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AGENDA

- 0930 0935 Welcome
- 0930 0940 Moving Aircraft
- 0940 1000 Spin Avoidance
- 1000 1030 Circuits
- 1030 1045 Morning Tea
- 1045 1115 Radio Quiz
- 1115 1130 Waypoints
- 1130 1145 Collision Avoidance
- 1145 1200 Club Tasks
- 1200 Lunch



Ground Handling

- Last Weekend the DG1001 was damaged when it was being towed to the launch point.
- The left wing tip sustained significant damage.
- Towing to the Launch Point, I observed the Towplane facing the fence.
- I proceeded to tow down, as the launch was not ready to go.
- I was debating whether to go around the towplane and glider.
- The Towplane then taxied to the normal launch position.
- I was already close to the fence.
- I observed the launch taking place.

The left wingstruck the Caravan Awning resulting in the winglet being damaged



Ground Handling

What Should I have done differently.

- 1. Stopped.
- 2. Waited for direction from the Duty Pilot.
- 3. On Instruction from the Duty Pilot to tow around in front of the Tow Plane
- 4. On Instruction from the Duty Pilot wait while they launched the glider.



Ground Handling

When Towing Gliders down to the 28 launch point.

- At the hangers Check for a launch getting ready to go.
- If Launch about to launch.
- Wait until launch has gone.
- Tow down and go around any gridded gliders.
- If a launch gets ready to go while towing down
 - Do not stop, get down and go around the gridded gliders.
 - Do not try to go between the gridded gliders and any parked obstacle.





SPIN Avoidance



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PRIMARY SPIN ACCIDENT CAUSES

Distraction
Other priorities
Didn't recognize early symptoms
Turbulence (sometimes)
Got into a difficult situation close to the ground

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BÁRRIERS TO SPIN TRAINING

- FEAR
- GETTING STUDENTS TO GET A GLIDER INTO A SPIN IS DIFFICULT.
- NOT RECOGNISING THE ONSET OR RISK FACTORS
- RECOVERY STILL NOT INSTINCTIVE
- TRAINING ENDS AND NO PRESSURE TO EVER DO IT AGAIN UNTIL BIENNIAL BFR

SOLUTION

- PRACTICE (ESPECIALLY WING DROPS) UNTIL IT IS INSTINCTIVE
- EDUCATE ON SITUATIONS THAT PRESENT A HAZARD
- ENCOURAGE EXPERIENCED PILOTS TO PRACTICE

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JO	2008
PW	2009
HI	2009
VG	2009
КО	2010
DF	<u>2012</u>
PE	2016
ZV	2016
тн	2016
<mark>XG</mark>	2017
ZP	<u>2022</u>

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Radio distraction Pilot unfamiliar with Waikato terrain No paddock landing selection training

OUTCOME Paddock landing presentation at X/C course





ASW20F

- In a turbulent thermal just after launch. Spin from 800ft agl didn't fully recover.
- Bit over 200hrs experience 83hrs on type.

Conclusions

- Possibly startled by rapid entry into spin
- Did not use flap to negative to recover





Discus 2c Experienced pilot Contest flying after a Mountain Flying course Spun turning close to terrain.

Conclusions Age, fatigue, turbulent mountain air, turning too close to the hill.





Discus b Winch launch. Stall and spun on rotation

Conclusions

Crosswind, half water ballast, wing runner did not balance the water ballast. Pilot did not release quick enough when the wing touched the ground.



WINCH LAUNCHING

- Low-level turning is part of winch launch emergencies
- Landing ahead is not always an option.
- Optical illusion of speed when close to the ground
- Only turn "downwind" if you are turning from a low level emergency.



SOME PERSONAL REFLECTIONS

- Big wingspan gliders may be impossible to recover from a spin.
- Fatigue, turbulent air, goal fixation, distraction.
- Experience, knowledge, and lack of previous accidents do not make you immune





LET'S TALK ABOUT OUR CIRCUIT

Think Situational Awareness





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CAA Message

Large number of near collision incident reports in the circuit at unattended aerodromes.

Key Factors – Lack of:

- Situational Awareness
- Communication
- Standard flight paths



LEARNINGS FROM FATAL CIRCUIT COLLISIONS Three accidents since 2017 which killed 8 pilots

- Common factors:
- At pilot's home airfield
- Good weather
- Experienced pilots, in two cases instruction flights
- One or more aircraft were manoeuvring

CAA program aimed at improving culture so that pilots do the right thing when no-one is looking, and;
 Circuit flying is predictable and understood by all pilots

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Recent near miss incident reports around Matamata

2023

Three near miss incidents between gliders tow planes and light aircraft in the circuit

August 2024 Near miss between landing glider and light aircraft doing touch and go in opposite direction

September 2024 Near miss between glider and light aircraft joining the circuit

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There is a high potential of a mid-air accident in our circuit!

