



Flight Instruction Journal

Student Name: _____

A B C Badge Checklist

Action	Goal	Complete
A Badge	Solo	
	Form Filed and Mailed	
B Badge	30 minutes Solo 2K Tow or 45 minutes Solo 3K Tow	
	Form Filed and Mailed	
C Badge	1 hour Solo 2K Tow or 1.25 Solo 3K Tow And Assemble/Disable Glider Short Field Landing no Altimeter with instructor Ground Instruction on cross country hazards	
	Form Filed and Mailed	

Forward

Student instruction in the NCSA has been part of the club from the beginning until the present. As the club has grown, the number of students and instructors has grown as well. Since there is a large number of students and instructors, the club has placed emphases on team teaching. Each student in the club contacts multiple instructors and each instructor has their own style of teaching. Communication between instructors can be limited. This book is design accommodate limited communication between instructors and allows the student ownership of their instruction.

Revision History

Date	Description	Version
01-14-05	Initial Release	1.0
09-30-06	Remove Grob, add unassisted TO in Solo	2.0

Thanks

Roger Fowler, Jim Hotelling, Woody Canon, Matt McKrell, Brian Carver

For the Student

You as the student own your flight instruction. No matter how much effort each instructor puts forward, it is up to you to manage your instruction to a successful completion. You must provide the motivation to move forward. You would think that the this ownership belongs to the flight instructors, in a organized school this might be true, but in a club organization that is difficult because of scheduling, time constraints and outside factors. This book is designed to maximize the instruction without repeating s. Even in a commercial environment a student can be repeating with different instructors and never make progress. So, this book is for you to manage your instruction and allow you to succeed.

How to use this book

Before each new please review the written material. Please have any questions listed before flying with your instructor. Upon meeting your instructor for the day take a moment and review the prior flight . Talk with your instructor about your progress in that and then ask questions regarding the written material. If the is complete to the satisfaction of prior instructor then the instructor will start the next . The instructor will plan the flights according to the needs of the . The instructor will mark in the book flight proficiency and areas of improvement. If the has completed satisfactory, then the instructor will sign the as complete.

Each session does not necessarily equal one flight. It might take several flights or even days at the field to accomplish a completion of a .

You must bring this book and your logbook to the field with you for each flight. Otherwise the instructor will have right to refuse instruction. Even though this journal is not a legal document, it is your memories of a special time. Make sure the instructor has this book available to him or her and show it to them with pride. It is your record of accomplishment.

Recommended Written and Study Material

Tom Knauff's Glider Basics – From First Flight to Solo
Tom Knauff's After Solo
Tom Knauff's Transition to Gliders

Mandatory Supplies

Glider Pilot Log Book
ASA Private Pilot Test Prep
ASA Private Pilot Prepware Software Package
Current FAR/AIM
Current Charlotte Chart

For the Instructor

This journal has been designed to maximize the communication between instructors in a team environment. The student will show their progress to you and will expect that you look and comment on their progress. Students are also expected to have done the reading before each lesson and will have questions regarding the written material. Please take the time to cover the written material with the students. Before taking to the air with each student please plan the flights and goals for that student. At the end of the day the student will see progress has been made towards those goals. If the student does not make progress please explain why and what steps are needed for movement. Students will quit if they are not making progress and repeating . It is the duty of each instructor to prevent this from happening.

Journal Rules

Each instructor must follow the plan.
Before flying please review the prior lesson.
Plan the flights before taking to the air and talk the plans over with the student.
Respect the prior instructor's comments.

At the end of each lesson, fill out the following table.

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

Write your initials and date in the box for each section.

Legend

GB = Glider Basics by Tom Knauff
TTG = Transition to Gliders by Tom Knauff
SFM = Soaring Flight Manual

1

Maintain Steady Aircraft Attitude

Ground Instruction

- Pre-flight Inspection
- Weight and Balance
- Glider nomenclature
- Ground Safety
- Names of legs in landing pattern

Flight Instruction

- Positive control check
- Attitude control
 - Straight flight
 - Turning flight
- Optional: Thermal turns demonstration if thermals available

Assigned Reading

- Use of checklists GB 51
- ABBCCDDE
- Altimeter, Belts, Ballast, Controls, Canopy, Cable, Dive Brakes, Dolly, Emergency
- Wing Runner Course

References

- GB 14 thru 50, 63 thru 66
- <http://www.soaringsafety.org/dl.asp> (wing runner course)

