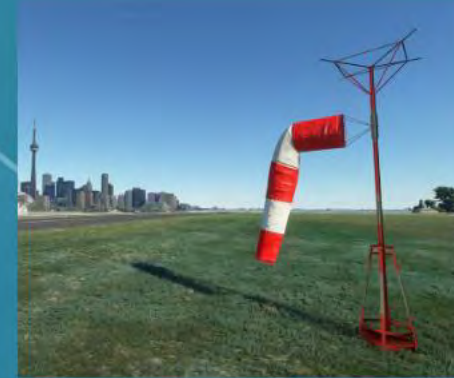


Microsoft *Flight
Simulator*



Learn To Fly

Flight Lesson 1



Introductions

Instructor

Students

Airplane

Airfield

Flight Lesson 1

The Training Airplane

Description:

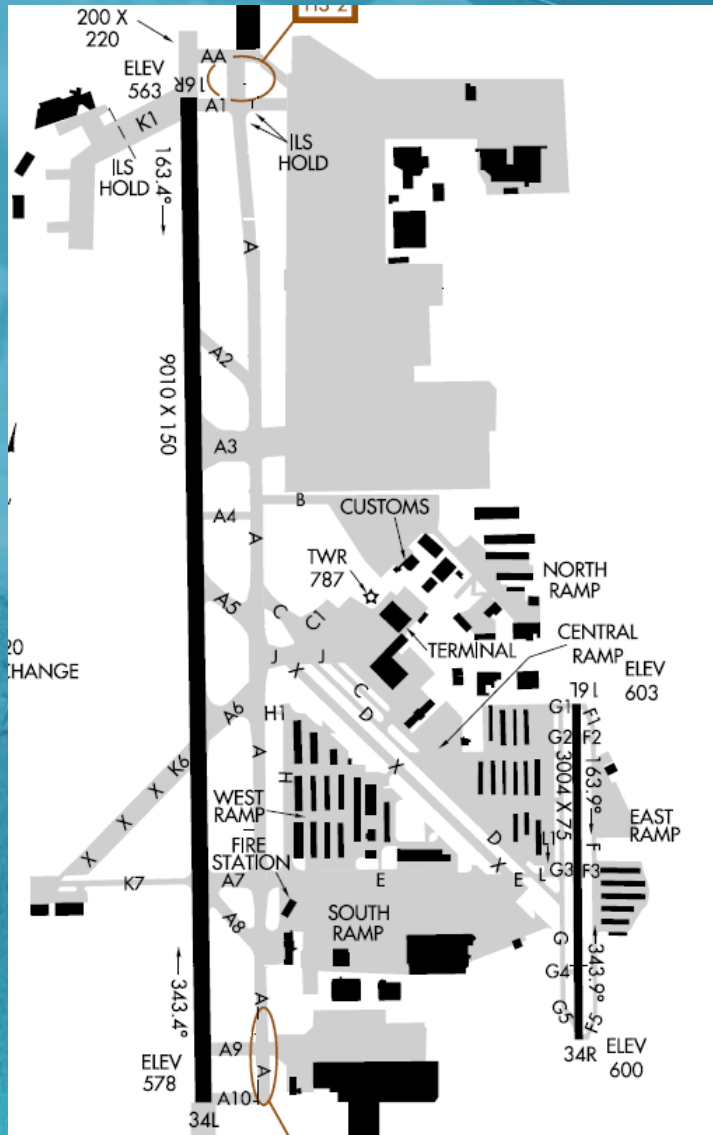
- All metal, 2 place high wing
- Popular training aircraft at most flight schools
- Easy to fly, easy to learn
- No auto-pilot
- Fixed pitch propeller
- Keep training costs low
- Tricycle landing gear
- Flight training and personal use.



Cessna 152

Flight Lesson 1

The Airfield



(KPAE) Everett, Washington

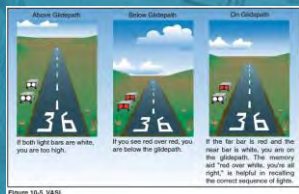


Lesson Plans

All flight lessons follow this three part structure:

1. The Lesson for the flight at the flying school.

- What you will learn
- Motivation
- Reference documents
- Topics



2. The air exercise in the training aircraft

- Demonstrations by the instructor
- Practices by the student
- From cold and dark using checklists

3. Post Flight

- Review lesson, re-brief as necessary
- Assign reading for the next lesson





Lesson Plan #1 (Dual)

ForderLearnToFly.com

Private Pilot Training (Flight Simulator)

LESSON PLANS

Lesson Plan #1 (Dual)

Class Time .5 hours

FAMILIARIZATION (Exercise 1, page 33)

GENERAL

This lesson is an introduction to flying. The student should be aware of the Pilot Operating Handbook, Aircraft documentation and flight authorization. The flight should be stimulating for the student without any abrupt maneuver.

MOTIVATION

To stress the importance or preparation for each briefing as a requirement for progress.

REFERENCE

- (1) Aeroplane Flight Training Manual
- (2) Pilot's Operating Handbook

TOPICS

- (1) Preparation for flight
- (2) Aircraft familiarization and documents
- (3) Pre-flight inspection (walkaround)
- (4) Cockpit familiarization
- (5) Engine start and run-up

Lesson Plan #1 (Dual)

ForderLearnToFly.com

Private Pilot Training (Flight Simulator)

Lesson Plan #1 (Dual)

Air Time .8 hours



AIR EXERCISE

- (1) Instructor will assist the student with the external check, start check and after start check.
- (2) Taxiing demonstration and practice; demonstration of yaw.
- (3) Instructor assists student in run-up and pre-take-off check.
- (4) Demonstration of take-off and climb.
- (5) Demonstration of reference points, effects of controls, and range of normal attitudes.
- (6) Student practices pitching and rolling through the normal attitudes and controlling yaw.
- (7) Demonstration of trim.
- (8) Student practices straight and level flight.
- (9) Demonstration and practice of transition from straight and level flight to straight and climbing flight and levelling out (APT)
- (10) Demonstration and practice of transition from straight and level flight to straight and descending flight and levelling out. (PAT)

POST FLIGHT

- (1) Review Lesson, re-brief as necessary.
- (2) Assign reading for next lesson.

