

Drone Pilot interview questions

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What to expect

Interviews for Drone Pilot roles usually focus on your technical flying ability, safety awareness and how you handle field and office work. Employers want to see you understand CASA regulations and can process data into useful outputs.

- **Technical:** Questions about flight planning, sensors, data processing software and aircraft maintenance.
- **Safety and regulatory:** How you apply CASA rules, conduct risk assessments and respond to emergencies.
- **Scenario:** Hypothetical missions or problems that test your judgement under pressure.
- **Behavioural:** Past examples of working in remote locations, with clients or in difficult conditions.
- **Client-facing:** How you communicate with clients and understand their data needs.

The interview may start with a phone screen covering your licence and experience, followed by a face-to-face or practical assessment where you walk through a flight plan or discuss a past project. Some employers include a simulated flight planning exercise.

1. Tell me about a time you had to change a flight plan due to unexpected weather or airspace restrictions.

Why they ask

Tests your adaptability and commitment to safety when conditions change.

How to structure your answer

Use STAR: describe the situation, the task, the action you took and the result.

Example answer

"On a recent survey job, I had planned a flight over a construction site. Just before take-off, a storm front moved in faster than forecast. I checked the radar, decided to postpone, and contacted the client. We rescheduled for the next morning. I used the time to check batteries and update the flight plan. The next day the flight went smoothly and we captured all required imagery without compromising safety."

2. How do you ensure compliance with CASA regulations during a typical job?

Why they ask

Assesses your knowledge of aviation rules and your ability to apply them in practice.

How to structure your answer

Walk through your process step by step, from pre-flight checks to post-flight reporting.

Example answer

"I start by checking the airspace classification and any relevant NOTAMs. I confirm the Remote Operator's Certificate covers the area and that I have the correct endorsements. Before flight, I conduct a risk assessment, check weather and set up geofencing. During flight, I maintain visual line of sight and monitor radio communications. After flight, I log the flight and report any incidents. I also keep my RePL and medical current."

3. A client needs aerial imagery for a large agricultural property. How would you plan and execute the mission?

Why they ask

Tests your technical planning, client focus and ability to deliver useful data.

How to structure your answer

Use a scenario judgement approach: outline the steps you would take and the decisions you would make.

Example answer

"First, I would meet with the client to understand what they need, such as crop health or drainage mapping. Then I would check airspace and weather, plan flight paths with adequate overlap, and choose the right sensor. I would set up ground control points if needed. On the day, I would fly the mission, monitor conditions, and then process the data with Pix4Dmapper or DroneDeploy. Finally, I would deliver maps and a report, and discuss findings with the client."

4. Describe your experience with processing aerial data into maps and reports.**Why they ask**

Checks your software skills and ability to turn raw imagery into usable outputs.

How to structure your answer

Use a skills and experience narrative: describe the tools you use and a specific project outcome.

Example answer

"I regularly use Pix4Dmapper to create orthomosaics and digital elevation models from drone imagery. I then import them into ArcGIS Pro for analysis and to produce clear maps. For a mining inspection, I processed imagery to identify areas of erosion, which helped the site team prioritise maintenance. I also write short reports explaining the findings and any limitations. I am comfortable handling large datasets and ensuring accuracy."

5. What do you do if you lose signal or battery power mid-flight?**Why they ask**

Evaluates your emergency response and ability to stay calm under pressure.

How to structure your answer

Use an emergency procedure structure: state the immediate action, then the follow-up steps.

Example answer

"If I lose signal, I first check the controller and try to re-establish connection. If that fails, the drone is programmed to return to home automatically. I monitor its path and keep clear of people. For battery power, I monitor levels constantly and land before it reaches critical. If a battery fails mid-flight, I would execute an emergency landing in a safe area, then secure the drone and report the incident. Safety is always the priority."

6. How do you handle working in remote locations or on mine sites?**Why they ask**

Assesses your adaptability and ability to follow strict site safety protocols.

How to structure your answer

Use a behavioural approach: give an example of how you have managed remote or site work.

Example answer

"I have worked on mine sites and remote farms, so I am used to long days and strict safety protocols. I always complete site inductions, wear required PPE, and follow site rules. I plan for limited amenities and carry spare equipment. I communicate clearly with site contacts. I enjoy the variety and take pride in delivering reliable data regardless of the conditions."