Duration

2 sessions

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

Reasonable Coordination of Rudder and Ailerons

Ground Instruction

- Use of checklist
- Wing Runner course complete
- Traffic Scan

Flight Instruction

- Use of pitch trim
- Turn entry and recoveries
- Adverse yaw

Reading

- Towing procedures GB 73
 - 1) Towplane position on horizon
 - Or 2) Towplane attitude
 - Or 3) Towplane position on glider windshield
 - Match towplane bank angle
- Forward Stalls GB 79

Reference

- GB 53 thru 58, 72 thru 78

Duration

- 3 Sessions

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

Pitch/Airspeed Control over the Normal Flight Range

Ground Instruction

Towing procedures

1) Towplane position on horizon

Or 2) Towplane attitude

Or 3) Towplane position on glider windshield

Match towplane bank angle

Use of airspeed indicator

Flight Instruction

Flight at various airspeeds (40, 50, 60, and 70 knots)

Introduction to stalls

Slow flight

Use of spoilers

Towing above 1000' (assistance acceptable)

Fly approach to landing (assistance expected)

Optional: Thermal Turns

Reading

Repeat the six signs of stalls, GB 81

Turning Stalls GB 89

Tow Emergencies GB 133

Reference

GB 80 thru 87, 103-127

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

4

Steep Turns and Stalls

Ground Instruction

Call out 200' decision point on take-off (start the habit now)

Flight Instruction

Steep turns

Stalls: imminent, complete, straight, turning, with spoilers open

Turning Stalls with cross controls

Towing above 1000'

Fly approach to landing (assistance acceptable)

Optional

Take-off

Landing

Thermalling

Reading

Centering thermals, Thermalling speeds GB 99

Thermalling bank angles

Air Speeds: Min sink speed, Best L/D speed, Wind penetration speed,

Change of speed with lift and sink, When to use above speeds

Reference

GB 66 thru 71, 89 thru 99

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

Normal Take-Offs and Landings

Ground Instruction

Student Pilot Certificate limitations
 no passengers, must get an endorsement for solo operations each 90 days

Weather

decision to fly
 obtaining information

Right of way rules between aircraft

Use of alcohol and drugs and limitations against flying

Medical decisions for flying

VFR visibility and cloud clearances

What the FARs are and why they are important

Thermal turns techniques, speeds and centering

Flight Instruction

Take-off and tow

Normal landing

Crosswind TO and landing, if available

Call out 200' decision point on take-off

Keep left hand on spoilers

Obtain student pilot certificate

Reading

Give student written test to work on

Reference

GB 127, 128, 90 thru 101, 59 thru 64

Duration

3 sessions

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**6 Goal:
Expected Variations on Take-Offs and Landings**

Ground Instruction

- Crosswind take-off and landing
- Tow signals while airborne
- Priority of radio calls
- Two times the glider must release
 - Wing rock signal
 - If towplane cannot be seen

Flight Instruction

- Minimum glide angle
- Maximum glide angle
- Crosswind take-off and landing, if available
- Landing on pavement
- Introduction to slips
- Towplanes gives release signal (wing-rock)
- Towplane gives "check sailplane" signal (rudder wag)
- Use of radio for downwind call
- Unassisted (wing down) take-off
- Alternate landing sites on Harnett Co. airport
 - What to do if overshooting intended landing site
 - What to do if canopy comes open during take-off

Reading

Premature Termination of the Tow GB 133

Reference

GB 133

Duration

2 sessions

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**7 Goal:
Coping with Emergencies**

Ground Instruction

- Where to go if rope breaks at any point during take-off
- Towplane aborts take-off
- Abbreviated pattern
- Alternate landing sites on Harnett Co. airport
- What to do if canopy comes open during take-off
- Two times the glider must release
 - Wing rock signal
 - If towplane cannot be seen

Flight Instruction

- Towing Emergencies
 - release before towplane liftoff
 - simulated 200' rope break
 - low release (600' or so)
- Diversion to alternate landing area

Reading

Reference

GB 130 thru 133

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**8 Goal:
First Solo Flight**

Ground Instruction

- Various procedures to recover from slack rope
- Responsibilities of PIC and limitations of a Solo Student

Flight Instruction

- Slack rope recovery
- Review stalls
- Review slow flight
- Review steep turns
- Review pattern entry
- Demonstrate proficiency for conditions

Optional

- Emergencies as appropriate
- Review written test
- Sign off student pilot certificate and logbook for solo
- Review weight and balance
- Solo
- A badge awarded

Reading

Reference

GB 100 thru 102

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**9 Goal:
Fly Aircraft without ASI/Work on B/C Badge**