Mix of aircraft types all aiming for, or leaving the same piece of ground

Mix of pilot expectations and skills

Pilot's concentration is fixed on landing with reduced attention to **Situational Awareness**













LET'S LOOK AT THE RULES







1. Circuit Direction: RWYs 04, 28 — Left hand RWYs 10, 22 — Right hand

- 2. A private aerodrome located approx 0.5 NM north of RWY 10 threshold necessitates extra care when operating on RWYs 10, 22 and 04.
- 3. Enroute traffic should avoid flying through Matamata MBZ due to the presence of parachute and gliding operations.
- All pilots should avoid using the overhead join procedure at Matamata aerodrome due to parachute and gliding operations.
- 5. RWY 04/22 may be closed for grass harvest. White crosses displayed will indicate RWY closure.
- When RWY 04/22 is in use, model aircraft operations may close RWY 10/28 and be conducted within "Waharoa" — modellers will activate only one model flying area at a time.
- 7. Intensive sporting activities take place, particularly during weekends.
- Glider Winch Launching: There will be a white "W" displayed on the threshold of the active vector when the winch is in use. Refer to Matamata Winch Launching Chart. Glider chat frequency outside of the MBZ is 133.55 MHz.

S 37 44 04 E 175 44 31

(continued)

Effective: 12 AUG 21

© Civil Aviation Authority

MATAMATA AERODROME (1)

Figure AD 1.6-1A **Aerodrome Traffic Circuit** Downwind Lea Base Crosswind Leg Leg Fina Upwind Leg Leg |-5-1A AD

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RULE: Inside ~2Nm below 1,500 AGL all traffic must follow this basic pattern

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Required standard join procedure. But, NZMA AIP plate says joining traffic should avoid the overhead.

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This is most common way gliders will join



NZMA CIRCUIT

Expect other traffic of all types to be in the circuit.

Look and listen out for other aircraft.

Plan to follow the correct circuit direction. **DO NOT** fly the wrong way along the downwind leg.

If, for safety reason (unexpected loss of height), you must fly a non-standard then make sure you advise other traffic that you're '*Non standard'* and keep an especially good lookout.

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MATAMATA AIRFIELD RUNWAY 10-28 GLIDER CIRCUIT AREA

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From training manual







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2831 m

Typical couple of hours on gliding day

Matamata Airport

Matamata Airport (Start) Matamata Airport (End) Matamata Airport

> Image © 2015 CNES / Astrium Image Matamata-Piako District Council © 2015 Google Image © 2015 DigitalGlobe

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BEST JOINING FLIGHT PATH PROVIDED HEIGHT PERMITS

SECOND BEST IF HEIGHT DOES NOT PERMIT THE BEST OPTION

JOINING FROM THE RIDGE

Welfelder USE THIS APPROACH ONLY IF HEIGHT LOSS CREATES UNSAFE POSITION. DO NOT PLAN TO JOIN NON-STANDARD UNLESS ABSOLUTELY NECESSARY.

Mowbray Rd-


Incorrect circuit joining by gliders







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WHAT'S MOST IMPORTANT WHEN JOINING

1 – Lookout, 2 – Lookout, 3 - Lookout

4 -Listen for radio calls

5 - Make correct radio calls

All to build - Situational Awareness

6 – Plan your circuit





LISTEN

- Listen for radio calls before entering the MBZ and build a mental picture of where other aircraft are and what they're doing.
- Often you may miss the other callsign but pick up their height and intentions. Use that to fill in gaps in your understanding.
- Listen to this. What is the position of these two aircraft?





MAKING RADIO CALLS

- Position boom mic **close** to your mouth
- Know how to use your radio frequency, volume, squelch







CIRCUIT RADIO CALLS

Correct radio calls are very important:

- Other pilots are relying on what you say
- Give accurate position

Don't say "*joining downwind*" if you're already flying downwind. Say "*downwind*" when passing downwind vector threshold.

