Briefings & Checks

B / AB 206 Jet Ranger IIIB

Helicopter Data (Meteo / NOTAM / DABS / W&B)

1.	Empty weight: (kg x 2.2)	…… lbs
2.	Main fuel: (liter x 3.8=USG, x 6 = lbs)	…… lbs
3.	Pilot / Pax / Baggage: (kg x 2.2)	…… lbs
4.	actual TOM / HOGE:	…… lbs / …… HOGE
5.	Max TOM:	3200 lbs (or iaw HOGE perf. chart)

Limitations

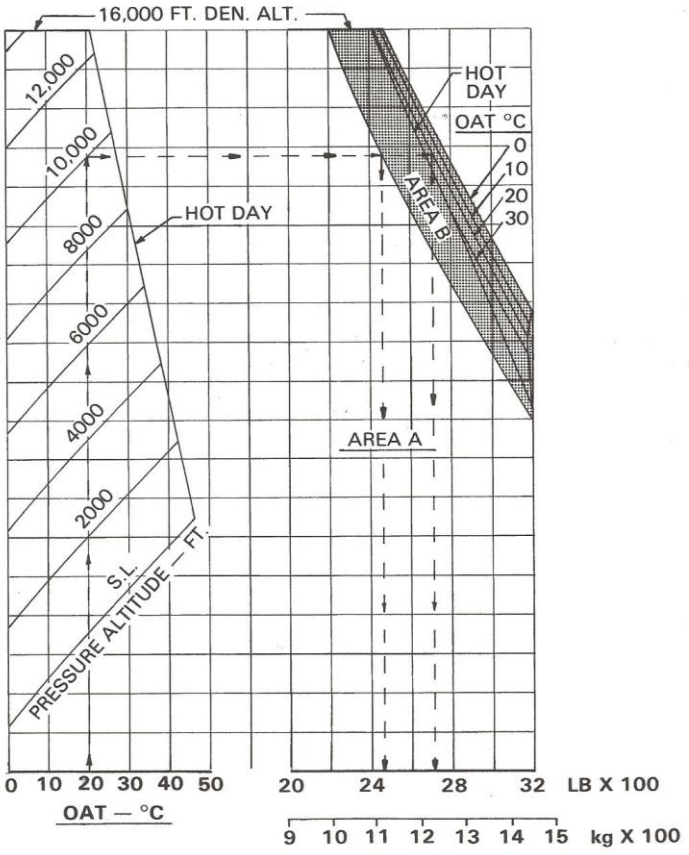
Torque Limitations Tq	
Max continuous	85%
Take off *(5 Min limit)*	100% / (> 85% tq -> *max 80 KIAS)*
Transient *(5 sec limit)*	110% *Intentional use prohibited*
Turbine Outlet Temperature TOT	
Max continuous	100 – 738°C
Take off *(5 Min limit)*	738 – 810°C
Transient *(6 Sec limit)*	810 – 843°C *Intentional use prohibited*
Starting / shut down *(10 Sec limit)*	810 – 927°C %
Gas producer (N1) RPM Limitations	
Normal	60 – 105%
Maximum	105%
Transient *(max 15 sec)*	106%
Rotor (NR) Limitations	
Power on	97 – 100% RRPM
Transient RotorRPM droop down to 95% is permited for max 5 sec	
Power off	90 – 107% RRPM
Altitude Limitations	
3000 lbs and below	max 20'000 ft PA
above 3000 lbs	max 13'500 ft DA
Airspeed Limitaitions	
3000 lbs and below	Vne 130 KIAS 0 - 3000 ft DA
above 3000 ft DA ->	Vne – 3.5 KIAS / 1000 ft DA
Above 3000 lbs	Vne 122 KIAS 0 – 3000 ft DA
above 3000 ft DA ->	Vne – 7 KIAS / 1000 ft DA
85 – 100% Tq take off power range:	Vne 80 KIAS

Engine failure and Autorotation limitation	
Airspeed for minimum descent	52 KIAS
Airspeed for maximum glide distance	69 KIAS
Vne Autorotation	100 KIAS (blue line on ASI)
Weight limitations	
Front seat weight	Min 170 lbs
	Min 200 lbs with range extender
Max gross weight	3200 lbs

