01

ICON
FLIGHT
TRAINING

COURSE GUIDE

Revision 5.3 FEBUARY 2020 ICON Aircraft

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COURSE GUIDE

ICON Aircraft

COURSE GUIDE

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N715BA
N730BA
LIGHT SPORT

INTRO TO ICON FLIGHT TRAINING

Welcome to the world of aviation Sport Flying. ICON is dedicated to ensuring its owners are equipped with all the tools necessary for a lifetime of fun and safe adventuring in their aircraft. To achieve this goal, ICON's Flight Training program was created to teach relevant competencies with an engaging and dynamic curriculum, specifically tailored to instill the knowledge, discipline, aviation skills, and best practices needed to operate your aircraft safely, reliably, and confidently. As a beginning pilot, ICON Flight Training will deliver a complete training program to earn your Sport Pilot License (SPL) before taking delivery of your aircraft. Your course will include a self-paced ground academics program and dedicated on-site training in the aircraft.

Your flight training will be both challenging and rewarding. We recognize that your time is valuable. With this in mind, the curriculum will be fast-paced, with two or more flights per day. Although there is a lot of material to cover, the program is designed to be fun and exciting.

Freedom. Fun. Adventure. These are the reasons the A5 exists. ICON has built a Nationwide Flight Training Network, which consist of independent instructors called, ICON Authorized Flight Instructors (IAFI) and Partnered Flight Schools that operate the A5 to provide a personalized, world-class aviation training experience in the ICON A5. Fire up ... Upon completion of pre-arrival academics, you can expect to commit dedicated time with one of our IAFIs or Partnered Flight Schools, learning all aspects of amphibious aircraft operations. Progression through...

- **Pre-arrival preparation.** More time spent learning pre-arrival material will generally mean less time required on-site teaching background and reference info, allowing more focus on learning to operate the vehicle hands-on.
- **Flight training periods.** Flight training will need to be coordinated and scheduled with an ICON Authorized Flight Instructor (IAFI) or Flight School Training Partner. They have been trained and authorized to teach the ICON curriculum and to deliver the results expected for training completion. The best part is that our network of IAFI's is growing and there may already be an instructor available in your area. These blocks of training will be scheduled to best see your progress in a flexible amount of time. Extended gaps between training could require additional flight time due to "warm up" in the aircraft.
- **Commitment to learning.** There's a lot to learn in a short amount of time. Like most things in life, the more you put into it the more you'll get out of it, and in this case, the less time it will likely take to complete.
- **Feel for the aircraft and operating environment.** It'll take some time to develop a feel for the aircraft and adapt to this new operating environment. The amount of time can depend on many factors that are not easily predicted in advance.
- **Weather.** Low cloud ceilings, high winds, and low visibility can sometimes prevent us from flying. Although difficult to predict far in advance, we can plan for additional training days during certain times of the year, depending on training location.

After completion of initial training you will then proceed to the water operations portion of your training by starting ICON's Transition – Land Course (TX-L). Once you have successfully completed the course and proficiency check, you will receive a light sport seaplane endorsement (ASES-LSA). This will allow you to fully operate the A5 on the water. After building some experience with A5 ops (at least 100 hours of flight time in type/model), you'll be encouraged to train with an IAFI or partnered Flight School to learn advanced techniques as time permits.

SPORT PILOT LICENSE COURSE OVERVIEW

The Sport Pilot License (SPL) course is divided into five phases. Completion of each phase provides the foundation for the next.

1

Pre-Arrival

1 month,
20-25 hours academics

Pre-Arrival Training will provide the knowledge foundation needed to start flying immediately once you schedule your training with an IAFI. All of your pre-arrival study material (and much more) is contained in the ICON Sport Flying Academics manual (SFA) and the ICON Sport Flying Operations manual (SFO). The SFA and SFO are the documents for all academic and flight ops info, provided in hard-copyYour Pre-Arrival Guide will walk you through this phase step by step. Learning modules include a short online assessment to provide feedback and track your progress throughout this phase.

2

Pre-Solo

7-10 flights

Pre-Solo phase is designed to teach you the basics of operating an aircraft in a dynamic 3-dimensional environment. We'll focus on building situational awareness (SA) and learning to connect with the aircraft through seat-of-the-pants, aural, and visual cues. Most of our time will be spent learning basic stick, rudder, and throttle control mechanics along with procedural execution of normal and emergency checklist items. This stage will culminate with your first solo flight.

3

Academic Completion

2-4 weeks,
30-35 hours academics

Academic Completion phase will include the remainder of your ground academics needed before the start of cross-country flight ops. This will include more detail about aircraft performance topics, aeromedical factors, and decision-making strategies most relevant for sport flying. This phase will also include completion of the FAA Sport Pilot written exam. For those students who would like to accelerate their training time, this phase will need to be completed before Flight Training begins.

4

Cross-Country

5-7 flights

Cross-Country phase will focus on flight planning, airport ops, and navigation. Weather, fuel, and route planning, along with detailed Garmin 796 GPS operations, will be covered. In fact, this will be your first introduction to the Garmin 796 GPS in airport-to-airport operations in long distance flying. This phase will include short and soft field ops along with a solo flight of at least 75 nm to two different local airfields.

5

Sport Check

3-5 flights

Sport Check phase will ensure you're ready for the FAA Practical Flight with a Sport Pilot Examiner (SPE). This will include complete aircraft rehearsals to practice the same flight profile that will be flown during the FAA check ride. This phase will culminate with your FAA Sport Pilot License. Your final syllabus event will be a "grad flight" to celebrate course completion and introduce you to advanced techniques and future follow-on training opportunities.

1 PRE-ARRIVAL ACADEMICS


NO STEP
NO STEP
ICON

1

PRE-ARRIVAL ACADEMICS

The SPL Pre-Arrival phase is designed to prepare you for flight training in the aircraft. The goal is to provide relevant information needed to start flying before meeting with an ICON Authorized Flight Instructor (IAFI) or Partnered Flight School. So we can spend more time with hands-on learning in the aircraft and less time in the classroom once training begins with flight instructors. The remainder of your ground academics, including the FAA written exam, will be completed during the Academic Completion phase after you've experienced some hands-on learning.

Follow the checklist to complete required modules from the Sport Flying Academics (SFA) before training in the aircraft. The list includes the first four modules from the SFA along with one module (A5 Overview) from the SFO. The remaining modules – along with the FAA Written Exam – can be completed later for those who break up training into multiple blocks.

Sport Flying Academics Overview

1. Introduction
- ☐ Learning to Fly
- ☐ Essence of Sport Flying
- ☐ ICON Pilot Philosophy
- ☐ Aircraft Intro

2. Basic Aero
- ☐ Intro
- ☐ Lift
- ☐ Weight
- ☐ Thrust
- ☐ Drag
- ☐ Maneuvering Forces & Load Factor
- ☐ VN Diagram
- ☐ Weight & Balance

3. Basic Aircraft Control
- ☐ Intro
- ☐ 3 Axes
- ☐ Aircraft Control Surfaces & Pilot Controls
- ☐ Engine/Propeller
- ☐ Flight Instruments
- ☐ Aircraft Location & Orientation

4. Flying Environment
- ☐ Intro
- ☐ The Atmosphere
- ☐ The Airspace Environment
- ☐ The Airport Environment
- ☐ The Water Environment
- ☐ The Terrain Environment

5. A5 Overview
- ☐ General Description
- ☐ Specifications
- ☐ Internal Views
- ☐ A5 Systems
- ☐ Limitations & Operating Envelope


N715BA

2
PRE-SOLO

2
PRE-SOLO PHASE

Pre-Solo Ground (PG) Events

Event	Title	Hrs	Description
PG 1	Course Intro	0.2	Welcome, staff intro, overview
PG 2	Pre-Solo Stage Overview	0.3	Event overviews, expectations
PG 3	Aircraft Orientation	1.0	Aircraft intro on flight line
PG 4	W&B and Performance Charts	0.5	Review aircraft performance & relationship to W&B
PG 5	Landing Pattern	0.8	Pattern procedures
PG 6	Airport Communication	0.8	Non-Towered Communications
PG 7	VFR Sectionals and Airspace	1.0	Sectional chart walkthrough
PG 8	A5 Systems	0.9	Normal Operations
PG 9	System Emergencies	1.0	Abnormal and Emergency Situations
PG 10	Aviation Weather	1.0	METAR, TAF, NOTAMS, TFRs
PG 11	Pre-Solo Exam (Take Home)	0.5	ICON Pre-Solo written exam
PG 12	Pre-Solo Endorsements	0.3	CFI Solo Endorsements
Stage Total Hours		**8.3**	

Pre-Solo Flight (PF) Events

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
PF 1	Pre-Solo 1	0.8	1.5	0.5
PF 2	Pre-Solo 2	0.8	1.5	0.5
PF 3	Pre-Solo 3	0.8	1.5	0.5
PF 4	Pre-Solo 4	0.8	1.5	0.5
PF 5	Pre-Solo 5	0.8	1.0	0.5
PF 6	Pre-Solo 6	0.8	1.5	0.5
PF 7	**Pre-Solo 7**	0.8	1.5	0.5
PF 7X	Pre-Solo 7x	0.8	1.5	0.5
PF 8	Solo 1	0.8	0.8	0.5
PF 9	Solo 2	0.5	0.8	0.5
Stage Total Hours (min)		**6.4**	**12.0**	**4**

"X" = Extra (student may be proficiency advanced without this event).
Bold Title indicates a progress check.

Note: Flight hours for events include 25 minutes of transit time.
These transit times will vary based on location of training site.

PF1
PRE-SOLO 1
FLIGHT OVERVIEW

Location: Airport – Training Area – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Introduce basic aircraft control techniques with a primary focus on stick, rudder, and throttle control mechanics.

Prerequisites:

1. Pre-arrival syllabus completion
2. PG 1: Course Intro
3. PG 2: Pre-Solo Stage Overview
4. PG 3: Aircraft Orientation

Desired Learning Objectives:

1. Understand and interpret aircraft instrumentation.
2. Understand aircraft control surface function and response to control inputs.
3. Understand basic stick, rudder, and throttle control mechanics.
4. Perform straight-and-level flight across a range of airspeeds.
5. Perform level turns and reversals.
6. Perform constant airspeed climbs and descents to a desired altitude.