Flight Lesson 1

Preparation

Books

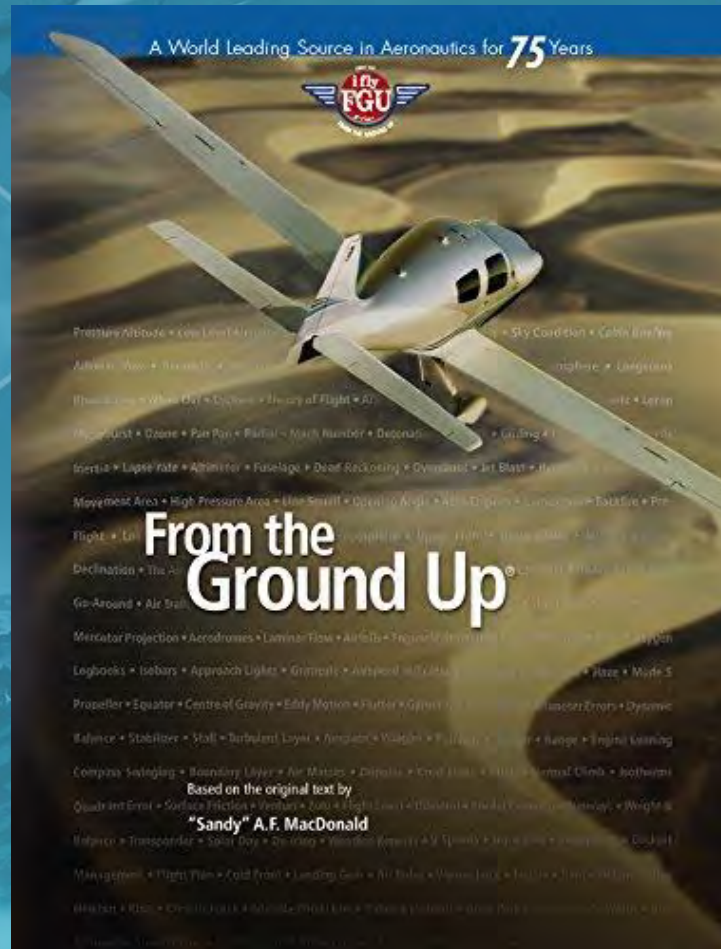
Maps

Ground
School



Flight Lesson 1

Preparation



Books

The Phonetic Alphabet

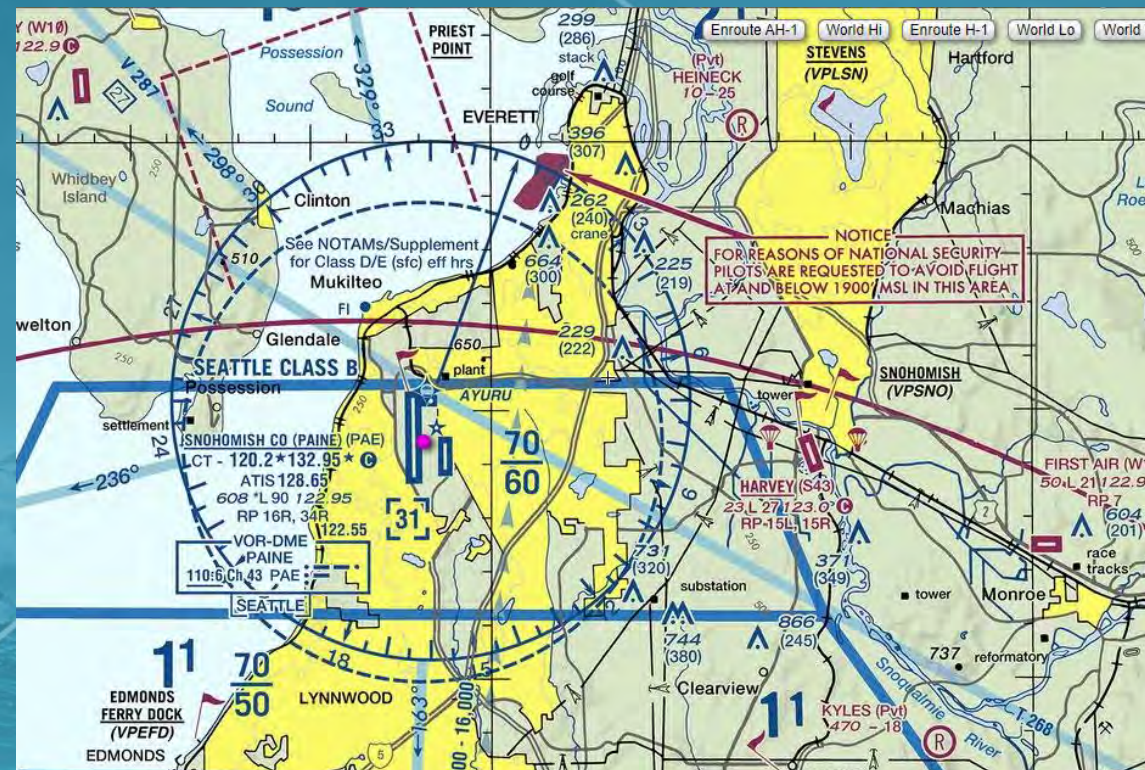
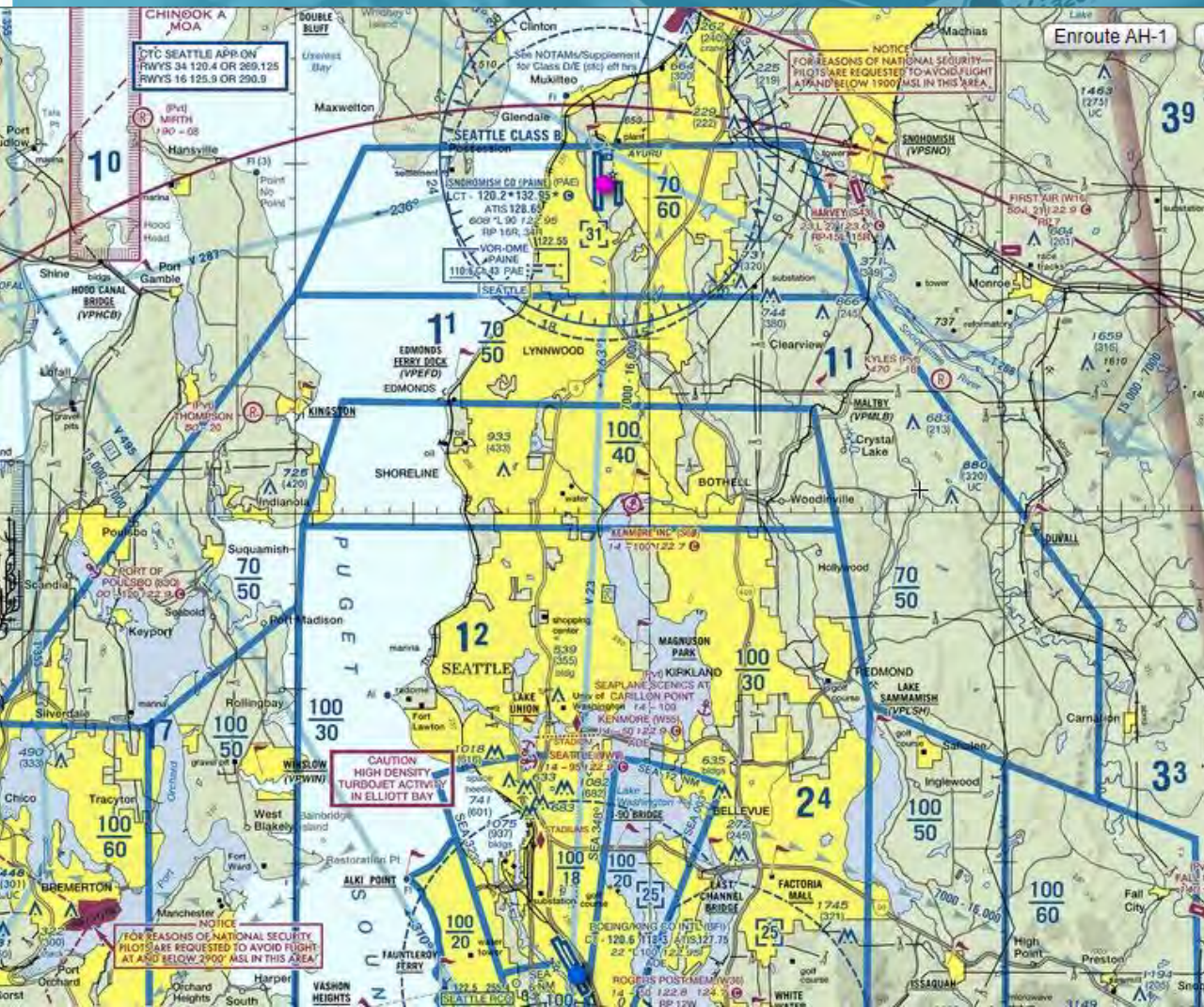
The phonetic alphabet is used by radio operators to convey the letters they intend to say. If you were to pronounce a B or a D over a radio, they can be incorrectly mistaken for each other. There can be no mistake about who is calling and which aircraft has been cleared to take-off. Therefore, we need to memorize the phonetic alphabet and use it every time we use a radio. At the very least, we would use it to convey our aircraft call sign.

When practicing and memorizing the phonetic alphabet, look around your house and spell each item phonetically. When in the car, look at the fuel gauge and say, Foxtroi, Uniform, Eclio, Lima (FUEL). Many pilots make a label for their aircraft call sign and attach it to the panel, just above the radio. Then you will never forget what your call sign is, especially when renting aircraft with different call signs.

