

# Quality and Procedures Manual

**Border Aviation Pty Ltd**



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# Section 1 Amendments

## 1.1 Amendment Procedures

When an amendment to this manual is made, each manual holder will be sent a new copy of the entire Manual in PDF either by email or on a suitable storage device.

A completed form Revision Advice- Quality and Procedures Manual (Section 11.20) will accompany the amended copy of the Manual and will be incorporated in the amended copy. The lower section of the Revision Advice form is to be completed and returned to the Managing Director by the Manual holder as confirmation that they are in possession of the current version of the manual. When returned, the confirmations received for the current amendment are to be kept in the Quality and Procedures Manual Amendment Records and Employee Acknowledgement file. Confirmations not received within 7 days of distribution of an amended Manual shall be followed up with the Manual holder by the Managing Director.

Two copies of the Manual must be maintained in printed form for easy reference (see 1.4 Register of Manual Holders). The Chief Engineer is responsible for ensuring these printed copies are maintained at the current amendment status, and that all superseded copies are destroyed.

The Managing Director shall ensure amendments are distributed to all Manual holders.

It is the responsibility of the Manual Holder to destroy and delete all superseded copies of the Manual, including any printed copies made.

When an amendment is issued it will be identified by the file name which will consist of Border Aviation Pty Ltd followed by the copy number, issue number then amendment number and the amendment date. For example: ProcedureManual\_Border AviationPtyLtd \_issue\_1\_amdt\_0\_200217

The amendment record sheet will be annotated with the amendment details.

An electronic copy of the Manual including superseded versions will be kept by the Managing Director for the purpose of Audit and producing future amended copies.

1. Copies of all amendments shall be distributed to all manual holders.
2. When an amendment is issued the package will contain :
  - a. An amendment number
  - b. A list of affected pages
  - c. Person authorising amendment
  - d. The amendment date.
3. The amendment details shall be recorded on the amendment record.
4. Any amendment to this manual may have an effect on the validity of the approval. If such could be the case a Variation of the Approval should be applied for together with the relevant manual amendment.

## 1.2 Record of Amendments

AMENDMENT NO	PAGES AFFECTED	INCORPORATED BY	DATE INCORPORATED
0	Issue 1	James Ball	20/02/17
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## 1.4 Register of Manual Holders

Copy No.	Holder
1	Civil Aviation Safety Authority Southern Region
2	Managing Director (Printed Copy, at Main Location)
3	Temporary Location Copy (Printed Copy, maintained by Chief Engineer)

## Employee Distribution

The Managing Director is to create and administer a permanent file (Employee Procedures Manual Acknowledgement) to record employees that have acknowledged reading this Procedures Manual.

The Employee Procedures Manual Acknowledgment signature sheet (Section 11.2 of this manual) must be signed by each new AME or LAME engaged by the company, whether permanent or temporary, after having read and understood this manual. The AME or LAME concerned must seek clarification on any points not understood before signing the signature sheet. Managing Director is to ensure the signature sheet is re-signed by all current AME or LAME's after every amendment made to the procedures manual, after the AME or LAME has familiarised themselves with the amended procedures.

In the case of casual or contracted LAMEs or AMEs, the Procedures Manual Acknowledgement shall be completed upon initial commencement of activities covered by this Manual, and thereafter each time an amendment to the Manual has been made and the individual continues to be engaged or is re-engaged by Border Aviation Pty Ltd.

The Chief Engineer is responsible for ensuring each employee is fully aware of procedures contained within this Manual for all activities. Reviews of the procedures contained in this Manual will be conducted during informal staff training sessions and at staff meetings in addition to scheduled audit activities.

# Section 2 Introduction

## 2.1 Introduction

Border Aviation Pty Ltd is the holder of Certificate of Approval No XXX Issue 1 issued by the Civil Aviation Safety Authority.

This Quality and Procedures Manual specifies the system of quality control to be followed with respect to activities carried out under the above mentioned Certificate of Approval, as required by CAR 30 (2D).

The principals, practices and procedures contained within this Manual are to be used during the conduct of all maintenance undertaken under the Certificate of Approval.

The Manual provides the necessary quality control procedures to ensure that maintenance of aircraft is carried out in accordance with the requirements of the Civil Aviation Regulations, the manufacturer's requirements and sound engineering practices.

Management and Engineering staff employed by Border Aviation Pty Ltd are required to understand and comply with the procedures and processes detailed in this Manual.

Where it is believed that the procedures or text of this Manual are deficient or in error, the matter should be brought to the attention of the Managing Director and/or Chief Engineer.

### Legal Identity

Border Aviation Pty Ltd

### Registered Company Address

15 Flight Place Tocumwal NSW

Phone: 0428743450

### Postal Address

Po Box 273 Tocumwal, NSW, 2714

Email:  
admin@borderaviation.com.au

### Director

James Thomas Ball

### Main Location

15 Flight Place  
Tocumwal, 2714, Australia

## 2.2 Background

Border Aviation Pty Ltd was established in 2016 by Managing Director and Chief Engineer James Thomas Ball, servicing planes from across the country at the Tocumwal Aerodrome. James has extensive experience in the Aircraft Maintenance field with over 23 years in the industry.

The typical customer of Border Aviation Pty Ltd is a private aircraft owner who is passionate about their chosen aircraft and wants it maintained to a high standard. The customer values personal service and attention to detail, and wants to play a part in the preservation of aviation history while also enjoying all the benefits of aircraft ownership.

The majority of customers fly less than 50 hour a year, so most work is planned well in advance and undertaken in a relaxed and unhurried manner where quality, lifestyle and experience take precedence over commercial considerations.

James, as Chief Engineer, provides the majority of the manpower in the workshop. Border Aviation Pty Ltd occasionally uses carefully selected additional manpower but no long-term contracts exist with other organisations. Looking forward, it is anticipated that another LAME or an apprentice may be employed in 2017, but the current focus is on maintaining and servicing the existing loyal customer base from the Tocumwal premises.

Being a small family company means that new work is carefully considered for its impact on operations before being accepted or passed by. Each potential new customer is evaluated by the directors to ensure the company has the resources required to do the work, or that the work is of sufficient value, and aligned with company values to support the acquisition of the additional resources to make it possible.

## 2.3 Abbreviations

AD	Airworthiness Directive
Amdt	Amendment
AME	Aircraft Maintenance Engineer
AMO	Aircraft Maintenance Organisation
ARC	Authorised Release Certificate
ARN	Aviation Reference Number
ATP	Aircraft Technical Publishers
AWB	Airworthiness Bulletin
CAA (UK)	Civil Aviation Authority (United Kingdom)
CAO	Civil Aviation Order
CAR	Civil Aviation Regulation
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations (1998)
CE	Chief Engineer
COA	Certificate of Approval
C of A	Certificate of Airworthiness
C of R	Certificate of Registration
FAA	Federal Aviation Administration (United States of America)
GRN	Goods Received Number
IAW	In Accordance With
LAME	Licensed Aircraft Maintenance Engineer
Manual	Border Aviation Pty Ltd's Quality and Procedures Manual
MITCOM	Manufacture In The Course Of Maintenance
MOS	Manual of Standards
MR	Maintenance Release
MD	Managing Director
RO	Registered Operator
SOM	An aircraft's maintenance system
TBO	Time Between Overhaul
TSO	Time Since Overhaul
TTIS	Total Time in Service



# Section 3 Register of Locations

## 3.1 Main Location

15 Fight Place,  
Tocumwal, 2714, NSW, Australia

Ph: 0428743450

admin@borderaviation.com.au

### Activities

Maintenance of the following Class B aircraft:

Piston engine and propeller driven turbine aircraft with a maximum take-off weight not exceeding 5700kg.

Maintenance of Non type certificated historical or ex-military aircraft.

Maintenance of special aircraft. AT802 series

## 3.2 Temporary Locations

Various locations used from time to time where for example it is more viable to work on the aircraft at the owners' premises than relocating the aircraft to main location.

### Activities

Maintenance of the following Class B aircraft:

Piston engine and propeller driven turbine aircraft with a maximum take-off weight not exceeding 5700kg.

Maintenance of Non type certificated historical or ex-military aircraft

All activities will be carried out at the Main Location or a Temporary Location assessed in accordance with Section 6.2 of this Manual.

Maintenance of special aircraft. AT802 series

# Section 4 Register of Appointed Persons

## 4.1 Appointed Persons

The following persons have been appointed by Border Aviation Pty Ltd to perform various functions within the organisation:

### The Managing Director of Border Aviation Pty Ltd

James Thomas Ball

Mobile 0428743450

Email: admin@borderaviation.com.au

### The Chief Engineer of Border Aviation Pty Ltd

James Thomas Ball

Mobile 0428743450

Email: admin@borderaviation.com.au

The position of Managing Director is the position occupied by the person who controls the carrying out of activities covered by the Certificate of Approval. This position may only be held by a current director of the company.

In the absence of the Managing Director, Anne-Maree Moore, assumes the role of Managing Director for the purposes of conducting activities under the Certificate of Approval.

In the absence of the Chief Engineer, the Managing Director may temporarily appoint another Chief Engineer in consultation with CASA. A permanent change to the Chief Engineer may only be made after consultation with CASA and amendment of this section of the Manual.

Section 5 provides details of specific role responsibilities.

## 4.2 Maintenance Contractors

The Chief Engineer, having been authorised by the Managing Director, may contract Maintenance Organisations or individuals to perform various maintenance tasks on aircraft covered by this Manual.

The Managing Director is to ensure each organisation or individual contracted to perform work is CASA Approved and/or has the required training, qualifications and experience, and adequate (and current) licence coverage if required, to perform the tasks required of them. Once engaged, training is to be provided for maintenance contractors as if they were employees.

The Chief Engineer is responsible for co-ordination of all work undertaken by contracted organisations or individuals.

Contracted organisations or individuals not holding a Licence, Authority or Certificate of Approval covering the work to be carried out will be subject to direct supervision by the Chief Engineer or an appropriately licenced LAME appointed by the Chief Engineer when carrying out activities under Border Aviation Pty Ltd Certificate of Approval.

