

IFS RPA PLAYBOOK



07 January 2011

Playbook Use

The Doss IFS RPA Playbook will be used in conjunction with the IFS RPA Syllabus to provide a detailed plan for students and instructors to prepare for individual missions. Use of the IFS RPA Playbook ensures that each student is exposed to all required topics in a logical sequence, using a building block approach to learning.

While the IFS RPA Playbook is directive in nature, it is meant for the student who enters training with little or no experience in aviation. It is not meant to restrict IP flexibility. If a student indicates understanding of a listed topic, and time permits, the IP should introduce or review other appropriate information. The student is responsible for studying all pre-flight study assignments and introduced maneuvers, and is expected to be able to discuss the designated Emergency Procedures and General Knowledge topics. Due to limited time, the IP may only sample a portion of the General Knowledge topics to ensure the student has a suitable understanding of the particular topics. As students progress through the missions and demonstrate strengths and weaknesses, IPs are expected to tailor mission profiles and ground training topics to maximize student learning. Consult with your Flt/CC before deviating from the playbook concerning actual flight maneuvers.

Instructors and students will reference the playbook prior to the mission to ensure all required briefing topics are covered and/or studied. "Recommended" reading assignments in the FAA handbooks are not mandatory but are useful for general knowledge study. Inadequate student preparation for the sortie may result in a cancelled sortie and an UNSAT grade.

Emergency Procedures (EPs)

EP training is a significant element of the student's training while attending IFS. To establish the end result, specific/detailed EP training will be accomplished on every mission. **Students are ultimately responsible for their training, and must assist their IPs with this requirement.** All EPs covered by Stan/Eval/USEM during morning "Stand Up" may be logged by each student. Additionally, students may log EPs discussed "in direct consultation" with any IP.

Students are required to study all the EPs in the Pre-Flight Study Assignment section of the Playbook prior to that mission. However, only the EP listed in the EP of the Day (Motherhood) section must be covered during the Motherhood (student) section of the Mission Briefing.

EPs listed in the TableTop EP (Pre/Post-Flight) section will be administered similar to the morning "Stand-Up"... i.e. they require a complete analysis, checklist reference (as applicable), and will be brought to a logical conclusion. For specific guidance reference the DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE.

Specific EPs have been published for each mission to ensure standardization. Additional EPs may be introduced at IP discretion, time permitting. Specific EPs are not published after R305. Reference the EP list in TIMS to see which EPs may not have been accomplished or have not been recently accomplished. IPs/Students should ensure they accomplish and log (in TIMS) all of the EPs listed **prior to R501**.

R101

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Starter Relay Failure
 - Abort
 - Emergency Ground Egress
 - Departing a Prepared Surface
- **IFG:** -- Planning/briefing/TOLD (white pages)
 - Departure/arrival/waypoint identification (yellow pages)
- **Local Flying Procedures:**
 - Chapter 1, General Procedures
 - Chapter 2, Ground Operations
 - Chapter 3, Patterns, Takeoffs, and Landings
 - Appendix G, Traffic Pattern Diagrams (Normal Pattern & Landing)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 2, Aircraft Structure
 - Chapter 3, Principles of Flight
 - Chapter 4, Aerodynamics of Flight, pg. 4-1 through 4-38
- **Airplane Flying Handbook (recommended):**
 - Chapter 2, Ground Operations
 - Chapter 3, Basic Flight Maneuvers
 - Chapter 5, Takeoffs and Departure Climbs
 - Chapter 7, Airport Traffic Patterns
- **Obtaining Weather & Winds**

Prerequisites – A101

Objectives – “Demo/Do”. Student practices basic aircraft control while adapting to the aircraft and performing basic maneuvers. **IP conducts the Mission Briefing, Motherhood/CRM Topics and Debriefing.**

Duration – 1.2 hrs

Introduced Maneuvers

- Engine Starting/Magnetos – DRY RUN (log in TIMS)
- Ground operations
- Takeoff and climb
- Basic aircraft control/trim
- Climbs/descents/turns//airspeed changes
- Departure/Arrival
- Traffic pattern
- Normal approach/landing
- Touch-and-Go
- Area orientation and planning
- Clearing/collision avoidance
- Checklist use
- Communication

Recommended Maneuvers

- Pattern Demonstration (in Area)
- Trim Demonstration
- Adverse Yaw Demonstration
- Landing Attitude Demo (log in TIMS)

EP of the Day (Motherhood)

- Emergency Ground Egress

TableTop EP (Pre/Post-Flight)

- Departing a Prepared Surface

R101 (continued)

General Knowledge (GK)

- G101, Aircraft Preflight/Postflight
- G102, Takeoffs and Traffic Patterns
- G103, Departures and Arrivals
- G104, Four Fundamentals
- A103, Aerodynamic Principles
 - Lift Principles
 - Four Forces
 - Stall
 - Adverse Yaw
 - Stability
 - Turning Tendencies
- A104, Airplane Performance
 - Weight & Balance
 - Pressure/Density Altitude

Dollar Ride Discussion Topics

Note: The student should have attended the *Dollar Ride “P” Mission Brief* prior to meeting the IP for the Dollar Ride sortie. The following listing of topics should be sampled by the IP to ensure the student has an understanding of all the required items prior to stepping for the Dollar Ride sortie.

- Mission preparation (weather, NOTAMS, mission timing, TOLD, etc.)
- “Step” procedures and sign-out process
- Airsick bags and seat cushions/sitting height assessment (comfortably see the oil door hinge)
- FOD prevention (stow ID cards, FOD cans, post-flight inventory, etc.)
- Fire bottles (location & use)
- Cockpit organization to include use of the checklists, IFG and local area chart
- ***Inadvertent starter engagement prevention***
- GPS setup and usage (Map, TAS, Terrain)
- Taxiing techniques
- Basic aircraft control to include:
 - coordinated flight
 - composite crosscheck
 - known power settings
 - pitch pictures (level flight, climb, descent, glide, etc)
- Proper use of, and how to trim
- Clearing/collision avoidance (visual, aural & TAS)
- Departures/arrivals/profiles

Note: Inadvertent starter engagements can cause significant damage to the starter pinion gear and cluster gear. This damage causes unnecessary maintenance delays and substantial financial costs to repair the damage. Students receive training in inadvertent starter engagement prevention and are expected to use good judgment and professionalism in the operation of the aircraft. All inadvertent starter engagements must be immediately reported to maintenance and will result in a cancelled sortie, grounding of the student, and an UNSAT grade. Additionally, the student will require a mandatory counseling session with the Chief Pilot or Designated Representative/MTO prior to the next flight.

