Jan-Feb 2024

NEWS AND VIEWS

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Coming Events

- Next COPA 26 Meeting is Tuesday January 9, 2024. Details on Page 1.
- The next Pilot Decision Making (PDM) Zoom Workshop is Feb 7, 2024. To join, send an email to cykf.pilotworkshop@gmail.com.

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- Trimming Your Aircraft

HAPPY NEW YEAR!

Our COPA 26 January 9 Meeting is a must attend event!

Our speaker will be Melissa Swain, Unit Operations Specialist for Nav Canada, based at the Waterloo control tower.

Melissa will be briefing us on the new VFR checkpoint, departure and arrival procedures that have been introduced for the Region of Waterloo International Airport (CYKF).

This will be helpful to all pilots using KW airspace to ensure we understand the changes and help make the traffic flow to and from the airport both efficient and safer. All pilots from all backgrounds are encouraged to come out to hear about it!

See you all there.

Something to Ponder.....

- Where do you go when a group of clowns attacks you? Go for the juggler...
- I used to work for the circus as a human cannonball until they fired me....
- A guy walks into a bar and is immediately disqualified from the Limbo competition!
- Have you ever tried archery blindfolded? You don't know what you're missing....
- I bought a sweater the other day and it was full of static electricity, so I returned it. They gave me another one free of charge....
- A driver ran into a lamppost the other day fortunately he only sustained light injuries....
- My wife said I never listen to her... or something like that....
- I hired a handyman and gave him a To-Do list. He only finished items 1, 3, and 5. Turns out he only does odd jobs.....
- Apparently insurance companies are warning campers that if their tents are stolen at night, they won't be covered.....

VFR CIRCUIT ENTRY PROCEDURES AT UNCONTROLLED AIRPORTS: CANADA vs U.S.A

By Warren Cresswell

You've been invited to visit a relative living in Linden, Michigan – about 10 miles south of Flint (KFNT) and 36 miles north of Willow Run (KYIP). Your relative tells you that there is an airport called Prices Airport (9G2) located right at Linden and they will pick you up there.

Linden has one asphalt runway of dimensions 3,999' x 75'. As the crow flies from CYKF the distance is only 154nm. Of course, you will have to clear Customs, probably at Port Huron. But still, this is an almost perfect mission for your C-172. While both Flint and Willow Run have Control Towers, Linden sits between them and is an uncontrolled airport.

Because of its proximity to these airports and also nearby Detroit, there is a good chance of some traffic upon your arrival at Prices Airport. You've never flown into the U.S. to an uncontrolled airport, so it is time to crack the books and see what, if any, differences there are between circuit joining procedures at a U.S. uncontrolled airport as compared to Canadian procedures.

Canadian Procedures for VFR Circuit Entry at Uncontrolled Airports:

Refer to TP 11541 dated 06/2010) VFR Circuit Procedures at Uncontrolled Aerodromes (see Page 3).

At such uncontrolled airports there are two basic ways to join the circuit:

As long as no traffic conflict is perceived to exist, you may join straight-in on the downwind leg.

Otherwise, make an overhead circuit entry which involves flying to the dead-wind side of the circuit (cross overhead



to the dead-wind side at least 500' above circuit altitude, descend on the dead-wind side to circuit altitude, recross the field at midfield and join the downwind leg for the circuit). Be at circuit altitude crossing the field to join the circuit at midfield. This will maximize your chance of seeing and avoiding any conflicting traffic on the downwind.

If a Mandatory Frequency has been established other options are available:

- Straight-in on base leg
- 45-degree angle to the downwind leg
- Straight-in final

These other options are predicated upon the concept that all aircraft will be on the MF frequency and communicating with each other or the local or remoted ATS personnel who can pass traffic to other pilots in the airport environment.

An example is Muskoka Airport where Timmins Radio keeps track of and passes traffic to pilots entering and departing the Muskoka traffic area.

You determine whether the circuit pattern is left-hand (standard) or right-hand by examining the PRO section of the CFS entry for the airport in question. Airports with (non-standard) right-hand circuits will be listed in the PRO section. If there is no mention of circuit pattern in this section, it is a standard left-hand circuit.

