sabena	Module : LWR FUS / EMPENA	A/C Reg :	Check :	
B707	Oper. : RT–MP HT			
	Type : NDT INSP	Issuer : A59513	Cert.St.: 50516	22F4000501
	Spec. : NDT INSP	Release Date: 03.05.2011		Page 1 of 7

RVSM CRITICAL AREA INSP

MAINT	RII/INSP

Execution / Start Date:	
End Date:	

RVSM CRITICAL AREA INSP

RVSM CRITICAL AREA INSP

	MAINT	RII/INSP

Nr.	Hardtime	Task	Spec.	Related Documents
1.		E4	NDT	DFW B707–34–554 rev 0 MMS–328 341001 00106 rev 27/10/09

Check: 24 MTH

Zones: 113

Access:

NRC YES ❍ NO ❍ | IF YES, NUMBER(S):

PERFORM SKIN WAVINESS MEASUREMENT

A. The required instruments for the measuring:

1. a fifteen (15) inch user–own straight edge scale, width & thickness must be appropriate as to assure adequate flatness & rigidity to measure the three inch radius critical port area.
2. a twenty four (24) inch user–own straight edge scale, width & thickness must be appropriate as to assure adequate flatness & rigidity to measure the 24 inch RVSM critical area.
3. feeler–gage shims (several thickness down to 0.002 inch).

B. Inspection & measurement procedure

Twenty four (24) Inch RVSM critical area measurement

1. The measurement has to be performed in the 24 Inches critical area as per figure 1 with a pitch of 1 inch.
2. For out of tolerance conditions use the instructions provided in chapter C.
3. If out of tolerance is found identify the location in figure 1 & fill–out the value found in table 1 or table 2 respectively.

Three (3) inch critical port measurement location

1. The measurement has to be performed in the 3 Inches radius critical area as per figure 2 with a pitch of 1 inch.
2. Fill–out the value found in table 3 & table 4 respectively.
3. For out of tolerance conditions use the instructions provided in chapter C.

C. Irregularity determination

The procedure has to performed following the instruction reported in the SRM 53–2–1 Para. 1 & the following parameters have to be registered:

a. Location of the irregularity

b. The maximum depth /height of the irregularity

c. The distance D between the static port & the center of the irregularity (f.e. max. depth /height)

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The kind of shape:

a. A round form with a roughly maximum around its center point or

b. An oval form

for case a):

- the height (/depth) of the maximum,
- the distance between the maximum point & the static port.

for case b):

- the height (/depth) values of some prominent points on the irregularities ridge line (/grove line) must be plotted on the limit chart
  - the point with the maximum of the height (/depth) irregularity,
  - the ends of the longish structure (corner marks),
  - the nearest ridge (or groove) point,
- the distance between the static port & the points specified immediately above.

Notes:

1. The surface of the skin & port, within a 3 inch radius area around the port must be flush with a tolerance of [+0.009 to –0.006] (Ref. SRM53–2–1 fig. 3A).
2. Measurement shall be taken at one inch intervals see figure 1 & 2. Two measuring cases may be found (A) bulge in skin & (B) dip in skin:
3. Use the edge of straight, square scale & measure the gaps with feeler–gage shims. Do not allow the ends of the scale to touch the paint or decals at the edge of inspection area.
   - (A) If there is a gap in the middle of the scale then it is a dip & gap is a negative value.
   - (B) If there is a gap at either end of the scale then it is a bulge & the gap is a positive value. For a bulge, measure the gap at both ends of the scale & use the largest measurement.

D. Measurement data

All the recorded data will give a skin mapping with position & dimension of the waviness.

The data have to be evaluated according with the Boeing 707 SRM 53–2–1 Figure 3D.

a) Send the filled out forms & accomplishment report to ESEC (fax +49 8459 8165853)

b) In case of out of tolerance conditions identified after consult with ESEC, a photogrammetric measurement is required to develop a repair procedure.

