



The Checklist Explained

Standard Operating Procedures for Cessna C150/C172

Compiled for KBM Aviation Flight School

Version 1

March 11, 2021

Preamble

This document has been prepared by the flight instructors at KBM Aviation, under the guidance and review of the Chief Flight Instructor. It represents the body of knowledge and experience from all staff and aims to compile the best practices as it relates to the use of checklists for operating the C150/C172. All entries in this document aim to follow any relevant regulations (TC CARs) and manufacturer instructions and limitations (Aircraft POH/AFM) yet build upon and expand on this based on the perspective of a user-based operation (the pilot). We expect all students (and staff) in training to benefit from reading, understanding, and following the guidance described in this document, however not all situations and exceptions can be accounted for. In this case, we relegate any omissions or commissions in this document to the ultimate authority of the Pilot-in-command of a given flight to demonstrate their sound pilot decision making. Adherence to the standards in this document are merely presented as a training aid. Non-adherence to the standards should be considered a learning opportunity and do not constitute grounds for any kind of punitive measures unless negligence or aircraft/occupant safety are at risk.

Amendments

If any errors or omissions are discovered, please forward proposals for any changes of content to the Chief Flight Instructor.

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Introduction

Please Familiarize yourself with these expanded procedures to help you understand the details of using a checklist. It is thorough and is applicable to flying either the C150 or the C172.

The checklist that comes in an airplane is like a cooking recipe. If you don't know how to make bread, you need to follow the recipe word for word to make sure it doesn't come out as a sloppy mess. But once you've done it a few times, you might have enough of an idea of what to do that you only need to glance at the recipe once in a while to ensure you're on the right track. In other words, a checklist provides you with a sequence of events that you need to follow to produce a certain outcome. While following the recipe word for word can be helpful when you are just starting out, sometimes more detail is needed to help you understand why you are performing certain actions, and to elaborate on certain exceptions and to add extra considerations. Just like cooking, once you repeat the same process repeatedly, the greater patterns at work will be revealed to you. This will help you become more fluent and capable when you encounter new and unfamiliar situations in the air.

Using a checklist does not mean you'll never miss or forget a check. Distractions in the cockpit are numerous and persistent. By understanding the underlying reasons for accomplishing these tasks in a certain way, and in the order prescribed, you stand a better chance at safely executing your flight.

How to use a checklist

The first time you view a checklist, you may think that it is list of instructions, like a recipe for baking bread. Once you use the checklist a few times however, you will begin using the checklist the way it was meant to be used: as a **checklist**. A way of verifying that everything (all aircraft switches and systems) is set, **after** the action has been performed.

Sometimes, using a checklist correctly depends on what stage of the flight you are in. As you go through each phase of flight in the following pages, each section will describe when you should perform the check.

One more thing to consider. Using a checklist, with one hand on the paper and the other on the yoke, can in itself be a distraction! Make sure that you use your situation awareness to determine if this is a good time to be pulling out a checklist. If the aircraft is moving on the ground, stop, then use the checklist. If ATC is trying to get a hold of you, consider pausing the checklist to listen in on what they have to say first. Completing a checklist by reference is never as important than ensuring that the aircraft is flying, maintaining situational awareness, and effectively communicating with other crew or ATC. Aviate, Navigate, Communicate!

PRE-FLIGHT

Preparation is the key to success! And with many items to consider before starting the engines, it is important to prepare for the flight in an organized manner. This is why every flight starts with the Pre-Flight Checklist.

PRE-FLIGHT

- 1. Documents-----CHECK
- 2. Cabin Check-----COMPLETE
- 3. Cockpit Check -----COMPLETE
- 4. Pre-Flight Inspection -----COMPLETE
- 5. Passengers -----BRIEFED

1. Documents

The following documents must be on-board the plane every flight:

Airworthiness Certificate– Issued for the correct aircraft, including registration and serial number. This document does not have an expiry. For the Airworthiness Certificate to be valid:

- The aircraft maintenance schedule must be followed. Maintenance is based on either total aircraft flight time (TAT), calendar date, or both. This information can be found at the bottom of the most recent Journey Logbook page.
- The aircraft must be flown within its limitations. This includes weight and balance limitations, speed limitations, etc.
- Any outstanding defects are rectified or deferred. There is a deferred defects sheet inside the front cover of the Journey Log. This is a list of any current defects on the aircraft, and whether they have been rectified or deferred, and any resulting limitations on the aircraft (ex. nav lights unserviceable, restricted to Day VFR only)
- Airworthiness Directives (ADs) must be complied with.

