

Weight and Balance: 206L-4, s/n 52037, N7077B

Computed by: Mark Stuntzner, 7/16/03

20 lb. Weight in Aft Facing Mid Seat

<u>Item</u>	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Aircraft Basic Weight	2760	128.74	355,322
Pilot (C. Getchell)	228	65	14,820
Aft Facing Cargo	20	91	1,820
Baggage Compt.	105	174	18,270
Full Fuel, Jet A, 6.8#/gal	753	131.7	99,170
Total	3866	126.6	489,403

Conclusions: Gross Weight of 3866 pounds and a Long. CG of 126.6 are both within Flt. Man. limits.

Max GWT = 4450 lbs

Allowable CG @ 3866 lbs GWT = 119.0 to 127.2 inches

Weight and Balance: 206L-4, s/n 52037, N7077B

Computed by: Mark Stuntzner, 7/16/03

20 lb. Weight in Fwd Facing Aft Seat

<u>Item</u>	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Aircraft Basic Weight	2760	128.74	355,322
Pilot (C. Getchell)	228	65	14,820
Fwd Facing Cargo	20	129	2,580
Baggage Compt.	105	174	18,270
Full Fuel, Jet A, 6.8#/gal	753	131.7	99,170
Total	3866	126.8	490,163

Conclusions: Gross Weight of 3866 pounds and a Long. CG of 126.8 are both within Flt. Man. limits.

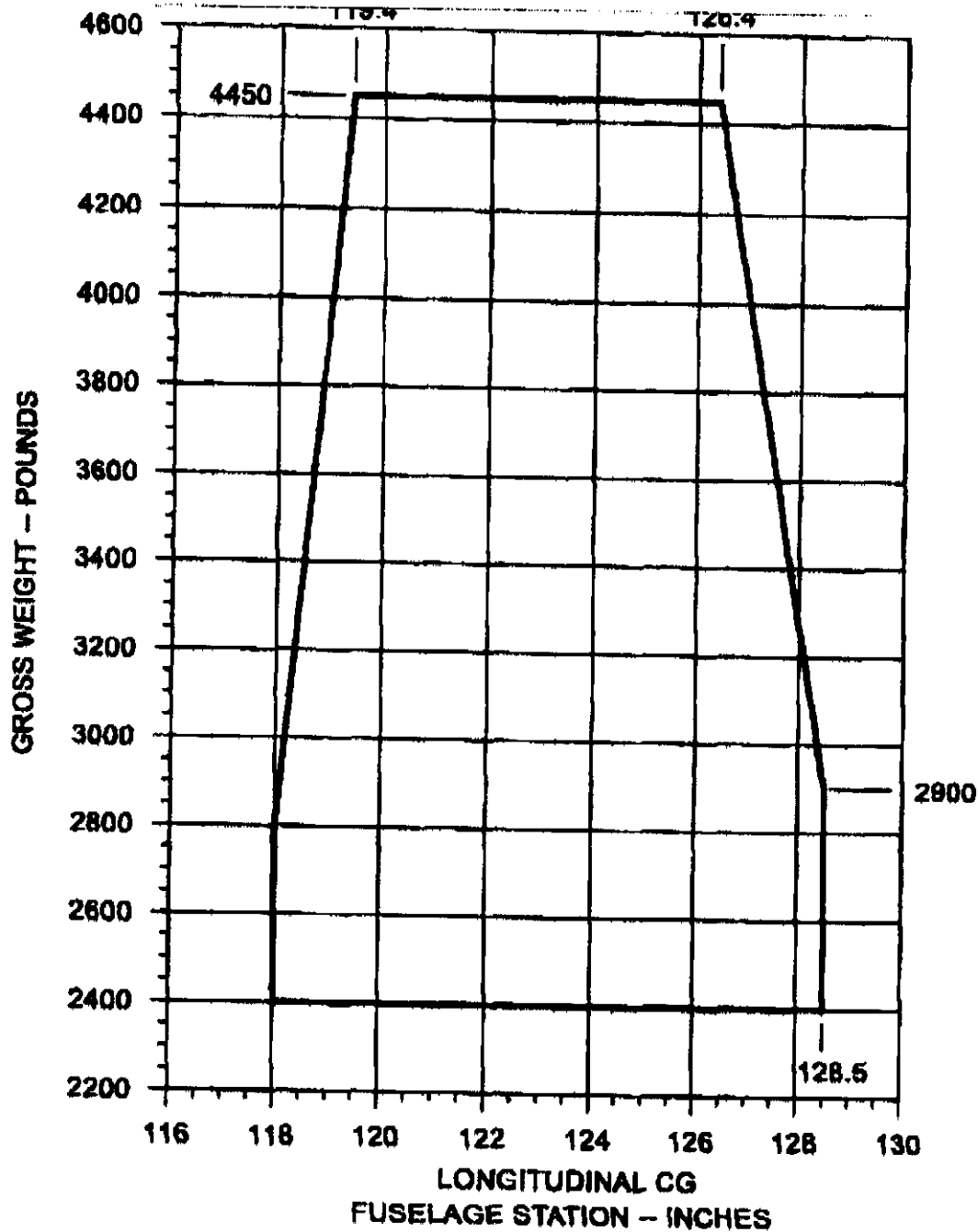
Max GWT = 4450 lbs

Allowable CG @ 3866 lbs GWT = 119.0 to 127.2 inches

DOT APPROVED

Post-it® Fax Note	7671	Date	7/16/03	# of pages	2
To	Doug W. Gifford		From	Mark Shentzner	
Co./Dept.	NTSB		Co.	Bell Helicopter	
Phone #					
Fax #	-7803				

