DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SUSTAINMENT CENTER (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

March 30, 2026

TO: AFSC/PZIM

FROM: OC-ALC/OBCA for 76 AMXG

SUBJECT: Brand Name Justification for A26-013 ET Matrix Array Ultrasonic Testing NDI System

1.This document provides the justification to procure Dolphitech brand name Matrix Array Ultrasonic Testing (MAUT) Non-Destructive Inspection (NDI) system.

2. This justification is based on the fact that only one specific brand can meet the Government's essential technical requirements to fully leverage MAUT technology. Matrix Array Ultrasonic Testing (MAUT) is an advanced non-destructive testing (NDT) technique that utilizes a two-dimensional array of transducer elements to electronically steer and focus ultrasonic beams in multiple directions. This method enables three-dimensional visualization of defects, providing superior detection and characterization compared to conventional phased array techniques. MAUT is particularly useful for inspecting composites, sandwich core constructions, and metals. To implement this advanced capability, the Government requires a system with a non-multiplexed, fully parallel architecture capable of driving a true 128x128 (16,384 element) matrix array and performing real-time Full Matrix Capture (FMC) and Total Focusing Method (TFM) processing. This specific combination of features represents a cutting-edge technological capability that is currently proprietary to a single manufacturer and is essential for generating the high-resolution, artifact-free volumetric images needed for reliable flaw detection.

3.Therefore, it is requested that Dolphitech Brand Name equipment is procured to meet all the requirements of the Government and subsequently the warfighters.

4.Market research was conducted to identify all capable sources. This research confirmed that due to the novelty of this technology, only one manufacturer has successfully developed and commercialized a product meeting the Government's minimum technical needs. However, the research has also identified multiple authorized resellers for this specific brand, and this requirement will be competed amongst them to ensure fair and reasonable pricing. To avoid future brand-name-only acquisitions for this capability, the Government will continue to monitor the NDI market for technological advancements and the emergence of new manufacturers who may be able to meet these requirements in the future

[redacted].

6. I have determined, in accordance with FAR 12.102(a), that the circumstances of this contract action deem a specific brand name to be required.

[redacted]