

**GENERAL NOTES**

**(UNLESS OTHERWISE SPECIFIED)**

1. 10 even spaces around hole. Orientation is not critical. Adjust orientation to avoid existing features.
2. 10 even spaces around hole. Orientation is critical.
3. Fabricate per AC 43.13.
4. Assembly shop practice per AC 43.13.
5. Odd dash numbers shown - next even dash number opposite.
6. Equally spaced attachment tolerance to be +/- 0.100".
7. Attachments located from part edge 2D+.060" for details, 2D minimum on assembly, 2D from joggles and adjacent structure.
8. Minimum attachment spacing to be 4D+.060" center to center.
9. Remove all burrs and sharp edges.
10. Identify per MIL-STD-130 using rubber stamp or and written with indelible ink. Small assemblies may be tagged.
11. Alodine all aluminum parts per Mil-C-5541.
12. Symbols + between end fastener symbols indicate identical fasteners equally spaced.
13. Install solid rivets per AC 43.13-1A. Install all other fasteners per manufacturer's instructions.
14. Torque per AC 43.13-1A or MIL-N-25027.
15. Install safety wire per AC 43.13-1A or MS33540.
16. Free flanges angular tolerance +/- 5 degrees (flanges not attached at next assy).
17. Restrained flanges angular tolerance +/- 1.5 degrees (flanges attached at next assy).
18. Faying surface seal all external skin mating joints and install fasteners wet using PR1431G, PR1422, or P/S 870C sealant.
19. Fillet or brush coat edges of mating parts using PR1422-B2, CS3204 class B, or P/S 890 class B sealant.
20. All bend relief's R .16.
21. Flange corner radii are to be R .25.
22. Pilot holes #40 drill for next assy fastener locations may be added or deleted by mfg.
23. All dimensions are prior to finish applications.

**INSTALLATION NOTES**

- A. The drawing main view, sections A-A & B-B shows the configuration of the aircraft for regular flight, without equipment installed
- B. When the camera is installed, the -11 cover plates are removed and the -15 deflector angle is installed on the bottom of the fuselage in place of the -11 cover plate.
- C. Weight of camera and accessories may not exceed the allowable weight of the baggage compartment.
- D. The baggage retainer net must be installed when the camera and accessories are installed.

**This drawing has been prepared for a specific alteration to TN based on information supplied to Aviation Engineering Consultants of USA, LLC (AECUSA-LLC) by the person responsible for arranging the alteration or his agent. The use of the data on any other aircraft or component may lead to an unsafe alteration and therefore the data is not to be used for any other purpose than for which it was originally supplied without the written approval of AECUSA-LLC.**

**HAZARDOUS MATERIALS WARNING**

Before you work with any component, assembly or product referred to in this document, read, understand and obey all safety instructions and take all appropriate safety precautions. These instructions include instructions from the manufacturer, the material safety data sheet (MSDS), the component maintenance manual, service information letters, all operators letters, and government regulations. A MSDS gives instructions on how you must safely use, keep and discard chemicals. Get instructions from your employer on how you must safely use, keep and discard chemicals. Chemicals may cause injuries to you or make you sick. Personal injury or disease may result if safety instructions are not obeyed.

|    |            |                          |                             |                          |            |          |
|----|------------|--------------------------|-----------------------------|--------------------------|------------|----------|
| 40 | AN526C1032 | SCREW                    |                             |                          | 9          |          |
| 40 | MS21059L03 | NUT PLATE                |                             |                          | 8          |          |
| 1  | -15        | DEFLECTOR ANGLE          |                             |                          | 7          |          |
| 2  | -13        | PLACARD                  |                             |                          | 6          |          |
| 2  | -11        | COVER PALTE              |                             |                          | 5          |          |
| 40 | -09        | SHROUD                   |                             |                          | 4          |          |
| 1  | -07        | SKIN DOUBLER             |                             |                          | 3          |          |
| 20 | -03        | ANGLE ASSY               |                             |                          | 2          |          |
| -  | -01        | CAMERA PORT INSTALLATION |                             |                          | 1          |          |
| -1 | NOTE       | PART NO.                 | NOMENCLATURE OR DESCRIPTION | MATERIAL / SPECIFICATION | STOCK SIZE | ITEM NO. |

