Occurrence Summaries 01/01/2023 to 31/12/2023 Region(s): All Club:



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21-Jul-2023



The Gliding Federation of Australia Inc								
SOAR Accident and Incident Occurrences								
General Statistics								
Date From:	Date From: 01/01/2023							
Date to: 31/12/2023								

Damage						
	VSA SAGA		NSWG	GQ	WAGA	Total
Nil	13	11	16	10	3	53
Minor	4	2	4	3	1	14
Substantial	2		3	3	1	9
Total	19	13	23	16	5	76

Injury

	VSA SAGA		NSWG GQ	WAGA	Total
Nil	18	13	23 1	.6 5	5 75
Minor	1				1
Total	19	13	23 1	.6 5	5 76

Phases

	VSA SAGA		NSWG GQ	WAGA	Total
Launch	4	3	5 4	ŀ	16
Ground Ops	3	1	2 1	L	7
In-Flight	7	5	4 3	3	19
Landing	2	3	8 5	5 5	23
Thermalling	2	1	2 2	2	7
Outlanding	1		2 1	L	4
Turne of Elizabet					
Type of Flight					
Type of Flight	VSA SAGA		NSWG GQ	WAGA	Total
Cross-Country	VSA SAGA 2	4	NSWG GQ 2 2	WAGA	Total
Cross-Country Ground Ops	VSA SAGA 2 3	4	NSWG GQ 2 2 2	WAGA	Total 11 5
Cross-Country Ground Ops Local	VSA SAGA 2 3 7	4	NSWG GQ 2 2 2 8 5	WAGA 2 1	Total 11 5 23
Cross-Country Ground Ops Local Competition	VSA SAGA 2 3 7 4	4	NSWG GQ 2 2 8 5 4 6	WAGA 2 1 5 2 5 2	Total 11 5 23 16
Cross-Country Ground Ops Local Competition Training/Coaching	VSA SAGA 2 3 7 4 3	4 1 7	NSWG GQ 2 2 8 5 4 6 5 3	WAGA 2 1 5 2 5 2	Total 11 5 23 16 18
Cross-Country Ground Ops Local Competition Training/Coaching AEF	VSA SAGA 2 3 7 4 3	4 1 7 1	NSWG GQ 2 2 8 5 4 6 5 3 2	WAGA 2 1 5 2 5 2	Total 11 5 23 16 18 3



The Gliding Federation of Australia IncSOAR Accident and Incident OccurrencesClassification Level 1Date From:01/01/2023Date to:31/12/2023

Level 1						
	VAG	VSA	SAGA I	SWG	GQ	Total
		3	1	1	1	6
Airspace		4	7	5	3	19
Consequential Events				2		2
Environment		1			1	2
Operational	5	9	5	13	9	41
Technical		2		2	2	6
Total	5	19	13	23	16	76





The Gliding Federation of Australia Inc SOAR Accident and Incident Occurrences Classification Level 2 Date From: 01/01/2023 Date to: 31/12/2023

Level 2						
	GQ	NSWGA	SAGA	VSA	WAGA	Total
	1	1	1	3		6
Aircraft Control	5	5	1	2	3	16
Aircraft Separation	3	5	3	4		15
Airframe		1			1	2
Airspace Infringement			4			4
Crew and Cabin Safety				1		1
Flight Preparation/Navigation		1		1		2
Ground Operations		1	1	3		5
Low Circuit		2				2
Miscellaneous	3		2	2		7
Powerplant/Propulsion		1				1
Runway Events		2	1		1	4
Systems	2	1		2		5
Terrain Collisions	1	3				4
Weather				1		1
Wildlife	1					1
Total	16	23	13	19	5	76





The Gliding Federation of Australia Inc SOAR Accident and Incident Occurrences Classification Level 3 Date From: 01/01/2023 Date to: 31/12/2023

Level 3						
	GQ	NSWGA	SAGA	VSA	WAGA	Total
	1	1	1	3		6
Aircraft Separation Issues	1	1	2	3		7
Airspace Infringement			4			4
Birdstrike	1					1
Collision	1					1
Collision with terrain		1				1
Control issues		2				2
Controlled flight into terrain		1				1
Depart/App/Land wrong runway					1	1
Flight controls	1					1
Fuel		1				1
Ground handling			1	3		4
Ground strike	1	1				2
Hard landing	1		1	1	2	5
Incorrect configuration	1	1				2
Landing gear/Indication		1			1	2
Loss of control				1		1
Low Circuit		2				2
Near collision	1	4	1	1		7
Other Crew and Cabin Safety Issues				1		1
Other Flight Prep/Nav Issues				1		1
Other Miscellaneous	1		1	1		3
Other Powerplant/Propulsion Issues		1				1
Other Systems Issues	1			2		3



Total	16	23	13	19	5	7
Wheels up landing	2	1			1	
VFR into IMC		1				
Taxiing collision/near collision		1				
Runway incursion		2	1			
Rope/Rings Airframe Strike	1					
Rope break/Weak link failure	1		1	1		
Pilot Induced Oscillations	1	1				
Other Weather Events				1		





Date	2-Jan-2023	Regior	า	VSA SOAR Report Nbr			S-	2144			
Level 1	Operational	Lev		2 Airc	Aircraft C		raft Control		3	Loss of control	
A/C Mod	el 1		Nim	mbus 2			A/C Model 2				
Injury	Minor	Dam	age	Minor	Pha	se	Launch		PIC Age		
Under in	Under investigation. When about 150 meters into the take-off roll during an aerotow launch, the left wing										
dropped	dropped and caught in long grass. The glider spun through 180 degrees and suffered minor damage.										

Date	4-Jan-2023	Region			VSA			R Repo	ort Nbr		S-2157	
Level 1	Operational		Leve	el 2 Ground O			d Operations Level 3			Level 3 Groun		indling
A/C Mod	C Model 1 Duo			Dise	cus T		A/C	Model	2			
Injury	Nil	Dama	age	Su	bstantial	Pha	ise	Grour	nd Ops		PIC Age	60
Under inv	estigation. Afte	r conduct	ing th	ie Da	aily Inspect	ion, t	he wi	ing doll	y was r	e-ins	talled to the	glider and
tied dow	n to the cable ru	n on the	apron	to a	ttend the	daily	briefi	ng. At t	he sele	cted	marshalling	time the
pilot load	led the glider wit	h gear ai	nd hoo	okec	l up the tai	l doll	/ and	towing	g bar to	the v	ehicle but f	orgot to
untie the	untie the wing dolly. The aircraft suffered minor damage when the pilot attempted to tow the glider to the											
launch po	launch point.											

Date	6-Jan-2023	Region			SOAR Report Nbr				S-2154		
Level 1	Airspace		Level 2	el 2 Airspace Infri			ace Infringement Level 3			Airspace Ir	nfringement
A/C Model 1 LS 4			A/C Model 2			2					
Injury	Nil	I Damage Nil Phase In-Flight PIC Age 62						62			
Under investigation. On return from a cross-country flight, the pilot infringed controlled airspace											

Date	7-Jan-2023	Regior	า	NSWGA			OAR Report Nbr			S-1	2138
Level 1	Operational		Level 2	2 Airframe			Level	3	Landing gear/Indic	ation	
A/C Mod	el 1	DG-300 Elan Acro				A/C	Model	2			
Injury	Nil	Dama	age	Nil	Pha	ise	Landi	ng		PIC Age	55
Under inv	Under investigation. While landing on a bumpy runway the undercarriage collapsed.										

Date	8-Jan-2023	Region		NSWGA SOAR Report Nbr					S-	2140	
Level 1	Technical		Level 2		Systen	ns		Level	3	Fuel	
A/C Mod	el 1		DG-100)1M		A/C	Model	2			
Injury	Nil	Dama	ge	Nil	Pha	ise	Grour	nd Ops		PIC Age	58
During the pre-boarding inspection for the fourth flight of the day, the pilot noticed a strong smell of petrol										ell of petrol	
and notif	and notified the CFI, who attended the glider and identified the smell was emanating from the engine										
bay. On o	bay. On opening the engine bay and inspecting the fuel connections, the site of the leak was not evident.										
Each of t	Each of the connection points was checked to see if they would come off, but they appeared to be well										
secured.	With a fire exting	guisher pr	esent an	d only autl	horise	d per	sons in	the vic	inity,	the ignitior	n was turned
on to run	the fuel pump a	nd pressu	irise the f	fuel lines. V	Within	ı a fev	w secoi	nds a fu	iel pr	essure warn	ing showed
on the EC	CU. The pumps w	ere left ru	unning fo	r 1 minute	and t	hen t	he igni	tion wa	s swi	tched off. U	pon
reinspect	reinspection of the engine bay the problem connection was identified and it was found that the fuel hose										
had not b	een fully engage	d when cl	lamped i	n place, an	nd 1-2	litres	of fuel	was la	ying a	at the botto	m of the
engine ba	engine bay. The hose was repositioned correctly and clamped securely in place. The other hoses and clamps										



Accident and Incident Summaries

were inspected and found to be in order. The fuel at the bottom of the engine bay was removed and then the fuel line was repressurised. A short engine run confirmed there were no leaks and the aircraft was returned to service. The engine was used after the incident, including self-launch, and inspected at the end of the day with no evidence of any fuel leak. It was considered most likely that one of the fuel hoses was dislodged during the Daily Inspection, when the inspector checked security of the fuel lines by gently pulling on the hoses. When the fuel pumps pressurised the system, this caused the fuel hose to disconnect. The CFI also noted the following:

- There has been over 250 engine hours and this issue has not occurred in the past. The engine runs at about 6000 rpm so it is an environment of high vibration.
- To prevent a repeat of this situation, the fuel hoses will no longer be 'pulled' on during the Daily inspection. Instead, the fuel lines and clamps in the engine bay, where they are subject to the large vibrations, will be checked every five hours of operation. During the daily inspection the fuel hose clamps will be checked to ensure they do not move freely.

Date	8-Jan-2023	Region	1		GQ		SOA	AR Repo	ort Nbr		S-1	2139
Level 1	Operational		Leve	12	Airc	raft Co	ontro		Level	3	Wheels up	landing
A/C Mod	el 1		٨S	W 19	9 B		A/C	Model	2			
Injury	Nil	Dama	age		Nil	Pha	se	Landi	ng		PIC Age	59

Under investigation. The pilot landed without having lowered and locked the undercarriage. The flight was the third and last day of a mini-Grand Prix event conducted by the club. In the three days of the event the pilot completed 12 hours of cross-country flying in hot weather conditions of about 30 degrees every day. On the day of the incident the pilot participated in a lead-and-follow coaching flight of 3½ hour duration. Heights of 9000 Ft were achieved in strong thermals reaching +11Kts strength. After landing the pilot realised that something was wrong and when disembarking the glider noticed that the undercarriage was not lowered. The glider was undamaged as the runway was a grass glider strip. Discussion with the CFI highlighted the importance of maintaining appropriate consideration of human factors in relation to the effects of dehydration, appropriate infight hydration, sustenance, urination, the cumulative effects of fatigue following multiple days of flying; including in hot conditions. The pilot will undergo a flight review before resuming solo flying.

Date	8-Jan-2023	Region		SAGA		SOA	AR Repo	ort Nbr		S-	2156
Level 1	Airspace		Level 2	2 Airspac	e Infri	ngen	nent	Level	3	Airspace Ir	nfringement
A/C Mod	el 1	LS 4				A/C Model 2					
Injury	Nil	Dama	ge	Nil	Pha	se	Thern	nalling		PIC Age	42

What Happened

While thermalling on a cross country flight the pilot was near 10000 feet and decided to don his oxygen cannular. At this point of the flight the glider was allowed to fly to 10000 feet in Danger Area D206. Climbs above this height are not permitted as the glider would enter Class 'C' airspace. While getting the oxy system working, the glider continued to climb and the pilot did not notice his altitude until he was at 11500feet. Once he realised his error, he immediately descended to below 10000 feet. When the pilot landed, he reported the airspace issue to the duty instructor and submitted a SOAR report.







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The trace file shows that the glider reached 12,917 feet in this area. When the CFI spoke to the pilot about this breach, the pilot disputed exceeding FL125 on his altimeter; suggesting that the trace file from his tablet computer only recorded GPS altitude and was not linked to his calibrated altimeter. Notwithstanding, the pilot was not confident that he had been adequately monitoring the altimeter.**Analysis**

The aerodrome from which the pilot was operating is situated beneath Class C airspace (LL4500), and within and between several areas of restricted military airspace and Danger Areas. On the day of the flight the Danger area D206 was active and allowed gliders to fly in restricted airspace by arrangement with the RAAF to a height of 10000 feet. The pilot is an early cross-country pilot with only a couple of seasons of flying cross country. He also has limited experience flying with oxygen, and thus only fitted his oxygen cannular as he approached 10,000 feet. As he concentrated on fixing the cannular and getting his oxygen system working, he climbed into controlled airspace. After the flight the pilot recognised that his primary error was not using the oxygen system much earlier in the flight and thus his oxygen saturation levels may have been a contributing factor in his airspace infringement. The pilot was using a moving map display on a tablet computer running XCsoar, but the program did not have an alerting function on.