Contractors, having been assessed as above, are engaged when Border Aviation Pty Ltd issues a written order (raised in the Accounting system) for work to be performed. The engagement is valid only for the work covered in the order and a new order is to be issued to extend or expand the scope of work authorised.

### 4.3 Register of Aircraft Maintenance Engineers

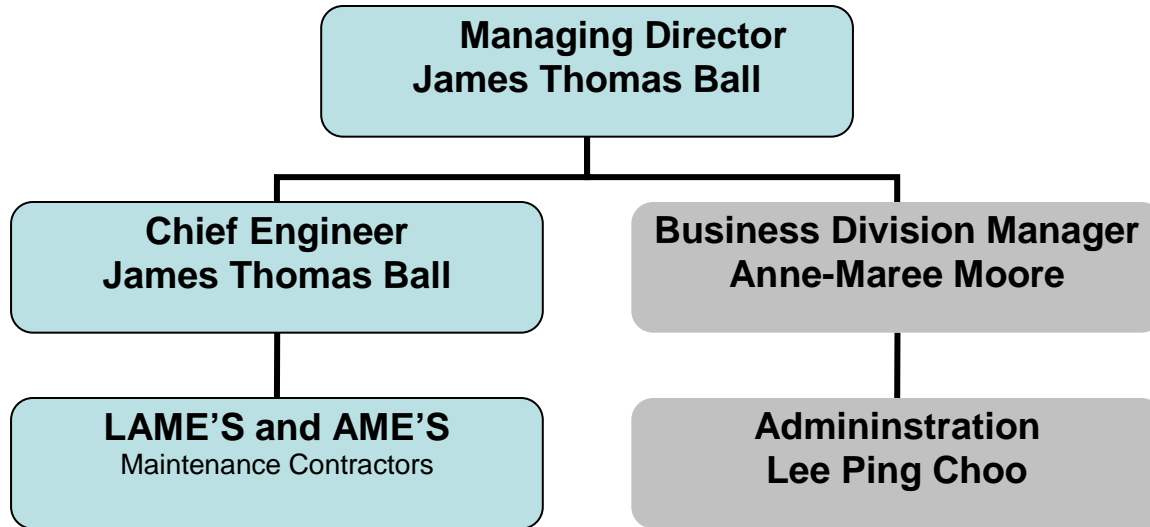
This register is maintained in a separate folder titled AME Register and Licences. Form 11.19 in Section 11 of this Manual is to be used by the Managing Director to record details of LAMEs and AMEs engaged by Border Aviation Pty Ltd. The register is to be used for both employees and individuals contracted to carry out work on behalf of Border Aviation Pty Ltd within the scope of this Manual.

At the time of engagement a photocopy of the Engineer's current licence (if he/she is a LAME) must also be inserted in the Register. If the Engineer's licence is amended or re-issued an updated copy is to be inserted in the Register.

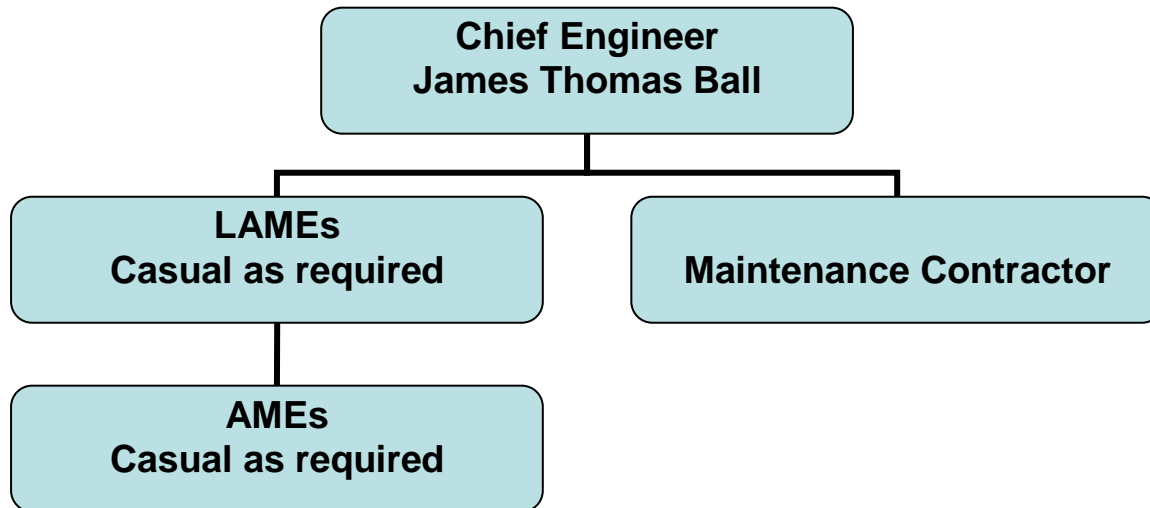
# Section 5 Organisational Structure

## 5.1 Organisational Structure

### Organisational Chart



### Job Chart



## 5.2 Quality Policy

As Managing Director of Border Aviation Pty Ltd, I commit to the development, implementation and continual improvement of the system of quality management as it applies to activities conducted under the Certificate of Approval issued Border Aviation Pty Ltd.

The system of quality management as described in this Manual is designed to ensure compliance with the requirements of the Civil Aviation Safety Authority, as well as ensure the continued improvement in the quality of work performed for and on behalf Border Aviation Pty Ltd.

Monitoring and improvement of the system of quality control will be achieved through a continual audit process, ensuring every aspect of the system is reviewed for continued effectiveness.

A management review of internal audit results and quality management procedures will be conducted at least annually.

Responsibilities with respect to the maintenance and airworthiness control conducted by Border Aviation Pty Ltd have been delegated to the person nominated as Chief Engineer. At all times, when performing those functions of Chief Engineer as described in this Manual, the Chief Engineer shall have my full authority.

The Chief Engineer is responsible for assuring that all maintenance is carried out in accordance with all Company, customer and CASA requirements.

In the event that the person nominated as Chief Engineer ceases to perform the duties and/or responsibilities of the Chief Engineer, I undertake to formally submit the name and qualification details of a replacement Chief Engineer to the local field office of the Civil Aviation Safety Authority forthwith.

The continued safety of aircraft maintained by company personnel and maintenance contractors is dependent upon the continued high standard of work performed in respect of aircraft to which this company has been contracted and the observance of the procedures laid down in this Manual.

Observance of the procedures contained in this Manual is mandatory and is the responsibility of each employee and maintenance contractor.

All employees and maintenance contractors are encouraged to bring to the attention of the Managing Director any instances where work practices and procedures could be improved. Where appropriate such improved practices and procedures will be formally incorporated into this Manual by revision.

James Thomas Ball  
Managing Director

## 5.3 Responsibilities - Managing Director

The Managing Director is responsible for the following functions in relation to activities covered by this Manual:

- The appointment of a suitably qualified Chief Engineer, who will ensure the standard of work performed by Border Aviation Pty Ltd under its Certificate of Approval is of the highest standard and complies with the requirements of the Civil Aviation Safety Authority.
- The provision of the infrastructure needed to support the Company's activities under the Certificate of Approval.
- Authorising the Chief Engineer to purchase equipment and stores, obtain approved data and engage maintenance contractors for maintenance activities as the need arises.
- Raising amendments to this Manual at such times as is necessary to ensure the smooth operation and continued quality of work output of Border Aviation Pty Ltd.
- Distribution of all Manuals and amendments to Manual Holders.
- Administration and control of all internal quality auditing activities.
- Performing Management Reviews for the purpose of continual improvement of safety and quality management.
- Ensure adequate licence coverage/scope of all LAMEs employed or contracted to perform work covered by this Manual.
- Maintain a register of LAMEs employed/contracted to carry out maintenance on aircraft within the scope of this Manual.
- Maintain a register of Locations, including Temporary Locations, within the scope of this Manual
- Maintain a register of Test and Ground Support Equipment calibration and maintenance.
- Maintain a Job Register of all work performed.
- Compliance with all relevant administration procedures of storage and distribution of stores and spares.

All other activities involved in the operation of the Border Aviation Pty Ltd Certificate of Approval.

## 5.4 Responsibilities - Chief Engineer

The Chief Engineer is responsible to the Managing Director of Border Aviation Pty Ltd for activities relating to aircraft maintenance. The duties and responsibilities of the Chief Engineer are:

- Administration and control of all aircraft maintenance.
- Administration and control of all documentation within the scope of this Manual.
- Administration and control of all Technical Data.
- Liaison with CASA.
- Compliance with relevant airworthiness requirements of CASA.
- Defect reporting and implementation of action to prevent recurrence of irregularities.

- Supervision, training and control of all aircraft maintenance staff.
- Oversight of Maintenance Contractors.
- Liaison with the Registered Operator or the Organisation's Maintenance Controller on all engineering matters.
- Liaise with the Managing Director of Border Aviation Pty Ltd on all matters regarding the Certificate of Approval.
- Acquisition, amendment and maintenance of the relevant data and equipment required for each location.
- The adherence to and amendment, as required from time to time, of the Quality and Procedures Manual.
- Management of all personnel and maintenance scheduling procedures.
- Response to the Authority for any discrepancies found during surveillance by the Authority.
- Supervision and control of LAMEs and AMEs for each job, and the standard of work performed.
- Ensuring certification is carried out in accordance with the CASA System of Certification (Schedule 6) for each job.

NOTE: Specific responsibility procedures are contained in each applicable section in this Manual.

## 5.5 LAME Responsibilities

LAME's are responsible to the Chief Engineer for the activities relating to aircraft maintenance.

The duties and responsibilities of LAME's are:

- Ensuring that all work performed is of the standard required by the Chief Engineer.
- Bring to the attention of the Chief Engineer and/or Managing Director any deficiencies observed or suggested improvements in Company procedures.
- Ensuring work performed on aircraft is carried out in accordance current technical data and documentation (including this Manual).
- Completion of documentation and correct certification upon completion of work.
- Liaison with the Chief Engineer on all aspects of each job.
- Reporting any defects found to the Chief Engineer.
- Report safety and environmental risks observed to the Chief Engineer or Managing Director.

## 5.6 AME's Responsibilities

Each AME is directly responsible to the LAME supervising and certifying for the work he/she is undertaking.

