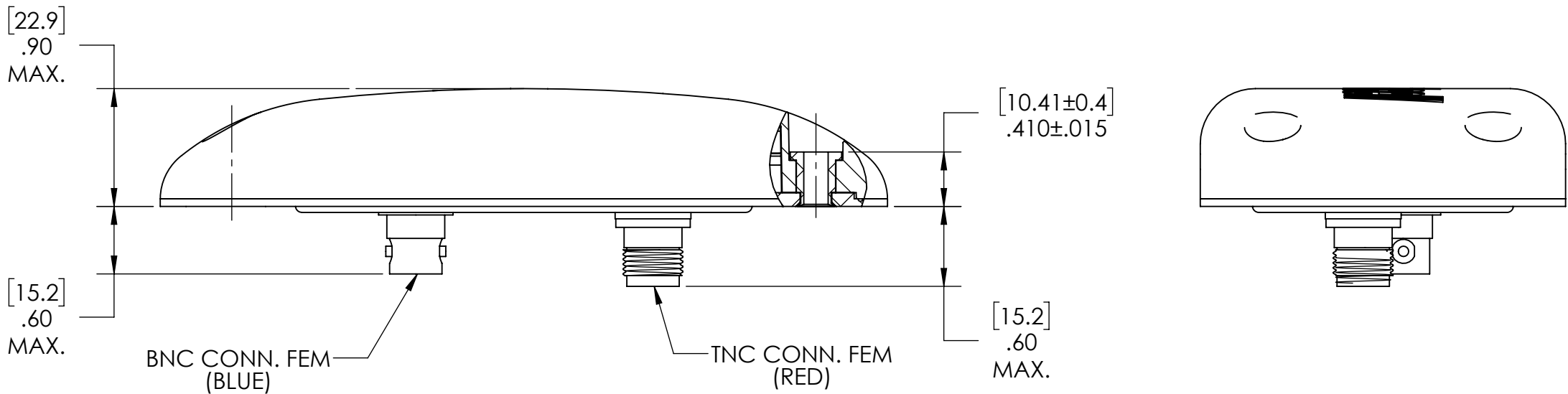
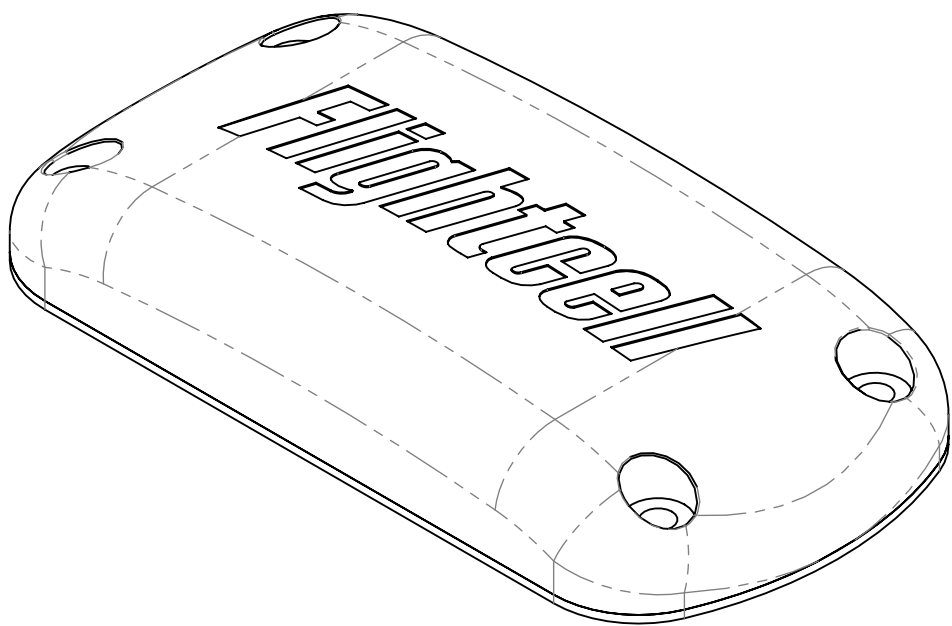
