

# A320FAM RIB 21 HOCKEY STICK INSPECTION

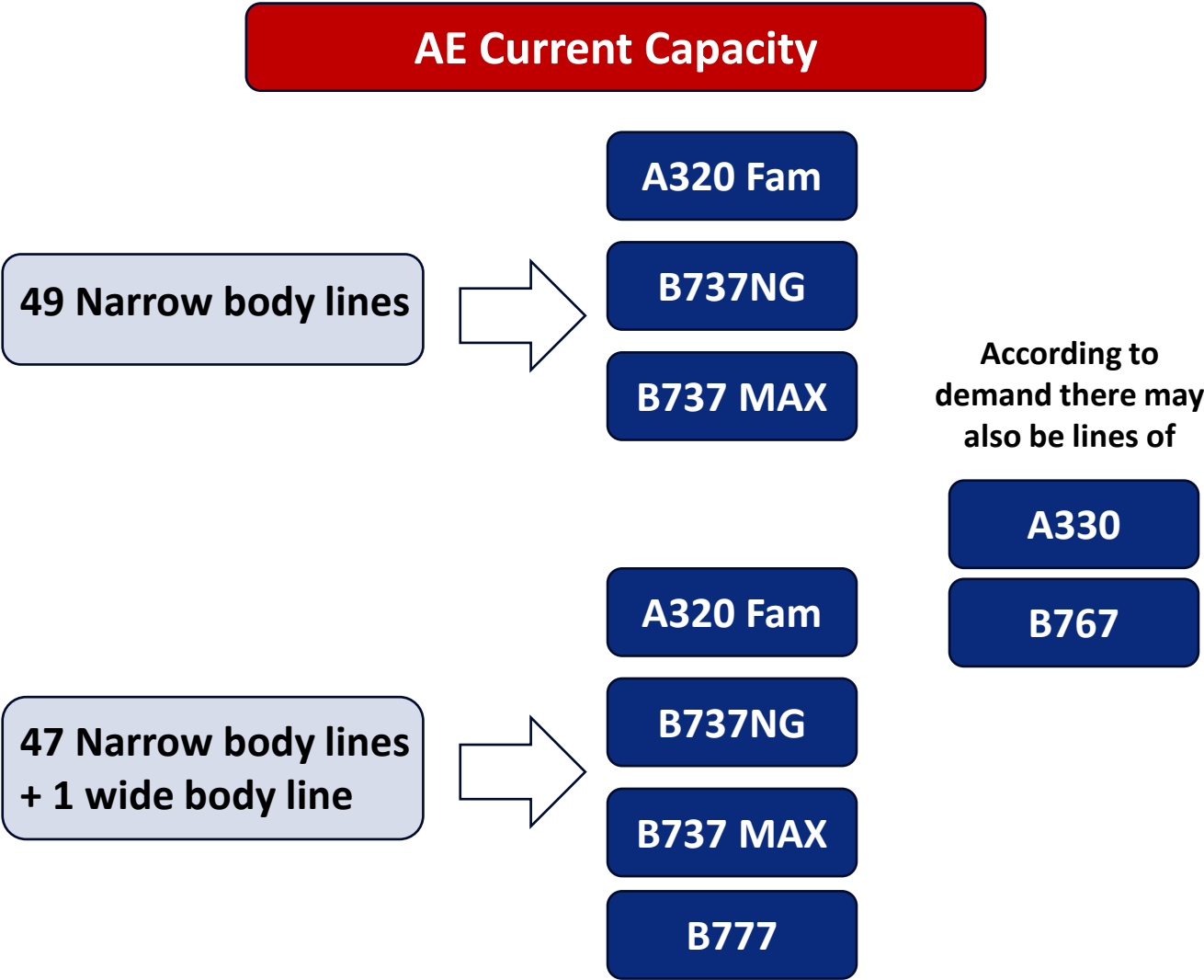
PAUT

Sep 2025

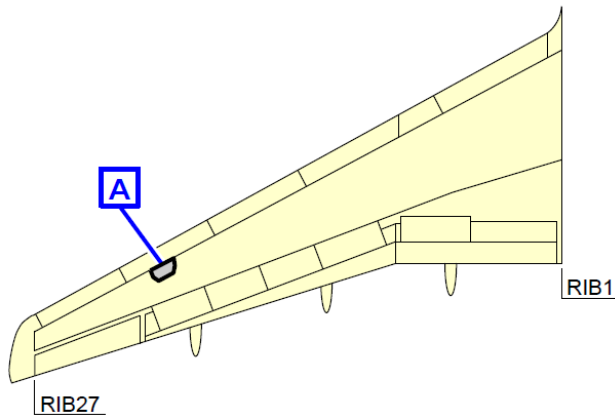


Aeroman, founded in 1983 as the maintenance division of TACA Airlines, has significantly expanded its operations over the years. By 2024, six hangars have been built, the capacity of two hangars has been expanded, and work is already underway on future expansions.

Aeroman is defined by its mission to provide high-quality aircraft maintenance services and its vision to lead globally in this field, guided by values such as solidarity, passion for challenges, commitment to quality, and continuous learning.