Safety Advice

To avoid airspace infringements pilots should apply Threat and Error Management in their flight planning and flying (e.g., identify the threats such as airspace, weather and equipment). Pilots must also consider the errors they are likely to make, such as in navigation, and address them early. Particular attention should be paid to vertical limits of controlled airspace, and pilots should plan to remain 200' below the base of controlled airspace and/or 1nm from the edge whenever possible. When flying at high altitude, pilots must understand how low oxygen saturation may impede their decision making process. They should use oxygen systems fitted to the aircraft before their oxygen saturation starts to fall with increasing altitude. It is also important that pilots understand the role of distraction before and during flight and how it can lead to



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inadvertent infringement of controlled airspace. Pilots should consciously recognise distractions including those from passengers, unfamiliar equipment or its malfunction, aircraft problems or weather as well as personal problems or stress. Pilots should ensure they positively shift attention from them back to flying, operating, and navigating the aircraft. If weather is becoming a factor, change your plans early and carefully. Importantly, look outside the cockpit with occasional confirmation checks on progress by viewing the moving map display or charts.

Date	8-Jan-2023	Regior	n	GQ		SOA	R Repo	ort Nbr		S-	2189
Level 1	Operational		Leve	l 2 Airc	raft C	ontro		Level	3	Hard land	ing
A/C Mod	el 1		BG 12/16			A/C Model 2					
Injury	Injury Nil			Damage Substantial Phase Landing PIC Age 71						71	
Under in	Under investigation. During landing the pilot mishandled the flaps and landed heavily.										

Date	10-Jan-2023	Regior	۱	NSWGA		SOA	AR Repo	ort Nbr		S-	2141
Level 1	Operational		Level 2	Airc	raft C	ontro		Level	3	Wheels up	landing
A/C Mod	el 1		Discu	s b		A/C	Model	2			
Injury	Nil	Dam	age	Minor	Pha	ise	Landi	ng		PIC Age	
Under in	vestigation. Upo	n returni	ng to the	aerodrome	e from	cros	s count	ry fligh	t, the	pilot lower	ed the
undercar	undercarriage but failed to lock it in place. During the downwind leg of the circuit the pilot became										
distracte	distracted by a glider in circuit ahead and omitted to conduct the pre-landing check list. Just prior to										

touchdown the pilot noticed the undercarriage was unlocked, and this distraction resulted in a heavy landing resulting in minor damage to the glider.

Date	13-Jan-2023	Region		WAGA		SOA	AR Repo	ort Nbr		S-1	2142
Level 1	Operational		Level 2	Airc	raft Co	ontro		Level	3	Hard landi	ng
A/C Mode	el 1		LS 4			A/C	Model	2			
Injury	Nil	Damag	ge	Nil	Pha	se	Landi	ng		PIC Age	63

What Happened

While landing in a cross wind the glider ran into sink near the ground. The glider ballooned a few feet and then touched down heavily on the runway. While the pilot felt that it was not a hard landing, the Duty instructor grounded the aircraft pending a 'hard landing' inspection.

Analysis

The pilot, who is pre -GPC and had limited experience on type, had returned to the aerodrome from a cross country flight. Since his departure from the aerodrome, conditions had changed and the wind was slightly stronger (12 knots) and across the operational runway (RWY 16). Several experienced pilots reported flying through turbulence and experienced difficulties on landing on this runway. The pilot's return the aerodrome was noticed by an instructor who was flying at the time, who made a radio call suggesting the pilot use RWY 26 that was more aligned with the wind direction. Unfortunately, this message was not delivered in time. The CFI debriefed the pilot and ascertained that the approach was flown at the correct speed for the gusting conditions, but upon experiencing the sink at approximately 20 feet above ground the pilot decreased the airbrakes and then mishandled the subsequent balloon resulting in a hard landing. The CFI noted that the pilot had sufficient energy when the sink was encountered and that he should have been able to correct using elevator without the need to adjust the airbrake position. The glider was inspected, and no damage was found. The pilot will undergo a competency check flight before further solo flights.

Safety Advice

A hard landing occurs when a sailplane hits the ground with a greater vertical speed and force than in a normal landing. However, the forces involved may not always be apparent. The club CFI noted that it is safer



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to conduct a 'hard landing' inspection than to fly a potentially damaged aircraft (refer SOAR report S- 1747 dated 18/11/2020). The CFI also noted that Instructors need to remain vigilant to the change of conditions when they are supervising solo flights by student (non-GPC) pilots.

Date	15-Jan-2023	Regior	Region SAGA S			SOA	R Repo	ort Nbr		S-2143		
Level 1	Operational		Level 2	2 Mis	scellar	ieous		Level	3	Rope break/Weak link failure		
A/C Mod	el 1	ASK 21				A/C Model 2						
Injury	Nil	Dama	age	Nil	Pha	ise	Launc	h	PIC Age 53			
Under in was felt t determin	vestigation. Duri o break. The PIC ed that the wea	ng the ini Cinitiated k Link fitt	tial clim the cab ed to th	b on a wincl le break pro e cable was	h laun Icedur too lig	ch, th e and ght fo	ie cable I lande or the gl	e conne d the a lider ar	ecting ircraf nd bro	the glider to t without ind oke.	o the winch cident. It was	

Date	20-Jan-2023	Regior	1	NSWGA		SOA	AR Repo	ort Nbr		S-2146		
Level 1	Technical	Level 2 Powerplant/Propulsion Level 3				3	Other Pow	erplant/Pro				
										pulsion Iss	ues	
A/C Mod	el 1		Ar	cus M		A/C	Model	2				
Injury	Nil	Damage Minor Phase In-Flight							PIC Age			
During th	e post flight eng	ine inspe	ction,	a fractured M	18 x 25	imm (cap scr	ew and	asso	ciated wash	er was found	
on the er	igine bay floor. Ir	vestigat	ion ide	entified the sc	rew a	nd wa	asher h	ad com	e fro	m the lower	RHS carbon	
fibre prop	fibre prop mast, where it attached to an aluminium block, which itself is bolted to the top right-hand side of											
the engin	he engine with two longer 8mm cap screws. The lower section of the fractured screw remained in the											
aluminiu	luminium block.											

Date	21-Jan-2023	Region	Region NSWGA SOAR Report Nbr				S-2145				
Level 1	Operational Level 2 Terrain Collisions Level 3 Collis							Collision w	Collision with terrain		
A/C Mod	el 1		Hor	net		A/C	Model	2			
Injury Nil Damage Substantial Phase Outlanding PIC Age 34											
Under inv	Under investigation. During the return leg of a cross-country flight, the pilot fell below final glide and										
decided t	ο conduct an οι	utlanding.	The pilo	t selected v	vhat h	e cor	sidere	d to be	the b	est paddocl	< out of a
number t	hat were availa	ble, and h	e landed	into wind.	Durin	g the	ground	d roll th	ie sta	rboard wing	tip caught
on some	on some long grass and thistles resulting in a ground loop. The pilto was uninjured but the glider was										
substanti	substantially damaged in the tailboom and fin.										

Date	22-Jan-2023	Region		WAGA		SOA	AR Repo	ort Nbr		S-2	2150
Level 1	Operational		Level 2	Airc	raft Co	ontro		Level	3	Wheels up	landing
A/C Mode	el 1		LS 4	1		A/C	Model	2			
Injury	Nil	Dama	ge	Minor	Pha	se	Landi	ng		PIC Age	

What Happened

During the return leg of a cross-country competition flight during the West Australian Gliding Championships, the pilot got low and began to look for suitable landing paddocks. The pilot selected a paddock and continued to search for thermals. With the glider continuing to descend, the pilot broke off the flight at around 800ft and set up for a landing. During the approach the pilot identified it contained stock, so the pilot changed the approach to land in an adjacent paddock. After initially touching down and bouncing back into the air, the pilot believed he had not lowered the undercarriage and moved the undercarriage



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lever and locked the wheel up. The glider touched down with minimal ground speed and sustained minor damage to the left side undercarriage door and fuselage gelcoat. Analysis

The incident occurred following a relatively long cross-country flight with thermals becoming more difficult on the last leg. At this point the weather had changed from its predicted forecast and another 14 gliders were either out-landing or starting engines. Options for outlandings were good and while the commitment to land may have been a little late (800ft), it did not make any difference to the outcome in this case. The pilot was concerned that the undercarriage was not down on finals and cycled the gear. It is noted that this type of aircraft has the provision that the airbrake cannot be used until the undercarriage handle is down. Although experienced on type (and on out-landings) the pilot seemed to be concerned that the undercarriage was not down after the initial touchdown. Upon examination of the aircraft, it was concluded that the pilot's concern was due to the bumps in the paddock, and still thinking the gear was up moved the gear handle to the up position shortly after landing causing the damage to the doors. The pilot's CFI identified that overload, fatigue, and dehydration may have been causal factors in this incident. The aircraft was repaired the next day and flew again the following day with the same pilot for the rest of the competition.

Date	27-Jan-2023	Region	1	WAGA		SOA	AR Repo	ort Nbr		S-	2149
Level 1	Operational		Level 2	Run	iway E	vent	S	Level	3	Depart/Ap wrong run	p/Land way
A/C Mod	el 1		ASH 25 E		A/C Mode		2				
Injury	Nil	Dama	age	Nil	Pha	hase Landing		PIC Age	54		

What Happened

The pilot had returned to the aerodrome from a competition flight and landed on the reciprocal of the operational runway. At the time there were no other aircraft in circuit. The pilot reported having flown seven competition days and attributed his confusing of the runway directions to fatigue. It was reported that a passenger on the flight was a pre-GPC student who identified the pilot's error but did not feel it appropriate to raise the issue with the very experienced command pilot (authority gradient).

Analysis

The incident occurred following a long difficult cross-country flight in the West Australian Gliding Championships. The pilot was flying with a pre-solo student for coaching purposes and had been taking different pilots with him on the other days to assist them with their cross-country flying. Conducting coaching activities during a competition would have added to the pilot's normal workload. Earlier in the week there had been a mass landing out of over 16 gliders due to a weather change which included this pilot and aircraft. The rest of the week did not provide good soaring conditions, which increased the fatigue of most competitors. The pilot had nominated the following day as a rest day which suggests that fatigue was an issue. Upon returning to the aerodrome at the end of the task, the pilot believed he had joined downwind for RWY 16 but was in fact on the reciprocal heading. After landing the pilot realised his error. The student pilot had noticed the command pilot's error but did not say anything as they felt she should not comment due to the authority gradient. The pilot's CFI identified the following causal factors:

- The competition had been using runway 34 for the first few days and had only changed to runway 16 on the last two days.
- The pilot's decision-making was affected by fatigue, and dehydration from a long flight was a potential factor.
- There were no other aircraft in the circuit at the time the pilot joined down-wind.
- There was no comment from the student that it was the wrong runway.

Safety Advice

Fatigue



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Fatigue has been identified as a factor in numerous aviation accidents over the years and is a continuing problem facing pilots flying gliders on long cross-country flights, or instructors and tow pilots with long duty cycles. Among the many symptoms of fatigue are increased reaction time, a decreased ability to concentrate on multiple tasks, fixation, short-term memory loss, impaired judgment, impaired decision-making ability, distractibility, and reduced visual perception. Fatigue cannot be eliminated, but the risks associated with it can be managed by being rested before flight, maintaining proper nutrition and hydration levels, using oxygen and taking regular breaks during rostered periods.

Authority Gradient

Authority Gradient refers to the established, and/or perceived, command and decision-making power hierarchy in a flight crew. Concentration of power in one person leads to a steep gradient, while more democratic and inclusive involvement of other crew members results in a shallow gradient. Reducing the risks that arise from authority gradients is a matter of raising awareness, learning some simple skills, practicing those skills whilst under training and applying those skills during routine and emergency operations. Instructors and Coaches must be capable of creating a working climate where trainees are confident enough to raise concerns, question decisions and also offer solutions. This requires the development of a flexible and professional leadership style based on clear communication and encouragement. Trainees need to learn assertiveness techniques to provide them with the confidence to question authority and play a full part in the team task. Appropriate and comprehensive pre-task briefings are essential to clarify roles, responsibilities, capabilities, limitations, and boundaries, both in normal and abnormal conditions. These may need to be reinforced during situational briefings such as pre-take-off and joining the circuit.

