

### BASA checkout requirements for Discus CS N9094D

1. All pilots wishing to check out in this glider must have met the minimum experience requirements set forth in Section 3.4 of the BASA Flight Rules.
2. Pilots who have recent (in the last year) experience flying a retractable-gear single-seat glider may be checked out by a Flight Committee member who has been checked out in the glider himself. Pilots who have not yet flown a retractable single-seat glider or do not have recent experience need a checkout by a CFG. The CFG checkout requirement for those pilots is imposed because they probably need a more thorough briefing on the transition.
3. Before checking out in the glider all pilots need to:
  - a. Review the aircraft manual and be familiar with limiting speeds, permitted maneuvers, etc. What is the maneuvering/rough air speed? What is the maximum aerotow speed?
  - b. Review the battery setup.
  - c. **Study the operation of the radio, transponder, electric vario and FLARM on the BASA website.**
  - d. Review the weight and balance information for this particular glider and the W&B spreadsheet available on the BASA webpage for this glider. The permissible CG range is 10.24 inches to 15.75 inches aft of the datum point. It is recommended that you do not fly the glider with the CG more than 2/3 of the way towards the aft end of this range (i.e., more than 13.91 inches), especially when you are new to the glider. Use the spreadsheet to calculate: (i) Do you fit within the weight and balance envelope for this glider? (ii) What is your CG position without any nose ballast weights? (iii) Should you add a nose ballast weight to bring your CG forward of 13.91 inches? The standard nose ballast weights are 2.2 kg / 4.85 lbs.
4. All pilots checking out to fly this glider must also check out to assemble and disassemble the glider. The pilot should bring a copy of the assembly procedure checklist for this glider (available on the webpage). BASA members who have their own personal gliders will be allowed to self-checkout on the assembly procedures because they are accustomed to assembling and disassembling frequently.
5. Before flying with water ballast, a separate water ballast checkout is required. The Flight Committee members and CFGs who can provide this water ballast checkout are limited to those who have experience flying with water ballast themselves. A separate water ballast checkout explanation is posted on the BASA webpage for this glider.

Discus CS Checkout Sheet

Name: \_\_\_\_\_ Checkout Date: \_\_\_\_\_

Flight Committee Member/CFG: \_\_\_\_\_

**Fill the following Discus CS information before your Checkout**

Never Exceed Speed (VNE) \_\_\_\_\_ Kts  
Maneuvering Speed (VA) \_\_\_\_\_ Kts  
Rough Air Speed (VB) \_\_\_\_\_ Kts  
Maximum Aerotow Speed (VT) \_\_\_\_\_ Kts  
Stall Speed (wings level) \_\_\_\_\_ Kts  
Stall Speed (60 deg bank) \_\_\_\_\_ Kts  
Minimum Sink \_\_\_\_\_ fpm at \_\_\_\_\_ Kts for your weight.  
Best L/D \_\_\_\_\_ at \_\_\_\_\_ Kts for your weight.