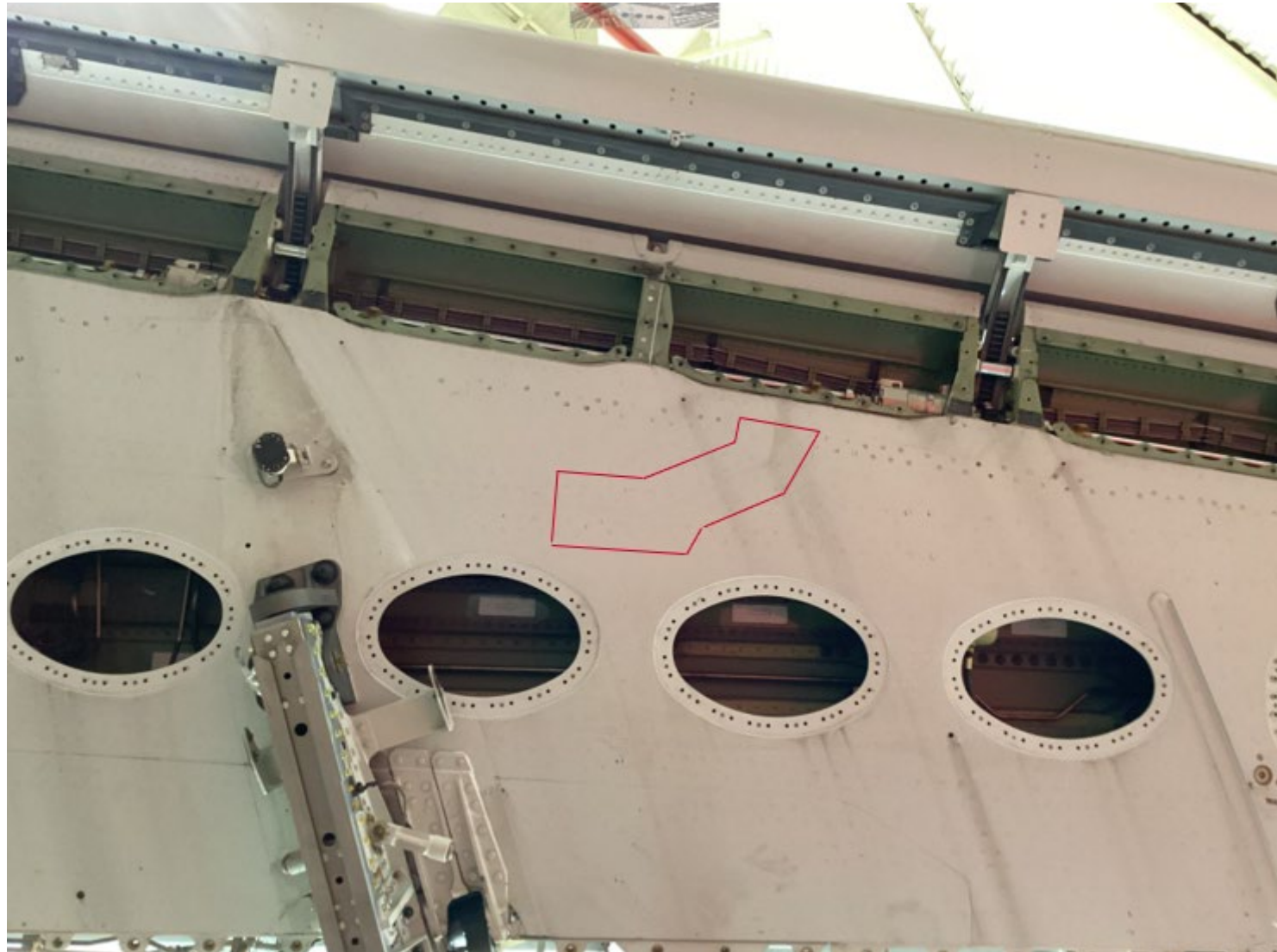


# AREA OF INSPECTION

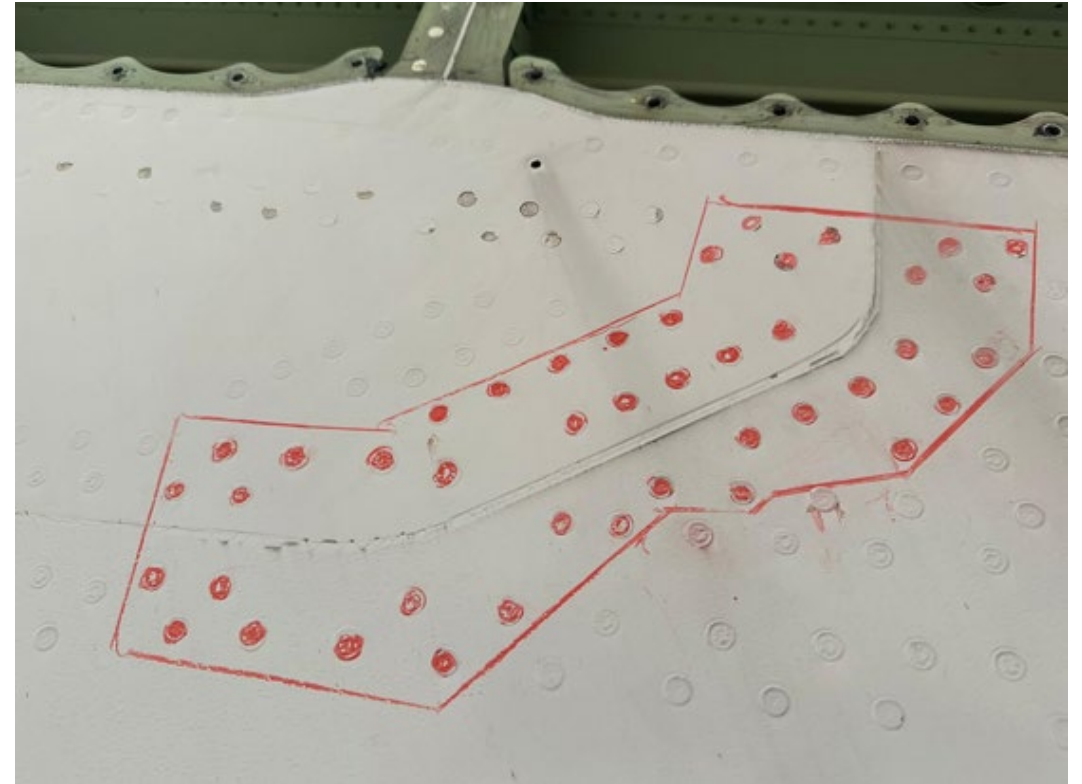




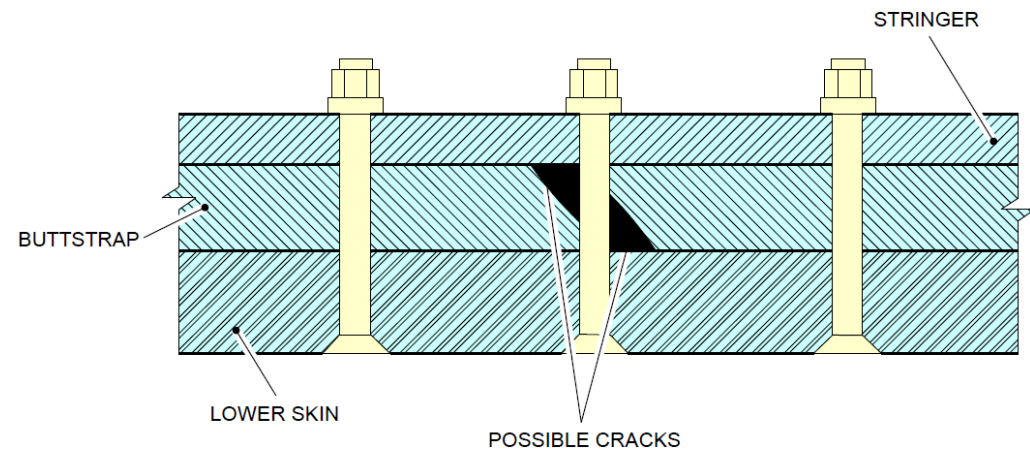
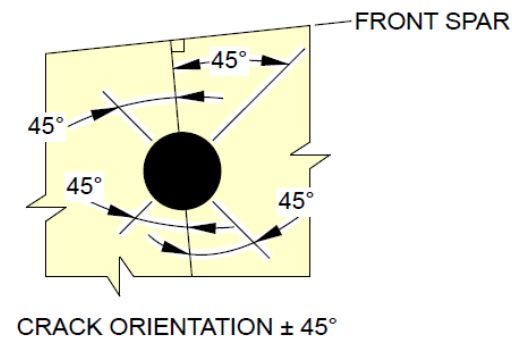
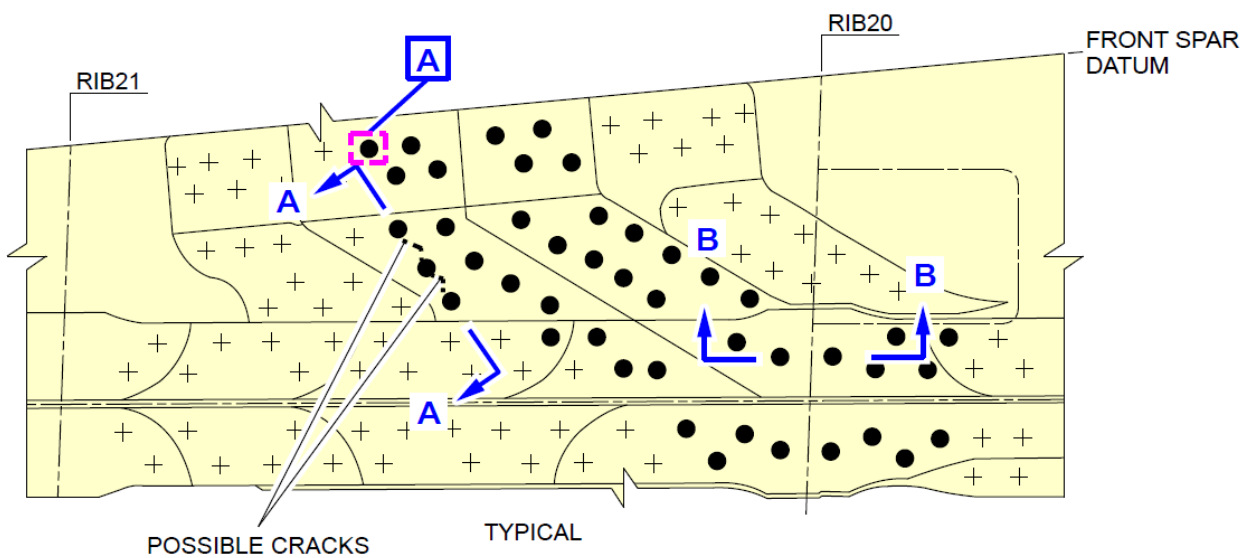
# AREA OF INSPECTION