A	Alpha	Q	Quebec
B	Bravo	R	Romeo
C	Charlie	S	Sierra
D	Delta	T	Tango
E	Echo	U	Uniform
F	Foxtrot	V	Victor
G	Golf	W	Whisky
H	Hotel	X	X-ray
I	India	Y	Yankee
J	Juliet	Z	Zulu
K	Kilo	Use these words to convey letters over the radio. Even when stating your quadrant on the Cleveland practice area. Others will understand immediately what letter you mean. You may be telling a controller your destination airport. As an example, the closest airport is CVTZ. You would say Charlie, Yankee, Tango, Zulu to reduce confusion.	
L	Lima		
M	Mike		
N	November		
O	Oscar		
P	Papa		

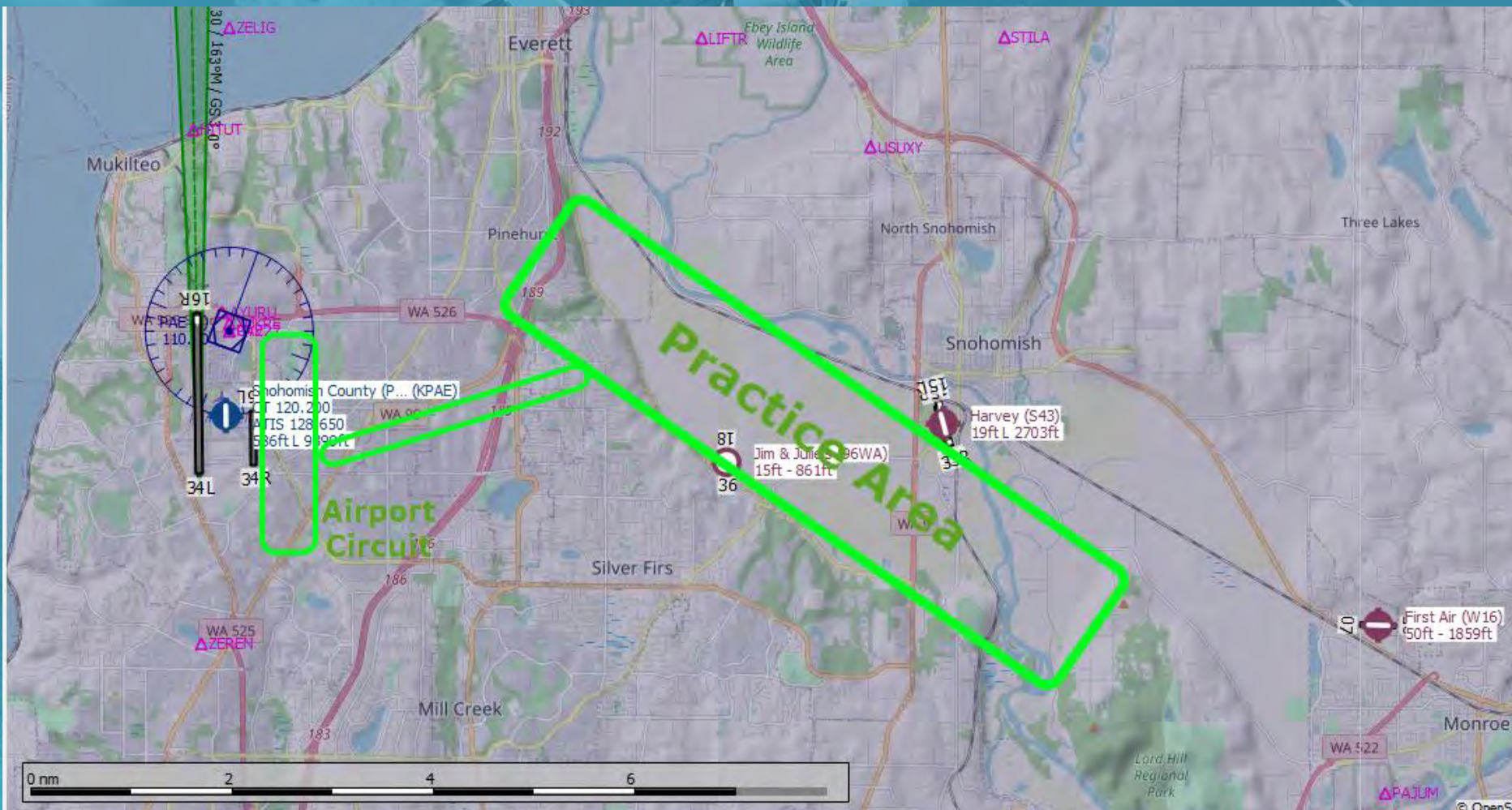
Flight Lesson 1 Preparation

Maps



Flight Lesson 1 Preparation

Maps



Flight Lesson 1 Preparation

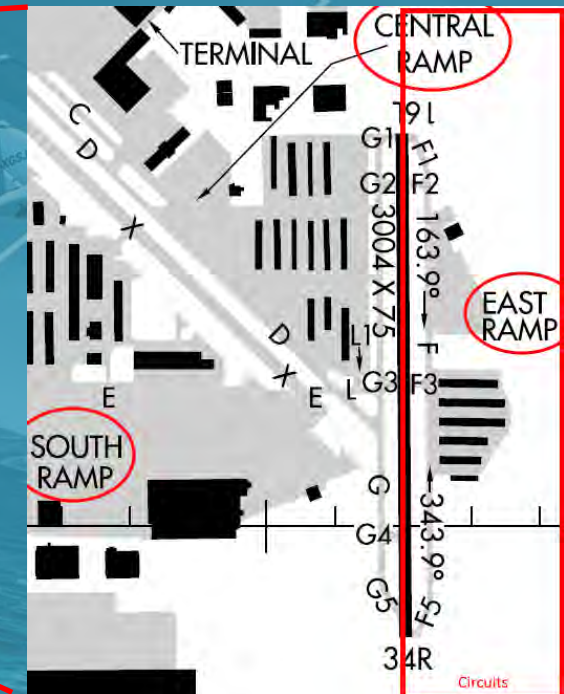
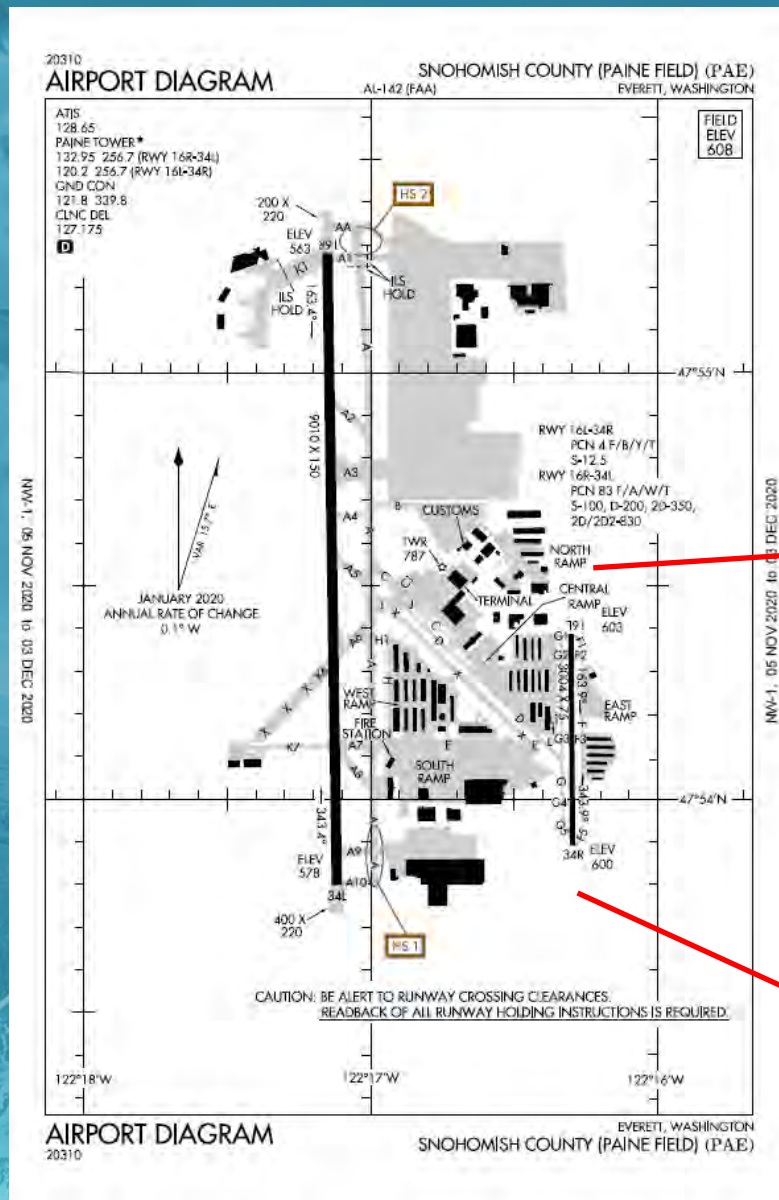
1. All student pilots have to attend 45 hours of ground school classroom learning.
2. This can be tedious and very in-depth
3. Based on textbooks and lectures
4. Can be done while taking flight lessons in the air
5. Most student pilots take ground school before their airplane flight lessons.
6. Jayne will be starting at the air exercises for this series.

