SECTION 4.3 CAO 95.10 AEROPLANE – SET OF DRAWINGS OR DATA PACKAGE (PLANS)

4.3.1 INTRODUCTION

CAO 95.10 permits construction of a privately built single place low momentum recreational aeroplane from a set of drawings or data package.

No approval of a set of drawings or data package is required; however, approval of a set of drawings or data package is available from RAAus.

4.3.2 DESIGN AND CONSTRUCTION

RAAus sets no design criteria. Designers are free to design as they wish and specify any materials they wish.

4.3.3 SAFETY EQUIPMENT

A seat belt set of commercially available automotive, or aviation shoulder harness type shall be fitted that has a minimum of three points of attachment. Points of attachment should be such that a reasonable person/pilot would have confidence in them.

4.3.4 SALE OF DRAWINGS (PLANS)

A person may sell sets of drawings or data package for a CAO 95.10 aircraft without RAAus approval, however, RAAus may issue such an approval if a person applies.

Any approval by RAAus will detail what documents the approval covers, for example, the issue number (or the like) of the drawings, any building manual included, any operating instructions included, any maintenance instructions included.

4.3.5 APPROVAL OF A SET OF DRAWINGS OR DATA PACKAGE TO BE BASED ON A HISTORY OF SAFE OPERATION.

Approval of a set of drawings or data package for a CAO 95.10 low momentum recreational aeroplane type must be based on a demonstrated history of safe operation of that type.

Any person may apply to RAAus for approval of a CAO 95.10 aircraft set of drawings or data package.

For all aircraft, satisfactory history of operation of one prototype plus at least one identical version for periods of 100 flight hours each is an acceptable basis to apply for approval of the kit for the aircraft type. The applicant is responsible for providing evidence to RAAus of a history of safe operation for the type.

4.3.6 CONSIDERATIONS

The history of safe operation of an aircraft type already operating overseas must include an analysis of:

a) published flight test reports.

b) incident and accident reports attributed to an aircraft related issue.

c) defect reports. Significant defects are to be documented, repair schemes developed by the manufacturer and incorporated into the kit.

Substantiation of flying hours - flying hours to be used for substantiating a history of safe operation are to be formally documented:

a) when the aircraft type is of overseas origin evidence that the required number of aircraft have flown the required number of hours is also to be documented; and

b) the Australian agent or representative is responsible for the provision of certified statements from owners/builders overseas attesting to the number of flying hours accrued on examples of the aircraft.

Performance and handling - must be such that:

a) the aeroplane conforms to the requirements specified in the RAAus or CASA Flight Test Guide for assessment of Amateur-Built Aircraft accepted under an ABAA, or an equivalent overseas document accepted by RAAus; and

b) a qualified pilot of average ability should have no difficulty in controlling the aircraft at all times.

4.3.7 APPLICANT PROCEDURE

The applicant shall arrange to present a set of the drawings or data package for which approval is sought to the RAAus HAM.

Documentation Required - an applicant seeking approval of a set of drawings or data package must provide the following data to the RAAus HAM:

a) a detailed description of the aircraft including specification of its engine(s) and propeller(s);

b) a statement specifying the design standard to which the aircraft model was structurally tested, and the conditions and limitations during such testing, including the applied loads report and a report of the static testing undertaken; and

c) a report of the flight tests undertaken. These should follow the format given in the RAAus Flight Test Guide; and

d) a statement detailing operational limitations applicable to the aircraft type, including as a minimum:

   i. empty weight and maximum take-off weight; and

   ii. centre of gravity range and loading data; and

   iii. stalling speeds, maximum manoeuvre speed, never exceed speed, flap and undercarriage extension speeds (if applicable); and

   iv. drawings showing the general arrangement of the aircraft type and its sub- assemblies, which clearly define the material specifications, dimensions, rigging details, control surface deflections, tolerances, standard parts used and finish; and

   v. assembly or building instructions, if available; and

   vi. a materials list, if available; and

   vii. a flight manual or pilots operating handbook, if available and

   viii. the aircraft designers name and contact details, if available.

4.3.8 EVALUATION

The RAAus HAM will evaluate the set of drawings or data package for conformance with CAO 95.10.

If the evaluation is found to be satisfactory, the RAAus HAM may issue a certificate (or the like) which indicates that the set of the drawings or data package is approved.

The issue of an approval certificate for a set of drawings or data package has no bearing on the ability of a person to sell a set of drawings or a data package without approval.

To retain approval, any changes to an approved set of the drawings or data package will require contact with the HAM to ascertain whether those changes are major or minor in nature. Major changes will require a fresh application for an approval certificate. Minor changes can be addressed by way of a Service Bulletin, revised plans, or updated parts list etc from the designer.

If the set of drawings or data package evaluation is found to be unsatisfactory due to some technical reason, (for example, the aircraft would surely exceed the max take-off weight permitted under CAO 95.10) no approval certificate can be issued, however the aircraft may be eligible for RAAus registration and operation as a CAO 95.55 amateur-built aircraft.