered as limited use)

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

- ☒ Suppressant/Retardant Mixing Equipment (Exhibit 5)
- ☐ Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements
- ☐ Additional Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements
- ☒ Digital P25 VHF-FM (FM-1) Transceiver in lieu of Analog VHF-FM (FM-1) Transceiver Must be complied with no later than January 1, 2010. (Only transceivers specified in Section C-8.A.3.g are acceptable)
- ☒ **GPS (See Section C-8)**
- ☐ Additional VHF-FM (FM-2) Transceiver (In accordance with requirements for a VHF- FM Transceiver in Section C.)
- ☐ AFT Cabin audio control system (Use Exhibit 17 for third audio control system specifications)
- ☐ External PA
- ☐ VHF Navigation receiver with indicator (VOR)
- ☐ GPS Data connector (Exhibit 7)
- ☐ Additional GPS Antenna (Exhibit 7)
- ☐ External antenna for Trimble Survey grade GPS unit.
- ☐ Interphone – All passenger positions
- ☐ Additional 760 Channel VHF-AM Radio
- ☒ VHF-FM Portable Radio (for fuel servicing vehicle driver)
- ☒ Fuel Servicing Vehicle Radio (Exhibit 7)
- ☐ Automatic engine re-ignition system
- ☐ Engine air intake filtration system
- ☒ Closed circuit fueling system if commercially available for the helicopter offered (See Exhibit 8).
- ☒ Kit for disposal of fuel during start-up/shut down; i.e., EPA Bell Kit if commercially available
- ☐ Wiring to accommodate Government-Furnished carousel
- ☒ Remote cargo hook for long-line (Exhibit 5) (for bucket equipped helicopters)
- ☒ Contractor-furnished 150 foot longline. Longline may consist of multiple segments and none shorter than 50 feet ( for bucket equipped helicopters).
- ☒ Interagency qualified vertical reference pilot
- ☒ Interagency qualified Mountainous terrain pilot
- ☒ Operations in countries boarding contiguous United States may be required. Pilots crossing international borders shall possess a valid passport.
- Other – Additional Special Requirements**
- ☒ SPCC Plan shall be available in fuel servicing vehicle. Refer to Section C-11.D

**B-13 Additional Information**

Additional information required to be submitted with your Proposal is contained in Section E, Instructions to Offerors-Commercial Items (Far 52.212-1) (Tailored).

Amendment 01  
Dated April 4, 2008

**SECTION B**  
**SUPPLIES OR SERVICES AND PRICES**

- ☒ Suppressant/Retardant Mixing Equipment (Exhibit 5)
  - ☐ Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements
  - ☐ Additional Variable Capacity Collapsible Bucket(s) (Capable of being transported in cabin or baggage compartment or external basket) must meet Section C-4.D.21 requirements
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  - ☒ **GPS (See Section C-8)**
  - ☐ Additional VHF-FM (FM-2) Transceiver (In accordance with requirements for a VHF- FM Transceiver in Section C.)
  - ☐ AFT Cabin audio control system (Use Exhibit 17 for third audio control system specifications)
  - ☐ External PA
  - ☐ VHF Navigation receiver with indicator (VOR)
  - ☐ GPS Data connector (Exhibit 7)
  - ☐ Additional GPS Antenna (Exhibit 7)
  - ☐ External antenna for Trimble Survey grade GPS unit.
  - ☐ Interphone – All passenger positions
  - ☐ Additional 760 Channel VHF-AM Radio
  - ☒ VHF-FM Portable Radio (for fuel servicing vehicle driver)
  - ☒ Fuel Servicing Vehicle Radio (Exhibit 7)
  - ☐ Automatic engine re-ignition system
  - ☐ Engine air intake filtration system
  - ☒ Closed circuit fueling system if commercially available for the helicopter offered (See Exhibit 8).
  - ☒ Kit for disposal of fuel during start-up/shut down; i.e., EPA Bell Kit if commercially available
  - ☐ Wiring to accommodate Government-Furnished carousel
  - ☒ Remote cargo hook for long-line (Exhibit 5) (for bucket equipped helicopters)
  - ☒ Contractor-furnished 150 foot longline. Longline may consist of multiple segments and none shorter than 50 feet ( for bucket equipped helicopters).
  - ☒ Interagency qualified vertical reference pilot
  - ☒ Interagency qualified Mountainous terrain pilot
  - ☒ Operations in countries boarding contiguous United States may be required. Pilots crossing international borders shall possess a valid passport.
- Other – Additional Special Requirements**
- ☒ SPCC Plan shall be available in fuel servicing vehicle. Refer to Section C-11.D

**B-13 Additional Information**

Additional information required to be submitted with your Proposal is contained in Section E, Instructions to Offerors-Commercial Items (Far 52.212-1) (Tailored).

Amendment 01  
Dated April 4, 2008



## **B-7 – Acceptable Work Schedules**

Carson Helicopters, Inc. (CHI) requests a work schedule for all personnel working under RFP AG-024-B-S-08-9003 of 12 days on / 12 days off.

CHI would like to reserve the right to employ personnel during their 12 days off for relief purposes only, provided that person has received a minimum of two (2) calendar days off since their last duty day.

This will allow CHI to ensure maximum availability under this Contract for Flight Crew and Duty Limitations as outlined in Section C-16.

Steve Metheny  
Exec. Vice President



**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**C-1 Scope of Contract**

- A. The intent of this solicitation and any resultant Contract is to obtain Standard or Restricted Category, Heavy (Type I) or Medium (Type II) Helicopters used **primarily for water delivery**. These helicopters shall be fully operated by qualified and proficient personnel and equipped to meet specifications contained herein for offered aircraft used in the administration and protection of Public Lands.
- B. Contract personnel shall conduct themselves in a professional and cooperative manner in fulfilling this Contract
- C. During the Mandatory Availability Period (MAP) and any extensions thereof, the aircraft shall be made available for the exclusive use of the Government.
- D. The helicopter furnished will be used for incident support and may also be used for project, law enforcement, and administrative flights. If contractor agrees to perform law enforcement, such agreement shall be in writing.

When operating in Alaska, see Exhibit 3, Alaska Supplement , for additional requirements.

- E. The Government has Interagency and cooperative agreements with Federal and State Agencies and private landholders. Aircraft may be dispatched under this contract for such use.
- F. The Contracting Officer (CO) may, with the Contractor's agreement, release the Contractor from the contract for short periods of time to perform outside work such as search and rescue for other Federal, State, or local agencies or private parties. During the period of such release, the U.S. Forest Service (USFS) is not responsible for any payment or liability.

**C-2 Certifications**

A. General

- 1. Contractors shall be currently certificated to meet 14 Code of Federal Regulations (CFR), 133 (External Load Operations), 135 (Air Taxi Operators and Commercial Operations), and 137 (Agricultural Aircraft Operations), as applicable. Any helicopter offered shall be listed by make, model, series, and registration number on the Operators Certificates.
- 2. Helicopters shall conform to the approved type design (normal or restricted), be maintained and operated in accordance with type certificate requirements notwithstanding the aviation regulations of the State in which the helicopter may be operated except those requirements specifically waived by the CO. If an operator has a 135 certificate, the aircraft will be maintained in accordance with their FAA approved maintenance program. 14 CFR Part 133 and 137 aircraft will be maintained in accordance with the type certificate and applicable supplement type certificates (STC).

Amendment 01  
Dated April 4, 2008

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

3. The pilot is responsible for computing the weight and balance for all flights and for assuring that the gross weight and center of gravity do not exceed the aircraft's limitations. Pilots shall be responsible for the proper loading and securing of all cargo. Load calculations (Exhibit 13, Form 5700-17 or OAS-67) shall be computed and completed by the pilot using appropriate flight manual hover performance charts.
4. Each helicopter shall operate in accordance with an approved 14 CFR Part 133, Rotorcraft Load Combination Flight Manual (RLCFM), unless the CO specifically waives the requirement. A copy of the RLCFM shall be kept with the aircraft at all times.

**B. Standard Category Helicopters**

1. All passenger-carrying flights, regardless of the number of passengers carried, shall be conducted in accordance with the Contractor's 14 CFR Part 135 operations specifications.
2. Helicopters shall be certificated in Normal or Transport Category.
3. The Government may elect not to utilize individual Standard Category aircraft for passenger transport.
4. Helicopters shall carry their fully rated capacity of cargo for suppressant/retardant as determined by use of the approved weight and balance performance data.

**C. Restricted Category Helicopters**

1. Helicopter(s) certificated in Restricted Category shall have been issued a Special Airworthiness Certificate.
2. Helicopter(s) configured from aircraft types that have FAA Type Certificates obtained by the aircraft manufacturer shall incorporate the manufacture's designated changes to bring the aircraft into conformity with their type design, excluding passenger configuration requirements. All applicable Airworthiness Directives and manufacturer Service Bulletins shall be accomplished.
3. Helicopter(s), which are configured from former military aircraft, which have FAA Type Certificates based upon military operation in lieu of a manufacturer's Type Certificate, shall have all applicable Time Compliance Technical Orders (TCTO's), military Service Bulletins, and Safety-of-Flight Messages accomplished. This includes any directives, which refer to later models of the same type, which were issued after the earlier models had left the military inventory. When FAA approvals establish more restrictive limits, such limits will prevail.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**C-3 Government Furnished Property**

- A. If Government Furnished Property (GFP) is provided; the Contractor shall be required to sign a property receipt document. Upon Government request, GFP shall be returned to the Government in accordance with **GFP FAR Clause 52.245-1 (JUN 2007)**.
- B. The Government will deliver the following items to the Contractor upon arrival at the Host Base.
  - 1. Interagency Aviation Transport of Hazardous Materials Handbook/Guide with any applicable Department of Transportation (DOT) Special Permit Letters and Emergency Response Guide.
  - 2. Personal fire shelter for each flight crewmember. Instruction in shelter deployment to be provided by the Helicopter Manager
- C. Foam Concentrate will be provided by the Government as needed in accordance with the most current Qualified Product List as specified at [www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire)

**C-4 Aircraft Requirements**

A. General

- 1. Aircraft shall be maintained in accordance with all applicable 14 CFR requirements, mandatory manufacturers' bulletins as required or identified by the FS and or DOI, and all applicable FAA Airworthiness Directives (AD).
- 2. All required documents needed to verify the data in Form FS-5700-21a or AMD 36b; Helicopter Data Record (including airframe logs, engine logs, compliance with mandatory manufacturer's bulletins, FAA AD compliance, and aircraft status record, etc.) shall be made available to FS or DOI inspector(s).
- 3. Unless authorized by an approved Minimum Equipment List (MEL), aircraft shall not be approved or used if any accessory or instrument listed on the aircraft type certificate data sheet is inoperative.
- 4. Aircraft shall not be approved if any component time in service exceeds the manufacturers' recommended Time Between Overhaul (TBO) or FAA-approved extension. All inspection times and intervals shall comply with the Contractor's FAA approved maintenance program.

B. Condition of Equipment

- 1. Contractor-furnished aircraft and equipment shall be operable, free of damage, and in good repair. Aircraft systems and components shall be free of leaks except within limitations specified by the manufacturer.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

2. All windows and windshields shall be clean and free of scratches, cracks, crazing, distortion, or repairs, which hinder visibility. Repairs such as safety wire lacing and stop drilling of cracks are not acceptable permanent repairs. Prior to acceptance, all temporarily repaired windows and windshields shall have permanent repairs completed or shall be replaced.
3. The aircraft interior shall be clean and neat. There shall be no un-repaired tears, rips, cracks, or other damage to the interior. The exterior finish, including the paint, shall be clean, neat, and in good condition (i.e. no severe fading or large areas of flaking or missing paint and etc.). Military or other low visibility paint schemes are unacceptable. Any corrosion shall be within manufacturer or FAA acceptable limits.

**C. Center of Gravity**

1. All aircraft shall be configured so that the center of gravity will remain within the FAA approved Flight Manual published limits for all load requirements and full range of fuel conditions, including ferry with minimum crew without subtraction or addition of ballast.
2. All aircraft shall be loaded such that the center of gravity will remain within allowed limit during the flight. Actual weights will be used for flight calculation.
3. When the equipped weight of the aircraft, as noted by registration number in Section B, Schedule of Items changes, the Contractor shall notify the CO of the change and submit a new weight and balance as required by the Contract.

**D. General Equipment (as applicable)**

Helicopters shall be configured with the equipment required by 14 CFR and approved for make and model furnished. In addition, the following will be required:

1. A copy of the Awarded Contract and modification(s) shall remain in the helicopter during the Contract period(s).
2. Instrumentation required by the Type Certificate and 14 CFR for use with the make and model furnished.
3. Free air temperature gauge.
4. Approved aircraft lighting for night operation in accordance with 14 CFR 91.209, plus instrument lights.
5. First Aid Kit Aeronautical (Exhibit 1, First Aid Kit Aeronautical)
6. Survival Kit Aeronautical (Exhibit 2, Survival Kit Aeronautical, Lower 48)
7. Additional Suppression/Prescribed Fire Equipment (Exhibit 5, Additional Suppression/Prescribed Fire Equipment) as applicable.
8. Seat belts for all seats. One set of individual lap belts for each occupant.

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9. FAA-approved double-strap shoulder harness with automatic locking inertia reels for each front seat occupant. Shoulder straps and lap belts shall fasten with one single-point, metal-to-metal, and quick-release mechanism. Standard factory shoulder harnesses are acceptable for Aerospatiale and Bell transport category helicopters. Military style harnesses are acceptable. (Exhibit 4, Restraint Systems Condition Inspection Guidelines).
10. FAA approved single diagonal shoulder harness with inertia reel integrated with the lap seat belt with one single point metal to metal, quick release mechanism for each passenger position. For aircraft equipped with airline type seats, a single or double FAA approved shoulder harness integrated with seat belt with one single point metal-to-metal quick release mechanism for each passenger position.
11. One flight hour meter (Hobbs) installed in a location observable by the pilot and front seat observer while seated. The meter shall be wired in series with a switch on the collective control, and a switch activated by engine or transmission oil pressure or equivalent system, to record flight time (in hours and tenths of hours) only.
12. **External load operations from other than the manufacturer's designated pilot station (right seat in most helicopters) are allowed only with an approved FAA Supplemental Type Certificate (STC) or field approval and designation on the aircraft Interagency Data Card. For single piloted aircraft, field approvals in lieu of STCs are not acceptable unless operational gauges are installed in a manner which allows observation while the pilot's focus is on the external load.**
13. Convex mirror for observation of external loads and landing gear (not required for aircraft equipped ONLY for vertical reference operations).
14. The Fire extinguisher(s) shall be a hand-held bottle, fully charged, with a minimum of 1.5 pounds capacity and 2-B:C rating, maintained in accordance with NFPA 10 and mounted with a quick release attachment accessible to the flight crew while seated.
15. Standard Category helicopters with a floor height greater than 18-inches shall have an approved personnel access step to assure safe entrance and exit from each door of the helicopter. A section of external cargo rack may be utilized as a step by providing a clear space covered with non-skid material.
16. Complete set of current aeronautical charts covering area of operation. The Contractor shall be responsible for providing navigation publications.
17. Dual controls are required for pilot evaluations.
18. One or more independently switched white or white and red strobe light(s) mounted on top of the helicopter or otherwise visible from above.

In accordance with 14 CFR 27.1401, Anti-collision Light System (d) Color. Each anti-collision light shall be aviation red and shall meet the applicable requirements of 14 CFR 27.1397. In order to meet contract specifications, Contractors shall obtain FAA approval (FAA Form 337) to alter the aircraft, if applicable.

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19. High visibility markings on main rotor blades (Exhibit 6, High Visibility Markings on Main Rotor Blades).

20. Cargo Hook

- a. One cargo hook that may be loaded and locked in a single motion with one hand, and is rated at the maximum lifting capacity of the aircraft.
- b. As a minimum, the cargo hook shall be completely disassembled and inspected with repairs made as required, lubricated, and a full-load operational check in accordance with manufacturers recommendations.

21. Variable capacity collapsible bucket(s) (For bucket-equipped helicopters)

- a. One (1) collapsible, variable capacity water/retardant buckets shall be furnished under this Contract.
- b. The bucket, at 100 percent of manufactures rated capacity (+/-5%) shall be commensurate with the maximum OGE lifting capability of the helicopter at 5000 PA and 30 degrees C with a 200 pound pilot(s) and 1 1/2 hours of total fuel. The bucket shall be capable of being operated with all increments of the long-line. No partial dips allowed.
- c. Environmental operating conditions may dictate the need for more than one size bucket.
- d. Helicopters equipped with electronic helicopter hook load measuring system (load cells) that provide a cockpit readout of the actual external load and a bucket that is equipped with a gating system and/or a powerfill bucket that allows part of the load to be released while retaining the remainder of the load are approved in lieu of the second bucket.
- e. Capacity of each position or adjustment level shall be marked on the bucket. Collapsible buckets with cinch straps shall only be adjusted to the marked graduations (i.e., 90%, 80%, 70%). Attempts to establish intermediate graduations or capacities below the manufacturer's minimum graduation (by tying knots, etc.) are prohibited. Powerfill buckets do not need to be cinched.
- f. An Operations Manual for the type bucket(s) provided shall be available on site.
- g. Either the weight of the bucket or capacity at each adjustment level shall be marked on the bucket or the operator shall have a written statement of the maximum capacity (weight) at each adjustment point.
- h. The jettison-arming switch, if applicable, shall be in the armed position during external load operations.

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- i. When a bucket is attached directly to the cargo hook, it is critical to measure the maximum length of the extended bucket from the shackle on the control head to the extended dump valve/fire sock, making sure that it is at least 6-inches less than the distance from the belly hook to the closest possible point on the tail rotor. Lines attached between the cargo hook and the bucket shall extend the bucket past the outside arc of the tail rotor, the line shall be no shorter than 50 feet.
22. The bucket gate open/close switch (es) shall be clearly marked for "open" and "closed," spring-loaded to the "OFF" position, and mounted on the collective pitch lever to avoid confusion with the cargo hook release. The switch shall be of a different design and shall be mounted in such a way as to not easily be confused with the RPM Control (Beep) switch.
23. Standard category Medium helicopters: An auxiliary power connector (MS3112E12-3S) protected by a 5-amp circuit breaker connected to the avionics or main aircraft power buss shall be permanently mounted in a location convenient to the passenger compartment. Pin A shall be +24 VDC in 24-volt aircraft; Pin B shall be aircraft ground. Pin C shall be + 12 volts VDC in 12 volt aircraft. Never apply power to both Pin A and Pin C simultaneously.
24. Fuel Servicing Vehicle (Exhibit 7 Additional Avionics Equipment and Exhibit 8 Fuel Servicing Equipment Requirements) (Not required for Alaska).
25. FAA Approved Extended Height /High Skid Landing Gear (if available by STC or aircraft manufacturer).
26. FAA approved high visibility, pulsating, forward facing, conspicuity lighting.
27. FAA-approved locking cap(s) on all fuel filler ports. Single point refueling port dust caps need not have an FAA approved locking device.
28. **(APPLICABLE TO STANDARD CATEGORY MEDIUM HELICOPTERS ONLY)**  
Internal baggage compartment/external cargo basket/racks. Fifteen (15) cubic feet of cargo space with isolated internal baggage compartment(s) capable of accommodating 58-inch long shovels, rakes, and other fire fighting tools (requires rear bulkhead modification of baggage compartment of some models). External cargo basket(s)/rack(s) with a closing mechanical latching lid may be provided in lieu of baggage compartments, which cannot be modified to accept fire tools. The lid shall cover the entire basket/rack. Cargo basket/rack shall be at least 4-inches deep. The devices shall be simple in function and have the capacity of being installed quickly. If lid is not manufactured for make and model then cargo shall be secured with tie down nets, straps, or bungee.

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**C-5 Aircraft Maintenance**

**A. General**

1. The Contractor shall be capable of providing field maintenance support to each helicopter for extended periods during heavy use.
2. Helicopters shall be operated and maintained in accordance with 14 CFR requirements and manufacturers' recommendations. Special equipment and/or modification of the helicopter to meet requirements of this contract shall be inspected, repaired, and altered in accordance with 14 CFR requirements and manufacturer's recommendations or engineered data and, if required, be FAA approved. All "time change" components, including engines, shall be replaced upon reaching the factory recommended time, or FAA approved extension if applicable. Aircraft operated with components and accessories on approved TBO extension programs are acceptable, provided the Contractor who provides the aircraft is the holder of the approved extension authorization (not the owner if the aircraft is leased), and shall operate in accordance with the extension.
3. **FAA, CFR 14, Part 145 Repair Stations, may be used for specific maintenance functions that the repair station is certified for. The aircraft must be returned to service under the repair station certificate, and not under an individual's certificate for the repair station; for example repairman or A&P mechanic. The repair station may not be used in lieu of the carded mechanic required by this contract.**
4. Compliance with mandatory manufacturers' service bulletins, FAA ADs, and the correction of maintenance deficiencies shall be accomplished prior to the start and during the period of Contract performance.
5. Contract performance may subject the aircraft engine to frequent smoke, sand and dust ingestion. All aircraft shall comply with the erosion inspection procedures at the recommended intervals in accordance with the engine operation and maintenance manual for the Contracted aircraft.
6. All maintenance performed shall be recorded in accordance with 14 CFR 43 and 91 including helicopter time-in-service and hour meter reading.
7. A copy of the current maintenance record required by 14 CFR 91 shall be kept with the aircraft.
8. Maintenance of aircraft records shall be in accordance with the FAA Advisory Circular (AC) No. 43-9C as revised.
9. The Contractor shall immediately notify the CO of any change of an engine, power train, control, or major airframe component and circumstances inducing the change.
10. Routine maintenance shall be performed before or after the daily standby or as approved by the CO.
11. All inspection times and intervals shall comply with the Contractor's FAA Approved Maintenance Program.
12. Inspections shall be performed in a maintenance facility, or in the best field conditions available.



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13. For aircraft on any FAA approved maintenance program, the following applies:

For aircraft on a maintenance program requiring 100 hr inspections: at the beginning of the Mandatory Availability Period there are 50 or more hours remaining prior to the 100-hour inspection, that 100-hour inspection and any required maintenance and subsequent 100-hour inspections may be performed without loss of availability per the requirements in a thru g below.

**OR**

Aircraft on an FAA Approved Aircraft Maintenance Programs with other than 100 hr inspections (for example phase or progressive type inspection), and after having flown 50 or more hours following the start of the Mandatory Availability Period, a scheduled inspection or maintenance may be performed without loss of availability per the requirements in a thru f below. From that time, after every subsequent 100 hours of flight ( $\pm 10\%$ ), scheduled inspections or maintenance may be performed without loss of availability per a thru f below.

- a. When the 100 hour or other FAA approved maintenance inspection (that occur on a 100 hour flight cycle), is due and the aircraft and flight crew have been released for the day, the contractor will be allowed to perform this scheduled inspection and/or maintenance, up to the end of the following calendar day, without assessment of unavailability.
  - b. Inspections shall be performed in one of the following:
    - (1) Maintenance facility,
    - (2) Host or alternate base, or
    - (3) Best field conditions available.
- Flight time to and from a maintenance facility or alternate base or location will not be paid.
- c. Contractor shall notify the Contracting Officer at least 16 flight hours prior to the initiation of any maintenance inspection.
  - d. When the aircraft is available for service, it is the Contractor's responsibility to ensure that the flight crew is also available.
  - e. If the flight crew is not available when the aircraft is returned to service, unavailability will be assessed from that time until such time that they do become available.
  - f. If the entire calendar day is not used to perform maintenance, no credit of that unused time shall be granted.
  - g. When less than 50 hours remain before the initial 100-hour inspection, the first 100 hour inspection shall be performed before or after the daily standby, or as approved by the Contracting Officer.

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14. During the MAP, contractor may, with the approval of the CO, elect to use 2 additional non-paid calendar days for the accomplishment of **scheduled maintenance**. These 2 days need not be consecutive; however they will each be full calendar days. Contractor shall request approval from the CO at least 48 hours prior to the initiation of the additional scheduled maintenance days. Contractor will not be assessed unavailability for performance purposes and will not be paid for the unavailability.
15. All weighing of aircraft shall be performed on scales that have been certified as accurate. The certifying agency may be any accredited weights and measures laboratory.
16. Helicopter(s) under initially awarded contract(s) under this solicitation shall remain at or below contracted helicopter equipped weight as bid. Helicopters will be allowed 1% above the awarded contracted helicopter equipped weight during the contract option period(s). The aircraft's equipped weight is determined using weight and balance data which was determined by actual weighing of the aircraft within 24 months preceding the starting date of the MAP and 36 months thereafter or following any major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft. If the government requires additional equipment after contract award no penalty will be assessed.
17. A list of equipment installed in the aircraft at the time of weighing shall be compiled. The equipment list shall include the name of each item installed. Items that may be easily removed or installed for aircraft configuration changes (seats, doors, radios, cargo hook, baskets, special mission equipment, etc.) shall also be listed including the name, weight, and arm of each item. Each page of the equipment list shall identify the specific aircraft by serial and registration number. Each page of the equipment list shall be dated indicating the last date of actual weighing or computation. The weight and balance shall be revised each time equipment is removed or installed.
18. When the contract equipped weight of the aircraft, as noted by registration number in Section B, Schedule of Items, changes, the Contractor shall notify the CO of the change and submit a revised weight and balance as required by the Contract.

**B. Turbine Engine Power Assurance Checks**

1. A power assurance check shall be accomplished on the first day of operation, and thereafter within each 10-hour interval of contracted flight operation unless prohibited by environmental conditions (i.e. weather, smoke). The power assurance check shall be accomplished by the contractor in accordance with the Rotorcraft Flight Manual or approved company performance monitoring program. A current record of the power assurance checks will be maintained with the aircraft under this Contract and any renewal periods.
2. Helicopters with power output below the minimum published performance charts shall be removed from service. The below-minimum power condition shall be corrected before return to service and contract availability.

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**C. Maintenance Flights**

A functional maintenance flight shall be performed following overhaul, repair, and/or replacement of any engine, power train, rotor system or flight control equipment, and following any adjustment of the flight control systems before the helicopter is returned to service. The flight will be performed at the Contractor's expense. Results of the maintenance flights shall be reported to and approved by the FS or DOI Aviation Maintenance Inspector before the aircraft is returned to Contract availability.

**C-6 Aircraft and Equipment Security**

- A. The security of Contractor provided aircraft and equipment is the responsibility of the Contractor.
- B. Aircraft shall be electrically and/or mechanically disabled by two independent security systems whenever the aircraft is unattended. Deactivating security systems shall be incorporated into preflight checklists to prevent accidental damage to the aircraft or interfere with safety of flight.
- C. Examples of Unacceptable disabling systems are:
  - 1. Locked door/windows; and/or
  - 2. Fenced parking areas.

**C-7 Avionics Requirements**

Required avionics systems and contractor offered avionics/communications equipment shall meet the performance specifications as specified in FS/AMD A-24 at:  
[www.fs.fed.us/fire/niicd/documents.html](http://www.fs.fed.us/fire/niicd/documents.html)

**C-8 Contractor Furnished Avionics Systems**

**A. Communications Systems**

**1. Emergency Locator Transmitters**

One automatic-portable/automatic-fixed or automatic-fixed Emergency Locator Transmitter (ELT) utilizing an external antenna and meeting the same requirements as those detailed for airplanes in 14 CFR 91.207 (excluding 14 CFR 91.207(f)), shall be installed per the manufacturer's installation manual, in a conspicuous or marked location. ELTs certified under TSO-C91 are not acceptable. **Note:** ELTs operating on 121.5 MHz and/or 406 MHz or both frequencies are acceptable.

**2. VHF-AM Transceivers**

One panel mounted VHF-AM aeronautical transceiver (VHF-1), operating in the frequency band of 118.000 to 136.975 MHz, with a minimum of 760-channels in no greater than 25 kHz increments, and a minimum of 5-watts carrier output power.

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**3. VHF-FM Transceivers**

- a. One aeronautical VHF-FM radio transceiver (FM-1). The transceiver shall operate from 150 to 174 MHz, permit the operator to program any usable frequency within that band while in flight, provide operator selection of both wide-band (25 kHz bandwidth/5 kHz modulation) and narrow-band (12.5 kHz bandwidth/2.5 kHz modulation) operation by channel for MAIN and GUARD operation. Transceivers shall be set to operate in the **analog narrowband mode** (typically indicated with a lower case "n") unless local conditions dictate otherwise.
- b. Carrier output power shall be 10-watts nominal. The transceiver shall be capable of displaying receiver and transmitter operating frequency. Transceivers shall provide both receiver and transmitter activation indicators for MAIN and GUARD. Simultaneous monitoring of both MAIN and GUARD (168.6250 MHz) is required. Scanning of GUARD is not acceptable. GUARD communications may only be used for: emergencies; initial call; recall; and redirection.
- c. A CTCSS sub-audible tone encoder with a minimum of 32 standards selectable tones, meeting the current TIA/EIA-603A standard, shall interface with the above transceiver. The encoder shall encode a 110.9 Hz tone on all GUARD transmissions.
- d. The transceiver's operational controls shall be mounted in a location that is convenient to both pilot and co-pilot/observer.
- e. Aircraft having two or more aeronautical VHF-FM radio transceivers need only have a GUARD receiver in the first transceiver (FM-1).
- f. The following analog aeronautical VHF-FM transceivers are known to be acceptable until 12/31/2009.

Eureka Radio Systems (ERS)	ERS-96000NB with external tone encoder
Northern Airborne Technology	NPX-138N-050/070 & NTX-138-050
Technisonic Industries	TFM-138 (serial # 1540 & up), TFM-138B/C/D, & TFM-500
Wulfsburg Electronics	Flexcom II (non P25 versions), RT-138N, & RT-9600N

- g. The following multimode (P25) digital aeronautical VHF-FM transceivers are known to be acceptable.

Technisonic Industries	TDFM-136
Northern Airborne Technology	NPX 136D

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- h. All VHF-FM transceivers (aeronautical, mobile, and portable) furnished to meet the requirements of this contract must be multimode (P25) digital by January 1, 2010. Only P25 compliant transceivers will be acceptable after this date. Multimode (P25) digital aeronautical VHF-FM transceivers must meet FS/AMD A-19. Visit the following website for a copy of FS/AMD A-19 and a current list of acceptable radios:  
[www.fs.fed.us/fire/niicd/documents.html](http://www.fs.fed.us/fire/niicd/documents.html)

**Note:** There are currently only two radios known to meet the fire P25 digital radio requirement: Northern Airborne Technology's (NAT) NPX136D and Technisonic Industries' TDFM 136. It is anticipated that a majority of operators will delay purchasing P25 digital compliant radios until the January 1, 2010 deadline. NAT and Technisonic rely on third party manufacturers for radio components, and these components may take several months to acquire. NAT and Technisonic have assured us that they will not be able to manufacture a large quantity of P25 radios in a short timeframe. Accordingly, it is highly suggested that all aviation operators place their orders for P25 digital radios as soon as possible to avoid delays in aircraft approval.

4. Provisions for AUX-FM Portable Radios (**Not required for Restricted Category or Limited Use Aircraft**)
- a. The Contractor shall provide the necessary interface for installing and properly operating an auxiliary VHF-FM portable radio through the aircraft's audio control system(s). The interface shall consist of the appropriate wiring from the audio control system; terminate in an MS3112E12-10S type connector and utilizing the contact assignments as specified by drawing FS/AMD-17 (See [www.fs.fed.us/fire/niicd/documents.html](http://www.fs.fed.us/fire/niicd/documents.html))
  - b. One weatherproof, external, broadband antenna (Comant type CI-177 or equal) covering the 150-174 MHz band, with associated RG-58A/U (or equivalent) coaxial cable and connector, terminated in a bulkhead-mounted, female BNC connector adjacent to the above 10-pin connector.
  - c. Mounting facilities, in accordance with the specifications of FAA AC 43.13-2A, for secure installation of the auxiliary VHF-FM portable radio in the cockpit shall be provided (Field Support Services (<http://www.helifire.com>) AUX-EPH-RB or equivalent). The location of the mounting facilities shall be such that, when connected with an 18-inch adapter cable, allows the co-pilot/observer full and unrestricted movement of the radio's controls.
  - d. Positive-polarity microphone excitation voltage shall be provided to the AUX-FM system from the aircraft DC power system through a suitable resistor network. A blocking capacitor shall be provided to prevent the portable radio microphone excitation voltage from entering the system. Sidetone for the AUX-FM shall also be provided (NAT AA34, Heritage PA-34, or equivalent).
  - e. In lieu of the above AUX-FM requirements, the Contractor may substitute one aeronautical VHF-FM transceiver (FM-2), which meets the same requirements as FM-1 unless the second aeronautical VHF-FM radio transceiver (FM-2) is specifically required. When two aeronautical VHF-FM radio transceivers are required, the AUX-FM is also required.