U.S.A. Procedures for VFR Circuit Entry at Uncontrolled Airports:

Things are a little different in the U.S.A. A good reference in the FAA's AC90-66C Non-Towered Airport Flight Operations Document issued on June 6, 2023. Refer also to the U.S. Airman's Information Manual ("AIM") section 4-3-3.

Firstly, the FAA states that traffic pattern guidance (from them) is "advisory only." This, of course, means that pilots may join the circuit in any way they wish, and visiting Canadian pilots should be ultra-cautious when joining VFR circuits at American uncontrolled airports. Be especially careful about other pilots flying long, straight-in circuits.

Despite not regulating circuit entry procedures, the FAA does specify RECOMMENDED procedures for joining a VFR circuit at an uncontrolled airport. These are described below. Since most U.S. pilots at these airports probably follow the recommended procedures, those procedures are what those pilots are expecting and looking for as they join the VFR circuit. Visiting Canadian pilots will benefit and have a safer operation if those same recommended procedures are followed.

1. The preferred method of entry is to join the downwind leg at a 45-degree angle, joining the circuit at about midfield of the downwind leg and joining at circuit altitude. Pilots should maneuver outside of the circuit pattern to position themselves for this 45-degree entry to the downwind. Such maneuvering should be done at a distance of at least 2nm from the airport

and maybe a little more to give a bigger margin of safety. As well, it makes sense to maneuver at an altitude of at least 500' above circuit altitude, and again, may a little higher if turboprop traffic is present. Standard traffic pattern altitude ("TPA") is 1,000' feet above airport elevation unless otherwise specified. However, turboprop TPA is often higher than 1,000 feet so adding an altitude margin above the 500' above pattern altitude is prudent. Having said that, when it comes to the point where you will join the downwind, on the 45-degree angle, at midfield and turn downwind, you should already have descended to circuit altitude to give yourself the best chance of seeing any traffic coming downwind.

- 2. Depending on the direction of flight to the airport it may be necessary to overfly the field to get to the dead-wind side, then make a course reversal to come back overhead the field to join the circuit on the active side. When flying from the active side to get to the dead-wind side, fly at least 500' above circuit altitude, and maybe a little more if turboprops are noted in the vicinity. After the turnaround, and as you are flying back towards the field from the dead-wind side and heading for the active side, there are two options one is preferred and other is not recommended if there is a lot of traffic in the pattern:
 - A) The preferred method is to fly overhead the field from the dead-wind side maintaining an altitude of at least 500' above circuit altitude on a heading which is approximately 90-degrees to the intended runway AND CONTINUE ON THIS HEADING FOR AT LEAST TWO MILES (a bit more if you want more buffer) PUTTING YOU SAFELY OUTSIDE THE CIRCUIT PATTERN. Now, make a turn to fly UPWIND, parallel to but outside the downwind leg. Continue to proceed upwind until you have room to make a teardrop turn back towards the downwind leg, putting you on track to cut the downwind leg at about 45 degrees. Prior to actually joining the downwind, be sure to descend to pattern altitude to give yourself the best chance to see and avoid any traffic coming from further back along downwind leg. With no traffic conflict, join the downwind leg on the 45-degree angle and continue following the pattern to make your landing. Think of this whole procedure as a reverse teardrop entry that sets you up to make the recommended 45-degree angle to join the downwind at around midfield. From when you pass overhead the field for the second time and enter the active side, you will be making a 225-degree turn to put yourself on the 45-degree angle to the downwind.

This preferred method is different than the Canadian overhead procedure in two ways:

In Canada we cross the field at circuit altitude, not 500+ feet above AND we join the circuit by turning downwind, not upwind as is called for in the U.S preferred teardrop method.