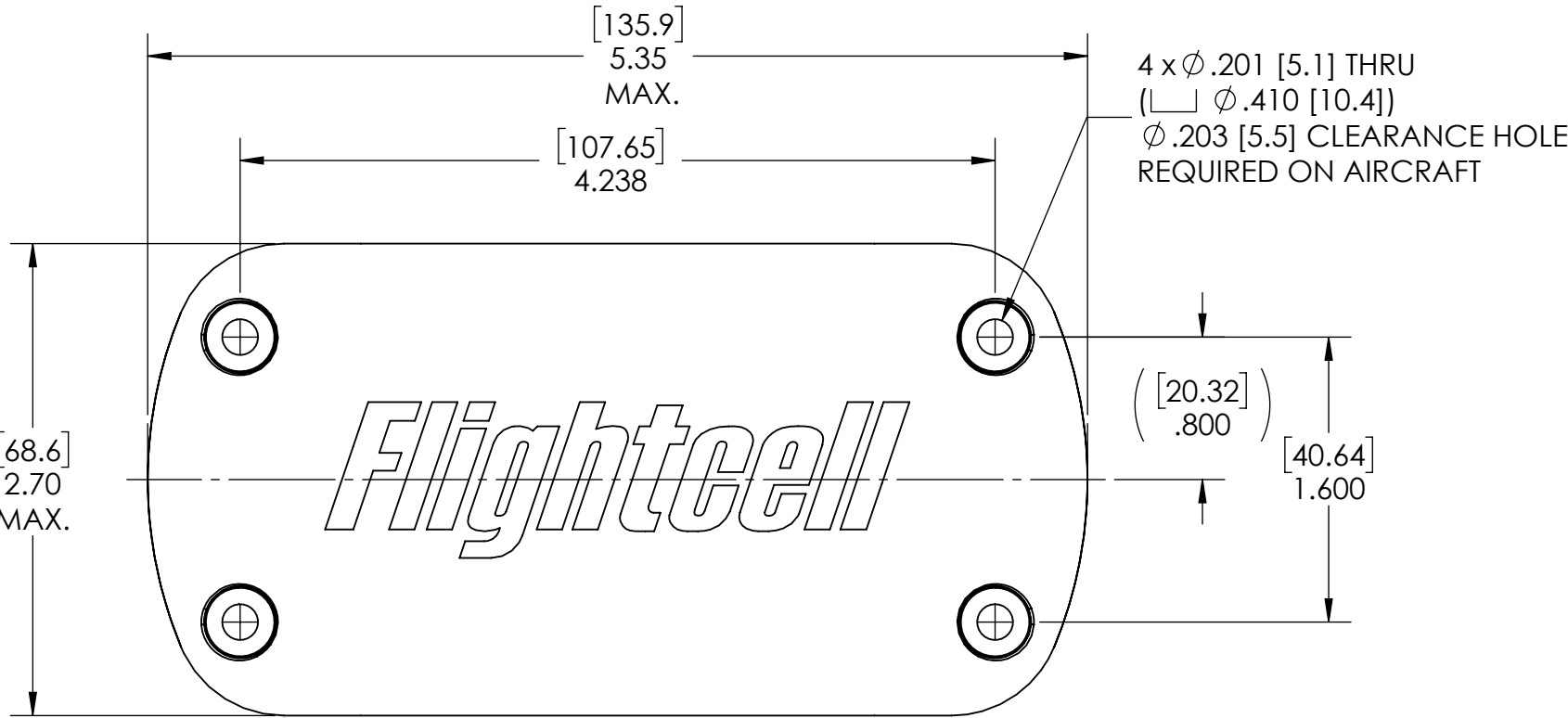
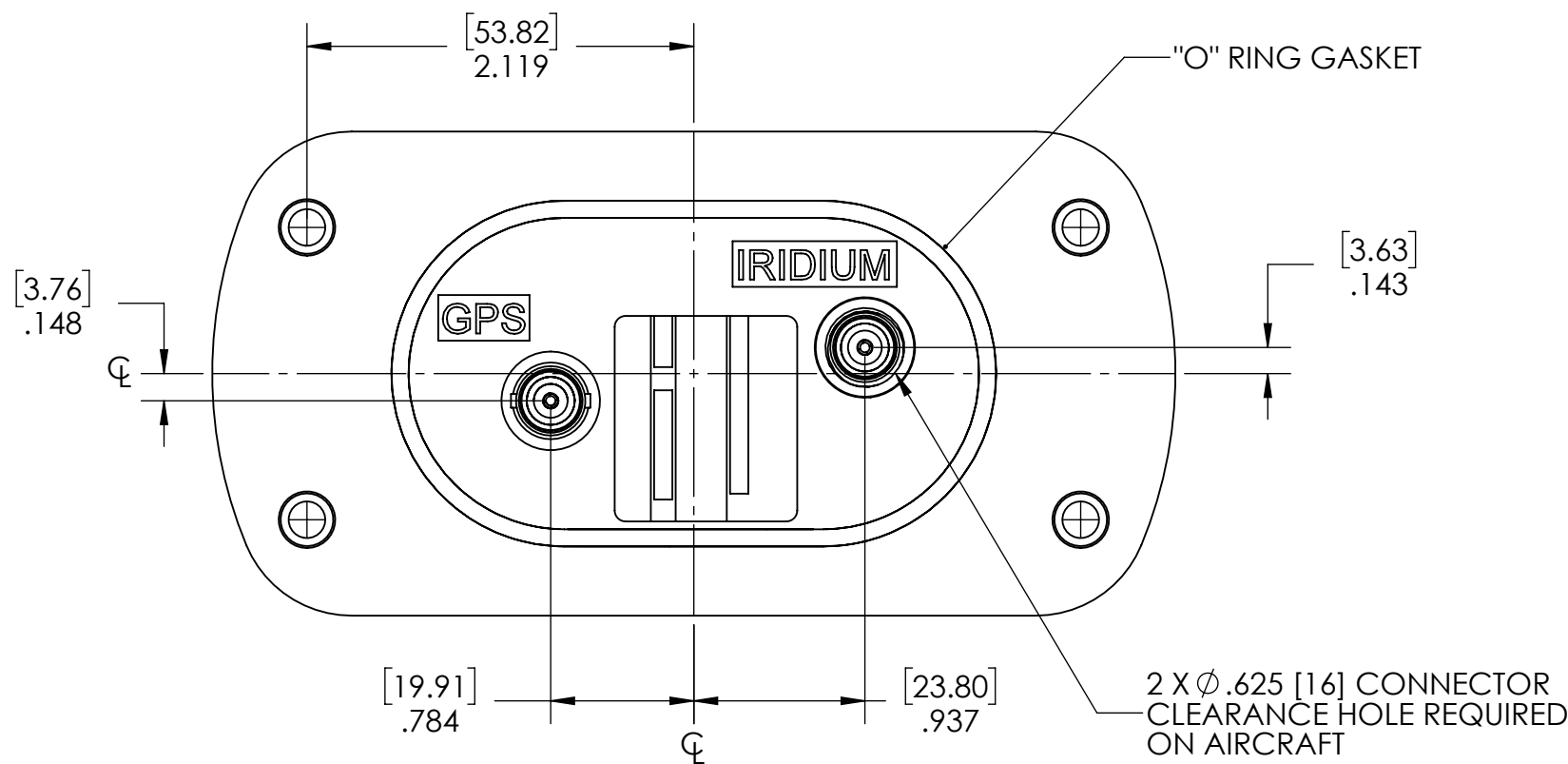