Introduce:

- → Cockpit instrumentation
  - Airspeed, altimeter, and AOA
  - Tachometer
- → Aircraft controls
  - Stick
  - Throttle
  - Rudder pedals
- → Cruise and maneuvering
  - Straight-and-level flight
  - Level speed changes
  - Level turns
  - Climbs and descents
- → Landing pattern (demo)
- → Post-flight debrief

Briefing Items:

- Aircraft nomenclature review
- Four fundamentals of flight
- Critical self-assessment

Flight Profile:

- Start-up/taxi/run-up
- Takeoff and V_{cc} climb
- Transit to Training Area
- Basic air maneuvering
  - Identifying a safe location to maneuver
  - Straight-and-level flying
  - Maintaining altitude with RPM changes
  - Level turns and reversals
- ■Climbs and descents
  - Straight-and-level climbs
  - Straight-and-level descents
- ■Transit to Airport
  - Basic air work
- Pattern entry/comm/landing (demo)

PF2
PRE-SOLO 2
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: GPS Off. Cover airspeed, altimeter, and tach (see flight profile).

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice basic aircraft control techniques with a primary focus on stick, rudder, and throttle control mechanics during climbs and descents.

Prerequisites:
1. Pre-Solo 1
2. PG 4: Weight and Balance/Performance Charts

Desired Learning Objectives:
1. Understand basic stick, rudder, and throttle control mechanics.
2. Judge AOA, airspeed, angle of bank, and pitch attitude without reference to flight instruments.
3. Perform straight-and-level flight across a range of airspeeds.
4. Perform level turns and reversals.
5. Control aircraft during slow-flight maneuvering.
6. Perform constant airspeed climbs and descents to a desired altitude.
7. Understand Weight and Balance and how it impacts aircraft performance.

Introduce:
- → Pre-maneuvering set-up
- → Performance Maneuvering
  - Slow flight
- → Various configuration climb and descents
  - Landing and takeoff configuration

Practice/Review:
- → Cockpit instrumentation
  - Airspeed, altimeter, and AOA
  - Tachometer
- → Aircraft controls
  - Stick
  - Throttle
  - Rudder pedals
- → Cruise and maneuvering
  - Straight-and-level flight
  - Level speed changes
  - Level turns
  - Climbs and descents

Briefing Items:
- Checklists and cockpit flows
- Aerodynamic drag & weight and balance
- Slow flight maneuvering
- Landing and takeoff configurations

Flight Profile:

- Start-up/taxi/run-up
- Takeoff and climb (intro)
- Transit to training area
  - Straight-and-level flying
  - Dutch roll (demo/practice)
  - Level speed changes
  - Level turns and reversals
  - Climbs and descents

Cover Airspeed & Tach:

- Repeat straight-and-level flying, level speed changes, level turns and reversals
- Assess airspeed, AOA, pitch and bank attitude throughout.

Sport Flying Maneuvering:

- Pre-maneuvering basics
  - Identifying a safe maneuvering area
  - Verifying a minimum altitude of 1,500 feet AGL
  - Clearing the area
- Performance maneuvering
  - Slow flight
  - Slow flight in multiple configurations
- Landing configuration and approach
- Transit to Airport
  - Basic air work enroute
- Pattern entry/full stop

PF3
PRE-SOLO 3
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: GPS Off. Cover airspeed, altimeter, and tach.

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Continue to refine stick-and-rudder mechanics with an emphasis on developing a feel for aircraft control and physical feedback cueing. Develop a feel for takeoff and takeoff pattern mechanics.

Prerequisites:
1. Pre-Solo 2
2. PG 5: Landing Pattern
3. PG 6: Airport Communications

Desired Learning Objectives:
1. Judge AOA, airspeed, angle of bank, and pitch attitude without reference to flight instruments.
2. Perform shallow, medium, and steep turns and reversals at various airspeeds.
3. Demonstrate stall awareness, avoidance, and recovery techniques.
4. Perform power-off and power-on stalls and stall-recovery techniques.
5. Perform accelerated stalls and recovery techniques.

Introduce:
- → Preflight ops
- → Checklist and cockpit flows
- → Hard-surface takeoff and cruise climb
- → 45 degree and 60 degree AOB turns and reversals (steep turns)
- → Power-off and Power-on stalls
- → Traffic Pattern
- → Non-towered airport comms

Practice/Review:
- → Cockpit instrumentation
  - Airspeed, altimeter, and AOA
  - Tachometer
- → Aircraft controls
  - Stick
  - Throttle
  - Rudder pedals
- → Cruise and maneuvering
  - Straight-and-level flight
  - Level speed changes
  - Level turns
  - Climbs and descents
- → Identifying a safe location to maneuver
  - Clearing the area
- → Slow flight maneuvering (various configurations)

Briefing Items:
- Energy and energy management during a turn (Steep turns)
- Stall awareness, avoidance, and recovery
- Power-on and power-off stalls
- Airport traffic patterns
- A5 operating envelope/V-speeds review

Flight Profile:

Cover Airspeed, Altitude, & Tach

- Start-up/taxi/run-up
- Takeoff and V_{CC} climb
- Transit to training area
  - Basic air work
  - Straight and level
  - Turns, climbs, descents

Sport Flying Maneuvers

- Perform pre-maneuvering set-up
  - Identifying a safe maneuvering area
  - Verifying a minimum altitude of 1,500 feet AGL
  - Clearing the area
- Performance maneuvering
  - Steep turn intro
  - Slow-flight maneuvering
  - Power-off and power-on stalls (various configurations)
- Transit to Airport
  - Turns and reversals
  - Climbs and descents
  - Assess AOA/airspeed/RPM
- Pattern entry (intro)
- Landing pattern (intro)
- Full stop landing (intro)

PF4
PRE-SOLO 4
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: GPS as required

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight ops with a focus on checklist flows, non-towered airport ops, and landing pattern entry and landing mechanics. Understand the effects of wind and how it may alter the flight path.

Prerequisites:
1. Pre-Solo 3
2. PG 7: VFR Sectional Charts and Airspace

Desired Learning Objectives:
1. Understand the basic VFR sectional chart and symbols
2. Understand airspace and identifying airspace on the VFR sectional chart.
3. Control the aircraft using ground references while taking the wind into account
4. Judge AOA, airspeed, angle of bank, and pitch attitude without reference to flight instruments.
5. Control deck angle/AOA for landing approach.
6. Control vertical speed at low altitude for landing approach.

Introduce:
- → Ground reference maneuvers
  - Turns-around-a-point
  - S-Turns
  - Rectangular Course
- → Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings

Practice/Review
- → V_Y climb
- → Cockpit instrumentation
- → Aircraft controls
  - Stick
  - Throttle
  - Rudder pedals
- → Cruise and maneuvering
  - Straight-and-level flight
  - Straight-and-level flight
  - Steep turns
  - Slow flight
  - Power-on and Power-off stalls
- → Airport Ops
  - Pattern entry
  - Airport communications
  - Touch-and-go landings
  - Full stop landings

Briefing Items:
- ■Types of altitude and speed
- ■VFR sectional charts and airspace
- ■Crabbing for wind correction
- ■Aeronautical decision making
- ■Ground Reference Maneuvers

Flight Profile:

- ■Start-up/taxi/run-up
- ■Takeoff and VCC climb
- ■Transit to training area
  - Basic air work
  - Dutch rolls
  - Turns, climbs, descents

Sport Flying Maneuvers

- Perform pre-maneuvering set-up
  - Identifying a safe maneuvering area
  - Verifying altitude of 600- 1,000 feet AGL
  - Clearing the area
- Ground reference maneuvering
  - Turns-around-a-point
  - S-Turns
  - Rectangular course
- Introduce basic visual navigation
  - Identify landmarks/points on the map (GPS or sectional chart) and identifying them in the air
  - Navigating to another point using basic visual navigation
- Transit to Airport
  - Turns and reversals
  - Climbs and descents
  - Assess AOA/airspeed/RPM
- Pattern entry and communication
- Touch-and-go landings while communicating
- Full stop landing

PF5
PRE-SOLO 5
FLIGHT OVERVIEW

Location: Airport-Training area- New Airport- Airport
Config: GPS On

Brief: 0+45 **Flight:** 1+00 **Debrief:** 0+30

Objective:
Practice A5 flight ops with a focus on abnormal indications and procedures, in-flight decision-making, and safe execution of basic procedures.

Prerequisites:
1. Pre-Solo 4
2. PG 8: A5 Systems
3. PG 9: System Emergencies

Desired Learning Objectives:
1. Perform safety briefing before start-up and takeoff.
2. Identify and perform emergency procedures in the air.
3. Perform go-around procedures
4. Perform engine-out glide procedures.
5. Perform (simulated) IPS deployment procedures.

Introduce:
- → Takeoff abort
- → Engine-out glide
- → ICON Parachute System (IPS) usage (sim)
- → "Land As Soon As Possible" Abnormal Indications
  - Smoke/fire
  - Low/no oil pressure
  - Dual-alternator failure

Practice/Review:
- → Aircraft start-up and checks
- → Checklist usage & cockpit flows
- → T/O, Vcc and maneuvering
  - Straight-and-level flight
  - Level speed changes
  - Level turns
  - Climbs and descents
  - Shallow and medium turns and reversals
  - Steep turns and reversals
- → Slow-flight maneuver
- → Power-on stalls (various configurations)
- → Power-off stalls (various configurations)
- → Landing on a hard-surface

Briefing Items:
- Pilot and passenger safety briefing
- A5 systems: ICON Parachute System (IPS)
- Go-arounds

Flight Profile:

- ■Start-up/taxi/run-up
- ■Takeoff abort scenario
- ■Takeoff and climb
- ■Visual navigation to training area
- ■Basic air work
- ■Steep turns
- ■Slow-flight maneuvering
- ■Power-off and power-on stalls (various configurations)
- ■Land ASAP scenario
  - Land as soon as practical scenarios
  - Land as soon as possible scenarios (divert IP discretion)
- ■Engine out glide scenario
  - ICON Parachute System (IPS) deployment (simulated)
- ■Airport communication and pattern entry
- ■Abnormal gear indication
- ■Go-around scenario
- ■Touch-and-go landings
- ■Engine failure in pattern scenario
- ■Full stop landing

PF6
PRE-SOLO 6
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: GPS On

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight ops with unusual flying environments such as, inadvertent instrument condition, unusual attitudes, crosswinds, and go-around scenarios.