The duties and responsibilities of AME's are:

- Adhere to procedures outlined in this Manual.
- Bring to the attention of the Chief Engineer and/or Managing Director any deficiencies observed or suggested improvements in Company Procedures.
- Maintain the standard of work required by the Chief Engineer.
- Complete documentation for work carried out.
- Ensure all work is supervised and inspected by the LAME certifying for the work.
- Report any defects to the Chief Engineer.
- Report safety and environmental risks observed to the Chief Engineer or Managing Director.



# Section 6 Work Procedures - General

## 6.1 All Locations

The Chief Engineer is to ensure each location stated in this Manual meets the requirements for carrying out planned maintenance activities with regard to premises, special equipment, specialised tooling, technical data, documentation and storage of aircraft parts and components.

The tools, equipment, data, parts and components required for an activity, and not already on hand, are to be sourced in accordance with the procedures in this Manual when the requirement becomes apparent, prior to commencement of the maintenance activity.

The Chief Engineer is to ensure a sufficiently qualified and experienced LAME is assigned to each job to supervise and inspect the appropriate stages of maintenance, ensure the necessary certifications for the completion of these stages are made, and to complete Final Certifications (if required) as coordinator in accordance with the System of Certification.

The Chief Engineer is to ensure there are sufficient appropriately qualified employees/maintenance contractors at each location, or able to be relocated to each location, to conduct all the necessary maintenance activities for each job.

The Chief Engineer must identify when uncommon systems/design features on aircraft introduce the need for additional training of maintenance personnel, and must ensure training is provided to personnel identified as requiring it.

The Chief Engineer shall implement additional safety precautions when uncommon systems or design features pose a safety risk if mishandled.

The Chief Engineer is to ensure work packages are sent to the maintenance location prior to each job and ensure completed work packages are received promptly from remote/temporary locations.

## 6.2 Temporary Locations

Prior to carrying out any work at a Temporary Location, use the Temporary Location Assessment (see Section 11.9) to establish the general facilities and features of the location, including the owner and access arrangements.

A completed Temporary Location Assessment is to be kept in the Temporary Locations Register for each Temporary Location utilised.

When conditions/facilities change at a Temporary Location previously assessed, a new assessment shall be done for that location.

The Temporary Location Checklist (see Section 11.10) is to be used to compile a checklist of requirements in preparation for a planned activity at a temporary/remote location. Drawing on information contained in the Temporary Location Assessment and the work package for the proposed activity, the completed Checklist must identify the personnel, data, special tools and equipment, parts and consumables anticipated to be required for the activity.

The Temporary Location Checklist must be approved and signed by the Chief Engineer prior to commencement of any activity.

When completed, the Temporary Location Checklist is to be attached to the work package along with a copy of the Temporary Location Assessment that relates to the Location being used.

Arrangements for the transport of special tools/equipment and parts shall ensure they are maintained in a serviceable condition.

When assessing personnel requirements, consideration of their well being should include hours of work (and travel), transport arrangements, accommodation and amenities for their comfort and safety.

Where facilities are found to be deficient at a proposed temporary location, identify on the Checklist the additional resources required to overcome the deficiency, e.g. If no power or air is available, can a suitable generator and compressor be sourced? Arrangements for the additional resources are to be specified on the Checklist e.g. 'hire from XYZ' or 'customer will supply'.

When deficiencies in facilities can be rectified by transporting equipment from the Main Location, the Chief Engineer must take into account the effect on operations at the Main Location while the equipment is absent and schedule work accordingly.

## 6.3 Training

### Chief Engineer

- Identify through direct supervision and/or interviewing employees/contractors, the personnel who need training in activities covered by this Manual or the use of any equipment used in connection with that work.
- Identify (if required) the content of necessary training, the identity of an appropriate trainer (if required) and notify the Managing Director in writing of the need. Develop an implementation plan if necessary.
- Ensure adequate technical training of employees/contracted staff, including those who, upon completion of training, will seek the issue of a CASA maintenance authority for the maintenance concerned.
- Ensure employees/maintenance contractors are trained when organisational changes to the procedures in this Manual are made.
- Keep adequate records of training due/undertaken using the Training Record (Section 11.13). Maintain records in the employee's file.

### LAMEs and AMEs

- Ensure that any qualifications required by the Company to be held are kept current.
- Request or obtain training in any task required by the Company where your skills or currency are lacking.
- Strive for continual improvement in work skills.
- Update knowledge of the industry, current practices and future developments continuously through personal study and research.
- Familiarise yourself with, and research the requirements of, particular jobs in advance of the commencement of the activity. Request information and/or documentation from the Chief Engineer if required.

## 6.4 Occupational Health and Safety

### Chief Engineer

Take all reasonable steps to;

- Provide and maintain a safe working environment
- Provide and maintain safe workplace plant and equipment, and systems of work.
- Provide information on safe work practices, and instruct and train staff and contractors where necessary.
- Provide, where necessary, adequate protective clothing and equipment so far as practical to protect staff and contractors against hazards.

## LAMEs and AMEs

Take all reasonable steps to;

- ensure the safety of yourself and others
- comply with safety procedures and directions agreed between management and staff
- report potential and actual hazards observed and all incidents and accidents immediately to the Chief Engineer and/or Managing Director.

## 6.5 The Environment

### Chief Engineer

- Take responsibility for the environmental obligations of the company.

### LAMEs and AMEs

- Report any environmental concerns to the Chief Engineer.

## 6.7 Audits

The Internal Audit described in this Manual is intended to gather, examine and evaluate objective evidence to verify that applicable elements of the quality system have been developed, documented and effectively implemented. It is intended, through the use of this planned and documented activity, that continual improvement of the system of quality management may be achieved.

### Audit Objectives

- To determine the effectiveness of the Border Aviation Pty Ltd system of quality control
- To determine conformance or nonconformance of engineering procedures
- To provide a basis for improvement of the quality system
- To determine compliance with regulatory requirements

### Independence

The audit process should be carried out by a person independent of the particular procedure/process to be audited. The person may be an employee of Border Aviation Pty Ltd, the Chief Engineer, Managing Director, or a contractor. Auditor experience and strengths will be taken into account in appointing an auditor for particular Task Areas.

### Record Keeping

At the conclusion of each audit, the forms used will be filed as permanent records by the Managing Director.

The Managing Director is to control the implementation and administration of the audit process.

The Managing Director is to ensure internal audits are carried out and all Task Area elements as described in Section 13.1 are completed within a 12 month calendar period.

Audit Scheduling shall be carried out by the Chief Engineer by entering the Task Area to be audited against the month it is scheduled to be audited on the Audit Programming Sheet (Section 13.2).

### Audit plan

#### Managing Director

- Select a suitable Auditor.
- Provide a copy of this Manual, the audit file, and required forms to the Auditor.
- Instruct the Auditor to complete the audit, ensuring that he/she has access to relevant data, records, work areas and aircraft.
- Receive the completed forms at the conclusion of the audit from the Auditor. Ensure deficiencies and recommendations discovered in an audit are rectified by the due date. Record details of action taken on the Acquittal Form (Section 13.4).
- File the forms used in the audit, and complete the date of the audit on the Audit Programming Sheet. Manage all audit records.
- Liaise with the Chief Engineer as required.

- Analyse results of the Audit to determine the requirement for training and/or amendment to the Procedures and system of quality control.
- Perform a Management Review of the audit results, ensuring an adequate assessment of all Task Area elements of the audit process, including interviews with the Chief Engineer.
- Select Task Area elements of the audit process for a Management Review at least annually.

### Chief Engineer

- Liaise with the Managing Director as required regarding the audit procedure and results.
- Assess the deficiencies and recommendations identified in the audit.
- Take action to address deficiencies and amend procedures to improve future outcomes.

### Auditor

- Gain instructions from the Managing Director to conduct the audit.
- Assign a survey number to the new audit on the Audit Record Sheet (Section 13.3).
- Complete the Internal Quality Audit form (section 13.1) by notating a suitable comment beside each task completed where no deficiencies have been found, or the deficiency.
- Record the results of the audit on the Audit Record Sheet, noting all deficiencies, comments and findings in the appropriate boxes.
- Record recommendations for improvement of the quality system in the bottom section, and sign the form.
- Assign a date for the acquittal of deficiencies.
- At the conclusion of the audit, present the results to the Managing Director.

# Section 7 Work Procedures - Equipment Control

## Test Equipment Requiring Calibration

The test equipment maintained by Border Aviation Pty Ltd that is subject to regular calibration is listed in the Tools and Equipment Register. Each item has an Equipment History Record (Section 11.11) in the Register that details the maintenance/calibration requirements and history.

The Calibration Service Provider for each item is listed on the Equipment History Record.

Non-destructive testing of Metallic parts and gas cylinders shall be carried out in accordance with the manufacturers recommended standards or CASA Airworthiness Directive requirements at a CASA approved facility by authorised persons.

## Chief Engineer

Ensure manufacturer's recommended tools and equipment, and the machinery, tooling and test apparatus necessary for the activities to be carried out under the Certificate of Approval are available prior to the commencement of work.

Ensure a letter of agreement exists with other organisations to hire or borrow tools and equipment if required. A copy of the letter of agreement is to be kept in the tools and equipment register folder.

Ensure borrowed tools and equipment is subjected to the borrowed tooling acceptance procedure in Section 7.1.

Ensure suitable storage is provided for particular items of equipment or tools required to be maintained in a special condition. Ensure Calibrated tools and equipment are identified as such and handled with care at all times. Wherever possible, calibrated tools shall be stored in protective containers. When calibrated tools and equipment are required to be transported, provision should be made to ensure they are maintained in a serviceable condition.

Where damage to a calibrated tool is suspected, the tool shall be withdrawn from service until re-calibrated.

Ensure suitable ground support equipment to facilitate the movement and servicing of aircraft is made available.

Ensure test equipment used for conformance acceptance or to make return to service assessments are periodically calibrated in accordance with the manufacturers or NATA recommended standards.

