



**NSWGA TRAINERS COACHES  
INSTRUCTORS MEETING  
JULY 2022**



**SAFETY MANAGER DISCUSSIONS  
+ Q&A FORUM**


**DREW MCKINNIE**

# SAFETY – STRATEGIC INTENT

- Safety – GFA Safety Policy Commitment
- “This means doing the right things, to high standards, the right way.”
- “The right way means the safe way, in a recreational and sporting aviation environment, with volunteer participants.”
- Not an empire!
- Safety achieved through Operations, Soaring Development, Airworthiness

C4/1/13 The Gateway  
Broadmeadows VIC. 3047  
Australia  
Phone +61 (0) 3 9359 1613  
Fax +61 (0) 3 9359 9865

The Gliding Federation of  
Australia Inc.  
Trading as Gliding Australia



**Safety Management System**

**Safety Bulletin**  
No. 03/22 February 2022

**Safety Policy Commitment**

The GFA President, who is Board Chairman, has signed a new GFA Safety Policy Commitment, attached below, for reference by members, clubs, regional associations, GFA departments, executive and board.

This document is a one-page summary statement of GFA and Gliding Australia's commitment to safety outcomes, principles, risk-based systems, standards, continuous improvement, resourcing, culture and behaviour to achieve better safety outcomes. It also refers to commitments to support reporting, emergency response, safety reviews, and key factors describing our risk appetite.


**WHY IS THIS IMPORTANT?**

The commitment describes how we wish to do safety, better, collectively! It reinforces our intent to work with clubs and members, giving highest priority to not harming members, other airspace users and the public, minimising fatal and serious injury accident rates, operating responsibly and safely in a multi user aviation environment, and cultivating a positive safety culture that encourages open reporting within a just culture.

This statement of safety policy commitment is also a foundation component of the GFA Safety Management System (SMS). A revised SMS is being developed now, part of our transition to becoming a CASA Approved Self-administering Aviation Organisation (ASAO) under Civil Aviation Safety Regulations (CASR) Part 149.

The importance of the new SMS is such that it will be promoted to publication later in 2022 as the GFA Manual of Standard Procedures (MOSP) Part 5 Safety Management System. It will therefore be an authoritative reference, part of the GFA Exposition, under Part 149.

Best practice for all organisations is to have a safety policy commitment, signed by the Accountable Manager. Clubs are encouraged to develop safety policy commitments along similar lines, tailored to their local environment, signed by their President and shared with members, in advance of the revised SMS.

  
A.R. (Drew) McKinnin  
GFA Safety Manager  
9 February 2022

Attachment: GFA MOSP Part 5 SMS Policy Commitment SMS 002 Version 1, 09/02/2022

SE 03/22 of 9 February 2022 Page 1 of 2

**GLIDING FEDERATION OF AUSTRALIA  
BOARD CHAIR AND CEO SAFETY POLICY COMMITMENT**

The Gliding Federation of Australia Inc, trading as Gliding Australia, an Approved Self-Administering Aviation Organisation, supports clubs and members in pursuing safe and enjoyable sporting aviation with a simple vision – **ONE TEAM – ONE SPORT – ONE GLIDING**.

**Our purpose** is to provide a safe environment for all people to experience the thrill of gliding, provide opportunities and foster excellence in all areas of the sport whilst recognising our responsibility to the wider aviation community. We wish members to achieve lifelong enjoyment through development, inclusion, training and leadership.

**This means doing the right things, to high standards, the right way. The right way means the safe way, in a recreational and sporting aviation environment, with volunteer participants.**

**Commitment:** We are genuinely committed to safety. We do not regard safety as an add-on, rather as an outcome of our collective activities, at national, regional and club levels. We achieve safety through our commitments to resourcing and doing the right things in airworthiness, training, operations, sporting events, administration, member care, all specialist aspects of our sport.



**Culture:** We wish to cultivate and embed a positive safety culture in gliding activities, encouraging free and open reporting within a just culture, with open discussion of safety feedback to members and clubs. We encourage members to seek improvements and support high standards of airmanship, airworthiness, training, operations in the air and on the ground, personal behaviour, and positive example. We communicate and share our best insights.

**Risk:** Risk management principles and processes are not encumbrances. They are intrinsic to departmental and club processes, developed over decades through hard-won experience with attention to professionalism in gliding operations and airworthiness. We strive to minimise the risks associated with gliding operations to reasonable levels, so we can enjoy freedom to fly in shared airspace, whilst protecting the wellbeing of members, other airspace users and the public. We support use of Threat and Error Management in mitigating risks. We share obligations to report and address hazards.