# BOLTS OF INTEREST

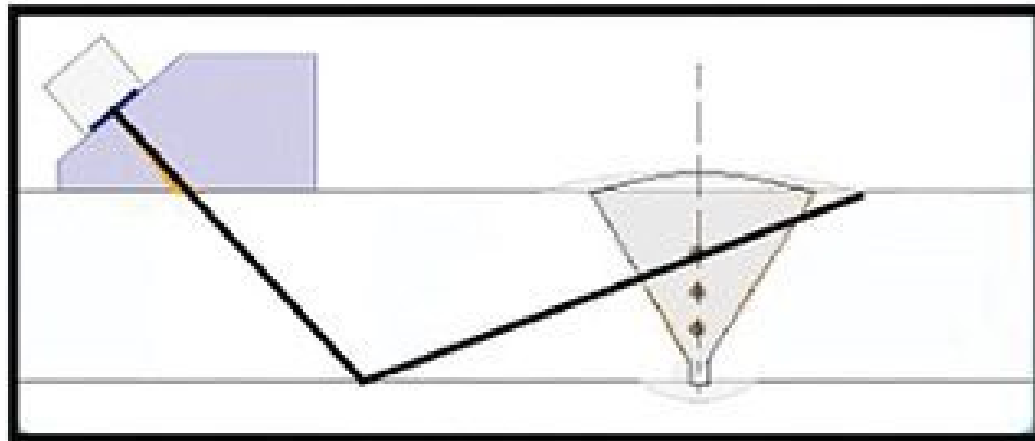


# LAYER OF INTEREST AND SCANNING DIRECTIONS



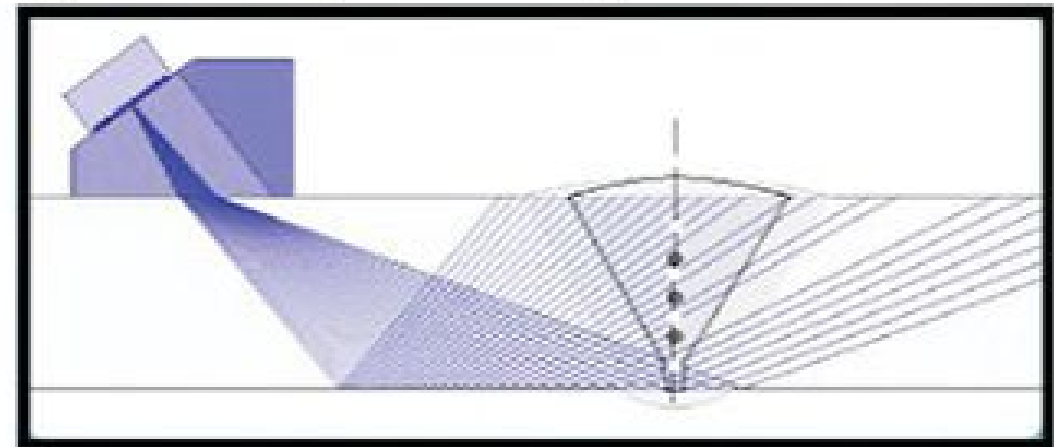
# UT VS PAUT

Analog - Conventional Angle Beam UT

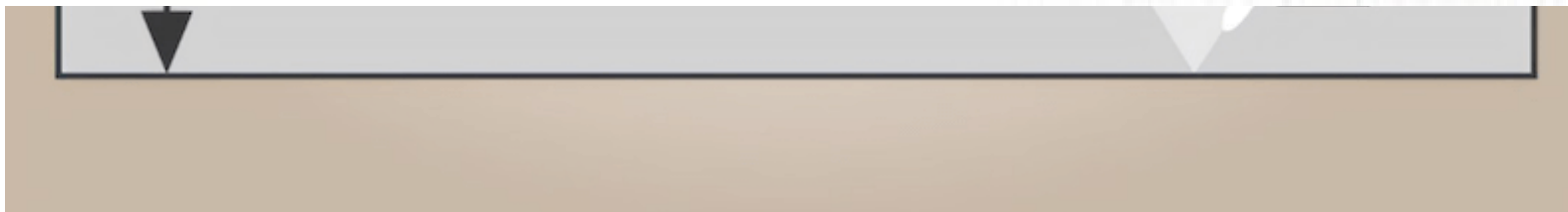


Single element transducer

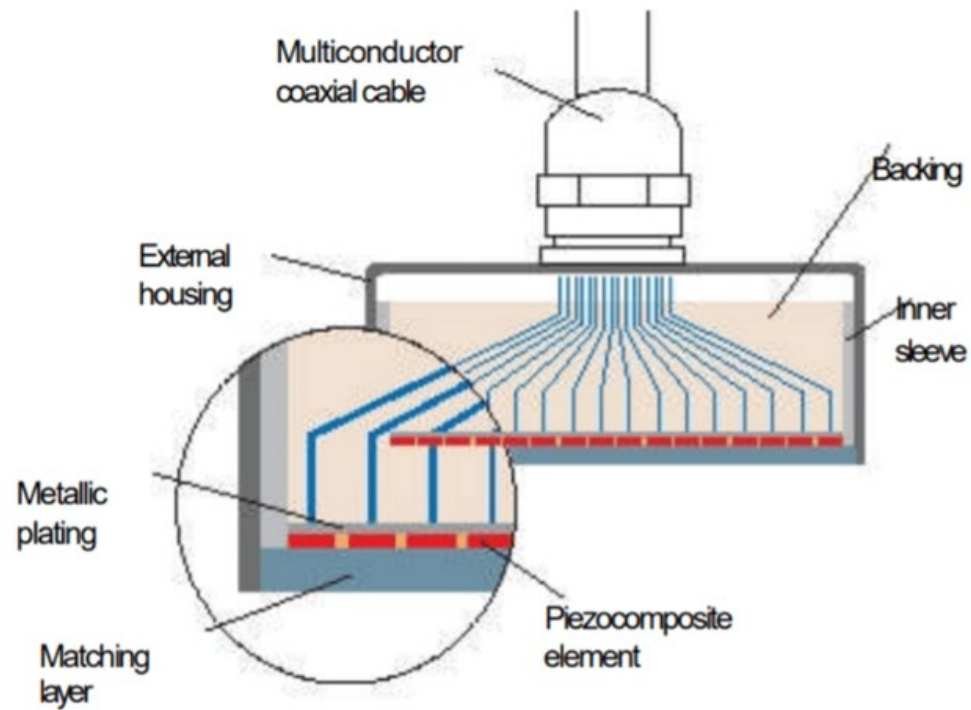
Digital - Phased Array Ultrasonic Testing PAUT



