

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

S.I.L. NO. **PT6A-041 R7** 

### SERVICE INFORMATION LETTER

#### **WARNING - PROPRIETARY RIGHTS NOTICE**

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Subject: TBO Escalation Options and Process

Applicability: **PT6A Engines** 

Note: there are significant changes introduced to this SIL through revision 7 and change bars have not been added.

#### Purpose:

Pratt & Whitney Canada Corp. (P&WC) can provide, upon request and after evaluation, recommendations for extended Time Between Overhaul (TBO) intervals. Procedures and requirements are further detailed in the applicable Service Bulletin (SB) or P&WC Engine Maintenance Manual (EMM) covering the "Operating Time Between Overhauls and Hot Section Inspection Frequency (TBO/HSI)" for the various PT6A engine models. Relevant SBs and EMMs are referenced within Appendix F.

This Service Information Letter (SIL) is issued to advise all operators of the various options for PT6A engines, with process guidelines to assist operators for submitting applications for TBO escalation.

The ability to increase the TBO on PT6A engines is a testament to their reliability and to the maintenance benefits to our operators. The current P&WC process reflects latest industry best practices in requiring multiple samples for higher TBO extensions. Escalation of TBO's can also help operators plan for business efficiency.

P&WC is happy to announce that the TBO escalation process has migrated to the My P&WC Power (MPP) customer portal, whereby a new "Engineering Service" is available to the Operator to submit, receive and review TBO escalation submissions. P&WC encourages Operators to register on our customer portal as soon as possible, in order to establish an immediate two-way communication channel.

Depending on the respective engine models/groups involved in the request, there may also be various options for escalating the TBO intervals (fleet or engine specific), to harmonize the interval between models or transfer the recommendation.

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Additionally, for maintenance scheduling purposes, the applicable SB or EMM may provide allowances for TBO/HSI contingency extensions. For interval extensions beyond this allowance, the operator may submit a request to P&WC for evaluation. Additional information for submitting TBO/HSI maintenance scheduling contingency extensions will be made available through a new P&WC SIL GEN TBC (to be released). Noting these contingency extensions will be beyond published intervals, the P&WC recommendation will typically be issued in the form of a Maintenance Deviation (DAA) Letter, which may incur a fee per P&WC SIL GEN-122.

#### Introduction:

The intent of this SIL is to describe in general the TBO escalation process and to offer guidelines to assist operators in taking full advantage of the process.

PT6A engines are required to undergo periodic inspection in accordance with a pre-established schedule in order to ensure airworthiness and safety, TBO and HSI intervals represent the two major scheduled inspections.

TBO escalation options available through MPP, refer to specific EMM or TBO SB for engine model eligibility:

- Option A Fleet TBO escalation by sampling
- TBO Harmonisation of a mixed fleet
- Option B Engine Specific TBO escalation
- Option C Engine Specific Progressive Maintenance Program (PT6A-67D only).
- TBO Transfer of TBO interval recommendations

#### Access to MPP Customer Portal for TBO Escalation

Operators will need to have a P&WC customer account with the online platform MyP&WCPower (https://customer.pwc.ca/).

Log into the customer portal, all of the TBO escalation forms are available through the menu bar selection "Services" and under "Engineering Services" the new feature is titled "TBO/HSI Contingency Extension and Escalation Request". The various options are available by selecting the "New Request" button.

If operator requires assistance with My P&WC Power portal access or required further information, please contact your local P&WC Field Support Manager (FSM) or P&WC Customer first Centre (CFirst)

Customer First Centre (CFirst):

Email: CFirst@pwc.ca

1 450 647-8000 Telephone:

> 1 800 268-8000 (international access code) + 8000 268-8000

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PRATT & WHITNEY CANADA CORP.

