

The one where we were in the downwind underneath another glider

About This Report

aircraft

Abbreviation	Aircraft	Pilot(s)	Colour	ASL on ground
YJ	ASK 21	Reg Braithwaite & Greg Zak	Blue	722'
W2	Mosquito	Chris Wilson	Red	784'

igc files

Aircraft	IGC
Yankee Juliette	 2924-09-16-reg-braithwaite-and-greg-zak.igc
Whiskey Two	 2024-09-16-whiskey-two-chris-wilson.igc

altitudes

Altitudes AGL for Yankee Juliette are extracted from the `.igc` file downloaded from the ASK 21's FLARM. When reviewed in a `.igc` file visualizer, that `.igc` file reports the airfield at altitude 722' AGL.

Therefore, altitudes AGL for Yankee Juliette in this timeline are determined by taking the altitude ASL reported in Yankee Juliette's `.igc` file and subtracting 722'.

Altitudes AGL for Whiskey Two are extracted from the `.igc` file provided to Reginald Braithwaite by Chris Wilson. When reviewed in a `.igc` file visualizer, that `.igc` file reports the airfield at altitude 784' AGL.

Therefore, altitudes AGL for Whiskey Two in this timeline are determined by taking the altitude ASL reported in the `.igc` file and subtracting 784'.