R201

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Electrical Malfunction (Low Voltage on the Ground)
 - Electrical Fire on the Ground
 - Spin Recovery
 - Engine Fire During Flight
- **IFG:** -- Departure/arrival/waypoint identification (yellow pages)
 - Airport diagrams (green pages)
- **Local Flying Procedures:**
 - Chapter 4, Departures, Arrivals, and Area Work
 - Appendix C, Callouts
 - Appendix D, Challenge and Response
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 5, Flight Controls
 - Chapter 6, Aircraft Systems, pg. 6-1 through 6-19, 6-25 through 6-32
 - Chapter 7, Flight Instruments, pg. 7-1 through 7-12, 7-15 through 7-26
- **Airplane Flying Handbook (recommended):**
 - Chapter 4, Slow Flight, pg. 4-1 through 4-2
 - Chapter 8, Approaches and Landings, pg. 8-1 through 8-13
 - Chapter 9, Steep Turns, pg. 9-1 through 9-2

Prerequisites – R101

Objectives – Continue “Demo/Do” and build on previous mission basics. Student refines basic aircraft control and practices previously introduced maneuvers while learning additional maneuvers. **IP conducts the Mission Briefing, Motherhood/CRM Topics and Debriefing.**

Duration – 1.4 hrs

Introduced Maneuvers

- Engine Starting/Magnetos – DRY RUN (log in TIMS)
- Normal Approach and Landing, Landing Attitude Demo (if not previously completed – log in TIMS)
- Steep turns
- Slow flight
- Go-Around
- Navigation Procedures/GPS/Chart use
- Avionics setup/use (radio/GPS/VOR/TAS)
- Breakout (if required)

EP of the Day (Motherhood)

- Spin Recovery

TableTop EP (Pre/Post-Flight)

- Engine Fire During Flight

General Knowledge (GK)

- G105, Steep Turns, Slow Flight and Stalls
- G107, Landings
- G109, Go-Arounds, Breakouts and Forward Slips
- A102, Aircraft Systems
 - Landing Gear and Brakes
 - Flight Controls
 - Electrical System

R202

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Engine Fire on the Ground
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Gliding
 - Forced Landing
- **IFG:** -- Departure/arrival/waypoint identification (yellow pages)
 - General information (blue pages)
- **Local Flying Procedures:**
 - Appendix E, Waypoints
 - Appendix F, Radio communications
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 6, Aircraft Systems, pg. 6-1 through 6-19, 6-25 through 6-32
 - Chapter 10, Aircraft Performance, pg. 10-1 through 10-20
- **Airplane Flying Handbook (recommended):**
 - Chapter 4, Stalls, pg. 4-3 through 4-12
 - Chapter 6, Ground Reference Maneuvers, pg. 6-1 through 6-9
 - Chapter 8, Approaches and Landings, pg. 8-13 through 8-17

Prerequisites – R201, G106, A106

Objectives – **Continue** “Demo/Do” and build on previous mission basics. Student refines basic aircraft control and practices previously introduced maneuvers while learning additional maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Landing Attitude Demo (if not previously completed - log in TIMS)
- Power-On and Power-Off Stalls
- Gliding
- Turns-Around-A-Point
- Breakout (if required)
- No-Flap Approach/Touch-and-Go

EP of the Day (Motherhood)

- Gliding

TableTop EP (Pre/Post-Flight)

- Forced Landing

General Knowledge (GK)

- G105, Steep Turns, Slow Flight and Stalls
- G106, Ground Reference Maneuvers
- A102, Aircraft Systems
 - Power Plant
 - Engine Ignition System
 - Aircraft Fuel System
 - Pitot Static System
 - Engine Oil System
 - Engine Air Induction System
 - Vacuum System
 - Aircraft Flight Instruments

R203

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Engine Malfunction in Flight (Fuel Pressure Loss)
 - Engine Malfunction in Flight (Engine Running Roughly)
 - Engine Malfunction in Flight (Engine Stoppage)
 - Engine Restart (Propeller Windmilling)
- **IFG:** -- Departure/arrival/waypoint identification (yellow pages)
 - Abnormal/Emergency (pink pages)
- **Local Flying Procedures:**
 - Chapter 5, Simulated Emergencies
 - Appendix G, Traffic Pattern Diagrams (No-Flap Landing, Pattern SFL)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 8, Flight Manuals and Other Documents
 - Chapter 9, Weight and Balance
 - Chapter 13, Airport Operations
- **Airplane Flying Handbook (recommended):**
 - Chapter 6, Ground Reference Maneuvers, pg. 6-1 through 6-9
 - Chapter 8, Approaches and Landings, pg. 8-25 through 8-35
 - Chapter 16, Emergency Procedures, pg. 16-1 through 16-11

Prerequisites – R202

Objectives – Continue “Demo/Do” and build on previous mission basics. Student refines basic aircraft control and practices previously introduced maneuvers while learning additional maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- S-Turns
- Breakout (if required)
- Simulated Forced Landing (Pattern)
- Forward Slips to a landing

EP of the Day (Motherhood)

- Engine Malfunction in Flight (Engine Stoppage)

TableTop EP (Pre/Post-Flight)

- Engine Restart (Propeller Windmilling)

General Knowledge (GK)

- G106, Ground Reference Maneuvers
- G108, Emergency Procedures
- G109, Go-Arounds, Breakouts and Forward Slips
- A105, Communications
 - Radio Volume/Management
 - Transponder/Radar Services
- A106, Airport Operations
 - Towered/Non-Towered Airports
 - Airport Signs/Lighting
 - Light Gun Signals
 - Runway Markings
 - Standard Traffic Pattern
 - Right of Way Rules

R301

Note: One hour of ground evaluation (cumulative) in preparation for the solo flight (R501/2) must be completed during the R3xx block. Reference the Pre-solo Ground Evaluation page in this playbook (following the R306 sortie) as a guide to complete this requirement

