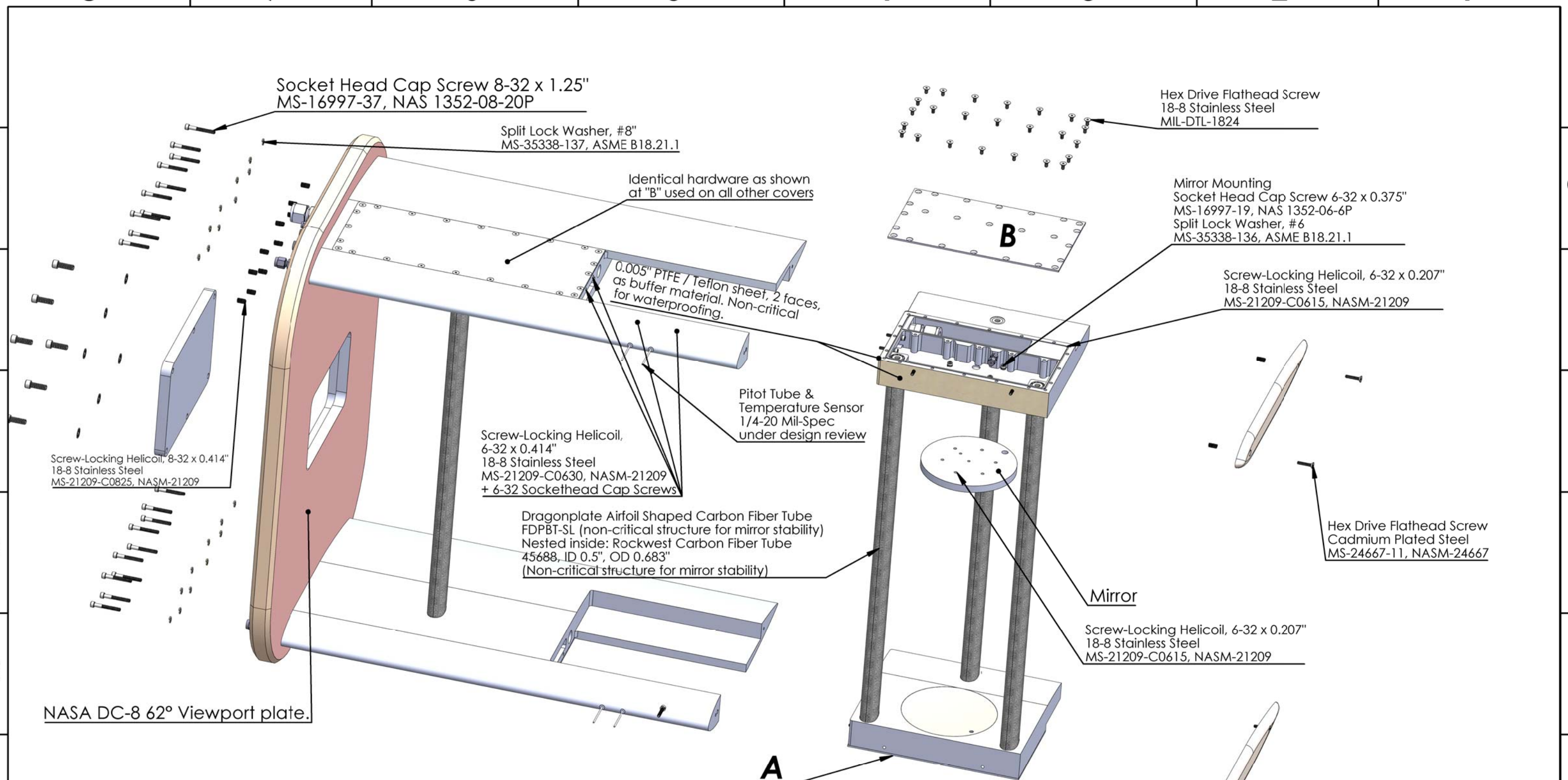


8 7 6 5 4 3 2 1

H
G
F
E
D
C
B
A

H
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F
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C
B
A



- Notes:
1. This drawings is to highlight the primary outdoor and attachment to aircraft hardware.
 2. That is, any hardware which, by failure, could jeopardize aircraft safety.
 3. It is not intended to show interior components.
 4. The non-exploded view shown at "A" varies from exploded view at "B" in interior configuration, some screw locations & quantity, and slightly by weight. However, hardware used will be identical to "B".
 5. False color has been used for clarity in some cases.
 6. All metal structures 6061 or 7075 Aluminum unless noted.

Revision History			
Rev	Description	Date	By
0	Origination	2019-02-04	JM
1	Add Access Plate & Viewport	2019-02-10	JM
2	Viewport Connectors & Boxes	2019-02-11	JM
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/64 th
ANGULAR: MACH ± 1° BEND ± 1°
TWO PLACE DECIMAL ± 0.010"
THREE PLACE DECIMAL ± 0.005

INTERPRET GEOMETRIC TOL. PER: ASME Y14.5 - 2009

MATERIAL:
FINISH:

3rd Angle Projection

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PRINCETON UNIVERSITY

TITLE: **NASA DC-8 NH3 (OPALS) Sensor Main Structural**

SIZE	DWG. NO.	REV
B	None	2

SHEET 1 OF 2

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

H
G
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A

H
G
F
E
D
C
B
A

All viewport gas and electrical connectors hermetically sealed

Swaglok SS-810-1-8BT
1/2" NPT
Fiber feedthrough with custom
teflon insert, gas purge in

Swaglok SS-100-1-1
1/16" NPT
Gas purge out

2x Glenair
801-009-02M7-10SA
10 pin electrical
connectors

Swaglok SS-200-1-1
1/8" NPT
Pressure sensor port

Laser electronics
14.5 x 12 x 3U
Enclosure to plate
with 1/4"-20 screws
to Mil. Spec helicoils

Detector electronics
14.5 x 12 x 3U
Enclosure to plate
with 1/4"-20 screws
to Mil. Spec helicoils

2x Glenair
801-009-02M7-10SA
10 pin electrical
connectors

Swaglok SS-100-1-1
1/16" NPT
Gas purge out

Swaglok SS-100-1-1
1/16" NPT
Gas purge out

Swaglok SS-200-1-1
1/8" NPT
Pressure sensor port

Access Panel
8 x 5" x 0.5"
Inset into viewport plate 0.5"

Access Panel Mounting
1/4"-20 Screws + Internal
Tooth Lockwashers +
Threadlocking Helicoils
Mil Spec.

Access Panel Thru
7 x 4" x 0.5"
0.5" Margin for Access Plate

Revision History			
Rev	Description	Date	By
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-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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THREE PLACE DECIMAL ± 0.005

INTERPRET GEOMETRIC TOL.
PER: ASME Y14.5 - 2009

MATERIAL:
FINISH:

3rd Angle Projection

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PRINCETON UNIVERSITY

TITLE: **NASA DC-8 NH3 (OPALS)
Sensor Main Structurals**

SIZE	DWG. NO.	REV
B	None	2

SHEET 2 OF 2

8 7 6 5 4 3 2 1