Ground School



Flight Lesson 1

Flight Preparation



Flight Lesson 1



AIRCRAFT CHECKLIST



PRESTART

External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

ENGINE START

Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4 INCH
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

AFTER ENGINE START

Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with compass)
Set Ground Frequency
Taxi Clearance

CESSNA 152

TAXI (or Run up first)

Brakes Check
Instruments Check while turning

RUN UP (into wind)

Parking Brake — ON
Fuel Quantity — CHECK
Elevator TRIM check set for T/O
Throttle to 1700
- Mags CHECK - not to exceed
150 rpm on either
or 50 between both
Carb Heat — ON (small rpm drop)
Engine Instruments & Ammeter CHECK
Suction Gage CHECK green
Idle RPM, then 1000
Radios and Avionics SET
Controls Free

This Checklist not to be used for real airplanes

Snohomish County (Paine Field) KPAE
ELV 608 Gnd: 121.80 ATIS: 128.65
Paine Tower: 132.95 (RWY 16R-34L)
Paine Tower: 120.2 (RWY 16L-34R)
East Practice Area: 126.70
Harvey Field: 123.0

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Beginner Checklist Card

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Flight Preparation



Cessna.

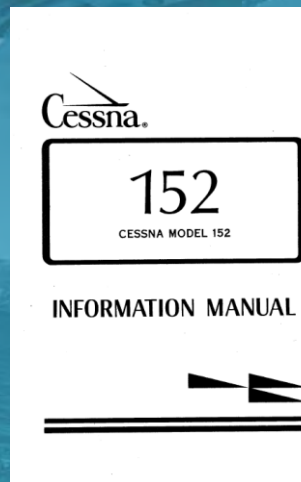
152

CESSNA MODEL 152

INFORMATION MANUAL



Aircraft Familiarization



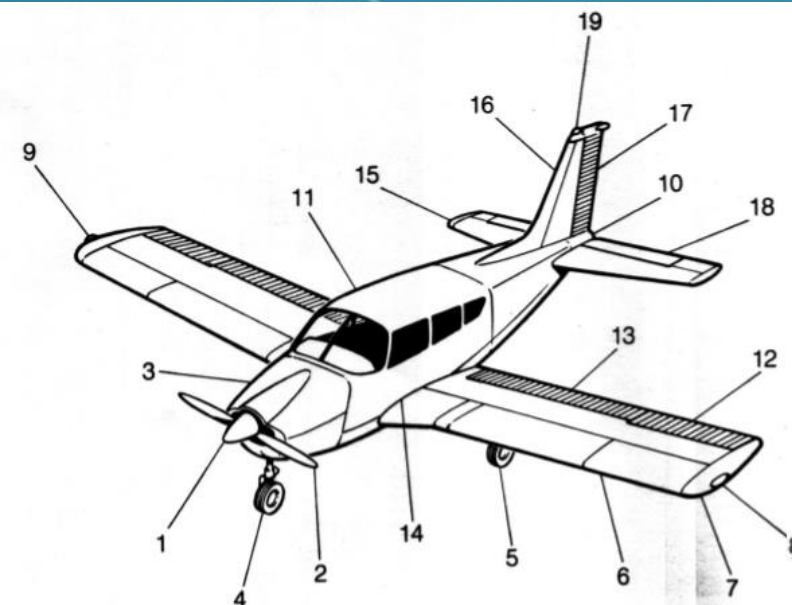
Flight Lesson 1

The student pilot will learn about all the instruments in ground school and the parts of the airplane.



8

- 1 Propeller Spinner
- 2 Propeller
- 3 Engine cowling
- 4 Nose wheel
- 5 Main landing gear
- 6 Leading edge of wing
- 7 Wing tip
- 8 Left position light (red)
- 9 Right position light (green)
- 10 Rear position light (white)
- 11 Fuselage
- 12 Aileron
- 13 Flap
- 14 Wing root
- 15 Horizontal stabilizer
- 16 Vertical stabilizer (fin)
- 17 Rudder
- 18 Elevator
- 19 Anti-collision light



Flight Lesson 1

When practicing and memorizing the phonetic alphabet, look around your house and spell each item phonetically. When in the car, look at the fuel gauge and say: Foxtrot, Uniform, Echo, Lima (FUEL). Many pilots make a label for their aircraft call sign and attach it to the panel, just above the radio. Then you will never forget what your call sign is, especially when renting aircraft with different call signs.

A	Alpha		Q	Quebec
B	Bravo		R	Romeo
C	Charlie		S	Sierra
D	Delta		T	Tango
E	Echo		U	Uniform
F	Foxtrot		V	Victor
G	Golf		W	Whisky
H	Hotel		X	X-ray
I	India		Y	Yankee
J	Juliet		Z	Zulu
K	Kilo	Use these words to convey letters over the radio. Even when stating your quadrant in the Claremont practice area. Others will understand immediately what letter you mean. You may be telling a controller your destination airport. As an example, the island airport is CYTZ. You would say Charlie, Yankee, Tango, Zulu to reduce confusion.		
L	Lima			
M	Mike			
N	November			
O	Oscar			
P	Papa			

One final preparation is continued practice with the phonetic alphabet and a written radio test after ground school before they can say a word on the radio.



Flight Lesson 1

Let's go
to the
airplane



Flight Lesson 1

The Walkaround

All students have to perform this and all pilots do this before every flight.

In this section of your Pilot's Operating Handbook, you should read the Preflight Inspection pg. 4-5 and on.

CESSNA
MODEL 152

SECTION 4
NORMAL PROCEDURES

CHECKLIST PROCEDURES

PREFLIGHT INSPECTION

① CABIN

1. Pilot's Operating Handbook -- AVAILABLE IN THE AIRPLANE.
2. Control Wheel Lock -- REMOVE.
3. Ignition Switch -- OFF.
4. Master Switch -- ON.

WARNING

When turning on the master switch, using an external power source, or pulling the propeller through by hand, treat the propeller as if the ignition switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller, since a loose or broken wire, or a component malfunction, could cause the propeller to rotate.

5. Fuel Quantity Indicators -- CHECK QUANTITY.
6. Master Switch -- OFF.
7. Fuel Shutoff Valve -- ON.

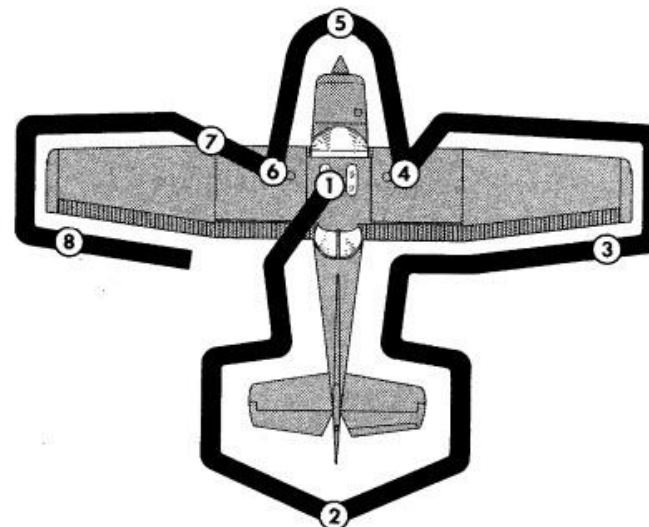
② EMPENNAGE

1. Rudder Gust Lock -- REMOVE.

Typically, we are physically touching and inspecting every part of the airplane before we get in and start it up. That includes physically looking into the fuel tanks and oil dipstick.

