

IFS PILOT PLAYBOOK



05 OCTOBER 2009

Playbook Use

The Doss IFS Pilot Playbook will be used in conjunction with the IFS Pilot Syllabus to provide a detailed plan for students and instructors to prepare for individual missions. Use of the IFS Pilot 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 Pilot 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 C305. 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 C501**.

C101

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**

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.**

Introduced Maneuvers

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

Recommended Maneuvers

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

EP of the Day (Motherhood)

- Emergency Ground Egress

TableTop EP (Pre/Post-Flight)

- Departing a Prepared Surface

C101 (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 (need to 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.

C201

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

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.**

Introduced Maneuvers

- Engine Starting/Magnetos – DRY RUN (log in TIMS)
- Landing Attitude Demo (if not previously completed – log in TIMS)
- Steep turns
- Slow flight
- Go-Around
- Navigation Procedures/GPS/Chart use
- Avionics setup (radio and GPS)
- 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
 - Electrical System
 - Pitot Static System
 - Flight Controls
 - Vacuum System
 - Aircraft Flight Instruments

C202

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

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.**

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
 - Engine Oil System
 - Engine Air Induction System

C203

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

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.**

Introduced Maneuvers

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

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

C301

Note: One hour of ground evaluation (cumulative) in preparation for the solo flight (C501/2) must be completed during the C3xx block. Reference the Pre-solo Ground Evaluation page in this playbook (following the C306 sortie) as a guide to complete this requirement.

Note: One sortie will be flown pattern only in this block (preferably done on C301-C304) and normally will be done in conjunction with the Special Syllabus requirement.

Special Syllabus – Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the C3xx 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)

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

Introduced Maneuvers

- none

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

C302

Special Syllabus – Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the C3xx 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)

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

Introduced Maneuvers

- none

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

C303

Special Syllabus – Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the C3xx 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)

Objectives – Student builds 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.**

Introduced Maneuvers

- Area Simulated Forced Landing (unless pattern only sortie)

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 (C501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the C306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

C304

Special Syllabus – Student accomplishes an arrival and traffic pattern at an alternate/auxiliary airfield in the C3xx 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)

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

Introduced Maneuvers

- Area Simulated Forced Landing (if not previously completed)

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 (C501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the C306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

C305

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)

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

Introduced Maneuvers

- None

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 (C501/2). Reference the *Pre-solo Ground Evaluation page* in the playbook (following the C306 sortie) as a guide to complete this requirement. **Log in TIMS as one exposure.**

C306

Reminder: All EPs must be signed off prior to C501.

Reminder: One hour of ground evaluation (cumulative) in preparation for the solo flight (C501/2) must be completed during the C3xx block. Reference the Pre-solo Ground Evaluation page in this playbook (following this page) as a guide to complete this requirement.

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)

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

Introduced Maneuvers

- None

EP of the Day (Motherhood)

- As Required...

TableTop EP (Pre/Post-Flight)

- As Required...

General Knowledge (GK)

- Complete **one Period** of the Pre-Solo Ground Evaluation in preparation for the solo flight (C501/2). 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.**

Pre-solo Ground Evaluation

Note: The Pilot Syllabus requires completion of “one-hour of ground evaluation in preparation for the solo flight” during the C3xx 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

C501/2

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 (4293), and the SPECIAL SYLLABUS - Solo Endorsement (4293) must be completed in the student's gradebook (C502) prior to stepping for the flight. Paper printouts are not required. Don't forget normal 4293 notifications (Ft/CC, AFt/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.*

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)

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

Introduced Maneuvers

- None

Normal Maneuvers for C501 (dual)

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

Normal Maneuvers for C502 (solo)

- 0.5 flight time (½ hour)
- Normal patterns/landings only
- 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)

C501/2 (continued)

Normal procedures (Pueblo solo):

- Student and IP will complete C501 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 C501 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 C502 (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 (C501/502/CT):

- Complete the aircraft logbook using two entries:
 - C501 – first line: PIC: **IP**, STUDENT: *student*
 - C502 – second line: PIC: *student*, STUDENT: <blank>
 - CT – third line: PIC: **IP**, STUDENT: *student*
- Complete the TIMS Flight Records as follows:
 - C502:
 - 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:
 - C501:
 - Under **Clr'd Solo**, check "Yes"
 - Under **Lnd. Cur.**, check "Update"
 - C502:
 - Overall grade: N or U (if required)
 - Grade #1, #25 and #26 as appropriate
 - 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

C601

Note: Prior to this sortie, the student will coordinate with the flight commander/USEM to determine the C790 checkride profile. Although not meant to exclude completing additional maneuvers, emphasis will be placed on these maneuvers in preparation for the C790 checkride.

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

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.

Objectives – Student demonstrates basic aircraft control, maneuver proficiency and proper preparation for his/her checkride. **IP conducts the Mission Briefing and Debriefing. Student briefs Motherhood/CRM topics.**

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...

General Knowledge (GK)

- As Required...

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

C790

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)

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.**

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