Prerequisites:
1. Pre-Solo 5
2. PG 10: Aviation Weather

Desired Learning Objectives:
1. Understand weather/NOTAM/TFR information and the available resources.
2. Perform crosswind takeoff and landings.
3. Respond appropriately to (simulated) inadvertent IMC
4. Perform unusual attitude recovery procedures.
5. Understand diversion procedures.
6. Perform forward slip to a landing

Introduce:
- → Crosswind T/O and landings
- → Slip to a landing
- → Instrument flight techniques
- → Lost procedures (5 C's)
- → Unusual attitude recovery
- → Diversion

Practice/Review:
- → Aircraft start-up and checks
- → Checklist usage & cockpit flows
- → Non-towered airport ops
  - Communications
  - Taxi ops
  - Hard-surface takeoff and cruise climb
  - Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings
  - Go-arounds
- → Cruise and maneuvering
  - Straight-and-level flight
  - Turns while climbing and descending
  - S-Turns, Turns-around-a-point
  - Stalls: power-off, power-on, and accelerated
  - Steep turns
- → Visual and GPS navigation
- → Engine-out glide

Briefing Items:
- ■Crosswind techniques for takeoff and landing
- ■Slip to a landing
- ■Instrument flight techniques
- ■Lost procedures (5 C's)
- Unusual attitude recovery

Flight Profile:

- ■Start-up/taxi/run-up
- ■Crosswind takeoff and climb
- ■Visual navigation to training area
- ■Basic air work
- ■Turns and reversals (shallow, medium, steep)
- ■Stalls: power-off, power-on
- ■Simulated engine failure (IP discretion)
- ■Unusual attitude scenario
- ■Instrument flight techniques
  - Level turns to a desired heading
  - Constant-speed climbs and descents
- ■Inadvertent IMC scenario
  - Level 180 degree turn out of IMC
- ■Lost scenario (5 C's)
- ■Diversion
  - Airport communication
  - Airport pattern entry
  - Full stop landing at near airport
  - Takeoff and pattern exit
- ■GPS navigation to base airport
- ■Landing pattern entry
- ■Touch-and-go landings
- ■Slip to a landing
- ■Full stop landing

PF7
PRE-SOLO 7 (PROGRESS CHECK)
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: As required

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
This progress check is intended to verify acceptable performance in the A5 with a focus on emergency indications and procedures, in-flight decision-making, and safe execution of basic procedures. Achieve CFI safe-for-solo flight endorsements.

Prerequisites:
1. Pre-Solo 6
2. Pre-Solo exam completed

Desired Learning Objectives:
1. Perform instrument flight techniques.
2. Respond appropriately to (simulated) inadvertent IMC.
3. Perform unusual attitude recovery procedures.
4. Respond appropriately to various abnormal aircraft indications.
5. Perform (simulated) Complete Aircraft Parachute (CAP) deployment procedures.

Introduce:
N/A

Practice/Review
- → Aircraft start-up and checks
- → Checklist usage & cockpit flows
- → Takeoff abort
- → Non-towered airport ops
  - Communications
  - Taxi ops
  - Hard-surface takeoff and cruise climb
  - Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings
  - Crosswind landings
  - No-flap and full-flap landings
- → Cruise and maneuvering
  - Straight-and-level flight
  - Level turns and reversals
  - Instrument flight techniques
  - Unusual attitude recovery
- → Visual navigation
- → Engine-out glide
  - Engine failure (suitable landing assured)
- → Gear malfunction procedures
- → Diversion

Briefing Items:
- ■Self-confidence, situational awareness, personal minimums, and self-awareness (IM SAFE checks)

Flight Profile:

- ■Start-up/taxi/run-up
- ■Takeoff-abort scenario
- ■Visual navigation to Op area
- ■Turns and reversals (shallow, medium, steep)
- ■Ground Reference Maneuvers
  - Turns around a point
  - Rectangular pattern
  - S-turns
- ■Engine failure (IP discretion)
- ■Land ASAP scenario
- ■Visual navigation return
- ■Instrument flight techniques
  - Level turns to a desired heading
  - Constant-speed climbs and descents
- ■Unusual attitude scenario
- ■Inadvertent IMC scenario
- ■IPS scenario
- ■Landing pattern entry
- ■Touch-and-go landings
- ■Crosswind landings
- ■Go-around scenario
- ■Abnormal gear indication
- ■Engine failure in pattern scenario
- ■Full stop landing

PF7X

PRE-SOLO 7X (REPEAT AS REQUIRED)
FLIGHT OVERVIEW

Location: Airport-Training Area-Airport
Config: GPS Off

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight operations in preparation for initial solo flight with a focus on safe execution of basic procedures, sound in-flight decision-making, and non-towered airport ops. Achieve CFI safe-for-solo endorsements.

Prerequisites:
1. Pre-Solo 7

Desired Learning Objectives:
1. Demonstrate understanding of A5 systems, operating envelope, procedures, and limitations.
2. Demonstrate confidence in ability to control the aircraft across the flight envelope.
3. Respond appropriately to various abnormal aircraft indications.
4. Demonstrate basic proficiency with non-towered airport ops procedures.
5. Perform engine-out glide procedures.
6. Demonstrate aircraft control across the flight envelope.
7. Demonstrate sufficient situational awareness for solo flight.

Practice/Review
- Aircraft start-up and checks
- Checklist usage & cockpit flows
- Takeoff abort
- Non-towered airport ops
  - Communications
  - Taxi ops
  - Hard-surface takeoff and cruise climb
  - Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings
- Cruise and maneuvering
  - Straight-and-level flight
  - Level speed changes
  - Turns and reversals
  - Slow-flight maneuvering
  - Stalls: power-off, power-on, and accelerated
- Visual navigation
- Engine-out glide
- Engine failure (suitable landing assured)
- PS deployment (simulated scenario)
- PS deployment (simulated scenario)
- Engine failure (suitable landing not assured)
- “Land as soon as possible” abnormal indications
- Gear malfunction procedures
- Diversion

Briefing Items:
- Any area that requires additional training or review as a result of the progress check.

Flight Profile:

- ■Start-up/taxi/run-up
- ■Takeoff-abort scenario
- ■Visual navigation to Op area
- ■Turns and reversals (shallow, medium, steep)
- ■Stalls: power-off, power-on
- ■Ground Reference Maneuvers
  - Turns around a point
  - Rectangular pattern
  - S-turns
- ■Engine failure (IP discretion)
- ■Land ASAP scenario
- ■Diversion (if applicable)
- ■Visual navigation return
- ■Instrument flight techniques
  - Level turns to a desired heading
  - Constant-speed climbs and descents
- ■Unusual attitude scenario
- ■Inadvertent IMC scenario
- ■IPS scenario
- ■Landing pattern entry
- ■Touch-and-go landings
- ■Crosswind landings
- ■Go-around scenario
- ■Abnormal gear indication
- ■Engine failure in pattern scenario
- ■Full stop landing

PF8
SOLO 1
FLIGHT OVERVIEW

Location: Airport
Config: GPS On

Brief: 0+45 **Flight:** 0+45 **Debrief:** 0+30

Objective:
Perform land-based A5 flight operations solo with a focus on safe execution of basic procedures, in-flight decision-making, and non-towered airport ops.

Prerequisites:
1. Student Pilot Certificate
2. Pre-Solo 7
3. PG 11: ICON Pre-Solo exam
4. PG 12: Safe-for-solo CFI endorsements in logbook

Desired Learning Objectives:
1. Gain confidence in ability to operate the A5 in solo flight.

Practice/Review
- → Aircraft start-up and checks
- → Checklist usage & cockpit flows
- → Traffic pattern ops
- → Non-towered airport ops
  - Communications
  - Taxi ops
  - Hard-surface takeoff and cruise climb
  - Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings

Briefing Items:
- ■Abnormal procedures: any per IP discretion
- ■Review: per IP discretion

Flight Profile:

With IP onboard, no instruction given:

- ■Start-up/taxi/run-up
- ■Takeoff and climb
- ■Landing pattern entry
- ■Full stop landings (2-3)

If student is ready, IP will then disembark the aircraft, student performs solo:

- ■Start-up/taxi/run-up
- ■Takeoff and climb
- ■Landing pattern entry
- ■Full stop landings (2-3)

PF9
SOLO 2
FLIGHT OVERVIEW

Location: Airport
Config: GPS On

Brief: 0+30 **Flight:** 0+45 **Debrief:** 0+30

Objective:
Perform land-based A5 flight operations solo with a focus on safe execution of basic procedures, in-flight decision-making, and non-towered airport ops.

Prerequisites:
1. Pre-Solo 8 (Solo 1)

Desired Learning Objectives:
1. Gain confidence in ability to operate the A5 in solo flight.

Practice/Review
- → Aircraft start-up and checks
- → Checklist usage & cockpit flows
- → Takeoff abort
- → Non-towered airport ops
  - Communications
  - Taxi ops
  - Hard-surface takeoff and cruise climb
  - Landing pattern entry
  - Landing pattern procedures
  - Hard-surface landings

Briefing Items:
- ■Abnormal procedures: any per IP discretion
- ■Review: per IP discretion

Flight Profile:

- ■Start-up/taxi/run-up
- ■Takeoff and climb
- ■Landing pattern entry
- ■Full stop landings (3-6, as needed)


N730BA

3
ACADEMIC COMPLETION

3

ACADEMIC COMPLETION

The Academic Completion phase will include the remainder of your ground academics needed before the start of cross-country flight ops. This will include more detail about aircraft performance topics, aeromedical factors, and decision-making strategies most relevant for sport flying. This phase will also include completion of the FAA Sport Pilot written exam.

Note: For those students who desire to complete all of their flight training as quickly as possible, this phase will need to be completed up front during the pre-arrival training academics phase. For everyone else, this phase must be completed prior to starting the cross-country phase of training.