SECTION 4 NORMAL PROCEDURES

CESSNA
MODEL 152



NOTE

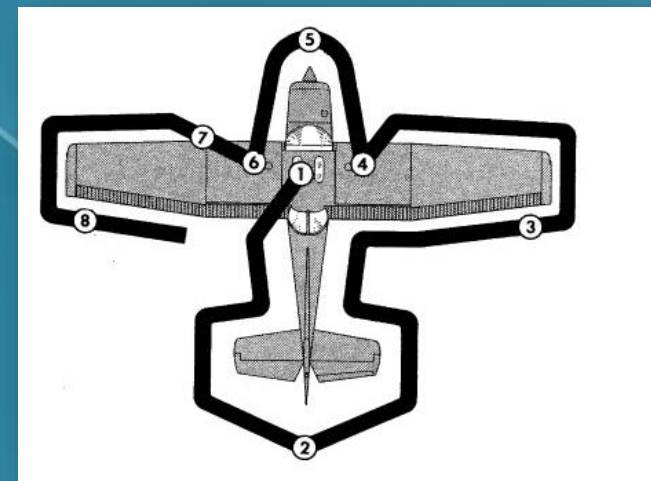
Visually check airplane for general condition during walk-around inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heater (if installed) is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights, and make sure a flashlight is available.

Figure 4-1. Preflight Inspection

Flight Lesson 1

The Walkaround

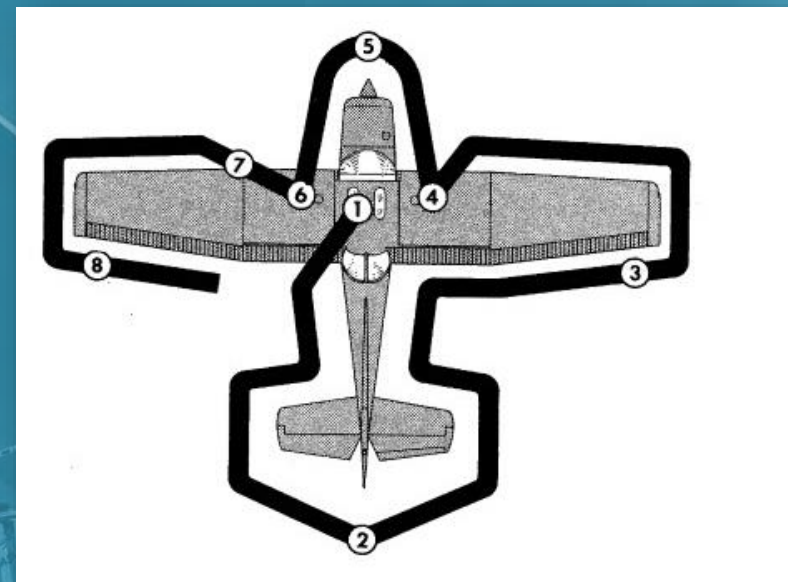
Master switch ON and Flaps all the way DOWN: (step #1) inside the cabin. You can do this while still standing outside the plane.



een ba



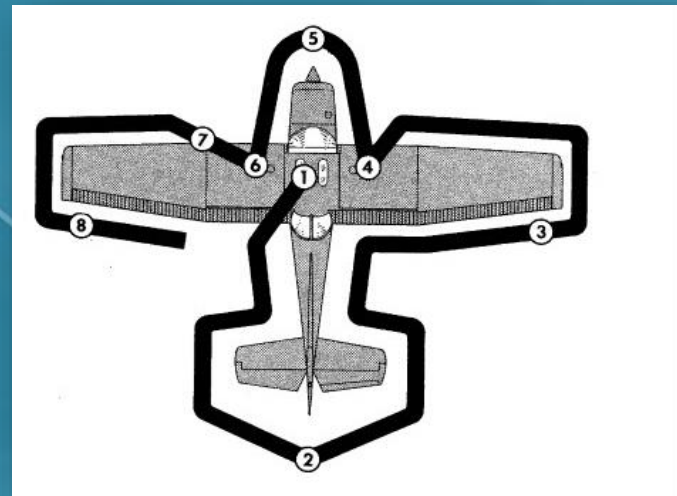
The Walkaround



Inspect the tail of the plane: (step #2)

Flight Lesson 1

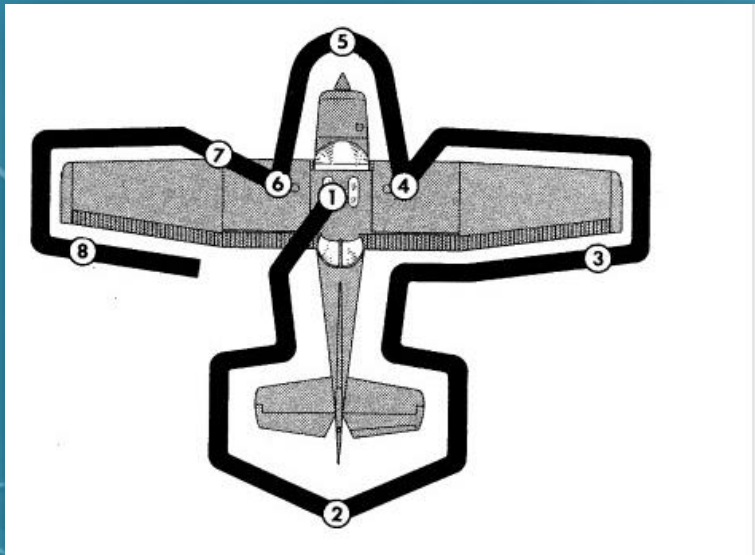
The Walkaround



Checking the oil:
(step #4.5)

Flight Lesson 1

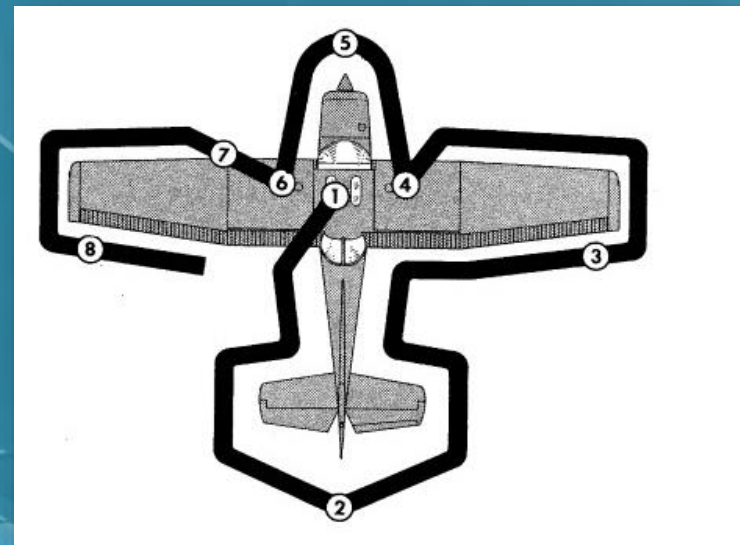
The Walkaround



(step #5)