**PARTS LIST**

Project No.: 00-0000-00

DIMENSIONS ARE IN INCHES  
TOLERANCES:  
.X= ±.1, .XX= ±.03  
.XXX= ±.015  
ANGLES ±0°-30'

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800-977-1992

TITLE: CAMERA PORT INSTALLATION - C172-TN

APPRVD *F. BROWN* 2011-0x

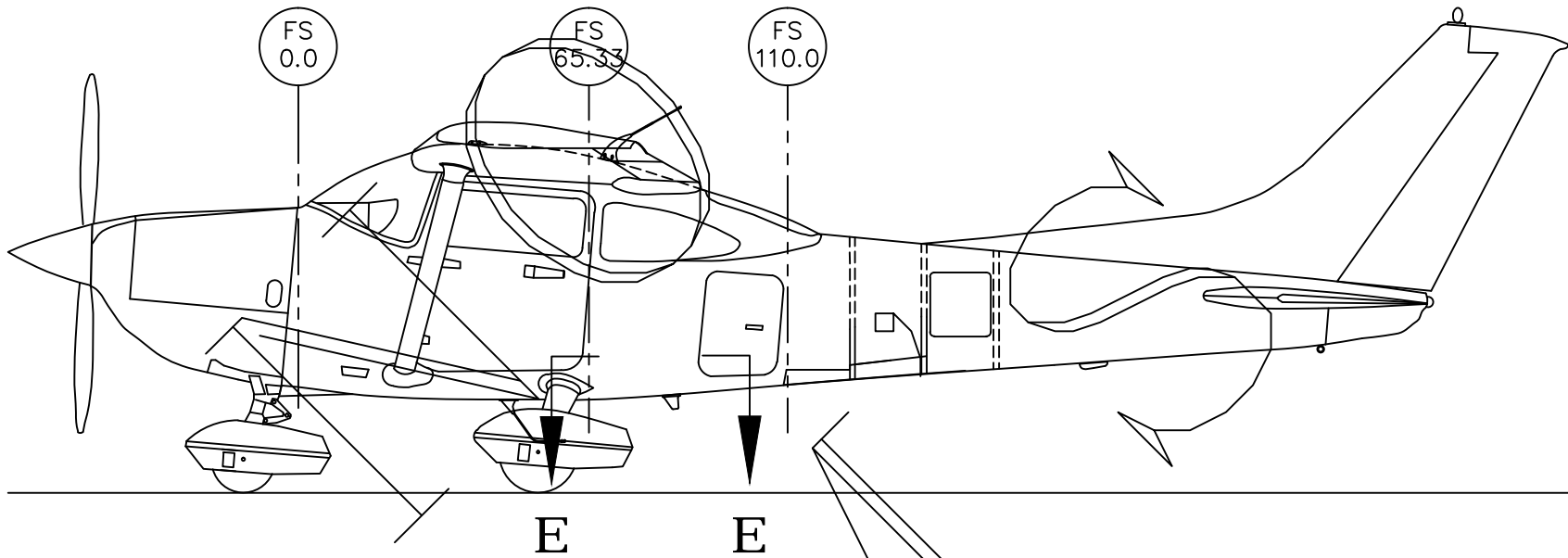
Dwg No.: 00-1500-04-01-TN

Rev. -

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# Fastener Hole & Countersink Size

| Fastener        | Hole Size  | Countersink Size |
|-----------------|------------|------------------|
| (LZ) NAS1097AD4 | ∅.128/.134 | 100°x∅.175/.185  |
| (LZ) NAS1097AD3 | ∅.098/.106 | 100°x∅.126/.136  |
| (BJ) MS20470AD4 | ∅.128/.134 | -                |
| (BJ) MS20470AD5 | ∅.161/.166 | -                |



# - 01 CAMERA PORT INSTALLATION

DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 .XX = ±.03  
 .XXX = ±.015  
 ANGLES ±0°-30°

