FSM TESTING, DARWIN AUSTRALIA

Pilot: Chris Jokinen Launch Alt: Sea level Air conditions: Tropical, adv temp 34C, adv humidity 55% Wing: Apco Thrust 2009 Engine: Air Conception Hybrid 130cc Carburetor: Star (clone of a Tillitson) Carb inlet distance from tank base: 770 mm

| | Prior to fitting | After Fitting |
|--|--|--|
| Cruising temp | 204C | 190C |
| Idle temp | 70C | 75C |
| Max prolonged RPM without overheating | 7,200 | 7,900 |
| Level flight RPM | 6,400 | 6,800 (prop rebuild from crash between measurements) |
| Max RPM | 10,400 | 10,800 (max engine RPM specs 9,800) |
| RPM where engine runs rough eg. "4 stroking" | 3,500 to 7,100 | 2,600 to 3,600 (not 4 stroking, just vibrates) |
| Acceleration from idle | Slight hesitation then fast | Zero hesitation, extremely fast |
| Priming method | Squeeze primer bulb until fuel enters engine | Pour fuel down carb throat |
| Average fuel usage | 3.5L P/H | 3.8L P/H |

Impressed Points:

- The insane speed of transition between low and high jets, along with fast acceleration.
- Even with a hole in vacuum line engine still ran better and cooler than normal
- The resolution I have in the lower RPM range
- The smoothness of the mid range and level flight.