



# MINIPACK

Model No. | **GTCP331-500B**  
Part No. | **3800550-1**  
Serial No. | **P-1450**

|           |                |            |
|-----------|----------------|------------|
| CONDITION | Repaired       | TSN 16,359 |
| TAGGED BY | TURBINEAERO    | CSN 10,562 |
| TAG DATE  | Sept. 25, 2025 | TSI 0      |
| TRACE TO  | CATHAY PACIFIC | CSI 0      |
| LOCATION  | UK             | TSR 0      |
|           |                | CSR 0      |

## LLPs

|                       |       |    |
|-----------------------|-------|----|
| 1ST STG COMP IMPELLER | 10490 | CR |
| 2ND STG COMP IMPELLER | 12309 | CR |
| LOAD COMP IMPELLER    | 13304 | CR |
| 1ST STG TURB ROT      | 11561 | CR |
| 2ND STG TURB ROT      | 16438 |    |
| 3RD STG TURB ROT      | 11167 |    |

## Additional Information:

|                                               |                                        |
|-----------------------------------------------|----------------------------------------|
| INCLUDED                                      | GENERATOR                              |
| <input checked="" type="checkbox"/> BOX/STAND | <input checked="" type="checkbox"/> NO |

### PRESERVATION

☐ 6 MO ☐ 12 MO ☒ 24 MO

|             |              |
|-------------|--------------|
| APPLICATION | AVAILABILITY |
| B777        | TBD          |

### TRANSACTION TYPE

☒ LEASE ☒ EXCHANGE  
☒ OUTRIGHT

More about your APU



## Non-Incident Statement



**AIRCRAFT OPERATING CERTIFICATE NUMBER: 1 (ONE)**

Cathay Pacific City,  
8 Scenic Rd.,  
Hong Kong International Airport  
Lantau,  
Hong Kong.

**Non-incident Statement**

|                   |               |
|-------------------|---------------|
| APU Model Number  | GTCP 331-500B |
| APU Part Number   | 3800550-1     |
| APU Serial Number | P-1450        |

|                        |              |             |
|------------------------|--------------|-------------|
|                        | Installation | Removal     |
| Date                   | 15-Jan-2025  | 08-Aug-2025 |
| Total Time Since New   | 15459        | 16347       |
| Total Cycles Since New | 9847         | 10552       |

Cathay Pacific certifies that it was the operator of the above equipment since latest installation date above until the date of removal and that, to the best of its knowledge and based on all available records, the APU complies with the following statements:

1. Neither the aircraft, nor the APU installed thereon have been:
  - a. damaged during, or identified as the root cause of, a reportable incident or accident as defined by Annex 13 to the Chicago Convention; or
  - b. subjected to severe stress or heat (such as in a major engine failure, accident, or fire) or has been submersed in salt water, unless its airworthiness status was re-established by an approved maintenance organization in accordance with the applicable airworthiness regulations and instructions of the type certificate holder and/or supplemental type certificate holder and/or OEM of the part, and supported by an authorized airworthiness release certificate.
2. No part has been installed on the aircraft which was obtained from a military source or was previously fitted to a state aircraft as deemed by Article 3 of the Chicago Convention.

Signed for and on behalf of Cathay Pacific Airways Engineering Department:

Name (PRINT): Talwinder Singh

Signature: 

Title: Senior Technical Services Engineer

Date: 11 Aug 2025



Last Operator  
Disk Sheet



Cathay Pacific Airways Limited  
[www.cathay.com](http://www.cathay.com)

APU P1450 LLP SHEET AS OF 08 AUG 2025

| ATA  | Slot Name                    | Installed Serial | Installed Item | TSN      | CSN   | LLP Limit | Cycles Remain |
|------|------------------------------|------------------|----------------|----------|-------|-----------|---------------|
|      | APU                          | P1450            | 3800550-1      | 16359:00 | 10562 |           |               |
| 4920 | IMPELLER-LOAD COMPSSR        | 060322903099     | 3822612-1      | 26677:00 | 16510 | 27000     | 10490         |
| 4900 | ROTOR ASSY-3RD STAGE         | 060134505198     | 3842160-6      | 19525:00 | 15833 | 27000     | 11167         |
| 72   | DISK-ROTOR TURBINE 2ND STAGE | 010335701600     | 3842156-1      | 16359:00 | 10562 | 27000     | 16438         |
| 72   | DISK-ROTOR TURBINE 1ST STAGE | 11-168522-05620  | 3842152-1      | 13375:00 | 15439 | 27000     | 11561         |
| 4920 | IMPELLER-2ND STAGE           | 050322902157     | 3822341-5      | 12018:00 | 13696 | 27000     | 13304         |
| 4920 | IMPELLER-1ST STAGE           | 060322902999     | 3822611-1      | 16740:00 | 14691 | 27000     | 12309         |