Registration – Valid and issued for correct aircraft registration and serial number. Numerous events can cause the registration to be cancelled such as the aircraft being sold, lost, or destroyed (to name a few).

Owners Manual– The Owners Manual, aka. Aircraft Flight Manual (AFM) or Pilot Operating Handbook (POH), for the specific aircraft model.

Weight and Balance– Needs to be completed prior to the flight, using either the manual method or KBMs electronic version. The aircraft needs to be within limits for the duration of the flight, and be within the appropriate category, such as the utility category when doing spins.

Journey Log– If planning to land and shut down at an airport other than the point of departure, the aircraft journey log must be on-board.

Insurance – Certificate of insurance verifying that the aircraft has liability insurance.

Licenses – the PIC of the aircraft must have their pilot license/permit on-board the airplane. Some examples of Transport Canada license/permits include: Recreational Pilot Permit, Private Pilot License, etc. Students flying solo will need to have (at minimum) a Student Pilot Permit to act as PIC. Additionally, anyone operating an aircraft radio must have a Restricted Operator Certificate – Aeronautical (ROC-A) and a valid Aviation Medical Certificate.

2. Cabin Check

The cabin and baggage compartment should be checked for items required for the flight. This may include items such as extra oil for cross-country flights, or wheel chocks if planning on parking at another airport. Every item that is taken for the flight needs to be stowed in a secure place so it will not become a hazard. Additionally, the First Aid Kit, Emergency Survival Gear, and Fire Extinguisher must be onboard the plane for every flight. The Fire Extinguisher should be sufficiently charged (needle pointing in the green), and any items in the cabin should be secured so that they will not become a hazard while flying.

3. Cockpit Check

Start by removing the pitot cover, control lock, setting the parking brake, and verify that the trim has full and unrestricted travel. Next is to verify that the master switch and all electrics are off, magnetos are off, and the circuit breakers are set. Then the master is turned on, allowing you to check the function of interior and exterior lights, pitot heat, check fuel gauge indication, and lower the flaps for the walkaround. After turning OFF the master, the walkaround can be started.

4. Pre-Flight Inspection

Starting at the pilot door, work your way counter-clockwise around the aircraft, inspecting it to make sure the aircraft is safe to fly. Consult the aircraft POH for a list of items which should be inspected.

In addition, the fuel quantity should be measured, fuel samples taken to check the fuel tanks for contamination, and the oil quantity should be verified. Each aircraft has a fuel dipstick for checking the fuel quantity. When checking fuel samples, ensure that the fuel is the correct grade (AVGAS is blue). The fuel should be clear (not milky), and should not contain any debris or water. If a fuel sample does contain contaminants, take additional samples until either it is clean, or there is clearly an issue with the fuel which must be addressed. Oil will indicate different volumes depending on whether it is warm or cold, but should always be within the limits of the POH. Should the plane require fuel or oil to be added, simply tell your instructor.

The goal of the walkaround is to notice anything that does not look right, including leaks, loose panels, missing fasteners, tears or buckling in the aluminum skin, etc. If you are unsure about anything you find on the walkaround, discuss it with your instructor.

5. Passengers

The briefing should be performed when flying with passengers, at the request of the flight instructor, or on a flight test. This should cover the following items:

- Use of seats
- Use of seat belts
- Location and operation of exits/emergency exits
- Location of First Aid Kit and Emergency Survival Gear
- Location and use of ELT
- Smoking policy
- Location of sick bags and passenger briefing cards
- Aircraft controls – when flying with passengers, they must be instructed not to touch the controls. When flying with an instructor or an examiner, briefing should include how you will transfer control, and who will handle the aircraft in the event of an actual emergency.