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5. Automated Flight Following

- a. One Automated Flight Following (AFF) system compatible with the governments AFF tracking network (Webtracker). Not all available AFF systems are compatible with Webtracker nor meet Webtracker's requirements. The contractor shall ensure that the AFF system offered is compatible with Webtracker. To view Webtracker's current compatibility requirements and a list of previously successful AFF equipment manufacturers, refer to <https://www.aff.gov>.
- b. The AFF system shall be powered by the aircraft's electrical system, installed per the manufacturer's installation manual, and operational in all phases of flight. AFF equipment shall utilize as a minimum: Satellite communications, an externally or internally mounted antenna, provide data to the Government's Webtracker software, use aircraft power via a dedicated circuit breaker for power protection, and be mounted so as to not endanger any occupant from AFF equipment during periods of turbulence. Antennas should be placed where they have the best view of the overhead sky as possible. Externally mounted antennas are recommended to improve system performance. Any AFF manufacturer required pilot display(s) or control(s) shall be visible/selectable by the pilot(s). Remote equipment having visual indicators should be mounted in such a manner as to allow visual indicators to be easily visible.
- c. AFF communications shall be fully operational in the lower 48 states. Contractors accepting dispatches to the State of Alaska, Southern Canada, or Western Canada must have an AFF system capable of being tracked in these locations at all times. Not all manufacturers' AFF equipment communication links will operate effectively in all geographic areas.
- d. The contractor shall maintain a subscription service through the AFF equipment provider allowing AFF position reporting for satellite tracking via Webtracker. The position-reporting interval shall be every two minutes while the aircraft is in flight. The contractor shall register their AFF equipment with the Fire Applications Support Desk (FASD) providing: Complete tail number; manufacturer and serial number of the AFF transceiver; aircraft make and model; and Contractor contact information. If the contractor relocates previously registered AFF equipment into another aircraft, then the contractor shall contact the FASD making the appropriate changes prior to aircraft use. In all cases, the contractor shall ensure that the correct aircraft information is indicated within Webtracker. The contractor shall contact the FASD of system changes, scheduled maintenance, and planned service outages.
- e. Registration contact information, a web accessible feedback form, and additional information is available at: <https://www.aff.gov>. The FASD can be reached at (800) 253-5559 or (208) 387-5290.
- f. Prior to the aircraft's annual contract inspection, the contractor shall ensure compliance with all AFF systems requirements. The contractor shall additionally perform an operational check of the system. As a minimum, the operational check shall consist of confirming the aircraft being tested is displayed in Webtracker (indicating it is currently transmitting data to Webtracker) and that all information

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displayed in Webtracker is current. A username and password are required to access Webtracker. Log on to the AFF website at <https://www.aff.gov> to request a username and password, or contact the FASD.

- g. This clause incorporates Specification Section Supplement available at: <https://www.aff.gov/contractspecs> with the same force and affect as if they were presented as full text herein.

**B. Navigation Systems**

One Global Positioning System (GPS). The GPS shall be panel-mounted; located where both the pilot and the co-pilot/observer can clearly view the display; utilize WGS-84 datum; reference latitude and longitude coordinates in the DM (degrees/minutes/decimal minutes) mode; and be powered by the aircraft electrical system. Antennas must have a clear view of the sky. The GPS unit must have the ability for manual entry of waypoints in flight. The GPS shall have a database, updated annually, covering the continental United States. Contractors accepting dispatches to Alaska shall also include an Alaska database in the GPS. Aviation portable GPS units (Garmin GPSMAP 296/396/496 or equivalent) are acceptable provided they use remote antennas, are securely mounted, present information from an overhead orientation (not a drive along the road type), installation approved via FAA Form 337, and meet all previously stated GPS requirements.

**C. Transponder/Altitude Encoders**

One ATC transponder and altitude reporting system(s) meeting the requirements of 14 CFR 91.215 (a) and (b), 14 CFR 91.413 and be tested and inspected every 24-calendar months as specified by 14 CFR Part 43, appendix F.

**D. Static Pressure, Altimeter, and Automatic Pressure Altitude Reporting Systems**

The aircraft's static system(s) shall be maintained in accordance with the IFR requirements of 14 CFR 91, and inspected and tested every 24-calendar months as specified by 14 CFR Part 43, appendix E and 14 CFR 91.411.

**E. Audio Control Systems**

**General**

1. *Standard Category.* Two audio control systems (which may be combined in a single unit) shall be installed providing the pilot and observer/co-pilot separate systems. Each system shall provide pilot and observer/co-pilot with separate controls for selection of multiple receiver audio outputs and transmitter microphone/push-to-talk (PTT) audio inputs. Each system shall also provide pilot and observer/co-pilot with separate controls for adjustment of both ICS and receiver audio output levels. Note: One audio control system is required for aircraft designed for a single occupant (i.e. K-MAX).

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2. *Restricted Category.* An audio control system shall be provided for the pilot and check/co-pilot. The system shall provide controls for selection of multiple receiver audio outputs and transmitter microphone/PTT audio inputs. The system shall also provide separate controls for adjustment of both Intercommunication System (ICS) and receiver audio output levels.

**F. Transmitter Selection and Operation**

1. *Standard Category.* Separate transmitter selection controls shall be provided to the microphone/PTT inputs of both the pilot and observer/co-pilot. The system shall be configured so that the pilot and observer/co-pilot may each simultaneously select and utilize a different transmitter (or Public Address (PA) System when installed) via their respective microphone/PTT. Whenever a transmitter is selected, the companion receiver audio shall automatically be selected for the corresponding earphone. Transmitter sidetone audio shall be provided for the user as well as for cross monitoring via the corresponding receiver selection switch on the other audio control system.
2. *Restricted Category.* A transmitter selection control shall be provided for the microphone/PTT inputs of the pilot and check/co-pilot. The system shall be configured so that the pilot or check/co-pilot may select and utilize a transmitter via their microphone/PTT. Whenever a transmitter is selected, the companion receiver audio shall automatically be selected. Transmitter sidetone audio shall be provided for the operator as well as for cross monitoring.

**G. Receiver Selection and Operation**

1. *Standard Category.* Separate controls shall be provided for both pilot and observer/co-pilot to select audio from one or any combination of available receivers. The aft exit passenger positions (two positions minimum) shall monitor the receiver(s) as selected by the observer/co-pilot unless the aft exit passenger positions have an independent audio control system(s). Aft exit audio control system(s) (if installed) shall provide selected receiver audio to appropriate required aft passenger positions (two positions minimum).
2. *Restricted Category.* Separate controls shall be provided for selection of audio from one or any combination of available receivers.

**H. Radios and Systems**

As a minimum, the audio control system(s) shall provide for selection of all installed radios and PA systems.

**I. Earphones and Microphones**

1. *Standard Category.* The audio system shall be designed for operation with 600-ohm earphones and carbon-equivalent, noise-canceling boom-type microphones (Gentex electret type Model 5060-2, military dynamic type M-87/AIC with CE-100 TR preamplifier, or equivalent). Only the pilot's position may be configured for low impedance (dynamic) operation.



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All earphone/microphone jacks in the aircraft shall be U-92A/U type, which will accept the U-174/U type plug. All U-92A/U cords shall be of an adequate length to provide the user free and unrestricted movement according to mission requirements.

2. *Restricted Category.* As required

**J. Push-to-Talk Systems**

1. *Standard Category.* Separate Push-to-Talk (PTT) switches shall be provided for radio transmitter and ICS microphone operation at the pilot and observer/copilot positions. The pilot's PTT switches shall be mounted on the cyclic control. The observer/co-pilot's PTT switches shall be mounted on the cord to an earphone/microphone connector (Alpine Aerotech AAL280-011-001 or equivalent). In lieu of the observer/co-pilot's cord mounted PTT switches, a foot switch operated PTT system may be utilized. In aircraft requiring two pilots the observer/co-pilot's PTT system may be on the cyclic control. The aft exit passenger positions (two positions minimum) shall be equipped with an ICS PTT switch mounted on a cord to the earphone/microphone connector (Alpine Aerotech AAL280-011-004 or equivalent).
2. *Restricted Category.* Separate PTT switches shall be provided for radio transmission and ICS microphone operation at the pilot and check/co-pilot positions.

**K. Intercommunications Systems (ICS)**

1. *Standard Category.* An ICS system shall be provided for the pilot, observer/co-pilot, and the aft exit passenger positions (two positions minimum). ICS audio shall mix with, but not mute, selected receiver audio. An ICS audio level control shall be provided for each position above. Adjustment of the ICS audio level at any position shall not affect the level at any other position. A "hot mic" capability, controlled via an activation switch or voice activation (VOX), shall be provided for the pilot and observer/co-pilot. ICS sidetone audio shall be provided for the earphone corresponding with the microphone in use.
2. *Restricted Category.* An ICS system shall be provided for the pilot and check-pilot/co-pilot. ICS audio shall mix with, but not mute, selected receiver audio. An ICS audio level control shall be provided for each position above. Adjustment of the ICS audio level at any position shall not affect the level at any other position. A "hot mic" capability, controlled via an activation switch or voice activation (VOX), shall be provided for the pilot and check-pilot/co-pilot. ICS sidetone audio shall be provided for the earphone corresponding with the microphone in use.

**C-9 Avionics Installation and Maintenance Standards**

- A. All avionics systems used in or on the aircraft for this contract and their installation and maintenance shall comply with all manufacturers' specifications and applicable 14 CFR requirements.
- B. Strict adherence to the recommendations in FAA AC 43.13-1B Chapter 11, "Aircraft Electrical Systems", and Chapter 12, "Aircraft Avionics Systems", as well as AC 43.13-2A Chapter 1, "Structural Data", Chapter 2, "Radio Installation", and Chapter 3, "Antenna Installation", are required.

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- C. All avionics systems requiring an antenna shall be installed with a properly matched aircraft-certified, broadband antenna unless otherwise specified.
- D. Antennas shall be polarized as required by the avionics system and have a Voltage Standing Wave Ratio (VSWR) less than 2.5 to 1.
- E. Labeling and marking of all avionics controls and equipment shall be clear, understandable, legible, and permanent. Electronic label maker marking is acceptable.
- F. Avionics equipment mounting location and installation shall not interfere with passenger safety, space, and comfort. Avionics equipment will not be mounted under seats designed for energy attenuation. In all instances, the designated areas for collapse shall be protected.

**C-10 Operations**

**A. General**

- 1. Regardless of any status as a public aircraft operation, the Contractor shall operate in accordance with their approved FAA Operations Specifications and all portions of 14 CFR 91 (including those portions applicable to civil aircraft) and each certification required under this Contract unless otherwise authorized by the CO.
- 2. A Government representative may inspect the pilot's Interagency Helicopter Pilot Qualification Card for currency before any flight. The Government has mission control and can delay, terminate, or cancel a flight at any time.
- 3. The government recognizes the ever-increasing difficulty operators are encountering in hiring mission-qualified pilots. In response to this situation the government has developed provisions for contractors to conduct "On Contract" pilot operational training. This program has been designed with the intent of providing operational training opportunities to contractors seeking to upgrade pilots into new aircraft, and to provide operational training for pilots with little or no previous natural resource/wildland fire experience. This program contains significant conditions and restrictions. Adherence to these guidelines is critical for success of the program. See Exhibit 19

**B. Pilot Authority and Responsibilities**

- 1. The Pilot-In-Command (PIC) is responsible for the safety of the aircraft, loading and unloading of occupants and cargo. The pilot shall comply with the directions of the Government, except when in the pilot's judgment compliance will be a violation of applicable federal or state regulations or contract provisions. The pilot has final authority to determine whether the flight can be accomplished safely and shall refuse any flight or landing which is considered hazardous or unsafe.
- 2. The pilot is responsible for computing the weight and balance for all flights and for assuring that the gross weight and center of gravity do not exceed the aircraft's limitations. Pilots shall be responsible for the proper loading and securing of all cargo.

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Load calculations (Exhibit 13, Form 5700-17/OAS-67) shall be computed and completed by the pilot using appropriate flight manual hover performance charts.

3. Smoking is prohibited within 50-feet of fuel servicing vehicle, fueling equipment, or aircraft.
4. After engine(s) shutdown, the pilot may exit the aircraft while the rotor(s) are turning if the Rotorcraft Flight Manual (RFM) allows and the pilot remains within the arc of the rotor(s). The pilot shall coordinate this action with the Helicopter Manager. If not allowed by the RFM, aircraft must be shutdown and rotors stopped for pilot to exit aircraft or change seats.
5. Pilot will use an approved 14 CFR 135/121 or appropriate 133 or 137 cockpit checklist for all flight operations.
6. Toe-in, single-skid, step-out landings are prohibited.
7. Equipment such as radios, survival gear, fire tools, etc., shall be located in or on the aircraft in such a manner as to potentially not cause damage or obstruct the operation of equipment or personnel. All cargo shall be properly secured.
8. The pilot shall not permit any passenger in the aircraft or any cargo to be loaded therein unless authorized by the CO.
9. Passenger Briefing

Before each takeoff, the PIC shall ensure that all passengers have been briefed in accordance with the briefing items contained in 14 CFR 135. Briefing shall include the following; Personal Protective Equipment (PPE), Shut-Off Procedures for Battery and Fuel, and Aircraft Hazards.

10. Flight Plans

Pilots shall file and operate on a FAA, ICAO, or agency flight plan. Contractor flight plans are not acceptable. Flight plans shall be filed prior to takeoff when possible.

11. Flight Following

Pilots are responsible for flight following with the FAA, ICAO, or in accordance with FS or DOI-Bureau approved flight following procedures, which includes Automated Flight Following (AFF) and radio check-ins.

12. Manifesting

Prior to any takeoff, the PIC shall provide the appropriate FS or DOI dispatch office/coordination center or helibase with current passenger and cargo information.

13. Fuel Reserve

To provide adequate fuel reserve all operations shall comply with 14 CFR 91 for VFR (20-minutes reserve).

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**C. IFR/Night Flight**

Requires US Forest Service approval.

**D. Flights with Cowling(s) or Doors Open/Removed**

The Contractor is responsible for removal, reinstallation and security of the doors. All loose items must be secured prior to flight with doors open/removed (velcro is not considered a secure attachment). Flights with cowlings removed are not permitted. The aircraft external registration number shall be displayed in such a manner to not be compromised.

**E. Bucket Operations**

The following procedure shall be used for all bucket operations:

1. Determine allowable payload using the Interagency Helicopter Load Calculation, appropriate HOGE helicopter performance charts, and current local temperature and pressure altitude. Partial dips for performance planning purposes are not authorized.
2. At the beginning of the fuel cycle, bucket capacity shall be adjusted so that the bucket, when filled to the adjusted capacity, does not exceed the allowable payload.
3. Helicopters equipped with electronic hook load measuring systems that provide cockpit readout of the actual external load and a bucket that is equipped with a gating system that allows part of the load to be released while retaining the remainder of the load is authorized.
4. For calculation of the allowable bucket payload use 8.3 pounds per gallon for water. When mixed fire retardant is being delivered by bucket, use the actual weight per gallon of the mixed retardant.
5. Bucket capacity at each position or adjustment level shall be marked on the bucket. Collapsible buckets with cinch straps shall only be adjusted to marked graduations (i.e., 90%, 80%, 70%). Intermediate graduations or capacities below the manufacturer's minimum graduation (by tying knots, etc.) are prohibited.
6. Buckets shall be attached directly to the belly hook unless the pilot is approved for vertical reference.
7. Extension (Tag) lines of less than 50-feet are not permitted for bucket operations
8. Aircraft equipped with a tail rotor and conducting external load operations (excluding class A loads) will be limited to an airspeed of 80 knots indicated or the airspeed limitation established by the rotorcraft flight manual, whichever is less. All other aircraft conducting external load operations shall comply with applicable Rotorcraft Flight Manual Limitations.
9. When conducting external load operations, rotors will remain above the canopy, or aircraft will operate within an opening no less than 1 ½ times the main rotor diameter (e.g. an aircraft with a 48' main rotor diameter would require a 72' diameter opening).

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**F. Dual Controls**

Dual controls are required and shall be made accessible to an approved agency Helicopter Inspector Pilot (HIP) for all pilot performance evaluations. During flight operations the front seat not occupied by a pilot may only be occupied by a Helicopter Manager, or a briefed and authorized aerial observer.

**G. Exemption for Transportation of Hazardous Material (HazMat)**

1. Helicopters may be required to carry hazardous materials. Such transportation shall be in accordance with DOT Special Permit and the DOI or FS Aviation Transport of Hazardous Materials Handbook/Guide (NFES 1068). A copy of the current Special Permit and handbook/guide and emergency response guide shall be aboard each aircraft operating under the provisions of this Special Permit and can be found at this website:  
<http://amd.nbc.gov/library/handbooks.htm>
2. It is the responsibility of the Contractor to ensure that Contractor employees have received training in the handling of hazardous materials in accordance with 49 CFR 172. Documentation of this training shall be retained by the company in the employee's records and made available to the Government as required. Training is available at this website:  
<https://www.iat.gov/Training/modules/a110/pre-110.html>
3. The pilot shall ensure personnel are briefed of specific actions required in the event of an emergency. The pilot shall be given initial written notification of the type, quantity, and the location of hazardous materials placed aboard the aircraft before the start of any project. Thereafter, verbal notification before each flight is acceptable. For operations when the type and quantity of the materials do not change, repeated notification is not required.

**C-11 Contractor's Environmental Responsibilities**

- A. The Contractor is responsible to ensure that all maintenance, fueling, and flight activities do not cause environmental damage to property or facilities.
- B. The Contractor shall be responsible for all cleanups of fuel, oil, and retardant contamination on airport ramps, retardant sites, parking areas, landing areas, etc., when caused by Contractor aircraft or personnel when cleaning paved areas, the contractor shall utilize cleaning agent that are biodegradable and non-toxic. Contaminated soils shall be removed to appropriate containers and disposed of as hazardous waste.
- C. The Government may, at its option, assign an area to be utilized by the Contractor for storage of equipment used in support of Contract performance. Oil, solvents, parts, engines, etc. shall be stored and utilized in a manner consistent with acceptable safety, health and environmental concerns.
- D. The contractor shall ensure that they are in compliance with 40 CFR Part 112: Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Plan Requirements (SPCC).

An SPCC plan is required for each mobile fueler used on this contract regardless of bulk storage container (tank) size.

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**C-12 Personnel**

**A. General**

1. Pilots, fuel servicing personnel, and mechanics shall speak English fluently and communicate clearly.
2. Only essential crewmembers are authorized on tactical flight missions. The Mechanic and Fuel Service Vehicle Driver are considered non-essential crew members and are not allowed to be onboard the helicopter during tactical flight missions.

**B. Pilot Approvals and Qualifications and Background Investigation**

1. Interagency Pilot Inspectors will verify that Contractor pilots meet the experience and qualification requirements under this contract.
2. Each PIC shall, at the discretion of the Government, pass an agency flight evaluation check. The flight check will be in an aircraft supplied by the Contractor at no expense to the Government. The satisfactory completion of the evaluation flight will not substitute for any of the total flight hour requirements listed in this clause.
3. Pilots shall complete appropriate portions of the Helicopter Pilot Qualifications and Approval Record (Form FS-5700-20a) prior to helicopter pilot inspector evaluation. When approved, each pilot will be issued an Interagency Helicopter Pilot Qualification Card documenting: Company, make, model and series of aircraft approved to operate and the missions each pilot is approved to perform. Pilot cards are contractor specific and are non-transferable. The regional helicopter inspector pilot, with the concurrence of the national helicopter program manager, will be the final authority in determining the number of aircraft and/or vendors for which the pilot will be carded.
4. Upon award the successful bidder will furnish and immediately submit a completed electronic Standard Form (SF) 85P and supporting documents to Immanuel West of the U.S. Forest Service for all pilots operating under this contract. The following information will be required for each pilot to be reviewed:
  - a. Complete name (first, middle, last)
  - b. Date of birth
  - c. Place of birth
  - d. Social security number
  - e. Working contact phone number.
  - f. Contractor email address will be provided

Applicants shall provide the required information to Immanuel West at [iwest@fs.fed.us](mailto:iwest@fs.fed.us) or by fax to (505) 563-9991. Mr. West can be reached at (505) 563-9211. Once the information is received, the applicant will be sent the information needed to access the secure on-line database system so they can complete their SF-85P electronically. A paper version of the SF-85P will not be accepted. Applicants can obtain information about the new investigation process at <http://www.usda.gov/da/pdsd/>. Costs incurred for background investigations will be recovered by the government for all pilots investigated by issuance of a Bill for Collection

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Contract Pilots will be permitted to operate aircraft under the initial contract period while the initial background investigation is being conducted. Contractor Pilots must receive a favorably adjudicated Minimum Background Investigations (MBI) in order to continue operating under this contract. If a pilot fails to meet this requirement that pilot shall be removed from the contract and shall be replaced.

**C. Pilot Requirements - General**

1. Commercial or Airline Transport Pilot (ATP) Certificate with appropriate rating (Rotorcraft-Helicopter) and a valid Class I or Class II FAA Medical Certificate.
2. Written evidence for make and model to be flown or 14 CFR 135 Airman Competency Proficiency Check (as applicable FAA Form 8410-3 or equivalent).
3. Written evidence of an Equipment Check Endorsement for Restricted Category helicopters by the Chief Pilot (as applicable).
4. Written evidence of qualification to transport external loads.
5. Notwithstanding, 14 CFR 61.58(b), "Recent Flight Experience" helicopter PICs shall meet requirements of 14 CFR 61.58(a).
6. Proof of compliance with 14 CFR Part 61.57 (a) (1) (i) and (ii)
7. Proof of qualifications to meet 14 CFR 137.
8. At the CO's discretion, each pilot shall pass an agency flight evaluation in make, model, and series -conducted over typical terrain.
9. The contractor shall ensure that pilots meet all requirements as outlined in paragraph C-12 D Pilot Requirements-Experience after award. The contractor shall verify all pilot hours submitted on form FS-5700-20b as determined from a certified pilot log or permanent record to ensure accuracy. Additionally, the contractor shall identify previous employers and submit the information on form FS 5700-20b (form pending) found in Exhibit 18. The information submitted is subject to verification by an Interagency Pilot Inspector.
10. Pilots may function as mechanics providing:
  - a. The pilot meets all the Mechanic Qualifications of this Contract.
  - b. Pilot duty limitations will apply to the pilot when functioning as a mechanic.
  - c. When pilots act as a mechanic, mechanic duties in excess of 2-hours will apply as flight hours on a one-to-one basis toward flight hour limitations.
  - d. A mechanic, other than the pilot, shall perform 50-hour, 100-hour, or progressive inspections.
  - e. If approved by the Contractor's Operations Specifications, and in accordance with 14 CFR 43.3(h), 43.5 and 43.7, pilots may perform preventive maintenance on the aircraft.

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### D. Pilot Requirements - Experience

Pilots shall have accumulated as pilot-in-command (PIC) the minimum flight hours listed below. Flight hours shall be determined from a certified pilot log. Further verification of flight hours may be required at the discretion of the CO.

#### 1. All Helicopters

#### Minimum Experience Flying Hours

Total Time..... 1,500

#### Pilot -in-command hours:

Total Pilot-in Command (Helicopter)..... 1,500

Helicopter, Preceding 12 months ..... 100

Weight Class ..... 100

Make and Model ..... 50\*

Make, Model, Series, and Last 12-Months..... 10

And

Turbine helicopter operations..... 100

Or

Piston helicopter operations..... 200

\* Flight hour requirements may be reduced by 50% if the pilot submits evidence of satisfactory completion of the manufacture's approved pilot ground and flight procedures training in the applicable make and model.

#### 2. Additional Special Mission Requirements:

Contract Pilot-in-command

(as related to the applicable Special Mission approval):

#### Minimum Experience Flying Hours

Mountain Flying (see 1)..... 200

Mountain Flying Experience - Make and Model..... 10

Long Line Vertical Reference (VTR) Experience..... 10

Annual Long Line VTR Recurrency Training..... 2

1. Mountain Flying - Helicopter Pilot: 200 hours experience operating helicopters in mountainous terrain identified in 14 CFR 95 Subpart B-Designated Mountainous Area. Operating includes maneuvering and numerous takeoffs and landings to pinnacles, ridgelines and confined areas.

### E. Pilot - Equipment Proficiency

Pilots shall be required to demonstrate proficiency with all mission equipment.

### F. Pilot - Vertical Reference Proficiency

1. Pilots may be required to demonstrate this capability during an agency evaluation. (Exhibit 10, Interagency Guidelines for Vertical Reference/External Load Training Standards)
2. Vertical reference qualified pilots shall maintain proficiency in vertical reference or external load operations. When active under Contract for a period of 30-consecutive days and no vertical reference activity occurs, the pilot will be provided a 1-hour proficiency flight at Government expense. This will include snorkel operations on tanked aircraft.



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3. The Contractor may be considered unavailable for failure to maintain vertical reference proficiency.

**G. Co-pilot Requirements (if applicable)**

Co-pilots/Second-In-Command (SIC) shall meet requirements of operator's certificate. They are not issued a Helicopter Pilot Qualification card.

**H. Mechanic Qualifications**

1. The mechanic shall have a valid FAA mechanic certificate with airframe and power plant ratings, and shall have held the certificate or foreign equivalent with both ratings for a period of 24-months. The mechanic shall have been actively engaged in aircraft maintenance as a certificated mechanic for at least 18-months out of the last 24-months.
2. The mechanic shall have 12-months experience as an Airframe & Power Plant (A&P) mechanic or foreign equivalent in maintaining helicopters. Three months experience shall have been in the last 2 years.
3. The mechanic must show evidence of maintaining a helicopter of the same make and model as offered under "field" conditions for at least 1-full season. Three months experience maintaining a helicopter away from the operator's Principle Base of Operations, and while under minimal supervision, will meet this requirement. **Operator may provide an additional A&P mechanic for field experience training. The additional A&P mechanic is not required to be carded.**
4. Mechanics shall have satisfactorily completed a manufacturer's maintenance course or an equivalent Forest Service or DOI-approved Contractor's training program for the make and model of helicopter offered, or show evidence of the mechanic has 12-months maintenance experience on a helicopter of the same make and model offered.
5. A company representative, other than the mechanic in question, shall certify that each mechanic offered under this contract has met the minimum certification, training, and experience qualifications of this section.
6. When requested by the Government, each Mechanic shall furnish a valid Interagency Mechanic Qualification card for review. The designated Interagency Maintenance Inspector shall issue the card for the duration of the Contract, including any optional periods. Should the mechanic leave the employment of the Contractor, the mechanic shall surrender the card to the Contractor upon termination of employment.

**I. Availability of Mechanics**

1. A mechanic (other than the pilot) shall maintain the helicopter in accordance with the Contractor's FAA approved Maintenance Program.
2. When the mechanic serves as the fuel servicing vehicle driver, the more stringent of the duty limitations apply.

**J. Fuel Servicing Vehicle Driver Qualifications**

1. The Contractor shall furnish a fuel servicing vehicle driver (FSVD) for each day the helicopter is available. The driver shall meet all DOT requirements.

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2. Driver(s) shall be experienced in proper fueling procedures and be familiar with the safety equipment installed on the fuel-servicing vehicle.

**C-13 Conduct and Replacement of Personnel**

- A. Performance of Contract services may involve work and/or residence on Federal property (i.e., National Forests and National Parks, etc.). Contractor employees are expected to follow the rules of conduct established by the manager of such facilities that apply to all Government or non-Government personnel working or residing on such facilities. The Contractor may be required to replace employees who are found to be in noncompliance with Government facility rules of conduct.
- B. Personnel, who perform ineffectively, refuse to cooperate in the fulfillment of the Contract objectives, are unable or unwilling to adapt to field living conditions, or whose general performance is unsatisfactory or otherwise disruptive may be required to be replaced.
- C. The CO shall notify the Contractor of specifics of the unsatisfactory conduct and/or performance by the Contractor's personnel. The determination of unacceptability is at the sole discretion of the CO. When directed by the CO, the Contractor shall replace unacceptable personnel.

**C-14 Suspension and Revocation of Personnel**

- A. The CO may suspend a contractor pilot, mechanic, or fuel servicing vehicle driver who fails to follow safe operating practices, does ineffective work, or exhibits conduct detrimental to the purpose for which contracted, or is under suspension or revocation by another government agency.
- B. Upon involvement in an Aircraft Accident or NTSB Reportable Incident (see 49 CFR Part 830), a pilot operating under this contract shall be suspended from performing pilot duties under this contract and any other activity authorized under the interagency pilot qualification card(s) issued to the pilot pending the investigation outcome.
- C. Upon involvement in an Incident-with-Potential as defined under mishaps, a pilot operating under this contract may be suspended from performing pilot duties under this contract and any other activity authorized under the interagency pilot qualification card(s) issued to the pilot pending the incident investigation outcome.
- D. When a pilot/mechanic is suspended, and when requested, the interagency pilot/mechanic qualification card(s) shall be surrendered to the CO. Suspension will continue until:
  1. The investigation findings and decision indicate no further suspension is required and the interagency pilot/mechanic qualification card(s) is returned to the pilot/mechanic; or
  2. Revocation action to cancel the interagency pilot/mechanic authorization(s) is taken by the issuing agency in accordance with agency procedures.

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**C-15 Substitution or Replacement of Personnel, Aircraft, and Equipment**

- A. The Contractor may substitute or replace aircraft or equipment equal to or greater than contract awarded performance after receipt of written approval by the Contracting Officer.
- B. Request for substitution shall be made at least 10 (ten) days prior to the proposed exchange, except for unforeseen conditions.
- C. When pilots are exchanged or replaced, training and familiarization costs, including any required flight time up to 3 (three) hours, shall be accomplished at the Contractor's expense. The Contracting Officer will determine the necessary amount of flight time up to 3 hours. This is not intended to affect cross shifting of Pilots that are familiar with the operating area or to affect approved relief pilots.

**C-16 Flight Hour and Duty Limitations**

- A. All flight time, regardless of how or where performed, except personal pleasure flying, will be reported by each flight crewmember and used to administer flight hour and duty time limitations. Flight time to and from the Host Base as a flight crewmember (commuting) will be reported and counted toward limitations if it is flown on a duty day. Flight time includes, but is not limited to: military flight time; charter; flight instruction; 14 CFR 61.56 flight review; flight examinations by FAA designees; any flight time for which a flight crewmember is compensated; or any other flight time of a commercial nature whether compensated or not.
- B. Various work schedules are acceptable as per Section B. The compliment of contract personnel shall be on the same work schedule however days off may be staggered. (Examples of work schedules are 12 on and 2 off, 12 on and 12 off)

**C. Pilots**

- 1. Pilot flight hour computations shall begin at liftoff and end at touchdown and will be computed from the flight hour meter installed in the aircraft. All flight hours shall fall within duty hour limitations.
- 2. Flight time shall not exceed a total of 8-hours per day.
- 3. Pilots accumulating 36 or more flight hours in any 6-consecutive duty-days shall be off duty the next day. Flight time shall not exceed a total of 42-hours in any 6-consecutive days. For the purpose of this clause, after any 1-full off-duty day, pilots begin a new 6-consecutive day duty-period, provided during any 14-consecutive day period, each pilot shall have two full days off-duty. Days off need not be consecutive.
- 4. Assigned duty of any kind shall not exceed 14-hours in any 24-hour period. Within any 24-hour period, pilots shall have a minimum of 10-consecutive hours off duty immediately prior to the beginning of any duty-day. Local travel up to a maximum of 30-minutes each way between the work site and place of lodging will not be considered duty time. When one-way travel exceeds 30 minutes, the total travel time shall be considered as part of the duty day. Note: The above travel time in excess of 30 minutes is considered duty time but is not compensable under standby or extended standby.

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5. Duty includes flight time, ground duty of any kind, and standby or alert status at any location.
6. During times of prolonged heavy fire activity, the Government may issue a notice reducing the pilot duty-day/flight time and/or increasing off-duty days on a geographical or agency-wide basis.
7. Flights point-to-point (airport to airport, heliport to heliport, etc.) with a pilot and co-pilot shall be limited to 10-flight hours per day. (A helicopter that departs "Airport A," flies reconnaissance on a fire, and then flies to "Airport B," is not point-to-point).
8. Pilots may be relieved from duty for fatigue or other causes created by unusually strenuous or severe duty before reaching duty limitations.
9. When pilots act as a mechanic, mechanic duties in excess of 2-hours will apply as flight hours on a one-to-one basis toward flight hour limitations.
10. Relief, additional, or substitute pilots reporting for duty under this Contract shall furnish a record of all duty and all flight hours during the previous 14-days.

**D. Mechanics**

1. Within any 24-hour period, personnel shall have a minimum of 8 consecutive hours off duty immediately prior to the beginning of any duty day. Local travel up to a maximum of 30 minutes each way between the work site and place of lodging will not be considered duty time. When one-way travel exceeds 30 minutes, the total travel time shall be considered as part of the duty day. . Note: The above travel time in excess of 30 minutes is considered duty time but is not compensable under standby or extended standby.
2. Mechanics will have a minimum of 2 full calendar days off duty during any 14 day period. Days need not be consecutive.
3. Duty includes standby, work, or alert status at any location.
4. Mechanics may be removed from duty for fatigue or other causes created by unusually strenuous or severe duty before reaching duty limitations.
5. The mechanic shall be responsible to keep the Government apprised of their ground duty limitation status.
6. When the mechanic serves as the fuel servicing vehicle driver, the more stringent of the duty limitations apply.

**E. Fuel Servicing Vehicle Drivers**

1. It is the Contractors' responsibility to insure that employees comply with DOT Safety Regulation 49 CFR Part 390-399, including duty limitations.

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2. Fuel servicing vehicle drivers may be removed from duty for fatigue or other causes created by unusually strenuous or severe duty before reaching duty limitations.
3. The fuel servicing vehicle driver will be responsible to keep the Government apprised of their ground duty limitation status.
4. Notwithstanding DOT Safety Regulation 49 CFR Part 390-399, the fuel servicing vehicle driver shall have a minimum of two (2) full calendar days off duty during any 14-day period. Off duty days need not be consecutive.

