

BASIC WEIGHT AND BALANCE RECORD

(CONTINUOUS HISTORY OF CHANGES IN STRUCTURE OR EQUIPMENT AFFECTING WEIGHT AND BALANCE)

AIRCRAFT MODEL: **206A IV** SERIAL NUMBER: **52182** REGISTRATION NUMBER: **H413ML**

DATE	ITEM NO.		DESCRIPTION OF ARTICLE OR MODIFICATION	WEIGHT CHANGE						RUNNING TOTAL BASIC AIRCRAFT				
	IN	OUT		ADDED (+)			REMOVED (-)			WEIGHT	ARM	MOMENT ¹		
				WEIGHT	ARM	MOMENT ¹	WEIGHT	ARM	MOMENT ¹					
				IN LBS.			IN LBS.			IN LBS.				
			EMPTY WEIGHT AS WEIGHTED									2413.2	129.7	31300.8
10-23-96	X		FELT	2.0		38.0								
10-23-96	X		PA SYSTEM SEE 337	20.0		146.0								
10-23-96	X		AIR COND SEE 337	83.96		1183.17						2579.16	129.67	32664.17
11-4-96	X		BLEED AIR HEATER SEE 337	11.39		1105.0						2590.55	129.68	32776.17
12-8-96	X		TYLON MOUNT (337)	181.0	117.0	21177.0						2771.55	128.68	34974.317
12-9-96		X	TYLON MOUNT (337)				181.0	117.0	21177.0			2590.55	129.52	32776.17
12-14-96	X		DOOR OPENING KITS (337)	5.6		471.72						2596.15	129.42	328237.89
12-27-96	X		WSPS STR (337)	16.4		597.4						2592.53	128.80	328285.29
1-15-97		X	LOW WING ST. STANDARD LND GEAR & FAIRING				97.0		10306.3			2495.55		318978.79
1-15-97	X		HIGH SKID GEAR & FLIGHT STEPS	128.0		14170.6						2583.57	128.75	332649.63
1-15-97	X		INSID FURSYS (AIRPLANE TURNING MT. 337)	212.25		9955.75						2795.82	122.54	342605.38
1-15-97		X	BALLAST IN NOSE				28		364			2767.8		342241.4
1-15-97	X		200 LBS BALLAST IN BAREGARE	200								2967.8	127.05	377041.0
1-17-97	X		NOSE BALLAST	28		364								
1-17-97		X	REMOVED CAMERA & MOUNT -				212.25		9955.75			2583.55	128.75	332649.63
1-21-97		X	REMOVED HIGH SKID GEAR				128.0		14170.67			2552.33	128.80	329785.29
1-21-97	X		INSTD STANDARD LND GEAR	187.0		10306.3						2552.33	128.80	329785.29
2-18-97	X		COAL OIL FILTER	4.0	212.5	852						2556.33	128.94	329635.29
3-24-97	X		TYLON MOUNT	181.0	117.0	21177.0						2557.33	128.94	329635.29
3-24-97		X	TYLON MOUNT				181.0	117.0	21177.0			2557.33	128.94	329635.29
3-24-97	X		LOW WING & STANDARD GEAR				97.0		10306.3					
3-24-97	X		HIGH SKID GEAR & FLT STEPS	128.0		14170.64								
3-24-97			+ TYLON NOSE MOUNT	168.5		15195.44								
3-24-97	X		HIGH SKID GEAR & FLT STEPS											
3-24-97		X	+ TYLON NOSE MOUNT				168.5		15195.44			2556.33	128.74	329635.29
3-24-97	X		STANDARD SKID GEAR	222.0	117.0	25974.0								
4-25-97	X		TYLON MOUNT MOUNT	181.0	117.0	21177.0						2778.33	127.99	355609.29
4-25-97	X		TYLON MOUNT MOUNT				222.0	117.0	25974.0			2552.33	128.94	329635.29
11-1-97	X		TYLON MIDDLE MT.	181.0	117.0	21177.0						2757.33	126.15	350312.29
11-1-97		X	TYLON MIDDLE MT.				181.0	117.0	21177.0			2556.33	128.94	329635.29
6-16-98	X		TYLON MIDDLE MT	181.0	117.0	21177.0						2737.33	128.15	350712.29
6-16-98		X	TYLON MIDDLE MT.				181.0	117.0	21177.0			2556.33	128.94	329635.29
2-10-00	X		TYLON MIDDLE MT	181.0	117.0	21177.0						2737.33	128.15	350712.29

¹ ENTER CONSTANT USED BELOW LINE



Actual Weight & Balance
Model 206L4

N413ML Amendment 1 to Weight & Balance dated: 02-Oct-96

Reg.No.: **N4138A**

Date: 02-Oct-96

Serial No.: 52182

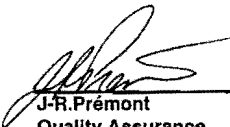
P/N & Description	Weight (LB)	Center of Gravity (in.)			
		Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Weight Empty	2413.2	129.7	313008	-0.1	-337
Install Ferry Equipment:					
206-898-006-101 ELT	2.0	21.4	43	-3.9	-8
New Weight Empty=	2415.2				
New Longitudinal CG=		129.6	313051		
New Lateral CG=				-0.1	-345