Date	28-Jan-2023	Regior	1	GQ		SOA	R Repo	ort Nbr		S-:	2148	
Level 1	Operational		Level 2	Airc	raft C	ontro		Level	3	Pilot Induc	ed	
										Oscillation	S	
A/C Mod	el 1		Astir C	S 77		A/C	Model	2				
Injury	Nil	Dama	age	Nil	Pha	ise	Landi	ng		PIC Age		
Under in	vestigation. The	pilot was	having hi	s first singl	e-sea	t con	version	from t	he DO	G1001 to an	Astir CS77.	
Following	Following a soaring flight of approximately 40 minutes, the pilot joined circuit for landing. After a normal											
circuit th	circuit the pilot turned onto the final approach and then pended the airbrakes about one-third. To counter											
an overs	noot, the pilot op	pened the	e airbrake	s to about	half. 1	The p	ilot rep	orted f	lying	the approad	h at around	
57 knots,	but found it har	d to prev	ent the a	irbrakes fro	от ор	ening	g fully c	lue to t	he fli	ght loads. Tl	ne pilot	
touched	down while still	at flying s	peed and	the glider	rebou	undeo	l into t	he air. [·]	The p	ilot reported	d that he	
"put th	e airplane back i	nto a stal	ble attitud	de and atte	empte	d a se	cond t	ouchdo	wn. C	On this occas	sion I	
bounced	bounced again. I attempted to stabilise again, but the tail touched down again. I deployed full airbrake at											
this stage	e. During the gro	und roll I	was occu	pied with l	keepin	g the	wings	level, v	vhich	led me to ru	ın off the	
runway".	runway". A thorough inspection of the glider did not identify any damage.											

Date	28-Jan-2023	Regior	1	GQ		SOA	AR Repo	ort Nbr		S-2151	
Level 1	Operational		Level 2	Airo	raft Co	ontro		Level	3	Incorrect of	onfiguration
A/C Mod	el 1		ASV	/27B		A/C	Model	2			
Injury	Nil	Nil Damage Nil Phase								PIC Age	60
Under inv	Jnder investigation. After releasing from aerotow in a thermal, the pilot found it difficult to centre the lift										
and climb	and climb. Further attempts to thermal were also unsuccessful and the pilot attributed this to the glider's										
high wing	g loading. The pil	ot broke	off the	light at 800	ft and	comi	menced	d a righ [.]	t-han	d circuit. Du	ring the
downwin	d leg the glider s	till had a	high sir	k rate and t	he pilo	ot to	land do	wnwin	d into	o a stubble p	addock. The
glider un	glider undershot and touched down in a cotton crop before rolling out into the stubble. Upon exiting the										
glider, th	e pilot realised th	ne airbra	kes had	been unlocl	ked for	r the	entire f	flight. L	Jpon i	reflection, tl	he pilot
realised they had not conducted their pre-take-off checks.											



Date	29-Jan-2023	Region		GQ		SOA	R Repo	ort Nbr		S-	2147
Level 1	Operational	l	Level 2	Airc	raft Co	ontro	Ē	Level	3	Wheels up	landing
A/C Model 1 ASW27b A/C Model 2											
Injury	Nil	Damag	ge	Minor	Pha	ise	Landi	ng		PIC Age	75
Under investigation. The pilot was conducting their first flight with water ballast for over 12 months. After											
releasing at 2000ft AGL in a thermal, the pilot raised the undercarriage and commenced a climb for about											
500ft wh	en the thermal w	as lost. Th	e pilot f	lew north	about	2 mi	les to a	promis	sing c	loud, howev	er the glider
lost consi	iderable height d	ue to enco	ountering	g high sink	. At at	oout :	1800ft /	AGL the	e pilo	t turned bac	:k to
aerodron	ne, but the glider	flew throu	ugh furtl	her sink an	nd so t	he pi	lot deci	ided to	dum	p the ballast	t. Due to
insufficie	insufficient height to conduct a circuit, the pilot decided to land on the reciprocal runway and made radio										
call advis	ing intentions. Th	ne pilot tur	ned ont	o final at 8	300ft A	AGL, a	and dur	ing the	hold	-off realised	l he had not
lowered the undercarriage. The glider touched down on the grass runway and suffered only minor damage.											

Date	3-Feb-2023	Regior	۱		NSWGA		SOAR Report Nbr				S-2155	
Level 1	Operational		Leve	el 2	Grour	nd Ope	eratio	ons	Level	3	Taxiing col	lision/near
											collision	
A/C Mod	C Model 1 ASW 27-18 A/C Model 2											
Injury	Nil	Damage Substantial					ase Ground Ops				PIC Age	67
Under inv	estigation. Whil	e towing	the g	glider	to the ha	ngar, a	a win	d gust (possib	ly a th	nermal) stru	ck the glider
causing it	to dislodge from	n the tow	v equi	ipme	nt. The sta	arboar	d wir	ng impa	acted a	runav	way marker	and the
glider hit the tow vehicle. Significant damage was cause to the starboard control surface, the port flap, and									rt flap, and			
vertical fi	n assembly.											

Date	4-Feb-2023	Regior	۱	SAGA		SOA	AR Repo	ort Nbr		S-2158	
Level 1	Airspace		Level 2	Aircra	aft Sep	arati	on	Level 3		Aircraft Separation	
										Issues	
A/C Mod	A/C Model 1 Grob G 109 A/C Model 2 Fisher Youngster										
Injury Nil Damage Nil Phase Landing PIC Age 53											
Under inv	Under investigation. The sortie was a refamiliarisation flight with an instructor in a touring motor glider.										
While the	While the glider was on base leg at 500ft AGL with the engine off, an ultralight aircraft was sighted on final										
approach	and potentially	in conflic	t with t	ne glider. Th	ie com	man	d pilot	in the g	lider	made a rad	io call to
alert the	ultralight pilot to	o the glid	er's pos	tion but rec	eived	no re	sponse	e and th	e ulti	ralight conti	nued its
approach. The command pilot restarted the engine and climbed away from the base leg. Subsequent											
discussio	n with the ultral	ight pilot	reveale	d he wasn't	monit	oring	the ae	rodrom	ne fre	quency and	had not
seen the	seen the glider.										

Date	5-Feb-2023	Regior	n		WAGA		SOA	AR Repo	ort Nbr		S-	2153
Level 1	Operational		Leve	el 2	Airc	raft Co	ontro		Level	3	Hard landi	ng
A/C Mod					A/C	Model	2					
Injury Nil Damage Nil Ph						Pha	Phase Landing PIC Age					
Under in	Under investigation. The pilot reported landing hard, but the aircraft was not damaged.											

Date	5-Feb-2023	Region	VSA	SOAR Rep	ort Nbr	S-2163
Level 1	Technical	Lev	/el 2	Systems	Level 3	Other Systems Issues



Accident and Incident Summaries

A/C Model 1		A	SW 28	A/C	CModel 2		
Injury	Nil	Damage	Nil	Phase	In-Flight	PIC Age	62

What Happened

At the top of a competition launch, the pilot was unable to release the tow rope.

Analysis

The pilot chose to make a radio call to the tow pilot advising of the failure to release but did not use the tug callsign. After a few radio calls, the tow pilot eventually became aware of the situation and towed the glider back towards the aerodrome. After numerous attempts to release the tow rope, it did release. The pilot landed back on the aerodrome and inspected the release, but the release tested OK and the pilot was unable to determine the cause of the failure. The pilot took a relaunch and the released worked when used.

Safety Advice

As with all radio communications, broadcasts must identify the callsign of the station being called as well as the station calling. In this case the glider pilot clearly did not know the tug callsign, so there was some initial confusion as to which of the four tugs was involved. Had the pilot conducted the standard 'release failure' procedure and flown out to the left of the tow plane in accordance with standard procedures, they may have got the tow pilot's attention earlier.

Date	9-Feb-2023	Regior	۱	VSA		SOA	AR Repo	ort Nbr		S-2223	
Level 1	Airspace		Level	el 2 Aircraft Se		ft Separation		Level 3		Aircraft Separation	
										Issues	
A/C Mod	A/C Model 1 SZD-48-			48-1 Jantar Standard 2			Mode	2	Pipe	er PA-25-235	5
Injury	Nil	Dama	Damage		il Pha		Phase In-Flig			PIC Age	62

Date	12-Feb-2023	2023 Region NSWGA SOAR Report Nbr S-2159								2159	
Level 1	Operational	L	evel 2	Terra	ain Col	lision	IS	Level	3	Ground st	rike
A/C Mod	el 1	JS 3 15 r	n with	jet sustain	er	A/C	Model	2			
Injury	Nil	Damage		Minor	Pha	ise	Outla	nding		PIC Age	65
Under inv	Under investigation. In an attempt to cross the finish line, the pilot flew into a non-manoeuvring area before										
attempti	attempting to start the sustainer jet engine at about 250ft AGL. The pilot reported: "At the 3 km finish point										
(approxin	(approximately 250 feet AGL) it was obvious that to make the airfield, trees would need to be cleared and it										
was not p	was not possible to clear the trees due to lack of height AGL and lack of airspeed to gain height. I lowered the										
undercar	riage, turned aw	ay from the	trees (180 degre	es) tov	vard	paddod	cks (tha	ıt wer	re not check	ed for out-
landing),	and turned on th	ne jet sustai	ner. Th	e aircraft v	vas ap	prox	imately	[,] 200 fe	et AG	GL. Whilst th	e jet
sustainer	engaged its star	tup procedi	ire, the	e aircraft ro	an out	of he	eight ar	nd land	ed in	a freshly pla	oughed
paddock.	paddock. There were fences in the paddock at close proximity and due to the fortunate circumstance of a										
freshly pl	oughed field and	very quick	stoppir	ng with the	e soft e	earth	there v	vas app	oroxin	nately 50 m	of clearance
to the fer	nce. At the time o	f landing th	e jet w	as fully en	gagea	l (abo	out 45 s	econds	had	elapsed fror	n time of
turning a	turning away from trees and landing in the field)."										





Date	13-Feb-2023	Regior	on SAGA				SOAR Report Nbr				S-2173		
Level 1	Airspace		Level	12	Airspac	e Infri	ngen	nent	Level	3	Airspace Infringement		
A/C Mod	el 1	Piper PA-25-235/A1				A/C	Mode	2	DG	1000			
Injury Nil Damage Nil							ise	Launo	:h		PIC Age	70	
Under inv	vestigation. Duri	ng an aer	otow a	and r	near the t	ор ор	f the	launch	, the to	w pil	ot inadverte	ntly towed	
the comb	ination into nea	rby Restr	icted A	Airsp	ace. The	combi	natio	n infrir	nged air	rpsace	e for less tha	an one	
minute. 1	minute. The tow pilot was flying by reference to ground features, but did not recognise the error due to the												
nose high	n attitude of the	tow plan	e.										

Date	18-Feb-2023	Regior	า	NSWGA	SWGA SOAR Report			ort Nbr		S-2160	
Level 1	Consequential	tial Events Level 2 L			ow Cir	cuit		Level	3	Low Circui	t
A/C Mod	C Model 1 Twin Astir						A/C Model 2				
Injury Nil Damage Nil Phase Landing								PIC Age	25		
Under investigation. During a training flight the student was unable to maintain the desired circuit speed of								uit speed on			
the down	wind leg, and th	ie instruc	tor faile	ed to take co	ntrol ι	ıntil t	he glid	er was ⁻	too lo	ow to condu	ct a safe
circuit. A	circuit. A very low circuit was flown, and only just enough height to clear obstacles. The instructor										
demonst	rated an unwillir	ngness to	accept	responsibilit	y for t	he in	cident.				



Date	18-Feb-2023	Region	1	VSA		SOA	AR Repo	ort Nbr		S-	2161
Level 1			Level 2					Level	3		
A/C Mod	el 1		lunior	A/C Model 2							
Injury	Nil	Dama	Damage Minor			ase	Landi	ng		PIC Age	81
Under in	nad landed	l norm	ally b	out duri	ing the	grou	nd roll the g	lider struck a			
depressio	on and rebounde	ed into the	e air. Upo	on touching	g dowr	n aga	in the r	ight wi	ng co	ntacted the	ground and
the glider slewed off the runway to right. The right-hand wing contacted a speed sign on the runway								iway			
perimete	r track, causing	minor dar	nage.								

Date	23-Feb-2023	Region		NSWGA		SOA	AR Repo	ort Nbr		S-2	2166
Level 1	Operational		Level 2		Fligh	t		Level	3	VFR into IN	ЛС
				Prepara	tion/N	laviga	ation				
A/C Mod	C Model 1 Piper PA-				25-235 A/C Mod					-51-1 Junior	
Injury	Nil Damage			Nil Phase In-Flight						PIC Age	
Under inv aeodrom	vestigation. A tug e after last light.	tigation. A tug and glider returned to the first light.					lrome f	ollowir	ng a re	etrieve from	a remote

Date	23-Feb-2023	Regior	۱		SAGA		SOA	R Repo	ort Nbr		S-	2162
Level 1	Airspace		Leve	el 2	Aircra	ift Sep	arati	on	Level	3	Aircraft Se	paration
											Issues	
A/C Mod	A/C Model 1 Grob G 109 A/C Model 2 Glasair SII RG											
Injury Nil Damage Nil Phase In-Flight PIC Age 64										64		
Under inv motor gli pilot of tl was only that he w	vestigation. The der (which was e ne Grob 109 was informed after l vas not monitori	pilot of a equipped aware o anding w ng the are	Glasa with a f anot hen th ea freo	ir re an E her a ne G quer	ceived an C device), aircraft ab lasair pilot ncy.	ADS-B appro out 1(conta	aleri achir DNMs acted	t of and ng head ahead the gli	other ai I on and but dio ding clu	rcraft d tool d not ıb. Th	t, a Grob 10 k avoiding a sight the Gl he glider pilo	9 touring ction. The asair and ot advised

Date	25-Feb-2023	Regior	۱		NSWGA		SOA	AR Repo	ort Nbr		S-	2184
Level 1	Airspace		Leve	el 2	Aircra	ift Sep	arati	on	Level	3	Aircraft Se	paration
											Issues	
A/C Mod	el 1	ASG 32 MI					A/C Model 2 A			ARC	US M	
Injury	Nil	Dama	Damage Nil P				ase In-Flight				PIC Age	69
During th	ie '20M Dual Sea	t Nationa	als' th	e Co	mpetiton l	Direct	or an	d Safet	y Office	er rep	orted that t	he pilot had
been obs	erved on a few o	occassions to fly aggressively, especially when entering thermals. The pilot was										
counselle	ed and is under s	scrutiny.										