**C-17 Accident Prevention and Safety**

- A. The Contractor shall furnish a copy of all reports required to be submitted to the Federal Aviation Administration (FAA) by the Federal Aviation Regulations (FAR) that relate to Pilot and maintenance personnel performance, aircraft airworthiness or operations.

Examples of these reports are paragraphs 14 CFR part 135.415 Mechanical Reliability Reports and Part 135.417 Mechanical Interruption Summary Reports required of the FAR, 49 CFR Part 830, and FAA Form 8010-4, Malfunction or Defect Report.

- B. Following the occurrence of a mishap, the Contracting Officer will evaluate whether noncompliance or violation of provisions of the contract, the Federal Aviation Regulations applicable to the Contractor's operations, company policy, procedures, practices, programs, and/or negligence on the part of the company officers or employees may have caused or contributed to the mishap. The occurrence of the mishap may constitute default in the performance of the contract. A finding of default under the above cited conditions shall entitle the Government to exercise the right to terminate the contract for cause as provided in the "Contract Terms and Conditions" as stated herein.
- C. The Contractor shall keep and maintain programs necessary to assure safety of ground and flight operations. The development and maintenance of these programs are a material part of the performance of the contract. (See Clause E7 Synopsis of Safety Program) When, in the sole judgment of the Contracting Officer, the safety programs will not adequately promote the safety of operations, the Government may terminate the contract for cause as provided in the "Contract Terms and Conditions" as stated herein.
- D. The Contractor shall fully cooperate with the Contracting Officer in the fulfillment of this clause. The Contracting Officer may suspend performance of this contract work, during the evaluation period used to determine cause as stated above.

**C-18 Mishaps**

A. Reporting

The Contractor shall, by the most expeditious means available, notify the National Transportation Safety Board (NTSB) and the FS or DOI when an "Aircraft Accident" or NTSB reportable "Incident" occurs within any company operations, whether under the Contract or not. Also, the FS or DOI shall immediately be notified when an "Incident-with-Potential" occurs.

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**B. Forms Submission**

1. Following an "Aircraft Accident" or when requested by the NTSB following the notification of a reportable "incident," the Contractor shall provide the FS or DOI with the information necessary to complete a NTSB Form 6120.1/2.
2. The NTSB Form 6120.1/2 does not replace the Contractor's responsibility, within 5-days of an event, to submit to the FS or DOI a "SAFECOM" to report any condition, observance, act, maintenance problem, or circumstance that has potential to cause an aviation-related mishap.
3. Blank SAFECOMS and assistance in submitting SAFECOMS can be obtained from the FS or DOI. SAFECOMS may be submitted electronically at [www.safecom.gov](http://www.safecom.gov).

**C. Wreckage Preservation**

1. The Contractor shall not permit removal or alteration of the aircraft, aircraft equipment, or records following an "Aircraft Accident", "Incident", or "Incident-with-Potential" which results in any damage to the aircraft or injury to personnel until authorized to do so by the CO. Exceptions are when threat-to-life or property exists; the aircraft is blocking an airport runway, etc. The CO shall be immediately notified when such actions take place.
2. The NTSB's release of the wreckage does not constitute a release by the CO, who shall maintain control of the wreckage and related equipment until all investigations are complete.

**D. Investigation**

The Contractor shall maintain an accurate record of all aircraft accidents, incidents, aviation hazards and injuries to Contractor or Government personnel arising in the course of performance under this Contract. Further, the Contractor fully agrees to cooperate with the FS or DOI during an investigation and make available personnel, personnel records, aircraft records, and any equipment, damaged or undamaged, deemed necessary by the FS or DOI. Following a mishap, the Contractor shall ensure that personnel (pilot, mechanics, etc) associated with the aircraft shall be readily available to the mishap investigation team.

**E. Related Costs**

The NTSB, FS or DOI shall determine their individual agency investigation cost responsibility. The Contractor will be fully responsible for any cost associated with the reassembly, approval for return-to-Contract availability, and return transportation of any items disassembled by the FS or DOI.

**F. Search, Rescue, and Salvage**

The cost of search, rescue and salvage operations made necessary due to causes other than negligent acts of a Government employee shall be the responsibility of the Contractor.

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**C-19 Personal Protective Equipment**

**A. General Operations**

The Contractor shall furnish the following personal protective equipment, be operable and maintained in serviceable condition as per appropriate manufacturer's specifications.

**B. Helmets**

1. Contractor personnel shall wear a flight helmet consisting of a one-piece hard shell made of polycarbonate, Kevlar, carbon fiber, or fiberglass that must cover the top, sides (including the temple area and to below the ears), and the rear of the head. The helmet shall be equipped with a chinstrap and shall be appropriately adjusted for proper fit. The helmet shall be worn with the chinstrap fastened.
2. Flight helmets currently approved for helicopters are the: SPH-5, HGU-84P, SPH-4B, the HGU-56P manufactured by Gentex, the Alpha 200, Alpha 400 and Alpha Eagle (900) manufactured by Interactive Safety Products and the MSA Gallet LH050 (single inner visor), LH150 (single outer visor) and the LH250 (dual visor-one inner and one outer).
3. Helmets designed for use in fixed wing aircraft do not provide adequate protection for helicopter occupants and are not approved for helicopter use.

**C. Clothing**

1. Contractor personnel while flying shall wear long-sleeved shirt and trousers (or long-sleeved flight suit) made of fire-resistant polyamide or aramid material, leather boots and leather, polyamide, or aramid gloves. A shirt with long-sleeves overlapping gloves, and long-pants overlapping boots by at least 2-inches, shall be worn by the pilot(s). Personnel shall not wear clothing made of non fire-resistant synthetic material under the fire-resistant clothing described herein.
2. Nomex® or other material proven to meet or exceed specifications contained in MIL-C-83429A may be worn. Currently, the following "other" materials meet this specification:
  - a. FRT Cotton Denim Cloth, MIL-C-24915
  - b. FRT Cotton Chambray Cloth, MIL-C-24916
3. Clothing not containing labels identifying the material either by Brand Name or MIL-Spec will not be acceptable.

**D. Ground Operations**

1. While within the safety circle of a helicopter with engine(s) running and/or rotor(s) turning, all Contractor personnel shall wear the following PPE:
  - a. Shirt with long-sleeves overlapping gloves, long-pants, hardhat/flight helmet with chinstrap, boots, hearing and eye protection.

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- b. Maintenance personnel working on running aircraft are exempt from gloves, eye protection (eye protection may be worn at the option of maintenance personnel or company policy), long sleeves, and hardhat requirements.
2. During all fueling operations, fuel-servicing personnel shall wear a long-sleeved shirt, long trousers, boots, and gloves. The shirt and pants must be made of 100% cotton or other natural fiber, or be labeled as non-static.

**E. Personal Flotation Devices**

1. A personal flotation device (PFD) required by 14 CFR 91 shall be worn by each individual on board the helicopter when conducting operations beyond power-off gliding distance to shore, and during all hovering flight operations conducted over water sources such as ponds, streams, lakes, and coastal waters.
2. Automatic inflation (water activated) personal flotation devices shall not be allowed.

**C-20 Inspection and Acceptance**

In accordance with Federal Acquisition Regulation Clause 52.212-4 (a), the following is added:

**Note: Official Government logos and or reference to "Official U.S. Government Fire Fighting Vehicle" will not be permitted on contractors equipment unless approved by the CO.**

**A. Pre-Use Inspection of Equipment and Personnel**

1. After award of the Contract and any renewal thereof, an inspection of the Contractor's equipment and personnel will be made. Inspections may be scheduled by mutual agreement between the Contracting Officer and the Contractor. The inspection will take place at the Host Base or other location as approved by the Contracting Officer.
2. The aircraft, pilot, relief pilot, mechanic, fuel vehicle driver, and fuel servicing vehicle will be made available for inspection as scheduled by the CO.
3. At the scheduled inspection, the Contractor shall provide a complete listing of all FAA ADs and Manufacturer's Mandatory Service Bulletins (MSBs) applicable to the make, model, and series of aircraft being offered. Documentation of compliance to each AD and MSB will include date and method of compliance, date of recurring compliance, and an authorized signature and certificate number will be recorded. The list shall be similar to that shown in AC 43-9, as amended.
4. All components or items installed in the offered aircraft that are subject to specified time basis or schedule (time/calendar life) for inspection, overhaul, or replacement shall be listed and made available to the Government at time of inspection. The list shall include component name, serial number, service life or inspection/overhaul time, total time since major inspection, overhaul, or replacement and hours/cycles calendar time remaining before required inspection, overhaul, or replacement. The list shall be similar to that shown in AC 43-9, as amended.
5. The Contractor may be required to furnish a copy of the procedures manual and revisions as required by 14 CFR 135 (as applicable).

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6. Each fuel-servicing driver will be expected to demonstrate knowledge of correct fueling procedures; and fueling and safety equipment installed on the fuel-servicing vehicle. Contractor shall have equipment and personnel to change the filter on the fuel service vehicle as required.
7. The fuel service vehicle approval is only an indication that the vehicle meets the additional equipment requirements of this Contract, and in no way indicates that the vehicle meets any requirement of 49 CFR.
8. Contractors shall ensure all documentation submitted for pilot approvals has been verified for accuracy and completeness. Pilot evaluations or approvals will not be administered/issued until all required documentation is complete. The documentation referenced in C-20 A. 9 b shall be submitted annually for each pilot needing interagency approval *(note; the CO may require additional information and documentation)*.
9. The items described below shall be made available at the pre-use or renewal inspection:
  - a. Certificates/Contract
    - (1) Copy of 14 CFR 133
    - (2) Copy of 14 CFR 135
    - (3) Copy of 14 CFR 137
    - (4) Complete copy of awarded Contract, including modifications, with each aircraft
  - b. Pilots
    - (1) Completed "Pilots qualifications and Approval Record".  
*(USFS Form FS-5700-20a Or AMD Form 64B)*
    - (2) Completed "Flight Hour Requirements & Experience Verification form." (See Exhibit 18)  
*(This form required only for pilots seeking their initial (first time) interagency approval)*
    - (3) Signed and dated signature page from the "Operations and Safety Procedures Guide for Helicopter Pilots".
    - (4) Copy of FAA Pilot Certificate. *(Both front and back may be needed to obtain all of the required information)*
    - (5) Copy of current Medical Certificate.

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- (6) Copy of **current** FAR 135 Airman Competency / Proficiency Check. "FAA form 8410-3" for each standard category make and model helicopter the pilot seeks approval in.  
**(Required if operating aircraft listed on the operators 135 Certificate)**  
"OR"
- (7) Copy of **current** Flight Review.  
**(Required if pilot does not have a valid FAA Flight Review within the last 24 months)**  
"AND"
- (8) Copy of **current (within the last 12 calendar months)** Equipment Check Endorsement **(or comparable document (E.G. CFR 14, part 61.58 Pilot Proficiency Check))** for each Limited Use or Restricted Category make and model helicopter the pilot seeks approval in.  
**(Required if operating aircraft not listed on the operators 135 Certificate)**
- (9) Copy of FAR 133 endorsement.
- (10) Copy of FAR 137 endorsement.
- (11) It is the company's responsibility to submit verification of pilot security background checks for all pilots working under this exclusive use contract to the National Helicopter Program Manager.
- (12) Completed Load Calculation form for each aircraft make/model in which the pilot is seeking approval. Included with the Load Calculation will be notations indicating what chart(s) are used. **(i.e. page and illustration or chart number)**
- (13) Completed "Vertical Reference Flight Training Endorsement" **(required for long-line operations and snorkel operations conducted in aircraft not equipped with mirrors for external load operations)**
- (14) Copy of the front and back of the pilots most recently issued Interagency Helicopter Qualification Card. **(If card cannot be produced it may be necessary to demonstrate proficiency for all Special Use operations required under the contract)** Completed "Pilots Qualifications and Approval Record". **(USFS Form FS-5700-20a Or AMD Form 64B)**
- (15) Prior to receiving an interagency "Pilot Qualification Card", all helicopters pilots are required to complete the on-line training modules for helicopter fire operations at least every 36 months. These modules are listed on the Interagency Aviation Training (IAT) website at <https://www.iat.gov/>. Pilots must sign up, create a profile and after completion of the modules print a copy of the certificates. A copy of the certificate must be presented to the Helicopter Inspector Pilot before an Interagency Helicopter Pilot Qualification card will be issued.

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**(16) Equipment Check Endorsement**

An Equipment Check Endorsement shall include, at a minimum, documentation of the following training;

- a. Operations Training;** 1.0 hour Minimum  
Company policies & procedures, Operations Specifications, HazMat, contract requirements, etc.
- b. Aircraft Ground Training;** 2.0 hour Minimum  
Aircraft systems, aircraft maintenance practices, radio programming, GPS programming, etc.
- c. Aircraft Flight Training;** 1.0 hour Minimum  
Aircraft familiarization, normal procedures, emergency procedures, in flight programming of radios and GPS, etc. (note; this training shall be in addition to any contractually required special mission training, i.e., long-line training, etc.)

**c. Equipment**

- (1) Appropriate equipment installed, or available to be installed, on the aircraft for the flight evaluation; i.e. dual controls, communications and navigation equipment and buckets.
- (2) Longline(s) of at least 150 feet and a suitable weight shall be available. (if applicable)
- (3) Aircraft maintenance records
- (4) Fuel servicing vehicle available

**d. Mechanic(s)**

- (1) A&P Mechanic available
- (2) Completed A&P Qualifications and Approval Record Form with applicable qualifying mechanic's records.

**C-21 Pre-Use Inspection Expenses**

- A. All operating expenses incidental to the inspection shall be borne by the Contractor.
- B. Pilot evaluation flights may require up to 2-hours of flight time for each pilot as deemed necessary by the CO. All evaluation flights shall be performed in a helicopter of like make and model furnished for the contract. (Exhibit 11, Helicopter Make/Model/Series Lists)
- C. The Contractor shall ensure that sets of fully operational dual flight controls are installed in the aircraft during all pilot evaluation flights.
- D. The Contractor will not be charged for the costs incurred by the Government on the initial pre-use inspection.

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**C-22 Re-inspection Expenses**

When re-inspection is necessary because Contractor equipment and/or personnel did not satisfy the initial inspection, or when inspecting substitute personnel and/or equipment subsequent to the initial pre-use inspection, the Contractor may be charged the actual costs incurred by the government in performing the re-inspection. Re-inspections will be performed at a time and location mutually agreed to by the Contractor and CO.

**C-23 Inspections During Use**

- A. At any time during the Contract period, the CO may require inspections/tests as deemed necessary to determine that the Contractor's equipment and/or personnel currently meet specifications. Government costs incurred during these inspections will not be charged to the Contractor.
- B. Should the inspections/tests reveal deficiencies that require corrective action and subsequent re-inspection, the actual costs incurred by the Government may be charged to the Contractor.
- C. When the aircraft becomes unavailable due to mechanical breakdown, the Government reserves the right to inspect the aircraft after the Contractor's mechanic has approved the aircraft for return to service. For items covered under 14 CFR 135.415, the Contractor shall furnish the CO with a completed copy of FAA Form 8010-4, Malfunction or Defect Report, or a Helicopter Association International (HAI) Maintenance Malfunction/Information Reporting Form 9 (as applicable).

**C-24 Contract Period and Renewal Option**

The Contract period shall extend from date of the award through April 30, 2009. However, at the option of the Government, the Contract may be renewed for additional 1 year option periods not to exceed three option periods, provided that the CO serves notice of intent to renew at least 60-days prior to Contract expiration. The renewal will be with the same terms and conditions. Availability shall be offered for base year and each optional renewal period (See Section B, Schedule of Items); however, the non fuel portion of the Government established flight rate will be subject to the provisions of Section D, Economic Price Adjustment Clause.

**C-25 Mandatory Availability Period (MAP) Including Extended and Optional Use**

- A. MAP will begin on the date stipulated in the Schedule of Items unless:
  - 1. The Government fails to award the contract at least 10 days prior to the established start date
  - Or
  - 2. By mutual consent, a new starting date is established. When a new starting date is established, the number of net days in the MAP will remain the same.
- B. Extended Use. The MAP may be extended on a day-to-day basis either prior to the starting date or subsequent to the ending date set forth in the Schedule of Items provided that no break in service occurs and that such extension is agreed to by both parties in writing prior to extension and that all terms, conditions, and specifications contained in this contract apply.

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- C. During the MAP and any extensions thereof, availability is required 14 hours each day beginning at start of morning civil twilight unless otherwise specified by the Contracting Officer. Contracts requiring night capability require 24-hours per day availability.
- D. Optional Use. When a break in service occurs, outside of the MAP or extended use, the aircraft may be hired under the optional use period clause. (Payment will be in accordance with C-34, Payment for Service in the Optional Use Period.)

**C-26 Daily Availability Requirements**

- A. Equipment. The aircraft and related equipment will be available 14 hours per day and will not be removed from the host base without the approval of the Contracting Officer.
- B. Personnel. Personnel will be in one of the following categories of availability:
  - 1. Standby: Personnel will be on Standby status each day. The beginning of the Standby period will be set by the CO and may be adjusted from day-to-day. Once Standby begins, the standby period will continue for 9 consecutive hours regardless of the payment status of the aircraft. During the Standby period, with the exception of the first 30 minute period to accommodate preflight, the personnel/aircraft shall be able to respond to a dispatch within 15-minutes unless an alternate response time is established by the CO.
  - 2. Extended Standby (that period over 9 hours per day per authorized crew member) is not intended to compensate the Contractor on a one-to one basis for all hours necessary to service and maintain the aircraft, nor is it paid while crew is traveling to and from place of lodging. Extended standby must be specifically ORDERED and documented on the Flight Use Invoice by the Government and only in unusual circumstances will the Government compensate the Contractor for extended standby when aircraft is not also available for immediate dispatch. Extended Standby is not applicable to double-flight crews. Extended Standby applies only to the awarded number of compensable personnel provided with each aircraft.
  - 3. Authorized Break. During the standby period, requirements may be modified by the CO to allow Contractor's personnel time off away from the assigned work location or to conduct routine maintenance. No deduction of availability will be made for such authorized breaks except when Contractor personnel fail to return to Standby upon request. The Contractor will provide the CO with information on how to contact Contractor personnel. Personnel will be allowed 1-hour to return to standby status after the contact attempt is made. Failure to return to work within 1-hour will result in loss of availability.
  - 4. Release-from-Duty. The Contractor's personnel may be released and be considered off duty prior to completion of their individual crew duty limitation period. Once released, the Contractor personnel are not required to return to Standby status the same day. Service shall be recorded as fully available provided the CO has approved release of the Contractor's personnel in advance.

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5. Additional maintenance days for scheduled maintenance. During the MAP, contractor may, with the approval of the CO, elect to use 2 additional non-paid calendar days for the accomplishment of **scheduled maintenance**. These 2 days need not be consecutive, however they will each be full calendar days. Contractor shall request approval from the CO at least 48 hours prior to the initiation of the additional scheduled maintenance days. Contractor will not be assessed unavailability for performance purposes and will not be paid for the unavailability.

**C-27 Unavailability**

- A. The Contractor will be considered to be "Unavailable" whenever equipment or personnel are unable to perform or fail to perform the requirements of this Contract. Also the aircraft will be considered unavailable when the pilot, mechanic, or fuel servicing vehicle driver cannot perform because of duty limitations unless a relief crew is provided as per Section B. Unavailability however, will not be assessed when pilot(s) has reached flight and/or duty limitations while performing under this Contract when the conditions in C.16 Flight and Duty Limitations occur.
- B. The Government may exercise its right to terminate for cause if there is unavailability in excess of three (3) full, consecutive calendar days (not to include the two approved scheduled maintenance days) or occurrence of unavailability during ten (10) percent of the total days in the Mandatory Availability Period
- C. Unavailability status will continue until the deficiency is corrected. It is the Contractor's responsibility to inform the CO whenever the equipment or personnel become available. Inspection by the Government after a performance failure has occurred will be made as promptly as possible after the Contractor has given notice that the deficiency has been corrected. When inspection reveals that the failure has been corrected, the Contractor will be considered in "Available" status from the time the Contractor gives notice to the Government that the deficiency has been corrected. If consistent failure to respond to dispatches occurs, the CO retains the right to require check flights at Contractor's expense.
- D. Periods of Unavailability will be accumulated for the day and posted on the Flight Use Invoice as actual clock unavailability. There will no longer be a need to round to the nearest quarter hour or reduce unavailability by 1/56.

**C-28 Ordering Additional Personnel or Equipment**

The CO may order an additional pilot or crewmember or aircraft on an intermittent basis. The pilot or crewmember or aircraft may be furnished at the option of the Contractor. All terms and conditions of the Contract will apply.

**C-29 Additional Aircraft after Contract Award**

After Contract award, aircraft with performance equal to or higher than aircraft awarded under this contract may be added at the CO's option at the same price as aircraft originally awarded. The flight rate will be for the make and model being added. All terms and conditions of the contract will apply.

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**C-30 Payment Procedures**

- A. All flight time, daily availability and other authorized charges or deductions shall be recorded on a flight use invoice in Aviation Business System (ABS). At the end of each day data shall be entered and reviewed by the Government and the Contractor's Representative.
- B. Approved invoices will be packaged electronically for payment on a semi-monthly basis for submission through the ABS process and electronically forwarded to the contractor for review and approval. Corrections shall be returned electronically to the designated representative for resolution. Upon approval, the package will be electronically forwarded to the Albuquerque Service Center (ASC) for payment. Invoices accumulated during the first half of the month will be processed for payment about the 15<sup>th</sup> and those accumulated during the last of the month will be processed about the 1<sup>st</sup> of the following month.

Go to <http://www.fs.fed.us/business/abs> "Getting Started" for instructions and more information.

- C. Upon completion of the MAP or any extension thereof, final payment will not be made until all Government-furnished property has been returned and a Contract Release form has been completed. The final Flight Use Invoice payment will be accompanied by the completed Contract Release and Transfer of Property Form.

**C-31 Payment for Flight**

- A. Flight time will be computed in hours and tenths of hours as recorded by the collective activated flight hour meter (Hobbs) on the helicopter.
- B. Payment for flight time will be made only for government authorized flight.
- C. The Government does not guarantee any flight time.

**C-32 Payment for Availability**

- A. Payment of availability will be made at the applicable daily rate in the Schedule of Items and will be recorded in ABS as appropriate.
- B. The Government will pay daily availability as specified in C-30. The maximum amount of availability to be earned per day is the daily availability offered amount.
- C. Availability for aircraft and crewmembers (maximum 14-hours-single crew) will be ordered, measured, and recorded each day.

**C-33 Payment for Extended Standby**

Extended Standby (that period over the first 9 hours of standby per day, per authorized crewmember) will be measured in hours (rounded to the next full-hour and paid at the rate specified in the Schedule of Items) for all Extended Standby ordered by the CO and performed by the Contractor when the crew meets the Standby requirement in accordance with Section C, Daily Availability Requirements.

Extended Standby is applicable to Alaska assignments

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**C-34 Payment for Service in the Optional-Use Period**

**A. Daily Availability Rate plus Specified Flight Rate Method**

1. The Contractor will be paid for availability and flight in accordance with C-31, Payment for Flight and C-32, Payment for Availability.
2. Unavailability will be deducted in accordance with C-27, Unavailability.
3. Any additional payments will be made in accordance with C-44, Miscellaneous Costs to the Contractor.

OR

**B. Optional-Use Hourly Flight rate Method**

1. The Contractor will be paid at the optional-use hourly offered price for the actual hours flown or a minimum of 2 (two) hours per day, whichever is greater.
2. If the aircraft becomes unavailable, actual flight time will be paid. The 2-hour minimum does not apply in this case.

**C. Ferry time of aircraft to and from the point of hire from the Contractor's base of operations or current aircraft location, whichever is closer, will be paid at the applicable flight rate. If a fuel servicing vehicle is required, mileage to and from the point of use from the Contractor's base of operations or current location that the fuel servicing vehicle is stationed, whichever is closer, will be paid at the rates stipulated in C-39, Payment for Fuel Servicing Vehicle Mileage.**

**C-35 Payment for Additional Aircraft and Personnel**

- A. When additional aircraft and/or personnel are ordered by the Government, the Contractor may furnish them, if available. All terms and conditions of this contract will apply to their use except as set forth below:**
1. Ferry or transportation from the point of dispatch and return will be paid at the applicable flight rate and proportionate availability, if applicable.
  2. Such aircraft will be released when the Government's need ceases to exist
  3. Use of additional helicopters will not affect the number of days in the Mandatory Availability Period.
- B. The Government may order an additional pilot or crewmember on an intermittent basis to maximize usage of the aircraft. The pilot or crewmember may be furnished at the option of the Contractor.**
- C. A lump sum payment of \$500 per day for travel days and workdays as compensation for each additional crewmember will be paid. This does not apply to relief crews brought in by the Contractor on primary pilot or crews mandatory days off. This compensation is only for double crews ordered by the Government.**

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- D. In addition to the \$500 per day, an overnight allowance will be paid when authorized. Extended standby does not apply to additional crewmembers ordered under this clause.
- E. Payment of necessary and reasonable transportation costs to and from the location of the aircraft is authorized. Itemized receipts shall support claims for reimbursement and shall be kept on file by the contractor. Copies of receipts shall be provided to the government upon request.

**C-36 Reimbursement for Mobilization and Demobilization Costs**

The Contractor is responsible for all mobilization and demobilization costs to the initial host base and from the final host base location. When the initial dispatch is to an alternate base, the Government shall be entitled to the equivalent of one round trip at no cost from the Contractor's home base to the initial host base and return from the final host base.

**C-37 Payment for Substitute/Replacement Aircraft**

When substitute or replacement aircraft are approved for use by the Contracting Officer, the following payment terms will apply:

- A. Availability – The same rate applicable to the aircraft that is being substituted or replaced.
- B. Flight – The rate applicable to the make, model, and series of the substitute or replacement aircraft.

**C-38 Meals**

No charge will be made for meals furnished by the Government.

**C-39 Payment for Fuel Servicing Vehicle Mileage**

Mileage for the fuel-servicing vehicle will be paid when it is dispatched by the Government to give service support to helicopters away from the host base as follows:

- \$3.51 per mile - where the carrying capacity of aircraft fuel is 1,500-gallons or more
- \$2.45 per mile - where the carrying capacity of aircraft fuel is at least 750 gallons to 1,499 gallons
- \$1.83 per mile - where the carrying capacity of aircraft fuel is at least 350 gallons to 749-gallons
- \$ 1.35 per mile - where the carrying capacity of aircraft fuel is less than 350-gallons

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**C-40 Payment for Fuel Transportation**

- A. The Government will reimburse the Contractor for costs incurred in transportation of helicopter fuel to sustain Government operations under the following conditions:
  - 1. When Contractor's fuel servicing vehicle cannot travel to an assigned alternate base of operations due to lack of road access.
  - 2. When Contractor has to arrange for fuel support at an assigned alternate base of operation to provide a supply for helicopter flights until the Contractor's fuel-servicing vehicle arrives on site.
- B. The CO will designate the method of transportation and the gallons to be transported.
- C. When the CO orders the Contractor to transport fuel by air, the flight time required to transport the fuel will be paid at the Contract flight hour rate.
- D. When the CO orders transportation of fuel by commercial carrier, reimbursement will be based on supporting itemized paid receipts and provided to the CO, upon request.
- E. In the event the Government furnishes fuel to the Contractor, fuel cost will be charged based upon rates at the nearest accessible point fuel is commercially available. Such fuel costs will be deducted from any sums otherwise due the Contractor on the Flight Use Invoice.

**C-41 Payment for Foam Concentrate**

- A. Payment for approved foam concentrate, when ordered by the CO and furnished by the Contractor, will be made on an actual cost basis. Supporting itemized paid receipts will be provided to the CO upon request..
- B. Any foam concentrate provided by the Contractor shall be on the list of Approved Foam Products found at the following website: [www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire).

**C-42 Payment for Costs Away from the Host Base**

- A. When Contractor's aircraft is dispatched away from the host base, the Government will authorize payment for additional necessary and reasonable costs involved in transporting authorized relief crewmembers to and from alternate bases when approved in advance by the Contracting Officer. These costs are limited to the actual transportation of the individual; i.e., airplane tickets, car rentals, etc. Salary costs for the Contractor's employee(s) while in travel status is not a cost for which the Government will reimburse the Contractor.
- B. The Contractor will be reimbursed for the difference between the normal cost of transportation from the CONTRACTOR'S BASE OF OPERATIONS to the HOST BASE and the CONTRACTOR'S BASE OF OPERATIONS to the ALTERNATE BASE.
- C. Prior to the Mandatory Availability Period the Contractor shall provide the Contracting Officer with a written statement that itemizes the normal cost of transportation from the Contractors Base of Operations to and from the host base.

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- D. If the Government does not authorize such payment, no deduction will be made for unavailability incurred because of personnel duty limitations. See Section B.
- E. Payment of necessary and reasonable transportation costs to and from the location of the aircraft is authorized. Itemized receipts must support claims for reimbursement and must be kept on file by the contractor. Copies of receipts shall be provided to the government upon request.

**C-43 Payment for Overnight Allowance**

- A. Overnight allowance will be paid equal to the current standard maximum rate that is allowed (or high rate, if applicable) as established by the Federal Travel Regulation (FTR) for each authorized crew member for every night assigned to an alternate base or at its option may provide meals/and or lodging. A list of localities where high rates are authorized is available upon request.  
  
Crewmembers who elect to return to the host base by alternate means rather than remain overnight with the helicopter will not be paid an overnight allowance.
- B. Overnight allowance will not be paid when the aircraft is assigned to its Host Base during the Mandatory Availability Period and any extension thereof where no break in service occurs.
- C. The Government will pay the Contractor an overnight allowance equal to the current standard maximum rate that is allowed (or high rate, if applicable) as established by the Federal Travel Regulations (FTR) or at its option may provide meals and/or lodging. A list of localities where rates are authorized is available upon request.
- D. If partial overnight allowance is provided by the Government, the Contractor will be reimbursed at current FTR rates for the portion that is Contractor provided. Current rates are available at [www.gsa.gov](http://www.gsa.gov).
- E. The appropriate rate for meals and incidental expenses will be paid unless the Government makes three meals available to the Contractor. The Contractor's lodging will be paid only when lodging is not furnished by the Government.
- F. If the Contractor elects to not utilize Government provided lodging, there is no reimbursement for lodging or transportation costs incurred by the Contractor.
- G. If the FTR rate changes, the change in overnight allowance to the Contractor will become effective on the effective date of the FTR change.
- H. Overnight allowance may also be applicable to primary crewmembers that are unable to return from the field.
- I. The Contractor may claim overnight lodging, Meals and Incidental Expenses (M & IE ) using either of the two following methods:
  - 1. Payment of the Standard or High Rate, if applicable EXCLUDING lodging tax does not require lodging receipts.

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2. Payment of actual lodging amount and M & IE rate not to exceed the maximum FTR rate PLUS lodging tax. Itemized receipts must support claims for reimbursement and must be kept on file by the contractor and made available to the CO upon request.

**C-44 Miscellaneous Costs to the Contractor**

- A. Housing, subsistence, ground transportation, and other expenses will be the responsibility of the Contractor or its employees at the Host Base.
- B. The Government will reimburse the Contractor for any airport use costs the Contractor is required to pay when ordered to operate from an airport other than the host base such as airport landing fees, tie-down charges, or other similar type costs.
- C. Miscellaneous unforeseeable costs not recovered through the contract payment rates and are the direct result of ordered service may be reimbursed at actual cost if approved by the Contracting Officer. Examples of this are truck permits at ports-of-entry when the fuel servicing vehicle must cross state lines in fulfillment of ordered services or State use taxes imposed on equipment brought into the state.
- D. Itemized receipts must support claims for reimbursement and must be kept on file by the contractor and made available to the CO upon request.

**C-45 Definitions**

As used throughout this contract, the following terms shall have the meaning set forth below:

**Additional Personnel** Additional personnel specifically ordered by the CO where it is to the Government's advantage to have additional availability of the aircraft (not to be confused with a relief crew furnished by Contractor to replace primary crew).

**Aircraft Accident** An occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

**Aircraft Incident** An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

**Aircraft Make and Model**. A specific make and basic model of aircraft, including modification; e.g., a Bell 206

**Aircraft Make, Model, and Series**. A specific make, model, and series of aircraft including modification (e.g., a Bell 206B is not the same make, model, and series as a Bell 206L).

**Airspace Conflict** A near mid-air collision, intrusion, or violation of airspace rules.

**Alert Status** A status subject to flight and duty limitations, in which the Contractor has 1 hour to return to standby if ordered by the CO to do so.

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Alternate Base A base, other than the host base, established to permit operation from the vicinity of a project area or incident.

Anchor The Interagency approved device manufactured to be the fixed point attached to the helicopter for rappel and cargo letdown operations.

Appropriate Flight Manual Hover Performance Chart A performance chart residing in either the original or supplemental portion of a rotorcraft flight manual (RFM) that the manufacturer or Supplemental Type Certificate (STC) holder deems appropriate for a given phase of flight or special purpose activity. For example: Kaman K-1200 Rotorcraft Flight Manual Supplement No. 1 USFS Fire Fighting.