Note: One sortie will be flown pattern only in this block (preferably done on R301-R304) and normally will be done in conjunction with the Special Syllabus requirement (alternate/auxiliary airfield arrival/departure)

Special Syllabus – 1. Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the R3xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Cabin Fire in Flight
 - Electrical Fire During Flight
 - Engine Restart (Propeller Stopped)
 - Precautionary Emergency Landing
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 11, Weather Theory
 - Chapter 12, Aviation Weather Services, pg. 12-1 through 12-21
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R203

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Area Simulated Forced Landing
- Spin Prevention Brief

EP of the Day (Motherhood)

- Engine Restart (Propeller Stopped)

TableTop EP (Pre/Post-Flight)

- Precautionary Emergency Landing

General Knowledge (GK)

- A107, Weather Reports
 - Atmospheric Circulation (H/L)
 - Air Masses/Fronts
 - Clouds and Thunderstorms
 - Atmospheric Stability/Inversion
 - Low Level Windshear/Turbulence
 - METAR/TAF

R302

Special Syllabus – 1. Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the R3xx block.

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Electrical Malfunction (Total Electrical Power Failure)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Landing with Defective Tire (Main Gear)
 - Diversion (IFG)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 14, Airspace
 - Chapter 15, Navigation, pg. 15-1 through 15-20
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R301

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Spin Prevention Brief accomplished one time in R3xx block.

EP of the Day (Motherhood)

- Landing with Defective Tire (Main Gear)

TableTop EP (Pre/Post-Flight)

- Diversion (IFG)

General Knowledge (GK)

- A108, Airspace
 - Controlled Airspace (A,B,C,D,E)
 - VFR Weather minimums
 - Airspeed limitations
- A109, Basic Navigation
 - Pilotage/Dead Reckoning
 - Radio Navigation/GPS
 - VFR Cruising Altitudes
 - Fuel/Alternate Planning
 - Magnetic Variation/Deviation
- Special Use Airspace
 - Prohibited/restricted areas
 - MTR, MOA, alert areas
- Aeronautical Charts
 - Airports and airport data
 - Airspace (B,C,D,E)
 - VORs, MTRs and Victor Airways
 - Obstructions/topography

R303

Special Syllabus – 1. Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the R3xx block.

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Landing with Defective Tire (Nose Gear)
 - Icing
 - Electrical Malfunction (Low Voltage During Flight/GEN Failure)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R302

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers while introducing additional maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Spin Prevention Brief accomplished one time in R3xx block.

EP of the Day (Motherhood)

- Icing

TableTop EP (Pre/Post-Flight)

- Electrical Malfunction (Low Voltage During Flight/GEN Failure)

General Knowledge (GK)

- Complete **one Period** of the Pre-Solo Ground Evaluation in preparation for the solo flight (R501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the R306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

R304

Special Syllabus – 1. Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the R3xx block. 2. Spin Prevention Brief accomplished one time in R3xx block.

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Lost Procedures (IFG)
 - Engine Malfunction in Flight (Oil Pressure Loss, Below Green Arc)
 - Throttle Linkage Failure (reference Precautionary Emergency Landing)
 - Flap Malfunction
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R303

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Spin Prevention Brief accomplished one time in R3xx block.

EP of the Day (Motherhood)

- Throttle Linkage Failure (reference Precautionary Emergency Landing)

TableTop EP (Pre/Post-Flight)

- Flap Malfunction

General Knowledge (GK)

- Complete **one Period** of the Pre-Solo Ground Evaluation in preparation for the solo flight (R501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the R306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

R305

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Avionics Malfunction
 - Trim Malfunction (Runaway Trim)
 - Controllability Check
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R304

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- Spin Prevention Brief accomplished one time in R3xx block.

EP of the Day (Motherhood)

- Trim Malfunction (Runaway Trim)

TableTop EP (Pre/Post-Flight)

- Controllability Check

General Knowledge (GK)

- Complete **one Period** of the Pre-Solo Ground Evaluation in preparation for the solo flight (R501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the R306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

R306

Reminder: One hour of ground evaluation (cumulative) in preparation for the solo flight (R501/2) must be completed during the R3xx block. Reference the Pre-solo Ground Evaluation page in this playbook (following this page) as a guide to complete this requirement.

Reminder: All EPs must be signed off prior to R490

Note: Prior to this sortie, the student will coordinate with the flight commander/USEM to determine the R490 checkride profile. Although not meant to exclude completing additional maneuvers, emphasis will be placed on these maneuvers in preparation for the R490 checkride.

Pre-Flight Study Assignment

- EPs: Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Trim Malfunction (Stuck Trim)
- IFG: All (review)
- Local Flying Procedures: All (review)
- GK Topics: (see below)
- Pilot's Handbook of Aeronautical Knowledge (recommended): All (review)
- Airplane Flying Handbook (recommended): All applicable sections (review)

Prerequisites – R305

Objectives – Student gains confidence, improves on basic aircraft control, gains proficiency and practices previously introduced maneuvers. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- VOR/GPS Orientation

EP of the Day (Motherhood)

- The student will brief (by memory) one of the following EP checklists as chosen by the IP:
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight)

- As Required (from Checkride Evaluation Guide desired)

General Knowledge (GK)

- Complete **one Period** of the Pre-Solo Ground Evaluation in preparation for the solo flight (R501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following this page) as a guide to complete this requirement. **Log in TIMS as one exposure.**

Note: Additional EP and GK topics will be in accordance with the IFS Checkride Evaluation Guide

Pre-solo Ground Evaluation

Note: The Pilot Syllabus requires completion of “one-hour of ground evaluation in preparation for the solo flight” during the R3xx block. This one-hour requirement may be broken up into four individual 15 minute periods. Each 15 minute period must be individually logged as a separate exposure in TIMS (special syllabus tab). **Complete each Period in sequential order (i.e. Period 1 before Period 2, Period 2 before Period 3, etc.).**

Period 1 (15 minutes) – Flight Characteristics and OPS Limits:

Discussion of the following as they relate to the student’s solo flight:

- Flight discipline and prohibited maneuvers
- Dual only maneuvers (simulated emergencies, planned forward slips, etc.)
- Solo wind limitations and crosswind component calculation (IFG, pg. 4-4)
- Starter normal operation/limitations (cold start vs. hot start)
- Oil temperature/pressure relationship (cold/high vs. hot/low) and limitations
- Stall/spin awareness, skidding turns, and stall speed vs. angle of bank (FIM, pg. 5-5)
- TOLD for solo flight (student pilot weight only)

Period 2 (15 minutes) – FAR/AIM:

Discussion of the following as they relate to the student’s solo flight:

- FAR 91.3 – Responsibility and authority of the PIC
- FAR 91.129 – Operations in Class D airspace
- FAR 91.155 – Basic VFR weather minimums
- AIM 2-3 – Airport signs and markings
- AIM 4-3-18 – Taxiing (crossing runways, holding short, etc.)
- AIM 4-3-20 – Exiting the runway after landing
- AIM 4-3-22 – Option approach

Period 3 (15 minutes) – Pattern and Ground EP’s:

Discussion of the following EPs as they relate to the student’s solo flight:

- Abort
- Engine malfunction/stoppage after takeoff with sufficient runway remaining
- Rough engine or partial power loss during takeoff climb
- Engine malfunction/stoppage after takeoff (prior to closed turn)
- Engine malfunction/stoppage in the traffic pattern
- Flap malfunction in the traffic pattern
- Radio malfunction in the traffic pattern

Period 4 (15 minutes) – Airport Operations:

Discussion of the following as they relate to the student’s solo flight:

- Solo ramp location, taxi instructions, shutdown/start/runup procedures
- Traffic patterns, spacing and collision avoidance
- Wake turbulence and wind shear avoidance
- ATC clearances/instructions versus requests (when required to comply)
- Abnormal ATC requests/patterns (go-around with sidestep, extended downwind, switching runways, 360° on downwind for spacing, etc.)
- Runway 26R/8L taxi/takeoff procedures & upwind climb restriction

R490

Use the IFS Checkride Evaluation Guide to prepare for this sortie

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE- All (review)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **Checkride Evaluation Guide:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R306, G111

Objectives – Student performs required items to the proficiency required by the MIF (including ~ 1 hour ground evaluation). **Check Pilot conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs

Introduced Maneuvers

- None

EP of the Day (Motherhood)

- The student will brief one of the following EPs (*chosen by the student*):
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight)

- In accordance with the IFS Checkride Evaluation Guide

General Knowledge (GK)

- In accordance with the IFS Checkride Evaluation Guide

R501/2

Note: Ensure the student has completed the Pre-Solo Test (A111S) and, if applicable, it has been corrected to 100% before authorizing the solo flight (complies with FAR 61.87[b][2])

Note: The Presolo Aeronautical Knowledge and Presolo Flight Training endorsements, and the SPECIAL SYLLABUS - Solo Endorsement must be completed in the student's gradebook (R502) prior to stepping for the flight. Paper printouts are not required. Normal notifications (Flt/CC, AFlt/CC, Administrative IP).

Note: All EPs must be signed off prior to the flight

Note: Four exposures (one hour total) of the Presolo Ground Evaluation endorsement must be signed off prior to the flight

Note: Use IFG Solo Briefing Guide in Preflight Brief

Pre-Flight Study Assignment

- EPs: Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE- All (review)
- IFG: All (review)
- Local Flying Procedures: All (review)
- GK Topics: (see below)
- Pilot's Handbook of Aeronautical Knowledge (recommended): All (review)
- Airplane Flying Handbook (recommended): All applicable sections (review)

Prerequisites – R490, A111S

Objectives – Following the dual sortie, the student should successfully solo the aircraft. The student must bring his/her FAA Medical Certificate or FAA Pilot Certificate, and Government issued photo ID to the mission briefing and carry during flight. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – approximately 1.4 hrs (0.9 Dual/0.5 Solo)

Introduced Maneuvers

- None

Normal Maneuvers for C501 (dual)

- Normal Approach/Landings (3 minimum)
- Pattern SFL
- Go-Around
- Forward Slip
- No-Flap (desired, not required)

Normal Maneuvers for C502 (solo)

- 0.5 flight time (1/2 hour)
- Normal patterns/landings only (normally 3 min)
- No planned abnormal landings (SFL, no-flap)
- No planned go-arounds
- No planned forward slips

EP of the Day (Motherhood)

- As Required...

TableTop EP (Pre/Post-Flight)

- As Required...

General Knowledge (GK) - discuss prior to the sortie.

- Communications, Radio Setup and TAS (specific to solo flight)
- Taxi and pattern procedures (specific to airport where solo flight will be completed)
- Brake Failure (during solo flight)
- Physiological Incident (during solo flight)

R501/2 (continued)

Normal procedures (Pueblo solo):

- Student and IP will complete R501 in the pattern. If possible, complete a portion of pattern work on 8L/26R so this will not be a surprise to the student (if required).
- When complete, taxi to the Solo Ramp. Avoid using high power settings and shutting the engine down on the gravelly portion south of the main ramp area to avoid FOD damage.
- The student will use the “KITTY XX” call-sign and will monitor 122.77 on COM2 during the C502 (solo) flight (for IP intervention, if required).
- When complete, the student will taxi back to the Solo Ramp and shutdown.
- The student and IP will taxi back to Doss Ramp using the student’s KITTY call-sign.

Normal procedures (Outlying Field solo – Bullseye, Butts, La Junta, etc.):

- Student and IP will complete R501 as a normal Pueblo departure and arrival at the designated airport, and then complete the required landings in the pattern.
- When complete, taxi to the designated ramp area and shutdown. Avoid any loose asphalt, FOD hazards or deep divots while taxiing to/from these areas.
- The student will use the “KITTY XX” call-sign and will communicate on CTAF during the R502 (solo) flight. The IP will communicate on the CTAF if intervention is required.
Exception: at Butts (KFCS), the student will use the “TIGER XX SOLO” call-sign and the student will monitor 122.77 on COM2 (for IP intervention, if required).
- When complete, the student will taxi back to the designated ramp area and shutdown.
- During the return flight (CT), the IP will fly the aircraft and complete all required actions, checklists, radio calls, etc. The original TIGER call-sign will be used to return to Pueblo.
- In an attempt to keep the sortie as close as possible to on time, the IP will fly as fast as practical and request the most expeditious arrival route and runway (straight in).

