## GYROPLANE FLIGHT TEST PLAN

Introduction: This is a proposed flight test plan to be presented at the time of the initial airworthiness certification inspection for $\qquad$ . This plan has been authored by $\qquad$ , the test pilot and builder. It is intended for a complete evaluation of this aircraft to comply with Phase I flight testing of Experimental amateur-built aircraft. This flight test plan is based on suggestions and recommendations made in the FAA Advisory Circular AC90-89A. The final revision will include recommendations, and requirements from the inspector after his inspection. It is a six part 45 hour test program covering testing and evaluation of every phase of flight anticipated. However, Part 1 will take as long as it takes to insure that the pilot and aircraft are ready for flight.

## Part 1: Taxi testing and familiarization of ground handling 5 hours Low and high speed taxiing, high speed runway runs

## Part 2: Flight testing to determine initial reliability <br> 3 hours

- 1 hour of flight at 20 feet above the runway to confirm engine is operating within limits and flight controls and trim is operating correctly
- 2 hours in closed pattern to observe engine operation

Part 3: Flight testing: reliability continuation and handling familiarization 12 hours
Normal flight maneuvers; shallow bank turns, climbs and descents, to continue evaluating aircraft and become familiar with basic handling characteristics in flight.

Part 4: Flight testing: stability testing
12 hours
The aircraft will be tested for overall aircraft stability in all phases of flight. The purpose is to determine safety of operation in all weights and loading arrangements. The aircraft will first be tested using only solo weight and minimum safe fuel. Then, it is be tested by adding weights in varying increments until the maximum weight has been reached.

Part 5: Flight testing: performance maneuvers
12 hours
This part will continue with pilot familiarization and prove controllability of the aircraft. Testing will include slow flight, steep turns, vertical descents, and high speed flight.

Part 6: Flight testing: simulated engine failure
1 hour
This part will test the aircraft in a simulated engine failure near the airport and establish the best glide speed.

| TOTAL TESTING TIMES: | GROUND | 5 HOURS |
| :---: | :---: | :---: |
|  | FLIGHT | 40 HOURS |
|  | TOTAL | 45 HOURS |