Performance

HOVER CEILING
OUT GROUND EFFECT TAKEOFF POWER
0° TO 46°C

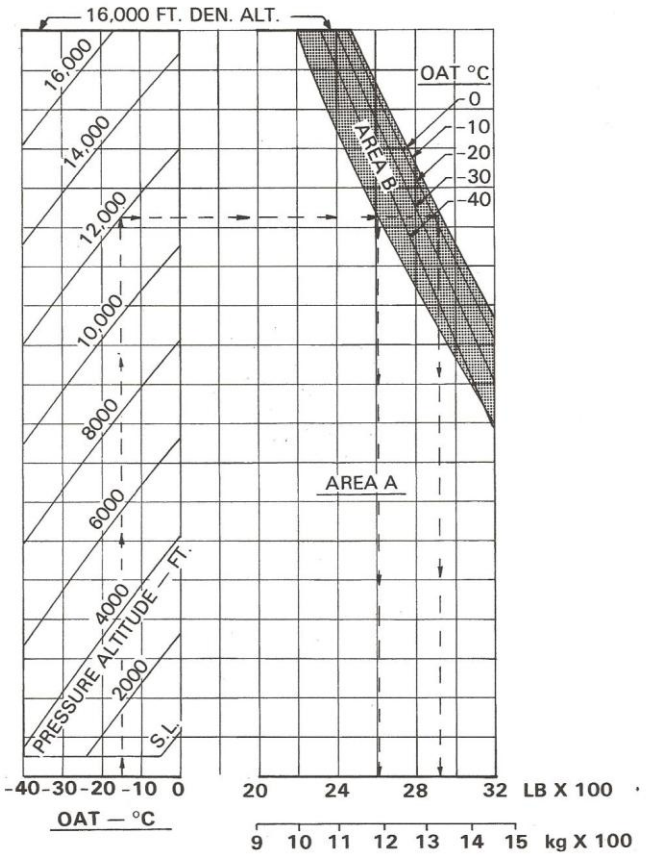
GENERATOR 22.3 AMPS — **ANTI-ICE OFF**
SKID HEIGHT 40 FT. (12.2 METERS) — **N2 ENGINE RPM 100%**
WITH ANTI-ICE ON GROSS WEIGHT IS 295 LBS. (133.8 Kg) LESS



HOVER CEILING

OUT GROUND EFFECT TAKEOFF POWER
0° TO –40°C

GENERATOR 22.3 AMPS — **ANTI-ICE OFF**
SKID HEIGHT 40 FT. (12.2 METERS) — **N2 ENGINE RPM 100%**
WITH ANTI-ICE ON GROSS WEIGHT IS 295 LBS. (133.8 Kg) LESS



Departure Briefing

1.	Obstacle /Wind	
2.	Departure procedure	sector, HIGE/HOGE
3.	Limitations	Tq /TOT / N1 / Vne / HOGE perform.
4.	Emergency	

Before Starting Engine Departure Briefing

(METEO / NOTAM / DABS / W&B / Fuelcap / Cabin / PAX / Baggage)

1.	Cabin Interior	Security of equipment
2.	Doors / Seat belts	Closed / latched
3.	Overhead panel switches	OFF
4.	Circuit breakers	All in (exp fuel pumps)
5.	Rotor brake handle	Latched up
6.	Instrument static position	Checked
7.	Altimeter	Set
8.	Fuel valve switch	On
9.	Hourmeter	Reset
10.	Compass slave	In
11.	De-Icing	Off
12.	Control boost	On
13.	Landing light	Off
14.	Throttle	Checked (travel / flight idle stop /**closed**)
15.	Controls	Full travel free -> Frictions ON

Starting Engine Rotorblades: level

1.	OAT for starting limits	15% N1 > 7°C / 13% N1 < 7°C
2.	Battery	On (if external power -> off)
3.	Fuel press. each pump	Checked (press. and light)
4.	Anti collision light	On
5.	Warning / caution lights	Test
6.	TOT instrument	Test and checked
7.	Low RPM Horn	Checked
8.	Aera (left + right)	Clear
9.	Throttle	**Full closed**
10.	Starter	Engage
11.	Engine oil pressure	Checked
12.	Throttle	Idle (@13-15%N1+TOT < 150°C)
13.	TOT rise and limits	Checked
14.	Blades turning	@ < 25% N1
15.	Beep @ 56% N1	Off
16.	Starter release	@ 58% N1
17.	Idle RPM	@ 60 – 65% N1
18.	Engine and XMSN oil pressure	Checked
19.	Generator	ON @ 70% N1 (Loadmeter checked)
20.	Avionics	On
21.	Throttle	Full open (torque < 40%)
22.	Rotor RPM	Set to 100%

Engine Run Up

1.	Engine De-icing	Checked (TOT rise ≈ 20°C)
2.	Friction	Off
3.	Hydraulic	Checked (acc RFM)

Check before Departure

1.	Switches / CB's	As required
2.	Friction's	OFF
3.	Throttle	Full open
4.	Landing Light	as required
5.	Deicing	OFF
6.	Landing Light	As required
7.	T's and P's	Green
8.	Fuel	…. Endurance
9.	RPM	100 % (30 / 60 / 80 / 100)
10.	Warning / Cautions Lights	OFF

