

P&WC 11524 (2021-07) MRO Information Management (9290)

S.I.L. NO. PT6A-233 R1

# SERVICE INFORMATION LETTER

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### Subject: Fleet Time Between Overhaul Read-Across Harmonization

Applicability: PT6A-41/42, PT6A-52, PT6A-60A and PT6A-61 engine models (Twin application only)

### Note: there are significant changes introduced to this SIL through revision 1 and change bars have not been added.

P&WC previously revised Service Bulletins (SB) SB3003 and SB13303 to support the harmonization of an Operator's escalated Time Between Overhaul (TBO) interval. Fleet TBO read-across harmonization is the extension of the fleet TBO for engines operated under different SBs in a mixed engine fleet. A fleet TBO read-across is applicable only for engines in the operator's possession.

The purpose of this program is to provide a pathway to align TBO intervals for an operator with a mixed engine fleet, based on a reduced number of engine overhaul samples. There are various eligibility requirements for operators and engines that are listed in respective SBs.

Today, the current fleet TBO escalation process (Option A) per SB 3003 and 13303 necessitates 14 successful engine overhaul samples to escalate the fleet TBO from 3600 hours to 8000 hours for similar engine models operated under the same SB. Some operators who own a fleet of mixed engine models may operate their engines to various BASIC or extended TBO intervals. Based on the review of the reliability of the engine models PT6A-41, -42, -52, -60A and -61 and by the acknowledgement of the operator's experience gained from operating PT6A engines under escalated TBO, P&WC will now consider the harmonization of fleet TBO with a reduced number of engine overhaul samples. The harmonization process, sample requirements and its applicability are described in SB3003 and 13303 under fleet TBO option A Read-Across harmonization. This SIL is published to provide practical examples of possible TBO read-across and describes the advantage for operators that own a fleet of mixed engine models (Twin application only).

Requests for harmonization may be submitted through the respective customer account within the online platform My P&WC Power (MPP). Specific guidelines for this process and instructions may be found in P&WC SIL PT6A-041. The TBO escalation forms are available in MPP through the menu bar selection *"Services"* and under *"Engineering Services"*. The new feature is titled *"TBO/HSI Contingency Extension and Escalation Request"*.

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Sample Requirements per SB 3003 and SB13303 for Fleet TBO Option A – Current Situation:

In TBO SB 3003 and 13303, the current Fleet TBO option A extensions are in 500-hour increments. For TBO extensions up to 5100 hours, one (1) representative engine sample per 500-hour increment is required. For TBO extensions above 5100 hours, two (2) representative engine samples per 500-hour increments are required.

Scenario 1: Operator owns four PT6A-42 engines with a PWC approved TBO of 8000 hours and owns two PT6A-52, two PT6A-60A and two PT6A-61 engines on a Basic TBO interval.

In accordance with the latest fleet TBO escalation Option A for a mixed fleet, this operator could escalate the TBO of their PT6A-52, -60A and -61 engines up to 8000 hours with 4 successful engine samples instead of 15, as follows:

- For the PT6A-52 and PT6A-61 engines, the operator can escalate the TBO of their -52 and -61 up to 5100 hours with no sample required.
- For PT6A-60A engines with the submission of one (1) successful TBO sample from their -60A engines at 3600 hours TSN/TSO, this operator can escalate the TBO of their -60A engines from Basic TBO (3600 hours) to 5100 hours.
- Following this initial step, this operator can escalate the TBO of their PT6A-52, -60A and -61 engines up to 6100 hours with the successful submission of one (1) additional sample from their PT6A-52, -60A, or -61 engines operated to 5100 hours TSN/TSO.
- This operator can further escalate the TBO of their PT6A-52, -60A and -61 engines up to 7100 hours with one additional sample from their PT6A-52, -60A, or -61 engines operated to 6100 hours TSN/TSO.
- The operator can escalate the TBO of their PT6A-52, -60A and -61 engines up to 8000 hours with one additional sample from their PT6A-52, -60A, or -61 engines operated to 7100 hours TSN/TSO. Noting, 8000 hours is the TBO interval limit as stated in the respective SBs.