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REVISIONS				
LTR	DESCRIPTION		DATE	APPROVED
A	RELEASED DRAWING		RM 10/28/19	DH 10/28/19
B	REF ECN 19-100		AK 11/08/19	11/08/19
C	REF ECN 20-019		RM 4/9/20	DH 4/9/20
D	REF ECN 24-028		RM 4/25/25	LH 04/25/25



[mm]
inch



ASSY DWG. D49044

INSTALLATION DRAWING

UNLESS OTHERWISE SPECIFIED		CONTRACT NO.		THALES							
DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .010 FRACTIONS ± 1/32 ANGLES ± 1°											
MACHINE FINISH 125✓ PER ANSI- B46.1 REMOVE BURRS AND SHARP EDGES .015 MAX MEET DIMENSIONS BEFORE PLATING DIMENSIONS ARE PER ASME Y14.5M		APPROVALS		DATE		TITLE IRIDIUM/GPS ANTENNA					
		DRAWN	R. MERCADO	10/28/19							
		CHECK	A. KRESS	10/28/19							
		ENGR	D. HOLLOWAY	10/25/19							
MATERIAL :		MFG	J. JONES	10/25/19		DWG. SIZE C	CAGE CODE 51351	DWG. NO. CI 490-500	REV. D		
		QC	R. PRICE	10/28/19							
DO NOT SCALE DRAWING						SCALE: 1:1		CAD FILE: --		SHEET : 1 OF 2	