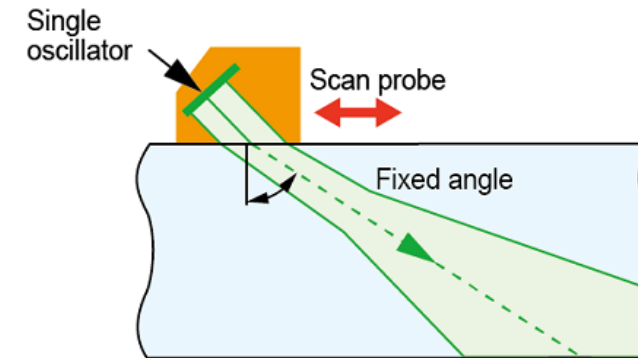
Multi-element transducer elements at various angles



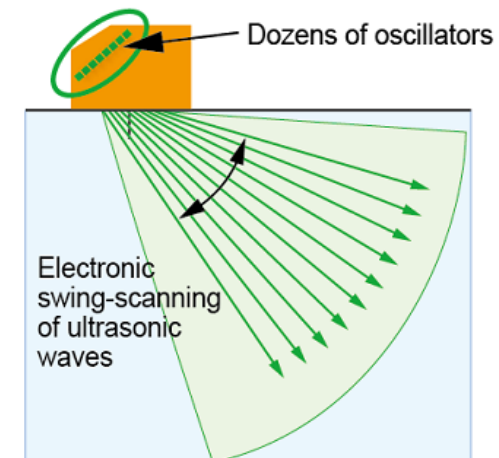




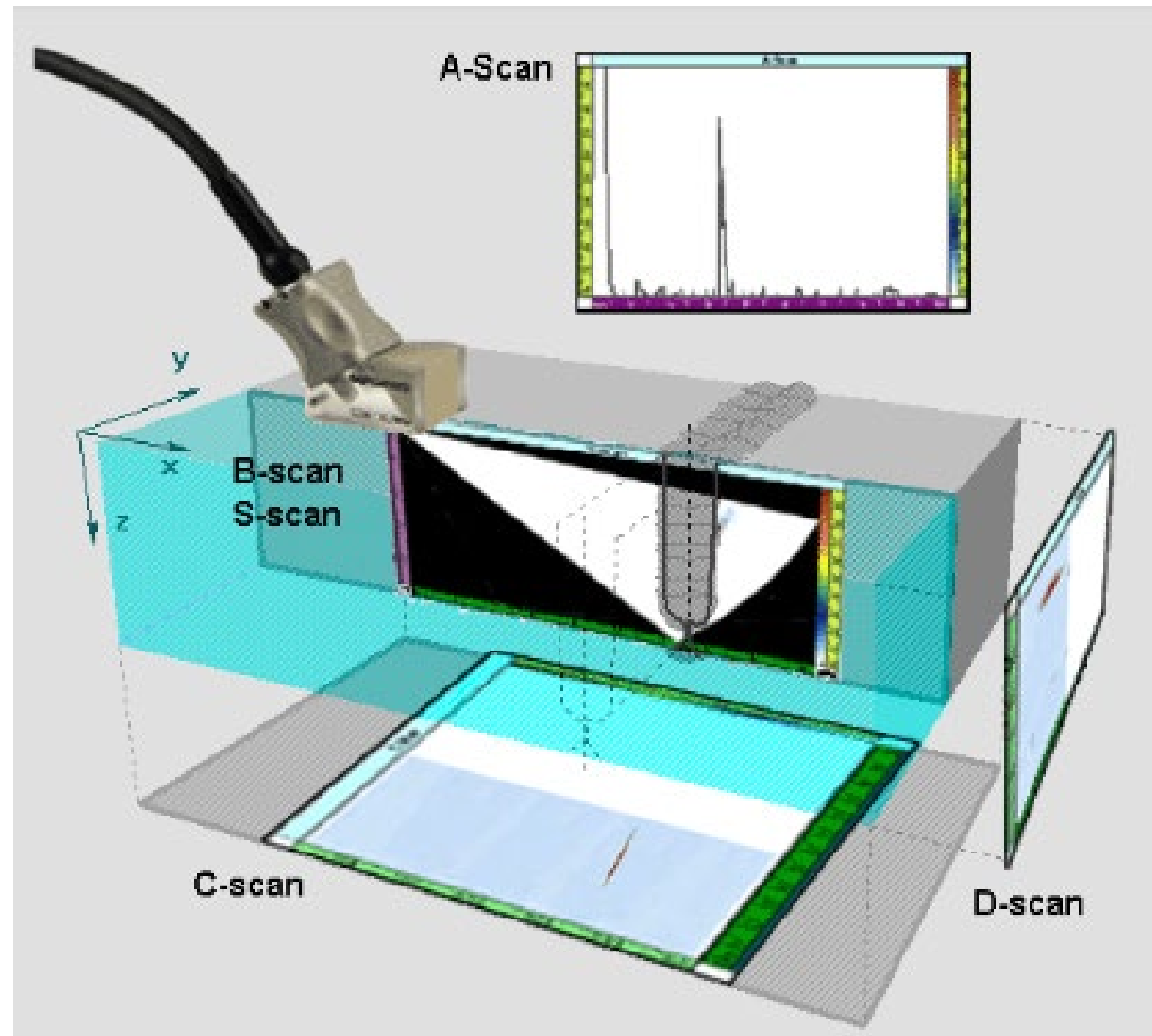
Conventional ultrasonic testing method  
(conventional UT method)



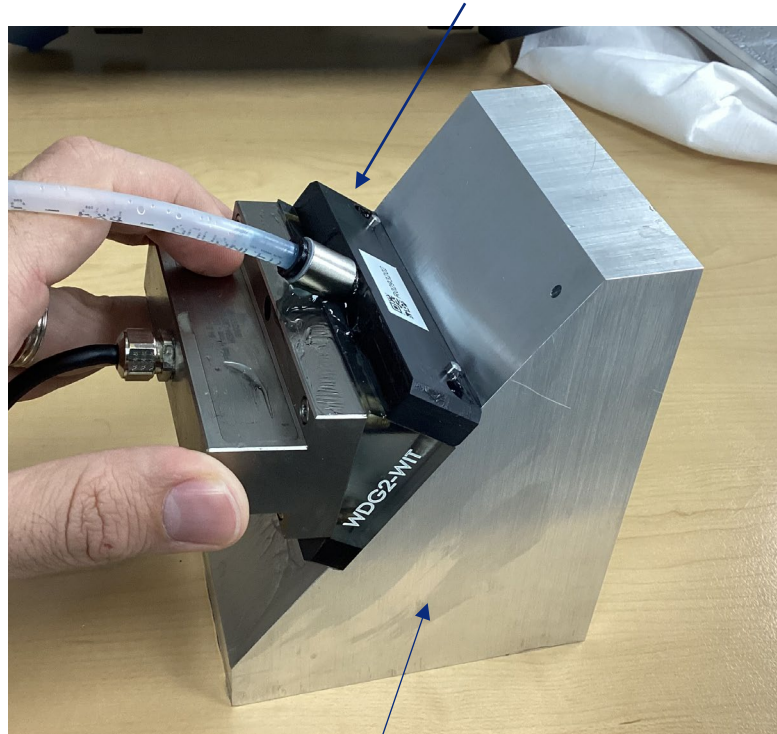
Phased array ultrasonic testing method  
(PAUT method)