Carey Lau

Senior Planning Engineer

Tech Records Section

Engineering Department

Cathay Pacific Airways Limited

國泰航空有限公司

Print Date : 13 Aug 2025





AD/SB Status



**AIRCRAFT OPERATING CERTIFICATE NUMBER: 1 (ONE)**

Cathay Pacific City,  
8 Scenic Rd.,  
Hong Kong International Airport  
Lantau,  
Hong Kong.

**Non AD / SB Statement**

|                   |               |
|-------------------|---------------|
| APU Model Number  | GTCP 331-500B |
| APU Part Number   | 3800550-1     |
| APU Serial Number | P-1450        |

|                        |              |             |
|------------------------|--------------|-------------|
|                        | Installation | Removal     |
| Date                   | 15-Jan-2025  | 08-Aug-2025 |
| Total Time Since New   | 15459        | 16359       |
| Total Cycles Since New | 9847         | 10562       |

Cathay Pacific hereby confirms that no Service Bulletins or AD-related work were implemented or performed on the equipment specified above:

Signed for and on behalf of Cathay Pacific Airways Engineering Department:

Name (PRINT): Talwinder Singh

Signature: 

Title: Senior Technical Services Engineer

Date: 09 Sep 2025

## Service Bulletin Report

The service bulletin record describes all service bulletins incorporated this shop visit.

| S.B. Number | Revision Number | Date         | Description                                                                                                                                                                                                                                                                      | Change No. | Status |
|-------------|-----------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|
| 49-7557     | 0               | Apr 06, 2000 | Disable Generator Filter Clogged Auto-Shutdown                                                                                                                                                                                                                                   | N/A        | C      |
| 49-7997     | 6               | Nov 05, 2020 | Standard Storage and Preservation Guidelines                                                                                                                                                                                                                                     | N/A        | C      |
| 49-8328     | 1               | Sep 01, 2020 | Replace The O-Rings, PN MS9386-013 on The Buffer Air Tube, PN 3618089-3 (post Sb 331-49-7752) with New O-Rings, PN M83248/1-013 and the O-Rings, PN MS9386-109 on The Buffer Air Tube, PN 3884925-1 (pre-SB 331-49-7752) with New O-Rings, PN M83248/1-109 on the 331-500[B] APU | 118        | C      |

**STATUS LEGEND:** PCW = PREVIOUSLY COMPLIED    C = COMPLIED THIS SHOP VISIT  
NC = NOT COMPLIED    N/A = NOT APPLICABLE    N/R = NOT REQUIRED