BEFORE START

Before entering the plane, it is recommended to do a quick visual scan to ensure the wheel chocks are clear of the wheels, fuel and oil caps are secured, and the prop area is clear of obstructions or debris on the ground.

The aircraft should be positioned properly to allow for start and taxi, as there should be no obstructions in the surrounding area. Also take into consideration what is behind the plane, as it will be receiving the 'prop blast.'

You are now seated in the aircraft with your seatbelt on and are ready to go for a flight! Follow along with the checklist as you cover the details here.

START

1. Flight Tracking-----ON
2. Brakes ----- HOLD
3. Fuel----- LEFT
4. Master -----ON
5. Beacon -----ON
6. Mixture ----- RICH
7. Throttle----- ¼"
8. Carb Heat----- OFF
9. Primer ----- AS REQ'D
10. Propeller Area -----CLEAR
11. Ignition-----START

AFTER START

1. Throttle ----- <1000RPM
2. Oil Pressure -----CHECK within 30sec
3. Flaps ----- UP
4. Mixture -----LEAN
5. Fuel Selector----- RIGHT
6. Avionics -----ON

1. Flight Tracking

KBM uses Garmin INREACH tracking devices for flight following. First, turn the InReach on via the power button on the top of the unit. Then tracking is verified ON by indicating a check mark on the tracking icon.

The device also has a messaging system which is used to send a 'wheels up' and 'wheels down' message for take-off and landing. These messages are pre-programmed and can be sent via the message icon in the upper left corner. A 'wheels up' message is sent during the Line-Up Checklist, and 'wheels down' sent during the After Landing Checklist. At aircraft shutdown, the unit should be powered off.

2. Brakes

HOLD the brakes to ensure the aircraft does not start moving during engine start-up.

3. Fuel

In a Cessna 172, the fuel selector can be set to LEFT, RIGHT, BOTH, or OFF. This determines which tank fuel is drawn from. The aircraft is started on one tank to ensure fuel is flowing properly from that tank, and each tank is tested individually before take-off.

In a Cessna 150, the fuel selector is either ON or OFF. When the fuel selector is in the ON position, fuel is drawn equally from both the left and right fuel tanks.

Ensure Fuel is ON at this point to provide fuel to the engine at start up.

4. Master

The Master power needs to be ON to be able to engage the starter.

5. Beacon

The beacon light (red light on the tail) alerts others in the area that the Master is on. This is an indication to others that the aircraft may be starting up momentarily.

6. Mixture

Start the engine with the mixture full rich. Any leaned mixture setting may not provide enough fuel to the engine at start-up.

7. Throttle

Advance the throttle ¼" (one quarter inch, not ¼ of the throttle) forward from the closed (idle) position. This provides sufficient air to allow the engine to run at approximately 1000 RPM at start-up.

8. Carb Heat

When the carb heat is on, unfiltered air is entering the engine. Therefore, the carb heat should always be off (cold) when on the ground to prevent ingestion of foreign contaminants.

9. Primer

Typically, 2-3 full strokes of primer is sufficient. In colder temperatures or with low engine oil temperatures, more priming may be required. Conversely, if the oil temperature is in the green (the engine was recently running), typically no primer is required.

When using the primer, movements should be slow and smooth, allowing the mechanism to work properly. Once finished, it's crucial to lock the primer to prevent potential rough running engine in flight.

10. Propeller Area

Shout “CLEAR PROP” out the window, and visually scan that the area is clear of people/wildlife/obstructions before starting the engine. Animals such as foxes and birds can sneak up on you, so be sure to have a good lookout!

11. Ignition

With one hand on the throttle, turn the switch MAGS to START. Be careful not to ‘crank’ the engine for too long or you risk burning out the starter motor (Starter timings are specifically addressed in the aircraft POH, usually no longer than 30 sec at a time). Once the engine has started, a low RPM (800-1000) should be used to allow the engine to warm up slowly. It is crucial to verify the oil pressure gauge which should be in the green arc within 30 seconds after start. During winter flying, the oil temperature may take up to 1 minute to register.