Where there is no statutory calibration interval for an item, the Chief Engineer shall determine the frequency of calibration to reflect the actual or projected use of an item. The Chief Engineer has the discretion to vary the calibration interval of an item after considering:

- The type and frequency of use;
- Equipment manufacturers recommended calibration periods;
- The manner in which the equipment is stored and transported between uses; and
- Any adjustments made to the equipment or variation to corrections required following previous calibrations that may indicate a shorter or longer interval would be appropriate.

Ensure equipment subject to calibration intervals, whether statutory or determined as above, is clearly marked with the due date of the next calibration.

Ensure suppliers selected to provide calibration services hold suitable accreditation and are familiar with the equipment to be calibrated.

Ensure a company register of ground support equipment and specialised tooling is maintained. The register is to contain a form Equipment History Record (Section 11.11) for each item requiring maintenance and/or calibration. The register will:

- Identify each item by serial number
- Document all maintenance and calibration requirements
- Provide a system of calibration control
- Provide a means of advising users of any calibration corrections used
- Provide a means of advising users if the item is unserviceable (an Unserviceable Tag per Section 12.1 should also be attached to the unserviceable item).

Enter in the company diary the dates on which maintenance and/or calibration is due for each item, and ensure the necessary action is taken when due dates are approaching.

Tools and equipment marked UNCALIBRATED or UNCONTROLLED must not be used for conformance acceptance or during return to service.

Tools and equipment marked CALIBRATE BEFORE USE must have the date and details of each use and calibration entered on the Equipment Life History Record.

Only tooling that is self calibrating, readily cal-checked, or has a valid calibration certificate are to be used to perform “return to service” assessment of aircraft components.

Calibrated tools may be fitted with a CORRECTION REQUIRED or NO CORRECTION REQUIRED sticker as appropriate by the Chief Engineer. If a tool is identified as CORRECTION REQUIRED the current Calibration Certificate referred to in the Equipment Life History Record must be used. Where practical, calibration certificates containing correction information should be copied and a copy kept with the equipment. If marked with CORRECTION NOT REQUIRED the tolerance that the tool has been tested to must be written on the sticker. The Chief Engineer must ensure the correction sticker is updated following each re-calibration of the tool.

When a tool is used to perform ‘return to service’ assessments the details of the tool used and the results of the assessment shall be recorded on the Additional Work Sheet and retained in the Job File.

Calibration results are to be monitored after each calibration test and evaluation made to any calibration interval variation necessary. Current and historic calibration reports are to be attached to the Equipment History Record for each piece of equipment.

## LAMEs and AMEs

Use of equipment in the maintenance of aircraft is to be carried out in accordance with the equipment manufacturer and aircraft manufacturer’s instructions. Seek training from the Chief Engineer if you are unfamiliar with any tooling or equipment, prior to use.

Notify the Chief Engineer of any irregularities, defective equipment, suspected damage, unserviceable equipment or equipment whose calibration is overdue.

Ensure personal tooling requiring calibration and inspection are not used for aircraft or aircraft component maintenance, unless included in the company register and calibration has been carried out.



## 7.1 Borrowed Tooling Acceptance Procedure

### Chief Engineer

Ensure all borrowed tools and equipment are subjected to this procedure.

#### Acceptance of borrowed tools and equipment:

- Identify the ownership of borrowed tools and equipment. Apply a label (Borrowed Data Tool/Equipment sticker) to items which are borrowed, stating the identity of the owner.
- Inspect the borrowed tools or equipment for applicability – reference Controlled Data to determine the applicability by part number, model number and serial number for the aircraft, equipment or component to be worked on.

NOTE: Non-applicable borrowed tools and equipment are to be returned to the owner.

- Inspect the borrowed tools and equipment for condition – ensure item is free from damage.

NOTE: Unserviceable borrowed tools and equipment are to be labeled with an Unserviceable Tag.

Determination of calibration condition:

- Determine borrowed tools and equipment calibration status (if applicable) by reference to a calibration sticker, tag or inscription, calibration certificate etc.
- In the absence of calibration data on tools and equipment subject to calibration, reference the register of tools and equipment kept by the owner or representative to determine the calibration status.
- Borrowed tools and equipment subject to calibration with expired calibration periods are to be labeled with an Unserviceable Tag.

NOTE: All unserviceable borrowed tools and equipment are to be brought to the attention of the Chief Engineer verbally. The Chief Engineer is to notify the owner of the borrowed tools and equipment of the un-serviceability.

## 7.2 Out of Tolerance Action

When a piece of test equipment is found to be out of tolerance, the Chief Engineer must determine what equipment, systems etc the tool was used in determining the return to service criteria since the last calibration was performed.

The following actions shall be taken as required:

- Review Job Files to determine when the tool was used for 'return to service' assessments since the last calibration.
- Determine the affect an erroneous result may have on the airworthiness of the component/aircraft by reviewing manufacturer data/tolerances.
- If considered necessary after the above investigation, recall affected aircraft by contacting the Registered Operator and advising the necessary actions to ensure the continued airworthiness of the aircraft.

Document the investigation and results of any action taken and retain on file.

# Section 8 Work Procedures - Stores Control

## Chief Engineer

Ensure all documents pertaining to the goods inwards, goods outwards, storage and use of spare parts and components are kept in the appropriate manner.

Ensure a place of storage is identified for spare parts. This location shall be able to be isolated from general access.

Ensure a secure place of storage is identified for quarantine items such as:

- Shelf life expired items
- Unserviceable items
- Items manufactured under MITCOM procedures

Ensure parts to be transferred to the store are protected against contamination or affects of exposure to light, moisture, heat, dust etc.

Ensure volatile or corrosive materials are segregated from all other parts.

Ensure commercial goods are segregated from aircraft components and materials.

Provide for the storage of gyros and other delicate components, in suitable packaging and stored on a foam (or similar) shock absorbing pad.

Ensure flexible goods are stored in a 'no-stress' situation.

Provide storage of aircraft sheet metal in racks to prevent damage.

Ensure electrostatic-sensitive components are stored in suitable packaging and stored on an anti electro-static shelf.

Ensure aircraft tyres are stored vertically in racks, and not exposed to strong light.

Ensure compressed gas cylinders are segregated as required to ensure safety and manufacturers' storage requirements are observed.

## 8.1 Goods Received Number

The GRN allocated to each new item entering the store ensures full traceability of goods used in maintenance. By entering the GRN into job files, each item can be traced back to the original supplier.

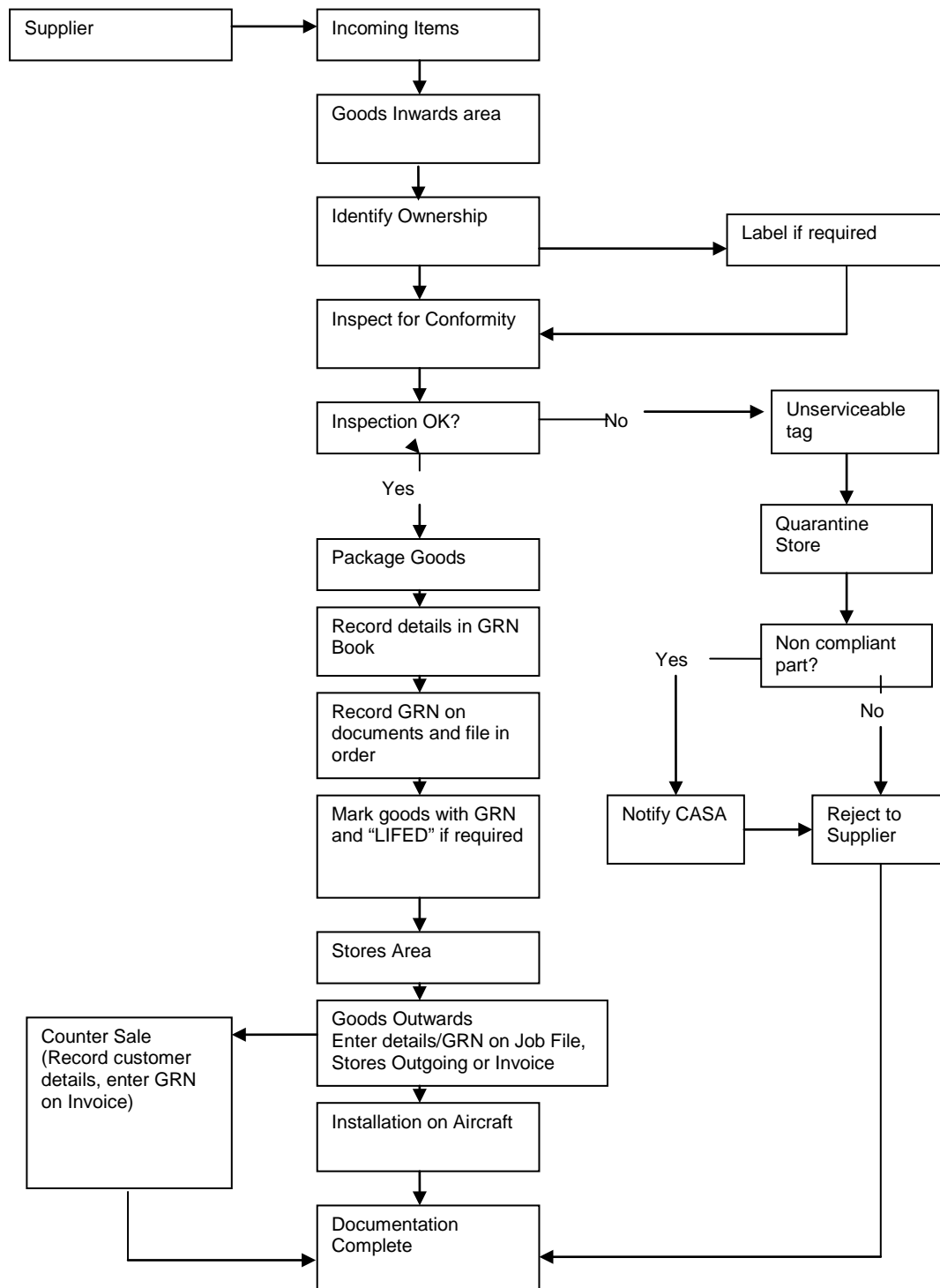
All incoming parts, components or materials intended for use on aircraft are issued a GRN prior to being placed in the store. The parts are entered into the "GRN Record" as they are received. The GRN Record records the date, part number, description, quantity, supplier, order number (refers to MYOB orders) and GRN. The GRN is then clearly marked on both the invoice/documentation and the part/component/material.