Data Prepared By:


 M.J. Burge
 Weight & Value Eng.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Approved By:


 J-R. Prémont
 Quality Assurance
 M.O.T. CO.-APPR.
 1-86

Actual Weight & Balance
Model 206L4

Amendment 1 to Equipment List dated: 02-Oct-96

43mc

Reg. No.: N1188A

Serial No.: 52182

Date: 02-Oct-96

P/N & Description	Weight (LB)	Center of Gravity(In)	
		Longitudin	Lateral
206-898-006-101 ELT	2.0	21.4	-3.9

Data Prepared By:


M.J. Burge
Weight & Value Eng.

Actual Weight Record
Model 206L4

413 ml
 Reg.No.: **N1188A**
 Date: **02-Oct-96**

Serial No.: **52182**

Weighing Results

[Units = pounds (lb), inches (in)]

Cell Location	Reading	Tare	Net Tare
Forward jackpoint (F.S. 55.16, B.L. -16.82)	591.5	0.0	591.5
Forward jackpoint (F.S. 55.16, B.L. +16.82)	572.5	0.0	572.5
Aft jackpoint (F.S. 204.92, B.L. +0.00)	1221.5	0.0	1221.5
Total	2385.5	0.0	2385.5

Longitudinal CG as Weighed:

$$\text{C.G.} = \frac{55.16 \times (1164) + 204.92 \times (1221.5)}{\text{Total Weight } 2386} = \frac{314516}{2386} = 131.8 \text{ in.}$$

Lateral CG as Weighed: (+ = right)

$$\text{C.G.} = \frac{-16.82 \times (591.5) + 16.82 \times (572.5)}{\text{Total Weight } 2386} = \frac{-320}{2386} = -0.1 \text{ in.}$$

Actual Weight Record
Model 206L4

413ml
Reg.No.: ~~N1198A~~
Date: 02-Oct-96

Serial No.: 52182

Weight Empty Derivation:

Item Description	Weight	Center of Gravity & Moments			
		Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
A/C as weighed (page 1)	2385.5	131.8	314516	-0.1	-320
Delete:					
Level	-3.2	117.7	-377	-11.0	35
Useable Oil	-13.0	205.0	-2665	0.0	0
Temporary Ballast	-28.0	13.0	-364	-2.5	70
Temporary Ballast	-12.0	16.4	-197	4.7	-56
Add:					
Unusable fuel	7.6	94.0	714	0.0	0
Headsets	2.5	75.0	188	0.0	0
Flight Manual	1.7	37.0	63	-24.0	-41
Battery	36.3	15.8	574	1.0	36
Dual Stick	1.8	52.1	94	-11.0	-20
Ballast	28.0	13.0	364	-2.5	-70
	6.0	16.4	98	4.7	28
Weight Empty	2413.2	129.71	313008	-0.1	-337

Actual Weight Record
Model 206L4

413ml
Reg.No.: **N1198A**
Date: **02-Oct-96**

Serial No.: **52182**

CG Extremes

Most Forward CG:

Item Description	Weight	Center of Gravity & Moment			
		Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Weight Empty (page 2)	2413.2	129.7	313008	-0.1	-337
+ Pilot	170.0	65.0	11050	14.0	2380
+ Passenger, Fwd	170.0	65.0	11050	-11.0	-1870
+ Passengers , Mid (2)	340.0	91.0	30940	0.0	0
+ Passengers , Aft (2)	340.0	129.0	43860	0.0	0
+ Oil, Engine	13.0	205.0	2665	0.0	0
+ Fuel, 59.9 USG (JP-5)	407.3	117.6	47898	0.0	0
Total	3853.5	119.5	460472	0.0	173

Most Aft CG:

Item Description	Weight	Center of Gravity & Moment			
		Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Weight Empty (page 2)	2413.2	129.7	313008	-0.1	-337
+ Pilot	170.0	65.0	11050	14.0	2380
+ Passengers , Aft (2)	340.0	129.0	43860	0.0	0
+ Oil, Engine	13.0	205.0	2665	0.0	0
+ Fuel, Full (JP-5)	752.8	131.7	99144	0.0	0
Total	3689.0	127.3	469727	0.6	2043

