FLIGHT PLANNING
Before Flight

Background

Planning conducted prior to a flight in a low-stress environment enables you as pilot to establish a safe strategy and successful outcome for your flight. By being proactive, planning ahead and establishing "decision points" for each flight phase you remain in total control as Pilot-in-Command.

In addition to the normal/general items like:
Navigation Log, Flight Weather Briefing, NOTAM review, Mass&Balance, Fuel Calculations (etc.) also consider to add the following topics for your review/consideration of every flight:

Your Flight Mission Objective

What kind of flight are you planning for?
(Proficiency) Training, local flight, X-Country, Flightwith Pax, ...?

Flight Focus/Debrief Items

What elements will you focus on during upcoming flight - to debrief in detail?
Communications, Altitude/Speed control, use/ reading of checklists, navigation efficiency/accuracy........

Before Flight Strategic Review Items

- ☐ QNH - altimeter setting
- ☐ Temp and Density Altitude
- ☐ Wind (Direction/Strength, Gust)
- ☐ Clouds (Ceiling, FEW/SCT/BKN/OVC)

- ☐ Runway in use in relation to local area
- ☐ Traffic circuit/Departure routing
- ☐ Emergency Landing fields in case of engine out

- ☐ Airspace and Altitude restrictions
- ☐ Noise abatement procedures

   SPEEDS:
- ☐ Vrotate
- ☐ Vx/Vy
- ☐ Vbest glide
- ☐ Vref/Vtarget for approach and landing

Risk Management Considerations for Departure & Emergency Take Off Briefing

Density Altitude

- ☐ What possible impact will this have on your aircraft performance today?

Aircraft Performance (add 30% margin for calibration)

- ☐ Review expected take-off/landing performance in relation to current/ landing airport/airfield and weather (wind/temp)
- ☐ **Review TODR,LDR vs TODA, LDA**
- ☐ **Review possible abort criteria in relation to** runway in use/environment

Aircraft Specific

- ☐ Review any known issues/systems that stand out/need to be taken into account of the aircraft **you are going fly, like for instance landing gear, fuel system, avionics, electric trim, etc.**

Airfield Specific

- ☐ Review airfield diagram specific layout for taxiways, fuel station, obstructions, take-off/ landing sector, noise considerations, emergency landing fields, etc.

- ☐ Note other flight activities ongoing: training flights, gliding, helicopter ops, etc.
- ☐ Review possible alternate airfields in case of circumstances/emergencies like runway obstruction/closure at departure airfield

POST FLIGHT DEBRIEF:
Departure/ Take Off

Background

The overall objective is to provide you with elements/topics to structurally evaluate your flight and determine what went well and what needs/can be worked on during a next flight. By honestly evaluating your performance and getting feedback you can keep challenging yourself to stay in control as PIC and/or improve where you find it necessary.

Use elements below to proactively review and rate yourself and/or openly discuss with your instructor/safety pilot/ pax, as applicable.

Don't only focus on what went wrong. What went right during your flight is equally important to provide good learning opportunities and motivation.

The list might not be complete; add any additional items as you deem necessary

Take Off Performed (e.g. Normal, Short-Field, Soft-field, Short Soft-field):

Overall Rating of your Departure/ Take Off

☐ Excellent　　　☐ Satisfactory　　　☐ Unsatisfactory

Review/Assessment Items

Aircraft Performance

- ☐ Cold start/Warm start sequence
- ☐ Engine start emergencies reviewed
- ☐ Initial radio call
- ☐ Instrument check (Altimeter, DG)

Take Off

- ☐ Relevant Take off briefings performed – departure, emergency, abort criteria?
- ☐ Any cross wind corrections rightly applied
- ☐ Applied adequate right rudder to avoid nose left tendencies?

After Take Off

- ☐ Speed control after take off and during climb (Vx/Vy)
- ☐ Overall departure sequence and climbing to cruise/circuit altitude
- ☐ Sterile Cockpit concept

Taxi

- ☐ Taxi route to runway briefed
- ☐ Followed centre line
- ☐ Crosswind corrections during taxi

- ☐ Call outs made– runway clear, take off power set, engine instruments checked, airspeed alive ?
- ☐ Tracking of centre line during take off

- ☐ Handling of radios and calls
- ☐ Maintaining situational awareness
- ☐ After take-off checklist items performed

P Pilot
A Aircraft (equipment/technology)
V EnVironment
E External Factors

POST FLIGHT DEBRIEF:
Cruise

Background

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Use elements below to proactively review and rate yourself and/or openly discuss with your instructor/safety pilot/pax, as applicable.

