

	<b>BRAZILIAN AIR FORCE</b> <b>AERONAUTICAL AND WARFARE MATERIEL DIRECTORATE</b> <b>SÃO PAULO AERONAUTICAL MATERIEL DEPOT</b>
	<b>TECHNICAL SPECIFICATIONS nº 005/TMOT/2024</b>
DATE: Sep 2 <sup>nd</sup> , 2024	

## I. PURPOSE

This Technical Specification (TS) has the purpose to present the collection of necessary and enough elements, with an adequate level of accuracy, to define the exchange of one PT6A-114/114A model engine, Serial Number PCE-PC1211, by another one overhauled PRATT & WHITNEY PT6A-114/114A engine with all accessories with TSO: 00h:00min (Time Since Overhaul) and CSO: 00cy (Cycle Since Overhaul) as well as with all LLP (Life Limit Parts) with LCF (Life Cycle Factory) must be delivery with CSN (Cycle Since New): 00 cycles. This engine model is applied in C-98 aircraft (Cessna 208A Caravan I), belonging to the fleet of Brazilian Air Force.

## II. OBJECT

The exchange of one PRATT & WHITNEY PT6A-114/114A engine, Serial Number PCE-PC1211, by another one PT6A-114/114A engine overhauled with all accessories also overhauled or new as well as with all life limit parts respecting the requirements described on this document.

Some information about the engine currently in the Brazilian Air Force fleet are listed at the table below:

MODEL	PN	SN	TSN	TSO	CYCLES
PT6A-114/114A	3044000	PCE-PC1211	4426:20	4426:20	5179 CY

## III. REASONS FOR REMOVAL

The engine PT6A-114/114A SN PCE-PC1211 was removed from the aircraft because of the following reasons:

- TBO

## IV. ENGINE DATA

### 1. Life Limited Parts – Service Life Data

The following table shows the number of accumulated cycles (AC Cycles) since new the rotary components of the engine have completed.

COMPONENT	PN	SN	LFC LIMIT	AC CYCLES
Disk	3011713	A001NMXT	25000	5179

Hub, Compressor, AIRC	3013111	RWA11A591	19000	5179
Disk and Hub, Compressor, Aircraft gas Turbine Engine	3013411	A001P69E	16000	5179
Disk, Axial Compress	3013712	A001NW2M	24000	5179
Disk, Turbine, Aircraft gas Turbine Engine	3026812	A001P6HR	20000	5179
Impeller	3027798	EAAA000L156	19000	5179

## 2. Soft Time Accessories Data and Disposition

ACCESSORY	PN	SN	TSN	TSO
Pump, Rotary	0258323-150	1183	6617:00	0:30
Bleed-Air	540-1407-4	7650	2198:10	588:55
Fuel Control, Main, Turbine Engine	3244897-4	C66504	1674:30	1674:30
Governor, Constant Speed Drive	8210-002	14254802AE	3551:30	3551:30

## V. ESTIMATED COST

According to market estimates, the maximum purchase price for the exchange by an overhauled engine is US\$ 589,000.00 (five hundred and eighty nine thousand dollars).

## VI. TECHNICAL REQUIREMENTS

The engine and all accessories might be delivery with TSO: 00h:00min (Time Since Overhaul) and CSO: 00cy (Cycle Since Overhaul). Also the LLP (Life Limit Parts) with all LCF (Life Cycle Factory) must be delivery with CSN (Cycle Since New): 00 cycles. It Means that they must have accumulated no more operating hours than those necessary to accomplish their manufacture testing process. The engine and accessories shall not have been used by any previous operator.

The engine must be in airworthiness condition and up to date with respect to the Service Bulletins issued by the manufacturer. At delivery, it must has already undergone the actions to comply all airworthiness directives mandatory as well as with the applicable Service Bulletins up to category 6 (six) issued so far.

## VII. DELIVERY

The engine shall be delivered at the Brazilian Aeronautical Commission in Washington (CABW) warehouse, which address will later be informed, with all caps and covers as well as the engine logbook completed and signed. The engine must be mounted in the approved P&WC shipping container as well as must be preserved condition considering that it might be stored for over 90 days, in accordance with the requirements of the Maintenance Manual.

## VIII. TECHNICAL WARRANTY

The engine shall be subjected to the technical warranty which is either 12 (twelve) months of operation or 500 (five hundred) operation hours, whichever occurs first.

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