**Note:** List all SBs requested in customer repair order and all SBs in engineering work scope.

INSPECTOR SIGNATURE & STAMP:   DATE: September 15, 2025



Current 8130/  
Easa Form 1

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------|
| <b>1. Approving Civil Aviation Authority/Country:</b><br><br>FAA/UNITED STATES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2                                       | <h2 style="margin: 0;">AUTHORIZED RELEASE CERTIFICATE</h2> <p style="margin: 0;">FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>3. Form Tracking Number:</b><br><br>F25-A0244      |                        |
| <b>4. Organization Name and Address:</b><br>TURBINEAERO REPAIR LTD<br>700/178 MOO 1, T.BANKAO, A.PANTONG<br>CHONBURI 20160, THAILAND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                         |                                                                                                                                  | <b>5. Work Order/Contract/Invoice Number:</b><br><br>SRT0010521<br>CUST.PO#:111515                                                                                                                                                                                                                                                                                                                                              |                                                       |                        |
| <b>6.Item:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>7.Description:</b>                   | <b>8.Part Number:</b>                                                                                                            | <b>9.Quantity:</b>                                                                                                                                                                                                                                                                                                                                                                                                              | <b>10.Serial Number:</b>                              | <b>11.Status/Work:</b> |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | GTCP331-500[B] APU                      | 3800550-1                                                                                                                        | 1                                                                                                                                                                                                                                                                                                                                                                                                                               | P-1450                                                | REPAIRED               |
| <b>12. Remarks</b><br>Repaired in accordance with EM 49-26-57 Rev.26 Dated October 06, 2023<br>- TSN: 16,359   CSN: 10,562   TSO: 900   CSO: 715   TSR: 0   CSR: 0<br>Incorporate applicable AD: NIL<br>Incorporate applicable SB/SIL: SB49-7557 Rev. 0   SB49-7997 Rev. 6   SB49-8328 Rev. 1<br><div style="text-align: right; margin-top: 10px;">This APU preservation was complied per SB49-7997 Rev. 6</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                        |
| <b>13a. Certifies the items identified above were manufactured in conformity to:</b><br><input type="checkbox"/> Approved design data and are in condition for safe operation.<br><input type="checkbox"/> Non-approved design data specified in Block 12.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |                                                                                                                                  | <b>14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service</b> <input type="checkbox"/> Other regulation specified in Block 12<br>Certifies that unless otherwise specified in block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service. |                                                       |                        |
| <b>13b. Authorized Signature:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>13c. Approval/Authorization No.:</b> | <b>14b. Authorized Signature:</b><br><br>                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>14c. Approval/Certificate No.:</b><br><br>74RY378D |                        |
| <b>13d. Name (Typed or Printed):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>13e. Date (dd/mm/yyyy)</b>           | <b>14d. Name (Typed or Printed):</b><br><br>PREECHA PAMORNRATTANAKUL                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>14e. Date (dd/mm/yyyy):</b><br><br>15/Sep/2025     |                        |
| <b>User/Installer Responsibilities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                         |                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                        |
| <p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.</p> <p>Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.</p> <p>Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p> |                                         |                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |                                                                                   |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------|
| 1. Approving Competent Authority / Country<br><b>EASA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | 2. <b>AUTHORISED RELEASE CERTIFICATE</b><br><b>EASA FORM 1</b> |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    | 3. Form Tracking Number<br><b>E25-A0237</b>                                       |                                                           |
| 4. Organization Name and Address:<br><b>TURBINEAERO REPAIR LTD</b><br><b>700/178 MOO 1, T.BANKAO, A.PANTONG</b><br><b>CHONBURI 20160, THAILAND</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    | 5. Work Order/Contract/Invoice<br><br><b>SRT0010521</b><br><b>CUST.PO#:111515</b> |                                                           |
| 6.Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 7.Description      | 8.Part No.                                                     | 9.Qty                                                                                                                                                                                                                                                                                                                                                                                                        | 10.Serial No.                                                                                                      | 11.Status/Work                                                                    |                                                           |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GTCP331-500[B] APU | 3800550-1                                                      | 1                                                                                                                                                                                                                                                                                                                                                                                                            | P-1450                                                                                                             | REPAIRED                                                                          |                                                           |
| 12. Remarks<br>Repaired in accordance with EM 49-26-57 Rev.26 Dated October 06, 2023<br>- TSN: 16,359 CSN: 10,562 TSO: 900 CSO: 715 TSR: 0 CSR: 0<br>Incorporate applicable AD: NIL<br>Incorporate applicable SB/SIL: SB49-7557 Rev. 0 SB49-7997 Rev. 6 SB49-8328 Rev. 1<br>This APU preservation was complied per SB49-7997 Rev. 6                                                                                                                                                                                                                                                                                                                                                                                                               |                    |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |                                                                                   |                                                           |