Actual Weight Record
Model 206L4

Reg.No.: **N1188A**

Date: **02-Oct-96**

Serial No.: **52182**

Equipment List - Required Equipment Installed

P/N	Item Description	Weight	Long Arm	Lat Arm
	<u>Indicators:</u>			
206-070-263-101	Altimeter	1.4	37.0	11.3
206-075-725-001	Airspeed	0.9	38.0	4.3
206-075-681-123	Dual Tachometer	2.3	37.2	4.3
206-075-682-107	Gas Producer Tachometer	1.0	37.4	1.3
206-075-676-119	Fuel Pressure & Loadmeter	1.0	37.6	-1.3
206-063-633-103	Fuel Quantity	0.8	37.4	-1.3
206-075-739-113	Torque	0.6	38.0	1.3
206-375-007-103	Turbine Outlet Temp	1.0	37.1	1.3
206-075-677-103	Engine Oil Press & Temp	1.0	36.9	-1.3
MC-NS5/A	Compass Magnetic Standby	0.7	33.1	22.9
M800-5-BATT	Clock	0.2	39.6	1.2
206-075-624-001	Outside Air Temperature	0.2	53.0	3.0
206-075-678-107	Transmission Oil Press & Temp	1.0	37.1	-1.3
75-0285-17	Master Caution Panel	2.0	39.1	3.5
206-062-200-113	Starter/Generator	20.7	165.8	6.5
206-075-742-101	Battery (Actual Weight)	36.3	15.8	1.0

Actual Weight Record
Model 206L4

413ML
Reg.No.: **N1488A**
Date: **02-Oct-96**

Serial No.: **52182**

Equipment List - Required Equipment Installed (cont'd)

P/N	Item Description	Weight	Long Arm	Lat. Arm
	Anti-Collision Light:			
A470-D-R	Strobe	0.4	392.0	7.0
A490A,TS-DF	Power Supply	1.5	185.8	11.2
206-075-303-001	Landing Light (2)	1.6	12.0	1.5
A-2064-1683	Tail Light	0.2	398.6	0.0
AN3033-12	Position Light, L.H.	0.3	284.9	-39.4
AN3033-13	Position Light, R.H.	0.3	284.9	39.4
90-004-4	Map Light	0.6	79.0	0.0
40000	Fire Extinguisher	2.6	75.0	0.0
	Safety Belts:			
222-320-823-119	Pilot	2.2	70.0	12.0
222-320-823-119	CoPilot/Fwd Passenger	2.2	70.0	-12.0
206-072-841-113	Mid Passenger, L.H.	1.7	87.0	-15.0
206-072-841-113	Mid Passenger, R.H.	1.7	87.0	15.0
206-072-841-111	Aft Passenger, L.H.	1.8	138.0	-17.0
206-072-841-115	Aft Passenger, Center	1.6	138.0	0.0
206-072-841-111	Aft Passenger, R.H.	1.8	138.0	17.0
BHT-206L4-FM-1	Flight Manual	1.7	37.0	-24.0

Actual Weight Record
Model 206L4

413ml
Reg.No.: **N4188A**
Date: **02-Oct-96**

Serial No.: **52182**

Equipment List - Optional Equipment Installed

Part Number	Item Description	Weight (lb)	Center of Gravity (In)	
			Long.	Lateral
206-705-008-103	VHF Equipment	7.5	41.5	0.7 #
206-705-008-115	Transponder Prov	0.8	51.2	-1.8
206-705-008-117	Transponder Equip	2.7	39.7	1.0
206-705-008-131	ADF Equipment	6.5	100.2	0.8
206-705-008-151	OMNI	3.7	135.5	0.5
206-705-008-163	VHF/ADF Prov w/Aud	10.7	62.7	-0.3
206-705-401-103	Air Distribution	6.8	78.2	0.4
206-706-043-101	Soundproofing	14.2	116.4	0.0
206-706-051-103	Blind Encoder	1.9	38.7	-3.3
206-706-127-113	Dual Controls	11.9	47.8	-13.5
206-706-212-123	Particle Separator	18.0	141.8	1.3
206-706-323-107	Flight Instruments, less Dir Gyro	6.6	39.2	8.4
206-706-502-101	Rotor Brake	13.9	130.6	-0.4
206-706-504-105	Standard Skid Gear	79.8	112.3	0.0
206-706-509-101	Skid Gear Fairings	10.2	118.8	0.0
Std Deluxe Interior (Fabric/ Vinyl) Includes:		114.4	98	-0.3
206-705-715-111	Seat kit			
206-705-009-115	Carpet kit			

Note: Equipment listed above was installed when helicopter was weighed except as indicated by (*) or partially installed as indicated by (#).

Actual Weight Record
Model 206L4

Reg.No.: ^{413 mL} ~~N1188A~~
Date: 02-Oct-96

Serial No.: 52182

Place Weighed: B.H.T.C
Mirabel
P.Q., Canada

Date Weighed: 02-Oct-96

The aircraft was weighed with the fluid systems in the conditions described:

Fuel System : Drained
Engine Oil System : Full (includes 1.6 lb undrainable @ FS 192.0)
Transmission Oil System : Full
Hydraulic System : Full


ITEM	Weight (lb)	Center of Gravity (in)	
		Long.	Lateral
Weight Empty (includes unuseable fuel & undrainable oil)	2413.2	129.7	-0.1

Data Prepared By:


M.J. Burge
Weight & Value Eng.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Approved By:


J-R. Prémont
Quality Assurance
M.O.T. CO.-APPR.
1-86