N612AZ CG	WEIGHT	ARM	MOMENT
N612AZ	12369	262.3	3244388.7
PILOT	225	88.6	19935
TEST PILOT	165	88.6	14619
C6 STA OPERATOR	270	167	45090
C7 STA OPERATOR		201	0
FWD FUEL	400	203.9	81560
AFT FUEL	400	305.9	122360
CTR FUEL	0	264.8	0
LOAD ON HOIST	200	154	30800
BALLAST AT STA 408	100	408	40800
A/C TOTAL WEIGHT	14129	254.763444	3599552.7
CG Range 16000 & under 254.0-280			
16500 = 254.7- 279.3			
17000 = 255.3 - 278.7			
17500 = 256.0 - 278.0			
18000 = 256.6 - 277.4			
18500 = 257.3 - 276.7			
19000 = 258.0 - 276.0			

N612AZ CG	WEIGHT	ARM	MOMENT
N612AZ	12397	262.3	3251733.1
PILOT	225	88.6	19935
TEST PILOT	165	88.6	14619
C6 STA OPERATOR	270	167	45090
C7 STA OPERATOR	0	201	0
FWD FUEL	850	203.9	173315
AFT FUEL	850	305.9	260015
CTR FUEL	0	264.8	0
LOAD ON HOIST		154	0
BALLAST AT STA 408		408	0
A/C TOTAL WEIGHT	14757	255.1133089	3764707.1
CG Range 16000 & under 254.0-280			
16500 = 254.7- 279.3			
17000 = 255.3 - 278.7			
17500 = 256.0 - 278.0			
18000 = 256.6 - 277.4			
18500 = 257.3 - 276.7			
19000 = 258.0 - 276.0			

N612AZ CG	WEIGHT	ARM	MOMENT
N612AZ	12369	262.3	3244388.7
PILOT	225	88.6	19935
TEST PILOT	165	88.6	14619
C6 STA OPERATOR	270	167	45090
C7 STA OPERATOR	185	201	37185
FWD FUEL	600	203.9	122340
AFT FUEL	700	305.9	214130
CTR FUEL	0	264.8	0
LOAD ON HOIST	600	154	92400
BALLAST AT STA 408	1100	408	448800
A/C TOTAL WEIGHT	16214	261.4338041	4238887.7
CG Range 16000 & under 254.0-280			
16500 = 254.7- 279.3			
17000 = 255.3 - 278.7			
17500 = 256.0 - 278.0			
18000 = 256.6 - 277.4			
18500 = 257.3 - 276.7			
19000 = 258.0 - 276.0			
VERIFIED - 12/27/07 [redacted]			

N612AZ CG	WEIGHT	ARM	MOMENT
N612AZ	12369	262.3	3244388.7
PILOT	225	88.6	19935
TEST PILOT	165	88.6	14619
C6 STA OPERATOR	270	167	45090
C7 STA OPERATOR		201	0
FWD FUEL	400	203.9	81560
AFT FUEL	400	305.9	122360
CTR FUEL	0	264.8	0
LOAD ON HOIST	200	154	30800
BALLAST AT STA 408	100	408	40800
A/C TOTAL WEIGHT	14129	254.763444	3599552.7
CG Range 16000 & under 254.0-280			
16500 = 254.7- 279.3			
17000 = 255.3 - 278.7			
17500 = 256.0 - 278.0			
18000 = 256.6 - 277.4			
18500 = 257.3 - 276.7			
19000 = 258.0 - 276.0			

N612AZ CG	WEIGHT	ARM	MOMENT
N612AZ	12397	262.3	3251733.1
PILOT	225	88.6	19935
TEST PILOT	165	88.6	14619
C6 STA OPERATOR	270	167	45090
C7 STA OPERATOR	185	201	37185
FWD FUEL	850	203.9	173315
AFT FUEL	850	305.9	260015
CTR FUEL	0	264.8	0
LOAD ON HOIST	600	154	92400
BALLAST AT STA 408	1100	408	448800
A/C TOTAL WEIGHT	16642	260.9717642	4343092.1
CG Range 16000 & under 254.0-280			
16500 = 254.7- 279.3			
17000 = 255.3 - 278.7			
17500 = 256.0 - 278.0			
18000 = 256.6 - 277.4			
18500 = 257.3 - 276.7			
19000 = 258.0 - 276.0			