After Start

1. Throttle

Less than 1000 RPM to safely allow the engine to warm up.

2. Oil Pressure

If the oil pressure gauge does not show an increase in pressure within 30 seconds in warm weather, shut down the engine and investigate. It may take about twice that long in very cold weather.

3. Flaps

Retract flaps and look for any abnormal operation. Occasionally the limit switch may frost up in winter operations causing the flaps to get ‘stuck’.

4. Mixture

Operations at low power settings with a rich mixture and cold engine temperatures can lead to spark plug fouling. This occurs when lead accumulates on the spark plugs and results in misfiring. Higher cylinder head temperatures (CHT) are required to vapourize the lead in the fuel mixture. Higher power settings and leaner mixtures result in hotter CHTs which results in less lead accumulating on the spark plugs. Therefore, the mixture should be leaned during ground operations to prevent spark plug fouling.

5. Fuel Selector

Switch fuel selector from LEFT to RIGHT. This allows you to check for proper operation of the fuel selector switch and fuel lines before take-off. Leave it on RIGHT until the Runup Checklist

6. Avionics

Turn on the avionics system by switching on the Avionics Master switch (if necessary). This is the time to set your radio frequencies, get the ATIS, and set the audio panel to verify you are listening and transmitting on the correct frequency. Also, the transponder should be turned on

in the STBY position. If flying VFR, the transponder should be set to 1200 until a squawk code is received.

TAXI

Once the Start checklist is complete, you are ready to start taxiing. Although there is no formal checklist for taxiing, there are a few things you should incorporate into your workflow to practice good airmanship. As well, make sure you have a taxi clearance (as necessary) before moving on to any controlled manoeuvring areas. And have a good listen on the radio and lookout around your aircraft before moving. You do not want to inadvertently taxi in front of moving aircraft/people!

1. Flight Time Start

The Canadian Aviation Regulations (CARs) define Flight Time as, “time from the moment an aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight” (CAR 101.01(1) *flight time*). Just before moving the aircraft under its own power, note the time for Flight Time Start.

2. Lights

Before taxiing, ensure any required lights are turned on. For flights in day VFR, there is no legal requirement for using lights. That being said, it is good airmanship to have the beacon light on any time the Master switch is turned on. As well, it is a good idea to turn on a taxi/landing light prior taxiing to increase your visibility to other aircraft/people on the manoeuvring areas.

3. Brakes

Prior to adding power and committing to a taxi movement, release the brakes and add just enough power to start moving at a slow walking pace. Then press the brakes to ensure that they are functioning properly. You don't want to be at full taxi speed before realizing that the brakes are not working. Beware, in winter weather, excessive use of brakes can melt snow/ice which may refreeze and seize the brake pads. In general, never ride the brakes!

4. Instruments

During the taxi, both a left and right turn are required to ensure proper functioning of the compass, heading indicator, and turn coordinator. In a left turn, the compass and heading indicator should be decreasing in heading, the turn coordinator should indicate a left turn, and the ball deflected to the right. Opposite indications should be observed in a right turn.

RUN-UP

The purpose of the Run-up is to ensure all systems are working correctly before you go flying. The aircraft should be positioned in an area where the prop blast will not create a hazard, the aircraft is not blocking traffic, and ideally with the nose pointed into the wind – especially in warm weather as this will aid engine cooling. Before starting the Run-up the oil temperature should be in the green.

| RUNUP | |
|------------------------------|------------|
| 1. Fuel Selector ----- | BOTH |
| 2. Mixture----- | RICH |
| 3. Throttle----- | 1700 RPM |
| 4. Brakes----- | HOLDING |
| • Oil Temp. and Press. ----- | CHECK |
| • Vacuum ----- | CHECK |
| • Alternator----- | CHECK |
| • Magnetos ----- | CHECK |
| • Carburetor Heat----- | CHECK |
| • Mixture ----- | CHECK |
| • Throttle ----- | IDLE CHECK |
| 5. Throttle ----- | <1000 RPM |
| 6. Mixture----- | LEAN |

1. Fuel Selector

Set fuel selector to BOTH before the run-up. This serves to check for normal functioning of the fuel selector and to set the fuel selector for take-off.

