

Overwatch Drone Workflow Checklist

Flight Model Render Publish

1. Pre-Flight Planning

- Confirm weather, wind (<15 mph), and daylight
- Clear flight area of trees, people, obstacles
- Confirm FAA compliance & airspace (B4UFLY app)
- DJI Mini 4 Pro batteries charged, SD card formatted
- Plan grid flight (75 – 80% overlap, 50 – 100 ft altitude)
- Manual camera mode: ISO 100, shutter ~1/500s, focus

2. Image Capture

- Fly grid + oblique patterns, capture overlapping shots
- Record optional 4K video for marketing
- Transfer photos to project folder (/raw_images, /videos, /notes)
- Backup to cloud or external drive

3. 3D Reconstruction

- Process images in Pix4D / Metashape / WebODM
- Align photos dense cloud mesh texture
- Export 3D model (.OBJ / .GLTF / .FBX)

4. Blender Processing

- Import model, clean geometry, simplify mesh
- Apply textures, add HDRI lighting & shadows
- Create flyaround animation (optional)
- Render stills and video (Eevee or Cycles)

5. Delivery & Portfolio

- Export model (.GLTF / .FBX), renders (.PNG), and video (.MP4)
- Upload to Sketchfab (optional)
- Add visuals to Overwatch website portfolio
- Include workflow description + logo branding

End Goal: One complete 3D inspection model, rendered visuals, and your first portfolio case study — ready to present to clients like Dream House Builders.