Flight Lesson 1

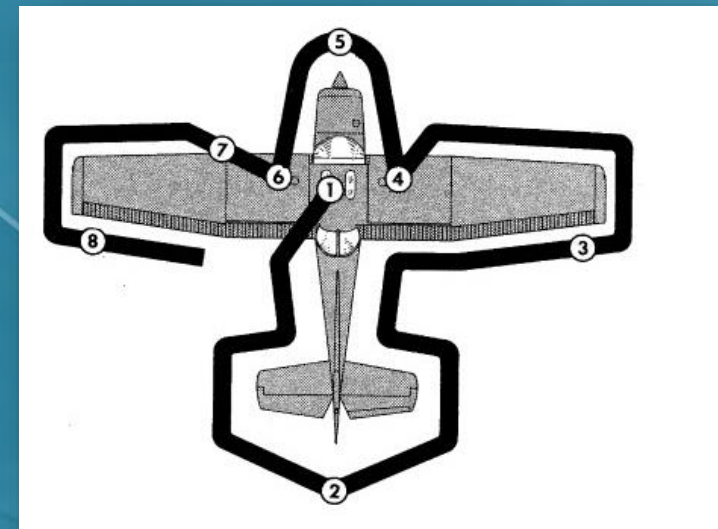
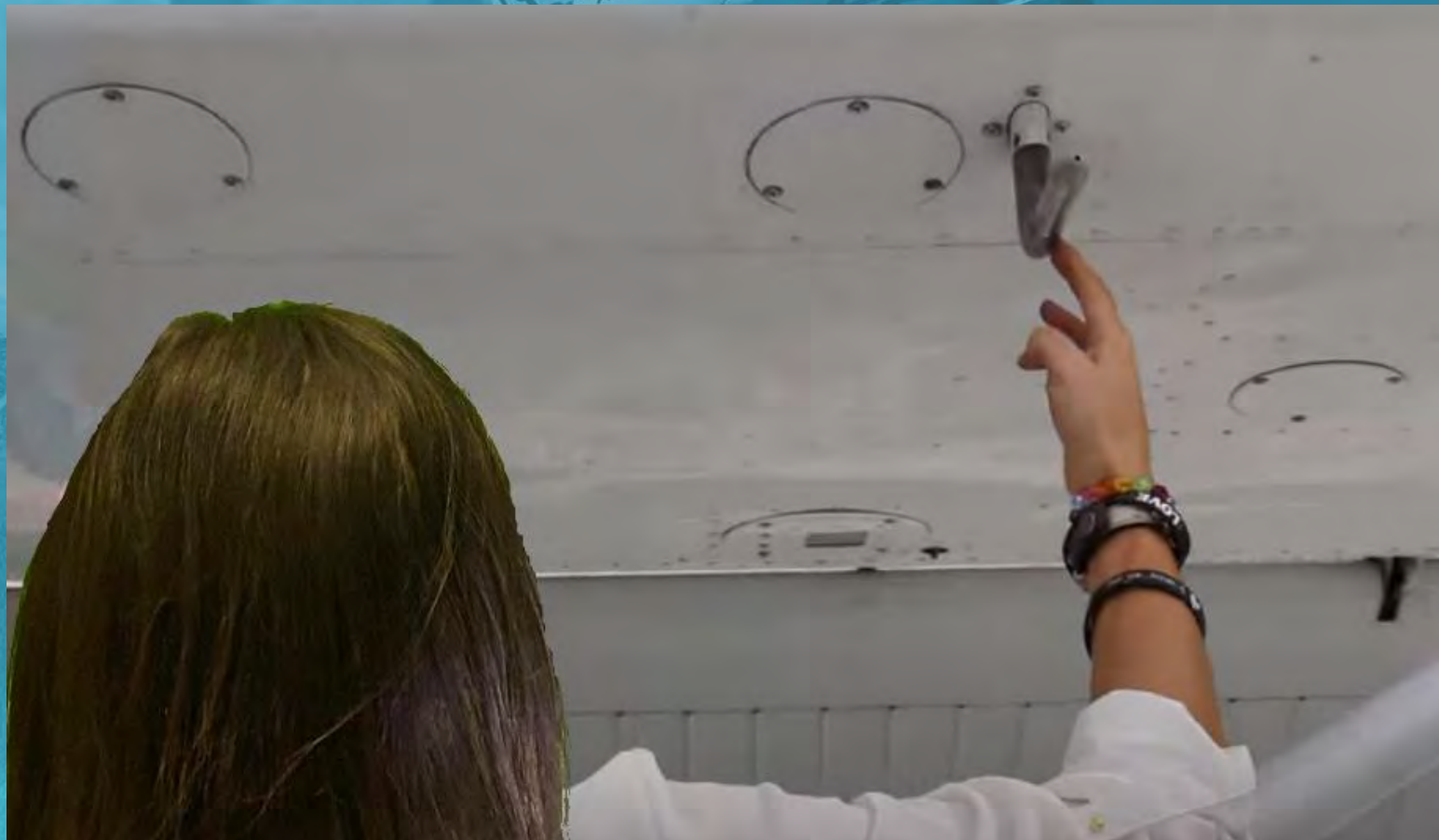
The Walkaround



Checking static port:
(step #5.5)

Flight Lesson 1

The Walkaround



Checking pitot tube:
(step #7

AIRCRAFT CHECKLIST



CESSNA 152

PRESTART

External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

ENGINE START

Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4 INCH
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

AFTER ENGINE START

Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with compass)
Set Ground Frequency
Taxi Clearance

This Checklist not to be used for real airplanes

Snohomish County (Paine Field) KPAE
ELV 608 Gnd: 121.80 ATIS: 128.65
Paine Tower: 132.95 (RWY 16R-34L)
Paine Tower: 120.2 (RWY 16L-34R)
East Practice Area: 126.70
Harvey Field: 123.0

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Forder Technical Services Inc.
Mforder@gmail.com
@ForderLearnToFly.com

Learn To Fly!
with Flight Simulator
Beginner Checklist Card

TAXI (or Run up first)

Brakes Check
Instruments Check while turning

RUN UP (into wind)

Parking Brake — ON
Fuel Quantity — CHECK
Elevator TRIM check set for T/O
Throttle to 1700
- Mags CHECK - not to exceed
150 rpm on either
or 50 between both
Carb Heat — ON (small rpm drop)
Engine Instruments & Ammeter CHECK
Suction Gage CHECK green
Idle RPM, then 1000
Radios and Avionics SET
Controls Free

First Use of Checklists

CESSNA 152



TAKEOFF

Carb Heat (COLD)
Flaps (0°) (UP)
HSI SET
Turn to face traffic
Get Clearance
Record TIME off
Lift nose wheel at 50KIAS
Climb speed 60-70 KIAS

SHUTDOWN

ELT Check 121.5
Avionics OFF
IDLE 1000 RPM
Mixture (OUT) (Cutoff)
Ignition Switch (OFF) remove key
MASTER OFF
Record HOBBS time

DOWNWIND CHECK & Pre-Landing check

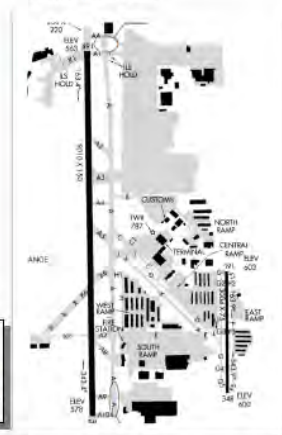
Primer (IN and LOCKED)
Master & ALT switches ON
Mags on BOTH
Circuit Breakers all IN
Switches CHECK (landing light etc.)
Mixture Rich (IN)
FUEL gages CHECK
Temp & Pressure GREEN
Approach Speed 60-70 KIAS

CLEAR of ACTIVE RUNWAY

FLAPS UP
Set Radio to Ground Frequency
Landing Light OFF—Taxi ON
Note TIME DOWN
Taxi Clearance
Trim for Takeoff

This Checklist not to be used for real airplanes

Max Glide: 60 XWIND MAX: 13
STALL SPEED Flaps up power off 51 KCAS
STALL SPEED Flaps down power off 47 KCAS
Baulked Landing: 55 Vne 141 KIAS
Best Angle: 56 KIAS Best Rate: 68 KIAS



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Beginner Checklist Card

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Lesson Plan #1 (Dual)

ForderLearnToFly.com

Private Pilot Training (Flight Simulator)

LESSON PLANS

Lesson Plan #1 (Dual)

Class Time .5 hours

FAMILIARIZATION (Exercise 1, page 33)

GENERAL

This lesson is an introduction to flying. The student should be aware of the Pilot Operating Handbook, Aircraft documentation and flight authorization. The flight should be stimulating for the student without any abrupt maneuver.

MOTIVATION

To stress the importance or preparation for each briefing as a requirement for progress.

REFERENCE

- (1) Aeroplane Flight Training Manual
- (2) Pilot's Operating Handbook

TOPICS



- (1) Preparation for flight
- (2) Aircraft familiarization and documents
- (3) Pre-flight inspection (walkaround)
- (4) Cockpit familiarization
- (5) Engine start and run-up



AIRCRAFT CHECKLIST



CESSNA 152

PRESTART

External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

TAXI (or Run up first)

Brakes Check
Instruments Check while turning

ENGINE START

Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4 INCH
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

RUN UP (into wind)

Parking Brake — ON
Fuel Quantity — CHECK
Elevator TRIM check set for T/O
Throttle to 1700
- Mags CHECK - not to exceed
150 rpm on either
or 50 between both

Carb Heat — ON (small rpm drop)
Engine Instruments & Ammeter CHECK
Suction Gauge CHECK green
Idle RPM, then 1000
Radios and Avionics SET
Controls Free

AFTER ENGINE START

Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with compass)
Set Ground Frequency
Taxi Clearance

This Checklist not to be used for real airplanes

Snohomish County (Paine Field) KPAE
ELV 608 Gnd: 121.80 ATIS: 128.65
Paine Tower: 132.95 (RWY 16R-34L)
Paine Tower: 120.2 (RWY 16L-34R)
East Practice Area: 126.70
Harvey Field: 123.0

Learn To Fly!
with Flight Simulator
Beginner Checklist Card

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Frederick Technical Services Inc.
info@fosterfly.com
@FosterLearnToFly.com

Lesson Plan #1 (Dual)

Checklist items

Items in this section ensure the fuel switch is on, you have recorded the HOBBS time and Avionics won't be affected by a power surge on startup.