Logbook, Flight Record and Gradebook procedures (R501/502/CT):

- Complete the aircraft logbook using two entries:
 - R501 – first line: PIC: **IP**, STUDENT: *student*
 - R502 – second line: PIC: *student*, STUDENT: <blank>
 - CT – third line: PIC: **IP**, STUDENT: *student*
- Complete the TIMS Flight Records as follows:
 - R502:
 - Pilot Initials: student’s
 - Delete Crew 2 (instructor)
 - CT:
 - Student **Flt Auth Duty Code** – XX, total time as “Other”
 - Instructor **Flt Auth Duty Code** – IP, total time as “Pri”
 - Log landing under Instructor’s name
- Complete the TIMS Gradebook as follows:
 - R501:
 - Under **Clr’d Solo**, check “Yes”
 - Under **Lnd. Cur.**, check “Update”
 - R502:
 - Overall grade: N or U (if required)
 - Grade #1, #25 and #26
 - Individual grades: N or U (if required) for maneuvers flown
 - Note: If any maneuver is graded U, the overall grade is U*
 - Under **Dual/Solo**, check “Solo”
 - Under **Other Data**, check “Unit Complete”
 - CT: gradebook not required

R601

Note: Brief time is for all VNAV Routes 1+15 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Note: Two sorties in the R6xx block will be flown solo after R601, usually R603 and R604

Note: Update student landing currency on all R6XX sorties when student executes a safe pattern and landing

Note: Use IFG VNAV Briefing Guide in Preflight Briefing if appropriate.

Note: Student accomplishes at least one area SFL on R601 or R602(Dual)

Note: Accomplish required maneuvers a minimum of twice in the R6xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Cabin Fire in Flight
 - Electrical Fire During Flight
 - Engine Restart (Propeller Stopped)
 - Precautionary Emergency Landing
- **IFG:** All (review)
- **Local Flying Procedures:** Chapter 6, VNAV Procedures
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge:** Chapter 15, Navigation, pg. 15-1 through 15-20
- **Airplane Flying Handbook:** Pages 16-12 to 16-16, Inadvertant VFR Flight into IMC
- **Instrument Flying Handbook:** Chapter 4, Section 1, Airplane Attitude Instrument Flying Using Analog Instrumentation
- **VNAV Route Study/Waypoint Identification**
- **VNAV Checklists/Briefs**
- **Obtaining Route Weather & Winds**

Prerequisites: R502, G112R (Advanced/Enroute Navigation), A114 (Instrument Orientation)

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced maneuvers, while learning the following navigation basics: flight planning, chart interpretation, weather/wind analysis, dead reckoning and turn point procedures. Introduction to Basic Instrument Flight Procedures using the control/performance concept to include level flight, turns to headings, climbs and descents, and unusual attitude recoveries. Introduction to short field and soft field takeoffs and landings, Vx and Vy climbs. **IP conducts the Mission briefing, VNAV route briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.4 hrs (Dual)

Topics introduced in Prebrief:

- Spin Prevention
- VOR cross-tuning/navigation procedures
- Radar Services

Introduced Maneuvers

- Altitude de-confliction
- Dead reckoning/Pilotage
- Turn point identification
- Wind corrections to headings (mission planning)
- Time, distance, and heading
- Chart interpretation
- Turn point procedures
- Clock Usage on VNAV sorties

R601(continued)

Introduced Maneuvers (continued)

- Basic Instrument Flight Maneuvers (straight/level/climbs/descents)
- Short Field Takeoff/Landings
- VOR/GPS Orientation/Operations

EP of the Day (Motherhood)

- Lost Procedures

TableTop EP (Pre/Post-Flight)

- Diversion

General Knowledge (GK)

- G112, Enroute Navigation
- Latitude/Longitude
- A112, Advanced Navigation
- Chart Symbolology/Interpretation

General Knowledge (GK) (continued)

- GPS Operation (TRK function)
- Flight Computer (E6-B)
 - Time, rate, distance
 - Wind and its effects
 - Determining relative wind
 - Groundspeed selection
- Route Study - Chart references (big to small)
 - Obstacles/Obstructions
 - Clock-Map-Ground points
 - Forced Landing locations
 - Collision Avoidance/TAS usage

VNAV Profile and Planning

The standard profile for VNAV route sorties (except the VNAV Route Abort on one sortie) includes a minimum of two patterns, typically one abnormal (no-flap, pattern SFL, short and/or soft field takeoff and landing, forward slip, touch-and-go, or go-around), and one normal pattern and landing. This will ensure maneuver continuity for pattern maneuvers.

In addition to the pattern work, normal maneuver continuity for area maneuvers is also required (except for the VNAV Route Abort sortie). **All crews (student/IP) must carefully plan each sortie to ensure the completion of minimum requirements (continuity) and any additional maneuvers/patterns as time allows.**

Some of the VNAV profiles (Daygo and Check) leave only a minimal amount of time for area maneuvers. In these cases, complete only the minimum maneuvers required (continuity) to prevent an extended sortie duration. Additionally, reduce transit time enroute (on the departure and arrival) by flying as fast as practical and use minimum delay entering/exiting the area. To compensate for lack of time on these profiles, use the extra time available on other profiles (Yak and Kramer) to complete extra area maneuvers beyond the minimum required (continuity). **It is understood that due to reasons beyond the crew's control some sorties may exceed the normal scheduled duration . However, use good judgment and prudence to keep the sorties as close to on-time as possible.**

R602

Note: R602 may be flown as an area solo, or VNAV route solo

Note: If a solo is flown on a VNAV Route, the student must have previously flown the route and must have met EOB MIF for Navigation Procedures/VOR/GPS/Map Use prior to flying the VNAV route

Note: Update student landing currency on all R6XX sorties when student executes a safe pattern and landing

Note: Use IFG VNAV Briefing Guide in Preflight Briefing

Note: Student accomplishes at least one area SFL on R601 or R602 (Dual)