# PAUT SCAN PRESENTATIONS

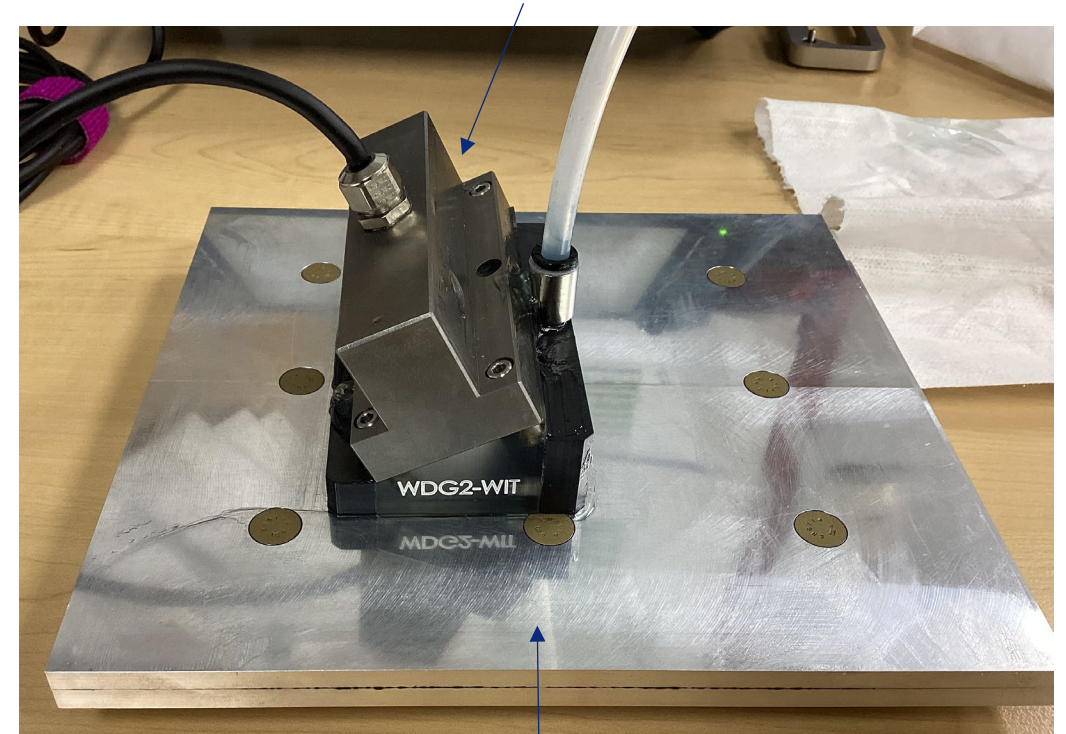


WEDGE: WDG2-WIT



FAMILIARIZATION STANDARD BLOCK:  
99F57204173000

SEARCH UNIT: ME64-LMP16-WIT



CALIBRATION STANDARD BLOCK: 99D57003007000

# PAUT SEARCH UNIT CALIBRATION



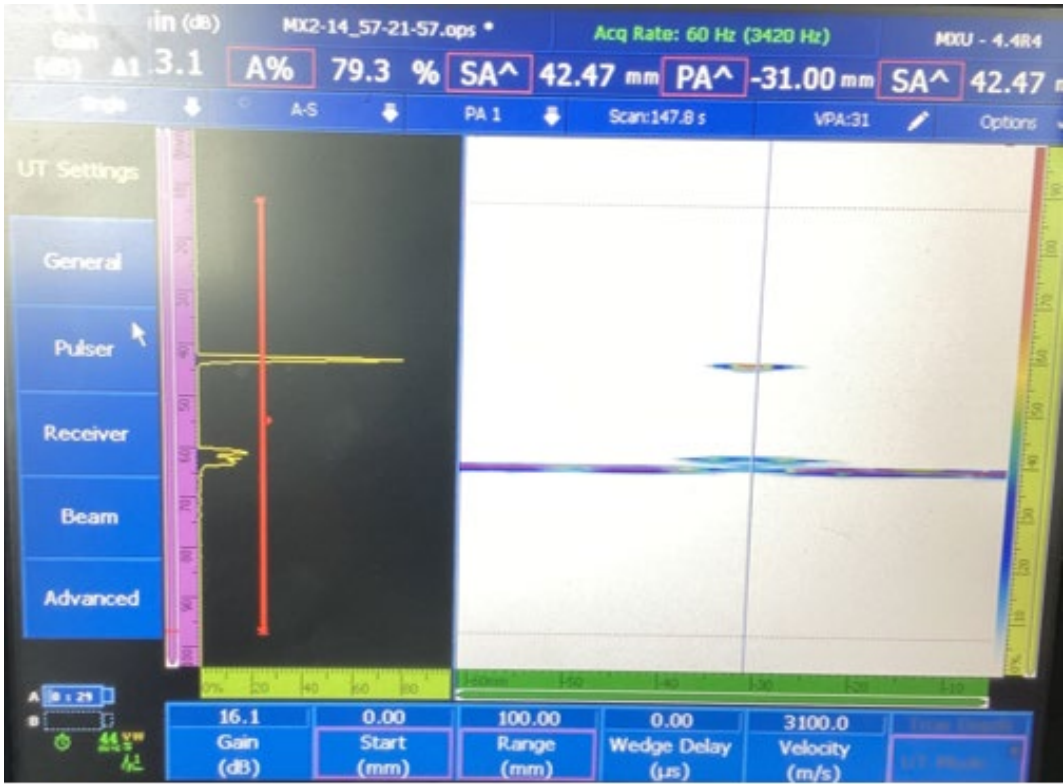
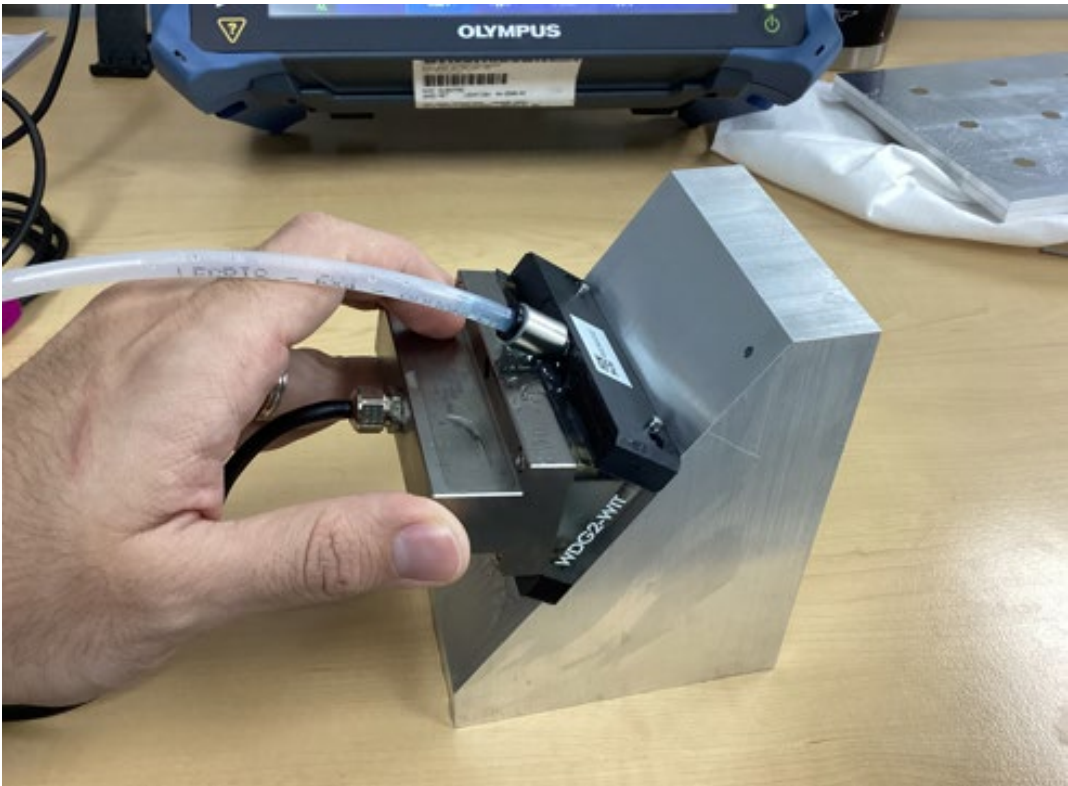
BEFORE