The GRN is a six digit figure. The first two digits indicate the year, the second two digits indicate the month and the final two digits indicate the sequence in the months' invoices/documents received. For example a GRN of 071106 represents goods received on the 6<sup>th</sup> invoice/document in the month of November in 2007. The invoice/documents for goods marked with this GRN can be found in the November 07 GRN documents file, and will be the 6<sup>th</sup> invoice/document in the bundle. The invoice will have the GRN handwritten on it to confirm the match. The invoice/documentation is filed in order for each month for easy reference.

If the parts/components/materials are suitable only for fitment to non-certified (limited category ex-military, experimental or ultralight) aircraft, the GRN will be prefixed with the letter U (e.g. U080406) and are not for use on Certified Aircraft unless specified in the current approved data.

NOTE: different parts received on the same invoice/documentation will have the same GRN.

## 8.2 Stores Control Flow Chart



## 8.3 Goods Inwards Procedure

### Chief Engineer

#### Acceptance of Goods

Ensure all incoming goods are placed in the GOODS INWARDS area.

Acceptance of goods:

- Identify the ownership of the incoming goods. Apply a label to items which are the property of owners, operators or maintenance contractors.
- Inspect the goods for conformity – ensure Part numbers and Serial numbers match the documentation and order. Ensure the documentation is satisfactory in accordance with applicable CAR's, CASR's and CAO's.

NOTE: Non-conforming goods are to be labeled with an Unserviceable Tag and placed in quarantine.

- Inspect the goods for condition – ensure item is free from damage, determine if the item is shelf-lived and identified appropriately.

NOTE: Unserviceable goods are to be labeled with an unserviceable tag and placed in the quarantine store area.

Rejection of Parts: All non-conforming and unserviceable goods are to be brought to the attention of the Chief Engineer verbally. The Chief Engineer must notify CASA of non-conforming and unserviceable goods. Refer CAO 100.16 and CAR 42W.

- Inspect the goods for non aviation use. Non aviation goods are to be labeled – Non Aviation Part or have the GRN prefixed with a U to indicate they are not for use on Certified Aircraft
- Ensure goods are suitably packaged with the use of blanking plugs/plates and/or containers.

NOTE: Serviceable used, overhauled or reconditioned parts/components held in the Store are to have all relevant details entered on a serviceable tag; the tag attached, and be stored appropriately.

Items procured for non-certified aircraft, whether ex-military or experimental, shall be subject to the same acceptance procedures as for certified aircraft except the same standard of supplier documentation may not be available. Such parts should be procured from original sources or through known and reputable distributors, and consideration should be given to the need to carry out additional investigation to determine the component's condition e.g. NDI.

#### Traceability of Goods

- Record the details of goods in the GRN book, and mark the documentation supplied with the GRN issued to the goods.
- Place the documentation in the appropriate file for the month in which they were received, in ascending order by the last two digits of the GRN.
- Clearly mark the goods with the GRN (ensure part number is also clearly marked).
- If the parts are a shelf-lived item and are not already been identified as lifed by manufacturer or supplier packaging, LIFED should be written along with the GRN and part number.

NOTE: All parts must be inspected for serviceability prior to being fitted to an aircraft regardless of shelf-life identification.

- Comply with any inhibiting requirements if necessary.

- Place the labeled goods in the Stores Area.
- Enter onto the GRN book (and file documents appropriately) any goods recorded in Job Files received from remote locations where supply was direct to that remote location.

## 8.4 Stores Area

### Stores Area

#### Chief Engineer

The guidelines listed elsewhere in this section are to be observed when placing items in the Stores Area. In addition, the Chief Engineer is to:

- Ensure parts are stored in a manner that allows satisfactory stores area management.
- Provide “sections” within the Stores Area, by partitioning or labeling, to adequately cover all types of goods. E.g. Engine Components, Consumables, Hardware, Tyres etc.
- Store goods within each section in part number order as far as is practicable.
- Control and monitor stock levels within the Stores Area by direct supervision using standard management best practices, to ensure timely receipt of parts. MYOB Inventory may be used to assist in monitoring stock levels and shelf life. Special attention shall be given to longevity of items that are sensitive to heat, light, moisture, time and U.V. All sensitive stock will be checked for serviceability at each stocktake, and prior to fitment to an aircraft.
- File and store all documentation (including the authorised release certificate) that accompanies parts, in a manner that allows traceability.

## 8.5 Goods Outward Procedure

### Chief Engineer

- Ensure outgoing goods are recorded on a Job File and/or an Invoice, or in the Stores Outgoing Register.

NOTE: Counter sales will have the GRN recorded on the customer invoice, and the customer details (name, address, items purchased) will be recorded in the Company sales register.

- Ensure goods have a means of identifying their serviceability and condition.
- Ensure aircraft components have their Component History Cards packaged with the component (if applicable).

## 8.6 Dispatch of Goods

All items contained in the store are to be checked for serviceability and traceability prior to being fitted to Aircraft.

Any parts/components/materials held in the store as serviceable items may be identified by either of the following methods:

- A Serviceable Tag fitted with all relevant details filled in.

- A GRN and part number.

Ensure Component History Cards and/or ARC's accompanying aircraft components are filed in the job Work Package.

If goods have been received direct from a supplier to a remote location, record the packing slip/invoice/release note details on the Stock Requisition Form in the job file and retain the documents in the work package of the aircraft for processing upon return to base.

## 8.7 Quarantine

Unserviceable items held in the Quarantine Store should be identified with relevant information and reason for unserviceability or reason for being placed in the quarantine store. Such parts are not to be fitted to aircraft unless they are overhauled, repaired or tested to return to a serviceable state in accordance with approved current data.

MITCOM parts held in the Quarantine store are only for fitment to aircraft undergoing maintenance and are not for separate sale. MITCOM parts, as with all quarantine parts, may only be accessed by the Chief Engineer.

All parts removed from aircraft or stock at stock take that are unserviceable will be labelled UNSERVICEABLE with all applicable details and stored in the appropriate quarantine area.

Any parts or materials found to be defective will be removed from the Store and placed in quarantine. The Chief Engineer will submit a rejection report to CASA in compliance with the rejection reporting requirements. Refer CAO 100.16 para 4 and CAR 51 and 52.

# Section 9 Work Procedures - Maintenance Control

## 9.1 Maintenance Control

The Chief Engineer will ensure the following are complied with in the carrying out of his administration of airworthiness control duties:

- Implement and comply with the aircraft's maintenance schedule/system of maintenance detailed in the aircraft Logbook Statement Part 1 when directed to conduct maintenance.
- Notify the Registered Operator without delay, when the maintenance schedule/system of maintenance is defective or no longer applicable.
- Comply with the relevant airworthiness requirements of the CAR's, CASR's and AD's.
- Manage all work and maintenance planning procedures, and the system of record keeping.
- Assign an appropriate coordinator to co-ordinate maintenance across categories if required.

## 9.2 Aircraft Work Packages

### Chief Engineer

Ensure a Work Package is compiled and forwarded to each maintenance location containing the following as required:

- A unique job number
- Job File Cover Page
- Stock Requisition Form
- Labour and Travel Record
- The relevant inspection schedules or maintenance instructions
- Additional Work Sheets
- AD and Special Inspection Sheets
- Category Certification Sheet
- Maintenance Release Book
- The Aircraft Logbooks if required
- Any other relevant documentation

Ensure the work package is returned on completion of the maintenance and certification for the maintenance performed has been carried out:

- The completed inspection schedules
- The completed Additional Work and Certification sheets
- The completed AD and Special Inspection sheets



- The expired Maintenance Release
- The Aircraft Logbooks
- All documentation accompanying aircraft parts or components supplied direct from suppliers

Upon receipt of the returned work package, update the Aircraft Logbooks. All Job Files shall be retained in the Company archives for a period of no less than 5 years.

Ensure the applicable contents of work packages are retained as a permanent record of each aircraft's maintenance history, in accordance with the applicable CAOs and CARs.

Ensure the work performed is certified in accordance with CAR Schedule 6 and CAR 42ZE. See section 9.6 of this Manual for Certification Procedures.

### LAMEs and AMEs

Ensure the correct completion and certification of documentation (by appropriate person) for work performed, in accordance with the Civil Aviation Regulations and Section 9.6 of this Manual.

Liaise with the Chief Engineer for the supply of parts, materials or equipment necessary for work being performed.

Bring to the attention of the Chief Engineer any suggestions that may improve the standard of work being performed.

## 9.3 Remote or Block Supervision of Work by A.M.E.'s

Under certain circumstances and only in accordance with written instructions of the LAME responsible for the work to be carried out, AME's may be permitted to perform work without the direct supervision of the LAME.

Prior to compiling written instructions, the LAME must take into consideration the experience level and knowledge/skill attributes of the individual AME.

Having carried out a survey of the actual work to be carried out, or in the case of routine scheduled maintenance – a survey of the work package, the LAME who will be certifying for the completion of the work may make use of this procedure.

Prior to exercising his/her prerogative, the responsible LAME shall provide the AME with clear written instructions. Such instructions shall:

1. Specify the work to be carried out.  
E.g. "Remove access panels from the following areas:  
(a) Underwing control cable access  
(b) Etc."
2. Clearly indicate at which point the AME cannot proceed until an inspection and/or sign-off by the LAME is carried out; and
3. Any other specific considerations if considered appropriate/applicable.

The following list of the type of work that may be eligible for remote or block supervision is provided as a guide only.

1. Disassembly for periodic inspection or rectification but only where such disassembly does not require the use of special tooling or processes or is not part of a stressed structure;
2. Removal/opening of access panels/doors to gain access as required;
3. Drainage of fluids, but not defuelling; and

4. Depending on the experience level of the AME, disassembly of flight controls, undercarriage and/or engine controls.

On completion of the task, a copy of the written instructions provided to the AME shall be filed with the completed work package.

## 9.4 Activities on behalf of the C of R Holder

This Section reserved for future use.

## 9.5 Computer Control Requirements

This Section reserved for future use.