Respectfully,

Nathan Carins Associate Director

PT6A Service Engineering

**Customer Service** 

#### Appendix List:

- A. Guidelines for Option A Fleet TBO escalation by sampling
  - A1. Fleet TBO Sample Request Form
  - A2. Fleet Data List
- B. Guidelines for Option B Engine Specific TBO Escalation
  - B1. Option B Operator Qualification Application and Checklist
  - B2. Option B Engine Qualification Application and Checklist
  - B3. Option B Annual Report
- C. Guidelines for Option C Engine Specific Progressive Maintenance Program (PT6A-67D only)
- D. Guidelines for TBO Transfer Requests
- E. Guidelines for Option A Fleet TBO Harmonisation
  - E1. TBO Harmonisation Request Form
- F. List of PT6A SBs and EMMs publishing TBO requirements

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### APPENDIX A Guidelines for Option A – Fleet TBO escalation by sampling

For an Option A fleet escalation request, this is to be submitted by the Operator before the sample engine is inducted for overhaul. The respective Overhaul Shop will automatically receive advice after Operator submission and then following engine induction, the Overhaul Shop will be able to provide summary and condition report documents to support the submission.

#### Sample engine eligibility:

Identify a sample engine from the Operator fleet that is due for scheduled overhaul that is representative of the mission profile, operating environment and maintenance practices.

Ensure the engine meets the sample engine eligibility criteria, refer EMM or TBO SB as applicable. Escalation of an operator's TBO requires one or two sample engines meeting the following criteria:

- Sample engine has been operated by the current operator for the majority of the TBO interval (more than 50% of the current operator's P&WC-recommended TBO interval).
- Sample engine did not have a major repair since the last overhaul (major repair may be defined as a repair in accordance with the P&WC Overhaul Manual (OHM)).
- Engine time since new (TSN) or time since overhaul is within 250 flight hours from the operator's current P&WC-recommended TBO interval. The sample engine may accumulate hours beyond the current interval.
- Engine operation and maintenance has been in full compliance with applicable Instructions for Continued Airworthiness (ICAs), including Aircraft Pilot Operating Handbook, Aircraft Maintenance Manual, P&WC EMM and SBs.
- Engines must have incorporated only new P&WC parts originally supplied by P&WC or parts shall have been repaired in accordance with P&WC approved repair processes.

#### Maintenance Scheduling Extension:

For a twin engine aircraft where the two engines have identical hours, the sample engine should be removed and a spare or rental engine installed. Operators may also elect to use the maintenance scheduling extension process for the opposite engine (twin application), whilst the escalation request is being evaluated. Additional information for submitting TBO/HSI maintenance scheduling contingency extensions will become available through P&WC SIL GEN-TBC (to be released).

#### MPP Customer Portal Option A Submission

From the TBO/HSI Contingency Extensions and Escalation Request screen, select "New Request" and "Option A". This is the Option A TBO escalation request submission form, there is header contact information and four (4) tabs that are required to provide the necessary details for the submission. This process is equivalent to the prior manual EMM or TBO SB form submission process.

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- Header contact information. Verify that the account is correct, if necessary, the details may be edited.
- Basic Details tab. These requirements are equivalent to the details specified on the Option A Fleet TBO
  Evaluation Sample Request Form (refer Appendix A1). Enter the information for the requestor company (this
  contact will be addressee for the issued escalation letter), maintenance facility for engine overhaul induction
  and the respective sample engine details. There are two (2) questions that relate to the operation and
  maintenance history for the sample engine.
  - NOTE: the P&WC recommendation for a TBO escalation is provided to the owner of the engine.
- Fleet Data tab. These requirements are equivalent to the information specified on the Fleet Data List Form (refer Appendix A2). The fleet data may be entered manually. Alternatively, a template file may be downloaded, when prepared in this format, it will enable uploading and auto-population of this form.
- Supporting Documents tab. Should additional supporting information be required, this may be attached to the submission using this tab.
- Acknowledgements tab. Final step for the submission is to complete the declaration, this is equivalent to signing the respective request forms.

Following successful submission, an automatically generated email will be issued to the Operator to acknowledge receipt and the Overhaul Facility to advise that a sample engine will be inducted for TBO evaluation. P&WC will also receive confirmation and the task will be registered for processing. The Operator may then dispatch the engine for overhaul induction, advising that this engine is a sample for TBO evaluation purposes.

#### Sample Engine Evaluation:

The Overhaul Facility identified in the submission will also receive an automatic email notification.

NOTE: For the purposes of this SIL, "Overhaul Facility" refers to any recognised P&WC Service Centre or P&WC Designated Overhaul Facility (DOF).