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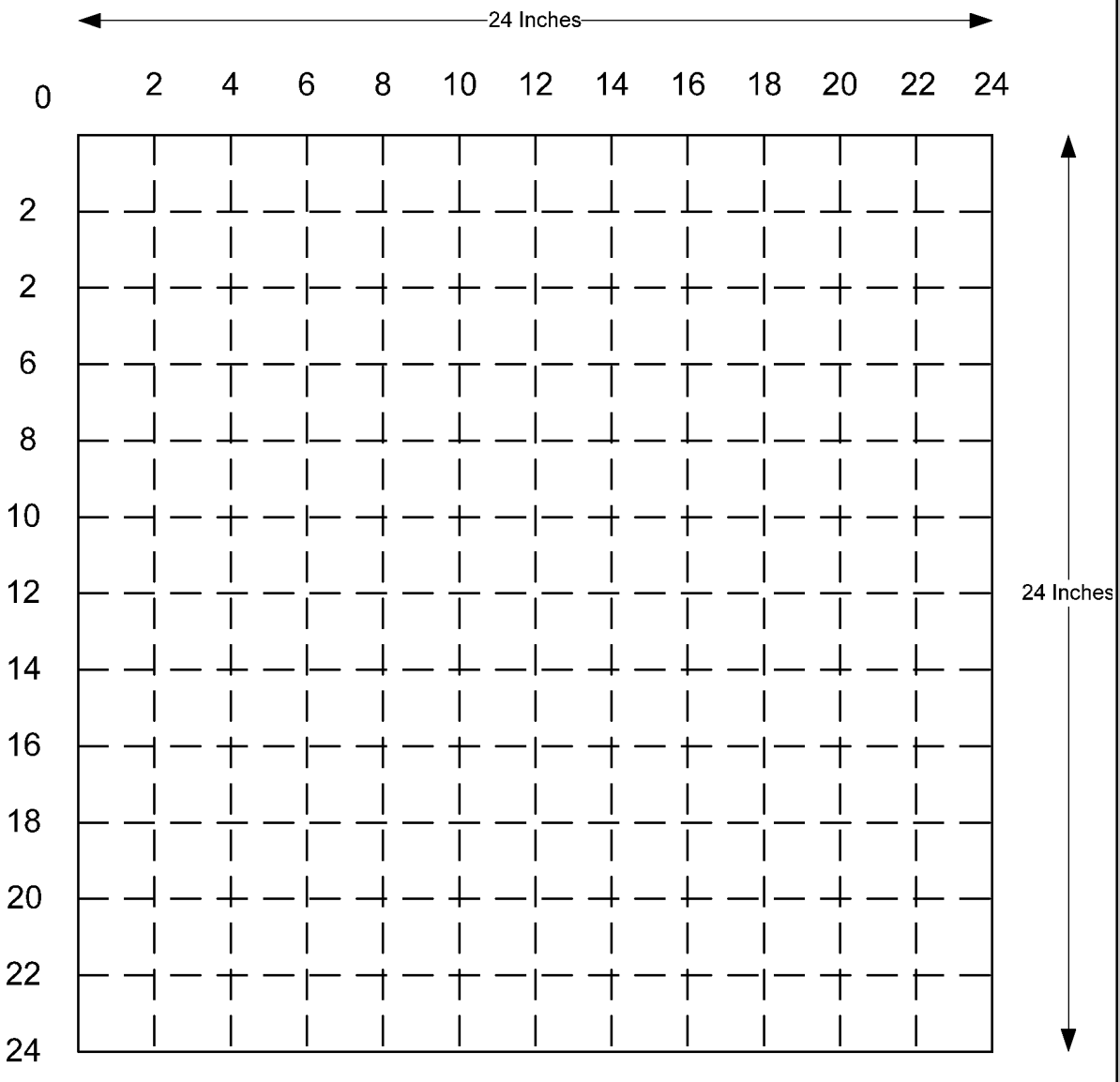

RVSM Critical Area measurement pattern
(Ref. Maintenance Manual 51-5-1 fig. 1)

Figure 1

RVSM CRITICAL AREA INSP

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RH RVSM critical area measurements

	2	4	6	8	10	12	14	16	18	20	22
2											
4											
6											
8											
10											
12											
14											
16											
18											
20											
22											

Table 1

LH RVSM critical area measurements

	2	4	6	8	10	12	14	16	18	20	22
2											
4											
6											
8											
10											
12											
14											
16											
18											
20											
22											