## 9.6 Manufacture of Parts in the Course of Maintenance

The manufacture of parts during the course of maintenance can be carried out under the Certificate of Approval as long as those products are to be used by the Certificate of Approval holder for the installation on the aircraft under maintenance of the COA.

The Chief Engineer is to ensure MITCOM is carried out in accordance with this section and the current CASA guidance material and regulations.

The following conditions must be considered when manufacturing the parts:

- Materials used in the production are as specified in the design data.
- The aeronautical product is required during the course of maintenance.
- The methods, procedures and controls listed in this Manual are followed.
- The aeronautical products manufactured are those required as part of a modification or to replace or repair a broken, corroded or worn aeronautical product.
- The aeronautical product is manufactured in accordance with the manufacturers' data or through an Engineering Order supplied by a design signatory.
- The aeronautical product is manufactured in accordance with the manufacturers' original material requirements or an approved alternative.
- The Company has the capability to manufacture particular aeronautical products with respect to appropriate facilities, tools, and trained/qualified staff.
- The manufactured parts are to be marked legibly and permanently and identified with the component original part number followed by the letters TRA.

Where a quantity of identical parts is produced beyond the immediate requirements, the additional parts may be held in stock providing they will be consumed in later maintenance. Such parts are to be held in the Quarantine Store and the Chief Engineer is to ensure they are not sold separately as spare parts.

The Chief Engineer is to keep a record of all aeronautical products manufactured by the company (see Section 11.14 Record of Manufactured Parts) and to provide copies of the relevant details to the customer/RO. Records are to be retained in the Company files for a period of at least 2 years.

The aircraft parts produced must have no detrimental affect on the airworthiness of the aircraft or aircraft component.

## 9.7 Certification

Certification for Periodic or Scheduled Maintenance carried out in accordance with the Manufacturer's or CASA Schedule leading to the issue of a CASA approved Maintenance Release shall be certified for completion in accordance with the CASA System of Certification contained in Schedule 6 of the CAR as per CAR 42ZE.

### Certification Procedures

Certification for maintenance within a category, and additional work, may be certified using the Additional Work Sheet (see Section 11.2) or Airworthiness Directive and Special Inspection Compliance Sheet (Section 11.3) as appropriate.

The certification must be made by an appropriately licenced Aircraft Maintenance Engineer ensuring that:

- All work carried out is entered on the work sheet and that maintenance completed has been carried out in accordance with approved data.
- Details of tests or adjustments, including identification of calibrated tools used and test results, are entered on the work sheet.
- Any defects or damage found as a result of the inspection have been rectified and a certification made for the rectification has been completed on the appropriate work sheet.

Coordination of maintenance within a category must be made using the Certification Sheet (see Section 11.4) by an appropriately licenced Aircraft Maintenance Engineer.

Before making a category certification the person certifying shall ensure that:

- Each stage of maintenance is performed by an appropriately authorised person and has been properly certified by that person.
- The carrying out of any stage of the inspection does not adversely affect another stage of maintenance.
- The carrying out of maintenance within the category is completed.

Coordination of maintenance across categories is to be made using the Certification Sheet (see Section 11.4).

The certification must be made by an appropriately licenced AME who has coordinated the whole inspection on behalf of BORDER AVIATION Pty Ltd, ensuring that:

- Each category of maintenance has been coordinated by an appropriately authorised person and certification for the co-ordination of that maintenance has been properly made.
- The carrying out of each category of maintenance has not adversely affected any other stage of maintenance
- The carrying out of maintenance has been completed

Certification for unscheduled maintenance is to be carried out using the Additional Work Sheet and Aircraft Logbook or the Maintenance Release by an appropriately licenced AME.

Before making a certification the person certifying shall ensure that:

- Maintenance completed has been carried out in accordance with approved data

- Details of the maintenance is entered on the work sheet or maintenance release

Certification for Independent Inspection of Flight Control Systems is to be made by entering the words “Independent Inspection of Flight Controls carried out” on the appropriate work sheet or Maintenance Release followed by the identity (Licence number) and signature of the 1<sup>st</sup> Inspector (appropriately licenced AME) and the 2<sup>nd</sup> Inspector (Pilot endorsed on type, or holder of an AME licence or airworthiness authority covering maintenance of a type that includes the inspection).

The first inspector shall be the person who carried out and/or supervised the work requiring the independent inspection. The second inspection must be carried out independently by an appropriate person.

Both inspectors shall check that the work being inspected was carried out in accordance with the aircraft’s approved maintenance data and that the system functions correctly and in correct sense.

The Certification shall be similarly made in the Aircraft’s Logbooks.

The form Independent Inspection-Flight Control Systems (Section 11.18) may be used as an alternative to carrying out the certification twice, on the additional worksheet and the aircraft logbook. This form allows for two original copies of the certification to be made in the work package (at the time the inspection is carried out) and one of those can be separated for attachment to the aircraft logbook upon completion of the maintenance. This is to allow for the possibility that the person completing the independent inspection is not present when the logbook entry is being made.

Final Certification must be made by the person that coordinated the maintenance, or if the maintenance was not required to be coordinated, the person who certified for the carrying out of the maintenance. Final Certification shall be made in the Aircraft Logbook in accordance with CAR Schedule 6 Part 4, prior to issuing the Maintenance Release.

The person who carried out Final Certification is to consider if an assessment flight is necessary. Any maintenance that may have an adverse effect on the flight or operating characteristics of the aircraft, but not to the extent as to affect the safety of the aircraft; and that can only be assessed during flight, should be subject to an assessment flight prior to final release to the customer. Liaise with the Registered Operator to ensure an appropriate pilot is selected to carry out the assessment flight, and that the pilot is aware of the maintenance that is being assessed. The Maintenance Release shall be endorsed to the effect that an assessment flight is to be carried out, including any specific details of systems to be assessed, and the identity of the crew and of the person who may clear the endorsement following satisfactory completion of the assessment flight.

## 9.8 Maintenance Release Issue

Maintenance Releases shall only be issued for the period stated on the Aircraft Logbook Statement Part 1.

The person signing a Maintenance Release on behalf of Border Aviation Pty Ltd shall be the person who coordinates the maintenance in all categories.

On issue of a Maintenance Release the coordinator shall endorse Part 1 of the Maintenance Release with details of maintenance required during the period of validity as assessed from details in the Aircraft’s Logbook.

The expired Maintenance Release is to be kept as part of the Aircraft Logbook Records.

## 9.9 Defect Reporting

### Rejection of Aircraft Components and Materials

Aircraft components or materials received from a supplier with CASA approved documentation or from a Certificate of Approval Holder with an Authorised Release Certificate, which are found to have manufacturing discrepancies or are of poor quality and unsuitable for use on aircraft, are to be reported to CASA with all required details as listed in CAO 100.16 4.1.

### Defect Reporting including Major Defects

The Chief Engineer shall investigate all defects and, if the defect is a major defect, submit a Defect Report (CASA form 404) to CASA immediately and report the defect to the Registered Operator of the aircraft.

A Major Defect is one that has or could cause; primary structural failure, control system failure, engine structural failure or fire in an aircraft.

Any person employed or contracted to carry out maintenance of aircraft covered by the Certificate of Approval held by Border Aviation Pty Ltd must report the existence of any defect discovered to the Chief Engineer.

If a defect is discovered in a component that is or was intended to be fitted to an aircraft, the Chief Engineer must investigate whether the defect, if installed on an aircraft, might affect the safety of the aircraft. The Chief Engineer shall notify the owner of the aircraft component (if applicable) and submit a Defect Report (CASA form 404) to CASA if the investigation reveals a threat to the safety of the aircraft.

If any defect, upon investigation, is found to have been caused by persons or procedures employed by Border Aviation Pty Ltd, the Chief Engineer and/or the Managing Director (as appropriate) shall take the immediate action necessary to stop any recurrence. Following such action, amendments to procedures and training of persons shall be implemented to safeguard against recurrence.

All completed Defect Reports and related documentation shall be retained in the Defect Report File.

# Section 10 Work Procedures- Document Control

## 10.1 Aircraft Maintenance Data

The Chief Engineer will ensure the contents of this manual and other necessary approved data specific to the task being undertaken is made available at the primary location and at other recorded or temporary locations where activities covered by the COA are carried out.

Current approved data, for which a revision service is in place, will be marked CONTROLLED.

All documentation relating to revision services maintained by Border Aviation Pty Ltd for controlled data is contained in a folder labeled 'Maintenance Data' maintained by the Managing Director. Renewal dates are to be noted in the company diary and the Managing Director is to liaise with the Chief Engineer to determine renewal requirements as they fall due.

Data for which no revision service is available or currently in place will be marked UNCONTROLLED. Prior to using UNCONTROLLED data in aircraft maintenance or repair the LAME must confirm the current status of the data. The Managing Director maintains a folder labeled 'Maintenance Data Resources' which contains quick reference information on where to look (usually internet sites) for the amendment status of publications for many aircraft manufacturers, type certificate holders and aeronautical product manufacturers. The folder includes website login details where Border Aviation Pty Ltd holds a customer access account with the manufacturer for online access to revision status and service information. Where information does not exist for a particular aircraft or product, LAMEs must confirm the status of the data with the manufacturer or type certificate holder prior to use.

As Border Aviation Pty Ltd maintains a wide variety of different vintage and classic aircraft types, many being orphaned types; maintenance and repair data is usually obtained 'as required'. Maintenance data is often maintained and supplied by the Registered Operator for their own aircraft. When using data supplied by the Registered Operator or borrowed from a third party, it is to be marked and treated as UNCONTROLLED data and confirmation sought from the manufacturer or type certificate holder of its currency prior to use for maintenance or repair.

## 10.2 Modification and Repair Data

Where a modification or repair is planned and the data is not contained in the aircraft or aircraft component manufacturers approved data, data approved in accordance with the CAR's, CASR's, Type Certificate or Supplemental Type Certificate will be obtained and supplied by the Chief Engineer.

The applicability and revision status of data generated by CASA is to be confirmed prior to commencing maintenance on an aircraft or aircraft component. The LAME is responsible for confirming the status of CASA publications by reference to the CASA website.