6. Aircraft Performance

- ☐ Intro
- ☐ Surface maneuvering
- ☐ Takeoff
- ☐ Climb
- ☐ Cruise
- ☐ Turning/Airborne Maneuvering
- ☐ Descent and Glide
- ☐ Landing
- ☐ Performance Charts

7. Aeromedical Factors

- ☐ Intro
- ☐ Critical Self-Analysis
- ☐ Spatial Disorientation, Visual Illusions, and Motion Sickness
- ☐ Hypoxia

8. Aeronautical Decision-Making

- ☐ Intro
- ☐ Risk Management
- ☐ Resource Management
- ☐ Applications to Sport Flying

9. Documentation, FAA Resources, & Reporting

- ☐ Intro
- ☐ Pilot Documents
- ☐ Aircraft Documents
- ☐ FAA Resources
- ☐ Reporting Requirements

10. Aircraft Maintenance

- ☐ Intro
- ☐ Preventative Maintenance
- ☐ Inspections
- ☐ Repairs and Alterations
- ☐ Airworthiness Directives (AD's)
- ☐ Safety Directives (SD's)
- ☐ Repairman (LSA) Certificate

FAA Sport Pilot Written Exam

The FAA written exam must be completed prior to your practical exam in the aircraft. The exam consists of 40 questions drawn at random from a question bank of approximately 400 possible questions. The time limit is 2 hours and passing score is 70%.

It will take some effort on your part to prepare for this test – approximately 15 hours of compressed study. Your Flight Instructor will guide you to a trusted, third party program that will provide a range of questions you may see on the actual exam. The study technique is very specific and designed to prepare you in minimal time.

This module must be completed at your own pace and using a specific, FAA test study prep. The information you need to retain for flying will be reinforced elsewhere during your academics and during flight training in the aircraft.

4

CROSS-COUNTRY

4

CROSS-COUNTRY PHASE

Cross-Country Ground (CG) Events

Event	Title	Hrs	Description
CG 1	Short Field and Soft Field Ops	0.5	Short field and soft field techniques
CG 2	Performance Charts	0.8	A5 performance chart usage
CG 3	VFR Sectionals Advanced	0.5	Advanced planning on aviation charts
CG 4	Planning Tools	0.5	796 GPS, Navlogs, 3rd Party Apps
CG 5	Weather Planning	0.5	Weather tools for X/C flying
CG 6	Route and Fuel Planning	1.0	Manual flight log, route planning
CG 7	X/C Planning (Dual)	1.0	Planning session for dual X/C
CG 8	X/C Planning 2 (solo)	1.0	Planning session for solo X/C
CG 9	Solo XC Endorsements	0.3	CFI Solo Endorsements
Stage Total Hours		**6.1**	

Cross-Country Flight (CF) Events

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
CF 1	Cross-Country 1	0.8	1.0	0.5
CF 2	**Cross-Country 2**	0.8	1.5	0.5
CF 2X	Cross-Country 2x	0.8	1.5	0.5
CF 3	Cross-Country 3 (solo)	0.8	1.0	0.5
CF 4	**Cross-Country 4**	0.8	2.0	0.5
CF 4X	Cross-Country 4X	0.8	1.0	0.5
CF 5	Cross-Country 5 (solo)	0.8	1.0	0.5
CF 6	Cross-Country 6 (solo)	0.8	1.5	0.5
Stage Total Hours (min)		**4.8**	**8.0**	**2.5**

“X” = Extra (student may be proficiency advanced without this event).
Bold Title indicates a progress check.

CF1
CROSS-COUNTRY 1
FLIGHT OVERVIEW

Location: Airport

Brief: 0+45 **Flight:** 1+00 **Debrief:** 0+30

Objective:
Introduce Short field and soft field takeoff and landing airport procedures.

Prerequisites:
1. CG 1: Short Field and Soft Field Operation
2. CG 2: Performance Charts Advanced

Desired Learning Objectives:
1. Refresh taxi techniques.
2. Refresh radio techniques.
3. Refresh checklist usage.
4. Refresh pattern exit and entry.
5. Refresh normal, short, and soft landings.
6. Refresh go-arounds.
7. Practice engine-out procedures.

Introduce:
- → Short field takeoff procedures
- → Soft field takeoff procedures
- → Short field landing procedures
- → Soft field landing procedures

Practice/Review:
- → Checklist usage
- → Airport operations
  - Radio techniques
  - Taxi procedures
  - Traffic patterns (including exit and entry)
- → Landings (normal, short, and soft)
- → Go-arounds
- → Engine-out procedures

Briefing Items:
- Current local weather
- Airport diagram/information
- Expected takeoff and landing distances utilizing performance charts

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Taxi
- Wind and surface assessment
- Normal takeoff
- Depart the pattern
- Return to the pattern
- Normal pattern
- Go around
- Normal pattern
- Normal landing – full stop
- Taxi back for takeoff
- Soft field takeoff/pattern/landing
  - Full stop
  - Taxi back for takeoff
- Short field takeoff/pattern/landing
  - Full stop
  - Taxi back for takeoff
- Go-around
- Simulated engine out
- IP's choice of takeoffs and landings
- Taxi back
- Fuel aircraft
- Park aircraft

CF2
CROSS-COUNTRY 2
FLIGHT OVERVIEW

Location: Airport – Nearby Airport (< 25nm) – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Introduce basic cross-country flying and preparing the student for solo flights to another approved local airport < 25nm.

Prerequisites:
1. Cross-Country 1
2. CG 3: VFR Sectionals Advanced
3. CG 4: Planning Tools
4. CG 5: Weather Planning
5. CG 6: Route and Fuel Planning
6. CG 7: X/C Planning (dual)

Desired Learning Objectives:
1. Introduce basic pilotage.
2. Introduce considerations for new airports.
3. Introduce flight planning and dead-reckoning skills.
4. Increase GPS proficiency.
5. Ability to integrate inside and outside references during the flight for navigational purposes.
6. Fly back to base airport, determine the traffic and winds, enter traffic pattern and land.
7. Introduce cross-country radio procedures.
8. Review emergency and lost procedures.

Introduce:
- → Basic navigation skills
- → Filing, activating, and closing VFR flight plans
- → New airport planning/considerations
- → Diversions
- → Cross-country radio procedures
- → Flight following

Practice/Review:
- → Airport Operations
  - Safety briefings
  - Radio techniques
  - Taxi procedures
  - Traffic patterns
- → Takeoffs and landings (IP choice)
  - Normal
  - Soft
  - Short
- → Go-arounds
- → Emergency procedures
  - Canopy opens/unlatched on takeoff
  - Fire/smoke
- → Engine failure
  - After takeoff
  - On final
  - At pattern altitude

Briefing Items:
- Local, enroute, and destination weather
- Expected takeoff and landing distances utilizing performance charts
- Emergency and lost procedures
- Course to/from second airport (flight plan)
- Second airport information

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi
- ■Wind and surface assessment
- ■Normal takeoff
- ■Depart the pattern
- ■Navigate to second airport
- ■Lost procedures/Diversion
- ■Monitor CTAF when appropriate
- ■Overfly the field to determine wind direction and traffic in pattern
- ■Determine proper pattern entry and execute
- ■Normal landing
  - Full stop
  - Taxi for takeoff
- ■Pattern work as time allows
- ■Depart pattern and navigate back to primary airport
- ■Determine winds and traffic
- ■Determine proper pattern entry and execute
- ■Pattern work as time allows
- ■Taxi back
- ■Fuel aircraft (if applicable)

CF2X

CROSS-COUNTRY 2X (REPEAT AS REQUIRED)

FLIGHT OVERVIEW

Location: Airport – Nearby Airport (< 25nm) – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Review any areas necessary for basic cross-country flying and preparing the student for possible solo flights to other approved local airports.

Prerequisites:
1. Cross-Country 2

Desired Learning Objectives:
1. Fly to a second airport, determine the traffic and winds, enter traffic pattern and land.
2. Increase GPS proficiency.
3. Ability to integrate inside and outside references during the flight for navigation purposes.
4. Fly back to base airport, determine the traffic and winds, enter traffic pattern and land.

Introduce:
N/A

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Flight following
- → Emergency considerations
- → Lost procedures
- → Diversions

Briefing Items:
- ■Any area that was not deemed adequate for solo flight.

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi
- ■Wind and surface assessment
- ■Normal takeoff
- ■Depart the pattern
- ■Navigate to second airport
- ■Lost procedures/Diversion (IP discretion)
- ■Monitor CTAF when appropriate
- ■Overfly the field to determine wind direction and traffic in pattern
- ■Determine proper pattern entry and execute
- ■Normal landing
- ■Full stop
- ■Taxi for takeoff
- ■Pattern work as time allows

CF3
CROSS-COUNTRY 3 (SOLO)
FLIGHT OVERVIEW

Location: Airport – Nearby Airport (<25nm) – Airport

Brief: 0+45 **Flight:** 1+00 **Debrief:** 0+30

Objective:
Conduct basic cross-country flying to another approved local airport < 25nm.

Prerequisites:
1. Cross-Country 2
2. CFI safe-for-solo endorsement
3. CFI safe-for-nearby-airport endorsement

Desired Learning Objectives:
1. Practice radio techniques.
2. Practice pilotage/dead-reckoning.
3. Practice ability to safely enter a different airport's traffic pattern.
4. Practice landings.
5. Practice non-towered airport communications.

Introduce:
- → Flight following
- → Filing, activating, and closing VFR flight plan
- → Diversions

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Emergency considerations
- → Non-towered airport communications
- → Pattern work

Briefing Items:
- ■Winds/weather at departure, along the route, and at destination airport
- ■Expected takeoff and landing distances utilizing performance charts
- ■Course to/from second airport (flight plan)
- ■Second airport information
- ■Diversions/lost procedures
- ■Review fuel requirements
- ■Review personal minimums

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi
- ■Takeoff
- ■Fly to airport < 25nm, (as briefed)
- ■Full stop landing
- ■Taxi for takeoff
- ■Takeoff
- ■Return to primary airport
- ■Enter traffic pattern
- ■Full-stop landing(s) for the remainder of flight time

CF4
CROSS-COUNTRY 4 (PROGRESS CHECK)
FLIGHT OVERVIEW

Location: Airport – Nearby Airport (>25nm) – Airport

Brief: 0+45 **Flight:** 1+45 **Debrief:** 0+30

Objective:
Practice basic cross-country flying and preparing the student for possible solo flights to other approved local airports for multiple landings.

Prerequisites:
1. Cross-Country 3
2. CG 8: X/C Planning 2 (solo)

Desired Learning Objectives:
1. Perform radio techniques.
2. Ability to effectively utilize pilotage/dead-reckoning.
3. Ability to correctly and safely enter a different airport's traffic pattern.
4. Ability to utilize flight following.
5. Ability to utilize airport signage and markings.
6. Ability to fuel at new/unknown airport.