The evaluation consists of two stages, following engine disassembly:

- 1 The first portion consists of a visual ("dirty") examination of the components prior to cleaning to assess whether the hardware appears capable of an additional 500 hours of operation.
- 2 -Following satisfactory completion of this phase, the second portion consists of a detailed ("clean") examination of the components to the requirements of the P&WC Overhaul Manual (OHM).

Following completion of these "Dirty" and "Clean" inspections, the overhaul facility will provide reports to P&WC by email. These reports are to be sent to <a href="mailto:pt6atboevaluation@pwc.ca">pt6atboevaluation@pwc.ca</a>

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#### P&WC Review of the Sample engine report:

Once these reports are received, the evaluation will continue until a resolution has been identified. The Operator and Overhaul Facility will receive confirmation for the outcome of the evaluation. Should additional information be required for the evaluation, P&WC will either contact the Overhaul Facility or the Operator directly.

After successful completion of the required number of samples (refer to the respective EMM or SB for details) P&WC will issue a letter to the operator stating that a TBO escalation is recommended for the customer's fleet. Please note, P&WC's TBO recommendation is subject to approval by the local airworthiness authority.

Should this evaluation be the first sample of more than one engine sample, following successful completion, P&WC will issue a letter to the operator stating that this engine is an acceptable representative sample for the TBO escalation and a subsequent sample is required in order to issue the P&WC TBO recommendation letter.

If the evaluation is successful, within the Customer Portal where the submission was made, the Operator may complete the payment using their customer account and download a copy of the issued P&WC letter. Refer to PT6A-SIL107 for more information regarding TBO escalation charges.

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## APPENDIX A1 Option A Fleet TBO Evaluation Sample Request Form

REQUESTING PARTY D.	ATA			
Operating Company Name				
Operating Company Name				
Company Address				
Telephone Number				
Fax Number				
Company Contact Name	-			
Telephone Number				
Facsimile Number				
Email Address				
Maintenance Facility Name		(	if other than owner)	
Contact Name	-			
Title				
Telephone Number Facsimile Number				
Email Address				
Indi Address				
SAMPLE ENGINE DATA				
Engine Model		* Engine Serial Nun	ther DCE.	
* Total Time Since New		hours		
* Total Time Since Overhaul		hours		
Current Operator TBO		hours		
	rated by the requesting party for t hours accumulated by the reques			No hours
Did this engine undergo majo	or repair (requiring removal from t	he aircraft) during this last TB	O period? Yes	No _
f yes, please provide details o	f the repair performed			
Reason for removal				
2. Total time (since new or sin	ce overhaul as applicable) of san	nple engine at time of major re	epair	hours
<ol><li>List of major parts replaced</li></ol>	by the repair agency who perform	ned the repair.		
If this comple does not most th	ne minimum eligibility criteria (as l	isted in the applicable TROS	E) places emplein why ve	u baliana that th
	ed as an eligible sample for the 1			
				North and a
l understand that the same en considered as an acceptable s	gine submitted for the purpose of ample.	TBO evaluation must meet m	inimum eligibility criteria	for it to be
	ntion provided herein is exact to ti sample engine's eligibility to this p		that I may be requested t	to provide

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## APPENDIX A2 Option A Fleet TBO Evaluation Sample Request Form

List other engines in the fleet for which the TBO extension requested would be applicable (Subject to the compliance with this SB).							
Engine Model	S/N	TTSN	TTSO	Time * Date	TTSO at induction into the fleet	Date of entry in service or last overhaul	Shop where the last overhaul was carried out

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## APPENDIX B Guidelines for Option B – Engine Specific TBO escalation

An Option B engine-specific escalation request evaluates an individual engine, based on a full evaluation of their configuration, condition and operation. The Operator is also evaluated for applicability against eligibility criteria. Registration in this program is recommended as early as possible after new or overhaul. Please refer to the respective P&WC TBO SB or EMM for details of eligibility, initial and on-going configuration and maintenance requirements.

#### MPP Customer Portal Option B Submission

From the TBO/HSI Contingency Extensions and Escalation Request screen, select "New Request" and "Option B".

This is the Option B TBO escalation request submission form, there is header contact information and five (5) tabs that are required to provide the necessary details for the submission. This process is equivalent to the prior manual EMM or TBO SB form submission process.

