## DEPARTMENT OF THE NAVY FLEET READINESS CENTER EAST PSC BOX 8021 CHERRY POINT NC 28533-0021

PROP202102-JPF 06 JUL 2021

## MEMORANDUM

From: J.P. Fontaine Propeller Fleet Support Team (FST) Lead To: Mr. Tim Gellerson, Pacific Propeller International

Subj: 27-29 April, 2021 Review of Manufacturing and Overhaul Procedure Visit

Ref: N/A

- 1. This memorandum is written to document the visit to Pacific Propeller International (PPI) from 27-29 April 2021. The purpose of this visit was to review the capability of PPI to conduct 54H60 propeller overhauls to the new blade overhaul procedures that were developed jointly by the USAF, Collins Aerospace and NAVAIR. PPI is also the sole licensee to manufacture new 54H60-77 (P-3) propeller blades. Newly developed/changed manufacturing processes were also reviewed. This review was conducted by members of the USAF C-130 SPO, Collins Aerospace and the NAVAIR Propeller FST. This review covered processes for both the 54H60-111 (C-130) and the 54H60-77 (P-3) blades.
  - a. Members of the visit team walked through the shop and viewed all major blade processes conducted during overhaul/manufacture of a blade. This included reviewing and providing comments/recommendations to the shop traveler/work control document that is used to process the blade through the shop.
  - b. PPI used multiple scrap blades to physicially demonstrate all processes for the purpose of this review.
  - c. The team performed a detailed review of blade taper bore machining, measurement and inspection as these areas are critical to ensuring blade airworthiness. PPI is using an air gauge to measure bushing taper and gauge diameter. This allows for measurements of these critical dimensions

- when the blade is loaded in the machining center. This is a best practice that should be carried over to other shops.
- d. Borescope, eddy current, ultrasonic, and flourescent penetrant inspections were witnessed. PPI does not have the ability to fully submerge the blade, but had tooling to be able to fill the taper bore, and process specs to cover their FPI procedures to ensure compliance with technical data.
- e. The NAVAIR team reviewed PPIs internal First Article Inspection (FAI) documentation that was completed IAW AS9102 and found no discrepancies.
- 2. This review established confidence that PPI has the capability in processes, personnel, and equipment to successfully and safely overhaul 54H60 propellers to the new technical requirements developed and manufacture new P-3 blades to assure continuing airworthiness of the propeller system.

## J. P. Fontaine

Cc
USAF C-130 SPO (Peter Christiansen, Mike Fisher)
PMA207 (Larry Smith)
PMA290 (Bruce Jackson, Curtis Ayers, Ricky Daniels)
Collins Aerospace (Tom Corley, Rob Pruden)
Propeller FST (Jerad Smith, Laine Johnson, Chris Parry, Glenn Pangburn, Blake Harrell)
NAVSUP WSS (Shawn Reams, Larry Haftel)
DCMA Seattle (Rodney Billinghurst, Jamie Corson)