 If you have to fly a non-standard circuit – make sure your calls say so and are understood by all other circuit traffic



SUMMARY

- Make you join and circuit **predictable** by other pilots.
- We are constantly assessing our situation and making decisions. Close to the ground primary concentration is on a safe landing.
- That primary thinking often dominates and blanks out other stuff → LOOKOUT and communication deteriorates
- Before joining and during the circuit we **MUST** be thinking **SITUATIONAL AWARENESS**





Radio

www.Kahoot.it

<u>Quiz</u>



Ridge Waypoints

www.Kahoot.it

Quiz

- •Kaimai Road
- •Golfball
- •<u>Waterfall</u>
- •<u>Tunnel</u>

•<u>High Point (although mostly used for the whole of that high area rather than as the specific highest point.</u> Sometimes clarified as being at the North or South end of the High Point)

- Thompson's Track not used a lot and a bit vague wrt location
- •<u>Maori Lady</u>
- •<u>Te Aroha</u>
- •Pig Farm
- •Paeroa Gap/Ohinemuri gap



Club tasks



Collision Avoidance Flarm Alerts





Proving ground tasks

Les Riesterer Short Course, 24.6km, Start below 3000 ft, Finish Above 2000 ft

Caitlin, 104.2km, Start below 4000ft, Finish Above 1000 ft.

Valley, 155.0km, Start below 4000 ft, Finish Above 1000 ft.

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	Riesterer	Catlin 100	Valley 150	
Start	NZMA Matamata AF	WALT Walton	WALT Walton	
TP	WALT Walton	TIRO Tirohia	KERE Kerepehi	
TP	MACE MataCemetery	GORD Gordon	GORD Gordon	
TP	WADV Wardville	HINU Hinuera	PIAR Piarere	
Fin	NZMA Matamata AF	WALT Walton	WALT Walton	
Nom. Dist	24.6 km	104.2 km	155.0 km	
-0	т	he Rules		
TP Radius	0.5km	0.5 km	0.5 km	
Max Start	3000 ft	4000 ft	4000 ft	
Min Finish	2000 ft	1000 ft	1000 ft	
Direction	Tasks can be f	lown clockwise, or cour	nter clockwise	



piako@soaringtasks.com

A summary of completed tasks is immediately emailed back.

The fastest flights are recorded on slips, magnetized to the task boards, and ordered from fastest to slowest - top to bottom. Adjust the slips to maintain this ranking as required. Complete a slip with this information:

Dilot Namo/s)	A/C & Reg	Date	Handicannod Ave Speed
Pilot Name(s)	Arcaneg	Date	Handicapped Avg Speed

For a new, faster flown task once the board is full, wipe the slowest slip clear to make it available. Complete it and place it back on the task board in order fastest on the top.

If the task fails the test by email, but is proven good on SeeYou, an OO can sign the slip with a validated time. Please share constructive feedback, or your experience with the platform through soaringtasks.com.

To retrieve a file including turnpoints and tasks for the club's Proving Ground, send an email to the address above with the word "task" anywhere in the subject. The club Proving Ground .cup file will be promptly delivered as an attachment to the requesting email address.

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Care200

Type: Polygon with three points Construction of Construction Construct								
Style	Code	Points	Latitude	Longitude	Dis.	Crs.		
Take off	01Matata	01 Matamata	S37°44.247'	E175°44.424'				
Start		72 Gordon	\$37°42.429'	E175°50.039'				
1.Point		03 Tirohia	S37°26.347'	E175°38.361'	34.4km	330°		
2.Point		32 Te Poi	\$37°52.360'	E175°50.575'	51.4km	160°		
3.Point		05 Hikutaia	S37º16.132'	E175°39.270'	69.1km	346°		
Finish		72 Gordon	\$37°42.429'	E175°50.039'	51.2km	162°		
Landing	01Matata	01 Matamata	S37°44.247'	E175°44.424'				

Care 200



Dave Mcpherson One Diamond Trophy

This trophy was donated by Dave McPherson as the Century 21 trophy, but on his passing away, and with the consent of his family, has been renamed in his memory.

Awarded on an annual basis to the pilot with the fastest handicapped speed over any FAI 300km Diamond Goal task originating and finishing at Matamata airfield.

For those flying the task for their Diamond, make sure to comply with all IGC requirements including declarations, and official observer.

- Start and finish point will be Waharoa Dairy Factory or Matamata Airfield.
- Start height must be a maximum of 3280ft Q.F.E.
- Height when crossing the finish for the task should be sufficient to ensure a standard rejoin for the runway in use.
- <u>Scoring.</u>
 - The standard GNZ handicap system will apply.
 - Speed will be calculated as:
 - Total distance flown / elapsed time x handicap
 eg. 315 km flown in 3hrs 40 mins in a glider with handicap of 0.94
 315kms / 220 minutes = 1.4318 x 60 = 85.9 kph / 0.94 = 91.38 kph handicapped speed.
- Flight information including GPS evidence should be in the Chief Flying Instructor's hands within three weeks of task flown.



Have a fun and safe 2024/25 season

Discussion, questions from the floor

not too long lunch is waiting