

# Aircraft Qualification Checklist - Disco

Version [1.0]

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This document may be used to certify and or qualify for the following aircraft:

## **Parrot Disco**

This qualification checklist is published by the Center for Disaster Risk Policy, Florida State University as part of the Florida Unmanned Aircraft System Working Group, Air Operations Branch, State Emergency Response Team.

### **Aircraft Qualification Checklist Assigned To:**

Pilot's Name: \_\_\_\_\_

Home Unit/Agency: \_\_\_\_\_

Home Unit/Agency Phone: \_\_\_\_\_

**Evaluator's Final Verification**

To be completed **only** when you (the evaluator) are recommending the trainee for certification.

*I verify that (pilot name) \_\_\_\_\_ has successfully performed and demonstrated all training tasks set forth in this checklist for the aircraft listed on page one. With this verification, I attest this pilot is competent and capable to operate this aircraft and should be considered for qualification.*

Evaluator's Printed Name: \_\_\_\_\_

Evaluator's Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Home Agency/Org: \_\_\_\_\_

Home Agency/Org Phone: \_\_\_\_\_

Home Agency/Org Email: \_\_\_\_\_

Date Verified: \_\_\_\_\_

**Agency Certification**

*I certify that (pilot name) \_\_\_\_\_ has successfully met all qualifications for the aircraft listed on page one. The certification and/or qualification has been issued. This completed checklist may serve as proof of this certification and/or qualification.*

Certifying Official's Printed Name: \_\_\_\_\_

Certifying Official's Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Home Agency/Org: \_\_\_\_\_

Home Agency/Org Phone: \_\_\_\_\_

Home Agency/Org Email: \_\_\_\_\_

Date Certified: \_\_\_\_\_

## About this Aircraft Qualification Checklist

The Florida UAS Aircraft Qualification Checklist (AQC) has been developed to provide an agency/organization centered certification of small unmanned aircraft systems (sUAS) operators on specific aircraft and payload and is part of Florida's effort to accurately type UAS teams and resources.

This AQC lists the tasks required to be demonstrated for the aircraft listed on page one. Each pilot must be observed completing all tasks and demonstrate the required knowledge and skills for the aircraft.

Qualified evaluators observe trainees during training, exercises, and real world incidents, and record successful performance in this ACQ.

Successful performance of all tasks will result in a recommendation to the home agency that the pilot be certified or qualified in the specified aircraft. It is the final determination of the pilot's home agency to accept this recommendation and issue certification or qualification in the specified aircraft. Neither Florida SERT, the Florida UAS Working Group, nor the Center for Disaster Risk Policy have the authority to issue this model certification to a pilot.

## Parrot Disco (Disco) Specific Tasks

### Group A: Preflight

**Description:** Prepare aircraft for flight operations

**Note:** Evaluate only numbered **Tasks**. Do not evaluate bullets (if present) - they are examples only.

#### Action: Unpack and assemble aircraft and systems

Task	Evaluator Initial/Date
<b>DISC.A.1.</b> Assemble aircraft, controller, GCS tablet, etc.	

#### Action: Link GCS software to aircraft

Task	Evaluator Initial/Date
<b>DISC.A.2.</b> Connect GCS software such as Free Flight 6 to the aircraft. <ul style="list-style-type: none"><li>• <i>Verify telemetry and video feeds</i></li></ul>	

#### Action: Perform preflight checks

Task	Evaluator Initial/Date
<b>DISC.A.3.</b> Using a checklist or other job aid, conduct a thorough preflight check of the aircraft	

## Group B: Flight Operations

**Description:** Perform in-flight maneuvers and operations in a safe and effective manner.

**Note:** Evaluate only numbered **Tasks**. Do not evaluate bullets (if present) - they are examples only

### Action: Takeoff

Task	Evaluator Initial/Date
DISC.B.1. Arm the aircraft	
DISC.B.2. Perform takeoff without crew assistance	

### Action: Perform basic flight operations

Task	Evaluator Initial/Date
DISC.B.3. Climb/Descend <ul style="list-style-type: none"><li>• <i>Performs climbs/descents while in forward flight</i></li></ul>	
DISC.B.4. Adjusts speed/throttle as appropriate and demonstrates understanding of flight performance.	
DISC.B.5. Pilot performs a landing approach without initiating landing. <ul style="list-style-type: none"><li>• <i>Demonstrates understanding of wind effects, terrain concerns and obstacle avoidance.</i></li></ul>	

### Action: Ground Reference Maneuvers

Task	Evaluator Initial/Date
DISC.B.6. Pilot flies the aircraft in a manual circular pattern around a designated ground reference point.	
DISC.B.7. Pilot follows a linear track on the ground over a predetermined reference object. <ul style="list-style-type: none"><li>• <i>Powerlines, pipeline, road, etc.</i></li></ul>	
DISC.B.8. The pilot establishes an automated loiter orbit.	