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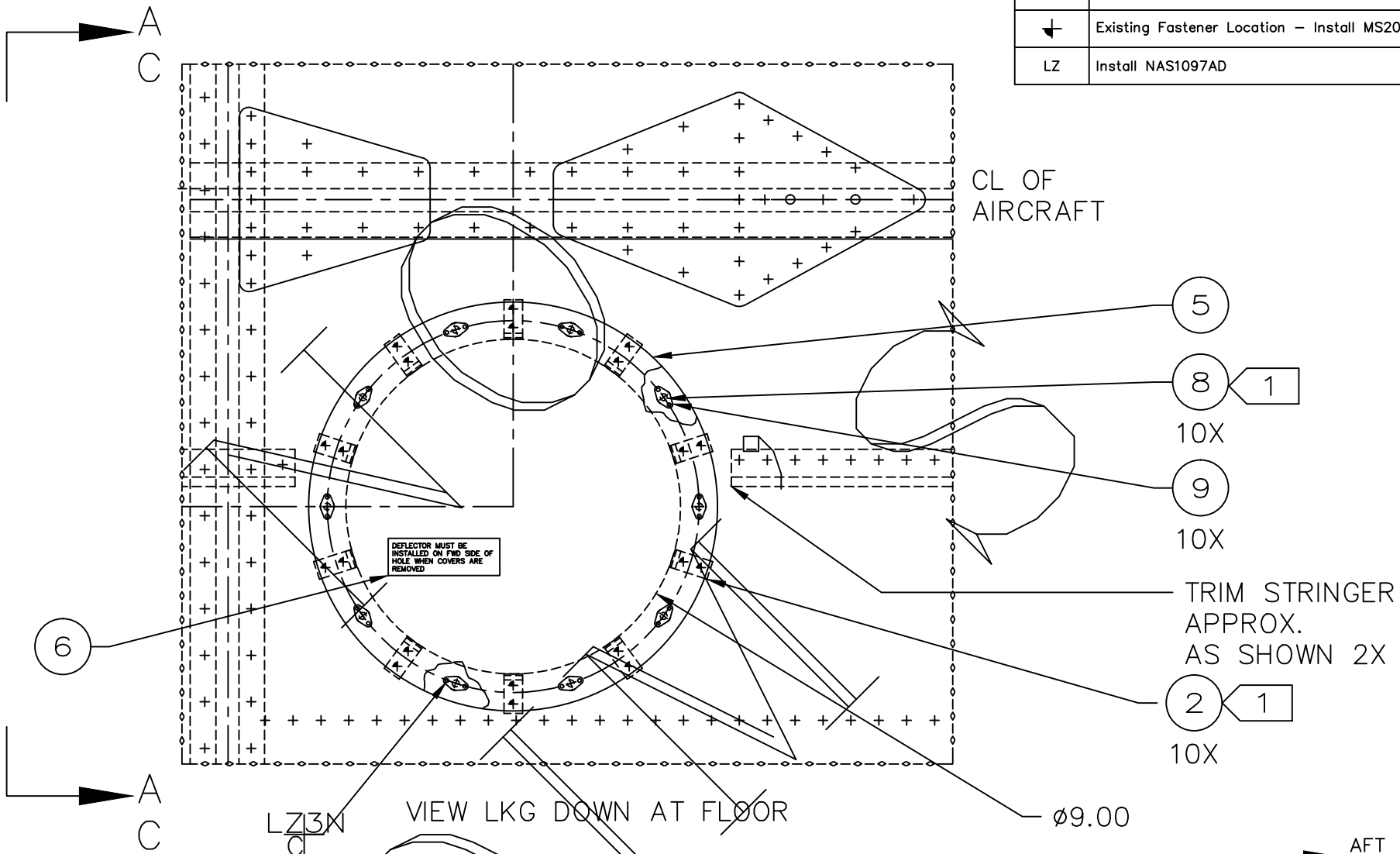
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DWG. NO. 00-1500-04-01-TN

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FS 65.33

| SYM | FASTENER  |
|-----|---|
| +   | Existing Fastener Location - Not Used           |
| ⊕   | Added Fastener Location - Install MS20470AD5    |
|     | NOT USED  |
| ⊖   | Existing Fastener Location - Install MS20470AD5 |
| LZ  | Install NAS1097AD                               |