Assigned Work Location The location designated by the CO from which an ordered flight will originate.

Authorized Crewmember Those individuals specified in the "Schedule of Items" unless designated otherwise by the CO.

Authorized Flight or Flying Time The actual time that a helicopter is off the ground for the purpose of the task or tasks to which assigned under an ordered flight when such time is recorded by the pilot and approved by a designated Government Official as having been properly performed.

Aviation Hazard Any condition, act, or set of circumstances that exposes an individual to unnecessary risk or harm during aviation operations.

Base Cost The portion of the flight rate that is constant throughout the contract period and not affected by changes in fuel prices. Adjustments to the base cost will be made annually by the CO.

Call-When-Needed A term used to identify the furnishing of services on an "as needed bases" or "intermittent use" in government procurement contracts. There is no guarantee the Government will place any orders and the Contractor is not obligated to accept any orders. However, once an order is placed and the Contractor takes steps to perform, both sides are bound by the terms and conditions of the Contract.

Cargo Any material thing carried by the aircraft.

Chief-of-Party Designated Government representative for all passengers on a flight.

Civil Twilight Begins in the morning, and ends in the evening when the center of the sun is geometrically 6° below the horizon.

Contractor An operator being paid by the Government for services.

Duty That period that includes flight time, ground duty (pre- and post- flight inspections) of any kind, and standby or alert status at any location.

Empty Weight The last weight and moment entry on the aircraft weight and balance record. Empty weight is determined using weight and balance data which was determined by actual weighing of the aircraft within 24 months preceding the starting date of the MAP and renewal option or following any

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major repair or major alteration or change to the equipment list which significantly affects the center of gravity of the aircraft.

Equipped Weight Equipped weight equals the Empty Weight (as listed in the Weight and Balance Data) plus the weight of lubricants and onboard equipment required by contract (i.e., survival kit, rappel anchor).

Extended Standby. Period following the 9 hours of standby up to 5 hours

External Load Any combination of load and line that is 50 feet or less in length

Fatal Injury Any injury, which results in death within 30-days of the accident

Federal Aviation Regulations Rules and regulations contained in Title 14 of the Code of Federal Regulations.

Ferry Flight. Movement of helicopter under its own power from point-to-point

First Aid Any medical attention that involves no medical bill - If a physician prescribes medical treatment for less than serious injury and makes a charge for this service, that injury becomes "medical attention."

Flight Crew Those Contractor personnel required by the Federal Aviation Administration to operate the aircraft safely while performing under contract to the Government.

Flight Rate The contract unit price per hour of flight time as found in the Flight Rate Chart or Schedule of Items. (Includes base cost plus fuel costs)

Flight Time Begins when the aircraft leaves the ground in takeoff for a given flight and ends when the aircraft has landed.

Forced Landing A landing necessitated by failure of engines, systems, components, or incapacitation of a crewmember, which makes continued flight impossible, and which may or may not result in damage.

Fuel Cost. The variable portion of the flight rate that is subject to change due to fuel price change

Fuel Endurance Fuel required including a 20-minute reserve.

Fully Operational Helicopter, pilot(s), other personnel, repairs, operating supplies, service facilities, and incidentals necessary for the safe operation of the helicopter both on the ground and in the air.

Fully Rated Capacity The number of passenger seats or pounds of cargo load authorized in the applicable Type Certificate Data Sheet.

General Aviation That portion of civil aviation that encompasses all facets of aviation except air carriers.

Ground Mishap, Aircraft. An aircraft mishap in which there is no intent to fly; however, the power plants and/or rotors are in operation and damage incurred requiring replacement or repair of rotors,

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propellers, wheels, tires, wing tips, flaps, etc., or an injury is incurred requiring first aid or medical attention.

Hazard Any condition, act or set of circumstances that exposes an individual to unnecessary risk or harm during aviation operations.

Helitanker An aerial delivery system that is a helicopter configured for the dispensing of fire retardant or fire suppressant material. Airtanker Board criteria shall apply to helicopters with a minimum capacity of 1000 gallons or more.

Host Base. The initial location at which the aircraft will be made available for the purpose of providing aircraft services. See Schedule of Items for host base locations.

Hover-in-ground-effect (HIGE) Maximum pressure altitude and temperature at which a helicopter can hover (at maximum gross weight) using the effects of ground cushion per the Flight Manual/Supplements and STC performance charts.

Hover-out-of-ground Effect (HOGE) Maximum pressure altitude and temperature which a helicopter can hover (at maximum gross weight) without the effects of ground cushion per the Flight Manual/Supplements and STC performance charts.

Incident An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Incident-With-Potential An incident that narrowly misses being an accident and in which the circumstances indicate significant potential for substantial damage or serious injury. Final classification will be determined by the agency Aviation Safety Manager.

Instrument Flight Rules (IFR). As defined in 14 CFR 91.

Internal Cargo Compartments An area within the helicopter specifically designed to carry cargo.

Law Enforcement Those duties carried out by agency personnel together with personnel from cooperating agencies, to enforce various Federal laws applicable to trespass (those activities relating to timber, grazing, fire, occupancy and others). Other activities can include those that are illegal under the antiquities acts and the manufacturing, production, and trafficking of substances in violation of the Controlled Substances Act (16 U.S.C. 559b-f)) and other illegal activities occurring on agency jurisdictional lands. Specific law enforcement activities can include surveillance (visual, infrared, or photographic), transportation of law enforcement personnel and persons in custody and transportation of property (both internally and externally). All helicopter activities including landings will occur at locations that are secured by law enforcement personnel or are locations removed from law enforcement actions.

Life-Threatening A situation or occurrence of a serious nature, developing suddenly and unexpectedly and demanding immediate action to prevent loss of life.

Limited Use Helicopter A limited use helicopter is an Interagency term used to denote a standard category helicopter that is designated and utilized in a limited role (not for passenger transport.) See **Standard Category**.

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Long-line Any combination of load and line, attached to the cargo hook of the aircraft for the purpose of carrying an external load greater than 50 feet in length.

Maintenance Deficiency An equipment defect or failure which affects or could affect the safety of operations, or that causes an interruption to the services being performed

Mishap, Aviation Mishaps include aircraft accidents, incidents-with-potential, aircraft incidents, aviation hazards and aircraft maintenance deficiencies.

Mountain Flying - Helicopter Pilot: 200 hours experience operating helicopters in mountainous terrain identified in 14 CFR 95 Subpart B-Designated Mountainous Area. Operating includes maneuvering and numerous takeoffs and landings to pinnacles, ridgelines and confined areas.

Night The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time.

Occupant: Any crew or passenger that is aboard an aircraft.

Official Sunset and Sunrise The times when the upper edge of the disk of the Sun is on the horizon, considered unobstructed relative to the location of interest. Atmospheric conditions are assumed to be average and the location is in a level region on the Earth's surface.

Operational Control The condition existing when an entity exercises authority over initiating, conducting or terminating a flight.

Operating Agency An executive agency or any entity there of using agency aircraft, which it does not own.

Operator Any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Passenger Any person aboard an aircraft who does not perform the function of a flight crewmember or crewmember.

Passenger Seating Capacity Number of passenger seats excluding pilot(s).

Payload The maximum allowable weight (passengers and/or cargo) that can be carried in any one mission.

Pilot-In-Command The pilot responsible for the operation and safety of the aircraft during the time defined as flight time.

Point-of-Hire. Point-of-Hire shall be the Contractor's Principle Base of Operations as specified in Section B or the location of aircraft at time-of-hire.

Precautionary Landing A landing necessitated by apparent impending failure of engines, systems, or components, which makes continued flight inadvisable

Principal Base of Operations The primary operating location of a 14 CFR 121, 133, 135 or 137 certificate holder as established by the certificate holder.



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**Rappeller** A person who has been trained and certified to rappel from a helicopter, in accordance with agency specified policy and direction contained in the Interagency Helicopter Rappelling Guide.

**Rappel Spotter**. A person who has been trained and certified, in accordance with agency-specified policy and direction contained in the Interagency Helicopter Rappel Guide, to direct and manage a rappel operation

**Restricted Category** An aircraft that has been manufactured in accordance with the requirements of and accepted for use by an Armed Force of the United States and later modified for special purposes such as agriculture, forest and wildlife conservation, aerial surveying, patrolling, or any the operation specified by the FAA Administrator.

**SAFECOM** Use to report any condition, observance, act, maintenance problem, or circumstance, which has potential to cause an aviation related mishap. The purpose of the SAFECOM form is not intended to be punitive in nature. It will be used to disseminate safety information to aviation managers, and also to aid in accident prevention by trend monitoring and tracking. See [www.safecom.gov](http://www.safecom.gov)

**Serious Injury** Any injury which: (1) requires hospitalization for more than 48-hours, commencing within 7-days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes or nose); (3) causes severe hemorrhages, nerve, muscle or tendon damage; (4) involves any internal organ; or, (5) involves second or third-degree burns, or any burns affecting more than 5% of the body surface.

**Sling Load**. Jettisonable external load that is lifted free of land or water during the rotorcraft operation.

**Special Use Missions:**

**Air Tactical Coordination (Air Attack)** Coordination with other tactical aircraft during fire and other project operations.

**Fire Surveillance/Reconnaissance** Patrolling in search of and scouting wildland fires; checking fuel types and fire behavior.

**Reconnaissance (Non-Fire)** Observation and fact-finding reconnaissance, i.e. wildlife monitoring, snow surveys, search and rescue, timber and range surveys, insect and disease surveys, law enforcement, and aerial photography.

**Other** Cooperative use with other agencies, and other purposes mutually agreed upon by the Contractor and the Contracting Officer.

**Standard Category/Limited Use Helicopter** Turbine powered helicopters certificated in the normal or transport category. Standard Category helicopters are operated and maintained for passenger carriage in accordance with (IAW)14 CFR 135 by an operator holding an Air Carrier Certificate. Limited Use helicopters are maintained IAW the type certificate and applicable STC's, operated IAW applicable CFR's and are not for passenger transport.

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Substantial Damage Any damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or rotor or propeller blades and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips are not considered "substantial damage" for the purpose of this part.

Type I (Heavy) Helicopter. 15 or more passenger seats or 5,000 lbs payload and 700 gallons retardant capacity

Type II (Medium) Helicopter Between 9 to 14 passenger seats or 2,500 to 4,999 lbs payload and 300 to 699 gallons retardant capacity.

Type III (Light) Helicopter Between 4 to 8 passenger seats or 1,200 to 2,499 lbs payload and 100 to 299 gallons retardant capacity.

Vertical Reference/External Load Direct visual reference, by the pilot, of an external load/cargo being slung from beneath the helicopter with a line attached to the cargo hook and being removed or placed from the earth's surface with precision.

Visual Flight Rules (VFR). As defined in 14 CFR 91.

### C-46 Abbreviations

A&P	Airframe & Powerplant (Mechanic)
ABS	Aviation Business Systems
AC	Advisory Circular
AD	Airworthiness Directive
AFF	Automated Flight Following
ASC	Albuquerque Service Center
ASP	Aviation Safety Plan
ATC	Air Traffic Control
ATCO	Air Taxi/Commercial Operators
CAB	Civil Aeronautics Board
CG	Center of Gravity
CO	Contracting Officer
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
COTR	Contracting Officer's Technical Representative
CWN	Call-when-Needed (Contract)
DOI	Department of the Interior
DOT	Department of Transportation
ELT	Emergency Locator Transmitter
EPA	Environmental Protection Agency
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FASD	Fire Applications Support Desk
FAR	Federal Acquisition Regulations
FPMR	Federal Property Management Regulations
GPM	Gallons-Per-Minute
FSS	Flight Service Station
HIP	Helicopter Inspector Pilot

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IATB	Interagency Airtanker Board
HOS	Helicopter Operations Specialist
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
M&IE	Meals and Incidental Expenses
MSL	Mean Sea Level
NTSB	National Transportation Safety Board
NOTAM	Notice to Airmen
PA	Public Address System
PASP	Project Aviation Safety Plan
PIC	Pilot-in-Command
PTT	Push-To-Talk
RAO	Regional Aviation Officer
RASM	Regional Aviation Safety Manager
RON	Remain-Over-Night
SIC	Second-in-Command/Co-Pilot
SPCC	Spill Prevention, Control and Countermeasure Plan Requirements
STC	Supplemental Type Certificate
TBO	Time Between Overhaul
TCAS	Traffic Collision Avoidance System
USFS	United States -Forest Service
VFR	Visual Flight Rules
VNE	Velocity Never Exceed
VSWR	Voltage Standing Wave Ratio

# **SECTION C** **DESCRIPTION/SPECIFICATIONS/EXHIBITS**

## **EXHIBIT 1** **FIRST AID KIT AERONAUTICAL**

Each kit shall be in a dust-proof and moisture-proof container. The kit shall be on board the aircraft and accessible to the occupants. The contents shall include the following minimum items:

Item Description	Passenger Seats (0 - 9)	Passenger Seats (10 - 50)
Adhesive bandage strips (3 inches long)	8	16
Antiseptic or alcohol wipes (packets)	10	20
Bandage compresses, (4-inch)	2	4
Triangular bandage compresses, 40 inch (sling)	2	4
Roller bandage, 4 inch x 5 yards (gauze)	2	4
Adhesive tape, 1 inch x 5 yards (standard roll)	1	2
Bandage scissors	1	1
Body Fluids Barrier Kit:	1	1
▪ 2-pair of latex gloves		
▪ 1-face shield		
▪ 1-mouth-to-mouth barrier		
▪ 1-protective gown		
▪ 2-antiseptic towelettes		
▪ 1-biohazard disposal bag		

Note:

Splints are recommended if space permits.

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**EXHIBIT 2**  
**SURVIVAL KIT AERONAUTICAL (LOWER 48)**

The contents shall include the following minimum items:

Item	Item
Knife	Signal Mirror
Aeronautical Flares (6-each)	Matches (2-small boxes in waterproof containers)
Food (2-days emergency rations per occupant)	Water (1-quart per occupant) (not required when operating over areas with adequate drinking water)
Space Blanket (1-per occupant)	Candles
Collapsible Water Bag	Whistle
Magnesium Fire Starter	Nylon Rope or Parachute Cord (50-feet)
Water Purification Tablets	

Suggested Survival Kit Items Dependent Upon Terrain and Climate:

Item	Item
Container w/carrying Handle or Straps	Individual First Aid Kit
Large Plastic Bags	Signal Panels
Flashlight with Spare Batteries	Hand Saw or Wire Saw
Collapsible Shovel	Sleeping Bag (1-per two occupants)
Survival Manual (Arctic/Desert)	Snowshoes
Insect Repellant	Axe or Hatchet
Insect Headnet (1-per occupant)	Gill Net/Assorted Fishing Tackle
Personal ELT	Sunscreen

Note: A hand-held 760 channel VHF transceiver radio is recommended. It should be attached, or immediately accessible, to a crewmember rather than placed in the aircraft survival kit.

## SECTION C DESCRIPTION/SPECIFICATIONS/EXHIBITS

### EXHIBIT 3 ALASKA SUPPLEMENT

The following provisions shall apply when operating in Alaska. All other provisions not expressly changed herein continue to apply.

NOTE: Contractors from the lower 48 dispatched to Alaska need to have insurance coverage for Alaska, in addition to having Operations Specifications that permit Alaska operations.

#### (1) SECTION C, General Equipment

Additional Equipment:

- A. One set of approved Tundra Boards or Snow Pads with accompanying FAA certification.
- B. Complete set of current aeronautical charts and navigation publications covering areas of operation within Alaska and Canada.
- C. Survival kit:

All aircraft will carry survival equipment. Survival kits will contain at least the following items and additional items required by local regulation as is appropriate for local climate and terrain conditions.

The minimum equipment to be carried during the summer months:

Ax or hatchet (1), and Knife (1)	Water Purification Tablets
Magnesium Fire Starter	Mosquito repellent containing DEET
Whistle	Mosquito headnet for each occupant (1)
Signal Mirror	Candles (5 each)
Aeronautical Flares (6-each)	Space Blanket (1 per occupant)
Matches (2-small boxes in waterproof containers)	Nylon Rope or Parachute Cord (50-feet)
Food (Each occupant sufficient to sustain life for 1-week)	An assortment of fishing tackle such as hooks, flies, lines, sinkers, etc.

Personal Locator Beacon (PLB) (Note: required only if Aircraft ELT requires tools to be removed)

In addition to the above, the following shall be carried as minimum equipment from October 15 to April 1 of each year:

Item	Item
Pair of Snowshoes (1)	Sleeping bag per two occupants (1)
Wool blanket or equivalent for each occupant over 4-years of age (1)	

Note: A hand-held 760 channel VHF transceiver radio is recommended. It should be attached, or immediately accessible, to a crewmember rather than placed in the aircraft survival kit.

#### FUEL SERVICING VEHICLE SPECIFICATIONS -

A fuel servicing vehicle and driver are not required.

The Government will furnish, transport, and store all aircraft fuel required at no expense to the Contractor.

Grades of Government-furnished fuel vary from location to location, and the Contractor shall use the grade available.

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**EXHIBIT 3**  
**ALASKA SUPPLEMENT (Cont)**

The appropriate type of fuel (Avgas or Jet fuel), in one of the following grades, will be available at each location:

AVGAS	JET FUEL
100	Jet A
100LL	Jet A-50
	Jet B
	Jet-4 or JP-5 or JP-8

All lubricating oil, parts, and supplies shall be furnished and transported by the Contractor to the assigned work location.

The Contractor shall furnish for each aircraft a portable hand or electrically operated fuel pump, barrel stem, hoses, and filtration system for refueling in remote areas.

The filtration system shall include a unit that accomplishes water separation with positive shut-off. The size of the filtration system unit shall be compatible with pump size. One acceptable three-stage unit is FACET part number 050971. If this model FACET is used, the third stage monitor should be a Velcon part number CDF-210K that is rated to 10 GPM. Also acceptable are Velcon filter spin on 5 micron cartridges, part number 40505SP, rated to 13 GPM; or Velcon VF-31 with 1 micron cartridge element, part number ACO-21005B, rated to 15 GPM. All filtering components shall be changed annually or sooner if needed, and the date of the change shall be placarded on the canister.

The Contractor shall furnish two complete spare filter changes.

**AVAILABILITY OF MECHANICS –**

The mechanic shall be present for all operations in Alaska. The mechanic shall accompany the helicopter to any assigned work location. The cost of the mechanic shall be included in the Daily Availability Rate.

**(2) SECTION C Payment for Availability**

Operations in Alaska will be scheduled by the Government in accordance with flight time/duty time limitations. The schedule will not exceed:

SINGLE CREW: Maximum 14 hour per day PIC, or PIC and SIC.

DOUBLE CREW: Maximum 24 hours per day.

Measurement of availability will be reduced, as specified below, for each hour or portion thereof service is listed as unavailable to the Government. Single or double crew Periods of Unavailability will be accumulated for the day and posted on the Flight Use Invoice as actual clock unavailability. There will no longer be a need to round to the nearest quarter hour or reduce unavailability by 1/56.

Availability, as measured above, will be paid at the applicable rate appearing in the Schedule of Items

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**EXHIBIT 3**  
**ALASKA SUPPLEMENT (Cont)**

(3) Payment for Extended Standby is applicable for Alaska assignments.

**(4) SECTION C, Transporting of Relief Crew**

If ordered by the Government, the Contractor shall be reimbursed for the cost incurred in delivering personnel to the reporting base NOT TO EXCEED the round trip coach fare from Seattle-Tacoma International Airport. The ordering of additional personnel shall be annotated, (including date and time ordered) on the Flight Use Invoice and signed by the Government Representative placing the order. The Contractor agrees to deliver additional crew to the host base within 48 hours after notification. Reimbursement shall be supported by paid receipts and the passenger coupon or legible certified true copies. Itemized receipts must support claims for reimbursement and must be kept on file by the contractor. Copies of receipts to be provided to the helicopter manager for review and approval but are not required to be submitted with the payment document

**(5) AIRCRAFT FUEL.** The cost of fuel furnished by the Contractor in lieu of Government Furnished fuel while operating in Alaska will be reimbursed to the Contractor as provided below:

**GENERAL:** The Contractor shall not charge any fuel acquired under this contract directly to the Government. All fuel not otherwise furnished by the Government must be paid by or charged to the Contractor. The purchase must be approved by the Contracting Officer. Fuel related costs shall be recorded as a line entry (i.e., date, fuel charge, dollar amount, and use-item code fuel charge [FC]), shall be summarized under "Other Charges/Credits" on the Aircraft Use Report (OAS-23), or Flight Use Invoice, and shall be supported by paid legible, itemized invoices from the supplier. Itemized receipts must support claims for reimbursement and must be kept on file by the contractor. Copies of receipts to be provided to the helicopter manager for review and approval but are not required to be submitted with the payment document. Certified true copies may be submitted in lieu of the original invoice.

Government furnished fuel used by the Contractor for maintenance flights, repositioning aircraft, crew transportation, or any other flight for the convenience of the Contractor, will be deducted from amounts due the Contractor at the rate specified in the current Hourly Flight Rate Fuel Consumption and Weight Reduction Chart.

**(6) Adjustment for Flight Rate** The flight rate will be reduced to reflect a dry rate by multiplying the fuel consumption for make and model of aircraft by current jet fuel price in the current Hourly Flight Rate Fuel Consumption and Weight Reduction Chart. Mobilization and demobilization will be at the wet rate. The dry rate will be effective upon the first Government-Furnished-Fueling.

**FERRY FLIGHTS THROUGH CANADA.** Flights through Canada will be paid at the wet rate.

**(7) SECTION C, Payment for Transportation of Helicopter Fuel** Not applicable in Alaska

**(8) Wage Determination** in effect is the one provided in the solicitation



**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 4**  
**RESTRAINT SYSTEMS CONDITION INSPECTION GUIDELINES**

- A. Federal Aviation Regulations require that occupant restraints systems are to be replaced in aircraft manufactured after July 1, 1951; such systems shall conform to standards established by the FAA. These standards are contained in Technical Standard Order TSO-C22. Restraint system eligible for installation in aircraft may be identified by the marking TSO-C22, TSO-C114 on the webbing, or by a military designation number since military systems comply with the strength requirements of the TSO. Aircraft manufacturer installed restraint systems with part numbers are acceptable. Each system shall be equipped with an approved metal-to-metal latching device.
- B. Federal Aviation Regulations provide minimum inspection guidance, other than to state, that mildew and fraying may render the restraint system un-airworthy and that suspected webbing should be tested for tensile strength. The tensile strength requirement for a single person system is 525 pounds (most systems are rated at 1,500 pounds).

C. Unacceptable Condition Criteria:

Webbing	Hardware	Attachment	Label
Frayed (5%) Torn Crushed Swollen Creased Deteriorated	Inoperable Damaged Corroded Excessive Wear	Broken Excessive Wear Missing	Missing Illegible

D. References:

14 CFR 91.205  
14 CFR 21.607  
AC 21-34  
TSO-C22  
TSO-C114

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 5**  
**ADDITIONAL SUPPRESSION/PREScribed FIRE EQUIPMENT**

**A. Fixed Suppressant/Retardant Delivery Tank with Self-Filling Capability**

One (1) externally mounted baffled, quick-disconnect (45-minutes) fixed suppressant/retardant delivery tank that meets or exceeds the following specification:

Capacity commensurate with the maximum related lifting capability of the helicopter equipped with the tank at sea level on a standard day.

NOTE: ALL CONTROLS FOR TANK SYSTEM SHALL BE LABELED AS TO FUNCTION

1. Door(s)

The Tank door(s) shall be designed such that:

- a. The frontal area of the retardant column is minimized.
- b. The door(s) does not appreciably deflect the retardant when fully opened.
- c. The tank and doors shall be leak proof, i.e. ½ gallon or less in a 24-hour period
- d. The doors shall be closeable in flight if the aircraft is not capable of landing with the door(s) open without damaging the door(s).

2. Venting

- a. The tank shall be vented so that no more than 0.25 PSI negative pressure will be created in the tank head space during the fastest drop sequence.
- b. The vent shall not leak during filling or normal flight maneuvers.

3. Fill Port(s)

- a. The fill port shall be a 3-inch Kamlock ® fitting (male) and shall be located on the right and left side of the aircraft.
- b. The fill port shall not leak or overflow during ground operations or during normal flight maneuvers.

Note: For hover draft operations, fill ports are not required.

4. Controls

- a. The door open switch shall be the same switch that opens the water bucket.
- b. When required, the tank close switch shall be the same switch that closes the water bucket.

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**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 5**  
**ADDITIONAL SUPPRESSION/PREScribed FIRE EQUIPMENT (Cont)**

- c. All tanks shall be equipped with an independently controlled and operated emergency dump system enabling the entire load to be dropped in less than 6-seconds. This system shall use mechanical, pneumatic, or fluid pressure for operation.
- d. Emergency systems operated by pneumatic or fluid pressure shall be isolated from the normal tank system pressure. Normal function or failure of the normal system shall not affect the emergency system pressure. Emergency systems dependent on normal operating aircraft or tank systems for initial charge shall have a pressure gauge or indicator readily visible to the crew. Emergency systems dependent on precharged bottles shall have a positive means of checking system charge during preflight.
- e. The primary emergency dump control shall be positioned within easy reach of the pilot and copilot while strapped in their respective seats. Electrically operated controls shall be wired direct to a source of power isolated from the normal aircraft electrical bus and protected by a fuse or circuit breaker of adequate capacity.

**5. Certifications**

- a. The aircraft will be certificated in the normal or transport category except when restricted operations are authorized by the CO.
- b. Weight and balance computations shall be made with the tank full, empty, and removed, showing the helicopter to remain within acceptable center of gravity limits at all times
- c. The tank shall accept filling at a rate sufficient to allow the tank to be filled to capacity in no more than 1-minute.

**B. Suppressant/Retardant Mixing Equipment**

**1. Installation**

The unit shall be designed for ease of installation and loading and shall not require any modifications to the helicopter. Modifications are defined as any change to the integrity of the structural components of the helicopter airframe, such as drilling holes in tubing or distorting the metal.

**2. Containment**

Any unit mounted inside the helicopter (other than those that have STC's or 337's) shall have a containment vessel around the pumping and concentrate storage supply. The containment vessel shall be able to hold 125% of the concentrate supply. The discharge hose and fittings shall be able to withstand 150 PSI or two times the rated maximum pressure output of the pump, whichever is greater. The discharge hose that is inside the cabin shall have a containment sleeve of clear hose to check for leaks.

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**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 5**  
**ADDITIONAL SUPPRESSION/PREScribed FIRE EQUIPMENT (Cont)**

3. Restraint

The foam pumping unit containment vessel and concentrates shall be affixed to the helicopter in a means to prevent injury to any occupants. The design shall meet the maximum inertia forces specified in 14 CFR 23.561(b)(2).

4. Hose Routing

The hose used to carry the concentrate shall be routed out the side of the helicopter away from the pilot. Hoses will be routed in a manner that will not interfere with flight controls.

5. Breakaway Fittings

Any hose shall have a disconnect that will pull away from the hose when the bucket is released. The disconnect shall be close to the helicopter to keep the hose from beating against the helicopter. The disconnect shall hold the pressure of the line and be able to activate at 1/3 of the bucket empty weight.

6. Compatibility of Materials

The materials used in construction of any foam dispensing unit shall be compatible with all foams. Materials shall be resistant to corrosion, erosion, etching, or softening. To evaluate the materials, submerge in foam concentrate for 96 hours then in a 1½% solution for 96-hours. Material samples shall be measured, weighed and visually examined to insure that deterioration of the materials and the assembly does not occur with operational use. Unacceptable conditions may be, but are not limited to cracking, crazing, softening, joint separation, bulging, diminished wall thickness, glue or mastic breakdown, or defective fasteners, gaskets or fittings.

7. Foam Quantity

Unit is to be of the optimum size compatible with the make and model helicopter. However, the unit shall carry a minimum of 5 (five) gallons of concentrate for each 100 gallons of bucket capacity. Downloading may be accomplished when desirable during operations.

8. Power

Power source for the dispenser shall be obtained from the helicopter by installing a MS 3116F-12-3P, 3 pin connector on the cord to the unit pin A shall be +28 VDC and pin B for ground (this is the same plug used for the infrared imaging system). Electrical power required to operate the concentrate pump shall not be in excess of that normally available from the plug used as the source of power.

9. Vibration

The unit shall not cause undue vibration in the helicopter during operation or in flight. The unit shall be padded to keep from causing any single stress points on any parts not designed for such.

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**EXHIBIT 5**  
**ADDITIONAL SUPPRESSION/PREScribed FIRE EQUIPMENT (Cont)**

**10. Operation**

The pilot shall be able to operate the unit with a minimal level of attention. The system shall be automated to the point where the pilot has one control to operate. Once the control is set for flow rate there should be no further adjustment necessary to the unit.

**11. Flow Rate**

The system shall be capable of dispensing a variable amount of concentrate, in flight, to achieve a mixture ratio ranging from 0.1 to 1.0% by volume in 0.1% increments.

**12. Concentrate Loading**

Loading using 5-gallon containers is preferred. Bulk loading shall be performed so such loading will avoid any spillage on the helicopter or come in contact with the helicopter. Servicing shall be accomplished during normal refueling time for the helicopter and take no longer than the refueling operation. Loading operations are to be performed by Contractor personnel.

**13. Approved Foam Products can be found at: Wildland Fire Chemical Systems (WFCS)**  
**[www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire)**

- a. When transporting retardant or equipment containing retardant residue, Contractor shall take precautions to prevent retardant from coming in contact with the aircraft structure.
- b. Offered equipment will be approved by the CO prior to any use under the Contract.

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**C. Additional equipment offered shall meet the following requirements:**

1. Power source for a Helitorch or remote cargo hook.

- a. An MS 3101A-24-11S, 9-pin connector shall be provided. Pin D shall be airframe ground. Pin E shall be switched 28VDC, protected by a 50 amp circuit breaker that can be manually opened and reset. The water bucket open switch shall also activate this circuit.
- b. The connector shall be mounted adjacent to the cargo hook (within 12 inches). A wire rope lanyard or other similar device shall be provided for support of the connector so that tension loads will not be placed on the electrical wiring.
- c. This connector has multiple circuit capacity sufficient to provide power and control for Contractor-furnished equipment such as the required water bucket. Water buckets shall be wired through this connector.

Notes:

- i). See FS/AMD A-16 for a 9-pin wiring diagram for suppressant/retardant buckets (See: [www.fs.fed.us/fire/niicd/documents.html](http://www.fs.fed.us/fire/niicd/documents.html))
- ii). The 9-pin connector is required on Type II (Medium) Exclusive Use helicopters and all Type III (Light) helicopters. Requiring the 9-pin connector on additional helicopters must be specifically mentioned in the contract.

2. Remote Cargo Hook

- a. As a minimum, the remote cargo hook shall be completely disassembled and inspected with repairs made as required; lubricated and perform a full-load operational check every 24 calendar months.
- b. All work shall be done in accordance with manufacturer's maintenance manuals, as applicable.

3. Long-lines (as applicable)

- a. Rotation resistant wire rope
  - (1) Rotation resistant wire rope with swaged fittings rated in accordance with ANSI Standards
  - (2) Fabrication and installation methods shall be in accordance with aircraft and ANSI Standards.
- b. Synthetic Long Line
  - (1) Helicopter synthetic long-lines shall be constructed from the HMWPE (High Molecular Weight Polyethylene Equipment) or HMPE (High Molecular Polyethylene Equipment)

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family of rope fibers including brand names such as Spectra® by Allied Signal or fibers with similar properties.

(2) Rope Diameter. Minimum rope diameter shall be ½-inch

(3) Working or Rated Load

A. The working or rated load of a rope is the maximum static load that will be lifted by the rope. Working loads are based on a percentage of the approximate breaking or ultimate strength of the rope when new and unused. The working load shall be appropriate to the lifting capability of the helicopter.

B. For reference, lifting capability for each category of helicopter is as follows:

Type I (Heavy)	8000 to 30,000 lbs or greater
Type II (Medium)	1600 lbs to 4500 lbs
Type III (Light)	750 lbs to 1600 lbs

(4) Factor of Safety

A factor of safety of 7 shall be used for helicopter synthetic long-lines. Therefore, all ropes shall have an ultimate strength of seven times the rated or working load. For example, if a Type II (Medium) helicopter line will have a working load of 4,500 pounds, the rope shall have strength, when new, of at least 31,500 pounds. Rope diameters will vary depending on strength and type of rope.

(5) Knots and Splices

Knots are not permitted in the synthetic long-line. Knots can decrease rope strength by as much as 50%. Splices may be used in the assembly of the long-line, but no mid-line splicing repairs may be done. Re-splicing at the end of the line is permitted only if the rope is in good condition, and the new splice is done per manufacturer's recommended splicing practices. Splices should always follow the manufacturers recommended splicing practices.

(6) Maintenance and Inspections

Manufacturer's recommended maintenance and inspection procedures shall be complied with.

4. Wire Cutters

Wire cutting devices to provide catastrophic failure protection from striking horizontal wires and cables. At least 85 percent of the frontal area of the helicopter shall be protected.