| 13a. Certifies the items identified above were manufactured in conformity to:<br><input type="checkbox"/> approved design data and are in condition for safe operation.<br><input type="checkbox"/> non-approved design data specified in Block 12.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |                                                                | 14a. <input checked="" type="checkbox"/> <b>Part-145.A.50 Release to Service</b> <input type="checkbox"/> Other regulation Specified in block 12<br>Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with <u>Part-145</u> and in respect to that work the items are considered ready for release to service. |                                                                                                                    |                                                                                   |                                                           |
| 13b. Authorised Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | 13c. Approval/Authorisation Number                             |                                                                                                                                                                                                                                                                                                                                                                                                              | 14b. Authorised Signature<br> |                                                                                   | 14c. Certificate/Approval Ref. No<br><b>EASA.145.0844</b> |
| 13d. Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | 13e. Date (dd mmm yyyy)                                        |                                                                                                                                                                                                                                                                                                                                                                                                              | 14d. Name<br><b>PREECHA PAMORNRRATTANAKUL</b>                                                                      |                                                                                   | 14e. Date (dd mmm yyyy)<br><b>15/Sep/2025</b>             |
| <b>USER/INSTALLER RESPONSIBILITIES</b><br>This certificate does not automatically constitute authority to install the item(s)<br>Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.<br>Statements in blocks 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown. |                    |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |                                                                                   |                                                           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       |                                                                                   |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|
| 1. Approving Competent Authority / Country<br><b>CAA/UK</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    | 2. <b>AUTHORISED RELEASE CERTIFICATE</b><br><b>CAA FORM 1</b> |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       | 3. Form Tracking Number<br><b>U25-A0023</b>                                       |                                   |
| 4. Organization Name and Address:<br><b>TurbineAero Repair Ltd</b><br><b>700/178 Moo 1, T. Bankao, A. Pantong, Chonburi 20160 Thailand</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       | 5. Work Order/Contract/Invoice<br><br><b>SRT0010521</b><br><b>CUST.PO#:111515</b> |                                   |
| 6.Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 7.Description      | 8.Part No.                                                    | 9.Qty                                                                                                                                                                                                                                                                                                                                                                                                               | 10.Serial No.                                                                         | 11.Status/Work                                                                    |                                   |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GTCP331-500[B] APU | 3800550-1                                                     | 1                                                                                                                                                                                                                                                                                                                                                                                                                   | P-1450                                                                                | REPAIRED                                                                          |                                   |
| <b>12. Remarks</b><br>Repaired in accordance with EM 49-26-57 Rev.26 Dated October 06, 2023<br>- TSN: 16,359 CSN: 10,562 TSO: 900 CSO: 715 TSR: 0 CSR: 0<br>Incorporate applicable AD: NIL<br>Incorporate applicable SB/SIL: SB49-7557 Rev. 0 SB49-7997 Rev. 6 SB49-8328 Rev. 1<br>This APU preservation was complied per SB49-7997 Rev. 6                                                                                                                                                                                                                                                                                                                                                                                                        |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       |                                                                                   |                                   |
| <b>13a. Certifies the items identified above were manufactured in conformity to:</b><br><br><input type="checkbox"/> approved design data and are in condition for safe operation.<br><input type="checkbox"/> non-approved design data specified in Block 12.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |                                                               | <b>14a.</b> <input checked="" type="checkbox"/> <b>Part-145.A.50 Release to Service</b> <input type="checkbox"/> Other regulation Specified in block 12<br>Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with <u>Part-145</u> and in respect to that work the items are considered ready for release to service. |                                                                                       |                                                                                   |                                   |
| 13b. Authorised Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | 13c. Approval/Authorisation Number                            |                                                                                                                                                                                                                                                                                                                                                                                                                     | 14b. Authorised Signature                                                             |                                                                                   | 14c. Certificate/Approval Ref. No |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                   | <b>UK.145.01799</b>               |
| 13d. Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    | 13e. Date (dd mmm yyyy)                                       |                                                                                                                                                                                                                                                                                                                                                                                                                     | 14d. Name                                                                             |                                                                                   | 14e. Date (dd mmm yyyy)           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>PREECHA PAMORNRATTANAKUL</b>                                                       |                                                                                   | <b>15/Sep/2025</b>                |
| <b>USER/INSTALLER RESPONSIBILITIES</b><br>This certificate does not automatically constitute authority to install the item(s)<br>Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.<br>Statements in blocks 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown. |                    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                       |                                                                                   |                                   |