Date	26-Feb-2023	Region		VSA		SOA	R Repo	ort Nbr		S-	2164
Level 1	Technical		Level 2		Syster	ns		Level	3	Other Syst	tems Issues
A/C Model 1 ASW 28 A/C Model 2											
Injury Nil Damage Nil Phase In-Flight										PIC Age	62
What Ha At the to attempts Analysis	ppened p of the launch, by the glider pil	the pilot w ot, the tow	vas unabl v pilot re	e to releas leased the	se the rope	tow i from	rope ar the to	nd, follo w plane	owing e. The	several uns pilot lande	successful d safely.



Accident and Incident Summaries

The pilot reported that the release had also failed during an aerotow a few weeks earlier (Refer to report S-2163), so a more thorough inspection was considered warranted. The release mechanism was removed from the sailplane and the inspector found a small stone lying loose in the nose under the release mechanism. As the stone was mobile, the inspector considered it was most likely that it would occasionally move into a position that prevented the release from being actuated. The stone was removed and there have been no further problems.





Date 28-Feb-2023 Region NSWGA SOAR Report Nbr S-2165
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Accident and Incident Summaries

Level 1	Operational		Level 2	Terra	in Co	lisior	IS	Level	3	Controlled	l flight into
										terrain	
A/C Mod	el 1		ASK2	21		A/C	Model	2			
Injury	njury Nil Damage Substantial Phase Launch PIC Age										
What Happened											
Shortly after becoming airborne on an aerotow launch and at a height of about 80ft, the glider flew through											
turbulend	ce causing the st	udent pil	ot to hit h	is head on	the c	anop	y and ir	nadvert	ently	release the	tow cable.
The pilot	reflexively lowe	red the n	ose and o	pened the	airbra	akes t	o cond	uct a sł	nort la	anding and	contacted
the grour	nd hard. The glid	ler rebou	nded into	the air and	agaiı	n stru	ick the	ground	hard	in a nose d	own
attitude. The pilot was uninjured, but the glider was extensively damaged around the nose wheel and											
forward of the rear instrument panel.											

Analysis

The student pilot had planned to fly a solo soaring flight of one hour to qualify for the issue of a 'C' certificate qualification. The wind was north westerly at about 8 knots, gusting to 15 knots. The pilot had intended to fly the Club's PW5, in which he had flown 27 flights. However, the supervising instructor suggested the K21 was more suited to the conditions, as it provided a more stable platform and was the aircraft in which the student had completed most of their training. The CFI reported that the student had flown 151 flights prior to the incident and had gone solo after 71 flights. The student had flown 36 solo flights before the incident, of which 27 flights were in the PW5. The student had trained with four instructors over 12 months, and usually flew about once a month for a week at a time. The student's current instructor regards him as a thorough and disciplined pilot who conducts comprehensive prefight checks with appropriate attention to options. He is very comfortable in the air, and flies in a safe and well considered manner. The investigation identified the crosswind from the left, and mild gusting as contributing factors. The groin strap was loose, but the lap and shoulder straps were tight. The student had their hand close to the release knob and was not holding it, but the sudden bump may have caused the pilot to grasp it. The CFI concluded that the incident was not the result of a PIO, but a reflexive response to aggressive but short-lived turbulence. The student's action was inappropriate for a low-level launch failure, and the student acknowledged that they should have taken a second or two to assess the situation before reacting. The duty instructor supervising the launch stated that it appeared to be normal up until the point of turbulence, whereupon the glider was seen to sharply nose down and disappear below the line of sight on the sloping runway, and appear again, probably after the first contact with the ground and a bounce. The student will undergo further training, with the emphasis on decision making rather than an instinctive response in various emergency scenarios.

Safety Advice

Aerotow launch emergencies are not uncommon and form part of a pilot's training. During launch the pilot must have a plan to address any emergency that may occur. Indeed, the pre-take-off checklist requires a pilot to consider their actions in the event of an emergency. In the case of a rope break or premature release from tow, the priority for the pilot is to lower the glider's nose and adopt safe speed. The next action is to assess landing options and conduct a safe landing. Sudden and aggressive control movements in pitch must be avoided, especially when close to the ground. Coarse elevator control inputs are inconsistent with a safe transition from a stabilised approach into the flare and landing and will often result in a sudden and unrecoverable steep dive into the ground.

Date	1-Mar-2023	Regior	1	SAGA		SOA	AR Repo	ort Nbr		S-1	2167
Level 1	Operational		Level	2 Airc	raft Co	ontro		Level	3	Hard landi	ng
A/C Mod	el 1			A/C Model 2							
Injury	Nil	Dama	age	Minor	r Phase Landir					PIC Age	70
Under inv	vestigation. The p	oilot conf	ilot configured the aircraft for landing just prior to entering the circuit. Just prior								
to turning	g to base, the pile	ot conducted their pore-landing checks to confirm all required actions were done									



Accident and Incident Summaries

including setting the approach speed. After a normal approach the glider touched down on grass runway while still at flying speed (62 knots) and bounced back up in the air about two feet. When the glider settled the pilot heard a "lot of noise" and the glider stopped quicker than usual. The plot recognised that the wheel had collapsed, as the undercarriage lever was still locked in the 'down' position.

Date	5-Mar-2023	Region	1	NSWGA		SOA	AR Repo	ort Nbr		S-	2168	
Level 1	Airspace		Level 2	Aircra	Aircraft Separation				3	Near collision		
A/C Mod	el 1		ASk	321	A/C Mode			2	Pipe	er PA 32		
Injury	Nil	Damage		Nil Pha			ase In-Flight			PIC Age	76	

Under investigation. Whilst the glider was tracking WNW at approximately 4500' about 1 NM North of 'Piper's Field', a Piper PA32 passed the glider on a reciprocal heading at a similar height and about 50 metres distance. The glider crew did not hear any radio broadcasts from the PA32 as it tracked directly over the top of the airfield. Flight Radar revealed the PA32 had departed Orange for Bankstown. The glider airfield is listed in the Bathurst Airport (YBTH) ERSA advising as follows: "Glider training activities, including aerobatics, are concentrated WI 3NM Pipers Field up to A050 but glider OPS often extend well beyond 20NM Bathurst and ABV A080. Intensive gliding activity will mainly be confined NORTH of the Orange-Bathurst highway. To avoid gliding activity, in VMC conditions by day other aircraft should remain SOUTH of the highway at all times between Orange Airport and the Macquarie River. Even when SOUTH of the highway keep watch as gliders may be operating or conducting cross-country exercises." The ERSA also contains a navigation diagram track for this procedure.

Date	5-Mar-2023	Region		VSA		SOA	AR Repo	ort Nbr		S-	2174
Level 1	Environment		Level 2		Weath	Weather			3	Other Weather Events	
A/C Mod	el 1	DG-1000			A/C Model		2	Pipe	er PA-25-260)	
Injury	Nil	Dama	Damage Nil		Pha	ise Laund		h		PIC Age	60

What Happened

While taking off from RWY 01 in a strong crosswind with a glider under tow, a strong gust from the left struck the combination just prior to the tug was becoming airborne. With the aircraft weight being mostly carried by the wings, the tug skidded sideways across the ground and then became airborne. The tug and glider proceeded to drift to the right and crossed the right-hand boundary fence at about 50ft. The combination climbed rapidly, and the glider released at 3000ft AGL about four minutes later.



Accident and Incident Summaries



Analysis

The towing combination comprised a DG-1000 glider being flown by a pre-solo student pilot under instruction and a Pawnee tow plane flown by a low hour's tow pilot. A tow pilot who observed the take-off advised that the wind was 15kts, and probably gusting to 20 kts. The drift started just when the tug got light on the undercarriage, and about 5-10 seconds later the combination was climbing over the boundary fence. At that time, other gliders were landing on RWY 27, which was more into wind. As the tug started drifting to the right, the gliding instructor took control but elected to stay on tow as the as the combination had gained sufficient height and speed to clear the fence, and the instructor was concerned that had he released the rope may have struck the fence and potentially caused difficulties for the tow pilot. In hindsight, the instructor recognised that the flight should not have proceeded in the prevailing conditions, and that once the tug started to drift, he should have released and allowed the tug to safely climb away while landing the glider straight ahead on the runway. The Club CFI noted that the cause of this incident was most likely the result of a strong gust combined with incorrect inputs by the tow pilot, and it highlights why gliding duty crews must manage flight risks by moving operations to the most into wind runway in a timely manner. **Safety Advice**

Like most clichés there is truth behind the statement that landings are mandatory, but take-offs are optional. Operations in crosswind conditions require strict adherence to applicable crosswind limitations or maximum recommended crosswind values, operational recommendations, and handling techniques. Most aeroplanes have a maximum demonstrated crosswind component. This is not a limitation—it is merely the greatest that was demonstrated during certification. If the pilot is very proficient, they may be able to take off (and land) with a greater crosswind. Also, while the aeroplane may be able to handle it—it's the pilot that



Accident and Incident Summaries

most often cannot. Pilots must therefore decide whether to attempt a crosswind take-off based on their recent experience and not some figure in the pilot's operating handbook. In the case of an aerotow, it is the tow pilot that has this responsibility as pilot in command of the combination.

Date	5-Mar-2023	Region		SAGA		SOA	R Repo	ort Nbr		S-	2169
Level 1	Operational Level 2 G			Grour	d Ope	eratic	ons	Level	3	Ground ha	ndling
A/C Mod	el 1	ASK 21				A/C Model 2					
Injury	Injury Nil Damage		ige	e Minor Pha			se Ground Ops			PIC Age	54

What Happened

While towing the ASK-21 glider back to the hangar, the driver received a stop signal and applied the vehicle brakes. Unbeknown to the driver, the rigid towing bar had bent and was now rubbing on the glider's rudder. Upon arriving at the hanger, the driver noticed the rudder had suffered some minor scratching from the bent towing bar.

Analysis

The rigid tow bar became bent when the towing combination, which was travelling above normal speed, was abruptly braked when the vehicle driver received a signal from the duty instructor to stop. The compressive force of deceleration resulted in the tow bar deforming. The cause of the incident was largely the result of a deterioration in judgment caused by prolonged exposure to a very hot day with multiple incidences of time in the sun repairing cables breaks. In addition, the tow vehicle driver was under some pressure to depart the airfield for a meeting in town and was in a hurry. Despite no significant damage resulting from this incident, there was a high probability that major damage could have resulted. The day's operation was not unusual but was conducted in high temperatures common in that location at this time of year. During the day there were multiple launch stoppages due to cable breaks, with winch drivers remaining in the sun for prolonged periods. Both the glider pilot and the tow vehicle driver had driven the winch during the day. At completion of flying, the two gliders on the airstrip were to be moved to the hanger connected to vehicles via rigid towbars. The ASK-21 was towed at speed towards the hangar and was about to overtake the other glider when the Duty Instructor signalled stop to allow the other glider to enter the hangar first. The vehicle towing the ASK-21 stopped with enough force to cause the tow bar to deform while decelerating the glider. There was a brief exchange between the duty instructor and passenger of the tow vehicle, where it was resolved that the ASK-21 would be towed beyond the hangar to make room for the other glider. The driver then departed with the damaged tow bar causing an oscillation of the glider's tail that was noticed by the Duty Instructor. The Duty Instructor again signalled the vehicle driver to stop but the driver did not see the signal and continued on their way. On arriving at the hangar the ASK-21 was unhooked and the driver and vehicle left the field immediately without further communication. After exiting the vehicle, the passenger noticed the deformation in the tow bar and conducted an inspection of the glider with the duty instructor. Apart from some abrasion, the glider did not suffer further damage. The CFI interviewed the persons involved and identified several failures:

- The winch drivers lacked self-awareness of their fatigued state.
- The vehicle driver was in a hurry to leave and drove too fast.
- The passenger in the vehicle towing the ASK-21, being similarly fatigued, did not identify the glider was being towed too fast.
- Neither the vehicle driver nor passenger maintained adequate situational awareness during the tow.
- It is not normal practice to overtake another glider under vehicle tow.