Nota Bene: If the altitudes reported for Yankee Juliette and Whiskey Two in the air are not relative to the altitudes reported for the aircraft on the ground, the altitudes reported in

this document will be incorrect.

dates and times

The flights took place 2024-9-16. The events recounted took place between 17:12:51 and 17:18:29.

Bottom Line Up Front ("BLUF")

Two gliders:

1. Yankee Juliette ("YJ"), an ASK 21 piloted by Reg Braithwaite with Greg Zak in the back seat, and;
2. Whiskey Two ("W2"), a Mosquito piloted by Chris Wilson.

...Encountered each other twice when landing on runway 21. Initially, they appeared to be heading towards each other near the high key, and Yankee Juliette performed an evasive maneuver. Yankee Juliette then encountered sink and chose to join the downwind but perform an abbreviated circuit. The Mosquito also joined the downwind, and the two gliders came into close proximity again, this time on the downwind leg.

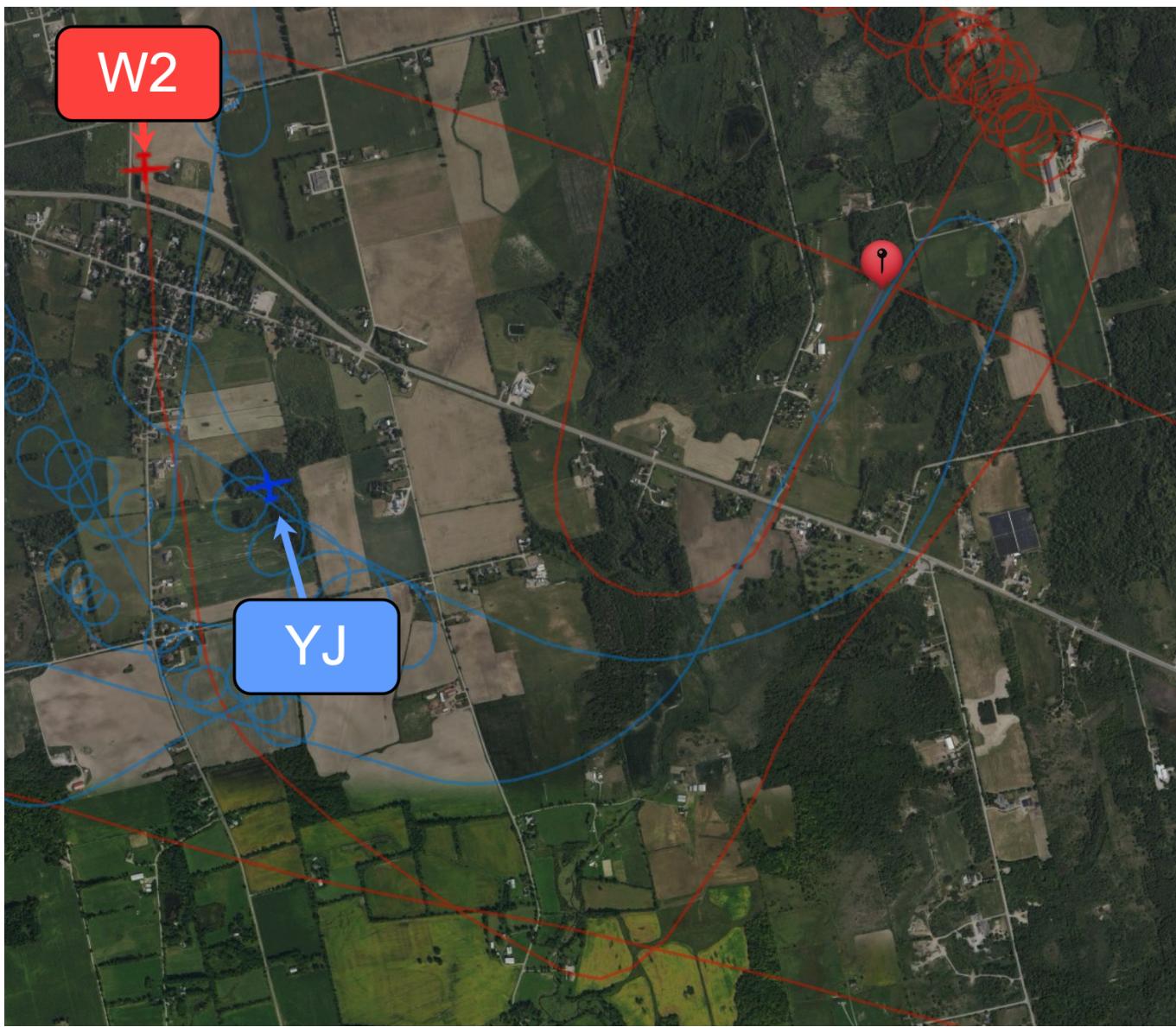
Yankee Juliette executed an abbreviated landing, creating separation from Whiskey Two by: flying tight to the runway; executing a 180° turn rather than flying a base leg; and landing long. Yankee Juliette came to a rest off the runway near the intersections between runways 21 and 10.

