



## Information Paper: “Experimental Dictionary”

*This information paper attempts to provide some quick references to various CASA Regulations and Advisory Circulars pertaining to Experimental aircraft.  
(Note: this list is not exhaustive.)*

Item	Source	Info
Authorised Person fees	<ul style="list-style-type: none"> <li>AC21.4(2) 11e</li> </ul>	A.P. may charge you a fee
Cockpit warning placard	<ul style="list-style-type: none"> <li>CAR (1988) 262AP(9)</li> <li>AC21.4(2) 14.1</li> </ul>	Not req'd for single seat
CofA application; sample letter	<ul style="list-style-type: none"> <li>AC21.4(2) attachment 2 sample letter</li> </ul>	To go with CofA Applic.
Design & construction	<ul style="list-style-type: none"> <li>AC21.4(2) 7.2</li> </ul>	Use any materials etc.
Design your own aircraft	<ul style="list-style-type: none"> <li>AC21.4(2) 7.6</li> </ul>	Permitted
Engine type	<ul style="list-style-type: none"> <li>AC21.4(2) 7.2</li> </ul>	Use any type of engine
Experimental “Category”	<ul style="list-style-type: none"> <li>AC21.3(0) 5.2</li> </ul>	No such thing! Experimental is only a <i>designation</i> of Special CofA.
Final Inspection - general	<ul style="list-style-type: none"> <li>AC21.4(2) 12</li> </ul>	General requirements
Final Inspection - purpose	<ul style="list-style-type: none"> <li>AC21.4(2) 6.3, 6.4</li> </ul>	SOLELY for imposing operating conditions
Flight Manual	<ul style="list-style-type: none"> <li>AC21.4(2) 17.1</li> <li>CASA Aeroplane Flight Manual Guide, 2002, page 17</li> </ul>	No formal manual required
Flight test area	<ul style="list-style-type: none"> <li>AC21.4(2) 14.2</li> </ul>	Owner to request an area with CofA applic.
Flight test hours	<ul style="list-style-type: none"> <li>AC21.4(2) 14.1</li> </ul>	25 hrs certified engine 40 hrs non certified engine
Flight test pilot	<ul style="list-style-type: none"> <li>AC21.10(0) 12.4</li> </ul>	Special pilot not required
Flight test program/schedule	<ul style="list-style-type: none"> <li>AC21.10(0) 9.6.2</li> </ul>	Recommended.
Inspections during construction	<ul style="list-style-type: none"> <li>AC21.4(2) 6.6</li> </ul>	Recommended, not mandatory
Maintenance	<ul style="list-style-type: none"> <li>CASA Instrument 535/03</li> <li>AC21.10(0) 7.6.3</li> </ul>	Maintenance program req'd by completion of test flying
Maintenance and it's Authorisation	<ul style="list-style-type: none"> <li>CASA Instrument 535/03</li> <li>AC21.4(2) 18.1.1</li> </ul>	Builder can do

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Maintenance release	<ul style="list-style-type: none"> <li>CASA Instrument 535/03</li> <li>CAR 1988 42ZC(6)</li> </ul>	Builder can issue. Not req'd to have for final inspection, but req'd before test flight commences
Major portion rule (51%)	<ul style="list-style-type: none"> <li>AC21.4(2) 5</li> </ul>	See definitions
Markings; "Experimental"	<ul style="list-style-type: none"> <li>CASR 1998 45.125 (1)</li> </ul>	50mm Minimum size
Noise certificate (otherwise known as the "Certificate to operate <u>without a certificate</u> "!)	<ul style="list-style-type: none"> <li>AC21.10(0) 17.2.1+3</li> <li>ANR info paper April 2002</li> <li>ANR 9A (2)</li> </ul>	Not req'd to have for final inspection, but req'd before flights commence
Operating conditions and limitations	<ul style="list-style-type: none"> <li>AC21.10(0) 16.1</li> </ul>	May be prescribed
Part built project	<ul style="list-style-type: none"> <li>AC21.29(0) 9</li> </ul>	Can qualify for Experimental Amateur Built
Passenger carrying	<ul style="list-style-type: none"> <li>AC21.4(2) 14.7</li> </ul>	Not permitted during testing
Phase 1 limitations	<ul style="list-style-type: none"> <li>AC21.4(2) 14.8a and attachment 3,</li> <li>CAR 1988 262AP</li> </ul>	Test period limitations
Phase 2 limitations	<ul style="list-style-type: none"> <li>AC21.4(2) 14.8b and attachment 3</li> </ul>	Ongoing limitations
Pilot qualifications for test flying	<ul style="list-style-type: none"> <li>AC21.4(2) 14.3</li> </ul>	Only normal endorsements required
Pre-closure Inspections during construction	<ul style="list-style-type: none"> <li>AC21.4(2) 6.6</li> </ul>	Recommended, not mandatory
Registration markings; number of	<ul style="list-style-type: none"> <li>CAR 1998 45.045</li> </ul>	3 sets, one under wings, & one set each side
Registration Identification Plate	<ul style="list-style-type: none"> <li>CARs 1998 45.140, 145, 150</li> </ul>	Fireproof. Near entrance & visible
Registration; size of	<ul style="list-style-type: none"> <li>CAR 1998 45.065 (3a)</li> </ul>	75mm Min. below 180kt (bigger, if above 180 kt)
Seat belts	<ul style="list-style-type: none"> <li>AC21.4(2) 7.3</li> </ul>	Recommended
Using parts off a certified aircraft	<ul style="list-style-type: none"> <li>AC21.4(2) 7.2</li> </ul>	Allowed (some)
Weight & balance	<ul style="list-style-type: none"> <li>AC21.4(2) attachment 2 sample letter.</li> <li>Confirmation by CASA and some existing A.P.'s.</li> </ul>	Builder can do. "I have weighed....." (not: "it has been weighed by:....." Also: How on earth could a "licenced" Weight Control Authority holder say that your aircraft of <u>totally unorthodox</u> design has it's centre of gravity in the right place? He can't possibly!