

Drone & Aerial Photography — Workbook

This workbook puts every concept from the course into immediate practice. Work through each section's exercises, worksheets, and checklists as you complete the corresponding module — fill in the templates with your own equipment, location, and client data so your notes become operational documents you use on every paid job.

Regulations, Certification, and Airspace

Lock in your certification path and build a reusable legal pre-flight checklist for your operating area.

Exercise: Certification Decision Exercise

Use this exercise to confirm which certification you need, map your study timeline, and book your test date before you proceed to Module 2.

- Which jurisdiction(s) will you primarily fly commercial jobs in — United States, Canada, or both? List the specific provinces or states.

- Write out the exact steps and fees required to obtain your target certificate (FAA Part 107 or Transport Canada RPAS Basic/Advanced), including the testing centre nearest to you and its next available date.

- List three study resources you will use (e.g., Pilot Institute, Tony Northrup Part 107, Drone Pilot Ground School RPAS) and assign a daily study time commitment in minutes.

- Set a hard exam booking date 30 days from today and write it here — then add it to your calendar.

Worksheet: Airspace Pre-Flight Classification Sheet

Before each new shoot location, complete this sheet to document your airspace assessment. Keep completed sheets for 24 months (FAA best practice).

Property address / GPS coordinates

Nearest airport name and ICAO identifier

Distance from property to nearest airport (nm)

Airspace class at shoot location (A/B/C/D/E/G)

LAANC authorization obtained? (Yes / No / Not required)

LAANC approval app used and authorization ID

Maximum approved altitude (ft AGL)

Active NOTAMs within 5 nm (list or 'None')

Active TFRs affecting the location? (Yes / No — if Yes, list)

Weather at planned flight time: ceiling (ft), visibility (sm), wind speed (mph), precipitation

Go / No-Go decision and reason

Checklist: Day-of-Exam Preparation Checklist

- Review sectional chart reading: identify Classes B, C, D, E, and G at two different airports
- Practice 10 sample NOTAM interpretation questions from Pilot Institute or FAA Safety.gov
- Complete one full-length practice exam (60 questions, 70% pass mark target for FAA) and review all missed answers
- Confirm testing centre address, parking, and required ID documents the night before
- Bring printed or digital proof of aeronautical knowledge test registration
- Arrive 20 minutes early; no electronic devices allowed in the exam room
- After passing, log your temporary certificate number and start the Part 107 DroneZone registration immediately

Equipment, Setup, and Safe Flight Operations

Build your personalised equipment kit list, master your pre-flight checklist, and document your emergency response procedures.

Exercise: Equipment Investment Analysis

Complete this analysis before purchasing or renting equipment to confirm your total kit cost and break-even calculation at your local market rates.

- List the drone model you plan to use or purchase, its current retail price, and the three main reasons it fits your target market (e.g., real estate, events, media).
- List every accessory you need (batteries, ND filters, SD cards, case, tablet): include the item name, quantity, unit price, and note whether you already own it.
- What is the average rate for a standard aerial package in your target market? At how many shoots will your total equipment investment be recovered?
- Identify one rental option (Fat Llama, ShareGrid, or local camera house) where you can rent your target drone before buying. When will you book your rental test shoot?

Worksheet: Personal Pre-Flight and Post-Flight Log

Complete one row per flight. This log serves as your operational record and insurance documentation. Keep digital copies backed up to cloud storage.

Flight date and time (take-off / landing)

Location name and GPS coordinates

Drone model and registration number

Battery numbers used and charge level at take-off (%)

Airspace class and LAANC authorization ID

RTH altitude set (ft AGL)

Wind speed at take-off (mph) and at landing (mph)

Flight duration (minutes)

Incident or anomaly? (Yes / No — if Yes, describe)

Footage review complete on-site? (Yes / No)

Delivered to client? (Yes / No — delivery date)

Checklist: Emergency Response Preparedness Checklist

- Verify lost-link action is set to RTH (not hover or land) in DJI Fly / Autel Sky settings
- Confirm RTH altitude is above tallest obstacle within your flight radius plus 50 ft
- Locate FAA Drone Zone accident reporting URL and bookmark it on your phone
- Record your insurer's 24-hour claims line in your phone contacts as 'Drone Insurance Claims'
- Write and laminate your emergency response card (lost-link, battery, flyaway, crash procedures)
- Practise a manual RTH trigger at 200 ft and 150 m distance in a safe open area before any paid job
- Confirm your commercial general liability policy certificate of insurance is current and accessible on your phone

Aerial Camera Craft and Flight Techniques

Translate camera settings theory into a ready-to-use shooting reference card and evaluate your first cinematic flight patterns with structured critique prompts.

Worksheet: Exposure Reference Card by Shooting Scenario

Complete this reference card for your specific drone model and print it laminated for your drone bag. Fill in the ND filter column for your kit.

Drone model and camera sensor size

Sunny midday / 30 fps: ISO, shutter speed, ND filter, white balance

Sunny midday / 60 fps: ISO, shutter speed, ND filter, white balance

Overcast / 30 fps: ISO, shutter speed, ND filter, white balance

Golden hour (60 min before sunset) / 30 fps: ISO, shutter speed, ND filter, white balance

Twilight / blue hour: ISO, shutter speed, ND filter, white balance

Real estate stills (sharpest): ISO, shutter speed, aperture if applicable

Picture profile used for video (D-Log M / Normal / D-Cinelike)

White balance lock setting for sunny / overcast / golden hour

Exercise: Cinematic Flight Pattern Practice Review

After practising each of the five flight patterns in a safe open area, answer these prompts to identify what you need to correct before a paid job.