**Policies and Processes:** We are all bound by rules, regulations, standards and obligations to operate as responsible, risk aware aviation participants. We seek to simplify their application wherever possible. We expect GFA members to know and understand them, appropriate to their

respective roles and responsibilities. If we find rules and processes prevent safety outcomes, we must raise those concerns to responsible officers and departments, preferably with proposed remedies. Willful rule violations and workarounds are contrary to positive, just culture. We willingly support reporting processes.

**Skills and Resourcing:** Gliding is a great sport, made possible by teamwork and club support. At national and club levels, we strive to ensure that skilled and trained people, information, processes, resources are available to implement safe operations. Accountabilities and responsibilities for flying safety are defined at all levels.

**Errors:** It is vital to acknowledge the inevitability of some human errors, that we sometimes make mistakes. They should be openly admitted, with responses tailored to better prevention, stronger defences against adverse consequences. We must learn from mistakes, talk openly about how we can 'do safety better'.

**Reporting:** This means all members supporting a safety occurrence reporting and analysis system, that monitors trends and actions, provides safety awareness feedback and education to members. This in turn drives improved operational and airworthiness safety systems and processes, informed by occurrence investigations and member feedback. We acknowledge that occurrences may be driven by pilot and member errors, sometimes exacerbated by external, systemic, organisational and cultural factors.

**Emergencies:** With the best will in the world, things can still go badly wrong. Gliding is an inherently dangerous recreational aviation activity, with obvious risks. We have responsibilities to plan for emergency events, to be best prepared to respond and minimise adverse consequences. We support emergency response planning at national and club levels, including supervisors at operational level.

**Reviews:** We support and implement safety audits and reviews, ensuring risk mitigation actions are taken. We must continuously monitor and review our safety performance, adjusting our practices and controls. We encourage all members, clubs and GFA officials to exercise vigilance, counter complacency, support safety awareness, for our mutual benefit.

**Key Factors:** GFA gives highest priority to not harming members, other airspace users and the public, minimising fatal and serious injury accident rates, operating responsibly and safely in a multi-user aviation environment, and cultivating a positive safety culture that encourages open reporting within a just culture.

  
STEVE PEGLER  
President, Chair GFA Board  
9 February 2022

GLIDING

GFA MOSP Part 5 SMS Policy Commitment SMS 002 Version 1, 09/02/2022 2 of 2

# SAFETY – STRATEGIC INTENT

- Safety – CASR Part 149 Transition
- 4 Key Positions
  - Accountable Manager (CEO)
  - Safety Manager (SM)
  - Executive Manager Operations (EMO)
  - Executive Manager Airworthiness (EMA)
- New GAus MOSP Part 5 Safety Management System Manual
- Defined responsibilities, relationships
- Simplified Emergency Response Plans & Club Templates