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**EXHIBIT 6**  
**HIGH VISIBILITY MARKINGS ON MAIN ROTOR BLADES**

**Acceptable Paint Schemes**

- A. Starting at blade tip, paint first 1/6th of blade length with gloss white. Paint second 1/6th of blade length with orange. Paint third 1/6th of blade length with gloss white. Paint next 1/3rd of blade length with orange. Paint remaining 1/6th of blade length with gloss white.

White	Orange	White	Orange	White	Hub	White	Orange	White	Orange	White
1/6	1/6	1/6	1/3	1/6		1/6	1/3	1/6	1/6	1/6

- B. One black and one white blade.
- C. Paint schemes previously approved under Interagency Fire and Aviation Contract.
- D. Paint schemes and color variations specified by manufacturer in a service bulletin, instructions, or other manufacturer published document or text.



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**EXHIBIT 7**  
**ADDITIONAL AVIONICS EQUIPMENT**

Additional avionics equipment specifications when identified as a requirement in Section B.

These Optional Items, if furnished by the contractor, shall meet the following specifications:

**A. GPS Data Connector**

Standard Category Type II (Medium) & Type III (Light): One GPS Data Port Connector. A GPS data port connector shall be installed for the purpose of external data retrieval by a GIS laptop computer. The connector shall be a DB-9F type D sub-connector shall be wired for RS-232C serial format for laptop computers (pin 2-transmit data, pin 3-receive data if applicable, and pin 5-ground) and shall be mounted in a location convenient to the observer. Note: Not required for aircraft designed for a single occupant (i.e. K-MAX) or tanked aircraft.

**B. Additional GPS Antenna**

Standard Category Type II (Medium) & Type III (Light): The Contractor shall allow the Government to utilize a portable GPS in the aircraft. In order to facilitate this, the Contractor shall provide a low-profile GPS aviation antenna (Freeflight Systems part number 16248-20 (telephone number (254) 662-0000) or equivalent) mounted atop the aircraft per the manufacturers installation manual, with associated cable and type "N" female connector, terminated within the aircraft in a location convenient to the observer. Note: Not required for aircraft designed for a single occupant (i.e. K-MAX) or tanked aircraft.

**C. Fuel Service Vehicle Radio**

1. A VHF-FM two-way mobile radio, with a matched broadband antenna (Antenna Specialists ASPR7490, Maxrad MWB5803, or equivalent), shall be installed in the fuel-servicing vehicle. The radio shall provide selection of either wideband (25.0 kHz) or narrowband (12.5 kHz) channel spacing on each channel **operating from 150 MHz to 174 MHz**. The radio shall be frequency-synthesized, equipped with a CTCSS sub-audible tone encoder having a minimum of 32 selectable tones meeting the current TIA/EIA-603 standard, and develop a minimum of 30 watts nominal output power.
2. Transceivers shall be set to operate in the **analog** narrowband mode unless local requirements dictate otherwise. All radios must have the ability to be programmed in the field by the radio operator without the aid of a computer or the services typically found in a radio shop.
3. The use of appropriate VHF-FM portable radios with suitable output power booster units is permissible. See the below VHF-FM Portable Radio section for portable radio requirements.
4. All VHF-FM transceivers (aeronautical, mobile, and portable) furnished to meet the requirements of this contract must be multimode (P25) digital by January 1, 2010. Only P25 compliant transceivers will be acceptable after this date.

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**EXHIBIT 7**  
**ADDITIONAL AVIONICS EQUIPMENT (Cont)**

Note: It is highly recommended that a programming "cheat sheet" accompany the fuel servicing vehicle.

**D. VHF-FM Portable Radio**

1. A VHF-FM two-way portable radio operating from 150 MHz to 174 MHz. The radio shall provide selection of either wideband (25.0 kHz) or narrowband (12.5 kHz) channel spacing on each channel. The radio shall be frequency-synthesized, equipped with a CTCSS sub-audible tone encoder having a minimum of 32 selectable tones meeting the current TIA/EIA-603 standard, and develop a minimum of 1 watt nominal output power but no more than 10 watts nominal output power. **Modified or Family Service Radios (FSR) are not acceptable.**
2. Transceivers shall be set to operate in the analog narrowband mode unless local requirements dictate otherwise. All radios must have the ability to be programmed in the field by the radio operator without the aid of a computer or the services typically found in a radio shop.
3. **When the above Fuel Service Vehicle Radio requirement is met with the use of a VHF-FM portable radio with output power booster, that portable VHF-FM radio may be used to comply with this section as long as the portable radio complies with all specified VHF-FM Portable Radio requirements. The VHF-FM portable radio used in the fuel service vehicle must be removable and still operate as a portable radio.**
4. **At least two fully charged batteries per radio are required at the beginning of each shift. The contractor supplied batteries must operate the portable radio throughout the shift. It is highly recommended that all portable radios utilize an AA alkaline battery clamshell. A source of 115 VAC power may not be available for rechargeable batteries.**
5. All VHF- transceivers (aeronautical, mobile, and portable) furnished to meet the requirements of this contract must be multimode (P25) digital by January 1, 2010. Only P25 compliant transceivers will be acceptable after this date.

Note: It is highly recommended that a programming "cheat sheet" accompany the VHF-FM portable radio. Additionally, the radio should have a carrying case or chest pack carrier and utilize AA batteries

Amendment 01  
Dated April 4, 2008

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**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 8**  
**FUEL SERVICING EQUIPMENT REQUIREMENTS**

**A. General**

1. An approved fuel servicing vehicle (FSV) (truck, pump-house, or trailer) shall be provided with each helicopter. The FSV shall be inspected annually and shall be stationed at the Host Base unless dispatched by the Contracting Officer. Vehicle shall display a current USFS or USDI-AMD inspection sticker.
2. The fuel-servicing vehicle shall be capable of transporting fuel over rough mountainous terrain to include grades of up to 9%.
3. Fuel tank/chassis combinations which are not compatible and/or that exceed the gross vehicle weight rating (GVWR) when tank(s) are full are not permitted.
4. Fuel servicing vehicles shall be properly maintained, cleaned, and reliable. Tanks, plumbing, filters, and other required equipment shall be free of leaks, rust, scale, dirt, and other contaminants. Trailers used for storage and transport of fuel shall have an effective wheel braking system.
5. Spare filters, seals, and other components of the fuel-servicing vehicle filtering system shall be stored in a clean, dry area in the fuel service vehicle. A minimum of one set is required to be with the vehicle.
6. The fuel servicing vehicle tank capacity shall be sufficient to sustain 8-hours of flight (14-hours of flight when the aircraft is doubled crewed and required in the Schedule of Items). Barrels are not acceptable. The fuel servicing vehicle manufacturers' gross vehicle weight (GVW), with a full fuel tank, shall not be exceeded.
7. All tanks will be securely fastened to the vehicle frame in accordance with DOT regulations and shall have a sump or sediment settling area of adequate capacity to provide uncontaminated fuel to the filter.
8. A 10-gallon per minute filter and pump is the minimum size acceptable. Filter and pump systems sizes shall be compatible with the helicopter being serviced.
9. The filter manufacturer's Operating, Installation and Service Manual shall be with the fuel-servicing vehicle. Filters shall be changed in accordance with the filter manufacturer's manual, at a minimum of every 12-months, whichever is less, and documented. The filter vessel shall be placarded indicating filter change date and documented in service vehicle log.
10. Gasoline engine driven pumps shall be designed to pump fuel, have shielded ignition system, Forest Service approved spark arrestor muffler, and a metal shield between the engine and pump. Other exposed terminal connections shall be insulated to prevent sparking in the event of contact with conductive material.
11. Fuel trucks shall meet the dead man switch requirements as outlined in NFPA 407.

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**EXHIBIT 8**  
**FUEL SERVICING EQUIPMENT REQUIREMENTS (cont)**

**B. Equipment**

1. Each aircraft fuel servicing tank vehicle shall have two fire extinguishers, each having a rating of at least 20-B: C with one extinguisher mounted on each side of the vehicle. Extinguishers shall comply with NFPA 10 Standards for Portable Fire Extinguishers.
2. Fuel tanks shall be designed to allow contaminants to be removed from the sediment settling area.
3. Only hoses compatible with aviation fuel shall be used for servicing. Hoses shall be kept in good repair. The hose shall be at least 50 feet in length, minimum of ½ the rotor diameter plus 20 feet for rapid refueling.
4. Fuel nozzle shall include a 100-mesh or finer screen, a dust protective device, and a bonding cable with clip or plug. Except for closed circuit systems, no hold-open devices will be permitted.
5. An accurate fuel-metering device for registering quantities in U.S. gallons of fuel pumped shall be provided. The meter shall be positioned in full view of the fuel handler while fueling the helicopter.
6. Fuel servicing vehicle shall have adequate bonding cables.
7. Fuel servicing vehicles shall comply with DOT and EPA requirements for transportation and storage of fuel, and shall carry sufficient spill response materials to absorb or contain up to 5-gallons of petroleum product spillage and shall have access to spill response resources for spills greater than 5 gallons. The Contractor is responsible for proper disposal of all products used in the cleanup of a spill in accordance with the EPA, 40 CFR 261 and 262.

**C. Markings**

1. Each fuel-servicing vehicle shall have "NO SMOKING" signs with 3-inch minimum letters visible from both sides and rear of vehicle.
2. Each vehicle shall also be conspicuously and legibly marked to indicate the nature of the fuel. The marking shall be on each side and the rear in letters at least 3 inches high on a background of sharply contrasting color such as Avgas by grade or jet fuel by type. Example: Jet-A white on black background.
3. All fuel-servicing vehicles shall be placarded in accordance with 49 CFR 172.

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**D. Filtering System (Three-Stage or Single-Stage is acceptable)**

1. The first and third stage elements of a three-stage system and the elements of a single-stage system shall be new and installed by the Contractor during the annual inspection and witnessed by the Government Inspector, upon request.
2. The separator element (Teflon screen) of the three-stage system shall be inspected and tested as prescribed by the manufacturer during the inspection. The filter assembly shall be placarded with that data.
3. If equipped with a drain, the bottom of the filter assembly shall be mounted to allow for draining and pressure flushing into a container. If the unit is drained overboard, the fuel shall not come in contact with the exhaust system or the vehicle's wheels. If the unit is equipped with a water sight gauge, the balls shall be visible.
4. Three-Stage (filter, water separator, monitor) System:  
  
Fueling systems shall utilize a three-stage system such as a Facet Part Number 050970-M2 for 20 gallon-per-minute (gpm) pump, or equal. A Facet Part Number 050971-M2 for a 10 gallon-per-minute pump, or equal. An acceptable third-stage (monitor) unit is Velcon CDF-220 Series for 20-gpm flow or Velcon CDF-210E for 10 gpm systems.
5. Single-Stage System or Three-in-One Filter Canister:  
  
Fueling systems shall utilize a single element system such as a Velcon filter canister with Aquacon cartridge of a size compatible with pumps flow rate.
6. Differential pressure gauge(s) shall be installed and readable. Example: Velcon VF-61 canister with an ACO-51201C cartridge.

**E. Fuel Servicing**

1. General
  - a. The Contractor shall supply all aircraft fuel unless the Government exercises the option of providing fuel. All fuel provided by the Contractor will be commercial grade aviation fuel. Only fuels meeting the specifications of American Society for Testing and Materials (ASTM) D-1655 (Type Jet A, A-1 or B), MIL T-5624 (Grade JP-4 or JP-5) for turbine engine powered aircraft are authorized for use.
  - b. Fueling operations, including storage and handling, shall comply with the airframe and engine manufacturer's recommendations and all applicable FAA standards. NFPA Standard No. 407, Aircraft Fuel Servicing, shall be followed except that no passengers may be on board during fueling operations.
  - c. The contractor shall ensure that they are in compliance with 40 CFR Part 112: Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Plan Requirements (SPCC). An SPCC plan is required for each mobile fueler used on this contract regardless of bulk storage container (tank) size.

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- d. Fuel shall pass through a filtering system in accordance with the filter manufacturer's recommendations.

**2. Rapid Refueling**

- a. There are two approved methods (CCR and Open Port) for fueling helicopters with engine(s) running.

(1) Closed Circuit Refueling (CCR). This method of refueling uses a CCR system designed to prevent spills, minimized fuel contamination, and prevent escape of flammable fuel vapors. Open port nozzle Emco Wheaton Model G457 or equivalent may be used in place of CCR system.

(2) Open Port. This method of refueling allows flammable fuel vapors to escape.

- b. Rapid refueling of helicopters is permitted if requested by the Government, and the Contractor follows NFPA 407 procedures, and the Contractor has an approved rapid refueling procedure. For 14 CFR Part 133 and 137 operators a copy of company rapid refueling procedures must be submitted prior to rapid refueling. Rapid refueling authorization shall be annotated on the approval card. Additionally, the Contractor shall meet the following requirements:

(1) A pilot shall be seated at the controls of the aircraft during refueling operations.

(2) The aircraft shall be shut down after every 4-hours of continuous operation.

(3) Personnel providing onsite fire protection are briefed on the Contractor's rapid refueling procedures.

(4) Government personnel shall not refuel Contract aircraft unless the pilot requests Government assistance due to an emergency situation; or when the Government provides the fuel servicing system and dispensing personnel.

(5) The hose shall be at least 50 feet in length, minimum of  $\frac{1}{2}$  the rotor diameter plus 20 feet for rapid refueling.

(6) A Closed Circuit refueling adapter shall be provided to allow fueling of aircraft equipped for single point refueling.

**F. Fuel Quality Control Procedures**

Compliance with fuel quality control requirements is the responsibility of the contractor. NFPA 407 shall be followed for Aircraft Fuel Servicing.

**1. Daily**

- a. Check for and remove any water from fuel tanks. A water check will be performed each morning before the vehicle is moved, after every reloading of fuel, washing of equipment, and after a heavy rain or snowstorm.

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**EXHIBIT 8**  
**FUEL SERVICING EQUIPMENT REQUIREMENTS (Cont)**

- b. Drain all filter/separator drain valves and check for water and other contaminants. Draw off any accumulation of water.
- c. Draw off a sample from the fuel nozzle. Sample shall be collected in a clean, clear glass jar and examined visually. Any visual water, dirt, or filter fibers are not acceptable.
- 2. During Helicopter Fueling Process
  - a. Check sight gauge for water, if equipped
  - b. Visually inspect fueler for leaks. Repair as necessary.
- 3. Weekly
  - a. With pump operating, pressure flush filter assembly. Continue flush operation until sample is clear, clean, and bright.
  - b. Time flow rate with full open flow from nozzle. Record gallons-per-minute to nearest 1/10 gallon.
  - c. Check condition of covers, gaskets, and vents.
  - d. Inspect all fire extinguishers for broken seals, proper pressure, and recharge date. Recharge as necessary.
  - e. Inspect hoses for abrasions, separations, or soft spots. Weak hoses will be replaced.
- 4. Record Keeping. (Records to be kept with the Fuel Truck) The fuel handler shall keep a record containing the following information: (as a minimum)
  - a. Condition (clean, clear, bright, etc.) of fuel sample at:
    - 1. Nozzle
    - 2. Filter Sump
    - 3. Tank Sump
  - b. Flow rate in gallons per minute to the nearest 1/10 gallon
  - c. Filter change (reason & date)
  - d. Record of source, location, when and quantity of fuel loaded into servicing vehicle
  - e. Fuel servicing vehicle tank ports will be secured and locked to prevent access by unauthorized individuals.

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**EXHIBIT 9**  
**OPERATIONS AND SAFETY PROCEDURES GUIDE FOR HELICOPTER PILOTS**

It is important for Contract pilots to be familiar with the Contract specifications. See Forest Service website:  
<http://www.nifc.gov/aviation/helicopters.htm>

Pilot operation briefings will emphasize the following areas:

1. Pilot Authority and Responsibility
2. Helicopter Management
3. Operational Requirements
4. Operating Limitations and Weather Requirements
5. FM Radio and GPS Operations
6. Flight Following and Flight Plans
7. Incident Airspace
8. Knowledge and Procedure Overview
9. Regional Procedures
10. Reference Web Sites
11. Pilot Certification
12. Verification of Long-Line and/or Snorkel Training
13. Flight Hour requirements and experience verification
14. Required documentation for pilot carding

It is the company's responsibility to submit verification of pilot security background checks for all pilots working under this exclusive use contract to the National Helicopter Program Manager and the Helicopter Inspector Pilot (HIP)



**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 10**  
**INTERAGENCY GUIDELINES FOR VERTICAL REFERENCE/EXTERNAL LOAD TRAINING**

National Interagency Helicopter Standards require that contractors develop a Vertical Reference / External Load Training Syllabus and that contract pilots receive this training before applying for Agency Special Use approval. Each contract pilot must have a current proficiency endorsement from the company's chief pilot in order to qualify for a Flight Evaluation by an Interagency Helicopter Inspector Pilot.

**The Applicant has demonstrated VTR proficiency with a 150' long-line by:**

- 1) Exhibiting knowledge of the elements of vertical reference / external load operations.
- 2) Performing a thorough preflight briefing of ground personnel to include hookup procedures, signals, and pilot and ground personnel actions in the event of an emergency or hook malfunction.
- 3) Visually determining that the cargo hook(s) and cables are installed properly and that electrical and manual releases are functioning properly.
- 4) Ascending vertically using vertical reference techniques while centered over the load until the load clears the ground, then maintain a stable hover with a load 10 feet (+ - 5-feet) above the ground for 30 seconds. (The applicant should insure that the long-line does not become tangled on external parts of the helicopter).
- 5) Controlling the hook movement and stopping load oscillations while in a hover.
- 6) Maintaining positive control of the load throughout the flight while maintaining specified altitude within 50 feet, airspeed within 10 knots, and heading within 10 degrees.
- 7) Maintaining the proper approach angle and rate of closure to establish an out-of-ground effect hover with the load 10 feet above the ground (+ - 5 feet) for 30 seconds and then placing the load within a 10-foot radius of the specified release/touchdown point.
- 8) Maintaining the proper approach angle and rate of closure to establish an out-of-ground effect hover within a confined area with the load 10 feet above the ground (+ - 5 feet) for 30 seconds and then placing the load within a 10-foot radius of the specified release/touchdown point.

NAME: \_\_\_\_\_ CERT NO: \_\_\_\_\_ ☐ INITIAL ☐ RECURRENT  
(Check One)

I certify that the above listed pilot has completed training as outlined in the National Interagency Helicopter Standards and meets the currency and performance requirements of this company's Vertical Reference / External Load Training Manual and recommend him/her for evaluation.

CHIEF PILOT: \_\_\_\_\_ COMPANY: \_\_\_\_\_  
Printed Name

CHIEF PILOT: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Signature

**SECTION C**  
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**EXHIBIT 10**

**INTERAGENCY GUIDELINES FOR VERTICAL REFERENCE/EXTERNAL LOAD TRAINING STANDARDS (Cont)**

National Interagency Helicopter Standards require that contractors develop a Vertical Reference training syllabus for pilots who fly helicopters with a fixed tank and snorkel and that contract pilots receive initial and recurrent training before applying for agency Special Use approval. Each contract pilot shall have a current proficiency endorsement from the company's chief pilot in order to qualify for a Flight Evaluation Check by an Interagency Helicopter Inspector Pilot.

**VERTICAL REFERENCE GUIDELINES FOR HELICOPTERS USING A FIXED TANK WITH SNORKLE**

*The pilot shall demonstrate proficiency with the snorkel by:*

- Exhibiting knowledge of the elements of vertical reference operations.
- Performing a thorough preflight of the tank and snorkel
- Establishing a hover before takeoff by ascending vertically using vertical reference techniques while not dragging the snorkel.
- Establishing and maintaining the proper approach angle and rate of closure to establish a 5 foot snorkel height above the porta-tank and then lowering the snorkel into the tank. Maintain a stable hover for 30 seconds. Ascend vertically while keeping the snorkel clear of the edges of the tank until the snorkel is at least five (5) feet above the tank. Transition to forward flight without allowing the snorkel to settle back into the tank,

OR

- Establishing and maintaining a proper approach angle and rate of closure to establish a 5 foot snorkel height above the ground and over a circle of 8 to 10 feet in diameter. The circle shall be marked by paint or other easily identifiable material. From a stable hover, lower the aircraft until the snorkel head is touching the ground. Execute a 360 degree turn (left or right) while maintaining the snorkel head in contact with the ground within the circle and not allowing any part of the snorkel hose to touch the outside of the circle. The maneuver should be completed in 90-120 seconds,

AND

- Perform a landing while placing the main landing gear in a 6 foot diameter circle.

NAME: \_\_\_\_\_ CERT NO: \_\_\_\_\_ ☐ INITIAL ☐ RECURRENT  
(Check One)

I certify that the above listed pilot has completed training as outlined in the National Interagency Helicopter Standards and meets the currency and performance requirements of this company's Vertical Reference / External Load Training Manual and recommend him/her for evaluation.

CHIEF PILOT: \_\_\_\_\_ COMPANY: \_\_\_\_\_  
Printed Name

CHIEF PILOT: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Signature

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 11**  
**HELICOPTER MAKE/MODEL/SERIES LIST**

Grouping of like makes and models of aircraft allows determination of pilot authority. Differences training shall be completed for each of the makes/models in a grouping. Make/model qualification and currency are met with time flown in any aircraft in grouping.

When make/model/series currency is specified in the procurement document, only that specific make/model/series may be used to determine currency.

Make	Model
Agusta	A-119
Bell	47 Series (All Recips)
Bell	47 Series (Solo)
Bell	206A, 206B, 206B3
Bell	206L, 206L1, 206L3, 206L4
Bell	407
Bell	204, 205, UH-1, All Series
Bell	212, 412
Bell	214
Boeing	BV-107-II, KV-107-II
Boeing	BV-234, CH-47
Boeing	369 (500) Series
Boeing	MD-600N
Boeing	MD-900, 902
Enstrom	28 Series
Eurocopter	SA-315, SA-316, SA-319 (Alouette/Lama)
Eurocopter	SA-318
Eurocopter	AS 350 Series (A-star)
Eurocopter	AS-355 Series (Twin Star)
Eurocopter	SA-341 (Gazelle)
Eurocopter	SA-360
Eurocopter	SA-365 (Dauphin)
Eurocopter	SA-330, AS-332 (Puma)
Eurocopter	MBB-105 Series
Eurocopter	BK-117 Series
Eurocopter	EC-145
Eurocopter	EC-135
Eurocopter	EC-120
Eurocopter	BO-105
Hiller	12 Series (Recips)
Hiller	12 Series (Solo)
Hiller	FH-1100
Hughes/Schweizer	269 (300) Series (Recips)
Schweitzer	330
Sikorsky	S-55, H-19 (Recip), S-55T
Sikorsky	S-58, H-34 Series (Recip), S-58T Series
Sikorsky	S-62
Sikorsky	S-61 Series, SH-3
Sikorsky	S-64, CH-54
Sikorsky	CH-53
Sikorsky	S-76 Series
Sikorsky	S-70, UH-60 Series

# SECTION C DESCRIPTION/SPECIFICATIONS/EXHIBITS

## EXHIBIT 12

HELICOPTER SERVICES HOURLY FLIGHT RATES, FUEL CONSUMPTION, AND WEIGHT REDUCTION CHART

04/14/2008

Effective April, 14, 2008

FOR CONTRACTS AWARDED 2008 -2011 (CWN/Exclusive Use)

COMPANY	AIRCRAFT TYPE	FUEL CONSUMPTION (gal/hr)	APRIL 2008 HOURLY FLIGHT RATE (\$/HR)	LOAD CALCULATION Weight Reduction (lbs)
AGUSTA WESTLAND	AW 119 Koala	55	\$1,076	230
	AW 139	129	\$2,172	Not Established
	EH 101	211	\$4,255	Not Established
AEROSPATIALE	SA 315B	58	\$1,526	180
	SA 316B	58	\$1,526	176
	SA 318C	45	\$1,391	80
	SA 319B	45	\$1,401	150
	AS 330J	179	\$3,863	N/A
	SA 332L1	160	\$3,816	N/A
	SA 341G	45	\$1,372	170
	AS 350B/350BA	45	\$986	130
	AS 350B1	46	\$991	160
	AS 350B2	48	\$1,005	160
	AS 350B3	50	\$1,064	175
	AS 350D	38	\$955	130
	AS-355F-1/355F-2	58	\$1,215	140
	AS 365N1	87	\$1,946	275
	EC 120	31	\$760	Not Established
	EC 130B4	53	\$1,010	Not Established
	EC 135	64	\$1,256	220
	EC 145	80	\$1,553	Not Established
	EC 155B1	95	\$2,051	Not Established
	EC 225	183	\$3,689	Not Established
BELL:	47/SOLO	23	\$613	120
	204B (UH-1 Series)	86	\$1,520	200
	204 Super B	90	\$1,564	200
	205A-1	88	\$1,545	260
	205A-1++	90	\$1,585	260
	206B-I	25	\$741	100
	206B-III	27	\$763	130
	206L-1	32	\$894	150
	206L-3	38	\$937	180
	206L-4	38	\$922	180
	210	90	\$1,580	260
	212	100	\$1,808	390
	214B	160	\$2,460	380
	214B1	145	\$2,290	380
	214ST	133	\$2,826	420
	222A	70	\$1,706	Not Established
	222B	83	\$1,792	Not Established
	222UT	83	\$1,792	Not Established
	407	45	\$1,304	155
	412	110	\$1,871	390
	412HP	110	\$1,947	390
	UH-1B	86	\$1,491	N/A
	UH-1B Super	88	\$1,521	N/A
	UH-1F	88	\$1,521	N/A
	UH-1H (13 engine)	88	\$1,521	N/A
	UH-1H (17 engine)	90	\$1,561	N/A
	TH-1L	88	\$1,521	N/A
BOEING:	BV-107	180	\$3,674	N/A
	BV-234	405	\$6,692	N/A
HILLER:	*SL-3/4	21	\$590	90
	H-1100B	22	\$761	130
KAMEN:	UH-12/Soly	23	\$672	100
	H43-F	85	\$1,516	N/A
MBB:	K-1200	85	\$1,854	N/A
	BO105CBS	55	\$1,196	180
McDONNELL-	BK-117	77	\$1,678	160
	500C	23	\$763	110
DOUGLAS:	500D/E	28	\$782	120
	520N	32	\$819	100
	530F	34	\$876	120
	600N	41	\$974	155
SIKORSKY	900/902	69	\$1,360	210
	CH 53D	425	\$6,558	N/A
	CH 54/S 64	525	\$7,145	N/A
	S-55T	47	\$1,101	170
	S-58D/E	83	\$1,602	N/A
	S-58T/PT6T-3	115	\$2,093	400
	S-58T/PT6T-6	115	\$2,093	460
	S-61N	170	\$3,487	N/A
	S-62A	70	\$1,306	300
	S-70	160	\$3,327	N/A
	S-76C+	90	\$1,959	Not Established
	S-92	178	\$2,952	Not Established
AVERAGE GALLON PRICE:		JET FUEL:		\$5.36

Amendment 01  
Dated April 4, 2008

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**EXHIBIT 13**  
**INTERAGENCY HELICOPTER LOAD CALCULATION**

**Instructions**

A load calculation must be completed for all flights. A new calculation is required when operating conditions change ( $\pm 1000'$  in elevation or  $\pm 5^{\circ}\text{C}$  in temperature) or when the Helicopter Operating Weight changes (such as changes to the Equipped Weight, changes in flight crew weight or a change in fuel load).

All blocks must be completed. Pilot must complete all header information and Items 1-13. Helicopter Manager completes Items 14 & 15.

1. **DEPARTURE** – Name of departure location and current Pressure Altitude (PA, read altimeter when set to 29.92) and Outside Air Temperature (OAT, in Celsius) at departure location.
2. **DESTINATION** – Name of destination location and PA & OAT at destination. If destination conditions are unknown, use MSL elevation from a map and Standard Lapse Rate of  $2^{\circ}\text{C}/1000'$  to estimate OAT.

Check the box in Line 1 (Departure) or Line 2 (Destination) to indicate the most restrictive values used to obtain Computed Gross Weight in Line 7b.

3. **HELICOPTER EQUIPPED WEIGHT** – Equipped Weight equals the Empty Weight (as listed in the Weight and Balance Data) plus the weight of lubricants and onboard equipment required by contract (i.e. survival kit, rappel bracket).
4. **FLIGHT CREW WEIGHT** – Weight of the Pilot and any other assigned flight crewmembers on board (i.e. Co-pilot, flight engineer, navigator) plus the weight of their personal gear.
5. **FUEL WEIGHT** – Number of gallons onboard X the weight per gallon (Jet Fuel = 7.0 lbs/gal; AvGas = 6.0 lbs/gal).
6. **OPERATING WEIGHT** – Add items 3, 4 and 5.
- 7a. **PERFORMANCE REFERENCES** – List the specific Flight Manual supplement and hover performance charts used to derive Computed Gross Weight for Line 7b. Separate charts may be required to derive HIGE, HOGE and HOGE-J. HIGE: use Hover-In-Ground-Effect, External/Cargo Hook Chart (if available). HOGE & HOGE-J: use Hover-Out-Ground-Effect charts for all HOGE operations.
- 7b. **COMPUTED GROSS WEIGHT** - Compute gross weights for HIGE, HOGE and HOGE-J from appropriate Flight Manual hover performance charts using the Pressure Altitude (PA) and temperature (OAT) from the most restrictive location, either Departure or Destination. Check the box in Line 1 (Departure) or Line 2 (Destination) to indicate which values were used to obtain Computed Gross Weight.
8. **WEIGHT REDUCTION** – The Government Weight Reduction is required for all "non-jettisonable" loads. The Weight Reduction is optional (mutual agreement between Pilot and Helicopter Manager) when carrying jettisonable loads (HOGE-J) where the pilot has total jettison control. The appropriate

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

Weight Reduction value, for make & model, can be found in the current helicopter procurement document (contract).

9. ADJUSTED WEIGHT – Line 7b minus Line 8.
  10. GROSS WEIGHT LIMITATION – Enter applicable gross weight limit from Limitations section of the basic Flight Manual or the appropriate Flight Manual Supplement. This may be Maximum Gross Weight Limit for Take-Off and Landing, a Weight/Altitude/Temperature (WAT) limitation or a Maximum Gross Weight Limit for External Load (jettisonable). Limitations may vary for HIGE, HOGE and HOGE-J.
  11. SELECTED WEIGHT – The lowest weight, either line 9 or 10, will be entered for all loads. Applicable limitations in the Flight Manual must not be exceeded.
  12. OPERATING WEIGHT – Use the value entered in Line 6.
  13. ALLOWABLE PAYLOAD – Line 11 minus Line 12. The maximum allowable weight (passengers and/or cargo) that can be carried for the mission. Allowable Payload may differ for HIGE, HOGE and HOGE-J.
  14. PASSENGERS AND/OR CARGO – Enter passenger names and weights and/or type and weights of cargo to be transported. Include mission accessories, tools, gear, baggage, etc. A separate manifest may be used.
  15. ACTUAL PAYLOAD – Total of all weights listed in Item 14. Actual payload must not exceed Allowable Payload for the intended mission profile, i.e. HIGE, HOGE or HOGE-J.
- Both Pilot and Helicopter Manager must review and sign the form. Check if HazMat is being transported. Manager must inform the pilot of type, quantity and location of HazMat onboard.