Note: Accomplish required maneuvers a minimum of twice in the R6xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Electrical Malfunction (Total Electrical Power Failure)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Landing with Defective Tire (Main Gear)
 - Diversion (IFG)
- **IFG:** All (review)
- **Local Flying Procedures:** Chapter 6, VNAV Procedures
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 15, Navigation, pg. 15-1 through 15-20
- **Airplane Flying Handbook (recommended):** All applicable sections (review)
- **VNAV Route Study/Waypoint Identification, VNAV Checklists/Briefs**
- **Obtaining Route Weather & Winds**

Prerequisites: R601, Previously flown route if VNAV solo, Solo Endorsement

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness and previously introduced navigation basics (flight planning, chart interpretation, weather/wind analysis, dead reckoning and turn point procedures) while learning the following additional navigation basics: course/speed/time control corrections. If Solo, the student must bring his/her FAA Medical Certificate or FAA Pilot Certificate, and Government issued photo ID to the mission briefing and carry during flight.. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.4 hrs (Dual or Solo).

Introduced Topics in the Prebrief

- GPS Integration (TRK vs. MAG CRS)
- Course, speed, and time control corrections
- Inflight Fuel Calculations
- Soft Field Takeoff/Landings
- Basic Instrument Maneuvers (level turns to heading/unusual attitude recoveries)

EP of the Day (Motherhood)

- Route Abort

TableTop EP (Pre/Post-Flight)

- As Required...

R602 (continued)

General Knowledge (GK)

- A108, Airspace
 - Controlled Airspace (A,B,C,D,E)
 - VFR Weather minimums
 - Airspeed limitations
- A109, Basic Navigation
 - Pilotage/Dead Reckoning
- Special Use Airspace
 - Prohibited/restricted areas
 - MTR, MOA, alert areas

R603

Note: R603 may be flown as an area solo, or VNAV route solo

Note: If a solo is flown on a VNAV Route, the student must have previously flown the route and must have met EOB MIF for Navigation Procedures/VOR/GPS/Map Use prior to flying the VNAV route

Note: Update student landing currency on all R6XX sorties when student executes a safe pattern and landing

Note: Use IFG VNAV and Solo Briefing Guides in Preflight Briefing as required

Note: Accomplish required maneuvers a minimum of twice in the R6xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Landing with Defective Tire (Nose Gear)
 - VNAV Route Abort Procedure
 - Icing
 - Electrical Malfunction (Low Voltage During Flight/GEN Failure)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - All applicable sections (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R602, Previously flown route if VNAV solo, Solo Endorsement.

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness and previously introduced navigation basics: flight planning, chart interpretation, weather/wind analysis, dead reckoning, turn point briefings, VOR cross tuning, and course/speed/time control corrections. If Solo, the student must bring his/her FAA Medical Certificate or FAA Pilot Certificate, and Government issued photo ID to the mission briefing and carry during flight. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.4 hrs

Introduced Topics in the Prebrief

-None

Authorized Area Maneuvers if flown solo

- Steep Turns, Slow Flight, Ground Reference Maneuvers

EP of the Day (Motherhood)

- The student will brief (by memory) one of the following EP checklists as chosen by the IP:
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight) - As Required...

General Knowledge (GK) - As Required...

R604

Note: R604 may be flown as an area solo, or VNAV route solo

Note: If a solo is flown on a VNAV Route, the student must have previously flown the route and must have met EOB MIF for Navigation Procedures/VOR/GPS/Map Use prior to flying the VNAV route

Note: Update student landing currency on all R6XX sorties when student executes a safe pattern and landing

Note: Use IFG VNAV and Solo Briefing Guides in Preflight Briefing as required

Note: Accomplish required maneuvers a minimum of twice in the R6xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Lost Procedures (IFG)
 - Engine Malfunction in Flight (Oil Pressure Loss, Below Green Arc)
 - Throttle Linkage Failure (reference Precautionary Emergency Landing)
 - Flap Malfunction
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 11, Weather Theory
 - Chapter 12, Aviation Weather Services, pg. 12-1 through 12-21
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R603, Previously flown route if VNAV solo, Solo Endorsement.

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness and previously introduced navigation basics: flight planning, chart interpretation, weather/wind analysis, dead reckoning, turn point briefings, VOR cross tuning, and course/speed/time control corrections. The student must bring his/her FAA Medical Certificate or FAA Pilot Certificate, and Government issued photo ID to the mission briefing and carry during flight. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.4 hrs

Introduced Topics in the Prebrief

-None

Authorized Area Maneuvers if flown solo

- Steep Turns, Slow Flight, Ground Reference Maneuvers

EP of the Day (Motherhood)

- The student will brief (by memory) one of the following EP checklists as chosen by the IP:
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight) - As required...

General Knowledge (GK) - As required...

R605

Note: R605 may be flown as an area solo, or VNAV route solo

Note: If a solo is flown on a VNAV Route, the student must have previously flown the route and must have met EOB MIF for Navigation Procedures/VOR/GPS/Map Use prior to flying the VNAV route

Note: Update student landing currency on all R6XX sorties when student executes a safe pattern and landing

Note: Use IFG VNAV and Solo Briefing Guides in Preflight Briefing as required

Note: Accomplish required maneuvers a minimum of twice in the R6xx block

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
 - Avionics Malfunction
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)
- **Checkride Evaluation Guide**

Prerequisites - R604

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced navigation basics (flight planning, chart interpretation, weather/wind analysis, dead reckoning and turn point procedures), instrument maneuvers, contact maneuvers, and patterns/landings. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration: 1.4 hrs

Introduced Topics in the Prebrief

- Any topics not previously accomplished

Authorized Area Maneuvers if flown solo

- Steep Turns, Slow Flight, Ground Reference Maneuvers

EP of the Day (Motherhood)

- The student will brief (by memory) one of the following EP checklists as chosen by the IP:
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight)

- As required...