### Action: Close Approach

Task	Evaluator Initial/Date
DISC.B.9. The pilot maneuvers the aircraft to pass within 50 feet of the pilot, moving left to right at an altitude of no more than 75 feet. <ul style="list-style-type: none"><li>• <i>Discusses terrain and obstacle hazards</i></li></ul>	

**Action: Basic Search/Inspection**

Task	Evaluator Initial/Date
<p><b>DISC.B.10.</b> Pilot demonstrates proper RPIC actions for performing a hasty search.</p> <ul style="list-style-type: none"> <li>• <i>Plan and perform a hasty search via fixed wing UAS, given information</i></li> <li>• <i>Alternate between inside/outside</i></li> </ul>	
<p><b>DISC.B.11.</b> Crewmember demonstrates proper visual observer actions while performing a hasty search.</p> <ul style="list-style-type: none"> <li>• <i>Demonstrate professional SA of relevant airspace</i></li> <li>• <i>Responsive to PIC/AO/instructor commands</i></li> </ul>	

**Action: EO Sensor Operations**

Task	Evaluator Initial/Date
<p><b>DISC.B.12.</b> Pilot demonstrates proficiency in aiming the EO sensor at targets requested while utilizing sensor pitch and aircraft yaw and airspeed.</p>	
<p><b>DISC.B.13.</b> Pilot demonstrates proficiency in manipulating all sensor controls, including camera settings and functions in video and still image modes.</p> <ul style="list-style-type: none"> <li>• <i>Exposure, focus control.</i></li> </ul>	
<p><b>DISC.B.14.</b> Pilot discusses appropriate sensor use cases.</p>	

**Action: Approach and Landing**

Task	Evaluator Initial/Date
<p><b>DISC.B.15.</b> Battery status is appropriate.</p> <ul style="list-style-type: none"> <li>• <i>Confirms aircraft is inbound for landing due to battery status and/or intent to land</i></li> </ul>	
<p><b>DISC.B.16.</b> Pilot prepares aircraft for landing and scouts appropriate landing location and direction.</p> <ul style="list-style-type: none"> <li>• <i>Demonstrates understanding of wind, terrain, and obstacles.</i></li> </ul>	
<p><b>DISC.B.17.</b> Pilot demonstrates appropriate landing approach and execution.</p> <ul style="list-style-type: none"> <li>• <i>Demonstrates attention to detail in landing procedures</i></li> <li>• <i>Responsive to instructor commands</i></li> </ul>	

**Action: Emergency Procedures**

Task	Evaluator Initial/Date
<p><b>DISC.B.18.</b> Loiter and Hold</p> <ul style="list-style-type: none"><li>• <i>The RPIC will place the UAS into LOITER flight mode.</i></li><li>• <i>Responsive to instructor commands</i></li></ul>	
<p><b>DISC.B.19.</b> Abort to Ground</p> <ul style="list-style-type: none"><li>• <i>PIC assumes manual control of aircraft and descends into an immediate landing</i></li><li>• <i>Responsive to instructor commands</i></li></ul>	
<p><b>DISC.B.20.</b> Abort to Launch / Abort to Home</p> <ul style="list-style-type: none"><li>• <i>PIC assumes manual control of aircraft and lands at launch site</i></li><li>• <i>Responsive to instructor commands</i></li></ul>	
<p><b>DISC.B.21.</b> Log Last Location</p> <ul style="list-style-type: none"><li>• <i>The PIC and AO will immediately log all information regarding current location of aircraft: lat/long, altitude, distance from home, etc.</i></li><li>• <i>Responsive to instructor commands</i></li></ul>	
<p><b>DISC.B.22.</b> Render UAS Safe</p> <ul style="list-style-type: none"><li>• <i>PIC demonstrates safety and responsibility in approaching downed aircraft</i></li><li>• <i>PIC evaluates aircraft, batteries, and props for viability</i></li><li>• <i>Responsive to instructor commands</i></li></ul>	

### Group C: Post-flight

**Description:** Perform post-flight operations in a safe and effective manner.

**Note:** Evaluate only numbered **Tasks**. Do not evaluate bullets (if present) - they are examples only

#### Action: Shutdown

Task	Evaluator Initial/Date
DISC.C.1. Approach and Landing	
DISC.C.2. Demonstrates appropriate safety procedures <ul style="list-style-type: none"><li>• <i>Calls for Neutral Throttle</i></li><li>• <i>Disarms aircraft appropriately</i></li></ul>	

#### Action: Data Management

Task	Evaluator Initial/Date
DISC.C.3. Downloads data via USB from aircraft.	
DISC.C.4. Performs quality control (QC) Data <ul style="list-style-type: none"><li>• <i>Browse data for any recognizable issues</i></li></ul>	
DISC.C.5. Ensure Data is Received by Data Manager <ul style="list-style-type: none"><li>• <i>Confirm delivery and receipt via communication</i></li></ul>	

#### Action: Pack up aircraft

Task	Evaluator Initial/Date
DISC.C.6. Ensure all components are in the 'off' position	
DISC.C.7. Place aircraft and all accessories correctly within the aircraft case.	
DISC.C.8. Ensure no pieces or components are missing from the aircraft package.	