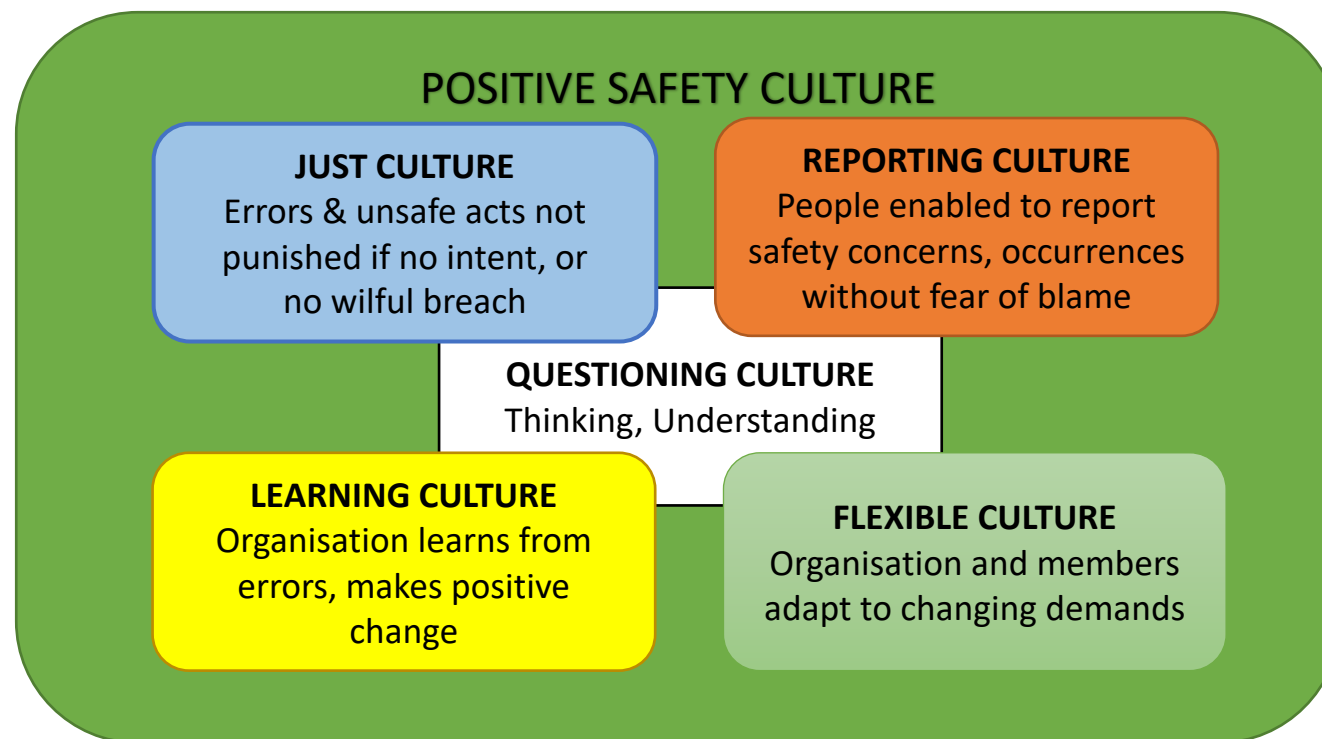
# SAFETY – STRATEGIC INTENT

- Safety – Integrated with Operations, Airworthiness, Training, Soaring Development, Aerodrome Upkeep etc!
- KISS Principle
- Safety Network – Talent Pool  
Share the expertise where we can  
Use volunteer effort better
- Audits ➤ Independent Safety Reviews
- Reporting systems improvements ➤  
Feedback



# SAFETY – STRATEGIC INTENT

- Safety – Culture & Behaviours
- Positive Safety Culture  
More than Just Culture
- Safety Conversations & Changes
- Learning, Education, Awareness  
Flexibility  
Questioning  
Reporting



# SAFETY – STRATEGIC INTENT

- Safety & Standardisation
- Evolution of Integrated Training System
- Learning from accidents, near misses
- Learning from training errors
- Learning from student feedback
- Learning from development of trainers, instructors & coaches
- Key Messages
- Common Problems
- Warnings





# SAFETY & TRAINING

- Train the Trainer – TPT Manual
- Human Factors, Adult Learning, Communications, Handover Takeover...
- Thresholds of Intervention!
- Types of Interventions!



# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION

- Train the Trainer – Timely Responses and Interventions
- Human Factors – Startle response!
- Some Situations require immediate Takeover...
- Very short timescales to have safe outcomes:
  - Wing drop winch launch
  - Rope / cable break full climb winch launch
  - Spin entry low level
  - Undershoot
  - Mishandled transition from approach to flare
  - Strong wind circuit, late base turn
  - Aerotow tug upsets – vertical and lateral
  - Avoidance of mid air collision

