

# Preparing for a Flight Test



**CAA Chief Flight  
Instructors' Seminar**

**2025**

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# A Personal Perspective



- Almost 50 years on the receiving end
- 37 years examining
- Outcome is important
- Nerves should be expected

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# A Personal Perspective

- How do you mitigate your flight test nerves?
- What do you tell your students to help them mitigate their nerves?
- Preparation is the key

**Knowledge is Confidence**

# Flight Test vs Emergency

- Many similarities in how we approach and handle them
- Stress level can be high in both
- Don't rush into anything – sit on your hands – think before you act!
- Have you watched Top Gun?
- What did Maverick say to Cougar when he lost his nerve?

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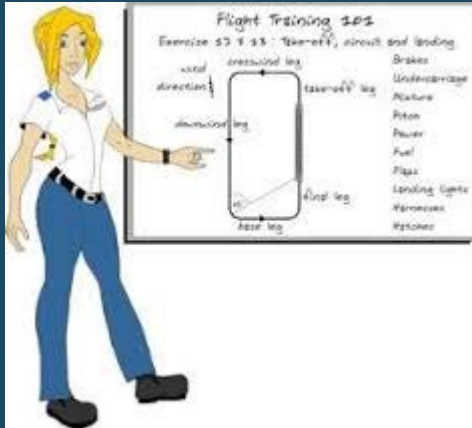


# Just a walk in the park!





# Flight Test or Emergency



- Rely on your training

- Follow checklists and procedures



- Good technical knowledge helps

| DA42 NORMAL CHECKLIST  |               | AFTER TAKE-OFF          |                 |
|------------------------|---------------|-------------------------|-----------------|
| <b>BEFORE START</b>    |               | <b>BEFORE TAKE-OFF</b>  |                 |
| External Checks        | COMPLETE      | Power                   | SET             |
| Internal Checks        | COMPLETE      | QNH                     | SET             |
| Passenger Brief        | COMPLETE      | <b>CRUISE</b>           |                 |
| Clearance              | OBTAINED      | Temperature             | CHECKED         |
| Radio / Nav Aids       | CHECKED       | Altitude                | CHECKED         |
| Transponder            | CHECKED       | HD / Compass            | CHECKED         |
| Tail                   | BRIEFED       | Legs                    | CHECKED         |
| Departure / HSIAs      | BRIEFED       | Engine Instruments      | CHECKED         |
| Take-off / Emergencies | BRIEFED       | Fuel                    | CHECKED         |
| TWOOP                  | BRIEFED       | Radio / Nav Aids        | CHECKED         |
| Position Lights        | ON            | GPS Approach            | AS REQUIRED     |
| Brakes                 | ON / OFF      | Winds                   | COMPLETED       |
| <b>AFTER START</b>     |               | <b>TOP OF DESCENT</b>   |                 |
| Engine Instruments     | CHECKED       | QNH                     | SET             |
| Crossed                | CHECKED       | HD / Compass            | CHECKED         |
| Fuel Computer          | SET           | Approach                | LOADED          |
| Tail Lights            | ON            | Approach / HSIAs        | BRIEFED         |
| <b>BEFORE TAKE-OFF</b> |               | Threats                 | BRIEFED         |
| Runway                 | CHECKED       | Radio / Nav Aids        | CHECKED         |
| Terrain                | SET           | CDR                     | VAOC / GPS      |
| Flaps                  | CHECKED / ON  | Winds                   | SET & CHECKED   |
| Engine Instruments     | CHECKED       | Fuel                    | CHECKED         |
| Radio / Nav Aids       | CHECKED       | <b>INITIAL APPROACH</b> |                 |
| Flight Plan            | LOADED        | Brakes                  | OFF / RELEASED  |
| CDI                    | SET / CHECKED | Undercarriage           | STANDBY / DOWN  |
| Winds                  | SET & CHECKED | Fuel                    | CHECKED         |
| Hatches & Windows      | SECURE        | Watches & Harnesses     | SECURE          |
| Controls               | FULL & FREE   | Mixed Approach Alt      | SET             |
| ECU / Tare             | COMPLETE      | <b>FLY</b>              |                 |
| Wipers                 | COMPLETE      | Approach                | COMPLETED       |
| Clearance              | VALIDATED     | Approach                | STABLE          |
| <b>LINE UP</b>         |               | <b>LANDING</b>          |                 |
| ILCTW                  | COMPLETE      | Traffic                 | ASSESSED        |
| Pitot / Stall Heats    | AS REQUIRED   | Winds                   | ASSESSED        |
|                        |               | Undercarriage           | DOWN / 3 GREENS |
|                        |               | <b>AFTER LANDING</b>    |                 |
|                        |               | Flaps                   | UP              |
|                        |               | Pitot Heats             | OFF             |
|                        |               | Landing Light           | OFF             |
|                        |               | Transponder             | STANDBY         |
|                        |               | Flight Plan             | TERMINATED      |
| EFFECTIVE DATE:        |               | 5 Nov 20                |                 |

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# Flight Test Preparation

**Follow a process:**

- **Train to syllabus not to FTSG**
- **Aim is to learn to safely operate an aeroplane**
- **Practise ground work**
- **Mock Flight Test**
- **Actual Flight Test starts with a Pass**
- **Examiner present to validate result**



# Practising Ground Work

- Takes time – use the bad weather days
- IFR knowledge
  - Complete full planning regardless of weather
  - Go/no-go once planning completed
- Performance calculations, Weight and Balance
- Aircraft Flight Manuals
- Emergency/Abnormal Procedures - QRH

# Training must be realistic and practical

- Aircraft faults, abnormalities and deferred defects
  - Deferred Defects need to be recorded
  - Don't ignore crew alerts
  - Action memory items or use QRH
- The dangers of ignoring crew alerts – Negative Training

**Normalisation of Deviance**

# A Recent Example



- A DA42 aircraft with diesel engines and FADEC's
  - During run up **L ALTN FAIL** caution – problem?
  - This had been a recurring problem with this aircraft
  - **L ALTN FAIL** on and off throughout flight and ignored

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## A Recent Example (Cont'd)

- **L ALTN FAIL** followed by **R ALTN FAIL** - problem?
  - Candidate did not notice the dual failure
  - Did not know there was a QRH checklist and **Warning** associated with the dual failure

### **AFM/QRH Warning**

If both alternators fail at the same time, reduce all electrical equipment to a minimum.

Expect battery power to last 30 minutes and land the airplane as soon as possible. Expect engine stoppage after this period of time.

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# Questions?

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