Whiskey Two executed a normal landing pattern with a deeper than usual base leg, creating separation from Yankee Juliette. Whiskey Two landed normally and came to a rest off the runway between the two hangers.

Timeline

first contact

Time	YJ AGL	W2 AGL	Separation
17:12:51	1,126'	1,372'	246'



Yankee Juliette is circling near the high key, intending to burn off some height before making a normal landing circuit. Whiskey Two spots another ASK 21 (not Yankee Juliette) circling near the high key.

Meanwhile, Yankee Juliette spots Whiskey Two, and—misjudging the separation and having suffered an earlier close call in the same flight—turns to the right of Whiskey Two and descends to avoid conflict.

cutting it short

Time	YJ AGL	W2 AGL	Separation
17:13:44	935'	1,286'	351'

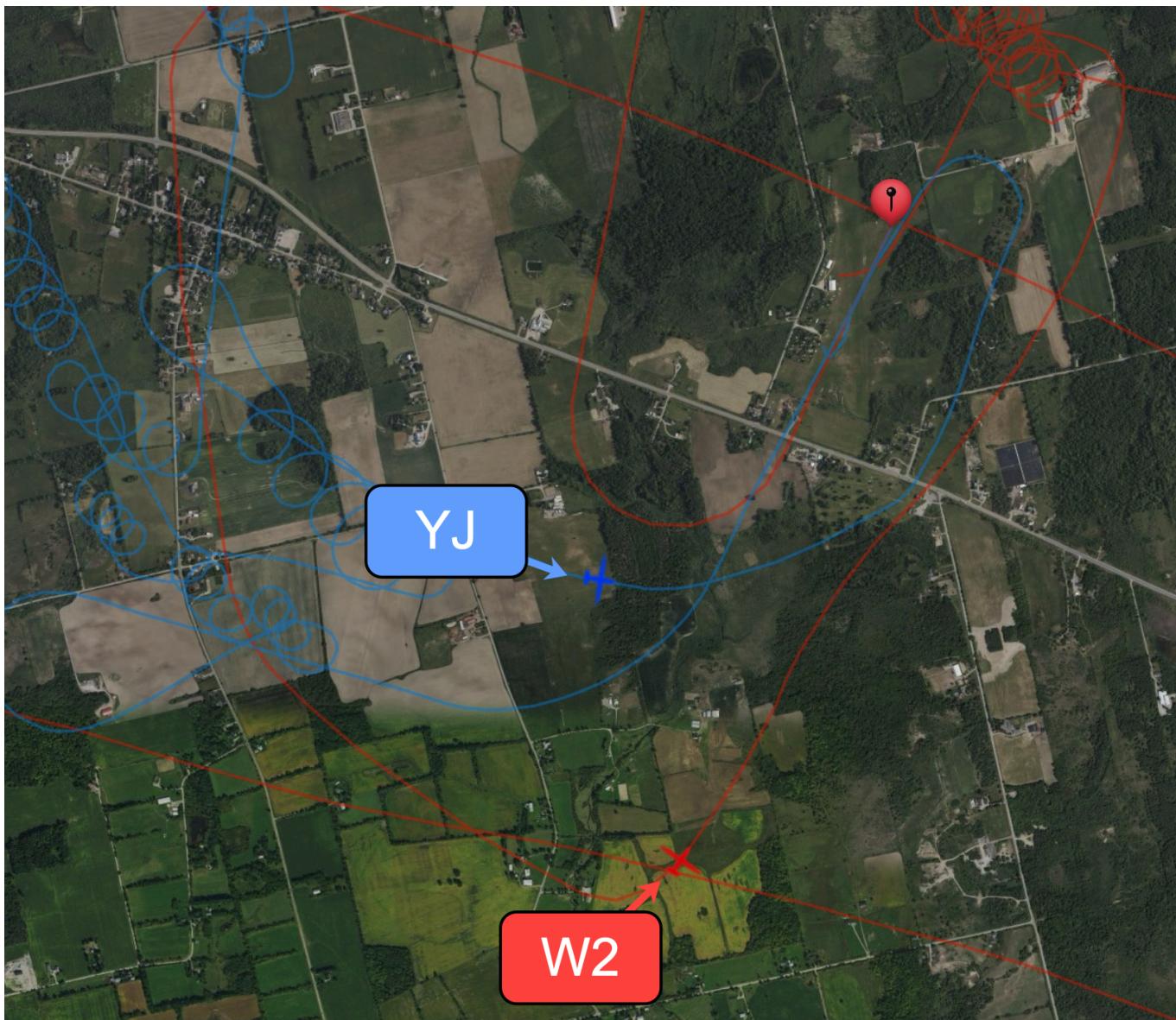


Yankee Juliette turns 180° to the left to resume travelling to the High Key. Yankee Juliette is now behind and beneath Whiskey Two, so Whiskey Two is unaware of Yankee Juliette's presence.

Yankee Juliette it is not in the High Key, but is close to the height a glider would normally leave the High Key to begin the downwind leg. Reg Braithwaite and Greg Zak review the situation and decide to head to the downwind leg directly.

that sinking feeling

Time	YJ AGL	W2 AGL	Separation
17:15:10	633'	991'	358'



Both Whiskey Two and Yankee Juliette encounter sink, both lose about 300' in less than 90 seconds. In Yankee Juliette, Reg Braithwaite and Greg Zak review the situation, realize that they are now very low, and choose the option of an abbreviated circuit. Around this time they spot Whiskey Two above them in the high key.

Reg Braithwaite makes his traffic call at 17:14:31, and says that Yankee Juliette is number one in the circuit:

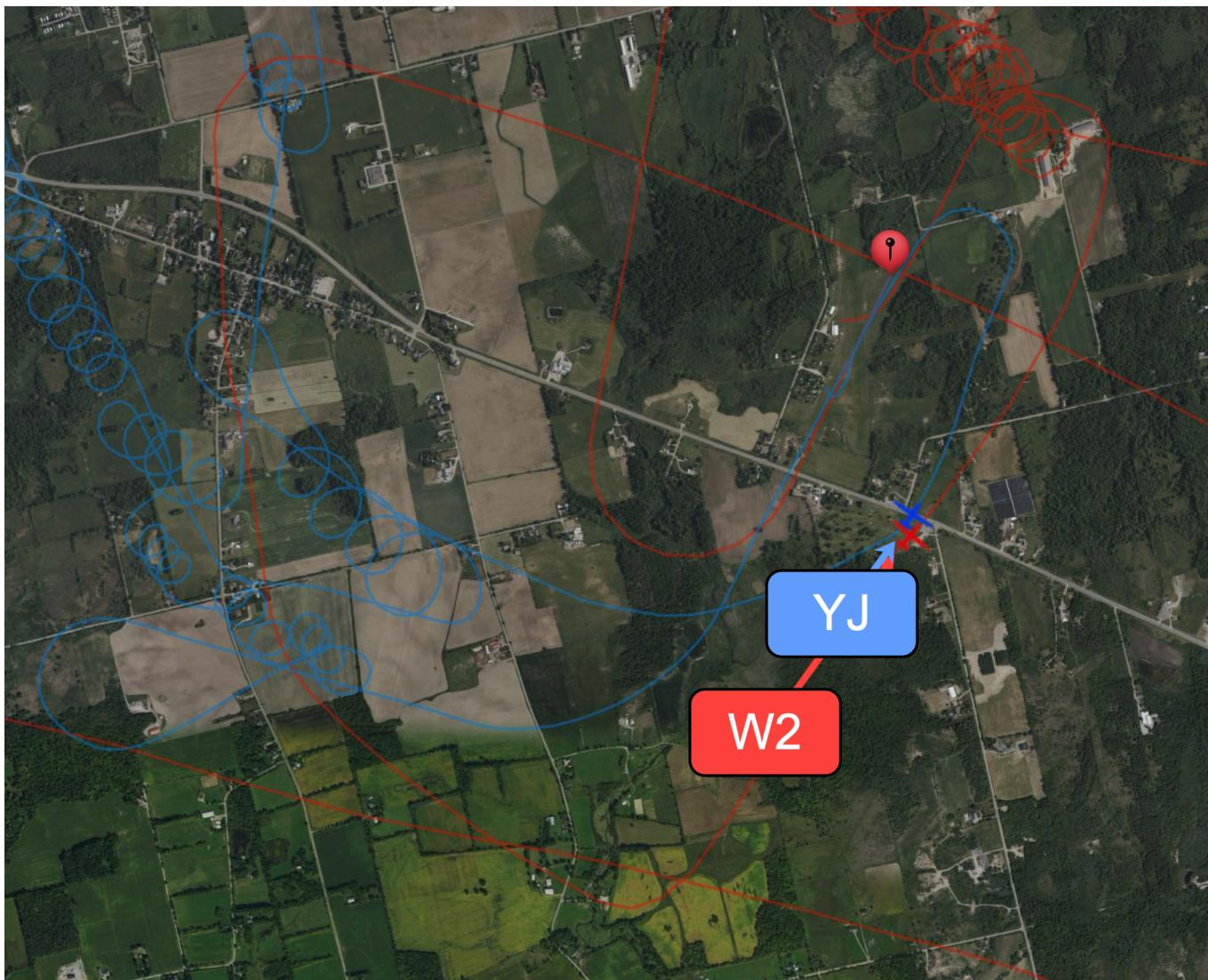
▶ 0:00 / 0:10 ━━━━ 🔊 ⋮

Chris Wilson does not hear Yankee Juliette's call, and makes his own call at 17:15:36:

▶ 0:00 / 0:04 ━━━━ 🔊 ⋮

numbers one and two stacked on downwind

Time	YJ AGL	W2 AGL	Separation
17:16:00	426'	637'	211'



Both gliders are now on downwind simultaneously. Chris Wilson cannot see Yankee Juliette and does not know it is beneath Whiskey Two. In Yankee Juliette, Reg Braithwaite and Greg Zak are aware that Whiskey Two is above and possibly a little behind them. They do not know its altitude.

Around about 17:15:56, Dan Aberg radios that two gliders have entered the downwind together:



0:00 / 0:08



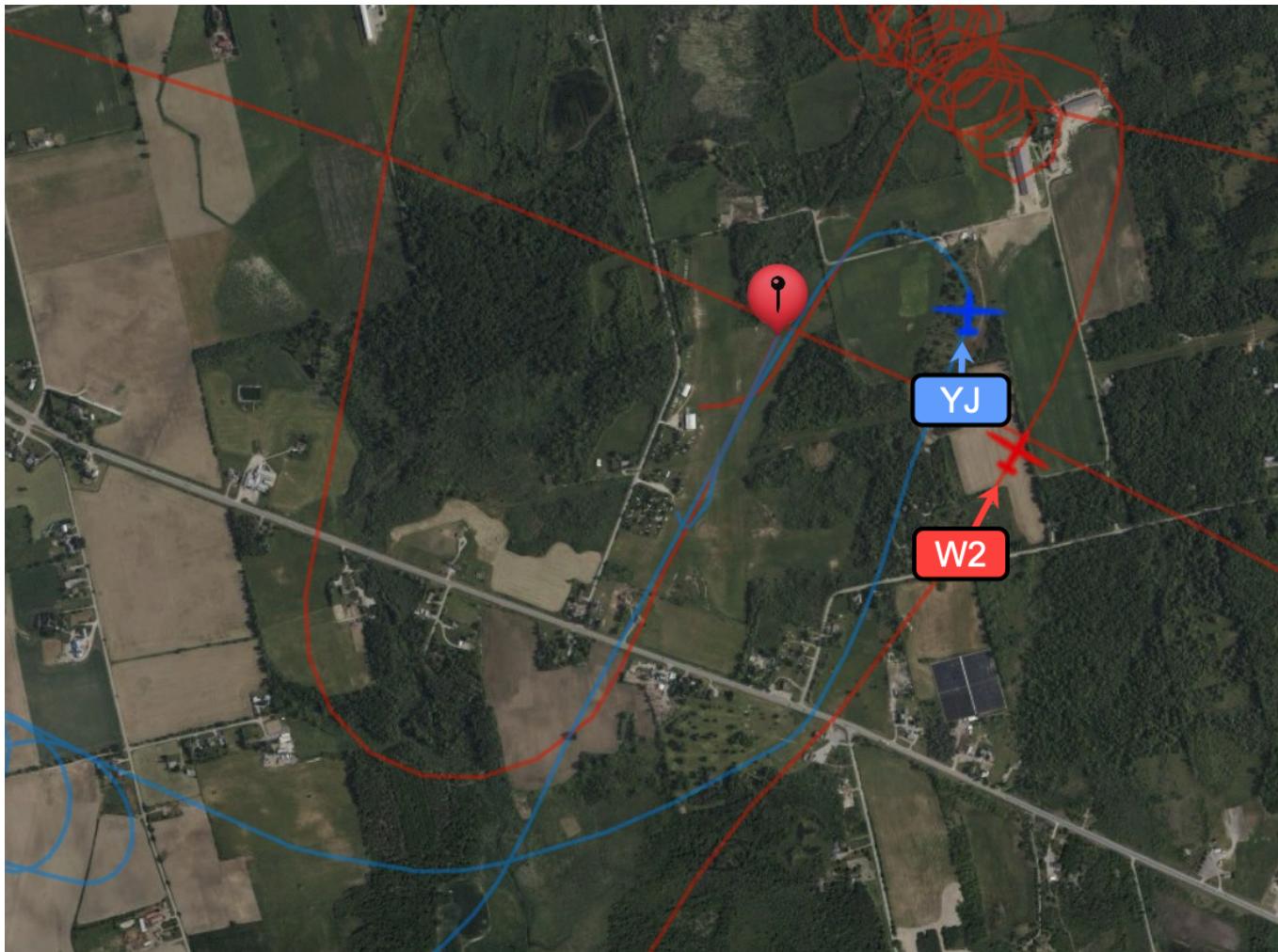
Chris Wilson hears this and asks for more information:

Meanwhile, Yankee Juliette is low for the pattern at 426' AGL. Reg Braithwaite makes another call to Rockton Traffic and reiterates that Yankee Juliette is number one in the circuit and will land long. Whiskey Two does not hear this radio call.

After a brief discussion of the situation and options, Reg Braithwaite flies tighter to the runway. Reg Braithwaite judges the circuit by look-down angle, and he is reassured by the angle of the runway to the glider that Yankee Juliette will be able to safely make an abbreviated circuit.

number one skips the base leg

Time	YJ AGL	W2 AGL	Separation
17:16:38	338'	663'	305'