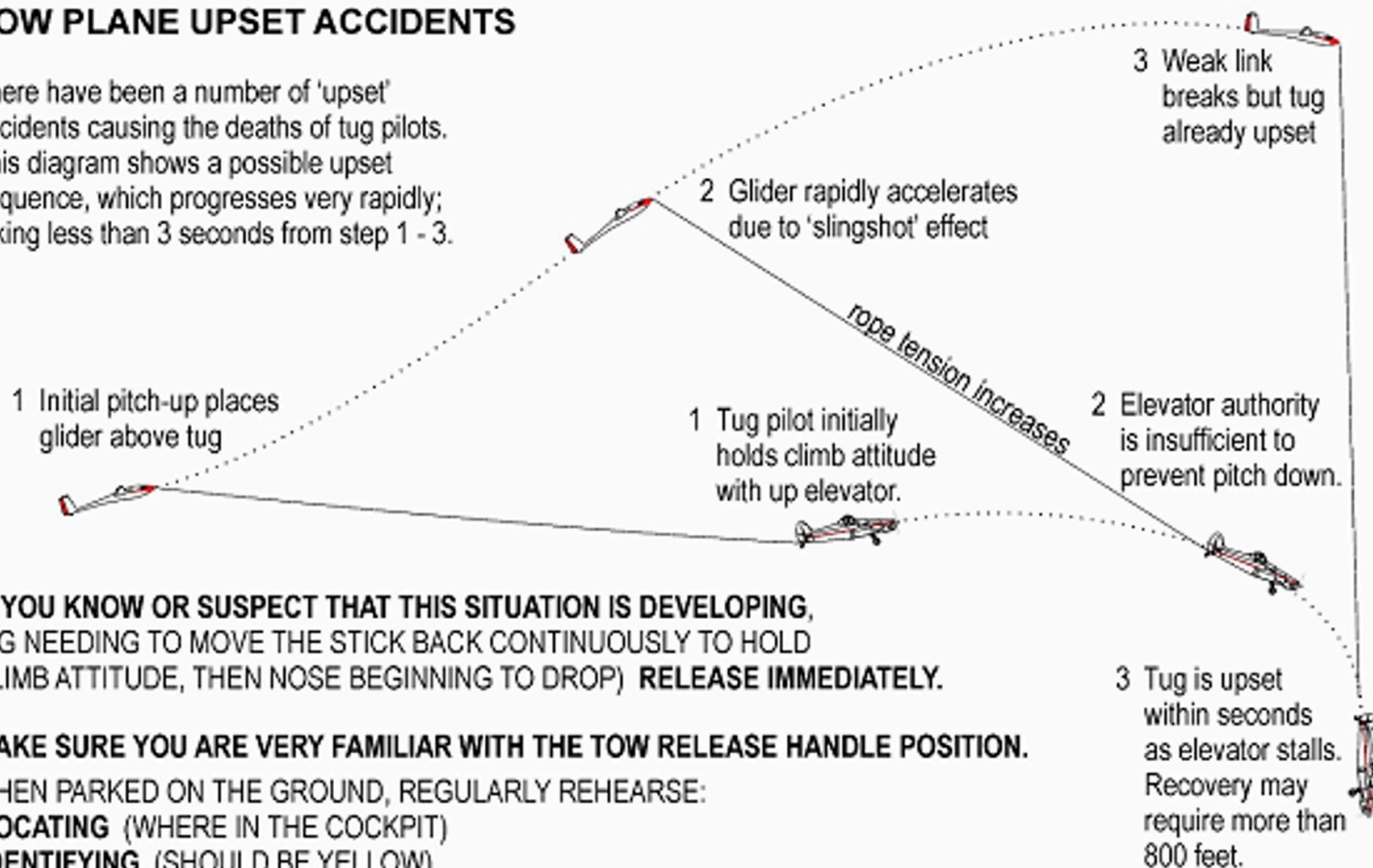




# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET

## TOW PLANE UPSET ACCIDENTS

There have been a number of 'upset' accidents causing the deaths of tug pilots. This diagram shows a possible upset sequence, which progresses very rapidly; taking less than 3 seconds from step 1 - 3.



**IF YOU KNOW OR SUSPECT THAT THIS SITUATION IS DEVELOPING,**  
(EG NEEDING TO MOVE THE STICK BACK CONTINUOUSLY TO HOLD CLIMB ATTITUDE, THEN NOSE BEGINNING TO DROP) **RELEASE IMMEDIATELY.**

**MAKE SURE YOU ARE VERY FAMILIAR WITH THE TOW RELEASE HANDLE POSITION.**

WHEN PARKED ON THE GROUND, REGULARLY REHEARSE:

**LOCATING** (WHERE IN THE COCKPIT)

**IDENTIFYING** (SHOULD BE YELLOW)

**REACHING** FOR THE RELEASE (WITHIN EASY REACH WITH HARNESS TIGHT?)  
(PARTICULARLY IF FLYING A DIFFERENT TUG FROM USUAL).