Despite the investigation showing no significant damage had occurred to the glider, this incident could have easily resulted in substantial damage had there been greater contact between the rudder or tail plane and the vehicle or tow bar. Additionally, had the glider in question had a more ridged tow bar it may have transferred additional braking forces to the airframe of the glider. **Safety Advice**



Accident and Incident Summaries

<u>Fatigue</u>

High levels of fatigue cause reduced performance and productivity and increases the risk of accidents and injuries. Fatigue affects the ability to think clearly. As a result, people who are fatigued are unable to gauge their own level of impairment and are unaware that they are not functioning as well or as safely as they would be if they were not fatigued. People working in a fatigued state may place themselves and others at risk. Fatigue management is a shared responsibility between Clubs and their members. Clubs have an obligation under their Safety Management System to minimise the risk of fatigue, so far as is reasonably practicable. Individual members have a duty to take reasonable care for their own safety and health, and make sure their acts or omissions don't adversely affect the health or safety of others. For further information on fatigue, refer to the Human Factors in Gliding publication.

Towing with a Vehicle

Drivers using a rigid bar must never tow at faster than walking pace and should always use the tow-out equipment designed for use with the glider. When towing gliders, never brake heavily and always allow a greater distance to slow or stop than the distance you would allow with only the car. Drivers and their passengers should always situationally aware and maintain a scanning technique.

Date	11-Mar-2023	Regior	1	NSWGA		SOA	AR Repo	ort Nbr		S-:	2172
Level 1	Consequential	Events	Level 2	el 2 Low Ci				Level	3	Low Circui	t
A/C Mod	el 1	5	ZD-50-3	D-50-3 Puchacz			A/C Model 2				
Injury	Nil	Dama	age	Nil	Pha	ise	e Landing			PIC Age	62
Under inv	estigation. A lov	w-hours pilot joined circuit low and failed to modify when sink was encountered.								ountered.	
The pilot	flew a very low	v circuit but landed successfully.									

Date	11-Mar-2023	Regior	۱		NSWGA		SOA	AR Repo	ort Nbr		S-	2171	
Level 1	Operational	onal Level			Airc	raft C	ontro		Level	3	Incorrect of	Incorrect configuration	
A/C Mod	A/C Model 1 SZI			ZD-50-3 Puchacz			A/C Model 2			Pipe	er PA-25-235	5	
Injury	njury Nil Damage				Nil Phase Launch Pl				PIC Age	67			
Under investigation. During an aerotow la			<i>ı</i> laur	nch the air	brakes	s deployed.							

Date	12-Mar-2023	Region	1	VSA		SOA	AR Repo	ort Nbr		S-	2170	
Level 1	Operational		Leve	l 2 Gro	und Op	eratio	ons	Level	3	Ground ha	andling	
A/C Mod		P	W-6U		A/C	Model	2					
Injury	Nil	Dama	age	Minor	Pha	ase	Grour	nd Ops		PIC Age	69	
Under inv	vestigation. Whil	e pushing	g the g	glider into th	e hanga	ar spo	ot, the s	tarboa	rd aile	eron struck	a hangar	
door and	door and was damaged.											

Date	12-Mar-2023	Region		NSWGA		SOA	AR Repo	ort Nbr		S-:	2178
Level 1	Operational		Level 2	Airc	raft Co	ontro		Level	3	Control iss	ues
A/C Model 1			Discu	s b		A/C	Model	2	Cess	sna 180	
Injury	Nil	Dama	ige Nil Phase Lau				Laund	h		PIC Age	53
Under inv	vestigation. Durii	ng an aer	otow lau	nch, the tu	g beca	ime a	irborne	e prior	to the	e high wing l	oading
glider, Th	e glider pilot wa	s unable t	to releas	e from tow	becau	use th	ne relea	ise kno	b had	slipped out	of reach,
and so m	and so made a radio call to the tow pilot to increase speed. The tow pilot cmplied and the launch continued										
uneventf	uneventfully.										



Accident and Incident Summaries

Date	18-Mar-2023	Regior	1	GQ			SOA	AR Repo	ort Nbr		S-	2175
Level 1	Airspace		Level	2	Aircra	ft Sep	arati	on	Level	3	Near collis	ion
A/C Mod	el 1		LS	S 8-a			A/C	Model	2	LS 8	-18	
Injury	Nil	Damage Nil				Pha	se	Thern	nalling		PIC Age	65
Under inv	Inder investigation. During the second leg of a competition flight, the pilot of a glider established in a											
received	a FLARM alert ind	dicating	an imm	nediate	threat	. The	pilot	was un	able to	iden	tify any reas	on for the
FLARM w	arning and could	not see	any gli	der or a	any pa	rt of a	glide	er while	e lookin	g for	signs of con	flicting
traffic. Th	ne FLARM alert w	as in res	ponset	to anot	her gli	der er	nterir	ng the t	hermal	from	directly be	hind and
below an	below and in the thermalling pilot's blind spot. The entering glider then turned inside the other glider as its											
pilot ope	ilot opened the turn in an attempt to sight the conflicting glider.											

Date	18-Mar-2023	Regior	1	VSA		SOA	AR Repo	ort Nbr		S-	2180
Level 1		Level 2	2				Level	3			
A/C Mod	A/C Model 1			quito		A/C	C Mode	2	LS4		
Injury	Nil	Damage Nil Pł		Pha	ise	Therr	nalling		PIC Age	70	
										-	•

Date	18-Mar-2023	18-Mar-2023 Region			NSWGA		SOA	AR Repo	ort Nbr		S-1	2187
Level 1	Airspace		Leve	12	Aircra	ift Sep	arati	on	Level	3	Near collis	ion
A/C Mod	A/C Model 1		Piper	PA-2	25-235		A/C	Model	2	AER	O VODOCH	DDY L-39C
Injury	Nil	Nil Dam			Nil	Pha	se	Launc	h		PIC Age	39
Under inv	vestigation. Duri	ng a AEF	activit	y th	e Glider/T	ug cor	nbina	ation ha	ad to ta	ike av	oiding actio	n to prevent
a collision	n with a local L3	9-C 'jet e>	perier	nce'	aircraft. A	fter ta	aking	avoida	nce act	ion, t	he aerotow	combination
resumed	esumed routinely and without further incident.											

Date	19-Mar-2023	Region			SAGA		SOA	AR Repo	ort Nbr		S-:	2183
Level 1	Airspace		Leve	el 2	Airspac	e Infri	ngen	nent	Level	3	Airspace Ir	nfringement
A/C Mod	el 1		DO	G-100	00S		A/C	Model	2			
Injury	ıry Nil		age		Nil	Pha	se	In-Flig	ght		PIC Age	

What Happened

The pilot self-reported entering active restricted airspace by 1300 metres for a period of two minutes. **Analysis**

As part of the pilot's pre-flight preparation, he checked the NOTAM in the morning but failed to see that the restricted area was become active a short period (90 mins) during part of the flight. The pilot uses an electronic Flight Bag (EFB) on his mobile phone and he confirmed the airspace was inactive while preparing for the flight. However, by the time he launched, the airspace had become active, and he did not use the EFB during the flight. It was after he landed and was preparing for another flight that he checked the EFB and noticed that the airspace was active.

Safety Advice

EFBs are a great tool, but it is reliant on the pilot using it in flight and does not replace the need to read and understand NOTAMS before a flight.

Date	20-Mar-2023	Region	VSA		SOA	AR Repo	ort Nbr		S-	2176	
Level 1	Airspace		Level 2	Aircra	ift Sep	arati	on	Level	3	Near collis	ion
A/C Mod	el 1		Mosqu	ito B		A/C	Model	2	LS8		
Injury	Nil	Dama	ge	Nil	Pha	ise	In-Flig	Flight		PIC Age	54



Accident and Incident Summaries

Under investigation. Two gliders nearly collided while thermalling.

Date	22-Mar-2023	Regior	1 I	NSWGA		SOA	AR Repo	ort Nbr		S-	2179
Level 1			Level 2					Level	3		
A/C Mod		Disc	us B		A/C	Model	2	LS8-	-18		
Injury	Nil	Dam	age	Nil	Pha	se	Thern	nalling		PIC Age	53
Under investigation. Two gliders nearly collided while thermalling.											

Date	2-Apr-2023	Regior	1	GQ			R Repo	ort Nbr		S-	2190
Level 1	Environment		Level 2	, ,	Wildli	fe		Level	3	Birdstrike	
A/C Mod	el 1	Sta	ndard Lib	elle 201 B		A/C	Model	2			
Injury	Nil	Dam	age Su	ubstantial	Pha	ise	Thern	nalling		PIC Age	64
While thermalling near the Bunya Mountains a wedge tailed Eagle dived from above with legs extended and									xtended and		
collided v	collided with the port wing of the glider. Inspection the left wing identified delamination of subsurface										
materials	s, chipped gelcoa	it and cra	cking in s	everal area	s exte	endin	g over a	an area	appr	oximately 3	0cm
diameter	. Although birds	and glide	er pilots o	ften share t	the sa	me t	hermal	and ca	n ope	erate near e	ach other
with rela	tive safety, birds	can and	do occasi	onally com	e into	cont	act wit	h a glid	er. W	/hile it is un	common that
a bird str	a bird strike causes any harm to aircraft crew, many result in damage to aircraft. Wedge-tailed Eagles are										
territoria	territorial and are known to defend around their nest sites from other Wedge-tailed Eagles and the										
occasional model airplane, hang glider, glider, fixed-wing aircraft and helicopter.											

Date	6-Apr-2023 Region		۱	GQ		SOA	AR Repo	ort Nbr		S-	2193
Level 1	Operational		Level	2 Tei	rain Co	llisior	าร	Level	3	Ground st	rike
A/C Mod	J	antar S	Standard 3		A/C	Model	2				
Injury	Nil Dan		age	Minor	Pha	ase	Outla	nding		PIC Age	51
Under inv	vestigation. On t	he returr	leg of	a competit	on task	cond	litions of	deterio	rated	, and the pil	ot
conducte	d an outlanding	into a cu	ltivated	d paddock.	During t	the fla	are, the	e pilot r	otice	d a picket a	nd wire
fence across the landing run. The pilot conducted a ground loop to avoid contact with the fence.											

Date	6-Apr-2023	Regior	ו GQ			SOA	AR Repo	ort Nbr		S-1	2191
Level 1	Operational		Level	2 Mis	scellar	neous		Level	3	Rope brea	k/Weak link
										failure	
A/C Model 1			Nim	ibus-2C		A/C	Model	2	Paw	nee	
Injury	Nil	Dam	age	Nil	Phase Launch				PIC Age	60	
An inexp	erienced launch o	rew hoc	ked th	e glider on fo	r an a	eroto	w laun	ch but	did no	ot properly e	engage the
rings in t	ne release. At 150	Oft AGL t	he ring	s pulled free,	and t	he gli	der wa	s safely	/ land	ed in a pado	lock. The
glider wa	glider was being launched from the CG release, as a nose release was not fitted, and the crew was unfamiliar										
with its o	with its operation.										

Date	9-Apr-2023	Apr-2023 Region				SOA	AR Repo	ort Nbr		S-	2197
Level 1		Level 2						Level	3		
A/C Mod	el 1		IS 28	B2		A/C	: Model	2			
Injury	ıry Nil Da		age	Nil	Pha	ise	Laund	h		PIC Age	58



Accident and Incident Summaries

Date	16-Apr-2023	Region	n	GQ		SOA	AR Repo	ort Nbr		S-	2195
Level 1	Technical		Level 2		Syster	ns		Level	3	Flight cont	rols
A/C Mod	el 1		ASK	21 B		A/C	Model	2			
Injury	Nil	Dama	age	Nil	Pha	ise	Grour	nd Ops		PIC Age	68

What Happened

While conducting their pre-take-off checks, the student found the right-hand rudder pedal mechanism was binding. The instructor, who was seated in the rear seat, noticed his rudder pedals were operating normally but could hear a noise coming from the front rudder pedals when moved. The pilots exited the glider and investigation confirmed there was a problem with the rudder pedal mechanism.

Analysis

An inspector subsequently removed the right-hand rudder pedal mechanism, cleaned and greased it, and returned the aircraft to service. However, it transpired the problem had not been resolved and a further investigation identified that grease on the left pedal pivot shaft (hinge) had been contaminated with dirt and was quite abrasive. The inspector thoroughly cleaned both front pedal pivot shafts, including the bushes in the pedals. The system was lubricated with graphite, and then reassembled and tested. No fault was found. The aircraft was returned to service.

Date	17-Apr-2023	Regior	1		NSWGA		SOA	R Repo	ort Nbr		S-1	2196
Level 1	Operational		Level	12	Run	way E	vents	5	Level	3	Runway in	cursion
A/C Mod	el 1	Gro	ob 1	.09		A/C	Model	2				
Injury	Nil	Dama	age	Nil			Phase Landing				PIC Age	73
The Tour	ong motor glider	had retu	irned f	from	n a training	g flight	t and	was la	nding c	on RW	Y 14. During	g the
transitior	n to the flare the	instructo	or becc	ome	aware that	at som	neone	e was w	anderi	ng aci	ross the run	way. After
touch-do	wn, the instructo	or initiate	d a gro	ound	d loop and	l raise	d the	e right-ł	nand w	ing. T	he pedestria	an became
aware of	the glider and dr	ropped to	o the g	groui	nd. The ra	ised le	eft wi	ng pass	ed ove	er the	head of the	pedestrian
and the g	lider came to a h	alt. The	glider	was	undamag	ed. Th	ie Clu	b CFI a	dvsied	the p	edestrian w	as
'daydrea	ming' at the time	, and he	has iss	sued	a safety a	alert to	o all c	lub me	mbers	remir	nding them	of the risks
of enterin	ng active runway	s.										