BSI Report

## Rotating Parts Information:

| Part Name   | Part Number | Serial Number   | TSN    | CSN    | CR     | LLP Card Received                       |                             |
|-------------|-------------|-----------------|--------|--------|--------|-----------------------------------------|-----------------------------|
| LC Impeller | 3822612-1   | 060322903099    | 26,677 | 16,510 | 10,490 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| EC1         | 3822611-1   | 060322902999    | 16,740 | 14,691 | 12,309 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| EC2         | 3822341-5   | 050322902157    | 12,018 | 13,696 | 13,304 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| T1 Wheel    | 3842151-3   | 11-168522-05620 | 13,375 | 15,439 | 11,561 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| T2 Wheel    | 3842155-3   | 010335701600    | 16,359 | 10,562 | 16,438 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| T3 Wheel    | 3842160-6   | 060134505198    | 19,525 | 15,833 | 11,167 | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

## Borescope Findings:

|                              |                                                |                                  |
|------------------------------|------------------------------------------------|----------------------------------|
| APU Borescope Inspection:    | <input checked="" type="checkbox"/> Yes        | <input type="checkbox"/> No      |
| Load Compressor Impeller:    | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| First Stage Compressor:      | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| Combustion Chamber:          | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| First Stage Turbine Nozzles: | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| First Stage Turbine Wheel:   | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| Third Stage Turbine Wheel:   | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |
| L/C and P/S Ball Bearings:   | <input checked="" type="checkbox"/> Acceptable | <input type="checkbox"/> Damaged |

Note:

## Incoming Functional Test Result:

- ☐ APU was not pre-tested.
- ☐ Major Internal damage.
  - ☐ Major External damage.
  - ☐ Metal Contamination.
  - ☐ Other:
- ☒ APU was pre-tested. Results are within acceptable manual specifications.
- ☐ APU was pre-tested. The following results exceed allowable specifications.

Note:



## Latest Shop Visit Report

## Auxiliary Power Unit Workscope Summary

- ☒ Repair
- ☐ Part Out
- ☐ Overhaul
- ☐ Functional Test
- ☐ Return As Is (RAI)
- ☐ Beyond Economical Repair (BER)

## Preservation

- ☐ None
- ☐ Immediate Use (Less than two weeks of storage)
- ☐ Short Term Storage (6 months or less)
- ☒ Long Term Storage (2 years or less)

## Documents and Certificates

- ☒ FAA 8130-3
- ☒ EASA Form 1
- ☐ CAAT Form 1
- ☐ CAAC-038
- ☐ JCAB Form 18
- ☒ Log Book
- ☒ Test Data Sheet
- ☒ Shop Visit Report
- ☒ Other: CAA UK

## Analysis and Conclusions

Auxiliary Power Unit (APU) GTCP331-500[B], serial number P-1450, arrived at TurbineAero Repair Asia from GA TELESIS, LLC, on August 19, 2025. The reported reason for removal was APU lease return. The unit was requested to be functional tested. The unit accumulated 16,359 hours and 10,562 cycles since new and 900 hours and 715 cycles since overhauled/repaired.

There is discrepancy about time and cycle information as table below.

|                                              | TSN       | CSN    |
|----------------------------------------------|-----------|--------|
| DMM Readout                                  | 16,359:15 | 10,562 |
| Logbook                                      | 16,359:00 | 10,562 |
| Customer's documents (LLP Sheet and Off Log) | 16,359:00 | 10,562 |

Customer confirmed using time and cycle information based on LLP Sheet and Off Log.

During APU receiving inspection, external damages and missing parts were noted in list below.

- Upper Inlet Plenum PN 3810727-6 was heavily delaminated on surface.
- DMM's ground strap on Lower Inlet Plenum PN 3810728-5 was torn.
- Generator Pad Gasket PN 3862285-1 was not received.
- Boot Terminal PN 2709968-1 was not received.

Generator Seal Plate was received as QEC item.

APU at receiving had smooth rotation. IGV Assembly had smooth movement with 5 Lbs. pull force. Lube, Generator Scavenge and Fuel Filters, Gearbox, Mid Frame, AFT Turbine Scavenge, Generator and ATS MCDs were not contaminated.

Borescope inspection was performed to confirm the serviceability of gas path. Impellers, Turbines and other parts were not found major damage.

APU was routed for functional test I.A.W. 49-26-57 and passed all test requirements. The APU was rejected from test cell for repair as necessary.

Engineering workscope was issued to repair external damage that was found during incoming inspection and route Pressure Relief Valve for functional test.

Incoming DMM information shows that the APU has not been complied with SB49-7557. Therefore, SB49-7557 was recommended to comply during shop visit to disable the Generator Filter Clogged auto S/D feature in order to reduce the APU auto S/D situation, which leads to damage of hot section and bearings.

Upper and Lower Inlet Plenums were removed from APU for repair as necessary.

Pressure Relief Valve failed functional test. Unit was repaired as necessary and returned to service.

After repaired, the APU was assembled and tested I.A.W. 49-26-57. The APU passed all the test requirements and was preserved I.A.W. SB49-7997 before returning to service.



SBs as listed below were complied during shop visit.

SB49-7557 : Disable Generator Filter Clogged Auto-Shutdown

SB49-7997 : Standard Storage and Preservation Guidelines

SB49-8328 : Replace the O-Rings, PN MS9386-013 on the Buffer Air Tube, PN 3618089-3 with New O-Rings, PN M83248/1-013. This Bulletin also replaces the O-Rings, PN MS9386-109 on the Buffer Air Tube, PN 3884925-1 with New O-Rings, PN M83248/1-109 on the 331-500[B] Auxiliary Power Unit (APU).