BALLAST Hoist Fit. Test. 12/20/07 1889.24 #

25.16	25.22	25.12
25.20	25.20	25.42
25.18	25.24	25.28
25.16	25.32	25.22
25.20	25.08	25.14
25.28	25.46	25.40
25.08	25.32	25.20
25.22	25.20	25.30
25.16	25.18	25.18
25.28	24.86	25.24
25.20	25.16	25.12
25.28	25.40	25.00
25.12	24.96	24.66
25.18	25.18	25.24
25.10	25.22	24.40
25.16	25.32	25.22
25.18	25.20	24.84
25.16	25.14	25.46
25.12	24.94	25.34
25.50	25.24	25.50
25.26	25.18	25.20
25.22	25.22	
25.20	25.20	
25.26	25.20	
25.18	25.18	
25.16	25.36	
25.16	25.22	

BALLAST Reweighed & Marked Accordingly.

ATP [redacted] 12/19/07

[redacted]

Rcd MANOGUE

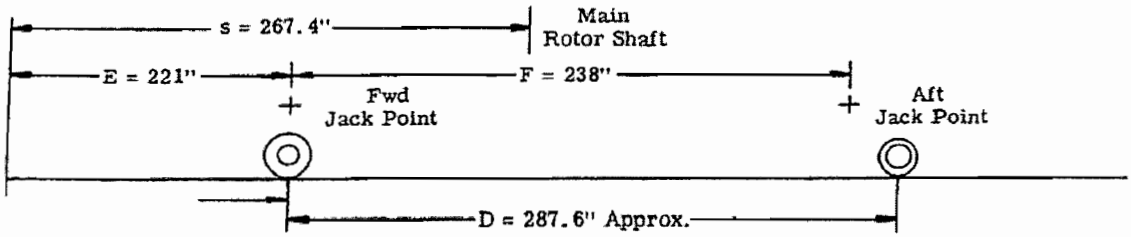
Sheet 1 of 1

AIRCRAFT ACTUAL WEIGHT AND HORIZONTAL BALANCE FOR S-61N MODEL HELICOPTER

Prepared By David Wolf
Date 12-26-07

Reg. No. N612AZ Serial No. 61297

SCALE POSITION	SCALE NO.	SCALE READING (LB)	TARE	SCALE ERROR	SYMBOL	NET WEIGHT
LEFT MAIN POINT		4943			W_L	4943
RIGHT MAIN POINT		5302			W_R	5302
POINT TAIL		2152			W_T	2152
TOTAL WEIGHT		12397			W	12397



CENTER OF GRAVITY TO FORWARD DATUM (HORIZ. DIST. - AS WEIGHED)

$$E + \frac{W_T \times D}{W}$$

Weighing on Jack Points $E + \frac{W_T \times F}{W}$ $\quad 221 + \frac{2152 \times 238}{12397} = 262.3$

CORRECTED WEIGHT AND HORIZONTAL BALANCE

ITEMS ADDED & SUBTRACTED	WEIGHT (LB)	HORIZONTAL DIST (in) C.G. TO FWD DATUM	MOMENT (lb in.)
Aircraft as Weighed	12397	262.3	3251733.1
Plus -			
Minus - 28 MGB run in kit	28	267.4	7487.2
TOTAL EMPTY WEIGHT	12369	262.3	3244245.9
BALANCE 262.3 (Corrected) Horizontal Dist. - s = 5.0 in. Fwd of Main Rotor Centroid			

S 5654 (R2)

Witnessed By [redacted]
Rodney Manogue

Figure 4-10