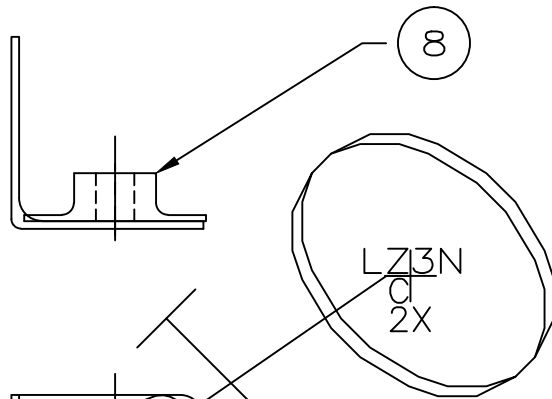
VIEW LKG DOWN AT FLOOR  
 Section E-E

DIMENSIONS ARE IN INCHES  
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 .XX = ±.03  
 .XXX = ±.015  
 ANGLES ±0°-30'

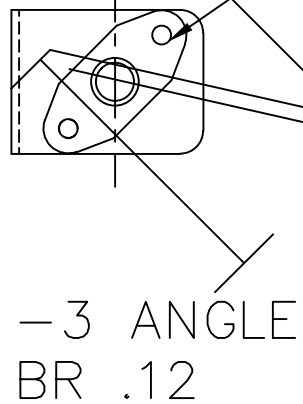
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 DWG. NO. 00-1500-04-01-TN  
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DEFLECTOR MUST BE  
INSTALLED ON FWD SIDE OF  
HOLE WHEN COVERS ARE  
REMOVED



-13 PLACARD  
.125" TEXT

DIMENSIONS ARE IN INCHES  
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.XXX = ±.015  
ANGLES ±0°-30°

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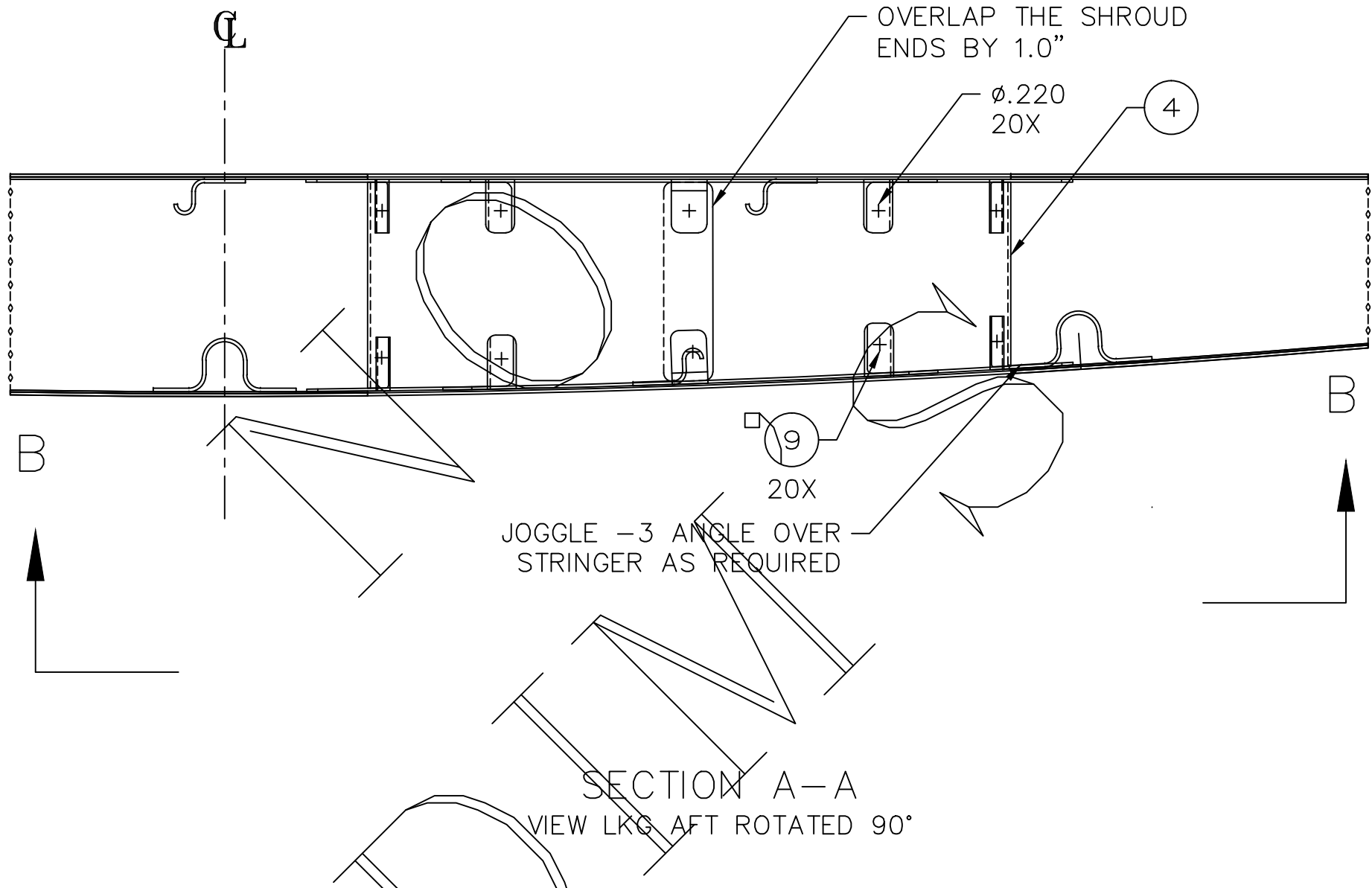