8

7

6

5

4

3

2

1

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1.0

GPS PASSIVE ANTENNA CHARACTERISTICS (T_A= -55° C TO +85° C)

1.1

FREQUENCY

1575.42 MHz ± 10 MHz

1.2

POLARIZATION

RIGHT HAND CIRCULAR

1.3

AXIAL RATIO

3.0 dB ON BORESIGHT (ZENITH) MAX.

1.4

PASSIVE RADIATION GAIN PATTERN HEMISPHERICAL

PASSIVE RADIATION GAIN

+5 dBic +/- 1 dBic NOM. (ZENITH)

GAIN PATTERN MEASURED ON 4' CIRCULAR ROUND PLANE WITH 2.0" RADIUS EDGES.

2.0

GPS PREAMPLIFIER CHARACTERISTICS (T_A= -55° C TO +85° C)

2.1

FREQUENCY

1575.42 MHz ± 10 MHz

2.2

OUTPUT IMPEDANCE

50 OHMS (NOMINAL)

2.3

OUTPUT VSWR

1.5: 1 MAX.

R/L

13.98 dB

2.4

GAIN AT 1575.42 ± 3MHz

26.5 dB MIN – 30.1 dB MAX.

2.5

NOISE FIGURE

2.5 dB MAX.

2.6

DC VOLTAGE

2.8 TO 24 VDC

2.7

DC CURRENT

30 TO 50 mA

2.8

LIGHTNING PROTECTION

DC GROUNDED

3.0

IRIDIUM SPECIFICATION

3.1

FREQUENCY

1616.0 MHz TO 1626.5 MHz

3.2

POLARIZATION

RIGHT HAND CIRCULAR

3.3

AXIAL RATIO

2.0 dB ON BORESIGHT (ZENITH) MAX.

3.4

RADIATION GAIN PATTERN

HEMISPHERICAL

3.5

PASSIVE RADIATION GAIN

+4 dBic +/- 1 dB NOM. (ZENITH)

GAIN PATTERN MEASURED ON A CIRCULAR GROUND PLANE WITH 2.0" RADIUS EDGES.

3.6

OUTPUT IMPEDANCE

50 OHMS (NOMINAL)

3.7

OUTPUT VSWR

1.5: 1 MAX.

RL

13.98 dB

3.8

POWER HANDLING

6.5 Watts, 13 Watts PEAK WITH 37% DUTY CYCLE

3.9

LIGHTNING PROTECTION

DC GROUNDED

4.0

ANTENNA WEIGHT

8.5 Oz. MAX.

5.0

TSO-C159d

RTCA DO-160G, ENV. CAT.: [F2X]ACE[R(C,C1)H(R)U(F,F1)]XSFSXSXXX[XXX][XX]X[XXXXXX][2A]AAC

6.0

FINISH: GLOSSY WHITE WITH

NICKEL PLATED ALUMINUM.

7.0

A49061 INSTALLATION INSTRUCTIONS SUPPLIED WITH ANTENNA.

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCES ON DECIMALS
.XX ± .03 .XXX ± .010
FRACTIONS ± 1/32 ANGLES ± 1°
MACHINE FINISH 125✓/PER ANSI- B46.1
REMOVE BURRS AND
SHARP EDGES .015 MAX
MEET DIMENSIONS BEFORE PLATING
DIMENSIONS ARE PER ASME Y14.5M

MATERIAL :

DO NOT SCALE DRAWING

THALES

IRIDIUM/GPS
ANTENNA

DWG SIZE
C

CAGE CODE
51351

DWG. NO.
CI 490-500

REV.
D

SCALE: --

CAD FILE: --

SHEET : 2 OF 2

8

7

6

5

4

3

2

1

DWG NO CI 490-500 REV D