



**EXPERIMENTAL - EXHIBITION and AIR RACING AIRCRAFT**

**OPERATING LIMITATIONS**

Aircraft Make: Schempp-Hirth  
Model: Discus-CS  
Registration Number: N511TW  
Serial Number: 251CS

1. No person may operate this aircraft for other than the purpose(s) as specified on the airworthiness certificate. This aircraft must be identified in accordance with 14 CFR part 45, including the experimental markings required by part 45 located near the cabin entrance and operated in accordance with all air traffic and general operating rules of 14 CFR part 91, all limitations herein prescribed, and as described in the owner operator's program letter. These operating limitations are a part of FAA Form 8130-7, and are to be carried in the aircraft at all times.
2. Application must be made to the geographically responsible FSDO where the aircraft is based for any revision to these operating limitations.
3. The pilot in command of this aircraft must advise passengers of the experimental nature of this aircraft and that it does not meet the certification requirements of a standard certificated aircraft.
4. The owner operator must submit an annual program letter to the geographically responsible FSDO where the aircraft is based. All operations must be conducted in accordance with these limitations and the program letter. A copy of the current program letter and any amendments must be carried on board the aircraft any time that the aircraft is being operated. The program letter must include the following information:
  - (a) The aircraft's home base.
  - (b) The name of the person responsible for the operation and maintenance of the aircraft.
  - (c) A list of events at which the aircraft will be exhibited. The list may be amended as necessary.
  - (d) Not issued – Group 6 Aircraft Only.
5. The pilot in command of this aircraft must hold an appropriate category and class rating.
6. Not Issued – Type Rating Required
7. Not Issued – Additional Pilot Certificate Authorization Requirements
8. Not Issued – Second in Command Requirements
9. Not Issued – Pilot Currency for Passenger Carrying

10. During Phase I test flight operations, this aircraft is to be operated under VFR, day only, and no person may be carried in this aircraft during flight unless that person is a required crewmember. The local FSDO must coordinate with AFS-800 to determine if a person is essential for the test flight.
11. During Phase I test flight operations, no person may flight test an aircraft except over open water or sparsely populated areas having light air traffic.
12. During Phase I test flight operations, this aircraft may only operate from Gallatin Field Airport, Bozeman, Montana (KBZN) until the requirements of 14 CFR §91.319(b) have been met.
13. During Phase I test flight operations, this aircraft must be operated for at least ten (10) hours with at least five (5) takeoffs and landings (to a full stop), and all operations must be conducted in the geographic area described as follows:

A twenty-five (25) nautical mile radius from the center of Gallatin Field Airport, Bozeman, Montana (KBZN).

14. During Phase I test flight operations, following satisfactory completion of the required number of flight hours in the flight test area, the pilot must certify in the records that the aircraft has been shown to comply with 14 CFR §91.319(b). Compliance must be recorded in the aircraft records with the following, or a similarly worded, statement: "I certify that the prescribed flight test hours have been completed and the aircraft is controllable throughout its normal range of speeds and throughout all maneuvers to be executed, has no hazardous operating characteristics or design features, and is safe for operation."
15. During Phase I test flight operations, aerobatic maneuvers intended to be performed must be satisfactorily accomplished and recorded in the aircraft records during the flight test period unless the aircraft meets the manufacturer's design which includes defined aerobatic maneuvers. In addition to the requirements of 14 CFR §91.303, appropriate limitations identifying the aerobatic maneuvers and conditions under which they may be performed shall be included in the aircraft records.
16. During Phase I test flight operations, if the aircraft will have removable externally mounted equipment, it must be test flown in all configurations. An entry must be made in the aircraft records indicating the configurations flight tested, unless the original manufacturer's flight test data for that equipment is included in the aircraft limitations.
17. During Phase II operations, this aircraft is prohibited from flight with any externally mounted equipment except in compliance with limitation (16) of this paragraph.  
  
**Note:** The owner may place the aircraft back into Phase 1 for the sole purpose of flight testing the added external equipment; in this case the owner must comply with limitation (16) requirements of this paragraph.
18. During Phase II operations, this aircraft is prohibited from flight with any externally mounted equipment unless the equipment is mounted in a manner that will prevent in-flight jettison.
19. During Phase II operations, this aircraft may be operated over densely populated, or congested areas in accordance with 14 CFR §91.913(c) only for the purpose of takeoff and landing. When

exercising this authorization, the pilot in command must avoid densely populated areas and congested areas whenever possible.

20. Not Issued – Operation Over Densely Populated Areas
21. Not Issued – Operation Over Densely Populated areas.
22. During Phase II operations, no person may be carried in this aircraft during the exhibition of the aircraft's flight capabilities, performance, or unusual characteristics at airshows, or for motion picture, television, or similar productions, unless essential for the purpose of the flight in accordance with FAA Order 8900.1, Volume 3, Chapter 6. Persons may be carried during flights to and from any event or during proficiency/currency flying, limited to the design seating capacity of the aircraft and subject to the regulatory prohibition on compensation.
23. Not Issued – Group 6 Aircraft Only
24. Not Issued – Group 6 Aircraft Only.
25. During Phase II operations, aerobatic maneuvers that were not documented in accordance with limitation (15) may not be performed.
 