Refer to Figure 1 for the visual representation of the TBO sample requirements.

Similarly, an operator that owns four PT6A-52 engines with a PWC approved TBO of 8000 hours and owns four PT6A-42 engines on Basic TBO could escalate the TBO of their PT6A-42 engines with 3 successful engine TBO samples.

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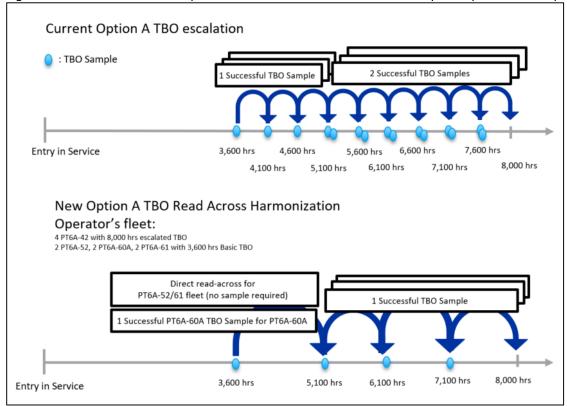


Figure 1: Scenario1-Fleet TBO Option A Read Across Harmonization – Sample Requirement Comparison

Scenario 2: Operator owns two PT6A-42 engines operated in accordance with an extended P&WC approved TBO of 6100 hours. Operator also owns two PT6A-52 and two PT6A-60A engines with a P&WC approved 4100-hour escalated TBO.

In accordance with the latest fleet TBO escalation Option A for a mixed fleet, this operator could escalate the TBO of their PT6A-52 and -60A engines up to 6100 hours with 2 successful engine TBO samples instead of 6, as it follows:

- For the PT6A-52 engines the operator can escalate the TBO of their PT6A-52 to 5,100 hours with no sample required.
- With the submission of one (1) successful TBO sample from their PT6A-60A engines operated to 4100 hours TSN/TSO, this operator can escalate the TBO of his PT6A-60A engines from 4100 hours to 5100 hours.
- This operator can further escalate the TBO of their PT6A-52 engines and PT6A-60A engines up to 6100
  hours with the successful submission of one (1) additional sample from their PT6A-52 or PT6A-60A engines

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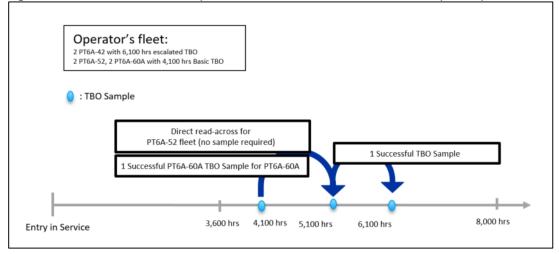
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operated to 5100 hours TSN/TSO. With this successful sample, the TBO of all engines in the operator's fleet are harmonized to 6100 hrs. Refer to Figure 2 for the visual representation of the TBO sample requirements.

 Thereafter, the fleet of PT6A-42, -52 and -60A engines with the harmonized TBO can be escalated by 500hour increment as one fleet of similar engines with submission required TBO samples. The number of samples required for each 500-hr increment is defined in SB3003 and SB13303.

Figure 2: Scenario 2- Fleet TBO Option A Read Across Harmonization – Sample Requirement



For further information, please contact your local P&WC Field Support Representative, or the P&WC Customer Help Desk, Tel +1 450-647-8000 or +1-800-268-8000. We can also be reached at cfirst@pwc.ca, or our website www.pwc.ca.

## PRATT & WHITNEY CANADA CORP.

Respectfully,

1. Shokauli

Azin Shokouhi Customer Manager PT6A Service Engineering Customer Service

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