b. Channel monitor switch (AFCS indicator panel) - PITCH.

c. No. 1 pitch channel engage-disengage switch - ENG. CH 1 indicator pointer should be approximately centered.

d. No. 2 pitch channel engage-disengage switch - ENG. CH 2 indicator pointer should be approximately centered. Slight movement of collective pitch should cause both needles to respond.

e. Channel monitor switch - ROLL. Engage roll axis following same procedure as for pitch axis (steps c. and d. above). Use lateral cyclic movement to check roll AFCS response.

f. Channel monitor switch - YAW. Engage yaw axis following same procedure as for pitch axis (steps c. and d. above). Use pedal movement to check yaw AFCS response.

g. Channel monitor switch - PBA. Check both indicator needles are full left (LFT/FWD).

TAXIING

NOTE

- Use tip path plain to control taxi speed. Use wheel brakes only as needed to slow down, turn. stop, or maintain a Ground position.
- When conducting extended ground operations in heavy snow, avoid high tail winds when practical. Headwinds improve EAPS performance.

*1. Pilot door(s) - Secured. Check lockpins. DOOR OPEN caution light off.

*2. Chocks - Removed.

CAUTION

To prevent damage to the optional parking brake light system, guide handle down to off position when releasing parking brake.

*3. Parking brake - Guide handle to OFF position.

*4. Wheel brakes - Checked.

PRE-TAKEOFF

*1. Engine and transmission instruments - Normal range.

2. Engine power assurance - Check as required using procedures in section IV.

ENGINE POWER ASSURANCE

The Power Assurance check charts indicate the maximum T5 and N1 values for specific target torques. In order to meet minimum manufacturers specification and performance data contained in the RFM, the engine must develop the target torque with adjusted T5 and N1 values that are less than or equal to the chart limits.

CAUTION

Limitations listed in Section I are not to be exceeded.

Each engine is to be checked prior to takeoff using the appropriate Power Assurance check chart.

NOTE

- Power Assurance should be done only when engine and transmission oil temperatures are in the normal operating range.
- Power assurance with EAPS ON must be conducted prior to flight with EAPS ON.

1. Refer to the cockpit engine placard and note the minimum acceptable values for T5 and N1 margins (Figure 1-8).
2. Refer to Figure 4-6 or 4-7 depending on the mode of operation and determine target torque and T5 and N1 limits at the prevailing ambient conditions.
3. Engine not being checked - IDLE.
4. With the nose of the helicopter into wind, check bleed air off, shut off the ac generator and the dc generator of the engine being tested, and then set torque obtained in step 2.
5. Stabilize the engine for 15 seconds and record the observed T5 and N1.
6. Using other engine, repeat steps 3. through 5.
7. Add the placard values to the observed T5 and N1 to obtained adjusted T5 and N1.
8. Determine T5 and N1 margins (subtract adjusted T5 and N1 from limit T5 and N1 recorded in step 2).
   a. If T5 and N1 margins are zero or greater, published performance is assured.

b. If either the T5 or N1 margin is negative (adjusted T5 or N1 exceed the limit value from step 2), there is no margin and engine maintenance must be accomplished in accordance with the maintenance manual before flight.

9. If a negative T5 or N1 margin is determined in step 8b, re-establish the target torque and repeat steps 3, 4, 5, 7, and 8 up to three times for confirmation.

10. Ac and dc generator switches - ON.

11. Match torques at 107% Nr.

12. At the conclusion of the flight, submit the recorded power assurance information for inclusion in the maintenance record.

POWER ASSURANCE EXAMPLE

NOTE

SHADED AREAS ENTERED BEFORE FLIGHT.

OAT 15°C PRESSURE ALTITUDE	5,000 FT	EAPS- ON / OFF
NO. 1	ENGINE	NO. 2
62%	TARGET Q	62%
687°/92.9%	OBSERVED T5/N1	680°/92.6%
6°/0.1%	T5/N1 PLACARD VALUES	8°/0.2%
693°/93.0%	ADJUSTED T5/N1	688°/92.8%
714°/94.0%	T5/N1 LIMITS	714°/94.0%
21°/+1.0%	T5/N1 MARGINS	26°/1.2%

Figure 4-5. Power Assurance Example