- Header contact information. Verify that the account is correct, if necessary, the details may be edited.
- Basic Details tab. These requirements are equivalent to the header details specified on the Option B Engine
  Qualification Application & Checklist Form (refer Appendix B2). Enter the information for the requestor
  company (this contact will be addressee for the issued escalation letter), line maintenance facility and the
  respective engine information.
  - NOTE: the P&WC recommendation for a TBO escalation is provided to the owner of the engine.
- Operator Checklist. Enter the information related to PT6A Maintenance Experience and Operator Mission Profile, Quality Assurance, Maintenance, Facility, Publications, Personnel and Tooling. These requirements are equivalent to the details specified on the Option B Operator Qualification Application & Checklist Form (refer Appendix B1). This Checklist will advise where additional supporting documentation is required.
- Engine Checklist. There are questions relating to the engine eligibility, configuration, current lifting history, exceedance monitor status, accessory records and mid-life inspection status. These requirements are equivalent to the details specified on the Option B Engine Qualification Application & Checklist Form (refer Appendix B2).

The Engine Checklist includes the FSM Approval Status, requesting if the FSM has been consulted during the submission process. This is an important step to ensure connection with the local FSM and they may provide support for the submission. P&WC Service Engineering may contact the FSM for assistance with the evaluation.

- Supporting Documents tab. Additional supporting information is required to substantiate the entries on the Operator Qualification Checklist, this may be attached to the submission using this tab.
- Acknowledgements tab. Final step for the submission is to complete the declaration, this is equivalent to signing the respective request forms.

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The P&WC TBO SB or EMM refers to completion of the checklists by qualified Part 145, Part 135 or Part 121 Inspectors or equivalent. Alternatively, the list may be completed by other operator personnel and submitted to the local FSM for review and approval. In order to complete the declaration, the Operator is to ensure compliance with this and other eligibility criteria in the respective P&WC TBO SB or EMM.

Following successful submission, an automatically generated email will be issued to the Operator to acknowledge receipt. P&WC Service Engineering and the FSM will also receive confirmation and the task will be registered for processing.

#### P&WC Review of the Application and Checklists:

Once the complete submission is received and validated against SB requirements, the evaluation will continue until a resolution has been identified. The Operator will receive confirmation for the outcome of the evaluation. Should additional information be required for the evaluation, P&WC will either contact the Operator directly or the FSM.

After successful completion of the evaluation, P&WC will issue a letter to the operator stating that a TBO escalation is recommended for the individual engine serial number. Please note, P&WC's TBO recommendation is subject to approval by the local airworthiness authority.

If the evaluation is successful, within the Customer Portal where the submission was made, the Operator may complete the payment using their customer account and download a copy of the issued P&WC letter. Refer to PT6A-SIL107 for more information regarding TBO escalation charges.

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## APPENDIX B1 Option B Operator Qualification Application and Checklist

ENGINE OPERATI	NG TIME BETWEEN OVERI FREQUE		ND HOT SECTION INSP	ECTION
Option B	Operator Qualification App	lication a	nd Checklist	
Company Name Company Address		Telephone Fax Email		
Company Contact Email		Title Telephone Fax		
Maintenance Facility Contact Name e-mail Fax		Title Telephone	(if other than operator)	
PT6A Maintenance Experience	Current Experience: Yes No	\$ \$ \$	Operating Certificate Part 91 or equivalent ( Part 121 or equivalent ( Part 135 or equivalent ( Other:	)
Operator Mission Profile	Average hours / month Average cycle-to-hour ratio	=		
Quality Assurance (Part 121 / 135 only)	Q.A. Program in place	In-House Yes No	Yes No	
Maintenance Tracking	Manual system Computer software ECTM capability	()()	()()	
	Please provide a brief summary of the maintenance tracking system and ECTM in place:			
Facility	Maintenance hangar sufficient for applicable aircraft installation Segregated and secure parts area	Yes No		
Publications	Illustrated Parts Catalog(s): Current Illustrated Parts Catalog Subscription to revisions up-to-date		{ } { }	
	Engine Maintenance Manual(s): Current Maintenance Manual Subscription to revisions up-to-date	()()	( ) ( )	
	Service Bulletins (SB): Complete SB set for applicable engine Subscription to SB's up-to-date	$\Box$	{} {}	C231512