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DIMENSIONS ARE IN INCHES  
TOLERANCES:  
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.XXX = ±.015  
ANGLES ±0°-30'

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2 1  
10X

CL OF AIRCRAFT

5 2

9 2  
10X

3 JOGGLE OVER EXISTING DOUBLERS & SPLICES

REFLECTOR MUST BE INSTALLED ON FWD SIDE OF HOLE WHEN COVERS ARE REMOVED

6

AFT

OUTBD

# SECTION B-B

VIEW LKG UP AT BOTTOM OF FUSELAGE ROTATED 90°

DIMENSIONS ARE IN INCHES  
TOLERANCES:  
.XX = ±.03  
.XXX = ±.015  
ANGLES ±0°-30'

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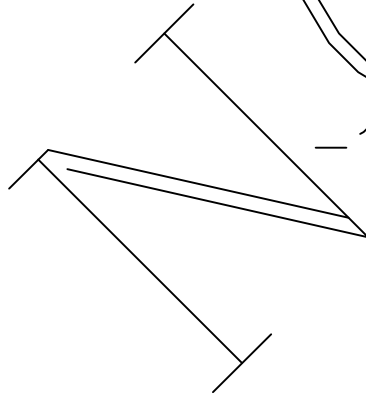
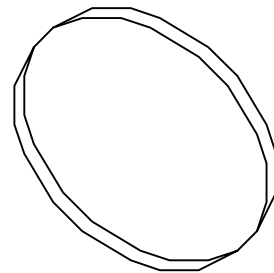


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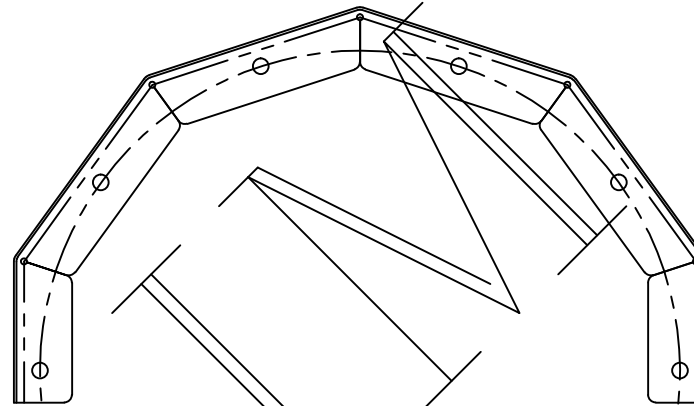
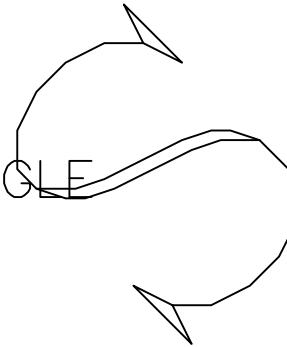
TITLE CAMERA PORT INSTALLATION - C172-TN