B) Alternate Method: The alternate method is NOT recommended by the FAA when there is a lot of traffic in the pattern because the implied risk of a midair collision is higher. The alternate method is the same as the overhead method we use in Canada. First fly overhead the field at an altitude of at least 500' to get from the active side to the deadwind side. Once on the dead-wind side, make a descending turnaround and aim back towards midfield of the intended runway. Get down to circuit altitude prior to recrossing the intended runway and entering the active side of the pattern. From overhead the field

fly a heading of about 90-degrees to the intended runway, join the circuit at the middownwind leg and continue following the pattern to make your landing.

3. What About Straight-Ins?

Remember that the FAA does not regulate traffic pattern entry and its guidance is advisory only. Therefore, a straight-in approach is not prohibited. This is especially true for IFR aircraft inbound on Visual Approaches. Therefore, the FAA cautions pilots flying a standard pattern to keep a close watch when turning base to final for conflicting straight-in traffic.

Note: AC 90-66C says that pilots who choose to execute a straight-in approach, that such maneuvering for and execution of the approach should NOT disrupt the flow of arriving and departing traffic.

4. Which Countries Rules Apply?

While in flight in international airspace (eg. Canadian registration flying in USA), the laws of the country of registration of the aircraft apply. However, if an incident/accident occurs, related to safety, the laws of the destination country (USA in this example) will apply. In addition, if the aircraft is within a country's airspace (eg. Canadian registration in U.S. airspace) then that country can impose its laws in certain situations. All of this is to say that when flying your Canadian registered aircraft in the U.S. it is prudent to follow FAA rules and recommendations for preferred methods. Not only does this make sense from a regulatory viewpoint but those preferred methods are what American pilots expect and are themselves looking for as they see and avoid during their own circuit joining maneuvering. So when joining the VFR circuit at an uncontrolled airport in the U.S. it is best to follow the preferred methods of:

- 45-degree angle to the downwind OR
- The preferred overhead method involving the UPWIND teardrop turn which puts you in position to join the downwind using a 45-degree angle.
- 5. Where can you find out information about the direction of circuit patterns for U.S. runways? There are several possible sources:
- Chart Supplement (U.S. equivalent of the Canadian CFS) In the Runway section, runways with (non-standard) right-hand circuits will be noted. You can purchase these books or, if you have a Foreflight or Garmin Pilot subscription they are included.
- In addition to the Chart Supplements provided, Foreflight and Garmin Pilot data for runways will highlight right traffic where applicable.





US VFR Circuit Procedure at Uncontrolled Airport



US VFR Circuit Procedure at Uncontrolled Airport

- Other aviation websites also provide information on the circuit pattern direction when (non-standard) right hand traffic is applicable

Eg. Airnav.com Eg. aopa.org

- Right-hand patterns are noted at airports on an aeronautical chart with an "RP" designator and the applicable runway next to the airport symbol. Eg. KMDQ Huntsville Executive (Alabama) Rwy 36- VNC chart indicates: RP 36.



US VFR Circuit Procedure at Uncontrolled Airport

Renewing Your Aviation Document Booklet

If you are planning to renew your aviation document booklet (ADB), here are the steps to follow:

- To renew an expiring ADB, applicants are required to submit a completed Application for an Aviation Document Booklet form (TP-26-0726) and a passport style photograph to the TCCA regional office that holds their pilot licensing file. Form TP-26-0726 can be found on the Transport Canada ADB renewal website, downloaded, and printed. Make sure to fill out the form carefully following all instructions (remember this is a government operation.....) and if you are renewing your ADB, be sure to check the proper box (Renewal) on the form. Complete instructions are provided with the downloaded application form.
- Transport Canada requires at least 4-6 weeks to process a completed application. Applicants should submit their applications prior to 90 days of the expiry date. There is no fee for renewal of your ADB however you will need to purchase a passport style photo at select drugstores, to complete the application.
- Transport Canada is in the process of updating the look and design of the new booklets. For this and other reasons, the application review time may be considerably longer than the stated 4-6 weeks. COPA National and Transport Canada have more recently provided guidance about this for example, for my (Geoff Gartshore) ADB which expires in January 2024, it will remain valid until August 2024 during this transition period. I submitted my renewal application on September 28, 2023 and have not received my new booklet yet at the time of writing. Readers should check the status of their own ADB expiry dates against Transport Canada deadlines to see what applies in each case.