Introduce:
N/A

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Fueling
- → Emergency considerations
- → Lost procedures/Diversion

Briefing Items:
- ■Expected takeoff and landing distances utilizing performance charts
- ■Winds/weather at departure, along the route, and at destination airport
  - Updated times if winds are significantly different from planned
- ■Course to/from second airport (flight plan)
- ■Flight-following procedures
- ■Opening and closing a flight plan

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi
- ■Run-up
- ■Takeoff
- ■Establish route
- ■Contact FSS and activate flight plan
- ■Initiate flight-following communications
- ■Track time on target for checkpoints along route
- ■Lost procedures/Diversion (IP discretion)
- ■Transition from flight following to CTAF
- ■Obtain appropriate winds/weather
- ■Correctly enter destination airport's traffic pattern
- ■Proper radio calls in pattern
- ■Normal landings
- ■Full stop
- ■Fuel A5 (if applicable)
- ■Engine start (if applicable)
- ■Taxi
- ■Run-up (only if engine was shut down)
- ■Takeoff
- ■Establish route
- ■Initiate flight-following communications
- ■Track time on target for checkpoints along route
- ■Transition from flight following to CTAF
- ■Correctly enter home airport's traffic pattern
- ■Proper radio calls in pattern
- ■Short field or soft field landing
- ■Full stop
- ■Taxi
- ■Shut down
- ■Close flight plan
- ■Fuel aircraft (if applicable)

CF4X
CROSS-COUNTRY 4X (REPEAT AS REQUIRED)
FLIGHT OVERVIEW

Location: Airport – Other Airport(s) – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Review any areas necessary for basic cross-country flying and preparing the student for solo flights to other approved local airports.

Prerequisites:
1. Cross-Country 2

Desired Learning Objectives:
1. Practice radio techniques.
2. Pilotage/dead-reckoning.
3. Ability to correctly and safely enter a different airport's traffic pattern.
4. Ability to utilize flight following.

Introduce:
N/A

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Flight following
- → Emergency considerations
- → Lost procedures
- → Diversions

Briefing Items:
- ■Any area that was not deemed adequate for solo flight.

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Taxi
- Run-up
- Takeoff
- Establish route
- Initiate flight-following communications
- Track time on target for checkpoints along route
- IP to give simulated emergencies 1-3 times throughout the flight
- IP can request lost procedures/diversion (IP choice)
- Cancel flight following – student navigates
- Transition from flight following to CTAF
- Correctly enter destination airport's traffic pattern
- Proper radio calls in pattern
- Normal landings
- Full stop
- Fuel (note fuel amount)
- Taxi
- Run-up
- Takeoff
- Establish route
- Initiate flight-following communications
- Track time on target for checkpoints along route
- Transition from flight following to CTAF
- Correctly enter home airport's traffic pattern
- Proper radio calls in pattern
- Short field or soft field landing
- Full stop
- Taxi
- Fuel (note fuel amount)

CF5
CROSS-COUNTRY 5 (SOLO)
FLIGHT OVERVIEW

Location: Airport – Other Airport(s) – Airport

Brief: 0+45 **Flight:** 1+00 **Debrief:** 0+30

Objective:
Practice basic cross-country flying to other approved local airports.

Prerequisites:
1. Cross-Country 4
2. CFI safe-for-solo endorsement
3. CFI flight-plan endorsement

Desired Learning Objectives:
A safe solo cross-country flight at least 75 nautical miles total distance with a full stop landing at two points with at least one segment being a straight-line distance of at least 25 nautical miles between takeoff and landing locations.

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Communications
- → Flight following
- → Emergency considerations
- → Lost procedures
- → Diversion procedures

Briefing Items:
- ■Current local weather
- ■Student's planning and paperwork
- ■Expected takeoff and landing distances utilizing performance charts
- ■Winds/weather along the route and at destination airport
- ■Updated times if winds are significantly different from planned
  - Review fuel requirements
  - Review personal minimums
- Flight plan
  - Review/file
- Instructor to provide appropriate endorsement(s)

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi / Run-up
- ■Takeoff
- ■Establish route
- ■Contact FSS to open flight plan
- ■Initiate flight-following communications(if applicable)
- ■Track time on target for checkpoints along route
- ■Transition from flight following to CTAF (if applicable)
- ■Obtain appropriate winds/weather
- ■Correctly enter second airport's traffic pattern
- ■Proper radio calls in pattern
- ■Full stop landings
- ■Takeoff
- ■Establish route for base airport
- ■Initiate flight-following communications (if applicable)
- ■Track time on target for checkpoints along route
- ■Transition from flight following to CTAF (if applicable)
- ■Obtain appropriate winds/weather
- ■Correctly enter home airport's traffic pattern
- ■Proper radio calls in pattern
- ■Short field or soft field landing
- ■Full stop
- ■Taxi
- ■Close flight plan
- ■Fuel (if required)

CF6
CROSS-COUNTRY 6 (SOLO)
FLIGHT OVERVIEW

Location: Airport – Other Airport(s) – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice basic cross-country flying to other approved local airports.

Prerequisites:
1. Cross-Country 5
2. CFI safe-for-solo endorsement
3. CFI flight-plan endorsement

Desired Learning Objectives:
A safe solo cross-country flight at least 75 nautical miles total distance with a full stop landing at two points with at least one segment being a straight-line distance of at least 25 nautical miles between takeoff and landing locations.

Practice/Review:
- → Pilotage
- → Dead-reckoning
- → Communications
- → Flight following
- → Emergency considerations
- → Lost procedures
- → Diversion procedures

Briefing Items:
- ■Current local weather
- ■Student's planning and paperwork
- ■Expected takeoff and landing distances utilizing performance charts
- ■Winds/weather along the route and at destination airport
- ■Updated times if winds are significantly different from planned
  - Review fuel requirements
  - Review personal minimums
- Flight plan
  - Review/file
- Instructor to provide appropriate endorsement(s)

Flight Profile:

- ■Pre-start/start-up/before-takeoff cockpit flow
- ■Taxi / Run-up
- ■Takeoff
- ■Establish route
- ■Contact FSS to open flight plan
- ■Initiate flight-following communications (if applicable)
- ■Track time on target for checkpoints along route
- ■Transition from flight following to CTAF (if applicable)
- ■Obtain appropriate winds/weather
- ■Correctly enter airport traffic pattern
- ■Proper radio calls in pattern
- ■Normal landings
- ■Full stop
- ■Fuel (if applicable)
- ■Taxi
- ■Run up (only if engine was shut down)
- ■Takeoff
- ■Establish route
- ■Initiate flight-following communications (if applicable)
- ■Track time on target for checkpoints along route
- ■Transition from flight following to CTAF (if applicable)
- ■Obtain appropriate winds/weather
- ■Correctly enter home airport's traffic pattern
- ■Proper radio calls in pattern
- ■Short field or soft field full stop landings
- ■Full stop
- ■Taxi
- ■Close flight plan
- ■Fuel (if applicable)


LIGHT SPORT

5 SPORT CHECK

5
SPORT CHECK PHASE

Sport Check (SG) Events

Event	Title	Hrs	Description
SG 1	Check Ride lab 1	1.0	Oral board/flight profile prep
SG 1X	Check Ride lab 1X	1.0	Oral board/flight profile prep
SG 2	**Oral Board Rehearsal**	2.0	Full oral board rehearsal
SG 3	Check Ride Prep	1.5	Logbook review and FAA paperwork prep
Stage Total Hours (min)		**4.5**	

"X" = Extra flight (student may be proficiency advanced without this event).
Bold Title indicates a progress check.

Add-On Course (Optional)

Event	Title	Hrs	Description
CAEG 1	Controlled Airspace	0.5	Airspace restrictions
CAEG 2	Towered Airport Operations	0.5	Pattern, Clearances, Comms
Stage Total Hours		**1.0**	

Sport Check Flight (SF) Events

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
SF 1	Sport Check 1	0.8	1.5	0.8
SF 2	**Sport Check 2**	0.8	1.7	0.8
SF 2X	Sport Check 2X	0.8	1.0	0.8
SF 3C	Sport Check 3C	2.0	1.5	0.5
Stage Total Hours (min)		**3.6**	**4.7**	**2.1**

"X" = Extra flight (if necessary).
"C" = Check ride (FAA SPE).
Bold Title indicates a progress check.

Add-On Course Flight (Optional)

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
CAEF 1	Controlled Airspace Endorsement 1	0.8	1.5	0.5
Stage Total Hours (min)		**0.8**	**1.5**	**0.5**

SF1
SPORT CHECK 1
FLIGHT OVERVIEW

Location: Airport local area

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+45

Objective:
Rehearse FAA practical check flight brief and flight profile.

Prerequisites:
1. Cross-Country phase completion
2. SG 1: Check ride lab 1

Desired Learning Objectives:
Demonstrate proficiency with each element of the Sport Pilot Practical Test Standards (PTS).

Practice/Review:
- Preflight preparation
- Preflight procedures
- Airport operations
- Takeoffs, landings, and go-arounds
- Performance and Ground Reference Maneuvers
- Navigation
- Slow flight and stalls
- Emergency operations
- Postflight procedures

Briefing Items:
- Review flight plan/profile
- Any per FAA Sport Pilot PTS

Flight Profile:

- ■Preflight inspection – determine airworthiness
- ■On-deck procedures: cockpit management
- ■Taxi operations
- ■Normal takeoff
- ■Visual navigation
- ■Diversion procedures
- ■Steep turns
- ■Slow-flight maneuvering
- ■Power-on stalls (various configurations)
- ■Power-off stalls (various configurations)
- ■Systems failures (minimum 3)
- ■Engine-out procedures
- ■Ground Reference Maneuver
- ■Visual navigation return
- ■Short field landing
- ■Short field takeoff
- ■Forward slip to a landing
- ■Go-around
- ■Soft field landing
- ■Soft field takeoff
- ■Normal landing
- ■Taxi to ramp
- ■Postflight inspection

SF2
SPORT CHECK (PROGRESS CHECK)
FLIGHT OVERVIEW

Location: Airport local area

Brief: 0+45 **Flight:** 1+15 **Debrief:** 0+45

Objective:
Rehearse FAA practical check flight brief and flight profile.

Prerequisites:
1. SF 1
2. SG 3: Check ride lab 2

Desired Learning Objectives:
Demonstrate proficiency with each element of the Sport Pilot Practical Test Standards (PTS).