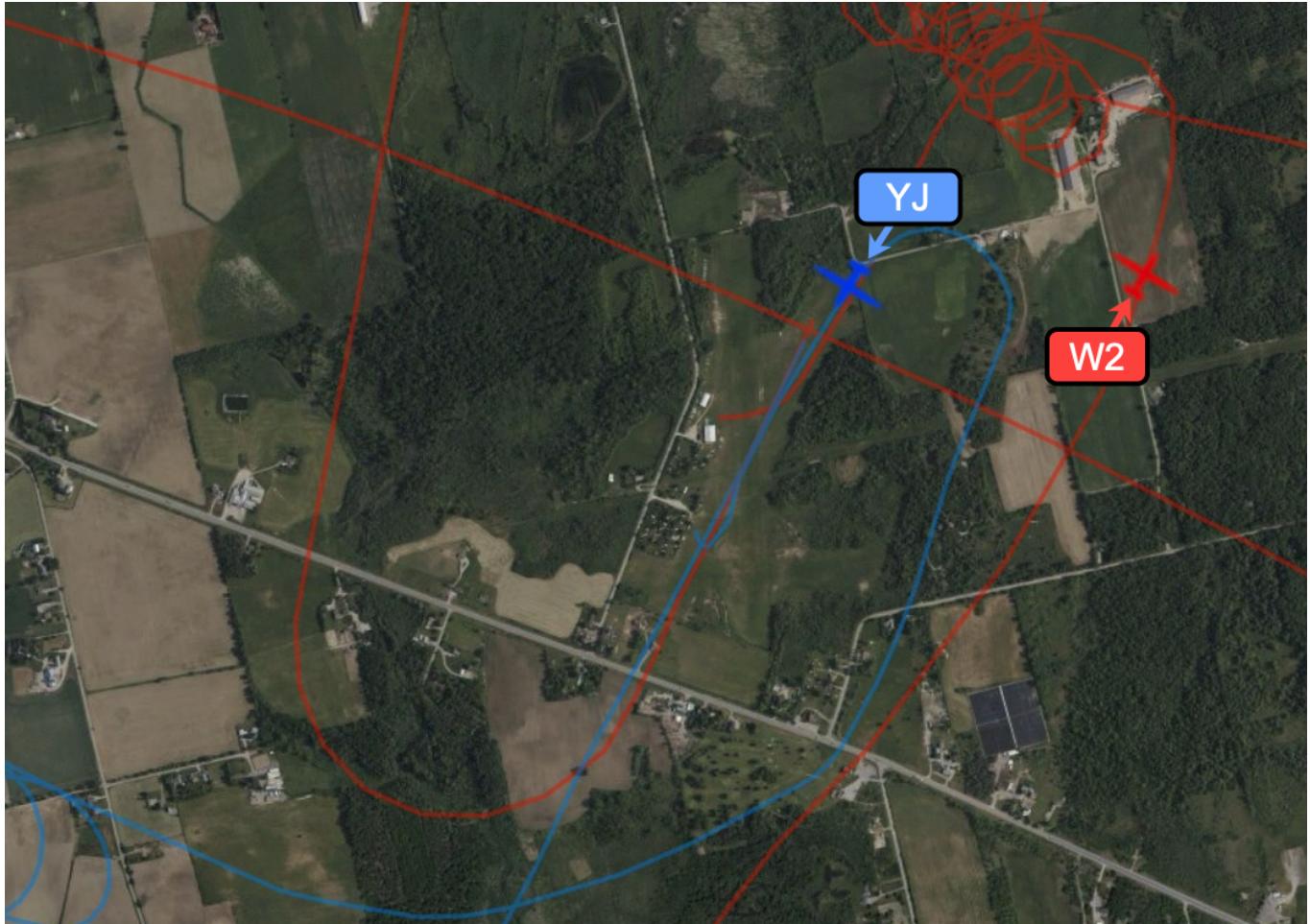


Yankee Juliette initiates a left-hand 180 degree turn to final from the downwind, skipping a base leg. Whiskey Two has angled away from the runway and—having been advised of the conflict

by a call from Dan Aberg—is on their way to a deeper base.