## 10.3 Document Inwards Procedure

Ensure all incoming data is placed in the administration area.

Acceptance of data:

- Identify the ownership of the incoming Data. Apply a label to items which are borrowed, stating the identity of the owner.
- Inspect the data for applicability – ensure Manual Numbers and Serial Numbers match the applicable aircraft, equipment or component. Ensure the documentation is satisfactory, applicable and complete.
- Inspect the data for condition – ensure item is free from damage and missing pages.

NOTE: All nonconforming and unserviceable data is to be labeled with an UNCONTROLLED sticker and brought to the attention of the Chief Engineer. The Chief Engineer shall notify the supplier and CASA of nonconforming and unserviceable data if required.

Determination of Currency:

- Examine the data for date of publication and revision status. Determine if the data owner has engaged a revision or notification service for the data from the publisher or manufacturer, and if the data is current in revision status.
- Apply a CONTROLLED DATA sticker to data determined as current. For current data without a revision service, record on the controlled data sticker the expiration date of the currency (if applicable).
- For undetermined currency data without a revision service, or expired currency data, contact the data supplier or manufacturer, or manufacturer's representative and determine the currency status of the data.

Ensure uncontrolled photocopied/faxed data is assessed prior to each use to determine applicability/currency. It shall be stamped UNCONTROLLED and dated upon receipt.

Border Aviation Pty Ltd subscribes to email notifications of ADs, AWBs and regulatory updates from CASA as well as email notifications for service bulletins from the major aircraft manufacturers. The person receiving these updates (normally the Managing Director) is to bring to the attention of the Chief Engineer anything which may apply to the activities carried out by the Company. Airworthiness Bulletins and other guidance material published by CASA that is generally applicable to Border Aviation's activities are to be printed, initialed and dated by the Managing Director and the Chief Engineer in turn once read and understood, and kept for future reference for a minimum of 12 months. The folder 'Advisory Material' is kept in the reference library for this purpose and contains information that has been reviewed and found broadly applicable to activities carried out by Border Aviation Pty Ltd. It is not intended to contain all the applicable information available.

# Section 11 Appendix 1 – Forms

11.1 Job File Cover Page

11.2 Additional Work Sheet

11.3 AD and Special Inspection Compliance Sheet

11.4 Certification Sheet

11.5 Stock Requisition

11.6 Labour and Travel Record

11.7 Parts and Materials Order Sheet

11.8 Stores Outgoing Register

11.9 Temporary Location Assessment

11.10 Temporary Location Checklist

11.11 Equipment History Record

11.12 Employee Procedures Manual Acknowledgement

11.13 Training Record

11.14 Record of Manufactured Parts

11.15 Instrument Calibration Worksheet

11.16 GRN Record

11.17 Engine Preservation Record

11.18 Independent Inspection of Flight Controls

11.19 Register of Aircraft Maintenance Engineers

11.20 Revision Advice- Quality and Procedures Manual



## 11.1 Job File Cover Page

Job Number	Aircraft Type	Aircraft Serial Number/Year		Aircraft Registration	
Date Started	Date Completed	Aircraft Time in Service		Tacho	Hour meter
Customer	Customer Contact	C of A	Flight Manual	LBS	Registration

Engine No. 1 Type	Serial Number	Date last OH	Date installed	TBO hrs/ysrs	AF hrs Installed
Engine No. 2 Type	Serial Number	Date last OH	Date installed	TBO hrs/ysrs	AF hrs installed
Prop No. 1 Type	Serial Number	Date last OH	Date installed	TBO hrs/ysrs	AF hrs installed
Prop No. 2 Type	Serial Number	Date last OH	Date installed	TBO hrs/ysrs	AF hrs installed

Work requested		
Customer Property	Received	Returned

Forms	Number of Pages	Comments		
Customer Work Order				
Additional Worksheet				
Labour and Travel record				
Stock Requisition				
Periodic Inspection Worksheets				
AD and Special Inspection Compliance Sheet				
Piston Engine Condition Report				
Certification Sheet				
		Old MR number	New MR number	New MR expires
Total Pages				





## 11.4 Certification Sheet

The Certification Sheet is to be used to complete Category Certification and Coordinator Certification for the completion of scheduled maintenance for and on behalf of Border Aviation Pty Ltd. If required for a particular activity, this form is to be retained as part of the Job File upon completion of the activity.

### CERTIFICATION SHEET

<b>JOB NO:</b>	<b>AIRCRAFT TYPE:</b>	<b>AIRCRAFT REGISTRATION:</b> <b>VH-</b>
<b>IDENTITY OF INSPECTION</b>	<b>IDENTITY OF SCHEDULE</b>	<b>MAINTENANCE RELEASE DETAILS</b>
		<b>EXPIRED M/R NO: ISSUED M/R NO: DATE OF ISSUE AIRCRAFT T.T.I.S.</b>

#### L.A.M.E. CERTIFICATION

I hereby certify that all maintenance in the category(s) for which I am responsible has been completed.

AIRFRAME CATEGORY:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....
ENGINE CATEGORY:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....
ELECTRICAL CATEGORY:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....
INSTRUMENT CATEGORY:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....
RADIO CATEGORY:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....

#### CO-ORDINATING CERTIFICATION

I hereby certify for the completion and co-ordination of the entire inspection.

LAME:	.....	LICENCE NUMBER:	.....	DATE:	.....	for & on behalf of:	.....
-------	-------	-----------------	-------	-------	-------	---------------------	-------

**A CERTIFICATION ABOVE CONSTITUTES A CERTIFICATION PURSUANT TO CAR 42ZE THAT ALL MAINTENANCE HAS BEEN PROPERLY CERTIFIED.**

Note: The person who certifies for the completion and co-ordination of the entire inspection is to ensure that any maintenance performed during the inspection has not invalidated a certification already made in another category and has been completed and properly certified.

## 11.5 Stock Requisition

This form is used to record parts, equipment and materials used in the course of maintenance for a particular job. Full details shall be provided of parts and materials used, including GRN and serial number if applicable. There is provision for recording the details of Customer Supplied Parts and consumables used in the course of maintenance. This form shall be retained as part of the Job File upon completion of the activity.

Job Number	Aircraft Registration

Parts from Stock					
QTY	Part No.	Description	Serial No.	GRN	\$(estimate)
Total					

Customer Supplied Parts					
QTY	Part No.	Description	Serial No.	Condition	Release

Consumables Used	
Description	\$(estimate)
Total	

## 11.6 Labour and Travel Record

The Labour and Travel Record is used to record expenses related to a particular job in the form of man-hours, travel, freight costs and outsourced work e.g. component overhauls. The main purpose of this form is for billing customers, and it is used in conjunction with the Stock Requisition.

Job Number	Aircraft Registration

Workshop Labour				
Date	Work Carried Out/Travel undertaken	Name	Hours	Comments

Out-sourced Work	
Description	\$(estimate)

Freight and other expenses	
Description	\$(estimate)



# 11.8 Stores Outgoing Register

Record all items removed from the store which are not recorded on a Job File or Invoice. State the reason for removing the item e.g. personal use, shelf life expired, damaged during handling etc.

DATE	REASON	PART NO.	DESCRIPTION	GRN	Quantity



## 11.9 Temporary Location Assessment

This form is to be used to assess the suitability of a Temporary Location for a proposed activity. If necessary, initial assessment may be made by discussion with the owner/operator of the premises remotely. Retain a copy of the assessment as part of the Job File upon completion of the activity. Retain the original in the Temporary Location Register.

Location	Date of Assessment	Access Arrangements/address/co-ordinates/airfield details
Owner/Operator of premises	Contact Details	

Building Features/features	Yes	No	Details/Alternative arrangements
Roof			
Sealed/level floor			
Work space/benches			
Power			
Compressed air			
Lighting			
Water			
Office space			
Mobile reception (phone/internet)			
Toilet Facilities			
Special Equipment/Tools (List available items)	Yes	No	Details/Alternative arrangements
Jacking equipment			
Lifting equipment			

Comments

Assessment by	Signature

## 11.10 Temporary Location Checklist

Use this form in preparing for an activity at a Temporary Location. The completed form is to be approved by the Chief Engineer prior to commencement of the activity. Retain as part of the Job File upon completion.

Location	Activity	Aircraft Registration	Job Number

Items from Main Location:

- Completed Work Package (including aircraft logbooks)
- Mobile Phone
- Laptop Computer/tablet/mobile internet as required
- First Aid Kit
- Servicable/Unservicable Tags
- Company Certification Stamp
- Maintenance Release Forms (if required)
- Temporary Location Copy of Procedures Manual
- Secure quarantine storage (securable container and packing material)
- Secure/suitable Stores storage (securable container and packing material)

Item	Transport from main location	Available On Site	Not Required	Comment/alternative arrangements
Work space/bench				
Power/generator				
Compressor				
Lighting				
Water				
<b>Special Tools/Equipment</b>				
<b>Materials, Consumables and Stores</b>				
<b>Data</b>				
<b>Personnel requirements</b>			<b>Travel/transport/accommodation arrangements</b>	
<b>Restrictions on activities (e.g. daylight only, no jacking etc)</b>			<b>Chief Engineer Approval: Sign and Date</b>	

## 11.11 Equipment History Record

Description of Tool/Equipment		
Owner of Tool/Equipment		
Manufacturer and Model		
Serial number		
Storage Location/requirements		
Calibration interval (manufacturer recommended)		
Calibration interval (as determined by Chief Engineer)		
Calibration service provider		
Maintenance Requirements		
Restriction on usage (if necessary)		
Date Maintenance or Calibration carried out	Maintenance/Calibration Result (identify calibration certificate)	Next Due







# 11.15 Instrument Calibration Worksheet p1

Job Number	Aircraft Registration

This is an optional form which may be used to assist in recording results of instrument calibration checks. When used, it remains part of the job file on completion.

Compass Calibration	Compass type	Serial number	Place	Date
ref CAO 108.6				
Radios on Y / N	Beacon on Y / N	StXXXe on Y / N	Nav lights on Y / N	Engine(s) Operating Y / N
Master Compass: Carac Industry Co Ltd Checked for condition and pointer movement Y / N				

	North	East	South	West
Reading	000	090	180	270
Actual				
Correction				

Deviation shall not exceed 5 degrees for a direct reading compass used as the primary compass, or 10 degrees for a standby compass.