Date	19-Apr-2023	Regior	n	NSWGA		SOA	R Repo	ort Nbr		S-1	2194
Level 1	Operational		2 Airc	raft Co	ontro	Ē	Level	3	Pilot Induc	ed	
										Oscillation	S
A/C Mod	el 1		DG	-1000S		A/C	Model	2			
Injury	njury Nil Damage M				Pha	nase Landing				PIC Age	22
Under inv	vestigation. The	student p	oilot wa	as flying on th	eir se	cond	solo fli	ght. On	late	final the pilo	ot flared too
late and,	in order to arres	t the des	cent ra	ate, pulled ba	ck har	d on [.]	the cor	ntrol co	lumn	. The glider s	struck the
ground o	round on the main and tail wheels and rebounded into the air. The pilot mishandled the subsequent pitch										
correctio	corrections causing the glider to bounce again before running out of energy and coming to rest.										

Date	20-Apr-2023	Regior	۱	VSA		SOA	AR Repo	ort Nbr		S-	2202
Level 1	Operational		Level 2	Grour	nd Ope	eratio	ons	Level	3	Ground ha	ndling
A/C Mod	el 1			A/C Model 2							
Injury	Nil	Dam	age	Minor	Pha	ase	Grou	nd Ops		PIC Age	
Under inv (golf bug situ and t minor da	vestigation. Afte gy), the ground o coo close to the g mage.	r moving crew ther glider, so	that aircr turned t that as th	aft onto th he glider to he glider wa	ne run o align as turr	way a with ned tl	nd diso the ru he port	connec nway. aileror	ting it The to n stru	from the to wing vehicl ck the vehic	owing vehicle e was left in le causing



Date	23-Apr-2023	Regior	า	SAGA		SOA	AR Repo	ort Nbr		S-2200	
Level 1	Operational		Level 2	Mis	scellar	ieous		Level	3	Other Miscellaneou	
A/C Mod	VC Model 1			Grob G 103 Twin II			Model	2			
Injury	Injury Nil		Damage		Pha	Phase In-F		ght		PIC Age	62
Under inv	estigation. The	Duty Inst	ructor all	owed an ai	r Expe	rienc	e Instr	uctor to	o con	duct a pre-s	olo
assessme	ssessment flight and then sent the student solo. The Air Experience Instructor exceeded the privileges of										
their rati	their rating by allowing the student to conduct the take-off and landing.										

Date	29-Apr-2023	Regior	1 I	SAGA		SOA	AR Repo	ort Nbr		S-	2199
Level 1			Level	2				Level	3		
A/C Model 1		ASK21		K21		A/C	C Mode	2	Paw	nee	
Injury	Nil	Dama	age	Nil	Pha	ise	Launo	:h		PIC Age	65

Date	29-Apr-2023	Region	1	VSA		SOA	R Repo	ort Nbr		S-	2208
Level 1	Operational		Level 2	Airc	raft Co	ontro		Level	3	Hard landi	ng
A/C Mod	el 1		DG-4	00		A/C	Model	2			
Injury	Nil	Dama	age Si	ubstantial	Pha	se	Outla	nding		PIC Age	83
Under inv	estigation. The	pilot self-	launchec	l from RWY	' 18 an	d clir	nbed u	nder p	ower	towards the	e South. At a
height of	about 1,430 ft t	he pilot e	ncounter	ed lift aver	aging	8-9 k	ts on tl	ne vario	o, whi	ich under er	ngine power
suggeste	d a thermal strei	ngth of 3-	4 kts. The	e pilot turn	ed into	o the	therm	al, turn	ed of	f and retrac	ted the
engine ar	nd raised the une	dercarriag	ge. The pi	lot did not	find th	ne co	re afte	r two ti	urns a	ind flew tov	vards a wispy
cumulus	cloud about 1.5	kms to th	e Southv	est. After (one tu	rn se	arching	g for lift	und	er the cloud	and at 700
ft, the pil	ot then flew tow	ards a m	ore deve	oped cum	ulus clo	oud a	bout 2	kms to	the s	South with t	he intention
of startin	g the engine to §	get there.	The pilo	t had "obse	erved a	an ap	parent	ly landa	able E	ast/West pa	addock
among th	ie smaller hobby	farm pao	ddocks",	so he lowe	red the	e und	lercarri	age, ex	tend	ed the engir	ne and
turned or	n the ignition. Th	e starter	motor di	d not oper	ate, ar	nd the	e pilot i	noticed	that	the "start"	LED did not
illuminat	e. The pilot susp	ected the	engine h	had not ext	ended	fully	but co	uld not	iden	tify the prol	olem. With
the glide	r at about 400 ft	above gr	ound, the	e pilot was	comm	itted	to 'stra	aight-ir	" lan	ding into th	e selected
paddock.	The pilot electe	d to focus	s on the o	outlanding	and no	ot ma	nually	retract	the e	engine, as th	e L/D ratio
with an e	xtended "dead"	engine w	as about	1:16. The J	pilot m	nisjud	lged th	e appro	bach a	and arrived	too close to
the East e	end of the paddo	ock and to	oo high to	o make a tu	irn ont	o fina	al. A tig	sht 270	-degr	ee turn was	made to the
left to los	e height, and th	e approa	ch was m	ade about	100 ft	over	the No	ortheas	t corr	er of the (6	00m long
and 200n	n wide) paddock	. As the p	ilot mano	peuvred ali	gn wit	h the	paddo	ock leng	th, h	e instinctive	ly opened
the air br	akes. However,	this incre	ased the	descent ra	te mar	kedly	/ into t	he gent	ly up	ward slopin	g paddock
and slow	ed the aircraft d	own. The	pilot imr	nediately c	losed t	the a	irbrake	s, but t	he ai	rcraft stalled	d and
dropped	the right wing to	the grou	ind. The រួ	glider yawe	d to th	ne rig	ht and	touche	ed do	wn heavily a	and causing
the unde	rcarriage and tai	lwheel to	collapse	. The fusela	age als	o suf	fered s	ubstan	tial d	amage.	







Accident and Incident Summaries



Date	29-Apr-2023	Region	n SAGA			SOA	AR Repo	ort Nbr		S-2	2201
Level 1	Operational		Level 2	Run	way E	vent	5	Level	3	Runway in	cursion
A/C Mod	el 1		Jabiru	170		A/C	Model	2	Mot	or vehicle	
Injury	Nil	Damag	ge	Nil	Pha	se	Landi	ng		PIC Age	55

What Happened

An early solo student was driving a private vehicle to retrieve a glider that had recently landed. The vehicle moved slowly towards the airside area adjacent to the RWY 23 threshold. The driver of the vehicle failed to conduct an effective scan and thus did not see the aircraft on final approach to runway 23. The vehicle then crossed the runway, as the approaching aircraft was on short final. The approaching aircraft (Jabiru) initiated a go-around to avoid the conflict.

Analysis

The Jabiru aircraft was conducting circuit training to RWY 23. When on the short final, the flight instructor observed a vehicle enter the airside area adjacent to the RWY 23 threshold. The flight instructor believed that the vehicle would hold short of the RWY while the Jabiru landed. However, the vehicle continued onto the RWY directly in the path of the Jabiru to retrieve a glider that had landed earlier. The student flying the Jabiru called "going around", applied power and conducted a missed approach from about 50ft AGL. The student pilot then completed a normal circuit, followed by a full stop landing. After landing the flight Instructor spoke with both the duty tug pilot and duty instructor who had witnessed the incident from the ground. Investigation by the CFI identified that the vehicle driver entered the airside area adjacent to the runway 23 threshold, without taking sufficient time to conduct a scan for aircraft approaching. The vehicle



Accident and Incident Summaries

driver was focussed on retrieving the glider that had just landed, and not enough attention to aircraft in the circuit. The duty instructor met with the vehicle driver and pointed out the importance of looking for aircraft on final. Especially the importance of conducting a targeted scan for aircraft. As the aircraft on final does not move significantly in the driver's field of view, the eyes' motion detection will not attract the viewers' attention. Therefore, the viewer needs to use the correct scanning technique to detect the aircraft approaching the runway. An additional contributing factor was the use of a private vehicle, in place of the normal golf cart. The private vehicle roof line can obstruct more of the field of view and require the driver to move their head to clearly see aircraft.

Safety Advice

To avoid runway infringements pilots should apply Threat and Error Management in their preparation to move vehicles around the airfield (e.g., identify the threats such as approaching aircraft). Drivers must also consider limitations of the human eye to detect items that do not appear to move in the persons field of view. To see an aircraft, you must focus your eye on the area where it is or may be. This means that you must look and focus then move to another area and look and focus.

Date	29-Apr-2023	Region	1	VSA		SOA	AR Repo	ort Nbr		S-2	2204
Level 1	Operational		Level 2		Flight			Level	3	S-2204 Other Flight Prep/Nav Issues	
				Prepara	tion/N	laviga	ation			Issues	
A/C Mod	el 1		LS 4	LS 4-a			A/C Model 2				
Injury	Nil	Dama	age	Nil	Pha	ise	Landi	ng		PIC Age	

Date	30-Apr-2023	Regior	ı	VSA		SOA	AR Repo	ort Nbr		S-	2203
Level 1	Airspace		Level 2	Level 2 Aircraft Se		paration		Level	3	Aircraft Se	paration
									Issues		
A/C Mod	el 1		LS 4	-a		A/C	Model	2			
Injury	Nil	Dam	age	Nil	Nil Pha		ase Therr			PIC Age	
(•	•									

Date	6-May-2023	Region	1	GQ		SOA	AR Repo	ort Nbr		S-	2206
Level 1	Airspace		Level 2	Aircra	aft Sep	arati	on	Level	3	Collision	
A/C Mod	el 1	18		A/C	Model	2	ASV	V 20 B			
Injury	Nil	Minor	Pha	ise	In-Flig	ght		PIC Age	63		
Under in	vestigation. On t	he day of	the accid	lent, 10 gli	ders w	/ere c	compet	ing in a	local	Grand Prix	event and
flying arc	ound a 150 km ta	sk. The ta	ask was a	polygon w	ith 5 t	urn p	oints.	The coll	ision	occurred in	a thermal
just after	ust after several gliders rounded the third turn point. The thermal was occupied by six gliders flying at										
similar he	imilar heights. An LS 8-18 glider was the last to enter and, about halfway around its first turn, collided with										
an ASW 2	20B glider. Invest	igation is	ongoing	, but a revi	ew of	the fl	light tra	ices sug	ggest	s the pilot o	f the LS 8-18
entered t	the thermal sligh	tly below	and pos	sibly in a do	ouble-	blind	positic	on with	respe	ect to the AS	SW 20B and
stayed in	this position un	til the mo	ment of	impact. If t	he pilo	ots of	^f both a	ircraft	were	in a positio	n such that
they cou	ld see the other,	they did	not, and	this was po	ossibly	beca	use the	ey were	look	ing at one o	r other
glider in t	the thermal at th	e time. T	he pilot o	of the ASW	20B e	ventu	ually no	ticed t	he ot	her glider in	close
proximity	, and the collisic	on occurre	ed when	he took ev	asive a	actior	n by rol	ling out	t of th	ne turn. The	gliders
suffered	no structural dai	nage – th	ie port ai	leron of gli	der th	e ASV	N 20B s	uffered	d a 15	0mm abras	ion to the
trailing e	dge, and the lead	ding edge	of the p	ort wingtip	of LS	8-18	suffere	d mino	r pair	nt abrasion.	
Unfortun	ately, this is a kr	own haza	ard in glio	ding compe	tition	s and	Airpro	x event	s con	tinue to occ	ur despite
pilots bei	ing trained in risl	k manage	ment for	flying in pr	oximi	ty to	other g	liders.	Since	the introdu	ction of



Accident and Incident Summaries

Flarm, the incidence of actual collisions has dropped significantly. However, see-and-avoid remains the primary defence.

Date	13-May-2023	Regior	า	GQ		SOA	AR Repo	ort Nbr		S-	2209
Level 1	Operational		Level	2 Mis	Miscellaneous			Level 3		Rope/Ring	s Airframe
										Strike	
A/C Mod	/C Model 1 P		Piper P		A/C Model		2	DG-	1000S		
Injury	Nil	Dama	age	Substantial	Pha	ise	Landing			PIC Age	68

What Happened

During the landing approach to RWY 06 at Clifton ALA Qld the tow rope of the Pawnee tug struck the tail of a DG-1000S that was lined up immediately behind the threshold of runway 06. The glider was substantially damaged.