2. Mixture

The run-up should be done at full RICH mixture. This allows the engine to produce the power required for runup.

3. Throttle

The run-up is performed at 1700 RPM for the C172 and C150. The engine-driven systems (such as alternators and vacuum systems) may not function as expected at lower RPMs due to insufficient power being supplied by the engine.

4. Brakes

Verify that the brakes are holding and the aircraft is not moving. During the run-up, focus will be on the instruments. However peripheral vision and occasional checks should be done to ensure the aircraft has not started ‘creeping’ forward. Following a brake check, the runup checks are performed.

- **Oil Temperature and Pressure** - Should both be in the green and stable.
- **Vacuum Pump** - Checked via the suction gauge. Should be indicating 4.6-5.4”Hg (in the green).
- **Alternator** - Check to ensure the alternator can supply enough power to the electrical system with a full electrical load. To test the alternator, turn on all electrics including lights, pitot heat, and flaps. Then verify via the ammeter that a positive rate of charge is being produced. If the ammeter is showing a negative indication, power is being drawn from the battery and the alternator is not working correctly. Afterwards, all non required electrics can be turned off.
- **Magnetos** - Aircraft engines have two sets of magnetos that must be tested individually. From the key in the BOTH position, note the RPM then turn to the LEFT position. Note the drop in RPM, then switch back to BOTH. Repeat for the RIGHT position. From BOTH, the RPM drop on the LEFT or RIGHT should not exceed 100 RPM, and the difference between the LEFT and RIGHT should not exceed 50 RPM. If an EGT gauge is installed, a rise in EGT should be seen when operating on one magneto.
- **Carburetor Heat** – Pull the carb heat ON (hot) and note the drop in RPM to verify the carb heat is working correctly. A small drop in RPM should be observed with the carb heat ON, as hot (less dense) air enters the engine and produces less power.
- **Mixture** – To check if the mixture control is working correctly, slowly pull the mixture knob back until the engine begins to cough, then return to full rich.
- **Throttle** – An idle check is done to verify that the idle mixture is set properly and the engine will not quit when reduced to idle.

5. Throttle

Should be set to less than 1000RPM.

6. Mixture

Should be re-leaned for ground operations.

BEFORE TAKEOFF

Ideally, this check should be completed before receiving taxi clearance. That way you are ready for takeoff when reaching the hold short line, allowing traffic to flow more efficiently. This check is followed by the Line-Up checks. Line-Up checks are to be completed when crossing the hold short line, after receiving clearance and verifying the runway is clear.

- | | |
|-----------------------------|-----------------|
| BEFORE TAKEOFF | |
| 1. Seats/Belts/Doors ----- | SECURE |
| 2. Flight Controls----- | CHECK |
| 3. Flaps----- | SET FOR TAKEOFF |
| 4. Carb Heat ----- | COLD |
| 5. Mixture ----- | RICH |
| 6. Trim----- | SET FOR TAKEOFF |
| 7. Fuel ----- | BOTH |
| 8. Engine Gauges----- | GREEN |
| 9. Flight Instruments ----- | SET |
| 10. Departure ----- | BRIEFED |
| LINE-UP | |
| 1. Flight Tracking ----- | WHEELS UP |
| 2. Wheels Up Time ----- | NOTED |
| 3. Transponder----- | ALT |
| 4. Lights----- | LDG + STR |

1. Seats/Belts/Doors

Confirm seats are locked and seat belts are snug, including the shoulder harness. When carrying passengers, verify that they have their seatbelts fastened and are prepared for take-off. Windows and doors should also be closed and locked. The only exception to this is on warm days when the window can be left open during taxi. Just remember to close it before takeoff.