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### APPENDIX B1 Option B Operator Qualification Application and Checklist

sonnel	Minimum Personne Director of Maintena Chief Inspector Experienced PT6A I Chief Pilot	ance	In-House Yes No ( ) ( ) ( ) ( ) ( ) ( )	Contract   Yes   No   ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	(Attach resume) (Attach resume)
sonnel Training	Pilot recurrent trainin # Mechanics with P # Mechanics schedu	T6A factory training	In-House	Contract	(Attach names / date (Attach names / date
ling	Specialized engine of Ground support equilibrium and mice ECTM (tools to dow Compressor / Turbin Fuel Nozzfe Inspect Propeller Balancing	ipment d-life inspection inload files) ne Wash ion	Yes No ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	Yes No ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	(Attach list) (Attach list) (Attach list)
	Cockpit instrumenta Borescope inspection		88	88	(Attach specification
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## APPENDIX B2 Option B Engine Qualification Application and Checklist

Company Name	Telephone
Company Address	
	Email
0	
Company Contact	Title
Email	TelephoneFax
Maintenance Facility	(If other than operator)
Contact Name	
Email	Telephone
Fax	
Trisk	
TCSN Total Cycle Since New TTSO Total Time Since Overhaul TCSO Total Cycles Since Overhaul TTSHSI Total Time Since Hot Section TCSHSI Total Cycles Since Hot Section TCSHSI Total Cycles Since Hot Section	n Inspection on Inspection rother qualified inspector shall initial for conformity with the following statements:
TCSN Total Cycle Since New TTSO Total Time Since Overhaul TCSO Total Cycles Since Overhaul TTSHSI Total Time Since Hot Section TCSHSI Total Cycles Since Hot Section TCSHSI Total Cycles Since Hot Section	n Inspection on Inspection
TCSN Total Cycle Since New TTSO Total Time Since Overhaul TCSO Total Time Since Overhaul TSHSI Total Time Since Hot Section TCSHSI Total Time Since Hot Section TCSHSI Total Cycles Since Hot Section Total Cycles Since New Total Cycles Since Overhaul Total Cycles Since Overhaul Total Cycles Since Hot Section To	n Inspection on Inspection  r other qualified inspector shall initial for conformity with the following statements:  Conforms Inspector's Yes No Initials  &WC recommended components,
TCSN Total Cycle Since New TTSO Total Time Since Overhaul TCSO Total Cycles Since Overhaul TTSHSI Total Time Since Hot Section TCSHSI Total Cycles Since Hot Section TCSHSI Total Cycles Since Hot Section	n Inspection on Inspection  r other qualified inspector shall initial for conformity with the following statements:  Conforms Inspector's Yes No Initials  &WC recommended components, ( ) ( )

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## APPENDIX B2 Option B Engine Qualification Application and Checklist

	nformity of availability of assembly and comp	onent records				orms <u>No</u>	Inspector's Initials
Accessories	and cycles since new, since last overhaul a time since new and since overhaul of life limited rotors (Ref P&WC SB/EMM for		LIFE)	(	)	()	
	ing components have a durability servonformity with the respective SB/EMM.			onfo	orm N	-	
The mainli	ne ball bearing No. 1	TTSN	(	)	(	)	
he mainli	ne ball bearing No. 4	TTSN	(	)	(	)	
he compr	essor turbine blades	TTSN	1	)	(	)	
he 1 <sup>st</sup> sta	ge power turbine blades	TTSN	(	)	(	)	
he 2 <sup>™</sup> sta	ige power turbine blades (If applicat	ole) TTSN	(	)	(	)	
he RGB 1	<sup>st</sup> stage Sun and Planet Gears	TTSN	(	)	(	)	
Vircraft mu	st be equipped with an approved	exceedance monitor	(	)	(	)	
	ned up for ECTM services with a fenter (DAC).	P&WC approved Designated	(	)	(	)	
	Iletin and Accessory configuration Applicable TBO SB/EMM and confirm combist.		ecomr	nen	ded	Service	bulletin Configurat
	List the SB's Complied with						

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## APPENDIX B2 Option B Engine Qualification Application and Checklist

Refer to Applicable TBO SB/EMM to confirm the Requirements of Accessories for applicable parts listed. Please insert "N/A" if not applicable.