PRESTART



External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time



Lesson Plan #1 (Dual)



PRESTART



External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

ENGINE START



Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

AFTER ENGINE START

Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with comp)
Set Ground Frequency
Taxi Clearance

Lesson Plan #1 (Dual)



A future lesson will focus only on radio communications.

For now, a student should focus on flying the plane.

The instructor will make all appropriate radio calls.

Once radios are turned on, we need to get the Automated Terminal Information System (ATIS) airport weather conditions.

PRESTART



External Check
Fight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

ENGINE START



Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

AFTER ENGINE START



Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with com
Set Ground Frequency
Taxi Clearance

Lesson Plan #1 (Dual)



The Run Up ensures the engine is going to work under load before we get into the air

TAXI (or Run up first) ✓

Brakes Check

Instruments Check while turning

RUN UP (into wind) ✓

Parking Brake — ON

Fuel Quantity — CHECK

Elevator TRIM check set for T/O

Throttle to 1700

- Mags CHECK - not to exceed
150 rpm on either
or 50 between both

Carb Heat — ON (small rpm drop)

Engine Instruments & Ammeter CHECK

Suction Gauge CHECK green

Idle RPM, then 1000

Radios and Avionics SET

Controls Free



1st Flight Lesson Briefing

Skills to learn in the first flying lesson:

1. Taxiing around the airport
2. Observe take-off & climb
3. Pitching & rolling aircraft
4. Trimming each attitude
5. Straight & level flight
6. Climbing & Descending

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Private Pilot Training (Flight Simulator)

Lesson Plan #1 (Dual)

Air Time .8 hours

AIR EXERCISE

- (1) Instructor will assist the student with the external check, start check and after start check.
- (2) Taxiing demonstration and practice; demonstration of yaw.
- (3) Instructor assists student in run-up and pre-take-off check.
- (4) Demonstration of take-off and climb.
- (5) Demonstration of reference points, effects of controls, and range of normal attitudes.
- (6) Student practices pitching and rolling through the normal attitudes and controlling yaw.
- (7) Demonstration of trim.
- (8) Student practices straight and level flight.
- (9) Demonstration and practice of transition from straight and level flight to straight and climbing flight and levelling out (APT)
- (10) Demonstration and practice of transition from straight and level flight to straight and descending flight and levelling out.

POST FLIGHT

- (1) Review Lesson, re-brief as necessary.
- (2) Assign reading for next lesson.

Climbing & Trimming

A.P.T. to climb.

1. Adjust **Attitude** (V_y)
2. Add full **Power**
3. Trim hands-free

You always want full power to climb, then less power to cruise.



A.P.T. to resume cruise.

1. Adjust **Attitude** (to level)
2. Reduce **Power** (75%)
3. Trim hands-free



Descending & Trimming

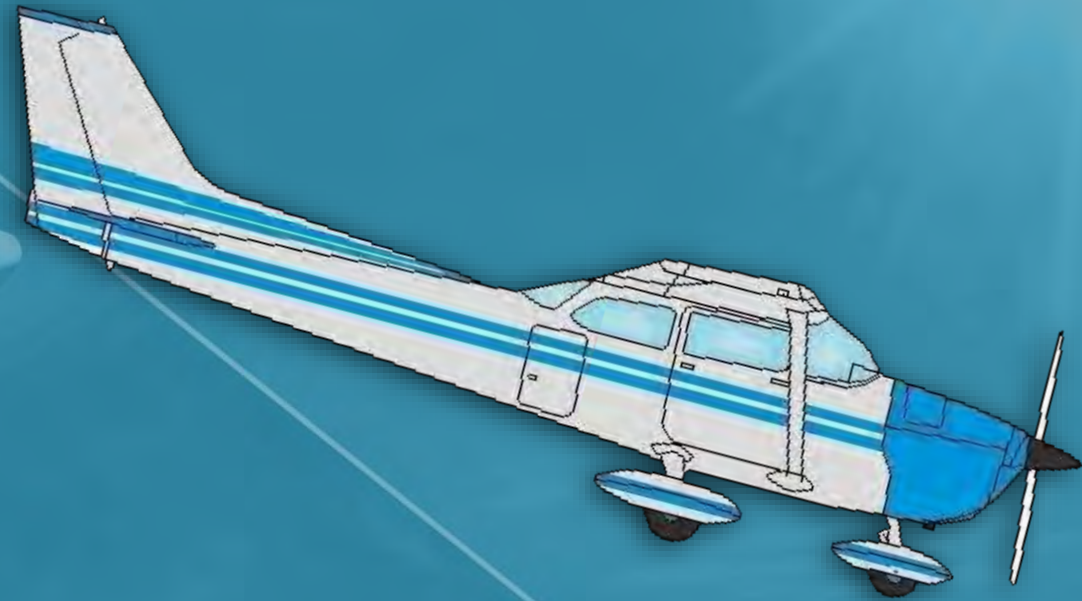
P.A.T. to descend.

1. Reduce **Power**
2. Adjust **Attitude**
3. Trim hands-free

You always want less or no power to descend, or your engine and rpms could increase way too high.

A good memory aid:

PAT down at airport security.

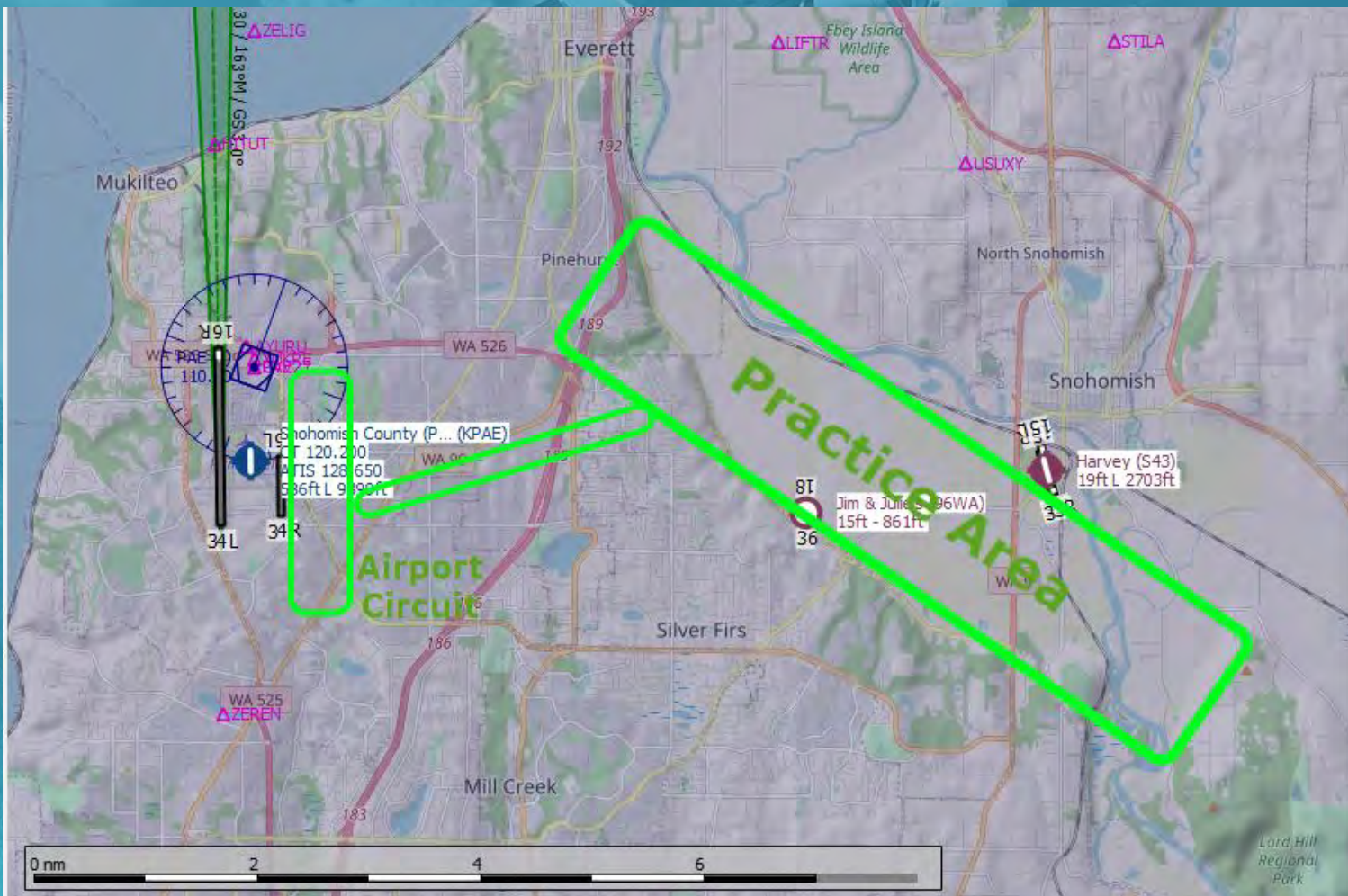


A “Cruise Descent” means to keep your cruise airspeed constant but descend to a lower altitude, then level out.