Table 2

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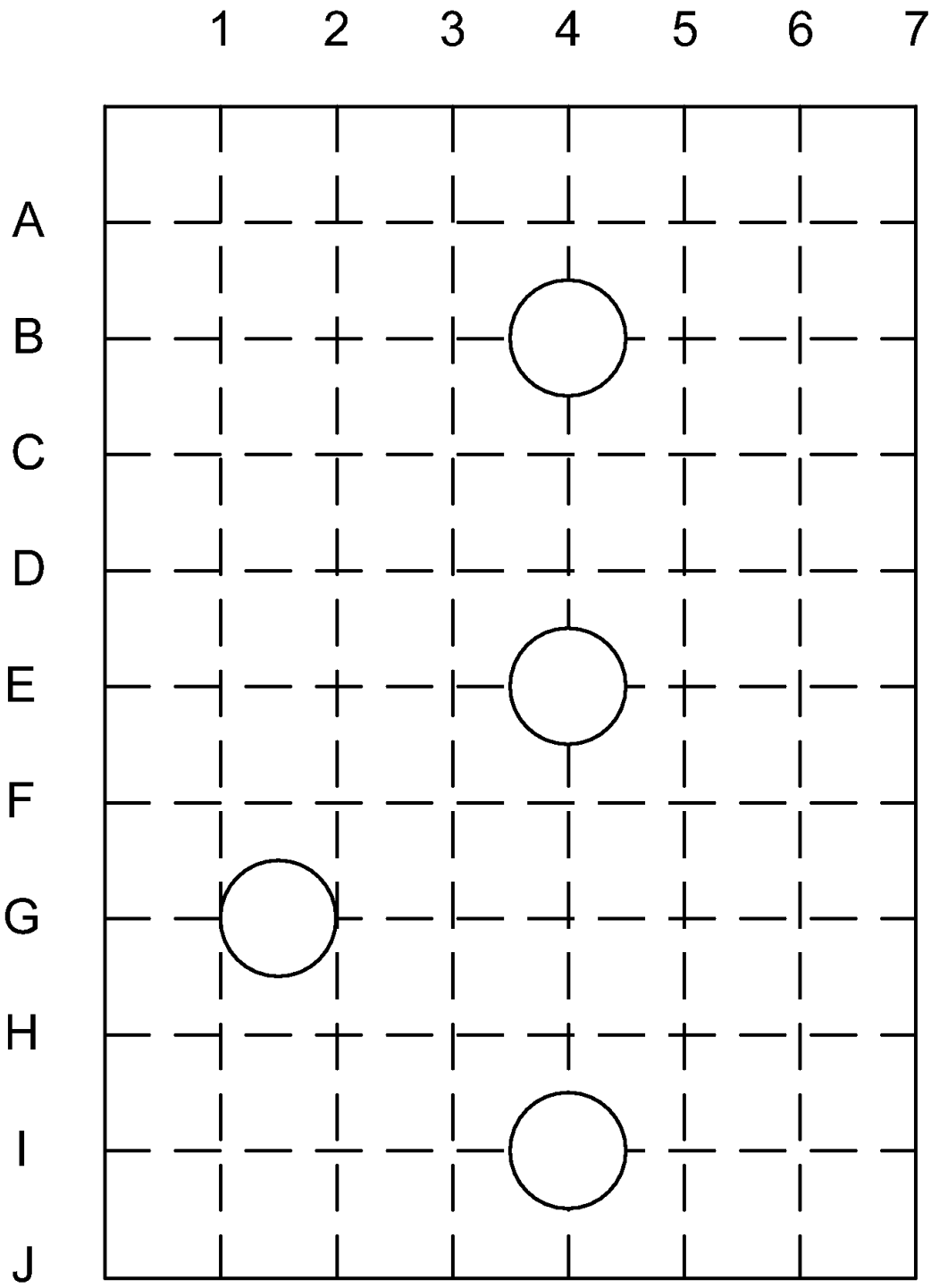

Aerodynamic Smoothness static ports

Figure 2

RVSM CRITICAL AREA INSP

MAINT	RII/INSP

RH Aerodynamic smoothness static ports							
	1	2	3	4	5	6	7
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							

Table 3

RH Aerodynamic smoothness static ports							
	1	2	3	4	5	6	7
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							

Table 4