Part Name	Mid-Life Requirement	TSO	Action Completed (yes / No)
Propeller Governor	Shop / On-Wing Functionality Check		( ) ( )
Fuel Heater	Inspect per EMM		( ) ( )
Fuel Pump	Shop Functionality Check		( ) ( )
Fuel Control Unit	Inspect per EMM		( ) ( )
Flow Divider	Shop Functionality Check		( ) ( )
Fuel Nozzles	Overhaul		( ) ( )
Bleed Off Valve	Shop / On-Wing Functionality Check		( ) ( )
T5 Harness	Inspect per EMM		( ) ( )
T5 Thermocouple	Inspect per EMM		( ) ( )
T1 Thermocouple	Inspect per EMM		( ) ( )
Start Control	Shop Functionality Check		( ) ( )
Automatic Fuel Dump Valve	Shop Functionality Check		( ) ( )
Overspeed Governor	On-Wing Functionality Check		( ) ( )
Ignition Exciter	Inspect per EMM		( ) ( )
Chip Detector	Inspect per EMM		( ) ( )
T2 Compensator	Clean and recalibrate		( ) ( )
Governor Free Turbine	Shop Functionality Check		( ) ( )
Torque Limiter	On-Wing Functionality Check		( ) ( )

Inspector	Initials:	
•		

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## APPENDIX B2 Option B Engine Qualification Application and Checklist

Mid-life Inspection Status		Yes No
d Life Inspection Completed?		()()
DECLARATION		
provided herein is exact to the best of my know recommendation requires additional maintenan independently verify all submitted information a and maintain engines in accordance to the appl	edge based upon as inspection of engine records and the ce actions at mid-life in accordance with SPEMV or the and acknowledge this application is subject to P&WC wr icable Pilots Operating Handbook (POH), applicable Main Ill and vold. I acknowledge this is a guide and the text in	riteria as determined by P&WC. I hereby attest the information hat P&WC may request additional data. I acknowledge the TBO TBO recommendation may become void. I grant P&WC all right: itten approval. I acknowledge that failure in the future to opera tenance Manuals, applicable Airworthiness Detectives and P&V SPEW will govern in all cases. I agree to provide an annual rep
Director of Maintenance		
Name (printed)	Signature	Date
Inspector Completing Checklist		
Name (printed)	Signature	Date
Aircraft Owner		
		(
Name (printed)	Signature ollication and Engine Qualific	Date Chookingt

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## APPENDIX B3 Option B Annual Report

#### **Option B Annual Report** This form is to be completed yearly by PT6A operators registered in the 'Engine Specific TBO Extension Option B' to support the yearly operation and maintenance requirements of the program. **OPERATOR DATA** Name (owner of engine): Maintenance Facility (if other than owner): **ENGINE DATA** Engine Model: Engine S/N: TSN: **Current TBO Interval:** A) ECTM Use of ECTM program: ☐ Yes Data review by trained/qualified technicians: ☐ Yes Frequency of reviewed: \_ Last time/TSN completed: Interval for compressor wash: Last time/TSN completed: Interval for turbine wash: Last time/TSN completed: C) FUEL NOZZLES INSPECTION Interval for nozzles Inspection: Last time/TSN completed: Concurrent borescope Inspection of hot section: Yes D) COMPRESSOR BLADES INSPECTION Interval for blades inspection: Last time/TSN completed: E) CONTROL AND POWER ADJUSTMENTS/CHECKS Interval for adjustments/checks: Last time/TSN completed: F) PROPELLER Last time/TSN completed: Interval for propeller balance: G) ENGINE INSTRUMENTATION (ITT, NG, Tq) Interval for gauges calibration: Last time/TSN completed: H) MISSION CONSISTENCY Mission that the engine is used for and area of operation have remained as specified at induction of TBO extension? ☐ Yes ☐ No I hereby attest that the information provided herein is exact to the best of my knowledge and that I may be requested to provide additional data to support yearly requirements of Option B TBO Extension. Completed by: Date: Please return report to: Pratt & Whitney Canada Attn: Manager Serv. Engineering - Small Turboprops (01PD4) 100 Marie-Victorin Longueull, Quebec Canada, J4G1A1 Email: pt6atboevaluation@pwc.ca

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#### **APPENDIX C**

### Guidelines for Option C – Engine Specific Progressive Maintenance Program (PT6A-67D only)

For an Option C engine-specific progressive maintenance program request, there are specific eligibility criteria, ongoing maintenance requirements and intermediate shop visits listed in P&WC SB 14003, for PT6A-67D models only. To request an Option C TBO Transfer, the operator/owner can apply using this process to submit a TBO Option C request form to P&WC.