Analysis

The gliding club was utilising this regional aerodrome for the purpose of conducting outlanding training and cross country aerotow training including straight and level and descending on tow. Two tow planes were in service. Runway 06 was being used as the wind was 10 knots from the northeast. The DG 1000S was parked behind the 800-metre runway threshold near the runway markers and was occupied by a flight crew awaiting the other tug to provide a launch. The wingtip runner was also standing nearby, and the pilot of the other tug was waiting for the Pawnee on approach to land before entering the runway. Witnesses reported seeing the tow plane rather low on approach. The pilot in the other tow plane could see the incident unfolding and made a radio call to the Pawnee pilot to drop the rope, but by then it was too late. The witnesses heard power being applied just before the tow plane reached the aerodrome boundary and the tow plane passed directly over the glider at a height of about 50 feet. The tow rope, which was approximately 60 metres long with metal rings on the free end for attachment to the glider's tow assembly, caught on and wrapped around the port side of the glider's tailplane. The glider's tail was lifted, and the glider yawed 90 degrees to starboard. With the tailplane now parallel to the direction of the tug's flight, the rope slid free. The glider suffered substantial damage to the tailplane, elevator, fin and rudder (see photo).





Accident and Incident Summaries

The club CFI reported that the runway width between the markers was 30 metres, and as there was no verge on which to land, the tow pilots had been briefed to approach high and land long. The tow pilot was a very experienced pilot, but he was lacking currency – having only flown 2 hours and 16 flights in the preceding 12 months. The tow pilot reported that he was not intending to fly the tug on the day as he lacked currency and hadn't flown that tug for some time. Nevertheless, he viewed this as "a good opportunity to renew my recency". The tow pilot conducted four launches prior to the incident flight. On the last flight the pilot stated that he joined a long downwind behind a local private pilot who was concerned about the glider positioned on the threshold. The local pilot was advised to land long and did so successfully. The tow pilot stated "I remember being concerned about my spacing from [the local aircraft] and making sure I didn't crowd [it] in the circuit. This put me on a longer final than I would have normally liked but it shouldn't have presented any problems. I could see the glider parked on the threshold of the runway and realised that I would need extra height over the threshold to clear it. I was well aware of the airfield elevation but on final approach I believe the upward slope of the runway gave me the impression I was higher than I actually was over the threshold. As I crossed the threshold, I felt a jerk and realised I had contacted something on the ground. As I taxied back, I realised what had happened and my world caved in!" The club's Tugmaster conducted a training session with all the club's active tug pilots to highlight the lessons learnt from this incident.

Safety Advice

A 55-metre tow rope hangs about 40 feet below a tow plane at approach speeds, so tow pilots must ensure they manage the risk caused by the trailing rope and rings by allowing plenty of clearance over obstacles. They should also avoid landing over the top of parked gliders, and in this case the pilot could have approached on the clear side of the runway and then manoeuvered to align with the runway centreline after passing the gliding operation. If the pilot suspects they are coming in too low and are unsure about obstacle clearance, whether it be buildings, vehicles, parked or taxying aircraft or people (especially people), they should drop the rope. When the rope is dropped, it loses forward momentum very quickly and ends up dropping almost vertically to the ground. When clubs are conducting remote operations, it is sound practice to conduct a risk assessment and ensure procedures are implemented to mitigate identified risks. **Regualtory note**

This matter was listed in the summary of incidents that ATSB provides to CASA on a weekly basis. Occasionally CASA will seek further information from the operator, or from GFA if it involves a sailplane administered by GFA. In this case, CASA sought information from the operator as tow planes listed on the Australian Civil Aircraft Register are administered by CASA. After reviewing the report, an Officer of CASA advised that this accident may have resulted in a breach of REG 91.050 – 'Aircraft not to be operated in manner that creates a hazard'. This is a strict liability offense. Strict liability offences have been defined by statute as crimes not because the acts or omissions are morally wrong, but because of public policy. The law has set a standard of behaviour, and any breach in that standard of behaviour imposed by the statute will result in criminal liability even in the absence of any criminal intent. Strict liability offences regulate activities that pose potential harm to public health, public safety and public morals. These strict liability offenses are often prosecuted summarily as there is no requirement to prove criminal intent. It is sufficient for the prosecution to prove the fact of commission of the acts defined by law as a crime for strict criminal liability to attach. CASA was informed that the tow pilot was dealt with and counselled in accordance with the GFA's Complaints and Disciplinary procedures.

Date	13-May-2023	Regior	۱		VSA		SOA	AR Repo	ort Nbr		S-2	2214
Level 1	Airspace		Level 2 Aircraf			ift Sep	arati	on	Level	3	Aircraft Se	paration
											Issues	
A/C Mod	el 1	1 HORNET STOL A/C Model 2 Cessna										
Injury	Nil	Dama	age		Nil	Pha	ase In-Flig		ght		PIC Age	69



Date	15-May-2023	Region		SAGA		SOA	AR Repo	ort Nbr		S-	2210
Level 1	Airspace	Le	evel 2	Aircra	aft Sep	barati	on	Level	3	Near collis	ion
A/C Mod	el 1	Stand	ard Lib	elle 201 B		A/C	: Model	2	M0 M20	ONEY AIRCF DJ	AFT CORP
Injury	Nil	Damage	į	Nil	Pha	ase	In-Flig	ght		PIC Age	73

Date	19-May-2023	Region		NSWGA			AR Repo	ort Nbr		S-	2211	
Level 1	Operational		Level 2	Ru	nway E	vent	S	Level	3	Runway in	ncursion	
A/C Mod	el 1		Grob (G 109		A/C	: Model	2	Cess	essna 172S		
Injury	Nil	Dama	ige	Nil	Pha	ase Landin		ng		PIC Age	55	
, ,		1	0					0		0		

Date	19-May-2023	Regior	า		WAGA		SOA	R Repo	ort Nbr		S-	2212
Level 1	Operational		Leve	el 2	A	Airfrar	ne		Level	3	Landing	
										gear/Indic	ation	
A/C Mod	A/C Model 1			LS 4			A/C	Model	2			
Injury	Nil	Dam	age	Sub	ostantial	Pha	nase Landing				PIC Age	49
The unde	rcarriage collaps	ed on la	nding.	Unco	ommande	d retr	actio	n of LS	type gl	ider ι	undercarria	ges is not
uncomm	on and usually o	cur whe	n the g	glider	r travels c	over ro	bugh	ground	or exp	erien	ces a sudde	n jolt. To
help prev	ent landing gear	collapse	s, alwa	ays fo	ollow the	maint	enan	ice mar	nual ins	tructi	ions at each	annual
inspectio	inspection. Ensure there is adequate over-centre and that the gas strut is in good condition. A weak gas strut											
will allow	ill allow the landing gear to collapse.											

Date	21-May-2023	Region	1		NSWGA		SOA	AR Repo	ort Nbr		S-	2213	
Level 1	Operational		Leve	el 2	Airc	raft C	ontro		Level	3	Control iss	sues	
A/C Mod	el 1	Normal Level 2 Aircraft Control Level 3 Control issues Piper Pawnee A/C Model 2 SZD-50-3 Puchacz Damage Minor Phase Launch PIC Age 55 . As the pilot applied power to commence an aerotow launch, the tow plane pitched				CZ							
Injury	Nil	Dama	age		Minor	Pha	ise	Launc	:h		PIC Age	55	
Under in	Under investigation. As the pilot applied power to commence an aerotow launch, the tow plane pitched												
forward a	forward and sufferred a prop strike.												

Date	21-May-2023	Region	1	GQ			AR Repo	ort Nbr		S-	2217
Level 1			Level 2		Level 3				3		
A/C Mod	el 1		SF 25 C	Falke		A/C	Mode	2			
Injury	Nil	Dama	age	Nil	Pha	ise In-Flig		ght		PIC Age	68

Date	26-May-2023	Region	1	VSA			R Repo	ort Nbr		S-	2224	
Level 1	Operational		Level 2	Crew a	nd Cat	oin Sa	fety	Level 3		Other Crew and Cabin Safety Issues		
A/C Mod	el 1		Zephy	/rus		A/C	Mode	2				
Injury	Nil	Dama	age	Nil	Pha	se In-Flight			PIC Age	65		
What Ha	What Happened											



Accident and Incident Summaries

While conducting spin entry and recovery manoeuvres during an instructor course, the course instructor in the front seat noticed on recovery that one lap and shoulder strap of the harness had come undone. The harness was resecured.

Analysis

The course instructor identified that the control column could contact the rotary control on the harness buckle when pulled fully back. When entering the spin, the movement of the control column fully back and across to the right resulted in the control column striking the rotary control causing it to move sufficiently to disengage the harness. The seat was moved further aft and the harness pulled tighter on subsequent flights, which resolved the issue.

Safety Advice

It is not unknown for seat belts to be opened when struck by a moving control column, so it is important that pilots ensure they have full and free control movement during the pre-take-off checks. If the control column can strike the harness buckle, the pilot should take appropriate measures to remove this risk.

Date	28-May-2023	Regior	۱	VSA		SOA	AR Repo	ort Nbr		S-1	2215	
Level 1	Operational		Leve	12 Mis	scellar	neous		Level	3	Rope brea	k/Weak link	
								failure				
A/C Mod	A/C Model 1			PA-25-160		A/C	Model	2	IS-2	8B2		
Injury	Nil	Damage Nil			Pha	se	Laund	h		PIC Age		
Under investigation. At about 200ft duirng an aerotow launch the tow rope departed and the gliding instructor conducted an off-field landing.												
			U									

Date	1-Jun-2023	Region		NSWGA		SOA	AR Repo	ort Nbr		S-	2219
Level 1	Airspace		Level 2	2 Aircra	aft Sep	arati	on	Level	3	Near collis	sion
A/C Mod		Grob	G 109		A/C	: Model	2	Cess	sna 172S		
Injury	Nil	Dama	age	Nil	Pha	se	Thern	nalling		PIC Age	55

Date	4-Jun-2023	Region			NSWGA		SOA	AR Repo	ort Nbr		S-	2221
Level 1	Airspace		Leve	el 2	Aircra	ift Sep	arati	on	Level	3	Near collis	ion
A/C Mod	el 1	l	KR-03	A Pu	chatek		A/C	Model	2	Heli	copter 206	
Injury	Nil	Nil Damag			Nil	Pha	ise	Landi	ng		PIC Age	
Under in	Under investigation. During winch gliding operations, the crew of a glider observed a helicopter flying inside											
the circu	it at approximate	ly 600 ft	AGL.	The	pilot flying	g the g	lider	took e	vasive a	actior	n by extendi	ng the
airbrakes	to provide vertion	cal separ	ation	fron	n the helico	opter.	Mult	tiple At	tempts	to co	ontact the he	elicopter
pilot on b	ooth the CTAF an	d Area Fi	reque	ncy	were unsu	ccessf	ul. Tł	ne Club	CFI co	ntacte	ed the Chief	Pilot of the
helicopte	helicopter operator and was informed "that they are an emergency service and cannot afford the time that											
(diverting	(diverting to avoid the circuit) would entail."											





Date	4-Jun-2023	Region		GQ		SOA	AR Repo	ort Nbr		S-	2225	
Level 1	Technical		Level 2		Syster	ns		Level	3	Other Syst	ems Issues	
A/C Mod	el 1		Twin A	stir		A/C	Model	2				
Injury	Nil	Dama	ge	Nil	Pha	ise Launch		h		PIC Age	59	

Date	7-Jun-2023	Region			SOA	AR Repo	ort Nbr		S-	2222	
Level 1	Operational	l	Level 2	Mis	scellar	ieous		Level	3	Other Mise	cellaneous
A/C Mod	el 1		Cessna 2	150G		A/C	Model	2	ASK	Other Miscellaneous 21 PIC Age	
Injury	Nil	Damag	ge	Nil	Pha	ase Laund		h		PIC Age	

Date	12-Jun-2023	23 Region		VSA		SOAR Report Nbr				S-2227	
Level 1	Operational	rational Le		/el 2 Miscellar		eous Level 3		3	Other Miscellaneous		
A/C Model 1		American Champion Aircraft			əft	A/C Model 2					
		Corp 8GCBC Scout									
Injury	Nil	Dama	age	Nil	Pha	ase In-Flight			PIC Age	56	
What Happened											
A report was received advising a GFA member flying an American Champion Scout conducted a low-level pass diagonally over the cross-strip at a Regional aerodrome and then did a steep climbing turn on departure.											



Accident and Incident Summaries



Analysis

Gliding Operations were being conducted from RWY 12 Bitumen. Several witnesses observed the Scout taxi to RWY 04 and heard the pilot make a standard departure call. The pilot conducted a normal take-off but was observed shortly thereafter descending from the Northeast at what appeared to be a few hundred feet. The Scout continued to descend and then crossed the runway cross-strips diagonally above the Windsock at approximately 50 feet AGL. As the aircraft crossed, it climbed in a steep bank to the right heading Northeast and then continued to track on climb. Two witnesses reported the Scout's wingtip came within 2 metres of the ground during the turn. The gliding club CFI subsequently spoke with the pilot, who acknowledged that it was the wrong thing to do and advised that it wouldn't happen again.