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**EXHIBIT 13**  
**INTERAGENCY HELICOPTER LOAD CALCULATION (Cont)**

INTERAGENCY HELICOPTER LOAD CALCULATION OAS-67/FS 5700-17 (11/03)			MODEL	
PILOT(S)			N#	
MISSION			DATE	
			TIME	
1	DEPARTURE	PA	OAT	
2	DESTINATION	PA	OAT	
3	HELICOPTER EQUIPPED			
4	FLIGHT CREW WEIGHT <i>5,400 w/ Bucket on Hook</i>			
5	FUEL WT ( _____ gallons X 7 _____ lbs per gal)			
6	OPERATING WEIGHT (3 + 4 + 5)			
		Non-Jettisonable		Jettisonable
		HIGE	HOGE	HOGE-J
7a	PERFORMANCE REF (List page/chart from FM)			
7b	COMP GROSS WT (Req for all Non-Jettisonable)			
8	WT REDUCTION (Req for all Non-Jettisonable)			
9	ADJUSTED WEIGHT (7b minus 8)			
10	GROSS WT LIMIT (FM Limitations Section)			
11	SELECTED WEIGHT (Lowest of 9 or 10)			
12	OPERATING WEIGHT (From Line 6)			
13	ALLOWABLE PAYLOAD (11 minus 12)			
14	PASSENGERS/CARGO MANIFEST			
15	ACTUAL PAYLOAD (Total of all weights listed in item 14) Line 15 must not exceed Line 13 for the intended mission			
PILOT SIGNATURE				HazMat
MGR SIGNATURE				Yes__ No__

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**EXHIBIT 14**  
**HELICOPTER AND FUEL SERVICE TRUCK PRE-USE CHECKLIST**

GENERAL					
Date:		Aircraft Make/Model:		N#:	
Vendor:					
Pilot(s) Name(s):					
Card Expiration Date(s):					
Pilot(s) Carded For Intended Mission(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No					
A/C Card Expiration Date:		A/C Carded For Intended Missions: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Departure Base:		Departure Hobbs Reading:		Arrival Hobbs Reading:	
Copy of Contract on Board Aircraft: <input type="checkbox"/> Yes <input type="checkbox"/> No HazMat HB/Exemption/ERG: <input type="checkbox"/> Yes <input type="checkbox"/> No					
LOGBOOK REVIEW					
50/100-Hr., Progressive, Or Other Inspection Program Up-To-Date: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Entries Indicating Damage To Aircraft: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Form HCM-5 'Turbine Engine Performance Analysis' Onboard Aircraft: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Power Check Completed/Results Satisfactory: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Comments:					
CONDITION OF HELICOPTER					
Item	OK	Document Inoperable Or Damaged Equipment (Dents, Tears, Leaks, Etc.)			
Skin and Exterior					
Windows					
Doors					
Upholstery					
Cargo Compartment					
Skids/Wheels					
Fixed Tank					
Other					
Comments:					
REQUIRED HELICOPTER EQUIPMENT INSTALLED AND OPERATIVE (CONSULT CONTRACT)					
Item	Yes	No	Item	Yes	No
Seat Belts and Harnesses			Strobe Light(s)		
Hi-Visibility Paint on Main Rotor Blades			Survival Kit		
VHF-FM Radio			First Aid Kit		
VHF-AM 760 Channel			Fire Extinguisher(s)		
Auxiliary Radio Adapter			Cargo Hook		
GPS			Convex Mirror		
High Skid Gear			Buckets (Appropriate Sizes)		
Nine-Pin Connector (Type II and III Helicopters)			Anti-Theft Security Measures in Place		
Comments:					
REQUIRED SERVICE TRUCK EQUIPMENT INSTALLED AND OPERATIVE (CONSULT CONTRACT)					
Item	Yes	No	Item	Yes	No
Spare Set of Filters			Filter Change Data Placarded		
Fire Extinguisher(s) Current Inspection			Bonding Cables		
Hazmat Marking and Placards			Fuel Quality Control Log		
Inspection Sticker			Absorbent Materials for Spills		
Beginning Odometer Reading:					
Comments:					
Signature of Inspecting Govt. Representative & Pilot			Print Name		Date



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EXHIBIT 15  
PERFORMANCE REPORT

To be completed at the end of the Mandatory Availability Period

CONTRACTOR'S NAME:			CONTRACT #:			A/C N#		
YOUR NAME:			EMAIL:			AGENCY:		
YOUR ASSIGNMENT DATE:			RELEASE DATE:			PHONE #:		
1. Was the helicopter kept clean and neat?								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
QUALITY COMMENTS:								
2. Did the fuel truck provide reliable service?								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
QUALITY COMMENTS:								
3. Did the company keep you fully informed on the condition of the crew, helicopter, and fuel truck? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
QUALITY COMMENTS:								
4. Did the contractor abide by all provisions of the contract? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
COST CONTROL COMMENTS:								
5. Would you take your next assignment with this contractor? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
COST CONTROL COMMENTS:								
6. Was the crew and helicopter supported by the company in a timely manner? Yes <input type="checkbox"/> No <input type="checkbox"/>								
TIMELINESS OF PERFORMANCE COMMENTS:								
7. During any mechanical problems, were you informed of the problem and the progress of the work being done to fix the aircraft? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
TIMELINESS OF PERFORMANCE COMMENTS:								
8. Did the flight crew/fuel truck/mechanic arrive on time each day? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
TIMELINESS PERFORMANCE COMMENTS:								
9. Were crew changes handled with little or no confusion, and, was there a briefing between crew members being exchanged? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
BUSINESS RELATIONS COMMENTS:								
10. Were you treated like a preferred customer? Yes <input type="checkbox"/> No <input type="checkbox"/>								
DOES NOT MEET REQUIREMENTS			1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>			EXCEEDS ALL REQUIREMENTS		
BUSINESS RELATIONS COMMENTS:								

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**  
**EXHIBIT 16**  
**DEPARTMENT OF LABOR WAGE DETERMINATION**

REGISTER OF WAGE DETERMINATIONS UNDER  
THE SERVICE CONTRACT ACT  
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR  
EMPLOYMENT STANDARDS ADMINISTRATION  
WAGE AND HOUR DIVISION  
WASHINGTON D.C. 20210

William W. Gross                      Division of  
Director                                  Wage Determinations

Wage Determination No.: 1995-0222  
Revision No.: 23  
Date Of Last Revision: 02/06/2008

Nationwide: Applicable in the continental U.S. Alaska, Puerto Rico, Hawaii and Virgin Islands.

Employed on U.S. Government contracts for aerial photographer, aerial seeding, aerial spraying, transportation of personnel and cargo, fire reconnaissance, administrative flying, fire detection, air taxi mail service, and other flying services.

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
31012 - Aerial Photographer	11.80
31011 - First Officer (Co-Pilot)	21.51
31010 - Airplane Pilot	23.62

EXCEPT SCHEDULED AIRLINE TRANSPORTATION AND LARGE MULTI-ENGINE AIRCRAFT SUCH AS THE B-727, DC-8, AND THE DC-9.

**WAGE DETERMINATION - LOWER 48**

**Department of Labor Wage Determination Information**

**DOL WAGE DETERMINATION NO. 2005-2271, REV. 4, DATED 07/30/2007**

Area: **Cadillac Michigan, Wexford County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$21.36
Aircraft Mechanic Helper	\$17.28
Truck driver, Heavy Truck	\$17.53
Truck driver, Medium Truck	\$14.74
Truck driver, Light Truck	\$14.35

**SECTION C**  
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**DOL WAGE DETERMINATION NO. 2005-2285, REV. 4, DATED 07/27/2007**

Area: **Ely, Minnesota, St Louis County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$23.03
Aircraft Mechanic Helper	\$18.59
Truck driver, Heavy Truck	\$18.36
Truck driver, Medium Truck	\$14.48
Truck driver, Light Truck	\$13.92

**DOL WAGE DETERMINATION NO. 2005-2081, REV. 4, DATED 09/27/2007**

Area: **Jeffco, Colorado, Broomfield**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$23.41
Aircraft Mechanic Helper	\$18.00
Truck driver, Heavy Truck	\$20.37
Truck driver, Medium Truck	\$19.56
Truck driver, Light Truck	\$15.48

**DOL WAGE DETERMINATION NO. 2005-2023, REV. 7, DATED 09/27/2007**

Area: **Prescott, Arizona, Yavapai County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$25.32
Aircraft Mechanic Helper	\$17.73
Truck driver, Heavy Truck	\$19.17
Truck driver, Medium Truck	\$18.71
Truck driver, Light Truck	\$13.61

**DOL WAGE DETERMINATION NO. 2005-2317, REV. 4, DATED 08/14/2007**

Area: **Hamilton, Libby, Helena, Hungry Horse, and Bozeman, Montana, Statewide**

Occupation:	
Aircraft Mechanic	\$19.37
Aircraft Mechanic Helper	\$15.11
Truck driver, Heavy Truck	\$16.09
Truck driver, Medium Truck	\$18.56
Truck driver, Light Truck	\$12.67

**DOL WAGE DETERMINATION NO. 2005-2361, REV. 5, DATED 09/27/2007**

Area: **Albuquerque, New Mexico, Bernalillo County**

Occupation:	
Aircraft Mechanic	\$18.94
Aircraft Mechanic Helper	\$13.80
Truck driver, Heavy Truck	\$17.53
Truck driver, Medium Truck	\$16.66
Truck driver, Light Truck	\$13.34

**SECTION C**  
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**DOL WAGE DETERMINATION NO. 2005-2025, REV. 4, DATED 7/18/2007**

Area: **Tucson, Arizona, Pima County**

Occupation:	Aircraft Mechanic	\$21.09
	Aircraft Mechanic Helper	\$15.82
	Truck driver, Heavy Truck	\$17.63
	Truck driver, Medium Truck	\$16.22
	Truck driver, Light Truck	\$31.46

**DOL WAGE DETERMINATION NO. 2005-2159, REV. 4, DATED 08/17/2007**

Area: **Grangeville, Lucky Peak (Boise), Pocatello, McCall, and Salmon, Idaho, Idaho, Statewide**

Occupation:	Aircraft Mechanic	\$20.19
	Aircraft Mechanic Helper	\$13.63
	Truck driver, Heavy Truck	\$15.02
	Truck driver, Medium Truck	\$13.66
	Truck driver, Light Truck	\$12.47

**DOL WAGE DETERMINATION NO. 2005-2531, REV. 4, DATED 08/14/2007**

Area: **Cedar City, Utah, Statewide**

Occupation:	Aircraft Mechanic	\$22.55
	Aircraft Mechanic Helper	\$15.54
	Truck driver, Heavy Truck	\$18.63
	Truck driver, Medium Truck	\$16.84
	Truck driver, Light Truck	\$12.36

**DOL WAGE DETERMINATION NO. 2005-2511, REV. 4, DATED 05/29/2007**

Area: **Silver City, New Mexico, Grant County**

Occupation:	Aircraft Mechanic	\$22.64
	Aircraft Mechanic Helper	\$15.58
	Truck driver, Heavy Truck	\$14.73
	Truck driver, Medium Truck	\$14.19
	Truck driver, Light Truck	\$12.39

**DOL WAGE DETERMINATION NO. 2005-2083, REV. 4, DATED 07/24/2007**

Area: **Rifle, Colorado, Garfield County**

Occupation:	Aircraft Mechanic	Minimum Hourly Wage \$18.13
	Aircraft Mechanic Helper	\$14.18
	Truck driver, Heavy Truck	\$15.32
	Truck driver, Medium Truck	\$14.06
	Truck driver, Light Truck	\$13.75

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**DOL WAGE DETERMINATION NO. 2005-2333, REV. 4, DATED 05/29/2007**

Area: **Reno, Nevada, Washoe County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$20.98
Aircraft Mechanic Helper	\$16.21
Truck driver, Heavy Truck	\$19.97
Truck driver, Medium Truck	\$17.46
Truck driver, Light Truck	\$15.81

**DOL WAGE DETERMINATION NO. 2005-2053, REV. 5, DATED 07/24/2007**

Area: **Hemet, and San Bernardino, California, San Bernardino & Riverside Counties**

Occupation:	Aircraft Mechanic	\$24.39
	Aircraft Mechanic Helper	\$17.24
	Truck driver, Heavy Truck	\$20.95
	Truck driver, Medium Truck	\$19.51
	Truck driver, Light Truck	\$12.63

**DOL WAGE DETERMINATION NO. 2005-2071, REV. 4, DATED 07/24/2007**

Area: **Casitas, California, Ventura County**

Occupation:	Aircraft Mechanic	\$25.01
	Aircraft Mechanic Helper	\$17.52
	Truck driver, Heavy Truck	\$20.53
	Truck driver, Medium Truck	\$14.76
	Truck driver, Light Truck	\$13.95

**DOL WAGE DETERMINATION NO. 2005-2047, REV. 4, DATED 07/24/2007**

Area: **Van Nuys, California, Los Angeles County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$26.83
Aircraft Mechanic Helper	\$18.79
Truck driver, Heavy Truck	\$20.08
Truck driver, Medium Truck	\$18.45
Truck driver, Light Truck	\$12.63

**DOL WAGE DETERMINATION NO. 2005-2063, REV. 4, DATED 07/19/2007**

Area: **Santa Maria, California, Santa Barbara County**

Occupation:	Aircraft Mechanic	\$22.11
	Aircraft Mechanic Helper	\$16.84
	Truck driver, Heavy Truck	\$17.09
	Truck driver, Medium Truck	\$17.73
	Truck driver, Light Truck	\$12.33

**SECTION C**  
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**DOL WAGE DETERMINATION NO. 2005-2073, REV. 5, DATED 09/26/2007**

Area: **Porterville, California, Tulare County**

Occupation:	Aircraft Mechanic	\$18.16
	Aircraft Mechanic Helper	\$13.46
	Truck driver, Heavy Truck	\$18.25
	Truck driver, Medium Truck	\$15.45
	Truck driver, Light Truck	\$14.32

**DOL WAGE DETERMINATION NO. 2005-2055, REV. 4, DATED 08/31/2007**

Area: **Orland, Glen County, Montague, Siskiyou County, Pollock Pines, El Dorado County, Truckee, Nevada County, and Chester, California, Plumas County**

Occupation:	Aircraft Mechanic	\$22.63
	Aircraft Mechanic Helper	\$16.09
	Truck driver, Heavy Truck	\$19.49
	Truck driver, Medium Truck	\$17.91
	Truck driver, Light Truck	\$13.49

**DOL WAGE DETERMINATION NO. 2005-2565, REV. 5, DATED 12/18/2007**

Area: **Wenatchee, Washington, Chelan County**

Occupation:	Aircraft Mechanic	\$23.66
	Aircraft Mechanic Helper	\$18.43
	Truck driver, Heavy Truck	\$16.95
	Truck driver, Medium Truck	\$17.52
	Truck driver, Light Truck	\$11.02

**DOL WAGE DETERMINATION NO. 2005-2045, REV. 4, DATED 07/18/2007**

Area: **Mariposa, California, Mariposa County**

		Minimum Hourly Wage
Occupation:	Aircraft Mechanic	\$20.96
	Aircraft Mechanic Helper	\$15.20
	Truck driver, Heavy Truck	\$16.03
	Truck driver, Medium Truck	\$13.11
	Truck driver, Light Truck	\$11.51

**DOL WAGE DETERMINATION NO. 2005-2439, REV. 5, DATED 08/21/2007**

Area: **Prineville, Oregon, Crook County**

		Minimum Hourly Wage
Occupation:	Aircraft Mechanic	\$21.81
	Aircraft Mechanic Helper	\$15.62
	Truck driver, Heavy Truck	\$15.04
	Truck driver, Medium Truck	\$16.40
	Truck driver, Light Truck	\$12.98

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**DOL WAGE DETERMINATION NO. 2005-2485, REV. 3, DATED 07/27/2007**

Area: **Custer, South Dakota, Custer County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$22.12
Aircraft Mechanic Helper	\$16.54
Truck driver, Heavy Truck	\$14.88
Truck driver, Medium Truck	\$12.38
Truck driver, Light Truck	\$11.43

**DOL WAGE DETERMINATION NO. 2005-2439, REV. 5, DATED 08/21/2007**

Area: **Oakridge, Oregon, Lane County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$21.81
Aircraft Mechanic Helper	\$15.62
Truck driver, Heavy Truck	\$15.04
Truck driver, Medium Truck	\$16.40
Truck driver, Light Truck	\$12.98

**DOL WAGE DETERMINATION NO. 2005-2569, REV. 5, DATED 10/01/2007**

Area: **La Grande, Oregon, Union County and John Day, Oregon, Grant County**

Occupation:	Minimum Hourly Wage
Aircraft Mechanic	\$23.12
Aircraft Mechanic Helper	\$17.34
Truck driver, Heavy Truck	\$17.19
Truck driver, Medium Truck	\$14.03
Truck driver, Light Truck	\$12.35

**CONFORMANCE PROCESS FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE**

If the Offeror intends to employ a class of service employee that is not listed above, the Offeror should immediately contact the issuing office of this solicitation and request a complete copy of the wage determinations. The Offeror can then view the wage determinations in their entirety and if needed can make a request for authorization of an additional classification and wage rate through the conformance process as set forth in the wage determinations.

Current revisions of U.S. Department of Labor Wage determinations may be obtained on the Internet at the U.S. DOL Wage Determinations Online website at: <http://www.wdol.gov/>

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**EXHIBIT 17**  
**SUPPLEMENTAL RAPPEL REQUIREMENTS**

**AVIONICS**

For Rappel Operations the following paragraphs in sections of C-8, Contractor Furnished Avionics Systems, are deleted and replaced with the following paragraphs:

**E. Audio Control Systems**

**General**

Two audio control systems (which may be combined in a single unit) shall be installed providing the pilot and observer/co-pilot separate systems. Each system shall provide pilot and observer/co-pilot with separate controls for selection of multiple receiver audio outputs and transmitter microphone/push-to-talk (PTT) audio inputs. Each system shall also provide pilot and observer/co-pilot with separate controls for adjustment of both ICS and receiver audio output levels.

For Heavy (Type I) and Medium (Type II) helicopters, a third audio control system shall be installed in the aft cabin for utilization by the rappel spotter. The audio control system shall be installed in a location that provides clear and unobstructed access by the spotter while seated in the spotter position. For the Bell medium helicopter, the spotter position is in the aft center forward facing seat, position 5 (see **Figure 1** of this Exhibit).

For all helicopter types, the aft cabin shall have capability for radio transmit push-to-talk (PTT) from two positions and have ICS and radio receive from all positions.

**F. Transmitter Selection and Operation**

Separate transmitter selection controls shall be provided to the microphone/PTT inputs of the pilot, observer/co-pilot, and spotter if required. The system shall be configured so that the pilot, observer/co-pilot, and spotter may each simultaneously select and utilize a different transmitter via their respective controller utilizing their microphone/PTT. Whenever a transmitter is selected, the companion receiver audio shall automatically be selected for the corresponding earphone. Transmitter sidetone audio shall be provided for the user as well as for cross monitoring via the corresponding receiver selection switch on the other audio control systems.

For the Bell medium, the left outboard aft facing position shall also have radio transmit PTT capability as selected by the rappel spotter's audio controller unless a fourth audio controller is provided (see **Figure 1** of this Exhibit).

For Type III helicopters, Bell 407 and L4, the aft forward and rear facing seats, opposite of the pilot's side, shall each have radio transmit PTT capability via the observer/co-pilot's audio controller unless a third audio controller is installed. For the Eurocopter AS350 Series, a door seat and the adjacent (next seat in) seat, opposite of the pilot's side, shall each have radio transmit PTT capability via the observer/co-pilot's audio controller, unless a third audio controller is installed.

Positions having shared PTT capability via the observer/co-pilot's audio controller need not transmit simultaneously.



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**EXHIBIT 17**  
**SUPPLEMENTAL RAPPEL REQUIREMENTS (cont)**

**AVIONICS**

**G. Receiver Selection and Operation**

Separate controls shall be provided for the pilot, observer/co-pilot, and spotter (if required), to select audio from one or any combination of available receivers.

All passengers shall be capable of monitoring receive audio. These positions shall monitor receive audio as selected by the spotter's audio control system (when installed) or the observer/co-pilot's audio control system. When additional audio control systems are installed, aft passengers shall monitor receive from the most logical audio control system.

**J. Push-to-Talk Systems (PTT)**

Separate PTT switches for radio transmit and intercom (ICS) operation shall be provided at all positions that require both. Positions not requiring radio transmit capability need only provide a PTT switch for ICS. The pilot's PTT switches shall be mounted on the cyclic control. All other PTT switches shall be mounted on the cord to the earphone/microphone connector. In lieu of the observer/co-pilot's cord mounted PTT switches, a foot switch operated PTT system may be utilized.

The spotter's PTT switches shall be mounted on a coil cord to the earphone/microphone connector with the cord being sufficiently long enough to allow the spotter to reach all aft cabin doors and view directly under the helicopter without unclipping the cord from their flight suit.

**K. Intercommunications Systems (ICS)**

An ICS system shall be provided for the pilot, observer/co-pilot, spotter, and aft passenger positions (for Bell medium helicopters see **Figure 1** of this Exhibit below). ICS audio shall mix with, but not mute, selected receiver audio. An ICS audio level control shall be provided for each position above. Adjustment of the ICS audio level at any position shall not affect the level at any other position. A "hot mic" capability, controlled via an activation switch or voice activation (VOX), shall be provided for the pilot, observer/co-pilot, and spotter. ICS sidetone audio shall be provided for the earphone corresponding with the microphone in use.

The following information is added to provide further clarification regarding the types and placement of jacks or receptacles in the Bell medium helicopter.

ICS/RX and ICS/TX/RX jacks/receptacles shall be located in a position above the seats (as indicated in **Figure 1** Exhibit 19 below) behind or near the passenger's head. Drop cords shall not hinder crew movement or interfere with entry and egress from the cabin during rappel operations.

**NOTE:** Seating configurations vary depending upon mission. During crew transport missions and some rappel configurations forward facing seats on either side of position 5 may be installed and the drop cords for positions 6, 7, 8, and 9 shall be used. During such missions, those seats at 6, 7, 8, and 9 shall be stowed or removed and the areas used for cargo. It is important that these drop cord jacks/receptacles be placed on the ceiling near the corners of the transmission housing, at or

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**SUPPLEMENTAL RAPPEL REQUIREMENTS (cont)**

**AVIONICS**

very near where indicated in **Figure 1** of this Exhibit so that the cords may adequately serve the forward facing seats on either side of position 5 (seats 10, 11, 12, and 13), or, when installed, seats 6, 7, 8, and 9, and not interfere with the movement of personnel into and out of the aircraft during rappel operations.

**NOTE:** Positions with ICS/TX/RX capability shall have drop cords configured as follows:

ICS switch – momentary and lock

Radio transmit PTT – momentary push button

Separate volume knob

Large clip

Jack - TJT-120 or U92 B/U type which will accept TP-101 (U174/U) Helmet plug

Drop cords shall be 6 foot length coil cord

**NOTE:** Positions with ICS/RX capability shall have drop cords configured as follows:

ICS switch – momentary and lock

Separate volume knob

Large clip

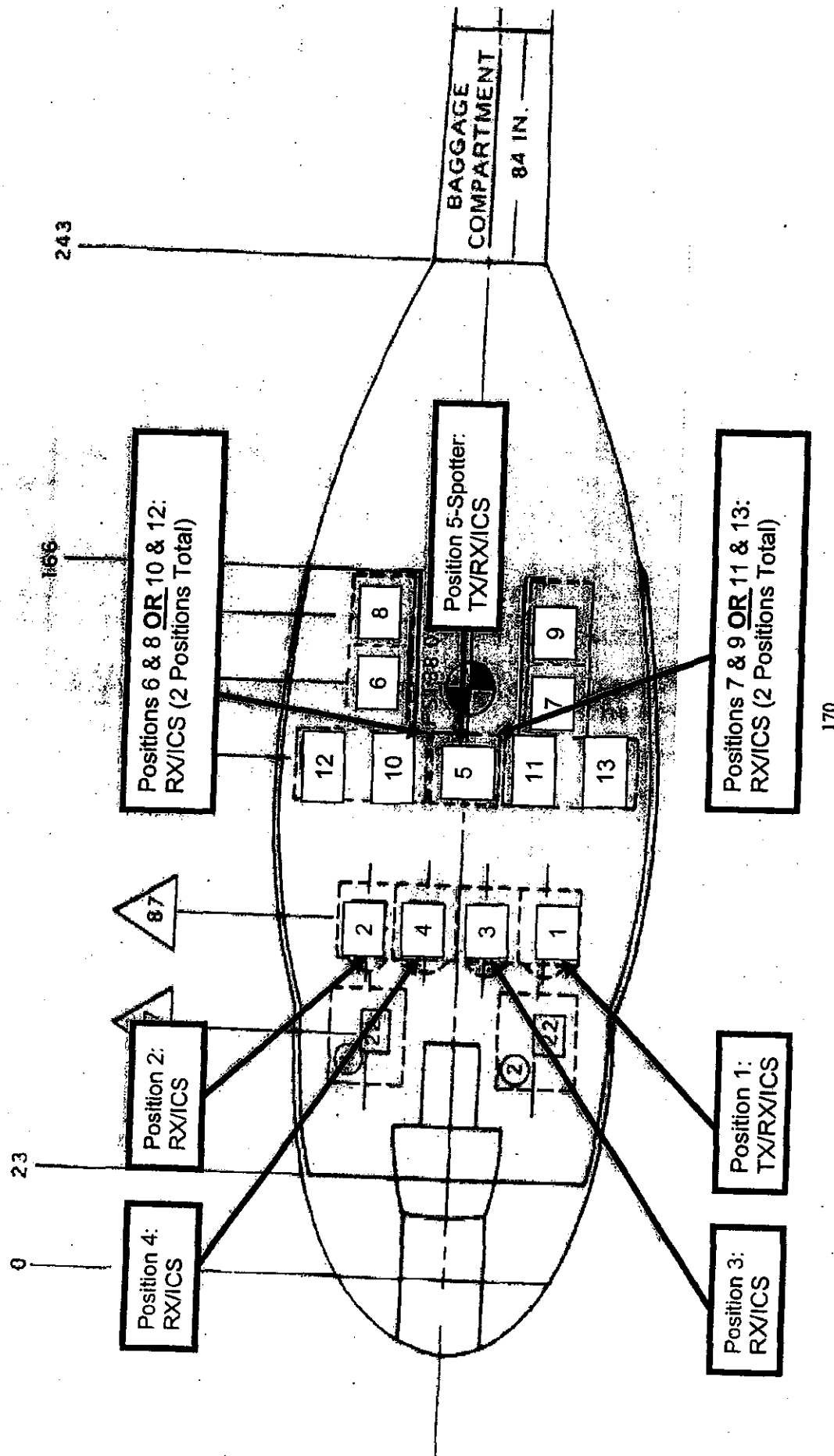
Jack - TJT-120 or U92 B/U type which will accept TP-101 (U174/U) Helmet plug

Drop cords shall be 3 foot length coil cord

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SUPPLEMENTAL RAPPEL REQUIREMENTS (cont.)

FUSELAGE  
STATIONS

Figure 1



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**SUPPLEMENTAL RAPPEL REQUIREMENTS (cont.)**

**RAPPEL ANCHOR**

Source 1

Heli-Tech  
190 S. Danebo Ave.  
Eugene, OR 97402  
Tel. 541-344-2304

- STC No. SH261WE for Bell Medium Series
- STC No. SH4547NM for Bell 206L-4
- STC No. SR00125LA-D for Eurocopter AS350 Series (Floor mounted kit)

Source 2

Aeronautical Accessories, Inc.  
P. O. Box 3689  
Bristol, TN 37625  
Tel. 423-538-5151

- STC No. SR01336AT for Bell 407
  - In addition to STC No. SR01336AT for Bell 407 the Forest Service requires STC No. SH4547NM for the purpose of a spotter attachment point in this make and model.
- STC No. SH2293SO for Bell 206L-4 cargo let-down only

The FS has approved three non-STC'd anchors for use in Interagency operations (the FS has no control over the availability of these designs):

- ☐ Sikorsky S-58ET (Aris Helicopters)
- ☐ Sikorsky S-58HT (Construction Helicopters)
- ☐ Sikorsky S-61N (Coulson Airplane)

**Rappel Anchor Inspection**

The owner shall assure that the rappel anchor is in condition to perform. STC'd rappel anchor kits will have Instructions for Continued Airworthiness.

The rappel anchors shall be visually inspected before and after each rappel operation. An annual inspection will also be conducted. The manufacturer of the anchor is responsible for developing a maintenance inspection, which ensures the continued airworthiness of the anchor. The owner of the anchor is responsible for ensuring that the inspection(s) are conducted. Critical inspection of metal components can be achieved using magnaflux, x-ray, sonics or dye-penetrant. No welding or major repairs will be accomplished without prior approval of a USDA Forest Service or Department of the Interior Contracting Officer. Major repairs shall only be performed by the STC holder or manufacturer.

All non-STC'd rappel anchors shall be fabricated in accordance with the materials specified in the engineering drawings supplied to and approved by the FS and DOI. These anchors shall be installed with an FAA field approval. The 337 will include installation instructions and type of hardware. Development of an inspection routine for a non-STC'd rappel anchor is up to the anchor's designer. A copy of the inspections and interval shall be sent to the Missoula Technology & Development Center. If there are any special inspections that are needed to assure continued airworthiness they will have to be complied with at time of rappel anchor

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installation and any subsequent inspection periods. The anchor will be inspected as part of the helicopter equipment.

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**EXHIBIT 18**

AMD-60B (12/06) / FS-5700-20b (pending)

**CONTRACTOR'S VERIFICATION OF INDIVIDUAL HELICOPTER PILOT REQUIREMENTS AND EXPERIENCE FOR INITIAL INTERAGENCY APPROVAL**

*Note: This form is required prior to initial (first-time) approval/carding. This form is not for pilots previously approved or carded by the USDA Forest Service or DOI, NBC Aviation Management (formerly Office of Aircraft Services).*

The Contractor must ensure that a pilot who is presented for initial carding meets all requirements as outlined in the contract's Section B, Technical Specifications/Pilot Qualifications, after award. The Contractor must verify all pilot hours submitted on this form as determined from a certified pilot log or permanent record to ensure accuracy. In addition, the Contractor must identify previous employers and submit the information on this form. The information provided by the pilot on *USFS Form FS-5700-20A or AMD Form 64B*, Interagency Helicopter Pilot Qualifications and Approval Record, prior to approval needs to be verified as accurate by the Contractor. The information submitted is subject to verification by an interagency pilot inspector.

**Date(mm/dd/yyyy):**

**Company's name:**

**Pilot's name:**

**Pilot's total helicopter pilot-in-command hours (verified from pilot's logbook or permanent record):**

**Pilot's information and flight time/experience as submitted for initial carding on AMD-64B or FS-5700-20a verified as accurate? Check if yes: ☐**

**Previous Employers:**

Previous Employer	Address & Telephone Number	Current Contact: Name & Telephone No.	Period Employed	Make/Model(s) Flown and PIC Hours in each
1.				
2.				
3.				
4.				

**Helicopter Training Courses Completed:**

Name of Course & Provider	Address & Telephone Number	Contact Name & Telephone No.	Date of Completion	Flight Hours Completed
1.				
2.				
3.				
4.				

**Comments (use additional sheets if necessary):**

**Check one:**      ☐ Chief Pilot      ☐ Director of Operations      ☐ Other

**Print name:** \_\_\_\_\_ **Sign name:** \_\_\_\_\_

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**EXHIBIT 19**

**"On Contract" Pilot Operational Training**

Pilot "operational training" may be accomplished "on contract" provided the following criteria are met.

1. Training shall not interfere with the Scope of the Contract (government will determine what constitutes interference). *Note: Will be reviewed at pre-work conference.*
2. Training may be suspended or terminated by the government at any time.
3. Contractor shall be responsible for all travel, per diem, and wage expenses of trainee pilots.
4. Contractor has an AMD / USFS approved "Pilot Operational Training Plan."
5. Contractor shall maintain "On Contract" training records documenting all phases of pilot training.
6. Training shall be accomplished only by an interagency approved "Pilot Trainer" meeting the following criteria:
  - A. Holds a current and valid CFI; Rotorcraft-Helicopter issued by the FAA, or is an FAA designated company check airman for their current employer
  - B. Has held an interagency pilot card for a minimum of 5 of the last 7 years.
  - C. Holds a current and valid Interagency Pilot Card endorsed for all missions in which training is to be provided.
  - D. Holds a current and valid Interagency Pilot Card endorsed "Designated Pilot Trainer."
  - E. Training Pilots are authorized to conduct training only for pilots holding an Interagency Pilot Card for the same designated contractor and endorsed "Trainee Only."
  - F. Training Pilots qualifications may be revoked at the government's discretion.
7. "Trainee" pilots shall meet the following criteria:
  - A. Meets all flight hour requirements\* as outlined in C-12.D (with the following exceptions):
    - i. Operational Training flight hours may be used to satisfy all but the initial 10 hours of the required flight hours for "Weight Class."
    - ii. Operational Training flight hours may be used to satisfy all but the initial 10 hours of the required flight hours for "Make and Model."
    - iii. Operational Training flight hours may be used to satisfy the required flight hours for "Mountain Flying - Make and Model."
    - iv. Operational Flight Training will not be used to accomplish the contractually required 10 flight hours of long-line training.

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**EXHIBIT 19**

**"On Contract" Pilot Operational Training Cont)**

- B. Holds a Type Rating for any aircraft requiring a Type Rating; a current and valid FAR 61.58 proficiency check for aircraft requiring more than one flight crewmember; a current and valid FAA Form 8410-3 for any aircraft listed on the contractors Part 135 Certificate; or a current Equipment Check Endorsement for Standard Category aircraft offered as Limited Use or Restricted Category aircraft  
(Note: provide all applicable documents)
  - C. Has submitted all required pilot carding documentation as outlined in C-20.A.9.b
  - D. Holds a current and valid Interagency Pilot Card with the endorsement **"Trainee Only."**
  - E. Has completed a minimum of 10 flight hours in the last 90 days in an aircraft of the make, model, and series in which to be trained.
  - F. "Trainee" pilots will be authorized to receive training in all missions the Pilot Trainer is endorsed to perform.
  - G. "Trainee" pilots will be authorized to receive training in no more than one aircraft make and model per calendar year (01/01 thru 12/31).
8. Contractors awarded up to three items on this Exclusive Use Solicitation may be authorized one "Pilot Trainer": If awarded four or more items, contractor may be authorized two "Pilot Trainers."
9. Contractors will be authorized two "Trainee" pilots per "Pilot Trainer" at any time.
10. Contractors shall submit training records and a formal request recommending the "Trainee" pilot for evaluation. The Pilot Trainer shall have verified that the trainee has met all contract minimum flight hour requirements and that the trainee is proficient in all special use missions for which they are to be evaluated.