BHT-206L4-FM-1



206L4-FM-1-1-1

Figure 1-1. Gross weight center of gravity limits — U.S. (Sheet 1 of 2)

BHT-206L4-FM-1

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1-6. WEIGHT AND CENTER OF GRAVITY

1-7. WEIGHT

CAUTION

LOADS THAT RESULT IN GW ABOVE 4,450 POUNDS (2018.5 KILOGRAMS) SHALL BE CARRIED ON AN APPROVED EXTERNAL LOAD KIT AND SHALL NOT BE IMPOSED ON LANDING GEAR.

Maximum internal gross weight is 4,450 pounds (2018.5 kilograms).

Minimum combined crew weight at fuselage station 65.0 is 170 pounds (77.1 kilograms) when operating in accordance with the SELECTIVE PASSENGER LOADING placard.

1-8. CENTER OF GRAVITY

For gross weight longitudinal and lateral center of gravity limits, refer to figures 1-1 and 1-2.

The standard helicopter (standard seating and fuel system) is ballasted in accordance with the Weight Empty Center of Gravity chart in the maintenance manual. The SELECTIVE PASSENGER LOADING placard shall be installed and may be used for loading passengers only within appropriate weight limitations without computing center of gravity. When passengers are seated other than in accordance with the selective loading placard or the baggage compartment is utilized, the pilot is responsible for determining weight and balance to ensure gross weight and center of gravity will remain within limits throughout each flight.

The helicopter with nonstandard fuel system or seating arrangement is not ballasted in accordance with the Weight

Empty Center of Gravity chart in the maintenance manual. Selective passenger loading does not apply and the ALTERNATE placard shall be installed. The pilot is responsible for determining weight and balance to ensure gross weight and center of gravity will remain within limits throughout each flight.

Refer to BHT-206L4-MD-1 for loading tables and instructions.

1-9. (DELETED)

1-10. DOORS OFF

Determine weight change after doors have been removed and adjust ballast if necessary. Refer to BHT-206L4-MD-1.

1-11. AIRSPEED

Basic V_{NE} is 130 KIAS (150 MPH) from sea level to 3,000 feet H_p . Decrease V_{NE} for ambient conditions in accordance with AIRSPEED LIMITATIONS placard (figure 1-3).

V_{NE} is 84 KIAS (97 MPH) at 75 to 100% TORQUE takeoff power.

V_{NE} is 90 KIAS (104 MPH) with any door(s) off, not to exceed placarded V_{NE} .

V_{NE} is 100 KIAS (115 MPH) for autorotation.

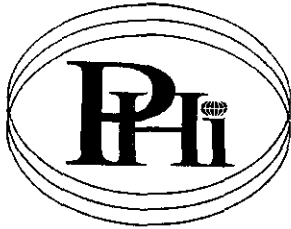
1-12. ALTITUDE

Maximum pressure altitude (H_p) is 20,000 feet.

Maximum density altitude (H_D) is 10,000 feet when gross weight is above 4150 pounds (1882.4 kilograms).

NOTE

Refer to applicable rules for high altitude oxygen requirements.



Training

MEMORANDUM

TO: Mike Hurst

FROM: Mike Terry

DATE: March 24, 2002

SUBJECT: N7077B weight and balance

Mike,

We ran several different Wt & Bal. scenarios for N7077B. The data is based on the weight and balance information from October 3, 2001. Basic Weight is 2760 pounds. Moment is 355322.4 inches. Basic C.G. is 128.74.

All computations are based on Full fuel (753 LBS – Most AFT CG), and all weights are in pounds.

Pilot Weight	Cargo Compartment	CG	CG Range
200	50	126.7	118.7 – 127.3
■	■	■	118.7 – ■
200	150	127.9	118.7 – 127.2
210	50	126.5	118.7 – 127.3
210	100	127.2	118.7 – 127.2
■	■	■	118.7 – ■
220	50	126.4	118.7 – 127.3
220	100	127.0	118.7 – 127.2
■	■	■	118.7 – ■
230	50	126.2	118.7 – 127.3
230	100	126.8	118.7 – 127.2
■	■	■	118.7 – ■

If you will provide the actual pilot and cargo weights, I will compute the actual C.G.