#### MPP Customer Portal TBO Option C Request Submission

From the TBO/HSI Contingency Extensions and Escalation Request screen, select "New Request" and "Option C".

The MPP process for submission of the Option C request form is aligned to that for Option B submission. For guidance on the MPP interface and required steps, please refer to Appendix B.

Should you require additional information or guidance, please contact your local FSM.

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### APPENDIX D Guidelines for TBO Transfer

P&WC escalation recommendations are only transferable between operators under conditions listed within the respective P&WC TBO SB or EMM, as applicable. To request a TBO Transfer between operators or from one TBO extension option to another, the operator/owner can apply using this process to submit a TBO Transfer form to P&WC.

### MPP Customer Portal TBO Transfer Request Submission

TBO/HSI Contingency Extensions and Escalation Request screen, select "New Request" and "TBO Transfer".

This is the TBO Transfer request submission form, there is header contact information and four (4) tabs that are required to provide the necessary details for the submission.

- Header contact information. Verify that the account is correct, if necessary, the details may be edited.
- Basic Details tab. Enter the information for the engine family and models related to the transfer. Should there
  be a mixed engine model fleet, there is a provision at the bottom to provide additional details. Insert
  information related to the previous operator and the new operator. There are two (2) questions for each that
  relate to the latest P&WC recommended TBO interval and the corresponding escalation letter reference
  number.
- Fleet Data tab. These requirements are equivalent to the information specified on the Fleet Data List Form (refer Appendix A2) that an operator would submit for Option A fleet TBO escalation. The fleet data may be entered manually. Alternatively, a template file may be downloaded, when prepared in this format, it will enable uploading and auto-population of this form.
- Supporting Documents tab. Should additional supporting information be required, this may be attached to the submission using this tab.
  - IMPORTANT: In processing a TBO Transfer request, it is important for P&WC to validate that there has been no change in the mission profile, operating environment, maintenance practices and quality assurance processes. Request this information be provided on company letterhead to substantiate the transfer and attached as a supporting document.
- Acknowledgements tab. Final step for the submission is to complete the declaration, this is equivalent to signing the respective request forms.

Following successful submission, an automatically generated email will be issued to the Operator to acknowledge receipt. P&WC will also receive confirmation and the task will be registered for processing.

After successful completion of the evaluation, P&WC will issue a letter to the operator stating that a TBO transfer is recommended. Please note, P&WC's TBO recommendation is subject to approval by the local airworthiness authority. Within the Customer Portal where the submission was made, the Operator may download a copy of the issued P&WC letter.

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PRATT & WHITNEY CANADA CORP.

### APPENDIX E Guidelines for Fleet TBO Harmonisation

Applicable engine models that permit harmonization between Operator mixed fleets are identified within P&WC SIL PT6A-233 and SIL PT6A-259. This process is used to submit a fleet harmonization reguest to P&WC.

#### MPP Customer Portal Harmonization Request Submission

TBO/HSI Contingency Extensions and Escalation Request screen, select "New Request" and "TBO Harmonization".

This is the TBO Harmonization request submission form, there is header contact information and five (5) tabs that are required to provide the necessary details for the submission. This process is equivalent to the prior manual form submission process.