2. Flight Controls

Check that the controls have full range of motion in all possible configurations to ensure controls are FREE (not sticking/catching on anything). Also, verify CORRECT control surface movement by visually confirming that the controls move the control surfaces in the correct directions.

3. Flaps

Set flaps for the type of takeoff to be performed; normal, short field, or soft field. Consult the POH for the required flap settings.

4. Carb Heat

Takeoff requires maximum power. Therefore carb heat should be OFF for Takeoff.

5. Mixture

A full rich mixture will ensure the aircraft has sufficient fuel flow for full power on takeoff. Anything less than full rich has the potential to damage the engine for takeoff power.

6. Trim

Elevator trim should be placed in the 'Takeoff' position.

7. Fuel

In the C172 the fuel selector should be set to BOTH. In the C150 it should be ON.

8. Engine Gauges

Should be in the green, indicating that the engine is ready for takeoff and full power is likely to be achieved.

9. Flight Instruments

Set the heading indicator to match the compass, verify the attitude indicator is indicating correctly, and verify the altimeter is set indicating field elevation.

10. Departure

The briefing should be done before each takeoff whether flying with an instructor, examiner, or solo. You may choose to do the briefing before calling for clearance or during the taxi, depending on which runway is in use and how long your taxi will be. The briefing should include the following items:

- Runway to be used
- Type of takeoff (normal, short, soft)
- Go/No Go point
- Emergency procedures – engine failure
- Plan after takeoff
- Any special considerations – terrain, traffic, weather

Example: “This will be a normal takeoff from runway 30, the go/no go point is taxiway A. On the roll if there is any indication of not making full power or any system failure the take-off will be aborted. If we have an engine failure with runway remaining, we will come to a stop on the runway. If we have an engine failure without runway remaining and below circuit altitude, we will look for a landing area straight in front of us. After take-off we will have a left turnout to heading 270, climbing to 4500'. There are 2 aircraft in the circuit, one on downwind, one on base. Any questions?”

Lineup Checks

1. Flight Tracking

On the InReach, send a WHEELS UP message.

2. Wheels Up Time

Note the takeoff time.

3. Transponder

Should be set to ALT mode.

4. Lights

Landing light and strobe light should be turned ON.

CRUISE

Just like the taxi checks, the cruise checks are not actually on the checklist. However, in practice of good airmanship, the following items should be addressed once established in a cruise attitude. These checks should also be done at regular intervals throughout the cruise portion of the flight.

1. Power

An appropriate cruise power setting should be established. This will require looking into the POH, but generally speaking a power of 65-75% should be used. If heading to the practice area, use a 'normal' cruise setting, typically 2200-2400 RPM. The exact power setting will depend on the winds and your desired groundspeed. For example, when flying into wind, you may want to use a higher cruise power setting to increase your groundspeed. If departing on a cross country flight, set your planned power setting and adjust if needed.

2. Mixture

As mentioned earlier, when the mixture is full rich, an excessive amount of fuel is being used. While it has the benefit of providing cooling to the engine, full rich is not beneficial in cruise flight as it wastes fuel and can foul the spark plugs. The mixture should be leaned as per the POH guidelines. For both the C172 and C150, the mixture should only be leaned when operating below 75%. It is done by pulling the mixture back until the RPM peaks and begins falling. Then enrichen the mixture back to peak RPM. Proper leaning is critical when on cross-country or maximum endurance flights.

3. Carb Heat

While in cruise, periodic checks for carb ice should be performed. This is especially important in cool, high humidity conditions. Normally when the carb heat is pulled ON, the result is a small drop in RPM (around 100 RPM). However, if ice is present and the carb heat is pulled on, the

engine may run rough with a larger drop in RPM. In this case, leave the carb heat on to melt the ice. When the RPM increases and the engine is running smoothly, the ice has cleared. If this happens, it may be a good idea to increase the frequency of the carb heat checks, fly with carb heat on for the rest of the flight, or consider changing altitudes in search for drier conditions.

4. Engine Gauges

Verify that oil temperature and pressure gauges are in the green and stable.