Practice/Review:
- Preflight preparation
- Preflight procedures
- Airport operations
- Takeoffs, landings, and go-arounds
- Performance and ground reference maneuvers
- Navigation
- Slow flight and stalls
- Emergency operations
- Postflight procedures

Briefing Items:
- Review flight plan/profile
- Any per FAA Sport Pilot PTS

Flight Profile:

- ■Preflight inspection – determine airworthiness
- ■On-deck procedures: cockpit management
- ■Taxi operations
- ■Normal takeoff
- ■Visual navigation
- ■Diversion procedures
- ■Steep turns
- ■Slow-flight maneuvering
- ■Power-on stalls (various configurations)
- ■Power-off stalls (various configurations)
- ■Systems failures (minimum 3)
- ■Engine-out procedures
- ■Ground Reference Maneuver
- ■Visual navigation return
- ■Short field landing
- ■Short field takeoff
- ■Forward slip to a landing
- ■Go-around
- ■Soft field landing
- ■Soft field takeoff
- ■Normal landing
- ■Taxi to ramp
- ■Postflight inspection

SF2X
SPORT CHECK 2X (REPEAT AS REQUIRED)
FLIGHT OVERVIEW

Location: Airport local area

Brief: 0+45 **Flight:** 1+00 **Debrief:** 0+45

Objective:
Rehearse FAA practical check flight brief and flight profile.

Prerequisites:
1. Sport Check 2
2. SG 2X: Check Ride Lab 2

Desired Learning Objectives:
Demonstrate proficiency with each element of the Sport Pilot Practical Test Standards (PTS).

Practice/Review:
- Preflight preparation
- Preflight procedures
- Airport operations
- Takeoffs, landings, and go-arounds
- Performance and ground reference maneuvers
- Navigation
- Slow flight and stalls
- Emergency operations
- Postflight procedures

Briefing Items:
- ■Review any area that was not deemed adequate for sport practical check.

Flight Profile:

- ■Preflight inspection – determine airworthiness
- ■On-deck procedures: cockpit management
- ■Taxi operations
- ■Normal takeoff
- ■Visual navigation
- ■Diversion procedures
- ■Steep turns
- ■Slow-flight maneuvering
- ■Power-on stalls (various configurations)
- ■Power-off stalls (various configurations)
- ■Systems failures (minimum 3)
- ■Engine-out procedures
- ■Ground Reference Maneuver
- ■Visual navigation return
- ■Short field landing
- ■Short field takeoff
- ■Forward slip to a landing
- ■Go-around
- ■Soft field landing
- ■Soft field takeoff
- ■Normal landing
- ■Taxi to ramp
- ■Postflight inspection

SF3C
SPORT CHECK 3C
FLIGHT OVERVIEW

Location: Airport local area

Brief: 2+00 **Flight:** 1+15 **Debrief:** 0+30

Objective:
Complete FAA practical check flight

Prerequisites:
1. Sport Check 2
2. SG 4: Check Ride Prep
3. CFI endorsement

Desired Learning Objectives:
Demonstrate proficiency with each element of the Sport Pilot Practical Test Standards (PTS).

Practice/Review:
- Preflight preparation
- Preflight procedures
- Airport operations
- Takeoffs, landings, and go-arounds
- Performance and ground reference maneuvers
- Navigation
- Slow flight and stalls
- Emergency operations
- Postflight procedures

Briefing Items:
- Review flight plan/profile
- Any per FAA Sport Pilot PTS

Flight Profile:

- ■Preflight inspection – determine airworthiness
- ■On-deck procedures: cockpit management
- ■Taxi operations
- ■Normal takeoff
- ■Visual navigation
- ■Diversion procedures
- ■Steep turns
- ■Slow-flight maneuvering
- ■Power-on stalls (various configurations)
- ■Power-off stalls (various configurations)
- ■Systems failures (minimum 3)
- ■Engine-out procedures
- ■Ground Reference Maneuver (examiner choice)
- ■Visual navigation return
- ■Short field landing
- ■Short field takeoff
- ■Forward slip to a landing
- ■Go-around
- ■Soft field landing
- ■Soft field takeoff
- ■Normal landing
- ■Taxi to ramp
- ■Postflight inspection

CAEF1 (Optional Course)

CONTROLLED AIRSPACE ENDORSEMENT 1
FLIGHT OVERVIEW

Location: Airport – Towered Airport – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight ops at an airport located in Class B, C, or D airspace having an operational control tower.

Prerequisites:
1. CAEG 1: Controlled Airspace
2. CAEG 2: Towered Airport Operations

Desired Learning Objectives:
1. Flight to an airport with an operating control tower.
2. Perform 3 takeoffs and landings to a full stop at a tower controlled airport, with each landing involving flight in the traffic pattern.
3. Practice radio communications in controlled airspace environment.
4. Comply with ATC instructions and clearances.
5. Properly identify airport signage and markings.

Introduce:
- → Tower communications
- → Pattern entry/landing clearance
- → Taxi clearance
- → Controlled airspace entry, if performed

Practice/Review:
- → Preflight planning
  - Current/forecast weather
  - Airport information
  - Fuel requirements
  - Takeoff performance
  - Landing performance
  - NOTAMS
- → Checklist usage & cockpit flows
- → Takeoff & climb
- → Runway landings

Briefing Items:
- Controlled Airspace requirements
- Tower Controlled Airport communications
- NORDO procedures in Controlled Airspace

Flight Profile:

- Pre-start/start-up/before takeoff cockpit flows
- Takeoff & V_{CC} climb
- Establish route
- Initiate flight-following communications, as necessary
- Transit to Tower Controlled Airport
- Pattern entry
- Perform minimum of 3 takeoffs and landings to a full stop
- Depart Controlled Airport
- Transit to Home Airport
- Full stop

TRANSITION COURSES OVERVIEW

The Transition (TX) courses consists of two different syllabi, each one specifically tailored to meet individual needs based on background, currency, and recency of experience.

TX-L: Transition – Landplane pilot
TX-S: Transition – Seaplane pilot

Each course will include a pre-arrival curriculum to provide aircraft and amphibious ops knowledge needed before starting training in the aircraft. Transition pilots will be directed to complete a small subset of relevant SFM modules for their specific course.

1

Pre-Arrival

1 week,
5 hours academics

Pre-Arrival will provide the knowledge refresher needed to start flying immediately upon arrival for training in the aircraft. All of your pre-arrival study material – and much more – is contained in the ICON Sport Flying Academics manual (SFA) and the ICON Sport Flying Operations manual (SFO). The SFA and SFO are the documents for all academic and flight ops info, provided in hard-copy format. Your Pre-Arrival Guide will walk you through this phase step by step.

2

Transition–Landplane

3-4 days,
5-6 flights

This course is designed for certificated landplane pilots who do not hold rating privileges for seaplanes. The syllabus will be tailored based on type and recency of landplane experience and current level of proficiency. We will focus on water ops and in-flight decision-making. We'll spend a lot of time analyzing the environment around us and thinking about how the various surface and atmospheric conditions can affect the decisions we make. We'll also learn about docking, ramping, and beaching ops.

3

Transition–Seaplane

2 days,
3 flights

This course is designed for transition pilots who hold rating privileges for seaplanes. The syllabus will be tailored based on type and extent of seaplane experience and current level of proficiency. We will focus on teaching the basics of operating an A5 in the runway environment and in the water environment.

1 TRANSITION PRE-ARRIVAL


N715BA
LIGHT SPORT

1

TRANSITION PRE-ARRIVAL ACADEMICS

The Transition Pre-Arrival phase is designed to refresh your general aviation knowledge prior to your arrival so we can spend more time with hands-on learning in the aircraft and less time in the classroom once training begins.

Follow the checklist to complete the recommended refresher modules from the Sport Flying manuals before arrival for training in the aircraft. The list includes five modules from the SFA along with one module (A5 Overview) from the SFO. The remaining modules may be completed if desired.

Transition Academics Overview

1. Introduction
- ☐ Learning to Fly
- ☐ Essence of Sport Flying
- ☐ ICON Pilot Philosophy
- ☐ Aircraft Intro

2. Flying Environment
- ☐ Intro
- ☐ The Atmosphere
- ☐ The Airspace Environment
- ☐ The Airport Environment
- ☐ The Water Environment
- ☐ The Terrain Environment

3. Aircraft Performance
- ☐ Intro
- ☐ Surface Maneuvering
- ☐ Takeoff Performance
- ☐ Climb Performance
- ☐ Cruise Performance
- ☐ Turn Performance
- ☐ Descent Glide/Performance
- ☐ Landing Performance
- ☐ Landing Performance Charts

4. Aeromedical Factors
- ☐ Intro
- ☐ Critical Self-Analysis
- ☐ Spatial Disorientation
- ☐ Visual Illusions
- ☐ Vestibular Illusions
- ☐ Motion Sickness
- ☐ Hypoxia

5. Aeronautical Decision-Making
- ☐ Intro
- ☐ Risk Management
- ☐ Resource Management
- ☐ Applications to Sport Flying

6. A5 Overview
- ☐ General Description
- ☐ Specifications
- ☐ Internal Views
- ☐ A5 Systems
- ☐ Limitations & Operating Envelope


LIGHT SPORT

2
TRANSITION LANDPLANE

2
TRANSITION PHASE

Transition Ground (TG) Events

Event	Title	Hrs	Description
TG 1	Course Intro	0.3	Welcome, staff intro, overview
TG 2	TX Course Overview	0.2	Event overviews, expectations
TG 3	Wind, Water, Surface Maneuvering	0.5	Assessment, decision-making, techniques
TG 4	Seaplane Resources	0.3	Seamanship and Resources for Seaplane Pilots
TG 5	ICON A5 Systems	1.0	In-depth look at the A5 Systems
TG 6	A5 Orientation	0.8	Aircraft intro on flight line
TG 7	Beaching, Ramping, Docking	0.5	Procedures review
TG 8	Advanced Topics	0.5	Glassy/rough water, high density altitude, remote areas ops
TG 9	Low Altitude Training	0.5	Accident review, energy management, low altitude considerations
Stage Total Hours		**4.6**	

Transition Flight–Landplane (TXL) Events

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
TXL 1	TXL Flight 1	0.8	1.5	0.5
TXL 2	TXL Flight 2	0.8	1.5	0.5
TXL 3	TXL Flight 3	0.8	1.5	0.5
TXL 4	TXL Flight 4	0.8	1.5	0.5
TXL 5	TXL Flight 5	0.8	1.5	0.5
TXL 6P	TXL Flight 6 Prof. Check	0.8	1.5	0.5
Stage Total Hours		**4.8**	**9.0**	**3.0**

"P" = Proficiency Check (LSA-ASES)

Note: Flight hours for events that occur on the water include 25 minutes of transit time. These transit times will vary based on location of training site.