DWG. NO. 00-1500-04-01-TN

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-15 DEFLECTOR ANGLE  
BEFORE BENDING



-15 DEFLECTOR ANGLE  
AFTER BENDING  
B.R. .12

DIMENSIONS ARE IN INCHES  
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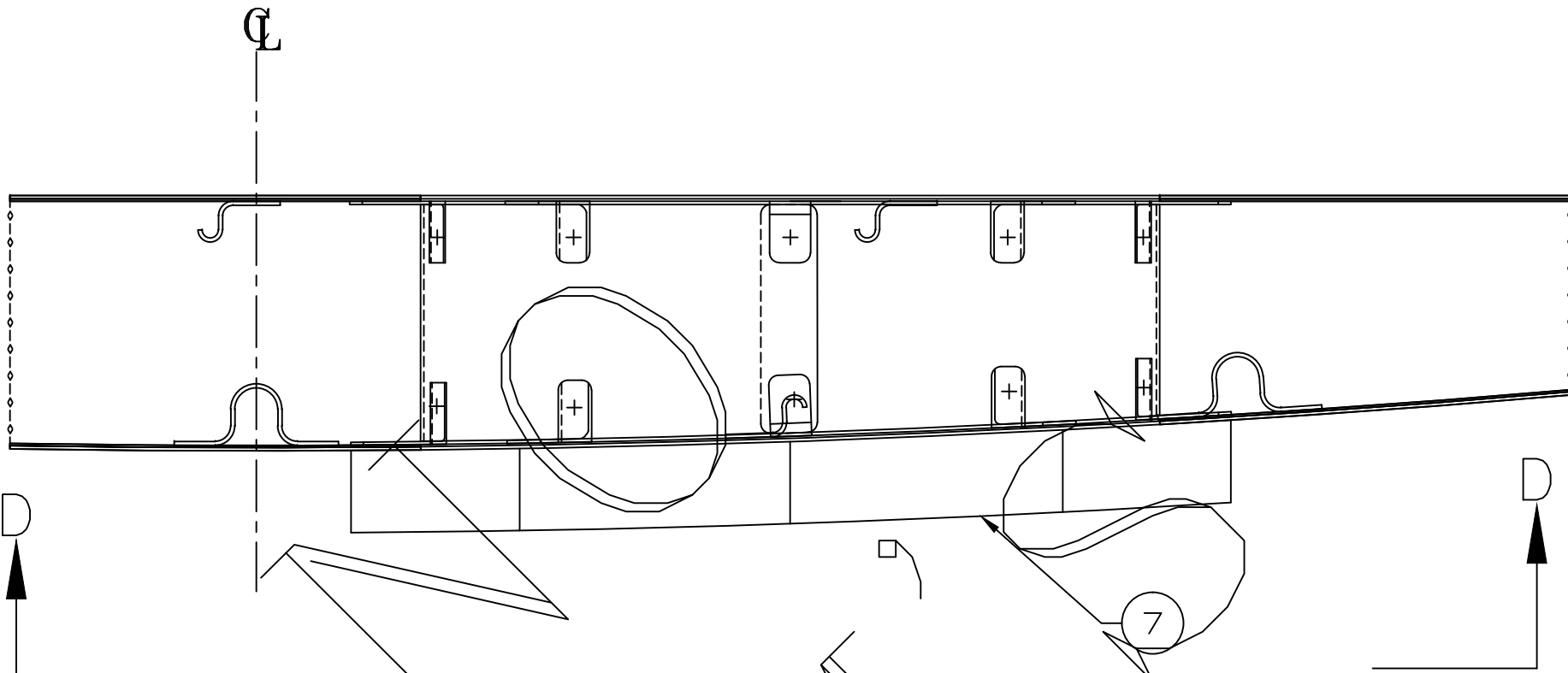


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TITLE CAMERA PORT INSTALLATION - C172-TN

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SECTION C-C  
 VIEW LKG AFT  
 SHOWING DEFLECTOR ANGLE INSTALLED  
 ROTATED 90°

DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
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 .XXX = ±.015  
 ANGLES ±0°-30'

