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SERVICE INFORMATION LETTER

DATE: October 13, 2020

1. SUBJECT: Pylon Reinforcement Doubler Installation

2. MODELS: 480, 480B

3. EFFECTIVITY: S/N 5254 and prior

4. BACKGROUND:

Enstrom received reports of cracks in the pylon joint under the forward left and/or right transmission mounts of three aircraft used in training operations. Enstrom issued Service Directive Bulletin (SDB) T-065 requiring inspection of the pylon for cracks.

Additionally, Enstrom developed a pylon joint reinforcement doubler (finger patch). Owners/operators may install the reinforcement doubler particularly for, but not limited to, aircraft with a service history of or that are currently used for flight training (especially those aircraft with a high occurrence of practice emergency landings) or agricultural spray operations. Installation instructions for the reinforcement doubler are provided in this SIL.

5. COMPLIANCE:

5.1 At owner/operator discretion, install the reinforcement doubler in accordance with paragraph 6.

5.1.1 The pylon joint must be inspected for cracks and repaired as necessary prior to installing the reinforcement doubler. Refer to SDB T-065.

6. DOUBLER (FINGER PATCH) INSTALLATION:

NOTE

Welding method must be GTAW (TIG) and must be performed by a welder qualified to work on aircraft. Welding filler rod to meet AWS specification A5.18. Best practices are to be used to avoid excessive heat buildup during welding.

NOTE

Perform all maintenance in accordance with the TH-28/480 Series Maintenance Manual (MM).

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6.1 Remove the main rotor transmission (MM paragraph 11-32).

6.2 Remove the engine (MM paragraph 13-6).

6.3 Remove the fuel cells and fuel cell support structures (MM paragraph 8-73).

6.4 Remove or disconnect airframe grounded instruments and avionics (MM paragraph 7-11 and TH-28/480 Series Maintenance Manual Supplement 5 or applicable manufacturer installation manual of relevant installed equipment, as applicable).

6.5 Clean the pylon tubes and welds in the area of the transmission mount using a suitable solvent (refer to paragraph 7.2).

6.6 Using chemical paint remover, remove epoxy primer from the finger patch area (reference Figure 1 and paragraph 7.2).

6.7 Install P/N 4110040-11R pylon repair fixture or equivalent at the four transmission mounts using appropriate length NAS6206 or similar style bolt, NAS509-6 or similar style nut, and steel washers as required (reference Figure 2).

NOTE

Ensure the pylon is electrically isolated prior to welding.

NOTE

Use best practices to minimize heat build-up during welding and forming of finger patch.

6.8 Weld P/N 4110007-25 and P/N 4110007-26 finger patches to the pylon joints (reference Figure 1).

6.8.1 Form the patch to fit the contour of the pylon tubes. It is permissible to heat the finger patch to assist in forming. The maximum gap between the patch and pylon is 0.063 in/1.6 mm.

6.9 Once the welds have cooled, remove P/N 4110040-11R pylon repair fixture.

6.10 Apply epoxy primer (reference paragraph 7.2) to the finger patch and welds.

6.11 Install the fuel cell support structures and fuel cells (MM paragraph 8-76).

6.12 Install the engine (MM paragraph 13-7).

6.13 Install the main rotor transmission (MM paragraph 11-37).

6.14 Install airframe grounded instruments and avionics (MM paragraph 7-14 and TH-28/480 Series Maintenance Manual Supplement 5 or applicable manufacturer installation manual of relevant installed equipment, as applicable).

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7. PARTS:

7.1 Patch Repair:

Part Number	Description	Quantity
4110007-25	Finger Patch - Left FWD MRGB Mount Cluster	1
4110007-26	Finger Patch - Right FWD MRGB Mount Cluster	1
4110040-3R	Drawing (Figure 1) – Forward Transmission Mount Cluster Reinforcement	REF

7.2 Consumables:

Product	Description
Solvent	Common household cleaner/degreaser or non-corrosive (non-chlorinated) brake cleaner
Paint Remover	Eldorado PR-3500 paint remover, or similar
Epoxy Primer	MIL-PRF-23377 Type I Class C2 or Class N