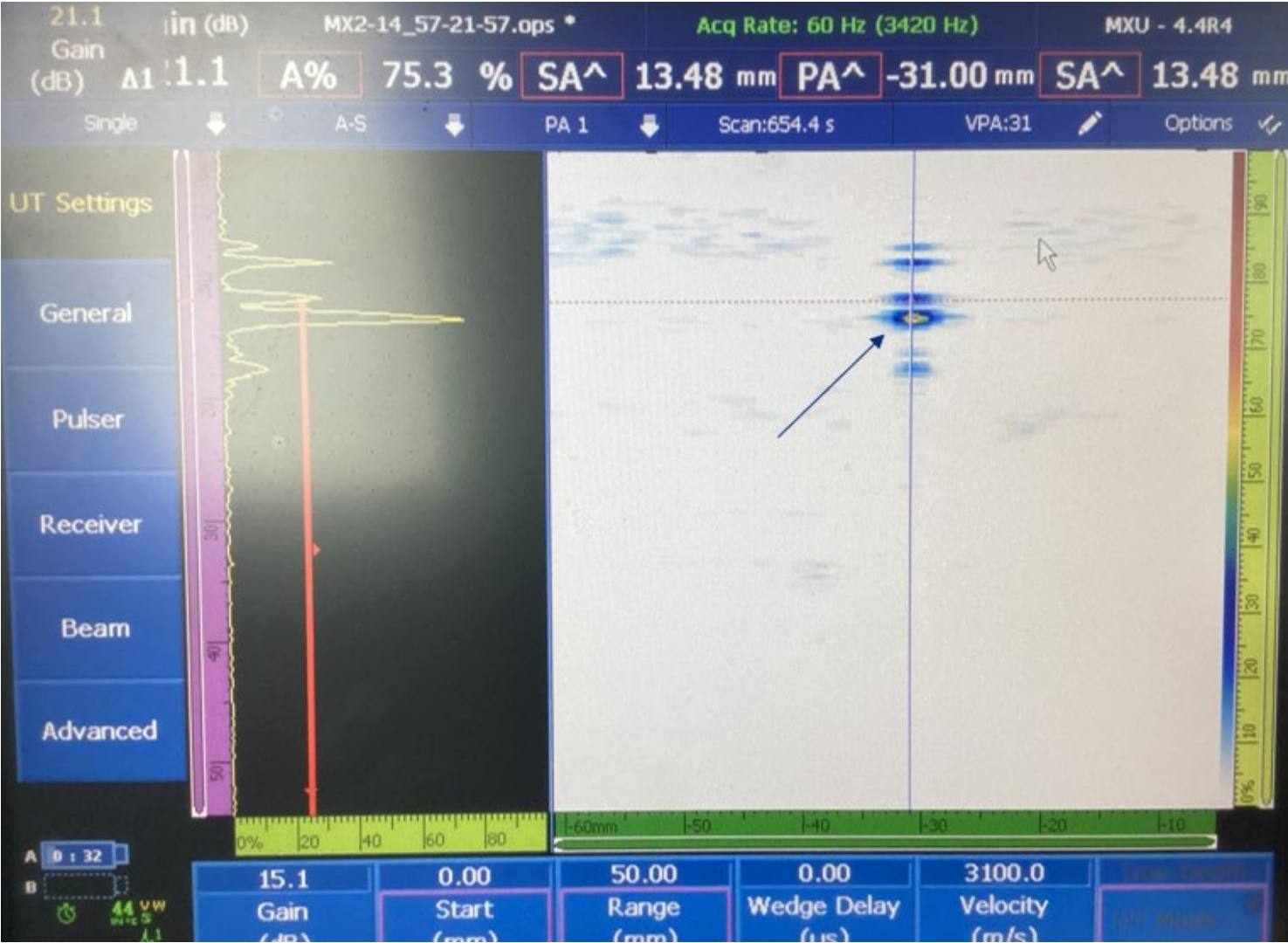
AFTER



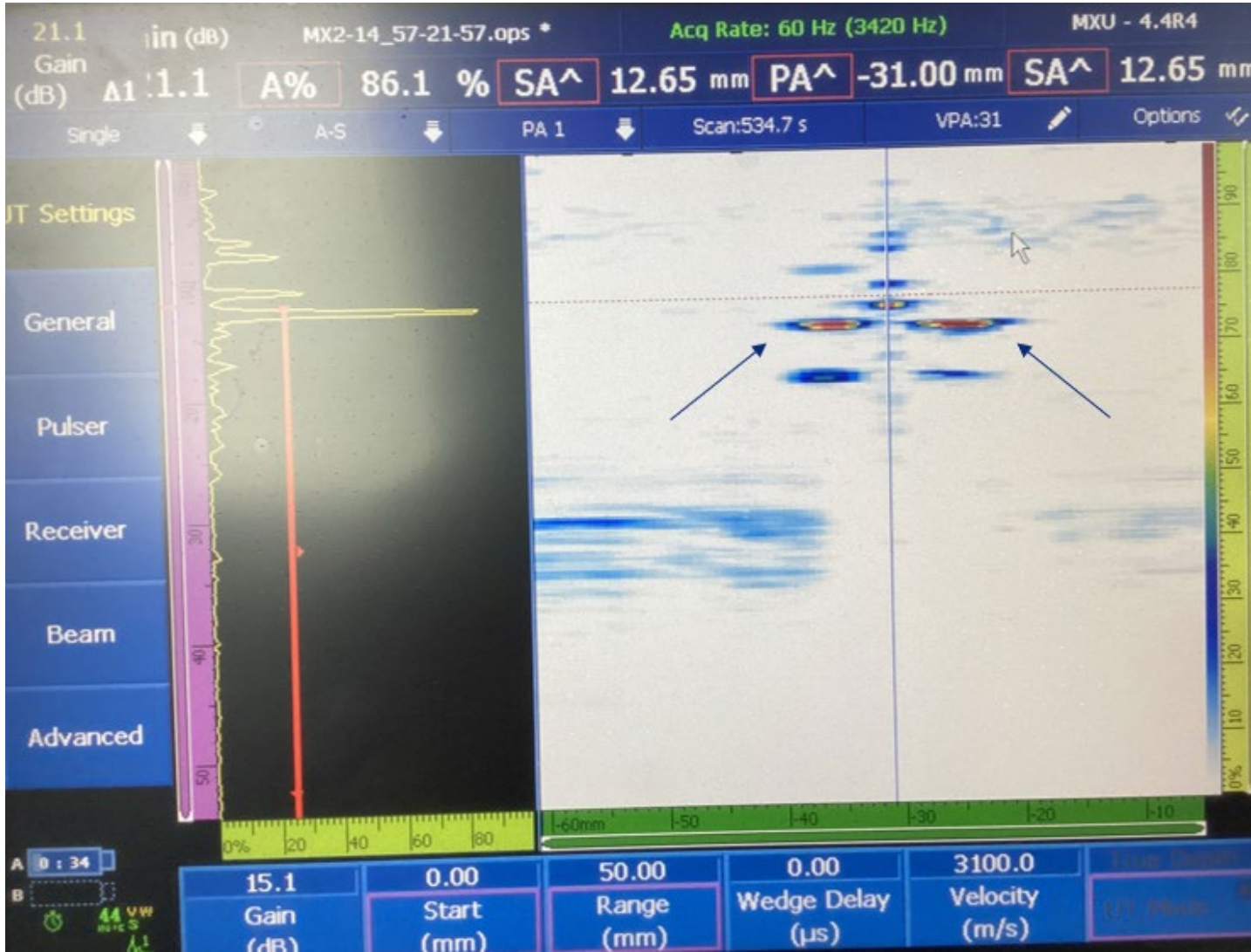
# SENSITIVITY CHECK



# CALIBRATION BLOCK HOLE SIGNAL



# CALIBRATION BLOCK NOTCH AND HOLE SIGNALS



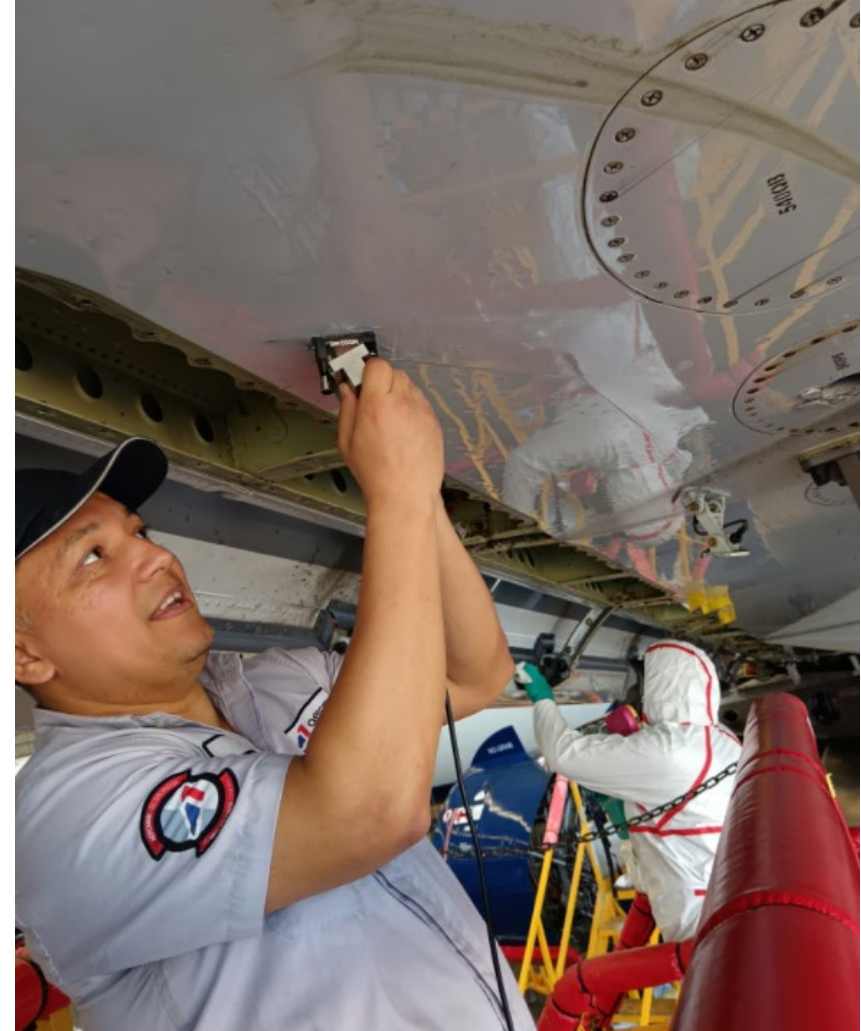


# INSPECTION PROCEDURE





# INSPECTION PROCEDURE



## **TASK 57-21-57-260-801-A01**

### **Outer Wing, Bottom Skin Run-out of the Buttstrap**

#### 1. Task Supporting Data

##### A. Area of Applicability

Outer Wing Bottom Skin Run-out of the Buttstrap at Stringer 8 between Rib 20 and Rib 21 adjacent to the Front Spar, and Run-out of the Buttstrap at Stringer 11 adjacent to Rib 21 at the Rear Spar, LH/RH wings. (See FIGURE 57-21-57-991-001)

