

Overview

This guide is intended for use by the Hangar Chief in preparation for the 2020-21 RADC DownDraft season. This guide does not replace the Game Manual, but rather assists the Hangar Chief referencing specific details along with providing insight into the role.

Hangar Chief Position Summary

The Hangar is where the drones are stored between matches. Teams are not permitted to remove their drone unless taking it to a match or practice area. There is space in the Hangar where teams can come and work on their drone. The Hangar Chief makes sure that the area is safe and secure as teams come retrieve their drone at the proper time and return their drone once they are done. If any work needs to be done on the drone, the Hangar Chief provides a safe space for that team to work.

Hangar Chief Key Attributes

The Hangar Chief interacts directly with teams and other event staff and needs to have the following skills:

1. Strong communication skills.
2. Ability to be confident and assertive when necessary.
3. Strong observational skills.
4. Team leader.

Hangar Chief Qualifications

1. Must be at least 20 years of age.
2. Must be approved by the Event Partner.
3. Must contain all of the attributes listed above.

Hangar Chief Key Responsibilities

1. Trains the queue inspection staff on how to collect, store, and return the drone back to the team at the proper time.
2. Trains the queue inspection staff on how to inspect the drone upon check-in and check-out of the Hangar.
3. Maintains a safe area for teams to work on their drones within that Hangar space.

Task List

The following is a list of the major tasks the Hangar Chief oversees throughout the event.

Preparation and Initial Inspection

1. Prepare space on tables to store drones. This can be done by taping team signs to a table where the drones will be stored when not in use.
 - a. Be sure to have space for 2 drones per team as each team is permitted to have a spare drone.
2. When teams first arrive at the event, they will come to the Hangar to drop off their drone. Collect the cell phone number from each team and write it on the sign where the drone is stored. This way, at the end of the day, if you have drones still in the Hangar, the team can be called.
3. Immediately inspect the drone using the Drone Inspection List. If the drone fails inspection, instruct the team where they can work on the drone within the Hangar.

Checking-out a Drone Prior to the Match

1. Drones should be checked out 2 matches prior to the team's scheduled match. e.g. if a team is in match-10, that team should be at the Hangar retrieving their drone at the start of match-8.
2. Queue Inspectors bring the drone to the team and complete a simplified inspection, looking for the following.
 - a. Drone is able to be turned on and battery lights are green.
 - b. 4 propellers are attached to the 4 motors.
 - c. 4 propeller guards are securely mounted around the propellers.
 - d. Drone has the correct Alliance Color indicator
3. If the drone fails inspection, the Queue Inspector asks if the team can fix the drone in time or if they would like to use their spare drone.
 - a. If using the spare drone, the Queue Inspector inspects the spare drone.
 - b. If the team elects to fix the drone, they are brought to the work area inside the Hangar.
4. When the drone passes inspection, the Queue Inspector directs the team to the field the moment the match prior to the team's match has ended.

Checking-in a Drone After the Match

1. When the team's match is over and the All-Clear has been given, the team will collect their drone and bring it back to the Hangar.
2. The Queue Inspector will inspect the drone for the following.
 - a. Drone is able to be turned on and battery lights are green.
 - b. 4 propellers are attached to the 4 motors.
 - c. 4 propeller guards are securely mounted around the propellers.
3. If the drone fails inspection, ask the team if they would like to work on their drone now or come back at a later time.
 - a. If the team elects to fix the drone, they are brought to the work area inside the Hangar.
 - b. If the team elects to come back later, the drone is placed back into storage in the team's designated space **with a note describing what failed during inspection.**

4. If the drone passes inspection, the drone is placed back into storage in the team's designated space.

Drone Work Area (Maintenance Area)

Anytime a team wishes to work on their drone, they need to ask the Hangar Chief for permission. Teams will also be directed to the work area when they fail an inspection.

1. When permission is granted, or when directed to the work area, a queuing inspector or Hangar Chief must be actively watching the team or group of teams working.
 - a. If no one is available to watch the teams.
 - i. Ask the team to come back at a time when someone will be available.
 - ii. Recruit another volunteer.
 - iii. Ask a queue inspector to inspect the alliance of teams so that the 2nd queue inspector can observe the teams working on their drones.
 - b. Once the team has completed their work, or wants to leave the area a queue inspector should inspect the drone, and return it back to the storage area in the team's designated space with a note describing anything that does not pass inspection. Check for the following.
 - i. Drone is able to be turned on and battery lights are green.
 - ii. 4 propellers are attached to the 4 motors.
 - iii. 4 propeller guards are securely mounted around the propellers.
2. Only students on the team are permitted to be in the Hangar area working on their drone. Students may leave the Hangar, without their drone, to consult with their coach, then come back at a later time to complete the work.
3. The Hangar Chief has all authority to limit the number of students working on the drone in the Hangar. This can be limited to 1 student per team and then increased as space becomes available.

Hangar Chief Best Practices

1. The Hangar Chief should always be observing everything going on. Do not get distracted by a single task, but instruct the volunteers, give advice, then move on and check back frequently.
2. Pay attention to the match schedule and if checking-in and checking-out teams is causing a delay in starting matches on time. If this is the case, then adjust by inspecting teams earlier, sending teams to the field earlier, or bringing drones out of storage earlier, even before a team shows up to ask for the drone. You know which teams will be coming to the Hangar based on the schedule, so have their drone waiting for them if necessary.
3. Rotate queue inspectors frequently. There are 3 positions. Check-in, Check-out and in the work area. Rotating positions will allow you to increase and decrease the number of queue inspectors depending on the need of the moment.