APU receiving and borescope inspection photos are illustrated in the Shop Photo Report.



Test Type: Medium Repair  
Test Date: 9/14/2025  
Test Sheet #: F-QF-OP-20-16  
Rev. Letter: Rev. Basic  
Rev. Date: December 18, 2020  
ATA Manual: 49-26-57; Rev.26; October 6, 2023  
Fuel Type: Jet A ASTM (D-1655-68)

Test Operator: NATTAMON  
Engine Model: GTCP331-500B  
Serial Number: P-1450  
Customer: GA TELESIS, LLC.  
Work Order: SRT0010521 Final-test #1  
Oil Type: Mobil Jet II (MIL-PRF-23699)

| Test Step | Description                    | Units  | Required         | Actual  | Pass/Fail |
|-----------|--------------------------------|--------|------------------|---------|-----------|
| 1.0       | Run-In Checks                  |        |                  |         |           |
| 2.0       | Flow Sensor Check              |        |                  |         |           |
| 2.1       | SCV Opening Flow               | lb/min | 159 to 174       | 162.53  | Pass      |
|           | SCV Opening Position           | degree |                  | 9.5     |           |
| 2.2       | SCV Closing Flow               | lb/min | 159 to 174       | 162.8   | Pass      |
|           | SCV Closing Position           | degree |                  | 11.620  |           |
| 2.3       | WC Delta                       | %      | -5 to 5          | 5.000   | Pass      |
| 3.0       | Stability Check                |        |                  |         |           |
| 3.1       | Set Point 1                    | lb/min | 138 to 142       | 139     | Pass      |
| 3.2       | Set Point 2                    | lb/min | 78 to 82         | 81      | Pass      |
| 3.3       | Set Point 3                    | lb/min | Fully Closed     | 27.15   | Pass      |
| 4.0       | Magnetic Plug and Filter Check |        |                  |         | Pass      |
| 5.0       | ECS Combination Performance    |        |                  |         |           |
|           | Barometric Pressure            | psia   |                  | 14.639  |           |
|           | Average Inlet Temperature      | Deg F  | 131 Max          | 93.40   | Pass      |
|           | T2                             | Deg F  |                  | -11.2   |           |
|           | Oil Pressure                   | psig   | 50 to 80         | 73      | Pass      |
|           | Oil Temperature                | Deg F  | 312 Max          | 164     | Pass      |
|           | Gearbox Pressure               | psig   | -1.5 to 1.5      | 0.15    | Pass      |
|           | APU EGT 1                      | Deg F  |                  | 1104.0  |           |
|           | APU EGT 2                      | Deg F  |                  | 1108.0  |           |
|           | APU EGT Spread                 | Deg F  | 80 Max           | 4       | Pass      |
|           | Lab EGT Corrected              | Deg F  | 1175 Max         | 1161    | Pass      |
|           | IGV Position                   | degree | 7.0 Min          | 11.50   | Pass      |
|           | IGV Position (adjusted)        | degree |                  | 4.0     |           |
|           | WBCDNA                         | lb/min | 165 to 169       | 166     | Pass      |
|           | WBCOR                          | lb/min | 444.0 Min        | 447     | Pass      |
|           | PBCOR                          | psia   | 51.2 Min         | 51.37   | Pass      |
|           | N1 Speed                       | RPM    | 38,653 to 39,434 | 39042.0 | Pass      |
|           | SHPCOR                         | shp    | 180 Min          | 180     | Pass      |
|           | WF                             | lb/hr  |                  | 632.77  |           |
|           | WFCOR                          | lb/hr  |                  | 629.94  |           |
|           | Accessory Vibration            | IPS    | 0.7 Max          | 0.20    | Pass      |
|           | Turbine Vibration              | IPS    | 1.0 Max          | 0.4     | Pass      |
| 6.0       | No Load Performance            |        |                  |         |           |
|           | Barometric Pressure            | psia   |                  | 14.649  |           |
|           | Average Inlet Temperature      | Deg F  | 131 Max          | 87.20   | Pass      |
|           | Oil Pressure                   | psig   | 50 to 80         | 77      | Pass      |
|           | Oil Temperature                | Deg F  | 312 Max          | 105     | Pass      |
|           | Gearbox Pressure               | psig   | -1.5 to 1.5      | 0.33    | Pass      |
|           | APU EGT 1                      | Deg F  |                  | 735.0   |           |
|           | APU EGT 2                      | Deg F  |                  | 744.0   |           |
|           | APU EGT Spread                 | Deg F  | 80 Max           | 9       | Pass      |
|           | N1 Speed                       | RPM    | 38,653 to 39,434 | 39035.0 | Pass      |

