

Subject: Air Lesson Plans

Aim	Resources	Time Allotted
To provide an overview of the air lesson plans.	- None	- None

Air lessons are to be conducted on a “proficiency” basis. Pilot progress will dictate what can, and will be, accomplished on each lesson plan and is not intended to be a hard and fast guide. The number of trips and/or hours allocated are in accordance with the Flight Training section of this manual. Performance levels to be achieved are established in this manual. The Chief Pilot and Operations Manager are to be advised in advance if flying training will exceed the hours allocated.

The training is to be conducted to ensure:

- a. that the pilot has achieved full understanding of the aircraft systems and their employment;
- b. that all required sequences are flown at least once to the stated performance level;
- c. that the pilot is suitably prepared for employment; and
- d. that the pilot is ready to conduct a Pilot Proficiency Check at the end of the formal training.

Teaching Points:

1. General

The pilot should be provided with a specific scenario in advance of each trip to allow time to research, review, and prepare:

- a. weather and NOTAMS;
- b. map study;
- c. weight and balance calculations;
- d. performance chart review;
- e. journey log, aircraft documents, and flight following information; and
- f. preflight inspection.

2. Preflight Preparation

The pilot should be prepared to brief the instructor on all preflight documentation in accordance with the provided scenario. Sufficient time should have been

allotted before the flight so that the briefing will be detailed, current, accurate, and relevant.

3. Airwork

Circuits - Circuits should be flown using established altitudes and airspeeds in order to improve and assess general aircraft handling.

Approaches – Both normal and steep approaches should be conducted during training and assessed for consistency of sight picture and awareness/avoidance of vortex ring state.

Confined areas – Confined area procedures shall include a high reconnaissance to evaluate, as a minimum:

- a. Size – is it sufficient for the aircraft;
- b. Shape – does the shape favour landing a particular direction;
- c. Slope – any visible slope of terrain features that may indicate a slope;
- d. Sun – will the sun affect visibility on approach;
- e. Shoots – where are the available areas for undershoots or overshoots should be required on approach or departure;
- f. Surface – any visible hazards; and
- g. Spot – where is the best spot to land.

Slope landings – Slope landing areas must be assessed by the pilot flying to ensure landings will be within physical aircraft limits (generally not to exceed 10 degrees for cyclic authority). Deplaning considerations will be discussed prior to takeoff.

Cockpit checks – Cockpit checks should be conducted regularly and verbalized aloud.

4. Emergency Procedures

Over the course of training, the pilot should be presented with the opportunity to conduct each emergency, either verbally or simulated, that is found in the Aircraft Flight Manual. Emergencies should be initiated with clear indications, realistic for the scenario, and not compounded with other unrelated emergencies.

Attention should be paid to smooth aircraft handling, accurate checklist response, and good airmanship in the execution of the sequence. The following constraints apply:

- a. Autorotations – Autorotations will be conducted both straight ahead and turning through a minimum of 180 degrees. In each case, a target landing zone will be selected prior to entering the auto. The pilot will be warned with the phrase “Practice Engine Failure” prior to rolling the throttle to flight idle. Entries will commence no lower than 1000 feet AGL and recovery will be planned to the hover. The pilot and instructor will establish, prior to the exercise, who will be handling the throttle for entry and recovery.
 - b. Pedal Failures – Pedal failures will be initiated in the high (50’) hover with neutral pedal input. The exercise will be terminated immediately if excessive rotation occurs during the exercise.
 - c. Governor Failures – Governor failures in single-engine aircraft will be initiated at a height sufficient to allow for entry to the autorotation followed by a stabilized approach. The exercise will be conducted over an area suitable for landing.
 - d. Single-engine work – One engine inoperative (OEI) flying is a large part of training pilots to fly the Bell 212. New pilots shall be allowed the opportunity to actually secure an engine and conduct a manual restart in flight as part of the conversion training. Pilots should be exposed to a variety of scenarios which dictate the simulated securing of one engine during training. When conducting OEI approaches to landing, consideration should be made with regards to engine limits. The partial application of the failed engine’s throttle by the instructor may be used to keep the operating engine within limits.
5. Specialized Techniques
- a. Waterbucket training – Pilots should conduct one or more waterbucket drops as part of normal training and this can also be used to check the function of the operations gear prior to the flying season. If able, both belly drop and longline drop should be flown.
 - b. Flight in reduced visibility – Flight in reduced visibility will be simulated in an area suitable for low-level work. Flight will be conducted at minimum flying speed (35 kts) and will include one turn in both directions through 180 degrees.
 - c. Hover exits – Hover exit flying training will include the actual egress of a passenger with one skid in contact with a sloped surface, toes only contact, and a low hover.
6. Airmanship

Throughout the training the pilot will act as the aircraft captain and make all decisions relative to the safe operation of the aircraft. The instructor will interject only when necessary as part of the conduct of the training or if safety of flight is, or will be, jeopardized.