- Header contact information. Verify that the account is correct, if necessary, the details may be edited.
- Basic Details tab. These requirements are equivalent to the details specified on the TBO Harmonization Request Form (refer Appendix E1). Enter the information for the requestor company (this contact will be addressee for the issued escalation letter) and the line maintenance facility. There are two (2) questions that relate to the latest P&WC recommended TBO interval and the corresponding escalation letter reference number.
- Harmonization Form tab. There are a series of questions related to the fleet operation, maintenance, current
  exceedance monitor installations, data analysis centre subscription and mission, to ensure consistency
  across the operator mixed fleet. There are an additional two (2) questions that relate to engine wash and fuel
  nozzle servicing intervals. Additional information refer TBO Harmonization Request Form, Appendix E1.
- Fleet Data tab. These requirements are equivalent to the information specified on the Fleet Data List Form (refer Appendix A2) that an operator would submit for Option A fleet TBO escalation. The fleet data may be entered manually. Alternatively, a template file may be downloaded, when prepared in this format, it will enable uploading and auto-population of this form.
- Supporting Documents tab. Should additional supporting information be required, this may be attached to the submission using this tab.
- Acknowledgements tab. Final step for the submission is to complete the declaration, this is equivalent to signing the respective request forms.

Following successful submission, an automatically generated email will be issued to the Operator to acknowledge receipt. P&WC will also receive confirmation and the task will be registered for processing.

After successful completion of the evaluation, P&WC will issue a letter to the operator stating that a TBO harmonization is recommended. Please note, P&WC's TBO recommendation is subject to approval by the local airworthiness authority. Within the Customer Portal where the submission was made, the Operator may download a copy of the issued P&WC letter.

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### **APPENDIX E1 TBO Harmonisation Request Form**

Company Name	Telephone	
Company Address		
-		
Company Contact	Title	
Email	Telephone	
Maintenance Facility	(If other than operator)	
Email	Telephone	
. The engines are factory built engines or engines	Conforms	Comments:
overhauled/repaired at a P&WC service center or a P&WC Designated Overhaul Facility (DOF).	YES NO	
The engines incorporate only P&WC parts originally supplied by P&WC or its authorized distributors or components repaired in accordance with P&WC approved repair process.	Conforms YES NO	Comments:
The engines are operated within the limitations of the relevant aircraft operating manuals and are maintained in accordance with the appropriate P&WC Instructions for Continued Airworthiness.	Conforms YES NO	Comments:
. For fleet operated under extended TBO, does ircraft have any exceedance monitor installed and inctional.	Conforms YES NO	Comments:
. Active Data Analysis Center (DAC) Subscription.	Conforms YES NO	Comments:
. All Aircrafts are operated under similar mission. foreover, maintenance is consistent across all engine lodels.	Conforms YES NO	Comments:
Latest TBO recommendation from P&WC.	TBO: STP Letter:	
. Engine internal wash interval.	Compressor: Turbine:	Comments:
Fuel nozzle inspection interval.	Interval:  Concurrent borescope inspection ( ) Yes	Comments:
ereby attest that the information provided herein pport the harmonization of Time Between Overl empleted by:	n is exact to the best of my knowledge and that I m naul.	ay be requested to provide additional data to

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## APPENDIX F List of PT6A SBs and EMMs publishing TBO escalation requirements

List of PT6A TE	<u>80 SBs:</u>
SB 1003	PT6A-6/-6A/-6B/-25/-25A/-25C/-34B
SB 1303	PT6A-34AG
SB 1403	PT6A-34/-35/-36
SB 3003	PT6A-38/-41/-42-/42A
SB 3303	PT6A-45A/-45B/-45R
SB 4003	PT6A-50
SB 1703	PT6A-114/-114A
SB 1803	PT6A-6C/20/-20/-20A/-20B/-21/-27/-28/-135/-135A
SB 12003	PT6A-11/-110/-112/-121
SB 12103	PT6A-11AG/-15AG
SB 13003	PT6A-65AR/-65B/-65R
SB 13203	PT6A-60AG/-65AG
SB 13303	PT6A-52/-60A/-61/-62
SB 14003	PT6A-67D/-67R/-67R
SB 14303	PT6A-67AF/-67F
SB 14503	PT6A-67AG
SB 14603	PT6A-64/-66/-66A/-66B/-66D/-67/-67A/-67B/-67P/-67T

### <u>List of PT6A P&WC Engine Maintenance Manuals</u>, containing TBO procedures in Chapter 05-20-00:

PN 3075742	PT6A-140
PN 3077182	PT6A-140A
PN 3079582	PT6A-140AG
PN 3135622	PT6A-65SC

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