1. What is the minimum no wind approach speed for this glider? \_\_\_\_\_
2. What is the recommended approach speed with a 5kt headwind component? \_\_\_\_\_
  - a. With a 10kt headwind component? \_\_\_\_\_
  - b. With a 20kt headwind component? \_\_\_\_\_
3. Describe the charging system & battery switch positions for the transponder and avionics.  
All- \_\_\_\_\_ battery. Transponder and Avionics- \_\_\_\_\_ battery.
4. Describe the charging procedure for this glider at the current location (i.e. Hollister or Truckee.)  
\_\_\_\_\_  
\_\_\_\_\_
5. What is the Maximum Gross Weight of this glider? \_\_\_\_\_ lbs
6. What is the Maximum Cockpit Load of this glider? \_\_\_\_\_ lbs
7. What is the Maximum Useful Load of this glider? \_\_\_\_\_ lbs
8. What is the allowable C.G. range for this glider? \_\_\_\_\_" to \_\_\_\_\_"
9. The location of the pilot seat is \_\_\_\_\_" mm forward of datum.
10. What is the location of the C.G. for your flying weight (i.e. w/ parachute, water, etc.) \_\_\_\_\_"
11. What is the recommended take-off trim setting for your flying weight?  
\_\_\_\_\_  
\_\_\_\_\_
12. Explain the location and type of control hookups for this glider.  
Wings- \_\_\_\_\_. Aileron and air-brakes- \_\_\_\_\_. Horizontal stabilizer- \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
13. What is the recommended dive brake position for landing? \_\_\_\_\_
14. What is the maximum speed that the dive brakes may be opened? \_\_\_\_\_ Kts in smooth air. \_\_\_\_\_ in gust conditions
15. What aerobatic maneuvers are permitted in this glider?  
\_\_\_\_\_  
\_\_\_\_\_
16. What aerobatic maneuvers are you signed off to perform? \_\_\_\_\_
17. What is the maximum distance (in nautical miles) that you can glide per 1,000 ft of altitude loss? \_\_\_\_\_ NM
18. Define the Best L/D speed and when it should be used? \_\_\_\_\_ (assuming no wind or sink).
19. Define the Minimum Sink speed and when it should be used? \_\_\_\_\_ (assuming shallow bank)
20. What effect does reducing gross weight has on maneuvering speed (VA)?  
VA is \_\_\_\_\_ as gross weight is reduced
21. When should you fly below Maneuvering Speed? \_\_\_\_\_
22. Describe the recommended procedure for spin recovery for this glider at your weight and C.G. location.  
\_\_\_\_\_  
\_\_\_\_\_

## Discus CS N9094D Physical Checkout

### Preflight

- If the glider is tied down, remove and store its covers in the trailer
- Glider preflight inspection
- Positive check
- Canopy care –
  - Lift by frame only
  - Always closed and gently latched
- Assemble and disassemble glider per the detailed checklist, under supervision of instructor or flight committee member
- Preflight ship per detailed checklist
- Electrical system
  - Install the batteries
  - Familiarization with the electrical system
- Familiarization with the Oxygen system
- Familiarization with hand brake
- Familiarization with landing gear raising and lowering while sitting in the glider
- Landing gear alarm test
- Familiarization with instruments
- Trim method
- Front ballast
- Outside air temperature (not below -10° C)
- Cockpit entry procedure
- Bailout procedure
- Pre takeoff pilot checklist

### Ground handling

- Don't use winglets as handles
- Don't push-up under horizontal stabilizer

### Perform in flight **at a safe altitude**

- Slow flight
- 720° turns at 45° bank at 50kts both directions
- Straight stalls
- Turning stalls
- Stalls in approach configuration
- Pre-landing checklist (Gear, Speed, Trim, Airbrakes, Look and Land)
- Lower gear down and verify visually
- Low energy touchdown
- Safely exit runway

### Post flight

- Electrical shutdown
- Remove batteries
- Clean wings

- Tie down
- Cover replacement if left tied down
- Ship log-book entry

## N9094D Panel



### Instrument Notes:

- A. LxNav Flarm LED. Provides rudimentary direction and audio Flarm contact indication. More detailed Flarm contact information is provided by instrument K.
- B. Analog altimeter
- C. Analog airspeed indicator
- D. Analog variometer
- E. Emergency Locator Transmitter. This is not operational !
- F. Main power toggle
- G. Battery selector. #1 is front battery, #2 is rear battery. There are two identical batteries behind the pilot seat. One is battery #2 and the other powers the USB outlet in the panel.
- H. COM. Top knob is volume/squelch. Bottom knob sets the standby frequency and bottom right switch toggles between primary and standby frequencies.
- I. LxNav S3 digital flight instrument. Has audio variometer, altimeter, and speed to fly. Does not have navigation or maps functionality. Refer to the documentation at <https://www.flybasa.org/n9094d> for operation instructions.
- J. Transponder. Set rotary switch in lower right to ALT before launching. The transponder squawk code should always be set to 1202.
- K. LxNav FlarmView. Provides additional information including distance to Flarm detections.

- L. 1-inch mounting knob for your own instrument such as a portable navigator. BASA club rules state that this is the only mount that may be used for personal instruments.
- M. USB power ports. These get power from one of the batteries behind the pilot's seat.
- N. Analog heading indicator
- O. Analog temperature indicator

If you are not familiar with any of these specific instruments, you should read their documentation at <https://www.flybasa.org/n9094d> before getting checked out in N9094D.