

PARC Inc High Power Certification Application

Personal Details (Completed by applicant)

Surname	: _____	First Name	: _____
Address	: _____		
D.O.B	: ____/____/____	Contact Phone	: _____
PARC #	: _____	Expiry	: _____

I, _____, certify that I am a member in good standing of the Perth Advanced Rocketry Club Inc. I am 18 years of age or older. I understand that I must comply with all applicable federal, state, and local laws or regulations during and after this certification attempt.

Signed: _____, Date: ____/____/____

Certification Details

Certification Level	: _____	Motor(s) Used	: _____	Manufacturer	: _____
<input type="checkbox"/>	1 st Time Certification	<input type="checkbox"/>	Re-Certification (Not required to pass written test again)		

Practical Certification Examination (Performed by certification officer(s))

<u>Pre-Flight</u>	<u>Launch/Flight/Recovery</u>	<u>Post Flight</u>
<input type="checkbox"/> Certification Exam Passed (see reverse for details)	<input type="checkbox"/> Stable flight	<input type="checkbox"/> Model recovered without major damage
<input type="checkbox"/> Minimum Experience for Required Certification	<input type="checkbox"/> Successful Chute Deployment	
<input type="checkbox"/> CASA Waiver for expected Alt (If required)	<input type="checkbox"/> Recovered safely	<input type="checkbox"/> Motor(s) retained
<input type="checkbox"/> Motor Certified	<input type="checkbox"/> Attempt successful <input type="checkbox"/> Attempt NOT Successful Reason: _____	
<input type="checkbox"/> Safety Checklist completed (See reverse of this form)		

Certification Statement (Completed by certification officer(s) if attempt successful)

I/we the undersigned, being financial members of PARC Inc and duly qualified to supervise this level 3 attempt, have witnessed _____ PARC # : _____ demonstrate skills required to successfully build, prepare, launch and recover a High Power Rocket.

This member is deemed qualified to build and launch High Power Rockets with a total installed impulse up to **320NS / 640NS / 2560NS** at PARC and/or CASA approved launch sites.

Expiry Date of Certification : ____/____/____

Full Name (Print)	: _____	PARC #:	_____		
Certification	: _____	Signed	: _____	Date	: ____/____/____
Full Name (Print)	: _____	PARC #:	_____		
Certification	: _____	Signed	: _____	Date	: ____/____/____

Safety Checklist:

<p>Nose Cone Section : Is the nosecone or payload shoulder sufficiently tight to prevent drag separation? The nosecone or payload should not wobble side to side or separate from its own weight.</p>		
<p>Body Tube : Is the body tube thickness adequate to withstand high power flight (typically 1.25mm / 0.05 inch walls or thicker)? Is there signs of pre-existing damage which may weaken the model structure (eg. tube crimps)? Are screws and fasteners tight, if used?</p>		
<p>Launch Lugs : Are the launch lugs securely fastened to the model?. Verify no cracking of adhesive joints. Is/are the launch lug(s) appropriately sized for the model, typically 1/4 inch or larger diameter? Will the launch lugs bind on the launch rod? Taped on launch lugs are not permitted.</p>		
<p>Motor Selection : Is the motor chosen for the certification flight sufficient to safely fly the model? Is the delay time suitable for the flight (ie, is the predicted ejection charge time on or around apogee?).</p>		
<p>Motor Retention : Is the motor suitably retained in the rocket (ie motor hook or other system required to prevent motor ejection)? Is an engine mount used? What adhesives were used to fix the engine mount? Check friction fit motors for tightness.</p>		
<p>Fin Section : Are the fins fully secured to the model? Check for looseness or cracking at the fin to body tube junction. "Through the wall" construction is recommended for high power models. How are the fins mounted, what adhesives were used (epoxy is preferred), and what fin material was used. Are the fins mounted parallel to the roll axis of the model? Are any significant warps present, which may cause erratic flight?</p>		
<p>Stability : Is the rocket stable? If stability is in doubt, ask for verification of CG and CP locations (remember CG should be forward of the CP by approximately 1.0 body tube diameters). If required, how were CG / CP locations calculated? Confirm that CG/ CP locations were calculated with model in "ready to fly" configuration (ie motor inserted, and recover system loaded).</p>		
<p>Predicted Hight : What is the predicted altitude of the rocket, and how was this calculated. Will the rocket fly within the CASA waiver allocated for the launch time and location?</p>		
<p>Recovery System : Inspect the recovery system. Check that the shock cord is adequate (with no fraying or burns), and that the shock cord mount is sufficient to withstand the recovery load. If in doubt, do a "pull test" on the recovery chute and cord. Confirm that there is chute protection (ie Baffle, wadding, piston, etc..).</p>		
<p>Electronics : If on-board electronics are used to ignite main engine and/or recovery, confirm that the battery, circuit board and connections are adequate to withstand "g" loads during acceleration. Supervise and confirm arming of electronics immediately prior to launch.</p>		
<p>Pre Flight Minimum Flight Requirement (5 x G / 5 x Re-Load) :</p>		
<p>Certification Exam Details :</p>		
<p>Score : _____% Administrator (Print) : _____ PARC # _____</p>		
<p>Signature : _____ Date : _____/_____/_____</p>		