General Knowledge (GK)

- A107, Weather Reports
 - Atmospheric Circulation (H/L)
 - Air Masses/Fronts
 - Clouds and Thunderstorms
- Aviation Weather Services
 - Atmospheric Stability/Inversion
 - Low Level Windshear/Turbulence
 - METAR/TAF

R701

Note: Brief time is 1+30 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements. Step Time is 0+45 prior to takeoff to allow for extended preflight activity

Note: R701 may be flown concurrently with R6xx/R702/R8xx as an out and back profile as long as prerequisites are met

Note: Update student landing currency on all R7XX sorties when student executes a safe pattern and landing

Note: Use IFG Night Briefing Guide, Instrument Briefing Guide, and Cross Country Briefing Guide as required in Preflight Briefing

Note: Students **do not** fly solo at night

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - Night: Mission planning, ground operations, takeoff, departure, basic pilotage and night flight operations, patterns and landings, post flight operations
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** Pages 13-6 thru 13-9 and pages 16-17 thru 16-19
- **Airplane Flying Handbook (recommended):** Chapter 10

Prerequisites – R601, A114 (Instrument Orientation), G115 (Night Operations)

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers with a vision restricting device, and patterns/landings. Introduction to basic night flight operations to include night mission planning, ground operations, takeoff, departure to area (as required: steep turns, slow flight, instrument maneuvers, unusual attitudes), basic night pilotage, night patterns and landings, night post flight operations. **IP conducts the Mission briefing and Debriefing. Student briefs Motherhood/CRM topics.**

Duration – 1.5 hrs (Dual)

Introduced Topics in the Prebrief

- Night Operations: mission planning, aircraft lighting, ground operations, takeoff, departure, basic pilotage/dead reckoning and night flight operations, night patterns and landings, airport lighting, post flight operations
- CFIT

EP of the Day (Motherhood)

- Electrical Malfunction (Total Electrical Power Failure) - Night

TableTop EP (Pre/Post-Flight)

- Forced Landing - Night

General Knowledge (GK)

- Night Flight Operations

R702

Note: Brief time is 1+30 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements. Step Time is 0+45 prior to takeoff to allow for extended preflight activity

Note: R702 may be flown concurrently with R6xx/R701/R8xx as an out and back profile as long as prerequisites are met

Note: Update student landing currency on all R7XX sorties when student executes a safe pattern and landing

Note: Use IFG Night Briefing Guide, Instrument Briefing Guide, and Cross Country Briefing Guide as required in Preflight Briefing

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - Night: Mission planning, ground operations, takeoff, departure, basic pilotage and night flight operations, patterns and landings, post flight operations (Review)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** Pages 13-6 thru 13-9 (Night Airport Operations) and pages 16-17 thru 16-19 (Night Aeromedical Factors) – (Review)
- **Airplane Flying Handbook (recommended):** Chapter 10 (Review)

Prerequisites - R701

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers with a vision restricting device, and patterns/landings. Introduction to cross-country operations to include Advanced Navigation Planning, pilotage, dead reckoning, VOR tracking, GPS usage, strange field arrival, patterns and landings. **IP conducts the Mission briefing, Debriefing, and the Cross Country Briefing. Student briefs Motherhood/CRM topics.**

Duration – 1.5 hrs (Dual)

Introduced Topics in the Prebrief

- Cross country operations/Strange Field Procedures
- Flight following
- Inadvertent Flight into IMC

EP of the Day (Motherhood)

- As Required

TableTop EP (Pre/Post-Flight)

- As Required

General Knowledge (GK)

- Night Flight Operations
- Radio Navigation/GPS
- VFR Cruising Altitudes
- Fuel/Alternate Planning
- Magnetic Variation/Deviation
- Inflight weather services
- Aeronautical Charts
 - Airports and airport data
 - Airspace (B,C,D,E)
 - VORs, MTRs and Victor Airways
 - Obstructions/topography

R801

Note: 3 Sorties in the R8xx block will be flown solo in any order. R801 is normally flown dual.

Note: Update student landing currency on all R8XX sorties when student executes a safe pattern and landing

Note: Use IFG Instrument Briefing Guide, and Cross Country Briefing Guide as required in Preflight Briefing

Note: Accomplish required maneuvers a minimum of twice in the R8xx block

Note: Brief time is 1+30 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - **Pilot's Handbook of Aeronautical Knowledge (recommended):**
 - Chapter 17 Aeronautical Decision Making
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites - R601

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers with a vision restricting device, contact maneuvers, patterns/landings, and cross-country operations (pilotage and dead reckoning, and strange field procedures). **IP conducts the Mission briefing and X/C Brief if not previously introduced to student. Student briefs Motherhood/CRM topics, student can accomplish the X/C brief if previously demonstrated.**

Duration – 1.5 hrs or 2.2 hrs if flown solo (R801 normally flown dual)

Introduced Topics in the Prebrief

- Cross country operations
- Flight following
- Alternate/Divert Planning

Introduced Maneuvers

- Short and Soft Field Takeoffs and Landings (if not previously introduced in R6xx block)

EP of the Day (Motherhood)

- Lost Procedures

TableTop EP (Pre/Post-Flight)

- Divert Procedures

General Knowledge (GK)

- Aeronautical Decision Making

R802

Note: 3 Sorties in the R8xx block will be flown solo in any order (approximately 6.7 hours total)

Note: Update student landing currency on all R8XX sorties when student executes a safe pattern and landing

Note: Use IFG Cross Country and Solo Briefing Guides in Preflight Briefing

Note: Short and Soft Field Takeoffs and Landings must meet MIF prior to R8xx sorties flown solo

Note: Accomplish required maneuvers a minimum of twice in the R8xx block

Note: Brief time is 1+15 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - **Pilot's Handbook of Aeronautical Knowledge (recommended):** Review
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites - R801, Cross Country Solo Endorsement, Previous GTIMS Flight Records as required, and Logbook Endorsement

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers, and patterns/landings, and cross-country operations (pilotage and dead reckoning, and strange field procedures). The student must bring his/her FAA Medical Certificate or FAA Pilot Certificate, and Government issued photo ID to the mission briefing and carry during flight. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.5 hrs or 2.2 hrs if flown solo

Introduced Topics in the Prebrief

- Radio Failure
- Short Field/Soft Field Contingencies

EP of the Day (Motherhood)

- As required

TableTop EP (Pre/Post-Flight)

- As required

General Knowledge (GK)

- As required

R803

Note: 3 Sorties in the R8xx block will be flown solo in any order (approximately 6.7 hours total)