8. SPECIAL TOOLS: P/N 4110040-11R Pylon Repair Fixture (Figure 2)

9. MAN-HOURS: 60 Man-hours

10. WARRANTY: N/A

11. WEIGHT CHANGE: N/A

12. LOG BOOK ENTRY: As required for maintenance actions

13. REPETITIVE INSPECTIONS: N/A

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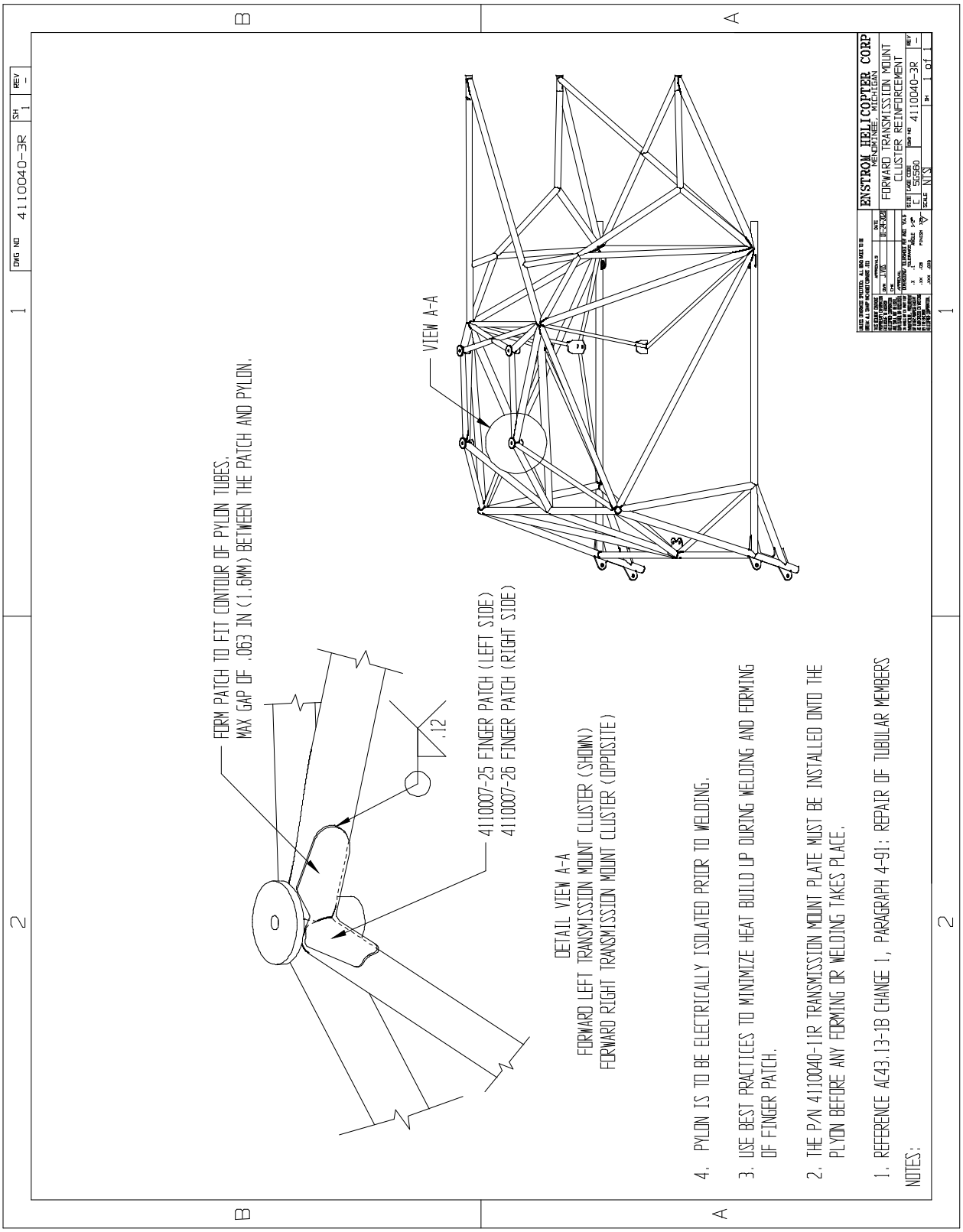

