FLAPS - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to measure the deflections of the inboard and outboard flaps and the actuation times for normal flap settings.

   B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
27-50-00-700-801-A	INBOARD AND OUTBOARD FLAPS - DEFLECTIONS	ALL

TASK 27-50-00-700-801-A
EFFECTIVITY: ALL

2. INBOARD AND OUTBOARD FLAPS - DEFLECTIONS

A. General

(1) This task gives the procedures to measure the deflections of the inboard and outboard flaps and the actuation times for normal flap settings.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
S.B.145-27-0042	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 044	Head Set	For communications	
GSE 070	Digital Protractor	To measure the deflections	
Commercially available	Stopwatch	To measure the time	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Cockpit
1	Does the task	Wing

I. Preparation

SUBTASK 841-002-A

(1) Make sure that the aircraft is safe for maintenance.

(2) Energize the aircraft with the External DC Power Supply (AMM TASK 20-40-01-860-801-A/200).

(3) Make sure that the flaps are in the zero-degree position.

(4) Install the digital protractor on the inboard flap and the outboard flap.

(5) Set the digital protractor to zero.

J. Deflections of the Inboard and Outboard Flaps (Figure 501)

SUBTASK 720-002-A

WARNING: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE FLAP TRAVEL AREA.

(1) Measure the deflections for zero-, 9-, 18-, 22-, and 45-degree position on the inboard and outboard flaps of the left and right wings. See Figure 501.

– The inboard and outboard flap deflections are shown in table 501.

Table 501 - FLAP DEFLECTIONS

FLAP POSITION[1]			INBOARD FLAP DEFLECTION (degrees)	OUTBOARD FLAP DEFLECTION (degrees)
A	zero degrees	maximum	+0.10	+0.10
		nominal	0.00	0.00
		minimum	-0.10	-0.10
B	9 degrees	maximum	9.98	8.30
		nominal	9.18	7.50
		minimum	8.38	6.70
C	18 degrees[2]	maximum	19.16	15.87
		nominal	18.16	14.87
		minimum	17.16	13.87
D	22 degrees	maximum	23.37	19.85
		nominal	22.37	18.85
		minimum	21.37	17.85
E	45 degrees	maximum	46.63	46.50
		nominal	45.13	45.00
		minimum	43.63	43.50

[1] Figure 501 shows the flap positions.

[2] Only to ACFT POST-MOD. S.B.145-27-0042 or ACFT EQUIPPED WITH FLAP 18-DEGREE.

Table 502 - ACTUATION TIME FOR NORMAL FLAP SETTINGS

Normal Flap Setting[1]	Actuation Time (seconds)		
	Minimum	Nominal	Maximum
from 0 to 9 from 9 to 0	9.8	10.9	11.9
from 9 to 18 from 18 to 9	6.3	7.2	8.2
from 9 to 22 from 22 to 9	8.2	9.1	10.1

[1] Only to ACFT POST-MOD. S.B.145-27-0042 or ACFT EQUIPPED WITH FLAP 18-DEGREE.

Table 502 - ACTUATION TIME FOR NORMAL FLAP SETTINGS (Continued)

Normal Flap Setting[1]	Actuation Time (seconds)		
	Minimum	Nominal	Maximum
from 18 to 22 from 22 to 18	2.1	3.1	4.1
from 0 to 22 from 22 to 0	18.0	20.0	22.0
from 22 to 45 from 45 to 22	9.0	10.0	11.0
from 0 to 45 from 45 to 0	27.0	30.0	33.0

[1] Only to ACFT POST-MOD. S.B.145-27-0042 or ACFT EQUIPPED WITH FLAP 18-DEGREE.

K. Follow-on

SUBTASK 842-002-A

(1) Remove the digital protractor from the inboard and outboard flaps.

(2) Set the flaps to the 0-degree position.

(3) Deenergize the aircraft (AMM TASK 20-40-01-860-801-A/200).

EFFECTIVITY: ALL

Inboard and Outboard Flaps - Location
Figure 501