TXL1
TRANSITION–LAND 1
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Introduce A5 flight ops from both airport and water environments.

Prerequisites:
1. Pre-arrival complete
2. TG 1: Course Intro
3. TG 2: TX Course Overview
4. TG 3: Wind, Water, and Surface Maneuvering
5. TG 4: Seamanship and Resources for Seaplane Pilots
6. TG 5: Systems
7. TG 6: A5 Orientation

Desired Learning Objectives:
1. Perform preflight and postflight procedures.
2. Checklists and cockpit flows.
3. Perform hard-surface takeoff and climb procedures.
4. Perform basic maneuvers familiarization.
5. Perform slow-flight maneuvering.
6. Perform pwr-off & pwr-on stall recognition & recovery.
7. Demonstrate airborne water assessment procedures.
8. Perform splash-and-go water landings.
9. Perform full stop water landings.
10. Perform surface maneuvering: idle, plow, and step.
11. Perform water takeoff.
12. Perform hard-surface touch-and-go procedures.
13. Perform hard-surface full stop landing.

Introduce:
- → Preflight and postflight procedures
- → Checklists and cockpit flows
- → Hard-surface takeoff
- → Airborne maneuvering
- → Slow-flight maneuvering
- → Power-off and power-on stalls
- → Airborne water assessment
- → Splash-and-go and full stop water landings
- → Deck-angle drill
- → Idle taxi
- → Plow turns
- → Step maneuvering
- → Water takeoff and climb
- → Hard-surface touch-and-go landings
- → Hard-surface full stop landing

Briefing Items:
- AOA gauge usage
- Lake community integration
- Water-flying mindset
- Idle, plow, step taxi overview
- Effects of wind on surface maneuvering

Flight Profile:

- Pre-start/start-up/before takeoff cockpit flow
- Taxi and takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - Basic air work
  - Power-off and power-on stalls
  - Slow-flight maneuvering
- Airborne lake assessment
- Demo water landing, using AOA
- Idle taxi with and without water rudder
- Plow turns
- Transition to step
- Step maneuvering
- Water takeoff and V_Y climb
- Airborne assessment (new location)
- Deck-angle drill (1–10 feet AGL)
  - Optimum deck-angle window
  - Throttle for VSI control
  - Splash-and-go
- Splash-and-go landings
- Full stop landing
  - Crosswind take off
  - Crosswind landing
- Water takeoff
- Transit to Airport
  - AI orientation/familiarization
  - Steep turns
  - Slow-flight maneuvering
  - Stalls
- Landing pattern entry
- Touch-and-go landing(s)
- Slip to a landing
- Full stop landing
- Taxi and shutdown

TXL2
TRANSITION–LAND 2
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 water ops and emergency procedures.

Prerequisites:
1. TXL-1
2. TG 7: Beaching, Ramping, Docking
3. TG 8: Advanced Topics
4. TG 9: Low Altitude Training

Desired Learning Objectives:
1. Checklists and cockpit flows.
2. Perform land ASAP emergency procedures.
3. Perform engine-out glide procedures.
4. Perform IPS deployment procedures.

Introduce:
- → Engine-out glide procedures
- → GPS usage/fam
- → IPS deployment procedures
- → Soft field takeoff and landing procedures
- → Emergency procedures
  - Low oil pressure
  - High oil/coolant temp
  - Smoke/fire
  - Engine roughness
  - Landing gear malfunction
- → Identifying boat wake(s) from the air and while on the water

Practice/Review:
- → Checklist usage and cockpit flows
- → Splash-and-go landings
- → Full stop water landings
- → Idle turns with and without water rudder
- → Step maneuvering
- → Water takeoff and V_Y climb

Briefing Items:
- A5 operating envelope and limitations
- Emergency procedures mindset
- Land ASAP emergencies
- Engine-out glide procedures
- Identifying boat wake(s) from different perspectives
- IPS procedures

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Soft field takeoff
- Transit to Lake or Bay
  - AI usage
  - GPS usage
  - Slow-flight maneuvering
  - Power-off and power-on stalls
- Lake assessment
- Full stop water landing
- Step maneuvering
- Water takeoff and V_Y climb
- Deck-angle drill
- Splash-and-go water landings
  - Boat wake avoidance-identify before landing
- Land ASAP scenario
- Full stop water landing
  - Maneuvering around boat wake(s)
- Water takeoff and V_Y climb
- Transit to Airport
  - Emergency procedures at IP discretion
  - IPS deployment scenario
- Landing pattern entry
- Engine failure in landing pattern scenario
- Gear malfunction/go around (if needed)
- Soft field landing (full stop)

TXL3
TRANSITION–LAND 3
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight ops in the water environment.

Prerequisites:
1. TXL-2

Desired Learning Objectives:
1. Perform beach approach/departure procedures.
2. Perform surface maneuvering: idle, plow, and step.
3. Perform water takeoff and V_Y climb.
4. Perform glassy water takeoff and landing procedures.
5. Intro/demo rough water takeoff and landing procedure.
6. Perform spot-landing procedures.
7. Perform go-around procedures.
8. Perform engine-out glide procedures.
9. Perform no-flap landing and take off
10. Perform water takeoff.

Introduce:
- → Glassy water takeoff and landing procedures
- → Rough water takeoff and landing procedures
- → No-flap water landings
- → Beaching procedures
- → Sailing Operations
- → Box-Canyon Turn
- → Short field takeoff and landing procedures

Practice/Review:
- → Checklist usage and cockpit flows
- → Splash-and-go landings
- → Full stop water landings
- → Idle taxi with and without water rudder
- → Plow turns
- → Step taxi
- → Water takeoff and V_Y climb
- → Airborne maneuvering
- → Slow-flight maneuvering
- → Power-off and power-on stalls
- → Land ASAP emergency procedures
- → Engine-out glide procedures

Briefing Items:
- Glassy water takeoff and landing procedures
- Rough water takeoff and landing procedures
- Box canyon turn
- AOA usage during maneuvering flight
- Energy management in low-altitude environment
- Beaching; to include sailing operations

Flight Profile:

- Pre-start/start-up/before takeoff cockpit flow
- Taxi and short field takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - Steep turns and reversals
  - GPS navigation
  - Slow-flight maneuvering
  - Power-off and power-on stalls

Cover airspeed indicator for remainder of flight

- Lake assessment
- Beach-approach selection
- Full stop landing and beach approach
- Beaching, exit, secure aircraft
- Beach departure – sailing backwards off the beach
- Glassy water takeoff and climb
- Glassy water landing
- Takeoff and repeat glassy water landing
- Idle taxi with and without water rudder
- Step maneuvering
- Rough water takeoff & landing (s)
- Water takeoff and V_Y climb
- Box Canyon Turn
- Engine-out glide and landing (IP discretion)
- No-flap splash-and-go
- Go-around scenario
- Full stop spot landing
- Return to base (RTB) Airport
  - Steep turns
- Pattern entry
- Normal config touch-and-go
- Short field full stop landing

TXL4
TRANSITION–LAND 4
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 flight ops in the water environment and continue to build amphibious ops skills.

Prerequisites:
1. TXL-3

Desired Learning Objectives:
1. Perform accelerated stalls
2. Perform ramping procedures.
3. Perform Low Altitude Maneuvering
4. Perform Confined area take off and circle climb

Introduce:
- Accelerated stalls
- LowAlt Maneuvering (energy Management)
- Confined area take off & circle climb
- Ramping procedures

Practice/Review:
- Checklist usage and cockpit flows
- Idle taxi with and without water rudder
- Plow turns
- Water takeoff and V_Y climb
- Splash-and-go landings
- Full stop water landings
- Step turns
- Engine-out glide procedures
- Rough water takeoff and landing procedures
- Glassy water takeoff and landing procedures
- Dynamic maneuvering – various airspeed/AOA
- Box-Canyon Turn
- Slow-flight maneuvering

Briefing Items:
- Wind and water limitations
- Ramping Q&A

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Taxi and takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - Slow-flight maneuver
- Lake assessment
- Perform normal water landing and takeoff
- Full stop simulated rough water landing
- Idle and plow turns
- Step maneuvering
- Glassy water takeoff and climb
- Glassy water landing
- Power-off sailing
- Normal takeoff and V_Y climb
- Engine-failure scenario (IP discretion)
- Perform spot landing
- Transit to ramp
- Full stop landing
- Approach to ramp
- Ramp water exit
- Water entry from ramp
- Takeoff and V_Y climb
- Low Altitude Maneuvering (energy management)
- Confined area landing and circle climb
- RTB Airport
  - basic air work enroute
  - Box canyon turn
  - Accelerated stalls
- Pattern entry
- Normal config touch-and-go
- Short field full stop landing

TXL5
TRANSITION–LAND 5
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Perform A5 flight ops in the water environment and show adequate amphibious ops skills.

Prerequisites:
1. TXL-4

Desired Learning Objectives:
Demonstrate A5 procedures and flight techniques.

Practice/Review:
- Checklist usage and cockpit flows
- Idle turns with and without water rudder
- Plow turns
- Water takeoff and V_Y climb
- Airborne assessment
- Splash-and-go landings
- Water landings
- Beaching procedures
- Step taxi
- Engine-out glide procedures
- Glassy water takeoff and landing procedures
- Dynamic maneuvering – various airspeeds/AOA
- Minimum-radius turns
- Accelerated stalls

Briefing Items:
- Review PIC Exam

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Taxi and takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - Slow flight/stalls
  - Simulated emergencies (IP discretion)
- Airborne lake assessment
- Spot landing (confined area landing)
- Idle and plow turns
- Step taxi
- Step turn to takeoff (confined-area takeoff)
- Engine-failure scenario (IP discretion)
- Glassy water landing
- Glassy water takeoff
- Slip to landing
- Go-around scenario
- No-flap splash-and-go
- Airborne beach selection
- Spot landing/remain on step
- Beach approach, shutdown, and secure aircraft
- Beach departure
- Power-off sailing
- Takeoff and V_Y climb
- Dynamic maneuvering – various airspeeds/AOA
- Box Canyon Turn
- Accelerated stalls
- RTB Airport
  - Basic air work enroute
- Pattern entry
- Normal config touch-and-go
- Engine failure in landing pattern (full stop)

TXL6P
TRANSITION–LAND 6 PROFICIENCY CHECK
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+45 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Demonstrate A5 flight ops in the water environment and complete LSA-ASES Proficiency Check.