**Note:** The owner may place the aircraft back into Phase 1 for the sole purpose of adding additional aerobatic maneuvers to the aircraft authorized maneuvers. In this case, the owner must comply with limitation (15) requirements of this paragraph.
26. During Phase II operations, the following placard, pertaining to gliders and sailplanes having experimental certificates, must be displayed in the cockpit in full view of the pilot in addition to the requirements of 14 CFR §91.9. “NOTE: no person may exceed the designer's or builder's recommended limitations as follows: Maximum gross weight \_\_\_\_; CG Limits \_\_\_\_; airplane tow speed \_\_\_\_; maximum airspeed in smooth air \_\_\_\_; and maximum airspeed in rough air \_\_\_\_.”
27. This aircraft must not be used for glider towing, banner towing, or 14 CFR part 105 parachute operations.
28. During Phase II operations, night and/or instrument flight is approved, provided the aircraft is equipped as described in 14 CFR § 91.205. Instruments and equipment installed for night and/or instrument flight must be inspected and maintained in accordance with the applicable requirements of 14 CFR part 91. All maintenance or inspection of this equipment must be recorded in the aircraft maintenance records and include the following items: date, work performed, name and certificate number of person returning the aircraft to service.
29. Not Issued – Turbine Powered Aircraft
30. Not Issued – Turbine Powered Aircraft
31. Not Issued – Turbine Powered Inspection Program
32. The inspections for aircraft must be recorded in the aircraft maintenance records showing the following, or a similarly worded statement: I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of 14 CFR part 43, appendix D, and found to be in a condition for safe operation.” The entry will include the aircraft's total time-in-service and the

name, signature, certificate number, and type of certificate held by the person performing the inspection.

33. No person may operate an aircraft unless within the preceding 12 calendar months it has had an inspection performed in accordance with the scope and detail of 14 CFR part 43, appendix D or other FAA-accepted program, as applicable, and was found to be in a condition for safe operation. This inspection will be recorded in the aircraft maintenance records and include the following items: date, work performed, and certificate number of person returning the aircraft to service.
34. Only FAA-certificated repair stations and FAA-certificated mechanics with appropriate ratings authorized by 14 CFR § 43.3 may perform inspections required by these operating limitations.
35. The geographically responsible FSDO where the aircraft is based must be notified, and its response received in writing, prior to flying this aircraft after incorporation of a major change. A 'minor change' is one that has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting airworthiness of the aircraft. All other changes are major changes." The FSDO response should be entered in the aircraft's records.
36. Not Issued – Ejection Seat Requirements
37. When an aircraft's home base is changed or there is a transfer of ownership, the owner/operator will take appropriate actions within 30 days:
  - (a) Submit a new program letter to the geographically responsible FSDO.
  - (b) If an accepted or approved inspection program is specified in these operating limitations, submit a copy to the geographically responsible FSDO.
    - i. The gaining FSDO will not change the previously accepted or approved program unless it can be substantiated that the previously accepted or approved program no longer meets FAA requirements. The gaining FSDO will not require the aircraft's airworthiness certificate or operating limitations to be reissued, unless the aircraft requires Phase I test flight operations or at the owner's request.
    - ii. Not Issued – Group 6 Aircraft Only.
38. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. The owner/operator of this aircraft must obtain written permission from another country's CAA before operating this aircraft in or over that country. That written permission must be carried aboard the aircraft together with the U.S. airworthiness certificate and, upon request, be made available to an ASI or the CAA in the country of operation.
39. Not Issued - Supersonic Flight
40. FAA acceptance or approval of maintenance and inspection interval extensions requires that the owner operator submit documentation and data justifying the extension in the request to the local FSDO for elevation for concurrence.

41. The aircraft may not be operated unless the replacement for life-limited articles specified in the applicable technical publications pertaining to the aircraft and its articles are complied with in one of the following manners as specified below:

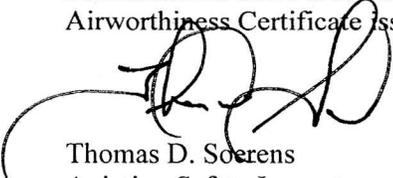
(a) Non-Type Certificate Products: Unless otherwise determined by the FAA, all articles installed in non-type certificated products operated in the experimental exhibition category, in which the manufacturer has specified limits, must include in their program an equivalent level of safety for those articles. The article must be inspected to ensure that it is still in a serviceable condition for safe operation.

42. Not Issued - Fatigue Life Recording Systems

43. Not Issued – Group 6 Aircraft

44. Not Issued - Former Military Aircraft

These Group 1 aircraft limitations are issued in accordance with Order 8130.2G and AIR-230 Memorandum dated December 21, 2011, are of unlimited duration and are a part of an Amended Special Airworthiness Certificate issued September 4, 2013.



Thomas D. Soerens  
Aviation Safety Inspector  
AGL-FSDO-03

**APPLICANT/PROGRAM LETTER SPECIAL AIRWORTHINESS CERTIFICATE**

***EXPERIMENTAL EXHIBITION***

<b>1. Registered Owner (as shown on Certificate of Aircraft Registration)</b>			
Name: Chicago Glider Club, Inc		Address: 26045 W. Airport Road Minooka, Il 60447	
		Telephone Number:815-467-9861	
<b>2. Aircraft Description</b>			
a. Registration Mark: N511TW	b. Aircraft Builder Name (Make) Schempp-Hirth	c. Year Mfg. 1998	
d. Aircraft Serial No. 251CS	e. Aircraft Model Designation Discus CS		
<b>3. Describe Program purpose for which the aircraft is to be used [CFR 21-193(a)]</b>			
21.191(d) Exhibition and (e) Air Racing			
<b>4. List the airshows, motion picture, television, and similar productions in which the aircraft is to be exhibited.</b>			
	Name of Event	Location and State	Month
1	Regional Contest	Ohio	April-November
2	Regional Contest	Michigan	April-November
3	Regional Contest	Wisconsin	April-November
4	Regional Contest	Indiana	April-November
5	Regional Contest	Illinois	April-November
6	Regional Contest	Minnesota	April-November
7			
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