5. Instruments

Check that the suction gauge is in the green and the attitude indicator is displaying correctly. Set the heading indicator to match the compass and keep your altimeter setting updated along the route of flight. Also, verify that the true airspeed correctly corresponds to power setting. Monitor Oil temperature and pressure occasionally to see if there are any fluctuations over the course of your flight.

6. Lights

Landing light can be turned off at this time. However, if the traffic is dense consider leaving the light on so other aircraft can see you more easily.

BEFORE LANDING

The purpose of these checks is to ensure the aircraft is safe and properly configured for landing. Typically, these checks will be done during the downwind leg of the circuit. However, they can also be done just prior to entering the circuit if joining via base or final.

| | |
|--------------------------|----------|
| BEFORE LANDING | |
| 1. Cabin ----- | SECURE |
| 2. Downwind Checks ----- | COMPLETE |

1. Cabin

Verify that any loose items are properly stowed, and that seatbelts, doors and windows are secured. If carrying passengers, ensure their seat is in the upright position.

2. Downwind Checks

Working across the cockpit from left to right, the following items should be checked.

- Primer – LOCKED
- Master – ON
- Mags – BOTH
- Circuit Breakers – SET
- Landing Light – ON
- Engine Gauges – GREEN
- Carb Heat – ON (hot)

Mixture – RICH

Fuel – ON (typically BOTH, but could be L or R depending on the situation)

Also included in the downwind checks should be a Landing Briefing, dictating to your instructor or examiner the landing to be performed. If carrying passengers, they do not need to hear a formal landing briefing. However, you should let them know you are about to land. The briefing should contain the following:

- Runway to be used
- Type of landing (normal, short, soft)
- Configuration (flap setting) and Vref
- Touchdown point
- GO/NO GO point
- Any special considerations (obstacles, traffic, wind)

Example: “This will be a short field landing on runway 12, using full flaps and a final approach speed of 55kt. Touchdown point will be the first stripe after the numbers, and will overshoot if not down by taxiway F. Wind is 150 @10kt, giving a right crosswind. Any questions?”

AFTER LANDING

These checks should be done once clear of the runway and across the hold short lines. The items on this check are self-explanatory as they have been previously discussed. Remember to obtain a taxi clearance (if necessary) before taxiing back to the apron.

AFTER LANDING

1. Flaps ----- UP
2. Carb Heat----- COLD
3. Lights -----OFF
4. Mixture -----LEAN
5. Transponder -----STBY
6. Time DOWN ----- NOTED
7. Flight Tracking ----- ARRIVED at DESTINATION

SHUTDOWN

Once you have reached the apron, find a suitable place to shut down. Make sure you are not blocking any other aircraft who are about to taxi out. As well, keep a good lookout for people, vehicles, etc. around the apron area.

SHUTDOWN

1. Avionics -----OFF
2. Magnetos ----- DEAD CHECK
3. Mixture ----- IDLE CUT-OFF
4. Magnetos -----OFF
5. Master -----OFF
6. Fuel Selector ----- LEFT
7. Flight Time Stop ----- NOTED
8. Aircraft -----SECURE

1. Avionics

At this point, the avionics are no longer required, and should be turned off prior to turning off the Master.

2. Magnetos

A magneto check is performed by turning both mags off momentarily and listening for the engine to stop firing. Then quickly turn both mags back on so the engine continues to run. The purpose of the check is to ensure that when the key is turned to off, the mags are actually off. That way if someone rotates the propeller (maintenance, ground crew, pilot doing a walkaround) there is a very low chance that the engine will fire. A broken p-lead on a magneto can cause the engine to run, even with the mags switched off and the key removed.

3. Mixture

The engine is turned off by pulling the mixture all the way back, therefore starving the engine of fuel.

4. Magnetos

Items 4-7 are self explanatory, however in the C150 the Fuel Selector should be left in the ON position. Though not on the checklist, the InReach should also be powered off at this time.

8. Aircraft Securing

After each flight, the aircraft must be secured by installing the control lock, pitot cover, and chocks. Additional items such as engine pre-heat, aircraft covers, and tie-downs may be required based on the weather and/or flight schedule.