



## Aerosonde Grade 1 AVO Requirements

- Set up the hardware in loop simulator;
- Simulate standard flight scenarios using the software or hardware in loop simulator;
- Under supervision install a mobile or fixed ground station set up;
- Under supervision monitor an aircraft en-route, perform hand-offs and act as landing controller.
- **An aircraft Technician endorsement of Grade 3 or higher.**
- Simulate abnormal flight scenarios using the software or hardware in loop simulator;
- Create and compile mission files;
- Understand the contents of aircraft parameter files and the ramifications of:
  - Changes to aircraft components or settings on parameter file requirements;
  - Incorrect parameter files and likely symptoms;
- Create landmark files for ground base;
- Set up and configure standard AMPI sessions;
- Install fixed and mobile ground stations without supervision;
- Up-load and configure aircraft software prior to flight;
- Create and up-load flight plans;
- Monitor aircraft en-route, perform hand-offs and land aircraft without supervision;
- Be aware of typical emergencies and the techniques to mitigate the occurrence or ramifications of these emergencies;
- Manage payload data;
- Perform the "Start Checklist" to a standard suitable to enable correct ground running of the aircraft;
- Under supervision perform the "Start Checklist" and launch aircraft in conjunction with the Manual Flight Controller;
- Manage and participate in the "new aircraft check-out" process and, where appropriate, sign off those items pertaining to the ground base operator.
- **A Flight Radiotelephone Operators Certificate of Proficiency, or equivalent, to permit the use of aviation-radio broadcast equipment.**
- Create and use AMPI landmark and map files;
- Perform the start checklist and launch aircraft;
- **Conduct operations in controlled airspace;**
- Execute planned auto-lands;
- **Train other controllers;**
- **Perform the functions of a "test pilot" in order to test fly new aircraft and those aircraft containing new and/or novel payload equipment;**
- Participate in the planning process and liaise with clients regarding flight requirements so that client expectations can be aligned with actual flight capability.



- Demonstrated proficiency with the prescribed elements of the skills syllabus:
    - To have the ability to recognize / identify system components
    - To have the ability to use the appropriate equipment correctly
    - To have the ability to use the appropriate checklists correctly
    - To have the ability to navigate through the Operator Interface
    - To have the ability to comprehend Operator Interface functions
    - To have computer literacy
    - To have the ability to apply crew resource management
    - To have the ability to apply the competencies
    - To be capable of making timely decisions
    - To have the ability to operate a hand held GPS
    - To have the ability to operate a magnetic compass
    - To be able to check applicable NOTAMs relevant to an operation
    - To be able to recognize emergencies and conduct the appropriate actions
    - To be capable of selecting the appropriate operating areas on the ground and in the air
    - To have the ability to conduct fault recognition on trends, parameters, graphs and equipment
    - To have the ability to understand the Auto Pilot logic
    - To have the ability to understand Gains
    - To have the ability to interpret aviation weather forecasts and conditions
    - To have the ability to submit a NOTAM relevant to an operation
  - Performed all items in the relevant achievement record;
  - Successfully completed the requisite modules of the knowledge syllabus to an advanced standard
- Piccolo conversion which includes:
- COMPETENT TO DEMONSTRATE AN INTERMEDIATE UNDERSTANDING OF THE CLOUD CAP TECHNOLOGIES PICCOLO SYSTEM DOCUMENTATION
  - COMPETENT TO CONFIGURE PICCOLO SOFTWARE (SIMULATOR)
  - COMPETENT TO DEMONSTRATE AN UNDERSTANDING OF THE AUTO PILOT SENSOR SYSTEM (FUNCTION, CALIBRATION, ERROR, TOLLERANCES)
  - COMPETENT TO NAVIGATE THE PICCOLO OPERATOR INTERFACE ADVANCED VIEW
  - COMPETENT TO COMPILE MISSION PLANS / LIMITS AND AIRCRAFT XML FILES
  - COMPETENT TO CREATE MAPS FOR OPERATOR INTERFACE
  - COMPETENT TO CONDUCT THE MK 4 START CHECKLIST UNSUPERVISED
  - COMPETENT TO CREATE AND UP-LOAD FLIGHT PLANS UNSUPERVISED
  - COMPETENT TO MONITOR AIRCRAFT EN-ROUTE, PERFORM HAND OFFS AND LAND AIRCRAFT UNSUPERVISED
  - COMPETENT TO MITIGATE OR CONDUCT CORRECT ACTIONS FOR AIRCRAFT EMERGENCIES UNSUPERVISED



- COMPETENT TO MANAGE/PARTICIPATE IN THE 'NEW AIRCRAFT CHECK-OUT' PROCESS
- SUCCESSFULLY COMPLETED THE REQUISITE MODULES OF THE KNOWLEDGE SYLLABUS TO AN INTERMEDIATE STANDARD
- COMPETENT TO CONFIGURE ECUMON SESSIONS
- COMPETENT TO CONFIGURE PAYLOAD DECODE
- COMPETENT TO DEMONSTRATE AN UNDERSTANDING OF THE DIFFERENCES BETWEEN THE CLASSIC AND PICCOLO SYSTEM
- COMPETENT TO DEMONSTRATE A BASIC UNDERSTANDING OF THE CLOUD CAP TECHNOLOGIES PICCOLO SYSTEM DOCUMENTATION
- COMPETENT TO IDENTIFY PICCOLO SYSTEM HARDWARE (AIR VEHICLE)
- COMPETENT TO IDENTIFY AND CONFIGURE PICCOLO SYSTEM HARDWARE (SIMULATOR)
- COMPETENT TO NAVIGATE THE PICCOLO OPERATOR INTERFACE
- COMPETENT TO CONDUCT THE MK 4 PRE FLIGHT CHECKLIST UNSUPERVISED
- COMPETENT TO CREATE AND UP-LOAD FLIGHT PLANS SUPERVISED
- COMPETENT TO MONITOR AIRCRAFT EN-ROUTE AND PERFORM HAND OFFS SUPERVISED
- COMPETENT TO COMPILE AND MODIFY MISSION LIMITS AND CONTINGENCY FLIGHT PLANS
- COMPETENT TO COMPILE AND MODIFY AIRCRAFT GLOBAL PARAMETER FILES
- COMPETENT TO ---CONFIGURE PAYLOAD TABS AND COMPILE PAYLOAD CONFIGURATION FILES
- COMPETENT TO CONDUCT THE MK 4 START CHECKLIST FOR THE PURPOSE OF FLIGHT
- COMPETENT TO ASSUME MISSION COMMANDER RESPONSIBILITIES, AND PLAN, AUTHORISE AND CONDUCT FLIGHTS
- COMPETENT TO TRAIN OTHER CONTROLLERS
- COMPETENT TO ASSUME PROJECT MANAGER RESPONSIBILITIES, AND CONDUCT FLIGHT PLANNING AND LIAISON WITH CUSTOMERS
- DEMONSTRATED PROFICIENCY OF THE SKILLS SYLLABUS TO AN ADVANCED STANDARD
- SUCCESSFULLY COMPLETED THE REQUISITE MODULES OF THE KNOWLEDGE SYLLABUS TO AN ADVANCED STANDARD
- Have an advanced understanding of weather
- Have an advanced understanding of aerodynamics
- Have an advanced understanding of aircraft performance
- Have an advanced understanding of human factors
- Have an advanced understanding of air law
- Have an advanced understanding of aviation navigation
- Have an advanced understanding of the content of the operations manual
- Have an advanced understanding of CASR 101