- Orbit (manual, no QuickShot): describe the smoothness of your circle — did the radius stay constant? Did you maintain a consistent altitude? What will you adjust next practice session?
 - Dronie: at what backward speed (mph) did the footage look cinematic versus jerky? How many seconds did your best dronie last and was it long enough for a 3-second edit cut?
 - Hyperlapse: which mode did you use (Circle / Straight Line / Free)? How did the assembled timelapse look — was the movement path smooth or did it jump between frames?
 - Top-down descending reveal: what was the starting altitude and ending altitude of your best attempt? Did the framing stay centred on the subject throughout the descent?
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Checklist: Real Estate Shoot Shot List Checklist

- Exterior front elevation at 45-degree angle, 60–80 ft AGL, property centred in frame
 - Exterior rear elevation (if accessible airspace) at same altitude and angle
 - Top-down overhead shot showing lot boundaries, pool, landscaping
 - Orbit / flyaround: at least one complete 360-degree circle at 80 ft, low speed
 - Dronie reveal starting 15 ft above roofline, ending at 120–150 ft showing neighbourhood context
 - Neighbourhood context shot: 200 ft AGL showing proximity to streets, parks, or water
 - Golden hour or twilight exterior still (if scheduled for dusk shoot)
 - Review all shots with agent on controller screen before packing up
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Post-Production, Delivery, and Building a Commercial Aerial Business

Set up your editing workflow, finalise your pricing and contract documents, and build the first version of your client acquisition pipeline.

Exercise: Post-Production Workflow Setup

Set up your Lightroom catalogue and DaVinci Resolve project template before your first paid job, so delivery on day one is professional and repeatable.

- Create your Lightroom catalogue structure: what folder naming convention will you use (e.g., 2024/2024-06-15_123-Main-St)? Write out your full folder path from drive root to shoot folder.
 - List the 12 Lightroom steps from the course in order from memory, then check them against the course notes. Which three steps do you find least intuitive and need to practise?
 - In DaVinci Resolve, name the 4-node colour grade you will build (Technical LUT, Exposure/Contrast, Creative Grade, Selective Corrections) and identify which LUT you will use in Node 1 for your drone's colour profile.
 - What is your target turnaround time for a standard real estate package (stills + 60-sec video)? Write your delivery promise to clients in one sentence that you will include in your service agreement.
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Worksheet: Business Setup and Pricing Documentation

Complete each field to produce the first draft of your rate card and business setup checklist. These become your booking confirmation and invoice templates.

Business name (or operating as your own name)

Certificate number (FAA Part 107 or TC RPAS) once obtained

Insurance provider, policy number, and annual premium paid

Standard real estate package description and price (USD or CAD)

Standard real estate video add-on price

Luxury / twilight package description and price

Hourly event rate and minimum booking duration

Day rate (commercial media) and what is included

Brokerage retainer monthly price and properties included

Service agreement e-signature tool selected (Adobe Sign / DocuSign / HoneyBook)

Preferred delivery method for client files (Dropbox / Google Drive / WeTransfer)

Cancellation / weather reschedule policy (state your written policy)

Checklist: Commercial Aerial Business Launch Checklist

- FAA Part 107 or TC RPAS certificate obtained and registration number displayed on drone
- Commercial general liability insurance active (\$1M per occurrence minimum)
- Hull insurance active on primary drone
- Service agreement template reviewed by a local attorney or purchased from a drone industry legal template provider
- Portfolio of 5–10 edited aerial images and one 60-second reel complete and hosted online
- Rate card PDF designed and ready to email to prospective clients
- Google Business Profile created with 'aerial photographer' and 'drone photography' in business description
- List of 20 real estate agents in target market compiled with contact emails
- First outreach message drafted offering a complimentary introductory shoot to two agents
- Aloft or AirMap professional account set up for LAANC authorizations and flight logging
- Lightroom catalogue structure and DaVinci Resolve project template created and tested on sample footage
- Emergency response card laminated and attached to drone carry case

Your Action Plan

1. Book your FAA Part 107 or Transport Canada RPAS exam within 7 days — use Pilot Institute or Drone Pilot Ground School to prepare and aim for a test date within 30 days
2. Install Aloft (formerly Kittyhawk) and run a LAANC authorization simulation for a location within 5 miles of your nearest Class C or D airport
3. Rent your target drone model for one weekend before purchasing — use Fat Llama or ShareGrid and shoot a mock real estate property to evaluate image quality
4. Build your laminated pre-flight legal checklist and emergency response card using the templates in this workbook — keep both in your drone bag at all times
5. Complete your exposure reference card for your specific drone model and print it laminated; shoot a test session in each lighting scenario (sunny, overcast, golden hour) to verify your settings
6. Practice all five cinematic flight patterns (orbit, dronie, descending reveal, hyperlapse, tracking shot) in a safe open field until each is repeatable before any paid job
7. Set up your Lightroom catalogue folder structure and build your 4-node DaVinci Resolve colour grade template using a manufacturer LUT as Node 1
8. Draft your service agreement (use a drone industry legal template), rate card, and cancellation policy — get a digital signature tool account before your first booking
9. Obtain commercial general liability insurance and hull insurance; confirm your COI can be issued naming clients as additional insured within 24 hours
10. Contact 10 real estate agents in your target market with your portfolio link and rate card, offering one complimentary introductory shoot — aim to book your first paid job within 30 days of certification