number one on final

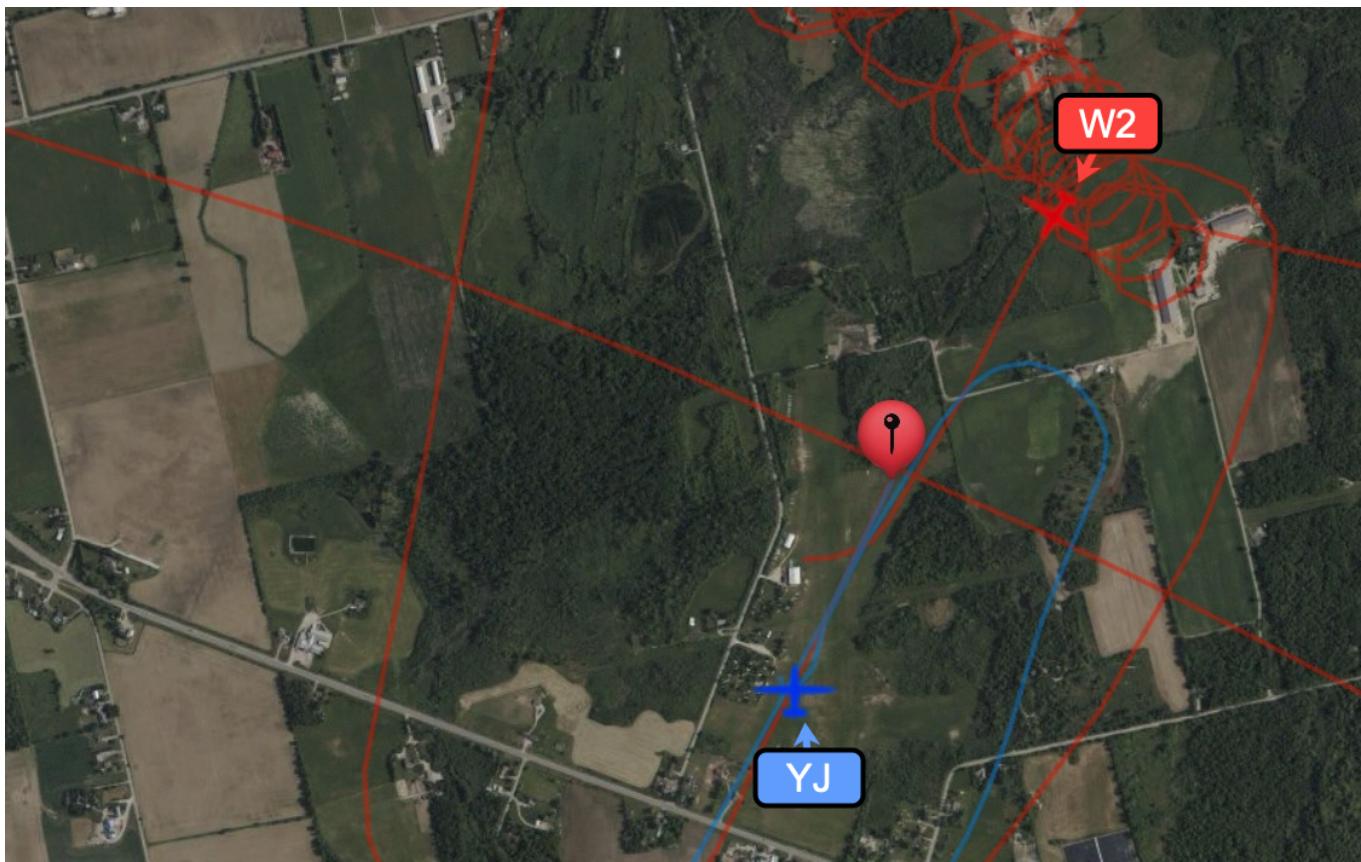
Time	YJ AGL	W2 AGL	Separation
17:16:57	213'	568'	355'



Yankee Juliette arrives on abbreviated final over the end of the runway at 213', while Whiskey Two prepares to make the turn to base at about 568' AGL.

landing long and number two on final

Time	YJ AGL	W2 AGL	Separation
17:17:37	—	315'	—



Yankee Juliette lands long, coming to a rest off the runway at the intersection of runways 21 and 10 while Whiskey Two arrives on final.

both down safely

Time	YJ AGL	W2 AGL	Separation
17:18:22	—	—	—



Whiskey Two makes a normal landing, coming to a rest off the runway near the hangers and trailers for private owners.

Post-Flight Discussions

Several things were informally discussed when reviewing the flight and preparing this report:

- Several calls were made but not heard by other pilots. Was there a problem with Yankee Juliette's radio and/or front microphone? In the first audio clip, Reg Braithwaite's voice is faint. In another clip, his voice can be heard faintly while being spoken over by another pilot. Yankee Juliette also did not hear calls made by other pilots.
- The choice to take evasive action and then circle back placed Yankee Juliette behind and below Whiskey Two.
- Yankee Juliette was aware of Whiskey Two and tried to use the radio to deconflict. When there was no response, were there lower-risk options for deconflicting such as using a different runway or making the 180° turn mid-runway?