

<b>INTERAGENCY HELICOPTER</b> <b>LOAD CALCULATION</b> OAS-67/FS 5700 (11/03)		MODEL	
		N#	
PILOT(S)		DATE	
MISSION		TIME	
1 DEPARTURE	PA	OAT	<input type="checkbox"/>
2 DESTINATION	PA	OAT	<input type="checkbox"/>
3 HELICOPTER EQUIPPED WEIGHT			
4 FLIGHT CREW WEIGHT			
5 FUEL WT (_____ gallons X _____ lbs per gal)			
6 OPERATING WEIGHT (3 + 4 + 5)			
	Non-Jettisonable		Jettisonable
	HIGE	HOGE	HOGE-J
7a <b>PERFORMANCE REF</b> (List page/chart from FM)			
7b <b>COMP GROSS WT</b> (FM performance Section)			
8 <b>WT REDUCTION</b> (Req for all Non-Jettisonable)			
9 <b>ADJUSTED WEIGHT</b> (7b minus 8)			
10 <b>GROSS WT LIMIT</b> (FM Limitations Section)			
11 <b>SELECTED WEIGHT</b> (Lowest of 9 or 10)			
12 <b>OPERATING WEIGHT</b> (From Line 6)			
13 <b>ALLOWABLE PAYLOAD</b> (11 minus 12)			
14 <b>PASSENGERS/CARGO MANIFEST</b>			
15 <b>ACTUAL PAYLOAD</b> (Total of all weights listed in Item 14) Line 15 must not exceed Line 13 for the intended mission.			
PILOT SIGNATURE			
MGR SIGNATURE		HazMat Yes ___ No ___	

## 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 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.