##### B. Description of Possible Damage

Fatigue cracks  $\geq 9.5$  mm (0.374 in.) in the buttstraps, initiating at the edge of the bolt holes. (See FIGURE 57-21-57-991-001)

## TASK 57-21-57-270-801-A01

Bottom Cover Buttstraps Runout at Rib Bays 19 to 21, LH/RH

#### 1. Task Supporting Data

##### A. Area of Applicability

The runout of the bottom cover buttstraps (hockey stick) at rib bays 19 thru 21, LH/RH (Refer to [FIGURE 57-21-57-991-011](#)).

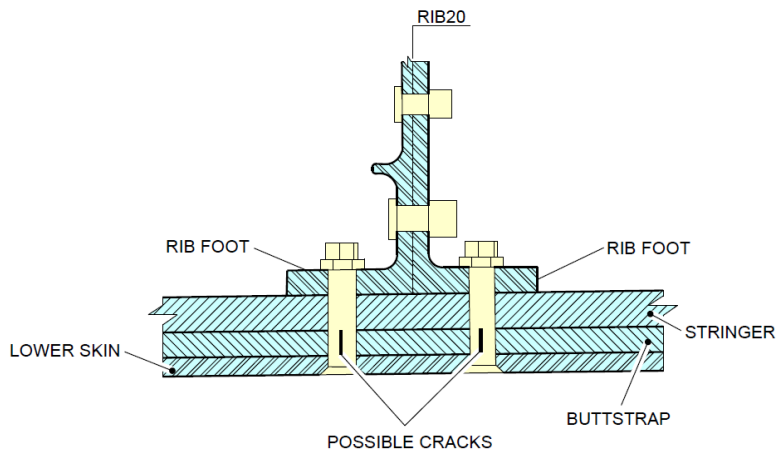
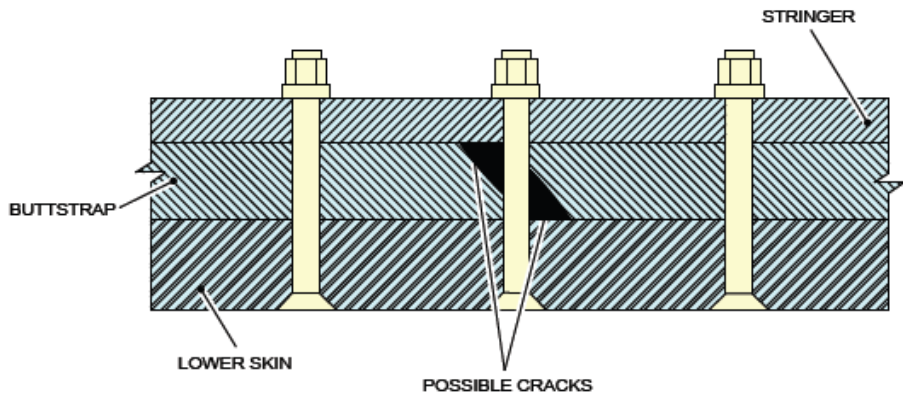
##### B. Description of Possible Damage

Fatigue cracks that start at the fastener hole and extend from the datum of the front spar flange in plus or minus 45° direction (Refer to [FIGURE 57-21-57-991-012](#)).