Note: Update student landing currency on all R8XX sorties when student executes a safe pattern and landing

Note: Use IFG Cross Country and Solo Briefing Guides in Preflight Briefing

Note: Short and Soft Field Takeoffs and Landings must meet MIF prior to R8xx sorties flown solo

Note: Accomplish required maneuvers a minimum of twice in the R8xx block

Note: Brief time is 1+15 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - **Pilot's Handbook of Aeronautical Knowledge (recommended):** Review
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R802, 4293 Cross Country Solo Endorsement

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers, patterns/landings, and cross-country operations (pilotage and dead reckoning, and strange field procedures). The student must bring his/her FAA Medical Certificate, FAA Pilot Certificate (if applicable), and Government issued photo ID to the mission briefing and carry during flight . **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.5 hrs or 2.2 hrs if flown solo

Introduced Topics in the Prebrief

- None

EP of the Day (Motherhood)

- As required

TableTop EP (Pre/Post-Flight)

- As required

General Knowledge (GK)

- As required

R804

Note: 3 Sorties in the R8xx block will be flown solo in any order (approximately 6.7 hours total)

Note: Update student landing currency on all R8XX sorties when student executes a safe pattern and landing

Note: Use IFG Cross Country and Solo Briefing Guides in Preflight Briefing

Note: Short and Soft Field Takeoffs and Landings must meet MIF prior to R8xx sorties flown solo

Note: Accomplish required maneuvers a minimum of twice in the R8xx block

Note: Brief time is 1+15 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Pre-Flight Study Assignment

- **EPs:** Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** - **Pilot's Handbook of Aeronautical Knowledge (recommended):** Review
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites - R803, 4293 Cross Country Solo Endorsement

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers, patterns/landings, and cross-country operations (pilotage and dead reckoning, and strange field procedures). The student must bring his/her FAA Medical Certificate, FAA Pilot Certificate (if applicable), and Government issued photo ID to the mission briefing and carry during flight . **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.5 hrs or 2.2 hrs if flown solo

Introduced Topics in the Prebrief

- None

EP of the Day (Motherhood)

- As required

TableTop EP (Pre/Post-Flight)

- As required

General Knowledge (GK)

- As required

R805

Note: 3 Sorties in the R8xx block will be flown solo in any order (approximately 6.7 hours total)

Note: Update student landing currency on all R8XX sorties when student executes a safe pattern and landing

Note: Use IFG Cross Country Briefing Guide in Preflight Briefing

Note: Short and Soft Field Takeoffs and Landings must meet MIF prior to R8xx sorties flown solo

Note: Brief time is 1+15 prior to Takeoff (dependant on IP availability) to allow for additional briefing requirements

Pre-Flight Study Assignment

- EPs: Review all in DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE
- IFG: All (review)
- Local Flying Procedures: All (review)
- GK Topics: - Pilot's Handbook of Aeronautical Knowledge (recommended): Review
- Airplane Flying Handbook (recommended): All applicable sections (review)

Prerequisites - R804, 4293 Cross Country Solo Endorsement

Objectives – Student gains confidence, improves on basic aircraft control, situational awareness, and previously introduced instrument maneuvers, patterns/landings, and cross-country operations (pilotage and dead reckoning, and strange field procedures). **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.5 hrs or 2.3 hrs if flown solo

Introduced Topics in the Prebrief

- None

EP of the Day (Motherhood)

- As required

TableTop EP (Pre/Post-Flight)

- As required

General Knowledge (GK)

- As required

R901

***Note:** Prior to this sortie, the student will coordinate with the flight commander/USEM to determine the R1090 checkride profile. Although not meant to exclude completing additional maneuvers, emphasis will be placed on these maneuvers in preparation for the R1090 checkride*

***Note:** This is a single sortie block - ensure all optioned MIF items (+) are completed.*

***Note:** Update student landing currency when student executes a safe pattern and landing*

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE- All (review)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)
- **Checkride Evaluation Guide**

Review – Gradebook, 4293s checked/signed/initialed, and any questions from previous sorties.

Prerequisites – R605, R702, R805

Objectives – Student gains confidence, demonstrates/improves basic aircraft control, instrument maneuver proficiency, unusual attitude recoveries, cross country procedures, sampling of pattern operations and landings, and proper preparation for his/her checkride. **Student conducts the Mission Briefing and Debriefing. IP monitors/evaluates.**

Duration – 1.5 hrs (Dual)

Introduced Maneuvers

- None

EP of the Day (Motherhood)

- The student will brief (by memory) one of the following EP checklists as chosen by the IP:
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight)

- As Required (from Checkride Evaluation Guide desired)

General Knowledge (GK)

- As Required...

Note: Emphases for EP and GK topics will be in accordance with the IFS Checkride Evaluation Guide.

R1090

Use the IFS Checkride Evaluation Guide to prepare for this sortie

Pre-Flight Study Assignment

- **EPs:** Refer to DA-20-C1 EMERGENCY PROCEDURES TRAINING GUIDE- All (review)
- **IFG:** All (review)
- **Local Flying Procedures:** All (review)
- **GK Topics:** (see below)
- **Pilot's Handbook of Aeronautical Knowledge (recommended):** All (review)
- **Airplane Flying Handbook (recommended):** All applicable sections (review)

Prerequisites – R901, A1090

Objectives – Student performs required items to the proficiency required by the MIF (including ~ 1 hour ground evaluation). **Student conducts the Mission Briefing and Debriefing. Check Pilot monitors/evaluates and briefs checkride specifics.**

Duration – 1.5 hrs (Dual)

Introduced Maneuvers

- None

EP of the Day (Motherhood)

- The student will brief one of the following EPs (*chosen by the student*):
 - Emergency Ground Egress
 - Departing a Prepared Surface
 - Engine Malfunction in Flight (Sufficient Runway Remaining to Land)
 - Engine Malfunction in Flight (Insufficient Engine Power after Takeoff)
 - Forced Landing
 - Spin Recovery

TableTop EP (Pre/Post-Flight)

- In accordance with the IFS Checkride Evaluation Guide

General Knowledge (GK)

- In accordance with the IFS Checkride Evaluation Guide