Ground Instruction

- Study for Knowledge test
- Thermal with only gliders

Flight Instruction

- Flight without airspeed indicator
- Solo practice
- Optional
 - Emergencies as appropriate
 - Thermaling
 - Thermaling with other gliders with instructor

Reading

- FAA Test Prep: Basic Aerodynamics and Aircraft Systems

Reference

Duration

- 1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**10 Goal:
Land without the Aid of the Altimeter/Work on B/C Badge**

Ground Instruction

Flight Instruction

Low tow

Flight without altimeter

Solo practice

Optional

Emergencies as appropriate

Thermalling

Thermaling with other gliders with instructor

Reading

FAA Test Prep: Flight Instruments and Regulations

Reference

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**11 Goal:
Become Proficient with Slips/Work on B/C Badge**

Ground Instruction

Flight Instruction

Box tow

Slips

Solo practice

Optional

Emergencies as appropriate

Thermalling

Thermaling with other gliders with instructor

Reading

FAA Test Prep: Regulations, Procedures and Airport

Operations

Reference

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**12 Goal:
Introduction to Spins/Work on B/C Badge**

Ground Instruction

Flight Instruction

Reading

 FAA Test Prep: Weather and Weather Services

Duration

Spins entries and recoveries, left and right

 Spiral dives

 Solo practice

 Optional

 Emergencies as appropriate

 Thermalling

Reference

 TTG 82 thru 86

Duration

 1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

13 Goal:
Introduction to Cross Controlled Stalls/Work on B/C Badge

Ground Instruction

Flight Instruction

 Cross controlled stalls

 Skidding Turn

 Slipping Turn

 Solo practice

 Optional

 Emergencies as appropriate

 Thermaling

 Reference,

 TTG 78 thru 81

Reading

 FAA Test Prep: Enroute Flight

Duration

 1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

14 Goal:

Understand Use of Flaps and Landing Gear Retraction/Work on B/C Badge

Ground Instruction

Flight Instruction

Stalls with flaps extended

Retract/extend landing gear

Landing with flaps extended

Solo practice

Optional

Emergencies as appropriate

Thermalling

Reading

FAA Test Prep: Navigation

Reference

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**15 Goal:
Practice Pilotage Navigation/Work on B/C Badge**

Ground Instruction

Responsibilities of PIC

Flight Instruction

Take High Tow

Find chart features on the ground

Find ground features on a chart

Solo practice

Meet experience requirements for glider rating

Knowledge Test Passed

Optional

Emergencies as appropriate

Thermalling

Reading

FAA Test Prep: Communication Procedures

Reference

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**16 Goal:
Pass Practical Test**

Ground Instruction

Complete sign-offs for Practical Test

Schedule Practical Test

Discussion

Review Practical Test Standards

Review Federal Air Regulation Part 61

Review Federal Air Regulation Part 91

Review NTSB 830

Review aircraft maintenance records

Flight Instruction

Practice test flights

Reading

Reference

Duration

1 session

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**17 Goal:
Let L33 Solo Checkout**

Ground Instruction

- Cockpit checkout
- Speeds to fly
- Landing Attitude

Flight Instruction

- Solo Flight
- Unassisted (wing down) take-off
- Discussion

Reading

- L33 Solo Flight Manual

Reference

Duration

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**18 Goal:
B and C Badges Complete**

B badge awarded

C badge awarded

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

**19 Goal:
Bronze Badge Completed**

15 solo hours in gliders
30 solo flights in gliders
10 flights in single seat gliders
2 hr duration flight
2 hr duration flight
3 spot landings witnessed by SSAI
2 dual accuracy landings without altimeter
Written test
Bronze Badge awarded

Initial Ground	Review Ground	Initial Flight	Review Flight	Complete

Solo Flight Check List

Description	Safe	Private	Commercial
Take Off			
High Tow			
Stalls			
Slow Flight			
Steep Turns			
Pattern Entry			
Glide Angle Control			
Speed Control			
Landing			
Rope break < 20'			
Rope break > 200'			

Practical Test Check List

Description	Private	Commercial
Take Off		
High Tow		
Low Tow		
Box the wake		
Stalls		
Slow Flight		
Steep Turns		
Pattern Entry		
Glide Control		
Speed Control		
Chart Features		
Landing		
Towplane Release Signal		
Rope break > 200'		
Acting as PIC		

Instructors: Please initial and date.

Safe: Consistent flying

Private: PTS Glider Section VII Performance Maneuvers

Commercial: PTS Glider Section VII Performance Maneuvers