A “Landing Descent” is a slower airspeed within the white-arc flaps range and eventually with flaps extended.

Flight Lesson 1

Let's go Flying!



AIRCRAFT CHECKLIST



CESSNA 152

PRESTART

External Check
Flight Controls Free
Trim check set for T/O
AVIONICS OFF
Fuel Selector ON
Record HOBBS time

ENGINE START

Carb Heat — COLD (IN)
Throttle — FULL OPEN—IN 1/4 INCH
Mixture — RICH (IN)
Brakes ON (Toes or Ctrl - period)
Call Out — PROP CLEAR
Master Switch ON
Prime Pump—3 times
IGNITION SWITCH START

AFTER ENGINE START

Idle 1000
Oil Pressure — GREEN
Avionics — ON
Flashing Beacon - ON
NAV lights — ON
FLAPS — retract
ATIS Copy - SET Altimeter
Heading Indicator SET (with compass)
Set Ground Frequency
Taxi Clearance

TAXI (or

Brakes C
Instrume

RUN UP

Parking B
Fuel Quan
Elevator
Throttle
1
0
Carb Heat
Engine In
Suction G
Idle RPM
Radios au
Controls

TAKEOFF

Carb Heat (COLD)
Flaps (0°) (UP)
HSI SET
Turn to face traffic
Get Clearance
Record TIME off
Lift nose wheel at 50KIAS
Climb speed 60-70 KIAS

SHUTDOWN

ELT Check 121.5
Avionics OFF
IDLE 1000 RPM
Mixture (OUT) (Cutoff)
Ignition Switch (OFF) remove key
MASTER OFF
Record HOBBS time

DOWNWIND CHECK & Pre-Landing check

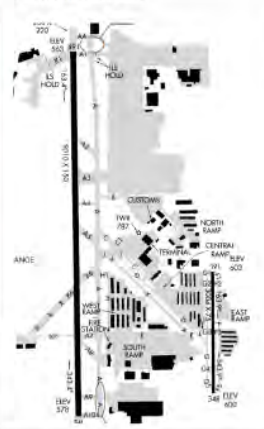
Primer (IN and LOCKED)
Master & ALT switches ON
Mags on BOTH
Circuit Breakers all IN
Switches CHECK (landing light etc.)
Mixture Rich (IN)
FUEL gages CHECK
Temp & Pressure GREEN
Approach Speed 60-70 KIAS

CLEAR of ACTIVE RUNWAY

FLAPS UP
Set Radio to Ground Frequency
Landing Light OFF—Taxi ON
Note TIME DOWN
Taxi Clearance
Trim for Takeoff

This Checklist not to be used for real airplanes

Max Glide: 60 XWIND MAX: 13
STALL SPEED Flaps up power off 51 KCAS
STALL SPEED Flaps down power off 47 KCAS
Baulked Landing: 55 Vne 141 KIAS
Best Angle: 56 KIAS Best Rate: 68 KIAS



Learn To Fly
with Flight Simulator
Beginner Checklist Card

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Designed and Produced by
Forder Technical Services Inc.
forder@forder.com
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Flight Lesson 1

Let's go Flying!

The **H.A.S.E.L.** Check

H. – Height

A. - Area

S. – Security

E. – Engine

L. - Lookout

Once we get to the practice area, we have to check all around us that no other aircraft are in the area.

Then continuously keep a lookout for “traffic”

Flight Lesson 1



Let's go Flying!

While Jayne and Howard head out to the airplane please direct your questions in chat to the 5 fellow students on live mics. They will convey your questions upon their return.

YOUR CONTROL

Jayne and Howard will be using a software product called “Your Control - Shared Cockpit” that is a 3rd party free download to pass control of the airplane back and forth.

ForderLearnToFly.com

Private Pilot Training (Flight Simulator)

Lesson Plan #1 (Dual)

Air Time .8 hours

AIR EXERCISE

- (1) Instructor will assist the student with the external check, start check and after start check.
- (2) Taxiing demonstration and practice; demonstration of yaw.
- (3) Instructor assists student in run-up and pre-take-off check.
- (4) Demonstration of take-off and climb.
- (5) Demonstration of reference points, effects of controls, and range of normal attitudes.
- (6) Student practices pitching and rolling through the normal attitudes and controlling yaw.
- (7) Demonstration of trim.
- (8) Student practices straight and level flight.
- (9) Demonstration and practice of transition from straight and level flight to straight and climbing flight and levelling out (APT)
- (10) Demonstration and practice of transition from straight and level flight to straight and descending flight and levelling out.

POST FLIGHT

- (1) Review Lesson, re-brief as necessary.
- (2) Assign reading for next lesson.

Review Lesson



Flight Lesson 1

AIR EXERCISE

- (1) Instructor will assist the student with the external check, start check and after start check.
- (2) Taxiing demonstration and practice; demonstration of yaw.
- (3) Instructor assists student in run-up and pre-take-off check.
- (4) Demonstration of take-off and climb.
- (5) Demonstration of reference points, effects of controls, and range of normal attitudes.
- (6) Student practices pitching and rolling through the normal attitudes and controlling yaw.
- (7) Demonstration of trim.
- (8) Student practices straight and level flight.
- (9) Demonstration and practice of transition from straight and level flight to straight and climbing flight and levelling out (APT)
- (10) Demonstration and practice of transition from straight and level flight to straight and descending flight and levelling out.

Review Lesson



Flight Lesson 1

Summary Questions

1. Looking at your aeronautical map, what is the diameter, in nautical miles of the Paine Field (KPAE) control zone, what class is it (A,B,C,D,E) and what is the maximum altitude from the surface while in that zone?

(answer: 5NM diameter, Class C, maximum altitude in that zone: 3100 MSL.)



Summary Questions

2. What is V_y and V_x airspeeds for the Cessna 152?

(section 4.3 POH)

(answer: V_y , Best Rate: normal climb for best cooling: 67 and
 V_x Best Angle for steeper climbs to clear an obstacle is: 55)



Summary Questions

3. What is the maximum crosswind velocity 152?

- Answer: 12knots. (POH section 4.3)



Summary Questions

4. When do we use the red knob, mixture control?

(answer: to lean the engine's gas to air ratio when above 5000 feet)



Summary Questions

5. What is the airport elevation and circuit height?

-Answer: 608 MSL, 1608 MSL (or just 1600 –
Airport Diagram)



Summary Questions

6. Why are some circuits left hand and some right hand at this airport?

-Answer: to keep you away from the airport bigger planes on the bigger runway beside us.



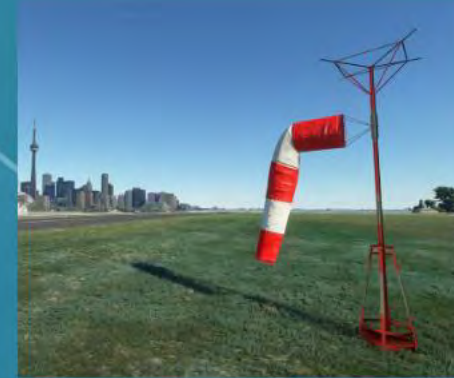
Summary Questions

7. What does H.A.S.E.L stand for and what do we use it for?

-Answer: Height, Area, Security, Engine, Lookout.
We use it in the practice area before upper level air work.



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Flight Lesson 1