Date	9-Jul-2023	Region		GQ			SOAR Report Nbr		S-2226		
Level 1	Airspace		Level 2 Aircra		Ift Separation		Level 3		Aircraft Separation		
										Issues	
A/C Model 1		Duo Discus				A/C	Model	1odel 2 737		MAX 8	
Injury	Nil Damag		age		Nil	Phase In-Flig		ght		PIC Age 76	
Under investigation. Shortly after releasing from aerotow on a training flight, and about 2 NMs South of the											
aerodron	aerodrome, the glider pilots received a radio call from the ground alerting them to the presence of a Boeing										
737 passing immediately South of the aerodrome on approach to Wellcamp airport. The glider crew											
eventually sighted the airliner about 2500ft higher and determined it was not a threat. The Duty instructor,											
who was flying in the glider at the time, was aware RPT traffic was expected but did not hear any of the											
usual radio calls announcing the approach of the airliner.											





Level 1	Level 2	Level 3	Definition			
Airspace	Aircraft Separation	Collision	An aircraft collides with another aircraft either airborne or on the runway strip, or a vehicle or person on the runway strip.			
Airspace	Aircraft Separation	Issues	Airspace - Aircraft separation occurrences not specifically covered elsewhere.			
Airspace	Aircraft Separation	Near collision	An aircraft comes into such close proximity with another aircraft either airborne or on the runway strip, or a vehicle or person on the runway strip, where immediate evasive action was required or should have been taken. (a) En-route (b) Thermalling (c) Circuit			
Airspace	Airspace Infringement	Airspace Infringement	Where there is an unauthorised entry of an aircraft into airspace for which a clearance is required.			
Airspace	Other	Other Airspace Events	Airspace occurrences not specifically covered elsewhere.			
Consequential Events	Ditching	Ditching	When an aircraft is forced to land on water.			
Consequential Events	Diversion / Return	Diversion / Return	When an aircraft does not continue to its intended destination, but either returns to the departure aerodrome or lands at an alternative aerodrome.			
Consequential Events	Emergency / Precautionary descent	Emergency / Precautionary descent	<u>Emergency descent</u> - Circumstances that require the flight crew to initiate an immediate high rate descent to ensure the continued safety of the aircraft and its occupants.			
Consequential Events	Emergency evacuation	Emergency evacuation	When crew and/or passengers vacate an aircraft in situations other than normal and usually under the direction of the operational crew.			
Consequential Events	Forced / Precautionary landing	Forced / Precautionary landing	Forced landing – Circumstances under which an aircraft can no longer sustain normal flight and must land regardless of the terrain. Precautionary landing - A landing made as a precaution when, in the judgement of flight crew, a hazard exists with continued flight.			
Consequential Events	Low Circuit	Low Circuit	Any occasion where a pilot flies a Low Circuit that was potentially hazardous.			
Consequential Events	Other	Other Consequential Events	Consequential events not specifically covered elsewhere.			
Environment	Weather	Icing	Any icing issue that affects the performance of an aircraft			
Environment	Weather	Lightning strike	The aircraft is struck by lightning.			
Environment	Weather	Other Weather Events	Weather occurrences not specifically covered			
Environment	Weather	Turbulence/Windshear/Microburst	elsewhere. Aircraft performance and/or characteristics are affected by turbulence, windshear or a microburst.			
Environment	Weather	Unforecast weather	Operations affected by weather conditions that were not forecast or not considered by the flight crew.			
Environment	Wildlife	Animal strike	A collision between an aircraft and an animal.			
Environment	Wildlife	Birdstrike	A collision between an aircraft and a bird. Wildlife related occurrences not specifically covered			
Environment Operational	Wildlife Aircraft Control	Other Wildlife Events Airframe overspeed	elsewhere. The airspeed limit has been exceeded for the current aircraft configuration as published in the aircraft			
Operational	Aircraft Control	Control issues	The flight crew encounter minor aircraft control difficulties while airborne or on the ground.			
Operational	Aircraft Control	Hard landing	Damage occurs during the landing.			
Operational	Aircraft Control	Incorrect configuration	An aircraft system is incorrectly set for the current and/or intended phase of flight.			
Operational	Aircraft Control	In-flight break-up	The aircraft sustained an airborne structural failure or damage to the airframe, to the extent that continued flight is no longer possible.			
Operational	Aircraft Control	Loss of control	When control of the aircraft is lost or there are significant difficulties controlling the aircraft either airborne or on the ground.			
Operational	Aircraft Control	Other Control Issues	Aircraft control occurrences not specifically covered elsewhere.			
Operational	Aircraft Control	Pilot Induced Oscillations	Any PIO occurrence occassioning damage.			
Operational	Aircraft Control	Stall warnings	Any cockpit warning or alert that indicates the aircraft is approaching an aerodynamic stall.			
Operational	Aircraft Control	Wheels up landing	An aircraft contacts the intended landing area with the landing gear retracted.			

Operational	Aircraft Loading	Loading related	 The incorrect loading of an aircraft that has the potential to adversely affect any of the following: a) the aircraft's weight; b) the aircraft's balance; c) the aircraft's structural integrity; d) the aircraft's performance; e) the aircraft's flight characteristics.
Operational	Aircraft Loading	Other Loading Issues	Aircraft loading occurrences not specifically covered elsewhere.
Operational	Airframe	Doors/Canopies	When a door or canopy, or its component parts, has failed or exhibited damage.
Operational	Airframe	Furnishings & fittings	An internal aircraft furnishing or fitting, including its component parts, has failed or exhibited damage.
Operational	Airframe	Fuselage/Wings/Empennage	Damage to the fuselage, wings, or empennage not caused through collision or ground contact.
Operational	Airframe	Landing gear/Indication	When the landing gear or its component parts (including indications), has failed or exhibited damage.
Operational	Airframe	Objects falling from aircraft	Objects inadvertently falling from or detaching from an aircraft.
Operational	Airframe	Other Airframe Issues	Technical - Airframe occurrences not specifically covered elsewhere.
Operational	Airframe	Windows	A window or a component part has failed or exhibited damage.
Operational	Communications	Other Communications Issues	Communications occurrences not specifically covered elsewhere.
Operational	Communications	Transponder related	The incorrect setting of a code and/or usage of transponder equipment.
Operational	Crew and Cabin Safety	Cabin injuries	A cabin crew member or passenger has suffered an illness or injury.
Operational	Crew and Cabin Safety	Flight crew incapacitation	A Flight Crew member is restricted to nil or limited duties as a result of illness or injury.
Operational	Crew and Cabin Safety	Inter-crew communications	Relates specifically to a loss, or breakdown, of communication between flight crew or associated ground staff.
Operational	Crew and Cabin Safety	Other Crew and Cabin Safety Issues	Cabin safety occurrences not specifically covered elsewhere.
Operational	Crew and Cabin Safety	Passenger related	Where the actions of a passenger adversely or potentially affects the safety of the aircraft.
Operational	Crew and Cabin Safety	Unrestrained objects	When objects are not appropriately restrained for the aircraft operation or phase of flight.
Operational	Fire Fumes and Smoke	Fire	Any fire that has been detected and confirmed in relation to an aircraft operation.
Operational	Fire Fumes and Smoke	Fumes	When abnormal fumes or smells are reported on board the aircraft.
Operational	Fire Fumes and Smoke	Smoke	When smoke is reported to be emanating from: a) inside the aircraft; or b) an external component of the aircraft
Operational	Flight Preparation/Navigation	Aircraft preparation	Errors or omissions during the planning and/or pre-flight phase that affect or may affect aircraft safety in relation to: a) the aircraft's weight; b) the aircraft's balance; c) the aircraft's structural integrity; d) the aircraft's performance; e) the aircraft's flight characteristics.
Operational	Flight Preparation/Navigation	Lost / Unsure of position	When flight crew are uncertain of the aircraft's position and/or request assistance from an external source.
Operational	Flight Preparation/Navigation	Other Flight Preparation/Navigation Issues	Navigation - Flight planning occurrences not specifically covered elsewhere.
Operational	Flight Preparation/Navigation	VFR into IMC	An aircraft operating under the Visual Flight Rules enters Instrument Meteorological Conditions.
Operational	Fuel Related	Contamination	When the presence of a foreign substance is found in fuel.
Operational	Fuel Related	Exhaustion	When the aircraft has become completely devoid of useable fuel.
Operational	Fuel Related	Leaking or Venting	Relates specifically to the unplanned loss of fuel from a fuel tank or fuel system.
Operational	Fuel Related	Low fuel	The aircraft's supply of fuel becoming so low (whether or not the result of a technical issue) that the safety of the aircraft is compromised.
Operational	Fuel Related	Other Fuel Related Issues	Fuel related occurrences not specifically covered elsewhere.

Operational	Fuel Related	Starvation	When the fuel supply to the engine(s) is interrupted, but there is still usable fuel on board the aircraft.		
Operational	Ground Operations	Foreign Object Damage/Debris	Any loose objects on an aerodrome have caused, or have the potential to cause, damage to an aircraft.		
Operational	Ground Operations	Ground handling	Any ground handling and aircraft servicing that caused, or has the potential to cause injury or damage to a stationary aircraft.		
Operational	Ground Operations	Jet blast/Prop/Rotor wash	Any air disturbance from a ground-running aircraft propeller, rotor or jet engine that has caused, or has the potential to cause, injury or damage to property.		
Operational	Ground Operations	Other Ground Ops Issues	Ground operation occurrences not specifically covered elsewhere.		
Operational	Ground Operations	Taxiing collision/near collision	An aircraft collides, or has a near collision, with another aircraft, terrain, person or object on the ground or on water during taxi.		
Operational	Miscellaneous	Missing aircraft	The aircraft is reported as missing. Miscellaneous occurrences not specifically covered		
Operational	Miscellaneous	Other Miscellaneous	elsewhere in this manual.		
Operational	Miscellaneous	Rope break/Weak link failure	Towplane separation incident necessitating a modified circuit.		
Operational	Miscellaneous	Rope/Rings airframe strike	Airframe struck by launch cable or rings. Includes entanglemt with rope.		
Operational	Miscellaneous	Warning devices	Situations in which an aural or visual aircraft warning device activates to alert the flight crew to a situation requiring immediate or prompt corrective action.		
Operational	Miscellaneous	Winch Performance Issue	Any incident caused by poor winch performance, such as power failure, or mechanical reasosn.		
Operational	Runway Events	Depart/App/Land wrong runway	 An aircraft that: a) takes off b) lands, c) attempts to land from final approach d) operates in the circuit at, to or from an area other than that authorised or intended for landing or departure 		
Operational	Runway Events	Other Runway Events	Runway event occurrences not specifically covered elsewhere.		
Operational	Runway Events	Runway excursion	An aircraft that veers off the side of the runway or overruns the runway threshold.		
Operational	Runway Events	Runway incursion	The incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.		
Operational	Runway Events	Runway undershoot	Any aircraft attempting a landing and touches down prior to the threshold.		
Operational	Terrain Collisions	Collision with terrain	Any collision between an airborne aircraft and the ground, water or an object, where the flight crew were aware of the terrain prior to the collision.		
Operational	Terrain Collisions	Controlled flight into terrain (CFIT)	When a serviceable aircraft, under flight crew control, is inadvertently flown into terrain, obstacles or water without either sufficient or timely awareness by the flight crew to prevent the collision.		
Operational	Terrain Collisions	Ground strike	When part of the aircraft drags on, or strikes, the ground or water.		
Operational	Terrain Collisions	Wirestrike	When an aircraft strikes a wire, such as a powerline, telephone wire, or guy wire, during normal operations.		
Technical	Powerplant/Propulsion	Abnormal Engine Indications	A visual or cockpit warning that indicates an engine is malfunctioning or operating outside normal parameters.		
Technical	Powerplant/Propulsion	Engine failure or malfunction	An engine malfunction that results in a total engine failure, a loss of engine power or is rough running.		
Technical	Powerplant/Propulsion	Other Powerplant/Propulsion Issues	Powerplant / Propulsion occurrences not specifically covered elsewhere.		
Technical	Powerplant/Propulsion	Propeller malfunction	The failure or malfunction of an aircraft propeller or its associated components.		
Technical	Powerplant/Propulsion	Transmission & Gearboxes	The failure or malfunction of an aircraft transmission/gearbox and/or its associated components.		

Technical	Systems	Avionics/Flight instruments	The partial or complete loss of normal functioning of the avionics system or its components.
Technical	Systems	Electrical	The partial or complete loss of normal functioning of the aircraft electrical system.
Technical	Systems	Flight controls	The partial or complete loss of normal functioning of a primary or secondary flight control system.
Technical	Systems	Fuel	The partial or complete loss of normal functioning of the fuel system.
Technical	Systems	Hydraulic	The partial or complete loss of the hydraulic system.
Technical	Systems	Other Systems Issues	Technical - Systems occurrences not specifically covered elsewhere.