Hover check

1.	Torque	< 100 %
2.	TOT	< 810°C
3.	RPM	100 %
4.	Wind	….
5.	DEP Sector	Obstacles

Climb check

1.	Climbspeed	60 KIAS (Vy)
2.	Power	85 < 100% max 5 min
3.	Landing light	As required

Cruise check

1.	Throttle	Full open
2.	Landing light	As required
3.	Anti ice	As required
4.	Fuel	…. Endurance
5.	T's and P's	Green
6.	Power	85 % Tq / max 738°C TOT
7.	RPM	100%
8.	Warning / Cautions Lights	OFF
9.	Altimeter	As required

Approach Briefing

1.	REKO	W A HI BEL U
2.	Elevation	Altitude
3.	Limitations	Tq / TOT / HOGE
4.	Emergency / Escape	

Check for Approach

1.	Throttle	Full open
2.	Landing light	As required
3.	Deicing	Off
4.	Fuel	…. Endurance
5.	T's and P's	Green
6.	Speed	70 KIAS
7.	RPM	100%
8.	Warning / Cautions Lights	OFF

Final Check

1.	Safety Window	30 KIAS / 500 ft ROD
2.	Decision	Land / Go around

Shutdown

1.	Collective down, Cyclic / Pedals	Neutral
2.	Hydraulic	Checked (acc RFM)
3.	Reduce RPM for cooling	Check deceleration time: max 3-5 sec Idle RPM (62-65%)≈ 2 Min
4.	Warn Horn mute *(if installed)*	Press to mute
5.	Frictions	ON
6.	Throttle	Closed (after ≈ 2 Min) *Needle split (Rotor RPM / N2)* *Check TOT*
7.	Avionics	121.50 checked / OFF
8.	GEN switch	Off
9.	Rotor Break @ 38%-30%	Engage
10.	All switches	Off *(exp BAT switch)*
11.	BAT switch	Off *(when N1 zero, TOT stabilized)*

Emergencies

1.	Engine failure and AR	- Collectiv down (90 – 107% RRPM / 52-69 KIAS) - High RRPM – increase rate off descent - Min rate of descent – 52 KIAS - Max glide - 69 KIAS - Max 100 KIAS – blue line ASI

2.	Air restart procedure	- AR (90 – 107% RRPM / 52-69 KIAS) - GEN switch off - Normal start procedure (< 12'000 ft)
3.	Engine fire during start	- Starter - continue to motor the engine - Throttle – full closed - FUEL VALVE switch - off - IGN ENG cirquit breaker - out - complet shut down
4.	Engine fire in flight	- Throttle - closed - Immediately enter AR - FUEL VALVE switch – off - Cabin ventilation
5.	Electrical fire in flight	- Master battery switch - OFF - Alt switch - OFF - Land immediately - Extinguish fire
6.	FCU and/or GOV failure	- Control power with throttle if engine overspeeds - Maintain RRPM with throttle if engine underspeeds - Establish autorotative glide if power is very low, or if engine must be shut down - Prepare for power-off landing
7.	Tachometer failure	- Use remaining tach to monitor RPM - Allow governor to control RPM - Land as soon as practical
8.	HYD System failure	- Adjust airspeed 61-69 KIAS - HYD CB out - HYD switch ON - If HYD not restored, HYD switch OFF - Land as soon as practical; max 15 KIAS
9.	Governor failure	- Grip throttle firmly to override governor - Switch governor OFF - Complete flight using manual throttle control

Warning lights

1.	**_ENG OUT**	- Enter Autorotation - Investigate failure - Engine relight
2.	**BAT HOT**	- BAT switch off - land as soon as possible
3.	**ROTOR LOW RPM** *(if installed)*	- Reduce collective pitch - Throttle full open
4.	**TRANS OIL PRESSURE**	- Check gage (pressure + temp) - Reduce power - land as soon as possible
5.	**TRANS OIL TEMP**	- Check gage (pressure + temp) - Reduce power - land as soon as possible
6.	**BAT TEMP**	- Battery OFF until light extinguishes - Then Battery switch on
7.	**ENG CHIP**	- Land as soon as possible
8.	**TRANS CHIP**	- Land as soon as possible
9.	**T/R CHIP**	- Land as soon as possible
10.	**GEN FAIL**	- GEN switch reset - GEN switch on - If GEN FAIL light illuminated, GEN switch off - Land as soon as practical
11.	**LOW FUEL** *(if installed)*	- 20 gallon fuel remaining - Plan Landing
12.	**FUEL PUMP**	- One or both fuel pumps inop - Descent below 6000 ft - Land as soon as practical
13.	**FUEL FILTER**	- Indicate fuel strainer contamination - If no other indications, land as soon as practical