

**Panorama Helicopters Ltd**

Ident: C-GZOL

Model: Bell 212HP+BLR VFR

Serial: 32141

REV: C-GZOL S/N:32141 [2022-07-13T17:40:07.926Z]

**Empty Weight and Balance Report**

Description	Action	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
Scaled On: 2019-04-18	As weighed	6803.50lbs	142.80in	971520.30lb-in	-0.07in	-448.40lb-in
<b>EMPTY WEIGHT C of G - Total:</b>		<b>6803.5</b>	<b>142.80</b>	<b>971520.3</b>	<b>-0.07</b>	<b>-448.4</b>

Amendment # 1 Dated: 2019-06-01

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
	SH96-49	ISOLAIR TANK ASSY	Installed	330.00	114.80	37884.00	0.00	0.00
<b>EMPTY WEIGHT C of G - Total:</b>				<b>7133.50</b>	<b>141.50</b>	<b>1009404.30</b>	<b>-0.06</b>	<b>-448.40</b>

Amendment # 2 Dated: 2019-06-14

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
	sh09-41	RH HELI ACCCESS STEP	Installed	14.00	94.50	1323.00	50.00	700.00
		vih crewstep l/h and r/h	Removed	7.50	63.00	472.50	0.00	0.00
<b>EMPTY WEIGHT C of G - Total:</b>				<b>7140.00</b>	<b>141.49</b>	<b>1010254.80</b>	<b>0.04</b>	<b>251.60</b>

Amendment # 3 Dated: 2019-07-06

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
	si212-4	Dual Control	Removed	15.30	27.80	425.34	-22.00	-336.60
<b>EMPTY WEIGHT C of G - Total:</b>				<b>7124.70</b>	<b>141.74</b>	<b>1009829.46</b>	<b>0.08</b>	<b>588.20</b>

Amendment # 4 Dated: 2019-07-17

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
		Dual Control	Installed	15.30	27.80	425.34	-22.00	-336.60
<b>EMPTY WEIGHT C of G - Total:</b>				<b>7140.00</b>	<b>141.49</b>	<b>1010254.80</b>	<b>0.04</b>	<b>251.60</b>

Amendment # 5 Dated: 2019-08-18

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
	SH96-49	ISOLAIR TANK ASSY	Removed	330.00	114.80	37884.00	0.00	0.00
SH09-41		VIH L/H boarding step	Removed	3.75	63.00	236.25	-30.00	-112.50
		L/H HELI ACCCESS STEP	Installed	14.00	94.50	1323.00	-50.00	-700.00
<b>EMPTY WEIGHT C of G - Total:</b>				<b>6820.25</b>	<b>142.73</b>	<b>973457.55</b>	<b>-0.05</b>	<b>-335.90</b>

Amendment # 6 Dated: 2020-07-05

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
		Dual Control	Removed	15.30	27.80	425.34	-22.00	-336.60
<b>EMPTY WEIGHT C of G - Total:</b>				<b>6804.95</b>	<b>142.99</b>	<b>973032.21</b>	<b>0.00</b>	<b>0.70</b>

Amendment # 7 Dated: 2020-09-01

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
		Dual Control	Installed	15.30	27.80	425.34	-22.00	-336.60
<b>EMPTY WEIGHT C of G - Total:</b>				<b>6820.25</b>	<b>142.73</b>	<b>973457.55</b>	<b>-0.05</b>	<b>-335.90</b>

Part #	STC #	Description	Option	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in
AAL-290-050-901	SH10-30 sh97-77 sh97-77 sh93-10	APINE AEROTECH HANDLE ASSY KIT	Installed	1.84	88.42	162.69	0.00	0.00
		aai fwd crosstube	Removed	32.08	71.65	2298.53	0.00	0.00
		aai aft crosstube	Removed	44.67	163.00	7281.21	0.00	0.00
		aai skidtubes	Removed	92.40	112.00	10348.80	0.00	0.00
D205-594-013	SH03-6	EXTENDED HEIGHT LANDING GEAR ASSY(DART CROSSTUBE + SKIDTUBE)	Installed	176.90	116.90	20679.61	0.00	0.00
		Extended high gear l/h & R/H heli access step modification	Installed	0.60	94.50	56.70	0.00	0.00
		Error correction amendement #5 boarding step	Installed	3.75	63.00	236.25	-30.00	-112.50
		fm tfm-550	Removed	5.10	50.00	255.00	0.00	0.00
<b>EMPTY WEIGHT C of G - Total:</b>				<b>6829.09</b>	<b>142.69</b>	<b>974409.26</b>	<b>-0.07</b>	<b>-448.40</b>