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The list might not be complete; add any additional items as you deem necessary

Circuit training/X-country/VFR/IFR. Relate elements to type of flight

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Overall Rating of your Cruise Management

☐ Excellent   ☐ Satisfactory   ☐ Unsatisfactory

Review/Assessment Items (How did you handle the following)

- ☐ Altitude Hold accurateness (skill test standard? Or more accurate+/- 100 ft or +/- 50 ft)
- ☐ Direction/Heading accurateness (skill test standard? +/-100 or more accurate?)
- ☐ Adherence to flight plan/diversion of flight plan – where, why and how?
- ☐ In case of training flight/Airwork : detailed review of training exercises
- ☐ Overall navigation management: In-flight use of systems (autopilot, navigation tools, iPad, charts)
  Communications (with crew/pax, with ATC/FIS, etc.)

- ☐ Anticipation of flight events (frequency changes, heading changes, approaching landing areas)
- ☐ Cruise checklists execution/Regular monitoring of aircraft systems
- ☐ Engine management (power settings, leaning)
- ☐ Fuel management
- ☐ Look out/Scanning techniques/In-flight situational awareness (aircraft, airspace, attitude, weather)

- ☐ Overall readiness and flexibility to adapt plan/ Mentally staying ahead of aircraft (Perceive-Process-Perform cycle)

P
A
V
E

Pilot   Aircraft   EnVironment   External Factors
              (equipment/technology)

POST FLIGHT DEBRIEF:
Approach and Landing

Background

The overall objective is to provide you with elements/topics to structurally evaluate your flight and determine what went well and what needs/can be worked on during a next flight. By honestly evaluating your performance and getting feedback you can keep challenging yourself to stay in control as PIC and/or improve where you find it necessary.

Use elements below to proactively review and rate yourself and/or openly discuss with your instructor/safety pilot/pax, as applicable.

Don't only focus on what went wrong. What went right during your flight is equally important to provide good learning opportunities and motivation.

The list might not be complete; add any additional items as you deem necessary

Type of Landing Performed (e.g. Normal, Short-Field, Soft-Field, Go-Around).

Overall Rating of your Approach and Landing/Go-Around

☐ Excellent   ☐ Satisfactory   ☐ Unsatisfactory

Rate separately as applicable

Review/Assessment Items

Approach Phase

☐ Start of TOD (Top of Descent). Transition cruise to approach
☐ Establishing radio contact with landing field/approach/Tower
☐ Situational Awareness of existing traffic situation, landing runway, wind
☐ Aircraft preparation/configuration for approach and landing

☐ Approach/Landing/Missed Approach - Go- Around briefing performed
☐ Sterile cockpit concept/preparation of crew/pax for landing
☐ Execution of approach and landing checklists Joining of circuit/Entering of controlled airspace

Landing Phase

☐ Altitude and speed control in traffic pattern/controlled airspace
☐ Scanning techniques in circuit/controlled airspace
☐ Radio calls in circuit
☐ Turning base to final execution (overshooting centre- line)
☐ Performance of final landing check (GUMPS, …)
☐ Stability of approach (Stable approach concept): Airspeed, vertical speed, configuration, tracking of centre line, flight/glide path changes – PAPI/VASI adherence

☐ Round out/Flare (high, low, energy management)
☐ Touch down within first 3rd of runway (on mains, upwind low, any abnormalities-bouncing, ballooning, excessive floating)
☐ Tracking of centre line during touch down and during landing run
☐ Cross wind control
☐ Braking action

Go-Around

☐ Moment of decision and execution (reason, altitude, decisiveness)
☐ Aircraft control : Applying Power, Suppressing Pitch Up/Attitude Control, Right Rudder, Retracting Flaps, Tracking RWY Centre Line

☐ Speed control during climb (Vx/Vy)
☐ Scanning techniques and situational awareness
☐ After take-off checklist items performed
☐ Re-joining traffic pattern and set up for next landing

P
A
V
E

Pilot   Aircraft (equipment/technology)   EnVironment   External Factors

Notes and any
other considerations