Figure 1. Drawing 4110040-3R – Forward Transmission Mount Cluster Reinforcement

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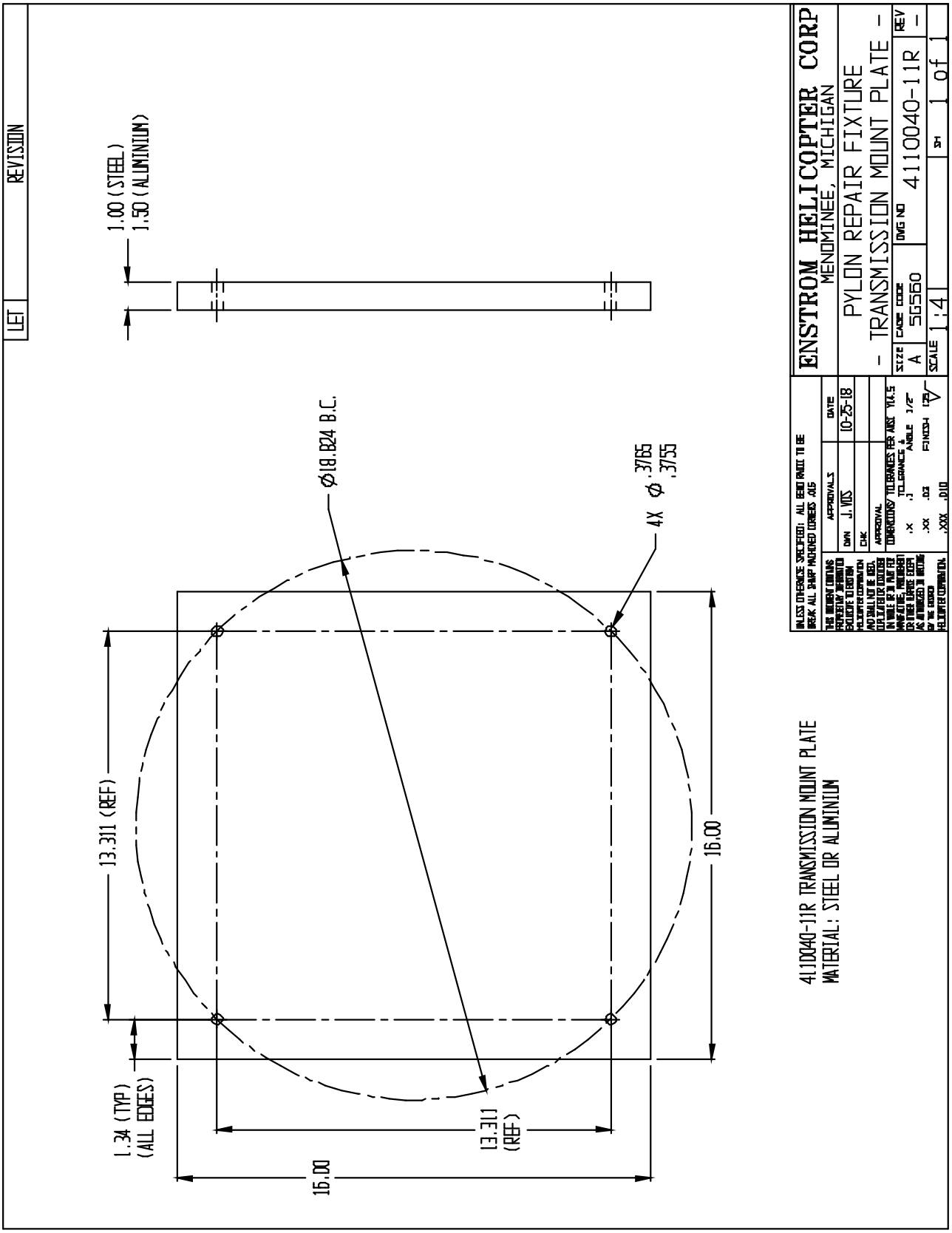

Figure 2. Drawing 4110040-11R – Pylon Repair Fixture, Transmission Mount Plate

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