Prerequisites:
1. TXL-5
2. Ready for Proficiency Check CFI endorsement

Desired Learning Objectives:
Demonstrate A5 procedures and flight techniques.

Practice/Review:
- Checklist usage and cockpit flows
- Hard-surface takeoff and climb
- Hard-surface landings
- Airborne water assessment
- Water landings
- Idle and plow turns
- Step taxi
- Beaching Procedures
- Power-off sailing
- Water takeoff and V_Y climb
- Engine-out glide procedures
- Glassy water takeoff and landing procedures
- Rough water landing procedures
- Dynamic maneuvering – various airspeeds/AOA
- Box Canyon Turn
- Power-off and power-on stalls
- Accelerated stalls
- Steep turns
- Slow-flight maneuver
- Emergency procedures

Briefing Items:
- IP discretion

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flows
- Hard-surface takeoff and V_{CC} climb
- Transit to Lake or Bay
  - Slow-flight maneuver
  - Power-off and power-on stalls
  - Steep turns
  - Simulated emergencies (IP discretion)
- Airborne water assessment
- Spot landing
- Idle and plow turns
- Step taxi
- Glassy water takeoff and climb
- Glassy water landing
- No-flap splash-and-go
- Normal approach to go-around scenario
- Confined area (Spot) landing/remain on step
- Beach approach, shutdown, and secure aircraft
- Beach departure
- Power-off sailing
- Rough water takeoff (sim)
- Rough water landing (sim)
- Takeoff and V_Y climb
- Engine-failure scenario (IP discretion)
- Box Canyon Turn
- Transit to Airport
- Normal config touch-and-go
- Full stop soft field landing


LIGHT SPORT
A5
ICON
WILL YOU MARRY ME?

3 TRANSITION SEAPLANE

3
TRANSITION PHASE

Transition Ground (TG) Events

Event	Title	Hrs	Description
TG 1	Course Intro	0.3	Welcome, staff intro, overview
TG 2	TX Course Overview	0.2	Event overviews, expectations
TG 3	Wind, Water, Surface Maneuvering	0.5	Assessment, decision-making, techniques
TG 4	Seaplane Resources	0.3	Seamanship and Resources for Seaplane Pilots
TG 5	ICON A5 Systems	1.0	In-depth look at the A5 Systems
TG 6	A5 Orientation	0.8	Aircraft intro on flight line
TG 7	Beaching, Ramping, Docking	0.5	Procedures review
TG 8	Advanced Topics	0.5	Glassy/rough water, high density altitude, remote areas ops
TG 9	Low Altitude Training	0.5	Accident review, energy management, low altitude considerations
Stage Total Hours		**4.6**	

Transition Flight–Seaplane (TXS) Events

Event	Title	Brief Hrs	Flight Hrs	Debrief Hrs
TXS 1	TXS Flight 1	0.5	1.5	0.5
TXS 2	TXS Flight 2	0.5	1.5	0.5
TXS 3P	TXS Flight 3 Prof. Check	0.5	1.5	0.5
Stage Total Hours		**1.5**	**4.5**	**1.5**

"P" = Proficiency Check

Note: Flight hours for events that occur on the water include 25 minutes of transit time. These transit times will vary based on location of training site.

TXS1
TRANSITION–SEAPLANE 1
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+30 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Introduce A5 flight ops from both airport and water environments.

Prerequisites:
1. Pre-Arrival complete
2. TG 1: Course Intro
3. TG 2: TX Course Overview
4. TG 3: Wind, Water, and Surface Maneuvering
5. TG 4: Seamanship and Resources for Seaplane Pilots
6. TG 5: A5 Systems
7. TG 6: A5 Orientation

Desired Learning Objectives:
1. Perform preflight and postflight procedures.
2. Checklists and cockpit flows.
3. Perform hard-surface takeoff and climb procedures.
4. Perform basic maneuvers familiarization.
5. Perform slow-flight maneuvering.
6. Perform power-off & power-on stall recognition & recovery.
7. Demonstrate airborne water-assessment procedures.
8. Perform splash-and-go water landings.
9. Perform full stop water landings.
10. Perform surface maneuvering: idle, plow, and step.
11. Perform water takeoff.
12. Perform hard-surface touch-and-go procedures.
13. Perform hard-surface full stop landing.

Introduce:
- → Preflight and postflight procedures
- → Checklists and cockpit flows
- → Hard-surface takeoff
- → Airborne maneuvering
- → Slow-flight maneuvering
- → Power-off and power-on stalls
- → Splash-and-go and full stop water landings
- → Idle (Displacement) taxi
- → Plow turns
- → Step maneuvering
- → Deck angle drill
- → Water takeoff and climb
- → Box-Canyon turn
- → Hard-surface touch-and-go landings
- → Slips to landing
- → Simulated engine failure (IP discretion)
- → Hard-surface full stop landing

Briefing Items:
- A5 operating envelope and limitations
- AOA gauge usage
- Box-Canyon turn
- Float vs. hull seaplane differences
- Step maneuvering in the A5

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flow
- Taxi and takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - Basic air work
  - Power-off and power-on stalls
  - GPS familiarization

Cover airspeed indicator for remainder of flight

- Airborne lake assessment
- Demo water landing, using AOA
- Idle taxi with and without water rudder
- Plow turns
- Step taxi
- Water takeoff and V_Y climb
- Airborne assessment (new location)
- Deck-angle drill (1–10 feet AGL)
  - Optimum deck-angle window
  - Throttle for VSI control
  - Splash-and-go
- Splash-and-go landings
- Full stop landing
- Water takeoff
- Engine failure scenario (IP discretion)
- Box Canyon Turn
- Transit to Airport
  - AI orientation/familiarization
- Landing pattern entry
- Touch-and-go landing(s)
- Slip to a landing
- Full stop landing
- Taxi to ramp and shutdown

TXS2
TRANSITION–SEAPLANE 2
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+30 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Practice A5 water ops and emergency procedures.

Prerequisites:
1. TXS-1
2. TG 7: Beaching, Ramping, Docking
3. TG 8: Advanced Topics
4. TG 9: Low Altitude Training

Desired Learning Objectives:
1. Checklists and cockpit flows.
2. Perform land ASAP emergency procedures.
3. Perform engine-out glide procedures.
4. Perform simulated IPS deployment procedures.
5. Identifying and maneuvering around boat wakes

Introduce:
- → Ramping
- → Beaching
- → Sailing
- → Rough water procedures
- → Glassy water procedures
- → Engine-out glide procedures
- → IPS-deployment procedures
- → Soft field takeoff and landing procedures
- → Identify boat wake(s) in the air and on the water
- → Emergency procedures
  - Low oil pressure
  - High oil/coolant temp
  - Smoke/fire
  - Landing gear malfunction

Practice/Review:
- → Checklist usage and cockpit flows
- → Splash-and-go landings
- → Full stop water landings
- → Idle turns with and without water rudder
- → Step maneuvering
- → Deck angle drill
- → Water takeoff and V_Y climb
- → Box-Canyon turn

Briefing Items:
- Rough water procedures
- Glassy water procedures
- Beaching; to include sailing operations
- Boat wake identification & avoidance
- Emergency-procedures mindset
- Land ASAP emergencies
- Engine-out glide procedures
- IPS procedures

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flows
- Soft field takeoff
- V_{CC} climb
- Transit to Lake or Bay
  - AI usage
  - Slow-flight maneuvering
  - GPS usage/familiarity
  - Power-off and Power-on stalls
- Lake assessment
- Identify boat wake(s) from the air
- Sim rough water landing
- Step maneuvering
- Identify and avoid boat wake(s) while on the water
- Water takeoff and V_Y climb
- Deck-angle drill
- Splash-and-go water landings
- Glassy water landing
- Glassy water takeoff
- Land ASAP scenario
- Full stop water landing
- Beaching
- Ramping, if able
- Spot landing
- No-Flap landing
- Water takeoff and V_Y climb
- Transit to Airport
  - Box-canyon turn
  - Emergency procedures at IP discretion
  - IPS deployment scenario
- Landing pattern entry
- Engine failure in landing pattern scenario
- Gear malfunction/ go around if needed
- Soft field landing (full stop)

TXS3P
TRANSITION–SEAPLANE 3P PROFICIENCY CHECK
FLIGHT OVERVIEW

Location: Airport – Lake or Bay – Airport

Brief: 0+30 **Flight:** 1+30 **Debrief:** 0+30

Objective:
Demonstrate A5 flight ops in the water environment and complete ICON Proficiency Check.

Prerequisites:
1. TXS-2

Desired Learning Objectives:
Demonstrate A5 procedures and flight techniques.

Practice/Review:
- Checklist usage and cockpit flows
- Hard-surface takeoff and climb
- Hard-surface landings
- Airborne water assessment
- Water landings
- Idle and plow turns
- Step maneuvering
- Water takeoff and V_Y climb
- Engine-out glide procedures
- Rough water takeoff and landing procedures
- Glassy water takeoff and landing procedures
- Beaching and/or ramping
- Slow-flight maneuvering
- Power-off and power-on stalls

Briefing Items:
- Review PIC Exam

Flight Profile:

- Pre-start/start-up/before-takeoff cockpit flows
- Hard-surface takeoff and V_{CC} climb
- Transit to Lake or Bay
  - Slow-flight maneuver
  - Power-off and power-on stalls
  - Steep turns
  - Simulated emergencies (IP discretion)
- Airborne water assessment
- Spot landing
- Idle and plow turns
- Step taxi
- Glassy water takeoff and climb
- Glassy water landing
- No-flap splash-and-go
- Normal approach to go-around scenario
- Confined area (Spot) landing/remain on step
- Beach approach, shutdown, and secure aircraft
- Beach departure
- Power-off sailing
- Rough water takeoff (sim)
- Rough water landing (sim)
- Takeoff and V_Y climb
- Engine-failure scenario (IP discretion)
- Box Canyon Turn
- Transit to Airport
- Normal config touch-and-go
- Full stop soft field landing

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