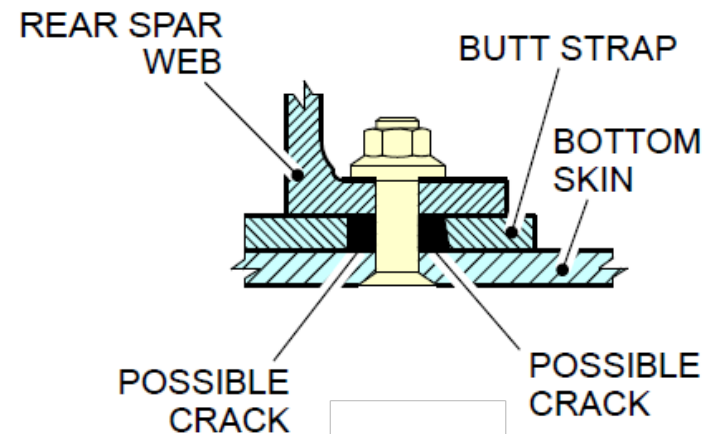
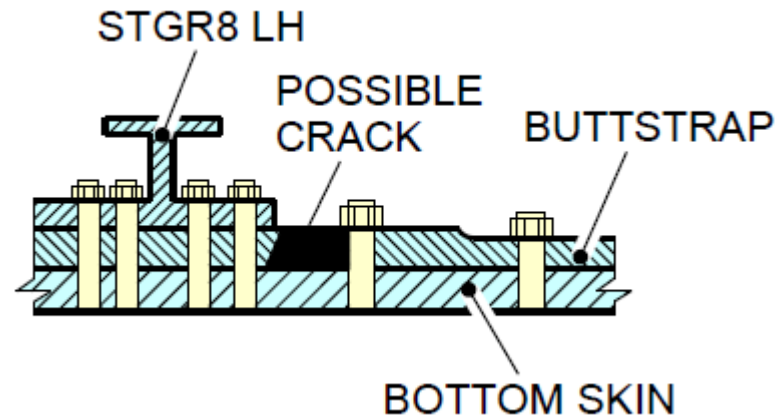
SLOT : 5 mm  $\pm$  0.15 mm x 5 mm  $\pm$  0.15 mm (0.197 in  $\pm$  0.006 in x 0.197 in  $\pm$  0.006 in)

WIDTH: 0.15 mm  $\pm$  0.15 mm (0.006 in  $\pm$  0.006 in)

# COMPARATIVE OF AREA STRUCTURE & POSSIBLE CRACKS



AOT A57N024-24



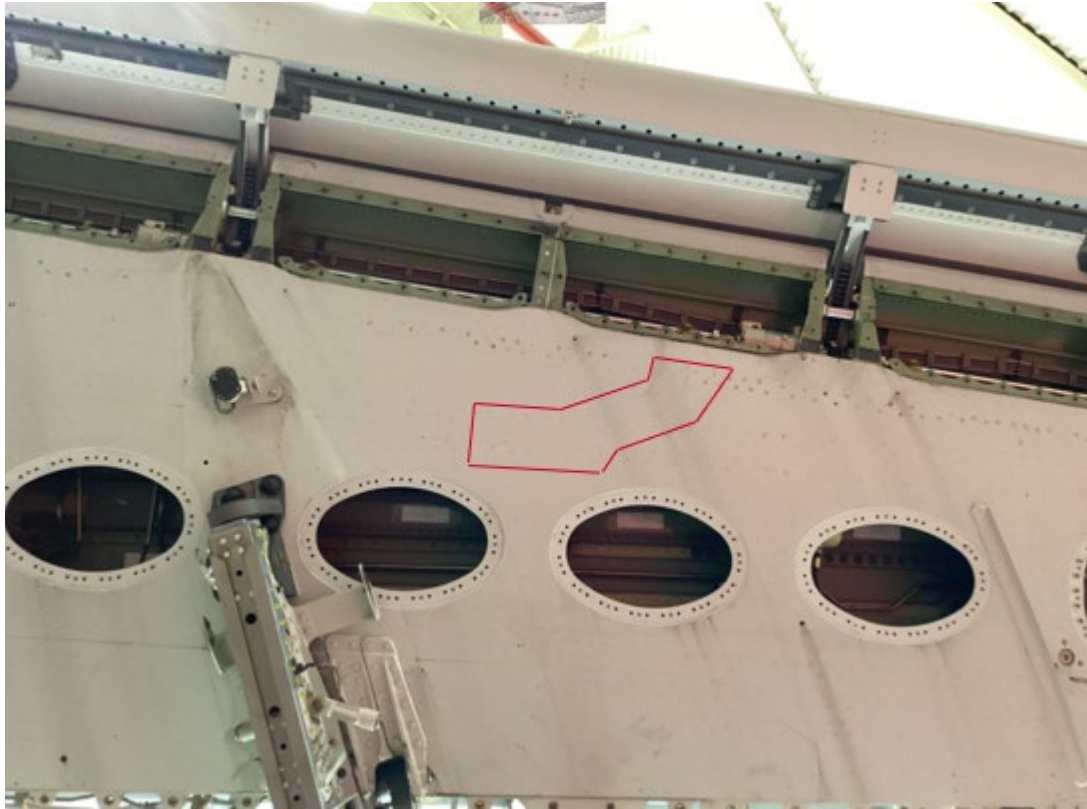
ALI 572157-01

# RADIOGRAPHIC EXPOSURE CALIBRATION STANDARD

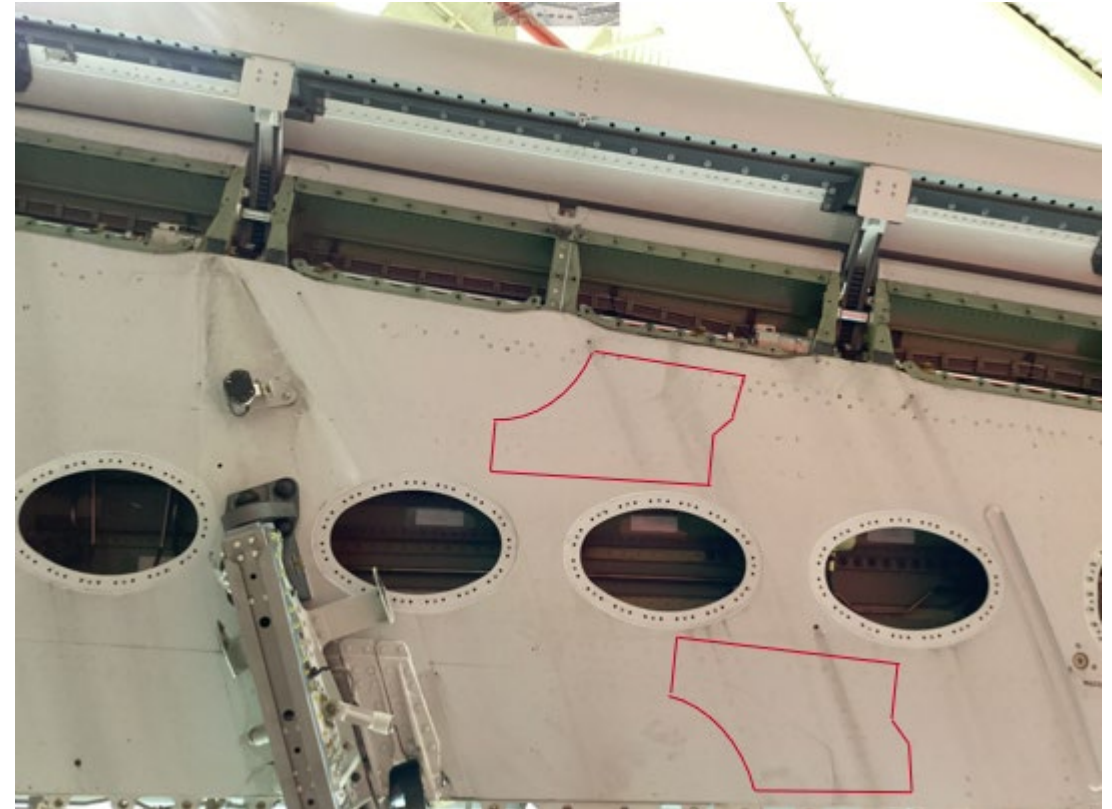




# COMPARATIVE AREAS OF INSPECTION



AOT A57N024-24



ALI 572157-01



RESPECT

TRUST

COLLABORATION



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