Hopefully the process will go smoothly for everyone as this new ADB system gets going

Avoiding Go-Around Problems (Source: Pilot Workshops with Wally Moran)

Subscriber question:

"I bought my Cirrus SR22 a year ago and went through the factory training. Yesterday, I went around from the flare when I thought I saw an airplane about to enter the runway. It didn't—but I was shocked how much forward pressure and right rudder it took to keep control. I don't remember it being so hard in training. Any clue what happened there?" — Gary T.

Wally Moran:

"A go-around during the flare or a rejected landing can be a difficult maneuver. Slow airspeed and high power creates the greatest amount of left-turning tendencies. Further, adding the power causes a pitching up moment which if not corrected can cause the nose to rise quickly and the aircraft could stall. Both of these things need to be corrected promptly. This is why it is so important to include training on these maneuvers into initial and recurrent training. We want to know our skills are sharp in this area so we will never be reluctant to go around if necessary.

First the pitch up. Since the airplane is normally trimmed for the proper approach speed and at low power, when we add full power the nose will pitch up significantly. We need to be prepared to counter this with forward elevator. If you add the power smoothly while watching the nose in relation to the horizon by looking out at the 10:30 to 11:00 position of the windscreen, you can keep that nose from climbing more than it should. Then you can begin to get the aircraft slowly back in trim. Follow your POH regarding clean up, but be careful not to move flaps or gear until you have good control of the aircraft and then only one thing at a time and re-trim between steps.

Some pilots trim nose up during the flare. Doing this will complicate the out-of-trim condition if a goaround is required.

Now for the left-turning problems. As you mention, these are at their worst at this time because of the high nose attitude. P-factor is at its greatest. So we need to anticipate a need for lots of right rudder as we are adding power. Again you will have to watch out the left side of the engine cowling and keep that cowling aligned with the left side of the runway. Another clue to proper rudder control is to check the ailerons. If you are holding a lot of right aileron, you need more right rudder.

When executing a rejected landing there is no reason to add the power quickly, usually just a little power and a slight pitch up will keep you in the air. So add the power positively but only at a rate that allows you to maintain control of the aircraft."

Trimming Your Aircraft (Source: Pilot Workshops with Wally Moran)

"My instructors always told me to 'trim off the control pressures,' but no matter how much I try, I feel like I never get the airplane perfectly in trim. What am I doing wrong?" — Joe P.



Wally Moran:

"Early in our flight training, most us learned a simple mantra for using trim: Pitch ... Power ... Configuration ... Trim.

If you change pitch, power, or configuration, you affect airspeed (actually you affect AoA) and you need to adjust the elevator trim — eventually.

Unfortunately, we're often too quick to reach for the trim. If you trim before the airplane has settled at a new constant airspeed, you just need to trim again later. You end up making frequent, small adjustments and the airplane is never properly trimmed.

Here is a simple fix: When you change pitch, power, or configuration, wait at least five seconds before you touch the elevator trim. If it helps, verbally or silently count to five (or even ten), and only then reach for the trim.

The key to using trim correctly is remembering that elevator trim is a secondary flight control, adjusted to relieve control pressures after the airplane has stabilized. Unless the change is temporary, such as when you make a small pitch change to recapture cruise altitude after updating the altimeter setting. In that case, you quickly return to the previously trimmed steady state.

The five-second rule might not always apply. For example, suppose you have trimmed the airplane at or near idle power with full flaps on final approach. The trim is set far into the nose-up range. If you add full power for a go-around, you must push forward on the yoke or stick to keep the nose from rising abruptly.

In this situation, it's helpful give the trim a quick nose-down swipe immediately after you add power to help manage the force required to hold the nose at the correct go-around attitude. You can fine-tune the trim after the airplane is climbing safely away from the runway and you have established the pitch attitude and configuration for a stable climb speed."

Have a Safe Winter of Flying!

Next Issue: Collision Avoidance