Test Type: Medium Repair  
Test Date: 9/14/2025  
Test Sheet #: F-QF-OP-20-16  
Rev. Letter: Rev. Basic  
Rev. Date: December 18, 2020  
ATA Manual: 49-26-57; Rev.26; October 6, 2023  
Fuel Type: Jet A ASTM (D-1655-68)

Test Operator: NATTAMON  
Engine Model: GTCP331-500B  
Serial Number: P-1450  
Customer: GA TELESIS, LLC.  
Work Order: SRT0010521 Final-test #1  
Oil Type: Mobil Jet II (MIL-PRF-23699)

| Test Step             | Description                  | Units  | Required         | Actual  | Pass/Fail |
|-----------------------|------------------------------|--------|------------------|---------|-----------|
|                       | WF                           | lb/hr  |                  | 362.45  |           |
|                       | Accessory Vibration          | IPS    | 0.7 Max          | 0.17    | Pass      |
|                       | Turbine Vibration            | IPS    | 1.0 Max          | 0.4     | Pass      |
| 7.0                   | MES Performance Test         |        |                  |         |           |
|                       | Barometric Pressure          | psia   |                  | 14.613  |           |
|                       | Average Inlet Temperature    | Deg F  | 131 Max          | 94.50   | Pass      |
|                       | T2                           | Deg F  |                  | -11.2   |           |
|                       | Oil Pressure                 | psig   | 50 to 80         | 73      | Pass      |
|                       | Oil Temperature              | Deg F  | 312 Max          | 164     | Pass      |
|                       | Gearbox Pressure             | psig   | -1.5 to 1.5      | 0.15    | Pass      |
|                       | APU EGT 1                    | Deg F  |                  | 1136.0  |           |
|                       | APU EGT 2                    | Deg F  |                  | 1143.0  |           |
|                       | APU EGT Spread               | Deg F  | 80 Max           | 7       | Pass      |
|                       | Lab EGT Corrected            | Deg F  | 1197 Max         | 1147    | Pass      |
|                       | WBCDNA                       | lb/min | 104 to 108       | 106     | Pass      |
|                       | PBCOR                        | psia   | 53.1 Min         | 53.13   | Pass      |
|                       | N1 Speed                     | RPM    | 38,653 to 39,434 | 39035.0 | Pass      |
|                       | SHPCOR                       | shp    | 180 Min          | 181     | Pass      |
|                       | WF                           | lb/hr  |                  | 660.32  |           |
|                       | WFCOR                        | lb/hr  |                  | 624.11  |           |
|                       | Accessory Vibration          | IPS    | 0.7 Max          | 0.23    | Pass      |
|                       | Turbine Vibration            | IPS    | 1.0 Max          | 0.4     | Pass      |
| 8.0                   | Automatic Start Check        |        |                  |         |           |
| 8.1                   | Electric Start Time          | second | 60 Max           | 43      | Pass      |
| 8.2                   | Electric Starter Cutout Time | second | 40 Max           | 28.0    | Pass      |
| 8.3                   | ATS Start Time               | second | 60 Max           | 37.0    | Pass      |
| 8.4                   | ATS Starter Cutout Time      | second | 40 Max           | 27      | Pass      |
| 9.0                   | Total Starts During Test     |        | 4 Min            | 4       | Pass      |
| 10.0                  | Total Hours During Test      | hour   |                  | 2:31    |           |
| Overall Test Results: |                              |        |                  |         | Pass      |

Remarks:

Operator Signature: Nattamon Date: 14 SEP 2025 Stamp: TAR 32



OEC/LRU  
Accessories

### Line Replaceable Units

| Part Number | Serial Number | Description                   | Workscope | Remark                  |
|-------------|---------------|-------------------------------|-----------|-------------------------|
| 3888364-3   | 971622601035  | WIRING HARNESS                | 1         | Operational test on APU |
| 3283076-5   | 715           | AIR TURBINE STARTER VALVE     | 1         | Operational test on APU |
| 3202854-1   | 1734          | APU CHECK VALVE               | 1         | Operational test on APU |
| 3884863-6   | P-667         | PNEUMATIC CLUSTER ASSEMBLY    | 1         | Operational test on APU |
| 3876217-1   | 091121450513  | SENSOR-INLET PRESSURE         | 1         | Operational test on APU |
| 3876218-1   | NSN           | SENSOR-TOTAL PRESSURE         | 1         | Operational test on APU |
| 3876219-2   | 091121480952  | SENSOR-DELTA PRESSURE         | 1         | Operational test on APU |
| 3290814-4   | 765           | SURGE CONTROL VALVE           | 1         | Operational test on APU |
| 3505814-3   | 333           | STARTER-AIR TURBINE           | 1         | Operational test on APU |
| 2704442-5   | 1392          | MOTOR-DIRECT CURRENT          | 1         | Operational test on APU |
| 3879008-1   | CUA11682      | FUEL CLUSTER                  | 1         | Operational test on APU |
| 4131000-6   | 442C          | CLUSTER LUBE                  | 1         | Operational test on APU |
| 160536-1    | 47-275        | OIL THERMOSTATIC BYPASS VALVE | 1         | Operational test on APU |
| 160488-2    | 697           | OIL COOLER                    | 1         | Operational test on APU |
| 304643-2    | GE2437        | DATA MEMORY MODULE            | 1         | Operational test on APU |
| 70722134-1  | 243607        | TEMPERATURE SENSOR            | 1         | Operational test on APU |
| 3876212-1   | 011936023956  | MOTIONAL TRANSDUCER           | 1         | Operational test on APU |
| 3876212-1   | 011936023957  | MOTIONAL TRANSDUCER           | 1         | Operational test on APU |
| 3876211-2   | NSN           | SENSOR-LOW OIL QUANTITY       | 1         | Operational test on APU |
| 3883499-3   | 1133          | INLET GUIDE VANE ACTUATOR     | 1         | Operational test on APU |
| 3888275-10  | NSN           | IGNITION SYSTEM ASSEMBLY      | 1         | Operational test on APU |
| 3876195-9   | J12370752     | IGNITION EXCITER              | 1         | Operational test on APU |
| 3888283-2   | NSN           | ELECTRICAL LEAD               | 1         | Operational test on APU |
| 3888283-4   | NSN           | ELECTRICAL LEAD               | 1         | Operational test on APU |
| 3888267-7   | 24043989      | IGNITER PLUG                  | 1         | Operational test on APU |
| 3888267-7   | 24043991      | IGNITER PLUG                  | 1         | Operational test on APU |
| 3876214-2   | 042021900272  | EGT THERMOCOUPLE              | 1         | Operational test on APU |
| 3876214-2   | 1115027700365 | EGT THERMOCOUPLE              | 1         | Operational test on APU |
| 3876214-2   | 1115027700529 | EGT THERMOCOUPLE              | 1         | Operational test on APU |
| 3876214-2   | 1615027700695 | EGT THERMOCOUPLE              | 1         | Operational test on APU |
| 968214-6    | NSN           | PRESSURE RELIEF VALVE         | 3         |                         |
| 3883688-1   | 016936203403  | PRIMARY MANIFOLD              | 1         | Operational test on APU |
| 3883689-1   | 016936203399  | SECONDARY MANIFOLD            | 1         | Operational test on APU |
| 3883453-1   | AAB61812      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | AAB61814      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | AAB61816      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | AAB61818      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | AAB61819      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | 1ANC1912      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | 1ANC2947      | FUEL NOZZLE                   | 1         | Operational test on APU |
| 3883453-1   | 1ANE1757      | FUEL NOZZLE                   | 1         | Operational test on APU |



|           |          |             |   |                         |
|-----------|----------|-------------|---|-------------------------|
| 3883453-1 | 1AUP1752 | FUEL NOZZLE | 1 | Operational test on APU |
| 3883453-1 | 1BAF1471 | FUEL NOZZLE | 1 | Operational test on APU |
| 3883453-1 | 1BDF1432 | FUEL NOZZLE | 1 | Operational test on APU |
| 3883453-1 | 1BDF1494 | FUEL NOZZLE | 1 | Operational test on APU |
| 3883453-1 | 1BDH0550 | FUEL NOZZLE | 1 | Operational test on APU |
| 3883453-1 | 1VN08805 | FUEL NOZZLE | 1 | Operational test on APU |

**Note:**

- 1 : Visual Inspection
- 2 : Functional Test
- 3 : Functional Test and Repair as Necessary
- 4 : Return to Customer
- 5 : Overhaul
- 6 : Replace