	Aircraft	Master	Aircraft	Master	Aircraft	Master	Aircraft	Master	For	Steer
000									000	
030									030	
060									060	
090									090	
120									120	
150									150	
180									180	
210									210	
240									240	
270									270	
300									300	
330									330	

<b>Fuel Gauge Calibration ref CAO 108.56 para 3.4 for VFR/NVFR only</b> Empty error max +0.5% or -5% of tank capacity, or up to -8% if no correction to empty reading is possible. Indicated Quantity = actual – unusable If scale error exceeds +/- 5% of capacity, or gauge is in fractions, placard is required and must also show ungaugable QTY.							
Level flight attitude Y / N		Normal system volts Y / N		Method used: dipstick / fuel added		Smooth ops Y / N	
Tank: Cap: Unusable:		Tank: Cap: Unusable:		Tank: Cap: Unusable:		Tank: Cap: Unusable:	
Gauge Ind	Litres usable	Gauge Ind	Litres usable	Gauge Ind	Litres usable	Gauge Ind	Litres usable

# 11.15 Instrument Calibration Worksheet p2

Job Number	Aircraft Registration

Pitot Static System ref CAO 108.56 para 3.3 for VFR/NVFR only		
Equipment Used	Pitot System Leak Check	Static System Leak Check
	120 knots for 10 seconds Pass / Fail	85 knots, not more than 4 kts loss in 10 seconds Pass / Fail

Altimeter ref CAO 108.56 para 3.2 for VFR/NVFR only														
Sea level to max operating height. Max error +/- 100 ft or 3% of indicated altitude (whichever is greater)														
Feet	zero	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	13000	14000
Error (up)														
Error (down)														

Airspeed Indicator (increasing) ref CAO 109.56 para 3.1 for VFR/NVFR only														
Max error +/- 4 knots up to max speed of aircraft.														
Knots	20	30	40	50	60	70	80	90	100	120	140	160	180	200
Error (up)														
Error (down)														

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## 11.18 Independent Inspection- Flight Control Systems (per CAR 1988 42G)

Job Number	Aircraft Type/Model	Aircraft Registration	Date

List affected systems and summarise maintenance carried out

Inspection: For the affected flight control system(s), check that the assembly, adjustment, repair, modification or replacement was carried out in accordance with the aircraft's approved maintenance data; and check that the system functions correctly.

Initial Inspection- by the person who carried out the maintenance:

Signature	Licence or Maintenance Authority	Date

Independent inspection- by an appropriate person as listed in CAR 1988 42G (5):

Signature	Licence or Maintenance Authority	Date

.....Detach here and attach lower section to aircraft logbook entry.....

### Independent Inspection per CAR 42G

Job Number	Aircraft Type/Model	Aircraft Registration	Date

List affected systems and summarise maintenance carried out

Initial Inspection- by the person who carried out the maintenance:

Signature	Licence or Maintenance Authority	Date

Independent inspection- by an appropriate person as listed in CAR 1988 42G (5):

Signature	Licence or Maintenance Authority	Date

## 11.19 Register of Aircraft Maintenance Engineers

This is the register referred to in section 4.3 of the Border Aviation Pty Ltd Quality and Procedures Manual. Upon entering new persons in this register the Employee Procedures Manual Acknowledgement must also be completed.

<u>Licenced Aircraft Maintenance Engineers</u>				
Name	Licence No	Effective Date	Licence Copy Inserted in this register (date/initial)	Date of first engagement

Aircraft Maintenance Engineers (unlicenced)			
Name	ARN (if any)	Date of first engagement	Date of termination

## 11.20 Revision Advice- Quality and Procedures Manual

Issue Number	Amendment Number	Date Dispatched	Method of Delivery (email, post etc)

Copy Number	Holder

Summary of Changes Made this Revision

Following incorporation of the change in your copy of this Manual, please return the acknowledgement slip below.

.....

### Acknowledgement by Manual Holder

Amendment Number	Issue Number	Copy Number	Holder

Amendment Actioned By	Signature and Date

Return to:

Border Aviation Pty Ltd  
 PO Box 273  
 Tocumwal, 2714

or

adminl@borderaviation.com.au

# Section 12 Appendix 2- Tags and Stamps

## Index

- 12.1 Unserviceable Tag Stamp
- 12.2 Serviceable Tag Stamp
- 12.3 Company Certification Stamp
- 12.4 Uncontrolled Data Sticker
- 12.5 Controlled Data Sticker
- 12.6 Company ID/Address Stamp
- 12.7 Borrowed Data/Tool/Equipment Sticker
- 12.8 Calibrate Before Use sticker
- 12.9 No Calibration Required sticker
- 12.10 Uncalibrated Reference Use Only sticker
- 12.11 Correction Stickers
- 12.12 Calibration Due Date sticker

## 12.1 Unserviceable Tag Stamp

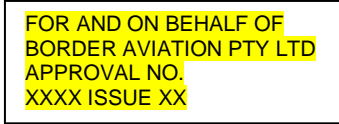
Used to identify unserviceable items. Items with this tag may be placed in quarantine or returned to the owner/operator. Also used to label unserviceable tools and equipment.

## 12.2 Serviceable Tag Stamp

Used to identify serviceable items placed in the store which have not been entered into the GRN system. (May be serviceable items removed from aircraft).

## 12.3 Company Certification Stamp

Used as part of certification to identify work done under the Certificate of Approval held by Border Aviation Pty Ltd.



## 12.4 Uncontrolled Data Sticker

Used to identify uncontrolled data and prevent accidental use for critical tasks.



## 12.5 Controlled Data Sticker

Used to identify controlled data and identify expiry dates to prevent use of out of date data.



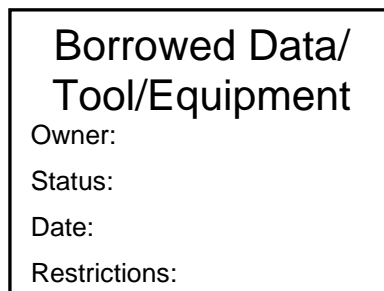
## 12.6 Company ID/Address Stamp

Used to identify property of Border Aviation Pty Ltd (reference books, text books and the like).



## 12.7 Borrowed Data/Tool/Equipment Sticker

To be used to identify borrowed tools or equipment. Includes provision for reference to calibration certificates/status, owner of tool/equipment, restriction on use of data/tool/equipment.



## 12.8 Calibrate Before Use sticker

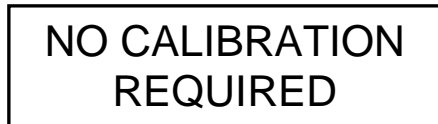


Use to identify tools/equipment requiring calibration prior to use for 'return to service' tasks. Details of each calibration and use must be entered on the Equipment History Record for the item.



## 12.9 No Calibration Required sticker

Used to identify tools that are self-calibrating or do not require calibration for normal usage.



## 12.10 Uncalibrated Reference Use Only sticker

Used to identify tools/equipment that are not maintained in calibrated condition. Such tools/equipment are to be used for troubleshooting and diagnosis only, and are not to be used in testing to establish the eligibility of a part or component for return to service/



## 12.11 Correction Stickers

Used to provide a "quick reference" on calibrated tooling where corrections may be required by the current calibration certificate. If no sticker is present on calibrated tooling, the Equipment History Record must be checked for corrections required.



## 12.12 Calibration Due Date Sticker

Used to alert users to the date after which the calibration is no longer valid.



# Section 13    Appendix 3- Audit Forms

## Index

13.1 Internal Quality Audit

13.2 Audit Programming Sheet

13.3 Audit Record Sheet

13.4 Acquittal Form

## 13.1 Internal Quality Audit p1

Item	Done	Task Description
Task Area A Compliance-General		
1		Work performed covered by Certificate of Approval
2		Procedures Manual available, applicable, current and procedures being observed
3		Relevant CARs, CAOs available and current
Task Area B Log Book Housekeeping		
1		Log Book Statement Parts 1,2 and 3 correct in all details
2		Exemptions and Concessions are being complied with
3		Check that all Non-recurring and Recurring AD's are listed and complied with
4		Check that all Life Limited Components are listed and within life limitation
5		Check that all Life Limited Component certifications are correct
6		Check that the Modification Status of the aircraft is correctly reflected
7		Check that all maintenance performed has been correctly entered and certified
8		Ensure the Weight and Balance data is correct and within the expiry date
9		Ensure Electrical Load Analysis sheet of the aircraft is correctly reflected
Task Area C Maintenance Releases		
1		Are expired Maintenance Releases being maintained as part of the aircraft records
2		Was the Maintenance Release issued correctly
3		Has compliance with required maintenance and endorsements been carried out correctly
4		Are correct entries being made for time-in-service, landings, cycles
5		Are OMEL.PUS items being correctly applied
6		Have all un-cleared and due items been cleared or transferred to worksheets

## 13.1 Internal Quality Audit p2

Item	Done	Task Description
Task Area D Certification Forms		
1		Check that certification forms used in job files are correctly entered and certified
2		Check that all certifications have been made by appropriately qualified or nominated personnel
3		Ensure that Maintenance Contractor work carried out is within the scope of the Certificate of Approval
Task Area E Direct Supervision		
1		Register of Appointed Persons and LAMEs is current
2		Are job files correctly issued, completed and certified
3		Are work Procedures in the Procedures Manual for work being performed being followed
Task Area F Data		
1		Manufacturers data, Design data/documents are available, applicable and current
2		CASA documents are current and available
Task Area G Equipment Control		
1		Check calibration status of tools and equipment
2		Company Register of Equipment available and current
3		Section 7- Equipment Control Procedures being observed
Task Area H Stores Control		
1		Ensure the stores areas meets the requirements of Section 8
2		GRN system is available, correctly used and current
3		Ensure goods in the stores areas meet the requirements of section 8
4		Check that the recording of goods used in work packages is correct
Task Area I Aircraft Undergoing Maintenance		
1		Work area is clean, safe and tidy and adequate for work being performed
2		Job File provided
3		Correct completion and certification of Job File