**SECTION D**  
**CONTRACT CLAUSES**

**D-1 Contract Terms and Conditions Required to Implement Statutes or Executive Orders-  
Commercial Items (FAR 52.212-5) (Nov 2007)**

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- (1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).
- (2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78)

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- ☒ (1) 52.202-1, Definitions (Jul 2004)
- ☒ (2) 52.203-5, Covenant Against Contingent Fees (Apr 1984)
- ☒ (3) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sept 2006), with Alternate I (Oct 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).
- ☒ (4) 52.203-7, Anti-Kickback Procedures (Jul 1995)
- ☒ (4a) 52.217-8, Option to Extend Services (Nov 1999).
- ☐ (5) 52.219-3, Notice of Total HUBZone Set-Aside (Jan 1999) (15 U.S.C. 657a).
- ☐ (6) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JULY 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).
- ☐ (7) [Reserved]
- ☒ (8)(i) 52.219-6, Notice of Total Small Business Set-Aside (June 2003) (15 U.S.C. 644).
- ☐ (ii) Alternate I (Oct 1995) of 52.219-6.
- ☐ (iii) Alternate II (Mar 2004) of 52.219-6.
- ☐ (9)(i) 52.219-7, Notice of Partial Small Business Set-Aside (June 2003) (15 U.S.C. 644).
- ☐ (ii) Alternate I (Oct 1995) of 52.219-7.
- ☐ (iii) Alternate II (Mar 2004) of 52.219-7.
- ☐ (10) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)).
- ☐ (11)(i) 52.219-9, Small Business Subcontracting Plan (Nov 2007) (15 U.S.C. 637(d)(4)).
- ☐ (ii) Alternate I (Oct 2001) of 52.219-9.
- ☐ (iii) Alternate II (Oct 2001) of 52.219-9.
- ☒ (12) 52.219-14, Limitations on Subcontracting (Dec 1996) (15 U.S.C. 637(a)(14)).
- ☐ (13) 52.219-16, Liquidated Damages—Subcontracting Plan (Jan 1999) (15 U.S.C. 637(d)(4)(F)(i)).
- ☐ (14)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (SEPT 2005) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).
- ☐ (ii) Alternate I (June 2003) of 52.219-23.
- ☐ (15) 52.219-25, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (Oct 1999) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

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- ☐ (16) 52.219-26, Small Disadvantaged Business Participation Program—Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- ☐ (17) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004) (15 U.S.C. 657 f).
- ☐ (18) 52.219-28, Post Award Small Business Program Rerepresentation (June 2007) (15 U.S.C. 632(a)(2)).
- ☐ (19) 52.222-3, Convict Labor (June 2003) (E.O. 11755).
- ☐ (20) 52.222-19, Child Labor—Cooperation with Authorities and Remedies (Aug 2007) (E.O. 13126).
- ☐ (21) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).
- ☒ (22) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).
- ☒ (23) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).
- ☒ (24) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998) (29 U.S.C. 793).
- ☒ (25) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).
- ☐ (26) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201).
- ☐ (27)(i) 52.222-50, Combating Trafficking in Persons (Aug 2007) (Applies to all contracts).
- ☐ (ii) Alternate I (Aug 2007) of 52.222-50.
- ☐ (28)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Aug 2000) (42 U.S.C. 6962(c)(3)(A)(ii)).
- ☐ (ii) Alternate I (Aug 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
- ☒ (29) 52.223-14, Toxic Chemical Release Reporting (Aug 2003)
- ☐ (30) 52.225-1, Buy American Act—Supplies (June 2003) (41 U.S.C. 10a-10d).
- ☐ (31)(i) 52.225-3, Buy American Act—Free Trade Agreements—Israeli Trade Act (Aug 2007) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L 108-77, 108-78, 108-286, 109-53 and 109-169).
- ☐ (ii) Alternate I (Jan 2004) of 52.225-3.
- ☐ (iii) Alternate II (Jan 2004) of 52.225-3.
- ☐ (32) 52.225-5, Trade Agreements (Nov 2007) (19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).
- ☒ (33) 52.225-13, Restrictions on Certain Foreign Purchases (Feb 2006) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- ☐ (34) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).
- ☐ (35) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).
- ☐ (36) 52.232-29, Terms for Financing of Purchases of Commercial Items (Feb 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- ☐ (37) 52.232-30, Installment Payments for Commercial Items (Oct 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

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**CONTRACT CLAUSES**

- ☒ (38) 52.232-33, Payment by Electronic Funds Transfer—Central Contractor Registration (Oct 2003) (31 U.S.C. 3332).
- ☐ (39) 52.232-34, Payment by Electronic Funds Transfer—Other than Central Contractor Registration (May 1999) (31 U.S.C. 3332).
- ☐ (40) 52.232-36, Payment by Third Party (May 1999) (31 U.S.C. 3332).
- ☒ (41) 52.236-7, Permits and Responsibilities (Nov 1991).
- ☐ (42) 52.239-1, Privacy or Security Safeguards (Aug 1996) (5 U.S.C. 552a).
- ☒ (43) 52.242-15 Stop Work Order Aug 1989).
- ☒ (44) 52.244-6, Subcontracts for Commercial Items (Mar 2007)
- ☐ (45)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) 46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631).
- ☐ (ii) Alternate I (Apr 2003) of 52.247-64.
- (c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:
- ☒ (1) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, et seq.).
- ☒ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (May 1989) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- ☒ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act—Price Adjustment (Multiple Year and Option Contracts) (Nov 2006) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- ☐ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act—Price Adjustment (Feb 2002) (29 U.S.C. 206 and 41 U.S.C. 351, et seq.).
- ☐ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Nov 2007) (41 U.S.C. 351, et seq.).
- ☐ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services—Requirements (Nov 2007) (41 U.S.C. 351, et seq.).
- ☐ (7) 52.237-11, Accepting and Dispensing of \$1 Coin (Aug 2007) (31 U.S.C. 5112(p)(1)).
- (d) *Comptroller General Examination of Record*. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records—Negotiation.
- (1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

**SECTION D**  
**CONTRACT CLAUSES**

- (2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
- (3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vii) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause—
- (i) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.
  - (ii) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).
  - (iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006) (38 U.S.C. 4212).
  - (iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998) (29 U.S.C. 793).
  - (v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201).
  - (vi) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, *et seq.*).
  - (vii) 52.222-50, Combating Trafficking in Persons (Aug 2007) (22 U.S.C. 7104(g)). Flow down required in accordance with paragraph (f) of FAR clause 52.222-50.
  - (viii) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
  - (ix) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
  - (x) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.
- (2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

**SECTION D**  
**CONTRACT CLAUSES**

**D-2 Certification of Toxic Chemical Release Reporting (FAR 52.223-13) (Aug 2003)**

(a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.

(b) By signing this offer, the offeror certifies that—

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: *[Check each block that is applicable.]*

- ☐ (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;
- ☐ (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
- ☐ (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- ☐ (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
  - (A) Major group code 10 (except 1011, 1081, and 1094.
  - (B) Major group code 12 (except 1241).
  - (C) Major group codes 20 through 39.
  - (D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
  - (E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or
- ☐ (v) The facility is not located in the United States or its outlying areas..

**D-3 Additional Clauses Required for Indefinite Delivery/Indefinite Quantity contracts incorporated by reference. In accordance with FAR 16.506.**

- (1) 52.216-18 Ordering (Oct 2005)
- (2) 52.216-19 Order Limitations (Oct 1995)
- (3) 52.216-22 Indefinite Quantity (Oct 1995)
- (4) 52.216.27 Single or Multiple Awards (Oct 1995)

Amendment 01  
Dated April 4, 2008

**SECTION D  
CONTRACT CLAUSES**

**D-4 Economic Price Adjustment Specified Flight Rate Contracts**

**(1) NON-FUEL PORTION OF THE SPECIFIED FLIGHT RATE**

Contract rates will be established in accordance with the following to reflect increases or decreases in the cost of performance of the contract work. The increases or decreases used in establishing the rates will be those indicated by the changes in the following price indexes:

The Non-Fuel Portion of the Specified Flight rate will be affected by :

**TABLE 6-PRODUCER PRICE INDEXES**

1. Commodity Group 1423 --Aircraft Engines and Engine Parts
2. Commodity Group 1425 --Aircraft Parts and Auxiliary Equipment

**AVERAGE OF PERCENT CHANGES X 100 PERCENT OF LAST ADJUSTED RATE**

The new rate will be derived by multiplying the average of the percentage changes of (1) and (2) times the rate in effect for the year immediately prior to the year in which the renewal is effective. The result will be added to or subtracted from the existing rate to become the newly adjusted rate (rounded to the next dollar).

**(2) FUEL PORTION OF THE SPECIFIED FLIGHT RATE**

During the contract periods, including renewals, flight rates will be adjusted to reflect increases and decreases in the prices of aviation fuel.

The price of Jet fuel is established at \$5.36 per gallon. The unit prices are an average of the lowest unit price for aviation fuel Nationwide. Variations in unit prices used in determining flight rate adjustment amounts will be established by using the average of the lowest unit price for aviation fuel at the following locations:

- (i) MERCURY AVIATION (RENO AIR SERVICE), Fresno, CA
- (ii) CUTTER FL YING SERVICE, Albuquerque, NM
- (iii) CUTTER AVIATION, Phoenix, AZ
- (iv) FLIGHTCRAFT, Portland, OR
- (v) MILLIONAIRE, Salt Lake City, UT (Interwest Jet)
- (vi) WESTERN AIRCRAFT MAINTENANCE, Boise, ID
- (vii) MINUTEMAN AVIATION, Missoula, MT
- (viii) WEST STAR AVIATION, Grand Junction, CO
- (ix) MERCURY AVIATION (RENO AIR SERVICE), Reno, NV
- (x) WINGS OF WENATCHEE, Wenatchee, WA
- (xi) EPPS AVIATION, Atlanta, GA
- (xii) KNOXAIR, Alcoa, TN
- (xiii) TAC-AIR AVIATION, Ft. Smith, AR

The adjustment to the fuel portion of the flight rate will be the determined variation amount multiplied by the fuel consumption rates found in **Exhibit 12, Helicopter Services Hourly Flight Rates, Fuel Consumption, and Weight Reduction Chart** for the applicable aircraft type.

## SECTION D CONTRACT CLAUSES

An initial adjustment to the fixed flight rate will be made on FEBRUARY 16 of each contract period. Subsequent adjustments will be made on MAY 16, and SEPTEMBER 16 of each contract period provided variations in the average unit price, determined as stated above, is \$0.10 per gallon or more from the unit price established in the last previous adjustment made.

### (3) DAILY AVAILABILITY RATE

Economic Price Adjustment is not applicable to the Daily Availability Rates Offered by the Contractor in the Schedule of Items.

### D-5 Property and Personal Damage

(1) The Contractor shall use every precaution necessary to prevent damage to public and private property.

(2) The Contractor shall be responsible for all damage to property and to persons, including third parties, that occur as a result of his or his agent's or employee's fault or negligence. The term "third parties" is construed to include employees of the Government.

(3) The Contractor shall procure and maintain during the term of this contract, and any extension thereof, aircraft and General Public Liability Insurance in accordance with 14 CFR 205. The parties named insured under the policy or policies shall be the **CONTRACTOR and THE UNITED STATES OF AMERICA**.

(4) The Contractor may be otherwise insured by a combination of primary and excess policies. Such policies must have combined coverage equal to or greater than the combined minimums required.

(5) Policies containing exclusions for chemical damage or damage incidental to the use of equipment and supplies furnished under this contract, or growing out of direct performance of the contract, will not be acceptable. The chemical damage coverage may be limited to chemicals dispensed while performing firefighting activities.

(6) The Contractor, prior to the commencement of work, shall submit to the Contracting Officer one copy of the insurance policy, or confirmation from the insurance company, certifying that the coverage described in this clause has been obtained.

### D-6 Option to Extend the Term of the Contract (FAR 52.217-9) (MAR 2000)

(1) The Government may extend the term of the Contract by written notice to the Contractor within 60 days; provided that the Government shall give the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(2) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(3) The total duration of this contract, including the exercise of any options under this clause, shall not exceed one (1) base year and three (3) one year renewal option periods.

## SECTION D CONTRACT CLAUSES

### D-7 Optional-Use Period

Outside the Mandatory Availability Period and any extensions thereof, the Government may need service on an intermittent basis. Orders may be placed subject to acceptance by the Contractor. The Contractor may agree to provide service at the contract daily availability rate plus specified flight rate (applies to daily availability contracts only) or at the optional-use hourly flight rate. If accepted, all terms and conditions of the contract will apply.

### D-8 Statement of Equivalent Rates for Federal Hires (FAR 52.222-42) (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Par 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This statement is for information only: It is not a wage determination.

Employee	Class	Wage
Aircraft Pilot	GS-12	\$32.13
Aircraft Co-Pilot	GS-11	\$26.80
Aircraft Mechanic-Journeyman	GS-11	\$26.80
Aircraft Mechanic - Junior	GS-9	\$22.15
Aircraft Mechanic - Helper	GS-6	\$16.30
Service Truck Driver	GS-5	\$14.62

### D.9 Service Of Protest (Far 52.233-2) (Sep 2006)

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Frank Gomez  
National Interagency Fire Center  
USDA - FS -- Contracting  
Jack Wilson Building  
3833 S. Development Ave.  
Boise, Idaho 83705

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.



**SECTION E  
SOLICITATION PROVISIONS**

**E-1 Instructions to Offeror-Commercial Items (FAR 52.212-1) (NOV 2007)  
(Tailored/Addenda)**

As part of the above referenced FAR Provision, it is important to note that significant to (j) Data Universal Numbering System (DUNS) Number and (k) Central Contractor Registration, the requirement for information is relevant to this solicitation. (See [www.arnet.gov](http://www.arnet.gov) for full text reference.)

**(a) Submission of offers. Your offer must consist of the following:**

- (1) Standard Form 1449, Solicitation/Contract/Order for Commercial Items, with blocks 17, and 30 completed by you.
- (2) Section B - Schedule of Items, Requirements and Prices with your proposed prices inserted in the appropriate spaces.
- (3) Section E, Offeror Representations and Certifications - Commercial Items (FAR 52.212-3), completed by you or electronically in accordance with the clause.
- (4) Acknowledgment of Solicitation Amendments (if any).
- (5) Include and submit information identified in E-2. The Offeror's past experience should be verified by the vendor; verify that points of contact, telephone, and facsimile numbers are valid.
- (6) **No facsimile (FAX) offers will be accepted**
- (7) Please contact the Contracting Officer by telephone or in writing (facsimile) if you do not understand any part of these instructions.

**(b) Contract Award. We intend to evaluate offers and award a contract without discussions with Offerors.** Therefore, your initial offer should contain your best terms from a price and technical standpoint. However, we reserve the right to conduct discussions if later determined by the Contracting Officer to be necessary. We may reject any or all offers if such action is in the public interest, accept other than the lowest priced offer; and waive informalities and minor irregularities in offers received.

(c) Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order within the technical specifications: (i) Typed provisions of these specification/exhibits; (ii) FS supplements and/or exhibits incorporated by reference; (iii) 14 CFR incorporated by reference; (iv) aircraft manufacturer's specifications; (v) other documents incorporated by reference.

(d) Contractor must comply with (FAR 52.204-7) (JUL 2006) Central Contractor Registration.

**(e) Pre-Proposal Conference will be scheduled as follows:**

Date: March 19, 2008      Time: 0900-1600

Location: Oxford Suites,  
1426 S. Entertainment Ave.  
Boise, Idaho 83709 Phone Number (208) 322-8000

Amendment 01  
Dated April 4, 2008

**SECTION E**  
**SOLICITATION PROVISIONS**

**E-2 INSTRUCTIONS FOR THE PREPARATION OF BUSINESS AND TECHNICAL PROPOSALS**

(a) **General Instructions.** Proposals submitted in response to this solicitation shall be furnished in the following format with the numbers of copies as specified below.

(1) The proposal must include a **Part I- Business Proposal** and **Part II- Technical Proposal**. Each of the parts shall be separate and complete so that evaluation of one may be accomplished independently from evaluation of the other. The technical proposal must not contain reference to cost; however, resource information (such as equipment capability) must be contained in the technical proposal so that the contractor's understanding of the statement of work may be evaluated.

(2) The Government will evaluate proposals in accordance with the evaluation criteria set forth in Section E of this RFP.

(3) Offerors shall submit their proposal(s) in the following format and the quantities specified:

(i) 1 copy (1 original) of the business/cost proposal (SF 1449 Cover/Signature Page and Sections B)

(ii) 1 copy (1 original) of the technical proposal.

**PART I BUSINESS PROPOSAL INSTRUCTIONS.**

**Price Proposal**

(1) Schedule of Item prices shall be submitted on the **Offeror's Submission Copy to include SF 1449 Cover/Signature Page and Sections B Supplies or Services and Prices.** The Daily Availability rate and the estimated flight hours times the flight rate will be added to determine total price. Total price for the base and option periods will be added to determine overall price reasonableness.

(2) Each price proposal shall be evaluated to determine its reasonableness and to determine the demonstrated understanding of the level of effort needed to successfully perform the services. A price analysis will be conducted to determine overall price reasonableness and by using the formula specified below. The "Best Value" formula computes the amount it would cost to transport a pound of product for the specific helicopter being offered. The best value formula will be used to make trade-off determinations to measure aircraft efficiencies of make and models of helicopters offered.

(3) Best Value Formula

$$D + (F \times H) + H \times (L \times P) = \text{Cost per Pound}$$

D = Average Daily Rate

F = Flight Rate

H = Average Daily Flight Hours (2.5)

P = Payload

L = Loads Delivered per Hour (6)

**SECTION E**  
**SOLICITATION PROVISIONS**

**PART II TECHNICAL PROPOSAL**

**Technical Proposal Instructions.** The technical proposal will be used to make an evaluation and arrive at a determination as to whether the proposal will meet the requirements of the Government. Therefore, the technical proposal must present sufficient information to reflect a thorough understanding of the requirements and a detailed, description of the techniques, procedures and program for achieving the objectives of the specifications/statement of work. Proposals that merely paraphrase the requirements of the Government's specifications/statement of work, or use such phrases as "will comply" or "standard techniques will be employed" will be considered unacceptable and will not be considered further.

Separate Part II- Technical proposal into four subparts, one for each of the major technical evaluation factors. As a minimum, your technical proposal must clearly address (1) Aircraft Technical Capability, (2) Safety/Risk Management (3) Past Performance and (4) Organizational Experience:

**SUB-PART 1**

**AIRCRAFT TECHNICAL CAPABILITY**

Provide the following information for each proposed aircraft. If more than one helicopter is offered, fill out a separate attachment for each helicopter. Include helicopter Make, Model and Variant and Aircraft Registration Number.

(a) Submit an Interagency Helicopter Load calculation for each aircraft, as per Exhibit 13 (see clause B-3, Aircraft Performance Specifications)

(1) The helicopter-equipped weight shall be based on the actual weighing of the aircraft and shall meet the following requirements:

- The aircraft shall be weighed prior to submission of the bid

**AND**

- The weighing must take place within 24 calendar months prior to the beginning of the first mandatory availability period (MAP).

(2) For the load calculation, the Equipped Weight includes the weight of a fixed tank or the weight of the empty bucket and any associated suspension hardware (cables, connectors, etc.). See clause C 4 D.21 for reference

(b) Submit copies of the following:

(1) Current 14 CFR Part 133 Operating Certificate and current FAA letter of authority for aircraft designated to operate under the 14 CFR Part 133 Operating Certificate. One copy will suffice.

(2) 14 CFR Part 135 Operating Certificate and current 14 CFR Part 135 Operations specifications (**Sections A, and D**). Each aircraft offered should be listed in Section D of the Operations Specification (as applicable). One copy will suffice.

(3) 14 CFR Part 137 Operating Certificate.

(4) Submit a current weight and balance for each aircraft offered as per C-5.

(5) Submit a current aircraft equipment list for each aircraft offered.

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## **SECTION E SOLICITATION PROVISIONS**

(6) Performance Data shall be provided with your proposal for evaluation of the helicopters performance and will be used to compute the Interagency Helicopter Load Calculation.

**Note:**

For the purpose of evaluating helicopter performance and computing the Interagency Load Calculation, only current, and appropriate FAA approved flight manual hover performance charts shall be used.

Performance enhancing data (Power Assurance Checks, wind charts, etc) shall not be used and will not be considered for the evaluation of proposals. Only FAA approved charts based on minimum specification engine performance shall be used. As an example, Kaman K-1200 helicopters shall only use minimum specification engine performance data calculated from Rotorcraft FMS NO. 1, (USFS Fire Fighting).

(7) Submit the weight and capacity of the tank and/or bucket as applicable

### **SUB-PART 2**

#### **SAFETY/RISK MANAGEMENT**

Offerors will be evaluated on their overall safety systems, organization and accident history. Offers will be evaluated on the following information requested/provided as per E-7 Synopsis of Safety Program:

- (a) Accident History (last five years)
- (b) Safety Management System
- (c) Accident Prevention Program

### **SUB-PART 3**

#### **PAST PERFORMANCE**

We will evaluate your capability on the basis of the company's past performance for the past 3 years (2005-2007). Utilize form E-6 Offeror's Past Performance and Organizational Experience.

Past Performance is a measure of the degree to which you have satisfied your customers in the past, and complied with Federal, State, and Local laws and regulations. Our assessment of your past performance will be subjective, and based mainly on your reputation with your customers. Identify and submit your references with verifiable telephone numbers to support your past performance. We may contact your references to ask whether or not they believe:

- (a) that you were capable, efficient, and effective
- (b) that your performance conformed to the terms and conditions of your contract
- (c) that you were reasonable and cooperative during performance

## SECTION E SOLICITATION PROVISIONS

(d) and that you were committed to customer satisfaction.

When evaluating your past performance we may contact other sources of information, including, but not limited to: Federal, State and local Government agencies.

Offerors who have not obtained Government contracts for helicopter services shall indicate their past experience and performance for related aviation services and include references for whom the services were performed.

### SUB-PART 4

#### ORGANIZATIONAL EXPERIENCE

The opportunity to learn is by doing. Your experience is relevant when you have been confronted with the kinds of challenges that will confront you under this contract contemplated by this RFP. We will assess your relevant experience on the basis of its breadth and its depth. The Government prefers experience supporting wild land fire operations. In addition to overall organizational company experience, address the experience of your personnel directly responsible for working under this contract.

(a) Management Personnel:

Specifically, list qualifications and experience of management personnel required under FAR 119.

(b) Pilot in Command (PIC):

Submit the name(s) of the PIC(s) with the pilots experience using the FS 5700-20b in exhibit 18. The contractor shall verify all pilot hours (PIC) submitted on "Helicopter Pilot Qualification and Approval Record" form FS-5700-20a as determined from a certified pilot log or permanent record to ensure accuracy.

The contractor shall ensure that a pilot meets all requirements as outlined in paragraph C-12 D Pilot Requirements-Experience.

(c) Maintenance Personnel:

Identify and submit existing and proposed maintenance personnel.

(1) Total years of experience

(2) Total years maintaining helicopters

(3) Total years maintaining helicopters in field conditions

(4) Certifications, i.e. A & P/IA

***The contractor shall insure that all offered mechanics meet the requirement in paragraph C-12 H. Mechanic Qualifications.***

#### E-3 Evaluation-Commercial Items (FAR 52.212-2) (JAN 1999) (Tailored)

(a) The Government will award a contract to the responsible offeror on the basis of price and other factors including Aircraft Technical Capability, Safety/Risk Management, Past Performance and Organizational Experience.

## SECTION E SOLICITATION PROVISIONS

The Government will evaluate "Price" of offers for award purposes by adding the price for the base year plus 3 option periods and adding the specified flight rate times the estimated flight hours to determine overall price being offered. The price proposals shall be evaluated to determine reasonableness and to determine the demonstrated understanding of the level of effort needed to successfully perform the services. Prices will also be evaluated using the "Best Value Formula index provided in exhibit E-2".

The nonprice factors - Aircraft Capability, Safety/Risk Management, Past Performance, Organizational Experience-when combined, are significantly more important than Price.

(b) Offeror's proposal shall include Two Separate Parts -Part 1 is a Business/Cost proposal and Part 2 is the Technical Proposal. The evaluation factors are listed in descending order of importance. All subfactors listed are equal in importance.

- (1) Aircraft Technical Capability
  - (a) Helicopter Load Calculation
  - (b) Submit Copies of the following requirements:
    - 1) Current CFR Part 133 Operating Certificate
    - 2) Current 14 CFR Part 135 Operating Certificate **if applicable**
    - 3) **Current 14 CFR part 137 Operating Certificate**
    - 4) Current weight and Balance Sheet
    - 5) Current aircraft equipment list
    - 6) Appropriate Flight Manual Hover Performance Charts
    - 7) Submit tank and or bucket capacity and weight of tank or bucket
    - 8) **Submit copies of STC's or FAA Field Approvals for equipment required in B-12**

The sub-factors are equal in importance.

- (2) Safety/Risk Management
  - (a) Accident History
  - (b) Safety Management System
    - 1) Operations Manual
    - 2) Training Program
    - 3) Safety Audit
    - 4) Operational Data
  - (c) Accident Prevention Program
    - 1) Participation in a recognized program
    - 2) Reduction of aviation insurance rates.

The sub-factors are equal in importance.

- (3) Past Performance
  - a) that you were capable, efficient, and effective
  - b) that your performance conformed to the terms and conditions of your contract
  - c) that you were reasonable and cooperative during performance
  - d) and that you were committed to customer satisfaction.

The sub-factors are equal in importance

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## SECTION E SOLICITATION PROVISIONS

- (4) Organizational Experience
- a) Management Personnel
  - b) Pilot in Command
  - c) Maintenance Personnel

The sub-factors are equal in importance

### E-4 Contract Award

- (a) Awards will be made to those offerors whose proposals are technically acceptable and whose technical/price relationships are the most advantageous to the Government. The Government reserves the right to award any combination of items or number of items.
- (b) The offeror's technical proposal may become a part of any resultant contract. Offerors are hereby advised that the Government will have the right to use, duplicate, or disclose in any manner and for any purpose whatsoever, and have the right to permit others to do so, all subject data required to be delivered under any contract resulting from this solicitation. Any reservations regarding these Government rights to data should be stated in the proposal and will be resolved during any subsequent negotiations if conducted.

### E-5 Offeror Representations and Certifications-Commercial Items (FAR 52.212-3) (NOV 2007)

An offeror shall complete only paragraph (l) of this provision if the offeror has completed the annual representations and certifications electronically at <http://orca.bpn.gov>. If an offeror has not completed the annual representations and certifications electronically at the ORCA website, the offeror shall complete only paragraphs (b) through (k) of this provision.

(a) *Definitions.* As used in this provision—

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service—

- (1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or
- (2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

"Manufactured end product" means any end product in Federal Supply Classes (FSC) 1000-9999, except—

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;

- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;

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- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

"Place of manufacture" means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

"Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Veteran-owned small business concern" means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

"Women-owned small business concern" means a small business concern—

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.





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**SOLICITATION PROVISIONS**

(4) *Small disadvantaged business concern.* [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it ☐ is, ☐ is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) *Women-owned small business concern.* [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it ☐ is, ☒ is not a women-owned small business concern.

**Note:** Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) *Women-owned business concern (other than small business concern).* [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it ☐ is a women-owned business concern.

(7) *Tie bid priority for labor surplus area concerns.* If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: \_\_\_\_\_

(8) *Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program.* [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) [Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the designated industry groups (DIGs).] The offeror represents as part of its offer that it ☐ is, ☒ is not an emerging small business.

(ii) [Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or designated industry groups (DIGs).] Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

**Number of Employees      Average Annual Gross Revenues**

☐ 50 or fewer

☐ \$1 million or less

☐ 51-100

☐ \$1,000,001-\$2 million

☒ 101-250

☐ \$2,000,001-\$3.5 million

☐ 251-500

☐ \$3,500,001-\$5 million

☐ 501-750

☐ \$5,000,001-\$10 million

☐ 751-1,000

☐ \$10,000,001-\$17 million

☐ Over 1,000

☒ Over \$17 million

(9) [Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.]

(i) *General.* The offeror represents that either—

**SECTION E**  
**SOLICITATION PROVISIONS**

- (A) It ☐ is, ☒ is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or
- (B) It ☐ has, ☒ has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.
- (ii) ☐ *Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns.* The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. *[The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: \_\_\_\_\_.]*
- (10) *HUBZone small business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents, as part of its offer, that—
- (i) It ☐ is, ☒ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and
- (ii) It ☐ is, ☒ is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. *[The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.]* Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.
- (d) Representations required to implement provisions of Executive Order 11246—
- (1) Previous contracts and compliance. The offeror represents that—
- (i) It ☒ has, ☐ has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and
- (ii) It ☒ has, ☐ has not filed all required compliance reports.
- (2) *Affirmative Action Compliance.* The offeror represents that—
- (i) It ☒ has developed and has on file, ☐ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 cfr parts 60-1 and 60-2), or
- (ii) It ☐ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

**SECTION E**  
**SOLICITATION PROVISIONS**

(e) *Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352).* (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) *Buy American Act Certificate.* (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act—Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act—Supplies."

(2) Foreign End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[List as necessary]

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate.* (Applies only if the clause at FAR 52.225-3, Buy American Act—Free Trade Agreements—Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "Bahrainian or Moroccan end product," "component," "domestic end product," "end product," "foreign end product," "Free Trade Agreement country," "Free Trade Agreement country end product," "Israeli end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act."

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian or Moroccan end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

**SECTION E**  
**SOLICITATION PROVISIONS**

Free Trade Agreement Country End Products (Other than Bahrainian or Moroccan End Products) or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

*[List as necessary]*

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

*[List as necessary]*

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate, Alternate I.* If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

Canadian End Products:

Line Item No.
_____
_____
_____

*[List as necessary]*

(3) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate, Alternate II.* If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

**SECTION E**  
**SOLICITATION PROVISIONS**

Canadian or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[List as necessary]

(4) *Trade Agreements Certificate*. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[List as necessary]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) *Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12689)*. (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals—

(1) ☐ Are, ☒ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; and

(2) ☐ Have, ☒ have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(3) ☐ Are, ☒ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

Amendment 01  
Dated April 4, 2008

**SECTION E**  
**SOLICITATION PROVISIONS**

(i) Certification Regarding Knowledge of Child Labor for *Listed End Products* (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed end products.

**Listed End Product    Listed Countries of Origin**

\_\_\_\_\_

(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]

☒ (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

☐ (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) *Place of manufacture.* (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly—

(1) ☐ In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) ☐ Outside the United States.

(k) *Certificates regarding exemptions from the application of the Service Contract Act.* (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.) [The contracting officer is to check a box to indicate if paragraph (k)(1) or (k)(2) applies.]

☐ (1) Maintenance, calibration, or repair of certain equipment as described in FAR 22.1003-4(c)(1). The offeror ☐ does ☐ does not certify that—

(i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror in substantial quantities to the general public in the course of normal business operations;

(ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR 22.1003-4(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and

(iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.

☐ (2) Certain services as described in FAR 22.1003-4(d)(1). The offeror ☐ does ☐ does not certify that—

Amendment 01  
Dated April 4, 2008

**SECTION E**  
**SOLICITATION PROVISIONS**

- (i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;
  - (ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR 22.1003-4(d)(2)(iii));
  - (iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and
  - (iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.
- (3) If paragraph (k)(1) or (k)(2) of this clause applies—
- (i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Act wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and
  - (ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.
- (l)(1) *Annual Representations and Certifications.* Any changes provided by the offeror in paragraph (l)(2) of this provision do not automatically change the representations and certifications posted on the Online Representations and Certifications Application (ORCA) website.
- (2) The offeror has completed the annual representations and certifications electronically via the ORCA website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications—Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs \_\_\_\_\_.
- [Offeror to identify the applicable paragraphs at (b) through (k) of this provision that the offeror has completed for the purposes of this solicitation only, if any.
- These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.
- Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.]



AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. Modification No. 01	3. EFFECTIVE DATE June 19, 2008	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable)	
6. ISSUED BY U.S. FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S DEVELOPMENT AVE BOISE ID 83706-5354	CODE	7. ADMINISTERED BY (if other than Item 6) CODE		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  CARSON HELICOPTERS INC 828 BROOKSIDE BLVD GRANTS PASS OR 97626		9A. AMENDMENT OF SOLICITATION NO.  9B. DATED (SEE ITEM 11)  10A. MODIFICATION OF CONTRACT/ORDER NO. AG-024B-C-08-9340 Item # 11 Hemet Item # 16 San Bernardino Item # 12 Cañas Item # 23 Mariposa Item # 15 Van Nuys  10B. DATED (SEE ITEM 13) June 6, 2008		
CODE FACILITY CODE				
11. THIS ITEM APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS				
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.				
CHECK ONE: A. THIS CHANGE ORDER IS PURSUANT TO: (specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. <input type="checkbox"/>				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). <input type="checkbox"/>				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: C-15 Substitution or Replacement of Personnel, Aircraft, and Equipment. <input checked="" type="checkbox"/>				
D. OTHER (specify type of modification and authority) <input type="checkbox"/>				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.				
Exclusive Use Large Fire Support  PURPOSE OF THIS MODIFICATION:  1) Replace Hourly Flight Rates, Fuel Consumption and Weight Reduction Chart.  Section C, Exhibit 12, Helicopter Services Hourly Flight Rates, Fuel Consumption and Weight Reduction Chart.  Replace with the attached flight rate chart, dated 05/16/2008, effective May 16, 2008.  2) Item # 11 Hemet: Substitute N905AL in place of N61NH Item # 23 Mariposa: Substitute N3173U in place of N103WF Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print) Steve Matheny, Exe. V.P.		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Frank Gomez, Contracting Officer		
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 6/19/08	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 6/19/08	
NSN 7540-01-152-8070 Previous edition unusable		STANDARD FORM 30 (REV. 10-83) Prescribed By GSA FAR (48 CFR) 33.243		

# EXHIBIT 12

## HELICOPTER SERVICES HOURLY FLIGHT RATES, FUEL CONSUMPTION AND WEIGHT REDUCTION CHART Effective May 16, 2008 FOR CONTRACTS AWARDED 2008 - 2011 (CWN/Exclusive Use)

05/16/2008

COMPANY	AIRCRAFT TYPE	FUEL CONSUMPTION (gal/hr)	APRIL 2008 HOURLY FLIGHT RATE (\$/HR)	LOAD CALCULATION Weight Reduction (lbs)
AGUSTA WESTLAND	AW 119 Koala	55	\$1,124.00	230
	AW 139	129	\$2,283.00	Not Established
	EH 101	211	\$4,737.00	Not Established
AEROSPATIALE	SA 315B	58	\$1,576.00	180
	SA 315B	58	\$1,576.00	170
	SA 315C	45	\$1,430.00	80
	SA 315B	45	\$1,448.00	150
	AS 330J	170	\$4,017.00	N/A
	SA 332L1	160	\$3,954.00	N/A
	SA 341G	45	\$1,411.00	170
	AS 350B/350BA	45	\$1,026.00	130
	AS 350B1	45	\$1,031.00	160
	AS 350B2	48	\$1,047.00	160
	AS 350B3	50	\$1,107.00	175
	AS 350D	38	\$988.00	130
	AS 355F-1/355F-2	58	\$1,265.00	140
	AS 355N1	87	\$2,021.00	275
	EC 120	31	\$787.00	Not Established
	EC 130B4	63	\$1,056.00	Not Established
	EC 135	64	\$1,312.00	220
	EC 145	80	\$1,622.00	Not Established
	EC 155B1	95	\$2,133.00	Not Established
	EC 225	183	\$3,747.00	Not Established
BELL	47/50LOV	23	\$638.00	120
	204B (UH-1 Series)	86	\$1,594.00	200
	204 Super B	90	\$1,842.00	200
	205A-1	88	\$1,621.00	260
	205A-1++	90	\$1,663.00	260
	206B-II	25	\$763.00	100
	206B-III	27	\$767.00	130
	206L-1	32	\$922.00	150
	206L-3	38	\$970.00	180
	206L-4	38	\$965.00	180
	210	90	\$1,658.00	260
	212	109	\$1,894.00	300
	214B	160	\$2,598.00	300
	214B1	145	\$2,415.00	380
	214ST	133	\$2,941.00	420
	222A	70	\$1,767.00	Not Established
	222B	83	\$1,864.00	Not Established
	222UT	82	\$1,864.00	Not Established
	407	45	\$1,073.00	155
	412	110	\$2,066.00	390
	412HP	110	\$2,042.00	390
	UH-1B	86	\$1,565.00	N/A
	UH-1B Super	88	\$1,587.00	N/A
	UH-1F	88	\$1,597.00	N/A
	UH-1H (113 engine)	86	\$1,587.00	N/A
	UH-1H (117 engine)	90	\$1,639.00	N/A
	TH-1L	86	\$1,597.00	N/A
BOEING	BV-107	180	\$3,829.00	N/A
	BV-234	406	\$7,041.00	N/A
HILLER	*SL-34	21	\$609.80	90
	H-1100B	22	\$780.00	130
	UH-12Sely	23	\$692.80	100
KAMEN	HK3-F	85	\$1,590.00	N/A
	K-1200	85	\$1,728.00	N/A
MBB	BO105CBS	55	\$1,246.00	180
	BK-117	77	\$1,745.00	160
McDONNELL	500C	23	\$783.00	110
DOUGLAS	500D/E	28	\$807.80	120
	520N	32	\$847.80	100
	530F	34	\$906.80	120
	600N	41	\$1,010.00	155
	900/902	69	\$1,420.00	210
SIKORSKY	CH 53D	425	\$6,924.00	N/A
	CH 54S 64	525	\$7,937.00	N/A
	S-65T	47	\$1,142.00	170
	S-68D/E	83	\$1,674.00	N/A
	S-68T/PT6T-3	115	\$2,192.00	490
	S-68T/PT6T-6	115	\$2,192.00	460
	S-61N	170	\$3,634.00	N/A
	S-62A	78	\$1,367.00	300
	S-70	160	\$3,485.00	N/A
	S-76C+	90	\$2,037.00	Not Established
	S-92	178	\$3,106.00	Not Established
AVERAGE GALLON PRICE:		JET FUEL:	\$6.22	

For the most recent version visit the FS website: <http://www.fs.fed.us/fire/contracting>

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1   3	
2. AMENDMENT/MODIFICATION NO. Modification No. 02		3. EFFECTIVE DATE June 29, 2008	4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)				
ISSUED BY U.S. FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S DEVELOPMENT AVE BOISE ID 83705-5354		CODE	7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  CARSON HELICOPTERS INC 828 BROOKSIDE BLVD GRANTS PASS OR 97526		9A. AMENDMENT OF SOLICITATION NO.  9B. DATED (SEE ITEM 11)  10A. MODIFICATION OF CONTRACT/ORDER NO. AG-0248-C-08-9340 Item #11 Hemet Item #16 San Bernardino Item #12 Casitas Item #23 Mariposa Item #13 Van Nuys  10B. DATED (SEE ITEM 13) June 6, 2008		
CODE	FACILITY CODE			
11. THIS ITEM APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS				
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
ACCOUNTING AND APPROPRIATION DATA				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.				
CHECK ONE	A. THIS CHANGE ORDER IS PURSUANT TO: (specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.			
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).			
<input checked="" type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52-243-4 Changes			
<input type="checkbox"/>	D. OTHER (specify type of modification and authority)			
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.				
Exclusive Use Large Fire Support Item No. 16 San Bernardino				
<u>PURPOSE OF THIS MODIFICATION:</u>				
1) Item No. 16 San Bernardino Change Host Base from San Bernardino to Weaverville, CA. (Trinity)				
2) Change Availability Rate to \$14,000.00 for base year only				
3) Replace Section B. B-12 and B-13 (see attached)				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print) <i>Steve McIntyre</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Frank Gomez, Contracting Officer		
15B. CONTRACTOR/OFFEROR <i>[Signature]</i> (Signature of person authorized to sign)	15C. DATE SIGNED 6-26-08	16B. UNITED STATES OF AMERICA <i>[Signature]</i> (Signature of Contracting Officer)	16C. DATE SIGNED 6/29/08	
NSN 7540-01-152-8070 Previous edition unusable		STANDARD FORM 30 (REV. 10-83) Prescribed By GSA FAR (48 CFR) 53.243		

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO. Modification No. 03		3. EFFECTIVE DATE June 29, 2008		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (if applicable)
6. ISSUED BY U.S. FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S DEVELOPMENT AVE BOISE ID 83705-5354		7. ADMINISTERED BY (if other than item 6)				
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				9A. AMENDMENT OF SOLICITATION NO.		
CARSON HELICOPTERS INC 828 BROOKSIDE BLVD GRANTS PASS OR 97526				9B. DATED (SEE ITEM 11)		
				10A. MODIFICATION OF CONTRACT/ORDER NO. AG-024B-C-08-9340		
				Item #11 Hemet		
				Item #12 Castias		
CODE				10B. DATED (SEE ITEM 13) June 6, 2008		
11. THIS ITEM APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS						
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
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<input type="checkbox"/> B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
<input checked="" type="checkbox"/> C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: C-25 Mandatory Availability Period including Extended Use and Optional use Period						
<input type="checkbox"/> D. OTHER (specify type of modification and authority)						
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.						
Exclusive Use Large Fire Support Item No. 16 Trinity N612AZ Item No. 23 Mariposa N3173U						
PURPOSE OF THIS MODIFICATION: C-25 Mandatory Availability Period including Extended Use and Optional use Period						
1) Item No. 16 Trinity: change Mandatory Availability Period (MAP) to 07/01/08 through 11/27/08 for base year only. (150 days)						
2) Item No. 23 Mariposa: change Mandatory Availability Period (MAP) to 07/01/08 through 09/28/08 for base year only. (90 days)						
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.						
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
				Frank Gomez, Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
						6/29/08
(Signature of person authorized to sign)				(Signature of Contracting Officer)		
NSN 7540-01-152-8070 Previous edition unusable				STANDARD FORM 30 (REV. 10-83) Prescribed By GSA FAR (48 CFR) 53.243		

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE		PAGE OF PAGES 1   3											
2. AMENDMENT/MODIFICATION NO. Modification No. 04		3. EFFECTIVE DATE July 16, 2008		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (if applicable)										
6. ISSUED BY U.S. FOREST SERVICE - CONTRACTING NATIONAL INTERAGENCY FIRE CENTER 3833 S DEVELOPMENT AVE BOISE ID 83705-5354		CODE		7. ADMINISTERED BY (if other than item 6)		CODE										
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  CARSON HELICOPTERS INC 828 BROOKSIDE BLVD GRANTS PASS OR 97526				9A. AMENDMENT OF SOLICITATION NO.												
				9B. DATED (SEE ITEM 11)												
				10A. MODIFICATION OF CONTRACT/ORDER NO. AG-024B-C-08-9340												
				<table border="1"> <tr> <td>Item #11 Hemet</td> <td>Item #16 Trinity</td> </tr> <tr> <td>Item #12 Casitas</td> <td>Item #23 Mariposa</td> </tr> <tr> <td>Item #13 Van Nuys</td> <td></td> </tr> </table>			Item #11 Hemet	Item #16 Trinity	Item #12 Casitas	Item #23 Mariposa	Item #13 Van Nuys					
				Item #11 Hemet	Item #16 Trinity											
Item #12 Casitas	Item #23 Mariposa															
Item #13 Van Nuys																
10B. DATED (SEE ITEM 13) June 6, 2008																
CODE		FACILITY CODE														
11. THIS ITEM APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS																
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E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copy to the issuing office.																
Exclusive Use Large Fire Support Item No. 11 Hemet, N905AL, Item No. 12 Casitas, N118AZ, Item No. 13 Van Nuys, N612RM, Item No. 16 Trinity N612AZ, and Item No. 23 Mariposa N3173U  <b>PURPOSE OF THIS MODIFICATION:</b> 1) Exhibit 12 Hourly Flight Rates, Fuel Consumption, and Weight Reduction Chart Replace Flight Rate Chart with the new Flight Rate Chart effective July 16, 2008 on page 2 2) Change Section D, D-4 (2) Fuel Portion of the Specified Flight Rate as shown on page 3 3) Change the Job Code for Availability from WFSU70 (1302) to WFR77 (1302)																
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.																
15A. NAME AND TITLE OF SIGNER (Type or print) <i>Steve Metheny</i>				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Frank Gomez, Contracting Officer												
15B. CONTRACTOR/OFFEROR <i>[Signature]</i> (Signature of person authorized to sign)		15C. DATE SIGNED 7/23/08		16B. UNITED STATES OF AMERICA <i>[Signature]</i> (Signature of Contracting Officer)		16C. DATE SIGNED 7/22/08										
NSN 7540-01-162-9070 Previous edition unusable				STANDARD FORM 30 (REV. 10-83) Prescribed By GSA FAR (48 CFR) 53.243												

**N612AZ**

INTERAGENCY HELICOPTER LOAD CALCULATION Electronic Version (1/04)		MODEL	S61N-CB	
		N#	N612AZ	
PILOT(S)	PIC / SIC	DATE	4/7/2008	
MISSION	External Fixed Tank	TIME	0800	
1 DEPARTURE	Heli-Base	PA 7000	OAT 20	<input type="checkbox"/>
2 DESTINATION	Wildland Fire	PA 7000	OAT 20	<input type="checkbox"/>
3 HELICOPTER EQUIPPED WEIGHT		12013		
4 FLIGHT CREW WEIGHT		400		
5 FUEL WEIGHT 255 gals X 7 lbs/gal		1785		
6 OPERATING WEIGHT (3 + 4 + 5)		14198		
	Non-Jettisonable		Jettisonable	
	HIGE	HOGE	HOGE- J	
7a PERFORMANCE REFERENCE (List chart/supplement from Flight Manual)	P-I, S-III	P-I, S-IV	P-I, S-IV	
7b COMPUTED GROSS WEIGHT (From Flight Manual Performance Section)	20100	18800	18800	
8 WEIGHT REDUCTION (Required for all Non-Jettisonable loads)				
9 ADJUSTED WEIGHT (7b minus 8)	20100	18800	18800	
10 GROSS WEIGHT LIMITATION (From Flight Manual Limitations Section)	22000	22000	22000	
11 SELECTED WEIGHT (Lowest of 9 or 10)	20100	18800	18800	
12 OPERATING WEIGHT (From Line 6)	14198	14198	14198	
13 ALLOWABLE PAYLOAD (11 minus 12)	5902	4602	4602	
	OK	OK	OK	
14 PASSENGERS/CARGO				
Bucket Performance HOGE 5238 lbs.				
15 ACTUAL PAYLOAD (Total of all weights listed in Item 14) 15 must not exceed Line 13 for the intended mission (HIGE, HOGE or HOGE-J)				Line 0
PILOT SIGNATURE				HazMat Onboard
MANAGER SIGNATURE				Yes X No

# **Weight & Balance**



**AIRCRAFT ACTUAL WEIGHT AND HORIZONTAL BALANCE, CHART B**  
**S-61N MODEL HELICOPTER (Form 80-287)**

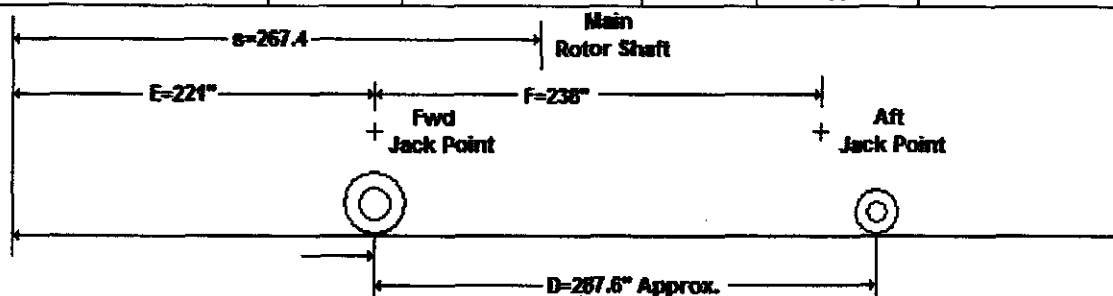
Prepared By: Levi Phillips

Date: 1/4/2008

Reg. No. N612AZ

Serial No. 61297

0	SCALE No.	SCALE READING (lbs)	TARE	SYMBOL	NET WEIGHT
LEFT MAIN POINT	1	5087.2	0	Wl	5087.2
RIGHT MAIN POINT	2	5167.2	0	Wr	5167.2
NOSE/TAIL POINT	3	1758.5	0	Wt	1758.5
TOTAL WEIGHT		12013	0	W	12013



CENTER OF GRAVITY TO FORWARD DATUM (HORIZ. DIST. - AS WEIGHED)

Weighing on Wheels

$$E + \frac{W_t \times D}{W}$$

$$221 + \frac{1758.5 \times 287.6}{12013} = 263.1$$

Weighing on Jack Points

$$E + \frac{W_t \times F}{W}$$

$$221 + \frac{1758.5 \times 287.6}{12013} = 263.1$$

CORRECTED WEIGHT AND HORIZONTAL BALANCE

ITEMS ADDED & SUBTRACTED	WEIGHT (lbs)	HORIZONTAL DIST (in) C.G. TO FWD DATUM	MOMENT (lb. in.)
Aircraft as Weighed	12013	263.1	3160620.3
Plus -			
Minus -			
TOTAL EMPTY/GROSS WEIGHT	12013	263.1	3160620.3
BALANCE Horizontal Dist. - s = in. Fwd/Aft of Main Rotor Centroid (corrected)			

Form # 80-287

Witnessed By: \_\_\_\_\_



# **Aircraft Equipment List**

CHART A - EMPTY WEIGHT CHECK LIST													
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8-11-67 1-4-68													
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK 1 IN AIRCRAFT CHART C ENTRY	CHECK 2 IN AIRCRAFT CHART C ENTRY	CHECK 3 IN AIRCRAFT CHART C ENTRY	CHECK 4 IN AIRCRAFT CHART C ENTRY	CHECK 5 IN AIRCRAFT CHART C ENTRY	CHECK 6 IN AIRCRAFT CHART C ENTRY	CHECK 7 IN AIRCRAFT CHART C ENTRY	CHECK 8 IN AIRCRAFT CHART C ENTRY
A	COCKPIT COMPARTMENT (32-110)												
A-1	AUTOTRANSFORMERS 906-1A												
	(2) WINDSHIELD DE-ICING)	9	42	3.8		✓							
A-2	BATTERY, Lead acid	80	45	36.		✓							
A-3	CONTROLLER 860-1 (WINDSHIELD DE-ICING)					✓							
A-4	WINDSHIELD WIPER INST'L. (86130-71117)	11	52	5.7		✓							
A-5	AIR SPEED IND. (12960U-4-0194)												
	(2)	2	61	1.2		✓							
A-6	ALTIMETER (D22061-10-012) (2)	3	61	1.8		✓							
A-7	GAS. GEN. TACH. (8DJ81) (2)	3	61	1.8		✓							
A-8	VERT. GYRO - COMPASS IND. (4085-A LEAR) (2)					✓							
A-9	MISCELLANEOUS INSTRUMENTS:	12	62	7.4		✓							
	HYDRAULIC PRESS IND. (SR-152A TYPE 3) (2)					✓							
	XMSN OIL TEMP. IND. (163B2)					✓							
	XMSN OIL PRESS. IND. (SR-152A TYPE 3)					✓							
	ENGINE OIL PRESS. IND. (SR-151A TYPE 2) (2)					✓							
	ENGINE OIL TEMP. IND. (163B2) (2)					✓							
	FUEL PRESS. IND. (SR-151A TYPE 2) (2)					✓							
MANDATORY FLIGHT EQUIPMENT													

\*MANDATORY FLIGHT EQUIPMENT

SIKORSKY AIRCRAFT  
S-61N FLIGHT MANUAL

Part 2, Section IV  
Loading Information

CHART A - EMPTY WEIGHT CHECK LIST																					
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8/1/07 1-4-08																					
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	IN AIRCRAFT CHART C ENTRY	CHECK 1	IN AIRCRAFT CHART C ENTRY	CHECK 2	IN AIRCRAFT CHART C ENTRY	CHECK 3	IN AIRCRAFT CHART C ENTRY	CHECK 4	IN AIRCRAFT CHART C ENTRY	CHECK 5	IN AIRCRAFT CHART C ENTRY	CHECK 6	IN AIRCRAFT CHART C ENTRY	CHECK 7	IN AIRCRAFT CHART C ENTRY	CHECK 8	IN AIRCRAFT CHART C ENTRY
A	COCKPIT COMPARTMENT (32-110) (CONTINUED)																				
A-9	POWER TURB. INLET TEMP. IND.																				
	H2900K416B (2)																				
	POWER TURB. INLET TEMP. IND.																				
	FUEL QUANTITY IND.																				
	(393004-01-884) (2)																				
	A.C. VOLTAMMETER (570-382)																				
	D.C. VOLTAMMETER (NAF 1225-300)																				
	STANDBY COMPASS (CB2100T4)																				
	ALTERNATE STANDBY COMPASS (AN5766T4)																				
A-10	TORQUEMETER																				
	(6300-C38A-155-31) (2)	3	63	1.9																	
A-11	TRIPLE TACHOMETER																				
	(B31521-10-008) (2)	6	64	3.8																	
A-12	INSTANTANEOUS VERTICAL SPEED IND. (D3WBSL-9066) (2)	3	64	1.9																	
A-13	TURN & SLIP IND. (A1400) (2)	3	64	1.9																	
A-14	CLOCK (A-13A) (2)	1	64	0.6																	
A-15	CUSHIONS, SEAT, PILOT & CO-PILOT (2)	6	92	5.5																	
A-16	SAFETY BELT (1101155-0) (2)	4	97	3.9																	
A-17	SEATS, PILOT & CO-PILOT (677R20000)	1	99	43.6																	

September 9, 1963  
Reissued December 17, 1971

CHART A - EMPTY WEIGHT CHECK LIST													
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8/1/67 1-4-68													
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK							
						1 IN AIRCRAFT ENTRY CHART C	2 IN AIRCRAFT ENTRY CHART C	3 IN AIRCRAFT ENTRY CHART C	4 IN AIRCRAFT ENTRY CHART C	5 IN AIRCRAFT ENTRY CHART C	6 IN AIRCRAFT ENTRY CHART C	7 IN AIRCRAFT ENTRY CHART C	8 IN AIRCRAFT ENTRY CHART C
A	COCKPIT COMPARTMENT (32-110) CONTINUED												
A-18	CUSHIONS, BACK, PILOT & CO-PILOT (2)												
A-19	SHOULDER HARNESS	4	103	4.1		✓							
	(1101155-0) (2)												
A-20	JUMP SEAT & SAFETY BELT	2	103	2.1									
A-21	FIRST AID KIT	7	104	7.3		✓							
A-22	PORTABLE FIRE EXT. (KIDDE 2TA)	2	108	2.2		✓							
A-23	WINDSHIELD WASHER BAG	7	108	7.6		✓							
	(INCL. FLUID)												
A-24	AIR SPEED IND. (B12961-04-003)	4	108	4.3		✓							
	(ALTERNATE)	2	61	0.1		✓							
A-25	FREE AIR TEMP. IND. (2289)	0.2	71	0.1		✓							
A-26	COURSE IND. (IN-12-1) (2)	3	63	1.9		✓							
A-27	CONTROL UNIT 20500/ARC-21A	2	78	1.6		✓							
A-28	COCKPIT CARPETING		84			✓							
A-29	AFV Tracker	2	92	1.8		✓							
B	ELECTRONICS COMPARTMENT (32-110)												
B-1	LANDING LIGHT (GRIMES 45-0013)												
	(2) (ALTERNATE TO ITEM B-15)	15	66	9.9		✓							
B-2	VOLTAGE REGULATOR (E-1597-1)	3	73	2.2		✓							
MANDATORY FLIGHT EQUIPMENT **USE ACTUAL WEIGHT													

\*\*MANDATORY FLIGHT EQUIPMENT \*\*USE ACTUAL WEIGHT

CHART A - EMPTY WEIGHT CHECK LIST													
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE: 8/1/67 1-4-68													
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK 1 IN AIRCRAFT CHART C ENTRY	CHECK 2 IN AIRCRAFT CHART C ENTRY	CHECK 3 IN AIRCRAFT CHART C ENTRY	CHECK 4 IN AIRCRAFT CHART C ENTRY	CHECK 5 IN AIRCRAFT CHART C ENTRY	CHECK 6 IN AIRCRAFT CHART C ENTRY	CHECK 7 IN AIRCRAFT CHART C ENTRY	CHECK 8 IN AIRCRAFT CHART C ENTRY
B	ELECTRONICS COMPARTMENT (32-110) (CONTINUED)												
B-3	RELAY (HARTMAN A-927A)	3	76	2.3									
B-4	AMPLIFIER (BENDIX AMA-10A)	6	82	4.9									
B-5	GYROSYN COMPASS (C4A)	7	83	5.8									
B-6	AMPLIFIER (684535)	7	83	5.8									
B-7	CONVERTER (GRW162YF1) (1)	21	84	17.6									
B-8	INVERTER (SE16-3)	14	86	12.0									
B-9	CONTROL GYRO (LEAR 7000B) (2)	14	86	12.0									
B-10	SUPERVISORY PANEL (34B12-2) (2)	14	88	12.3									
B-11	AMPLIFIER GYRO (LEAR 55IDE) (2)	5	89	4.5									
B-12	RADIO, JURY RIG INSTAL. (RT11A) (S6105-6110)	38	90	34.2									
B-13	CONTROL UNIT, HEATER (CYL-Z-1886-40)	3	96	2.9									
B-14	CONTROL UNIT, ANTI-ICE (1378-1B0)	11	104	11.4									
B-15	LANDING LIGHT (GRIMES 45-0013-3) (2)	16	66	10.6									
B-16	CRUISE LIGHT #9371 (STOWED POSITION)	3	106	3.2									
B-17	AUXILIARY BATTERY Leadacid	80	120	96									
B-18	Pulse-lite System	2	75	1.5									

\*\* USE ACTUAL WEIGHT

\*MANDATORY FLIGHT EQUIPMENT.

CHART A - EMPTY WEIGHT CHECK LIST									
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8/11/68									
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK 1 IN AIRCRAFT CHART C ENTRY	CHECK 2 IN AIRCRAFT CHART C ENTRY	CHECK 3 IN AIRCRAFT CHART C ENTRY	CHECK 4 IN AIRCRAFT CHART C ENTRY
C	CABIN (110-493)								
C-1	SLIDING DOOR, COCKPIT TO CABIN	8	110	8.8		0	0		
C-2	HEATING SYSTEM:								
	FUEL CONTROL UNIT (B54C00)	8	117	9.4		1	1		
	HEATER (JANITROL A90C13)	33	118	38.9		1	1		
	BLOWER (BENSON 134201-1)	15	118	17.7		1	1		
	SWITCH, AIR PRESSURE	1	123	1.2		1	1		
	IGNITION UNIT (A11C30)	6	124	7.4		1	1		
C-3	PASSENGER SEAT & BELTS								
	(2 PLACE)		124						
C-4	BAGGAGE ENCLOSURE - S6109-51327		150			0	0		
C-5	#3-193 TRAYS (24)		160			0	0		
C-6	GALLEY S6109-51318		166			0	0		
C-7	#1343 BEVERAGE JUG (1)		168			0	0		
C-8	PASSENGER SEAT & BELT (1 PLACE)		171			0	0		
C-9	6TNG PAPER CUPS & DISPENSER		172			0	0		
C-10	#1343 BEVERAGE JUGS (2)		175			0	0		
C-11	UNUSABLE FUEL-FWD TANK	2	204	4.1		1	1		
C-12	PASSENGER SEAT & BELTS								
	(2 PLACE)		205						
C-13	PASSENGER SEAT & BELT (1 PLACE)		205			1	1		
C-14	PASSENGER SEAT & BELTS								
	(2 PLACE)		239			0	0		
C-15	PASSENGER SEAT & BELT (1 PLACE)		239			1	1		
C-16	PASSENGER SEAT & BELTS								
	(2 PLACE)		273			0	0		

\*MANDATORY FLIGHT EQUIPMENT.



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CHART A - EMPTY WEIGHT CHECK													
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8/1/07 1.400													
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK 1 IN AIRCRAFT CHART C ENTRY	CHECK 2 IN AIRCRAFT CHART C ENTRY	CHECK 3 IN AIRCRAFT CHART C ENTRY	CHECK 4 IN AIRCRAFT CHART C ENTRY	CHECK 5 IN AIRCRAFT CHART C ENTRY	CHECK 6 IN AIRCRAFT CHART C ENTRY	CHECK 7 IN AIRCRAFT CHART C ENTRY	CHECK 8 IN AIRCRAFT CHART C ENTRY
C	CABIN (110-493) (CONTINUED)												
C-17	PASSENGER SEAT & BELT (1 PLACE)		273										
C-18	UNUSABLE FUEL-AFT TANK	3	306	9.2									
C-19	PASSENGER SEAT & BELTS (2 PLACE)												
C-20	PASSENGER SEAT & BELT (1 PLACE)		307										
C-21	VIBRATION ABSORBER INSTL. (S6120-70010)	184	310	570.4									
C-22	HAND FIRE EXTINGUISHER (CHARGED)												
C-23	FIRST AID KIT # 1C		7	319	22.3								
C-24	ATTENDANT'S SEAT & BELT		2	320	6.4								
C-25	PASSENGER SEAT & BELT (1 PLACE)		322										
C-26	PASSENGER SEAT & BELTS (2 PLACE)		341										
C-27	PASSENGER SEAT & BELT (1 PLACE)		371										
C-28	PASSENGER SEAT & BELTS (2 PLACE)		375										
C-29	PASSENGER SEAT & BELT (1 PLACE)		409										
C-30	PASSENGER SEAT & BELTS (2 PLACE)		443										
C-31	PASSENGER SEAT & BELTS (2 PLACE)		472										
C-32	UPHOLSTERED INTERIOR: FORWARD PANELS CARPET												

\*\*MANDATORY FLIGHT EQUIPMENT.

\*\*USE ACTUAL WEIGHT.

\*MANDATORY FLIGHT EQUIPMENT. \*\*USE ACTUAL WEIGHT.

CHART A - EMPTY WEIGHT CHECK LIST													
AIRCRAFT MODEL 8-6IN SERIAL NO. 61997 ENTER DATE 8/11/67 1-4-08													
ITEM NUMBER	ITEMS AND LOCATION	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	CHECK 1 IN AIRCRAFT CHART C ENTRY	CHECK 2 IN AIRCRAFT CHART C ENTRY	CHECK 3 IN AIRCRAFT CHART C ENTRY	CHECK 4 IN AIRCRAFT CHART C ENTRY	CHECK 5 IN AIRCRAFT CHART C ENTRY	CHECK 6 IN AIRCRAFT CHART C ENTRY	CHECK 7 IN AIRCRAFT CHART C ENTRY	CHECK 8 IN AIRCRAFT CHART C ENTRY
C	CABIN (110-493) (CONTINUED)												
C-32	CONTINUED												
	CEILING UPHOLSTERY												
	UNDERCARPET PADDING												
	UPHOLSTERED PANELS, R. H.												
	UPHOLSTERED PANELS, L. H.												
	BATTING - SOUNDPROOFING												
	AFT PANELS												
C-33	LAVATORY												
	WATER TANK ASSY S6109-51311-041		465										
	WATER (5 GAL.)	42	465										
	SINK & ENCLOSURE		467										
	MIRROR S6109-51345-081		467										
	TOILET ASSY S6109-51310-043		481										
	PAPER HOLDER 42G39115 & PAPER		485										
	PAPER TOWEL DISPENSER 2030 & PAPER		485										
C-34	PASSENGER SEAT & BELT (2 PLACE)												
			171										
C-35	ATTENDANT SEAT & BELT		350										
C-36	BAGGAGE RACK		370										
C-37	CONTAINER ASSEMBLY 6109-51360	6	372	22.3									
C-38	PORTABLE OXYGEN BREATHING UNIT MODEL 6000B1-0	13	376	48.9									

\*\*USE ACTUAL WEIGHT

\*\*USE ACTUAL WEIGHT.

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CHART A - EMPTY WEIGHT CHECK LIST																					
AIRCRAFT MODEL S-61N SERIAL NO. 61297 ENTER DATE 8/11/07 1-4-00																					
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	8/11/07		CHECK 1 IN AIRCRAFT ENTRY	CHECK 2 IN AIRCRAFT ENTRY	CHECK 3 IN AIRCRAFT ENTRY	CHECK 4 IN AIRCRAFT ENTRY	CHECK 5 IN AIRCRAFT ENTRY	CHECK 6 IN AIRCRAFT ENTRY	CHECK 7 IN AIRCRAFT ENTRY	CHECK 8 IN AIRCRAFT ENTRY							

\*MANDATORY FLIGHT EQUIPMENT.

CHART A - EMPTY WEIGHT CHECK LIST									
AIRCRAFT MODEL S-61N SERIAL NO. 61297				ENTER DATE					
ITEM NUMBER	ITEMS AND LOCATION GROUPED BY COMPARTMENT	WEIGHT	ARM	MOMENT/100	DELIVERY EQUIPMENT	8/11/67 1408			
						CHECK 1	CHECK 2	CHECK 3	CHECK 4
E	TAIL CONE & PYLON (493-705)					IN AIRCRAFT ENTRY	IN AIRCRAFT ENTRY	IN AIRCRAFT ENTRY	IN AIRCRAFT ENTRY
E-1	BLOWER, FRESH AIR (M4941A)	7	497	34.8		0	0		
E-2	BLOWER, FRESH AIR (M5882X)	12	497	59.6		0	0		
E-3	FLUX VALVE & COMPENSATOR - CAA	2	543	10.9		1	1		
E-4	CATWALK	4	543	21.7		1	1		
E-5	OIL, INTERMED, & TAIL GEAR BOXES	5	687	34.4		1	1		
E-6	RECEIVER (R-836/ARC-21A)	7	517	36.2		0	0		
E-7	DYNAMOTOR (DY-150/ARC-21A)	5	524	26.2		0	0		
F	EXTERNAL EQUIPMENT								
F-8	Aerial liquid tank	1090	261	2845		0	0		
F-9	Goodrich AC Rescue Hoist	135	186.4	211		0	0		
F-10									
F-1	MAIN TIRES 6.50 x 10 (4)	50	221	110.5		1	1		
F-2	TAIL TIRE 6.00 x 6	9	505	45.5		1	1		
F-3	WIRE ANTENNA (ARC-21A)	3	540	16.2		0	0		
F-4	LOOP ANTENNA L-11	5	595	29.8		0	0		
	ENGINE AIR INLET ICE DEFLECTOR	33	154	50.8		0	0		
F-5	Fixed Gear Installation	357	177	631.9		0	1		
F-6	Sponson Installation	971	171	1660.4		1	0		
F-7	Hoist	129	211	272.0		0	0		

\*MANDATORY FLIGHT EQUIPMENT.

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September 9, 1963  
Reissued December 17, 1971

# **Aircraft Airworthiness & Registration Certificates**

Referred to FAA for release determination