BELL 212 POWER ASSURANCE CHECK

To be carried out every 25 hours or as requested
by the engineer assigned to the aircraft.
See AFM Section 4 (pg 4-3) for more detail.

Use Chart A to determine the target torque for the specific pressure altitude. Set this torque on the appropriate engine torque needle using the inner scale of the torquemeter for greater accuracy (don't use the summation needle on the outer scale).

Use Chart B to determine the maximum allowable ITT and N1 based on the current OAT. Allow the engine to stabilize for four minutes to ensure accurate ITT indications.

Record the data on the back of this card and return it to maintenance.

CHART A

H_P	-500	-1000	-1500
% TORQUE	50.5	51.5	52.5

H_P	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500
% TORQUE	49.5	48.5	48.0	47.0	46.0	45.0	44.0	43.5	42.5	42.0	41.0	40.5

H_P	6000	6500	7000	7500	8000	8500	9000	9500	10,000	10,500	11,000
% TORQUE	39.5	38.5	38.0	37.5	36.5	36.0	35.0	34.5	34.0	33.0	32.5

EXAMPLE

1. ALTIMETER ..... 29.92 IN HG
2. OBSERVED H_P ..... 1500 FT
3. OBSERVED CHART A TORQUE 47.0%
4. START BOTH ENGINES
5. TURN HEATER OFF
6. ON GROUND, ENGINE NO. 2 TO IDLE
7. STABILIZE NO. 1 ENGINE, 4 MINUTES MINIMUM, AT 97% (N2) ENG RPM AND CHART A TORQUE AND OBSERVE

   GAS PROD (N1) 95.2% RPM
   ITT 710°C
   OAT 20°C
8. OBSERVED GAS PROD (N1) RPM AND ITT MUST BE LESS THAN CHART GAS PROD (N1) RPM AND ITT FOR OBSERVED OAT.
9. REPEAT CHECK ON NO. 2 ENGINE WITH NO. 1 ENGINE AT IDLE.
10. If OBSERVED GAS PROD (N1) RPM AND/OR ITT ARE GREATER THAN CHART B GAS PROD (N1) RPM AND/OR ITT FOR OBSERVED OAT.
11. HOVER IGE AND CHECK NO. 1 AND NO. 2 ENGINE TORQUE NEEDLE SPLIT NO GREATER THAN 4%.

CHART B

OAT ~ °C	52	50	45	40	35	30	25	20	15	10	5	0
GAS PROD (N1) – % RPM	100	100	99.8	99.1	98.4	97.7	97.0	96.3	95.6	94.8	94.1	93.4
ITT ~ °C	810	810	805	795	780	765	750	735	720	705	690	675

OAT ~ °C	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-54	
GAS PROD (N1) – % RPM	92.7	92.0	91.3	90.6	89.9	89.2	88.5	87.8	87.1	86.4	85.8	
ITT ~ °C	660	645	630	615	605	590	575	560	545	530	520	

Power Assurance Check	
Aircraft Registration	*Date*
PA	*Temp*
Tgt Q	
Max N1	*Max ITT*

Power Sections		
	Eng 1	**Eng 2**
N1		
ITT		
Eng Oil Temp		
Eng Oil Press		
Fuel Press		
AC Voltage		
DC Voltage		

Ancillaries			
CBox		**Xmsn**	
Temp		Temp	
Press		Press	

Beep Check			
Rotor RPM	**Eng 1**	**Eng 2**	**Dual**
High			
Low			
Limits	95-99.5	95-99.5	97-101.5