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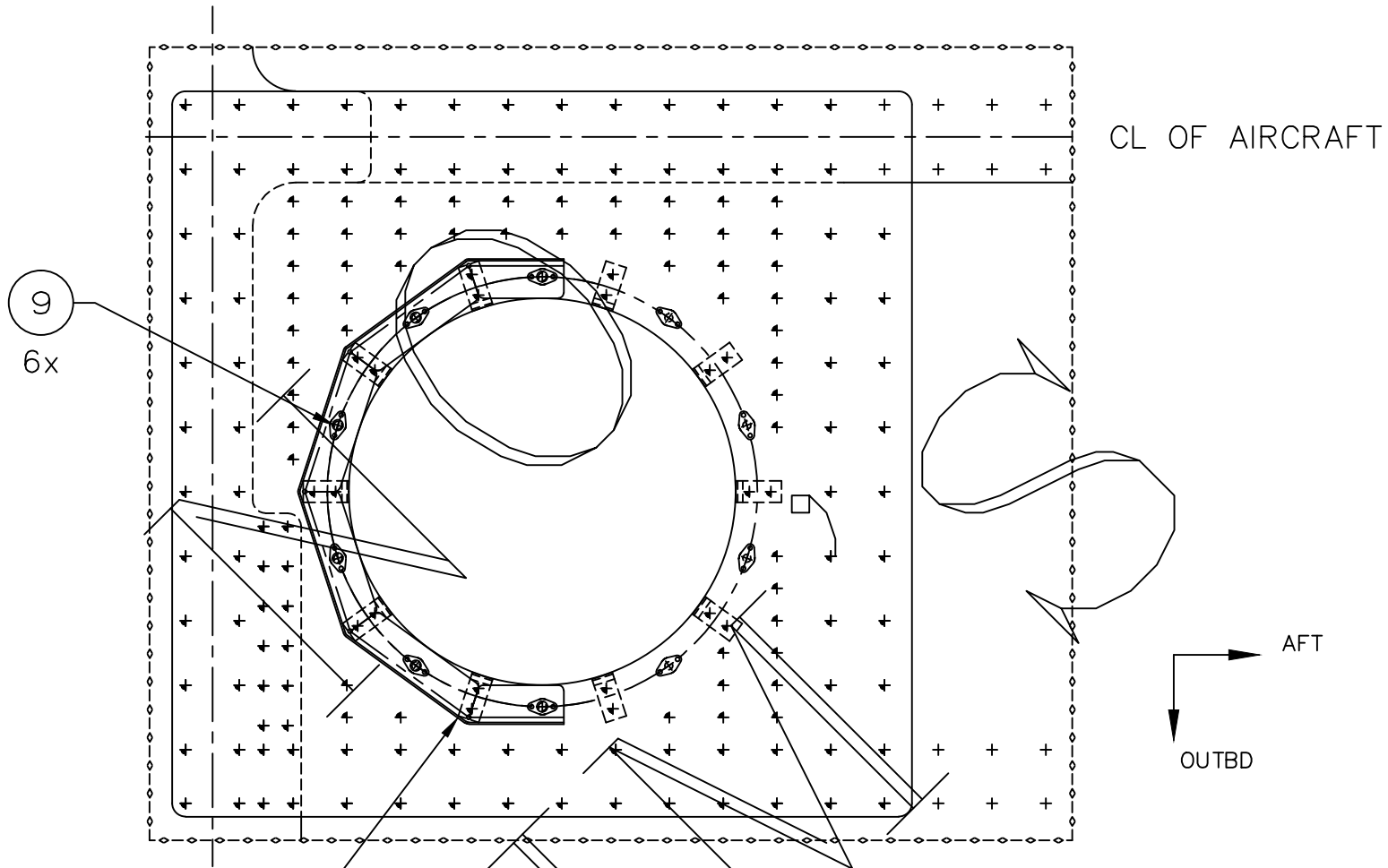
TITLE CAMERA PORT INSTALLATION - C172-TN

DWG. NO. 00-1500-04-01-TN

Rev. - SHEET 8



FS 65.33



# SECTION D-D

VIEW LKG UP AT BOTTOM OF FUSELAGE  
 SHOWS -15 DEFLECTOR ANGLE INSTALLED  
 ROTATED 90°

DIMENSIONS ARE IN INCHES  
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 ANGLES ±0°-30'

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