## Equipment Lists

### Installed Equipment List

Part #	STC #	Description	Weight lbs	Long Arm in	Lat Arm in
	sh93-61	aai cargo door windows	0.00	117.00	0.00
	sh93-61	aai chin bubble windows	0.00	0.00	0.00
	sh93-61	aai crewdoor window	0.00	18.00	0.00
		aai hinge panel	0.00	87.00	0.00
	sh93-61	aai skylight window	0.00	23.00	0.00
	sh93-41	aai wire stike	18.68	36.56	0.00
	sh16-55	aerotex seat cushions and cover	0.00	147.00	0.00
	sh00-31	ailpine oil cooler support panel	0.00	240.00	0.00
	sh01-60	Alpine aerotech cbox drain reservoir	1.10	211.10	1.74
	sh97-80	Alpine aerotech ejector deflector	0.00	0.00	0.00
	sh02-28	Alpine aerotech pump drain reservoir	4.20	213.37	7.58
	SH10-30	ALPINE AEROTECH SLINDING DOOR HANDLE KIT	1.84	88.42	0.00
		Artex elt c406-2hm	3.37	47.00	34.00
		Aux Fuel Tank	81.40	149.60	0.00
	SH8025SW	Benz kulite eng oil pressure transducer	0.00	175.00	0.00
	sh058-55	blr fastfin and strake	3.80	266.00	0.00
	sh93-34	cargo release copiloat	3.20	21.00	-16.00
	sr09053rc	Concorde battery rg380e/44	86.00	-5.70	7.90
	s96-42	Dart Bearpaws	23.00	146.50	0.00
	sh92-80	Dart cargo Mirror	5.00	-5.25	0.00
	sh05-11	dart console riser	2.30	37.00	0.00
	sh08-43	dart door sill protetor	1.20	45.00	0.00
	sh92-16	dart pulse light	4.30	-5.53	-0.37
	sh07-7	dart shoulder harness kit	19.80	126.00	0.00
	sh92-55	DART VERT REF. DOOR	2.00	-40.00	50.80
D205-594-013	SH03-6/SH96-88	EXTENDED HEIGHT LANDING GEAR ASSY(DART CROSSTUBE + SKIDTUBE)	176.90	116.90	0.00
D205-633-013		L/H HELI ACCESS STEP	14.30	94.50	-50.00
	sh99-217	Onboard Cago Hook	7.00	137.55	0.00
	sh93-25	Onbooard Load cell	2.00	137.55	0.00
D205-633-013		R/H HELI ACCESS STEP	14.30	94.50	50.00
	sh07-12	survival kit tray	2.40	-6.50	-6.40
	sh14-43	vih caution panel	0.80	23.00	-11.00
	sh09-41	vih R/H crewstep	7.50	63.00	30.00
	sh04-23	vih rain gutter rubber	0.00	117.00	0.00
	sh07-12	vih survival kit	50.00	-6.25	-6.40

**Optional Equipment List**

<b>Part #</b>	<b>STC #</b>	<b>Description</b>	<b>Weight lbs</b>	<b>Long Arm in</b>	<b>Lat Arm in</b>
205-070-792-037		4 man seat	73.00	87.00	0.00

## Radio Equipment List

Part #	STC #	Description	Weight lbs	Long Arm in	Lat Arm in
		ams 42 audiobox	2.00	87.30	-4.00
		ams 44 audiobox	2.00	40.00	0.00
		COM ANTENNA 17-50-01	1.30	35.00	-24.00
		COM VF10-201	0.50	200.00	0.00
		dart pulse light module	1.00	46.00	5.50
		ELT ANTENNA 110-320	0.50	50.00	0.00
		elt artex 406mhz	4.50	63.00	34.00
		encoder a-30	0.50	11.00	10.00
		FM ANTENNA DM C63-4/A	0.50	35.00	24.00
		FM LO BAND ANTENNA CI-166	0.50	42.00	-5.00
		longline relays	5.20	127.50	0.00
		pa controller nat aa21-400	1.40	54.00	0.00
		pa loud speaker ts 100 wr	13.75	63.33	-22.00
		pa110-015 amp	10.00	11.00	-8.00
		RC ALLEN ATTITUDE INDICATOR	0.42	23.00	18.00
		RC ALLEN ATTITUDE INDOCATOR	0.42	23.00	-18.00
		RC ALLEN HIS	0.42	23.00	18.00
		RC ALLEN HIS	0.42	23.00	-18.00
		rC ALLN TURN & BANK IND	1.90	23.00	22.00
		rear headset amp aa38-301	0.96	95.30	-11.00
		tdfm-136b	3.50	47.00	0.00
		tTRANSPONDER ANTENNA	0.30	38.00	10.00
		transponder ky76a	3.10	44.00	0.00
		vhf ky-196	2.80	4.20	0.00
		vhf ky-196a	2.80	43.00	0.00

**Weight and Balance Temp Configurations**

Scaled On: 2019-04-18

Amendment # 8 Dated: 2021-09-10

FMS TC Num	Weight lbs	Long Arm in	Moment(H) lb-in	Lat Arm in	Moment(L) lb-in	Graph vs [CofG]	Most Fwd Pos	Most Aft Pos
	0	6756.09	143.29	968058.26	-0.07	-448.40	Standard	9160.59lbs@132.28 8436.59lbs@143.07
X	1	6829.09	142.69	974409.26	-0.07	-448.40	Standard	9233.59lbs@131.92 8509.59lbs@142.59
FMS TC Num	Weight in	Graph vs [CofG]	Most Fwd Pos	Most Aft Pos	Long Arm in	Long Mom lb-in	Lat Arm in	Lat Mom lb-in

FMS = 4 man seat

X = Installed

O = Installation Conflict - Temp Config is Invalid for this Configuration

For Lateral Arm: - is Left and + is Right

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

A handwritten signature in black ink, appearing to read 'J-F Bouchard', with a large loop on the left side.

**REV: C-GZOL S/N:32141 [2022-07-13T17:40:07.926Z]**

**Dated: 2022-07-13**

**Jean-Francois bouchard**

**Licence #M904844 AMO2604**