RG

# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET



# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET





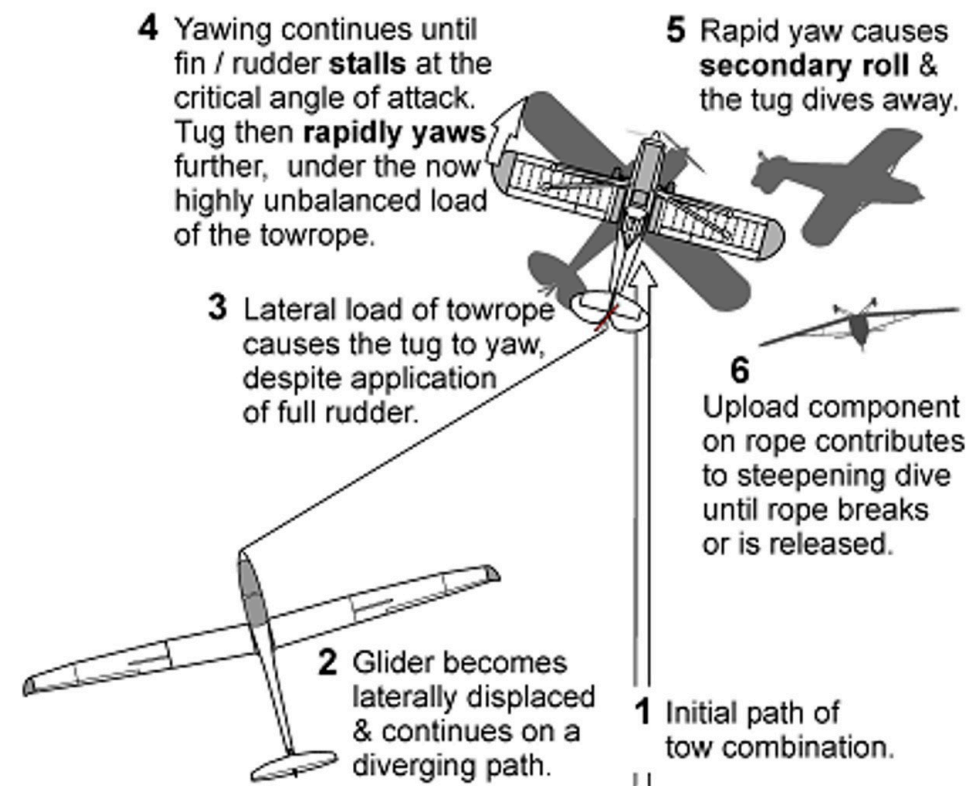
# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET

## LATERAL TOWPLANE UPSET —

### ADVICE FOR TOW PILOTS:

IF YOU THINK THAT THIS SITUATION IS DEVELOPING,  
RELEASE IMMEDIATELY.

DO NOT APPLY LARGE RUDDER DEFLECTIONS  
IN AN ATTEMPT TO COUNTER HIGH LATERAL LOADS.



# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET



# SAFETY & TRAINING – TIME CRITICAL RESPONSES & THRESHOLDS OF INTERVENTION – TUG UPSET

- Tick tick tick tick tick - oh shit!
- INTERVENTIONS
  - Comment / Suggestion
  - Direction / Command
  - MY AIRCRAFT!
- THRESHOLDS OF INTERVENTION
  - Loss of Control Authority
  - Lose Sight of Towplane
  - Large Displacement Out of Position
  - Large Rate of Movement Out of Position
  - Lack of Student Correction
  - Student Overloaded
  - Pucker Factor!





# SAFETY & TRAINING– THREAT & ERROR MGT

- THREAT & ERROR MANAGEMENT
  - THREATS COME AT US
  - ERRORS COME FROM US
  - BOTH MAY CAUSE UNDESIRED AIRCRAFT STATES
- TEM – INCLUDED IN ALL GPC UNITS
- ANTICIPATION OF PROBLEM AREAS
- KEY MESSAGES – HELP AVOID UNDESIRED AIRCRAFT STATES – HELP AVOID NEED TO APPLY SUPERIOR SKILLS TO GET OUT OF TROUBLE



# SAFETY & TRAINING – THREAT & ERROR MGT

### KEY MESSAGES

- Early introduction of the aerotow launch is inappropriate. It can reduce a student's confidence and will probably prolong their training. The student must not be introduced to aerotow until their competence in smooth and reasonably accurate co-ordination of aileron, elevator and rudder controls has been acquired. Only when the student can maintain straight flight and gentle turns at 60, 65 and 70 knots, without over-controlling or jerky movements can towing instruction be commenced – not before.
- The student's initial and early attempts to fly the aerotow launch must always start at a safe height, say above 800' AGL, and will be progressively lowered as their skills develop.
- In the introduction to aerotow, the student should be taught to remedy small divergences from position by keeping the glider's wings parallel with the towplane's wings using aileron, and then using rudder only to ease the glider into position. This is supported by the glider's self-centring tendency when using a nose release.
- Lookout during aerotow launch is critical. Get the student to look to the horizon, ahead and to the side; do not let them fixate on the towplane.
- Emphasise that if the pilot loses sight of the towplane, then the tow rope must be immediately released.

# SAFETY & TRAINING – THREAT & ERROR MGT

## COMMON PROBLEMS

Problem	Probable Cause
<ul style="list-style-type: none"> <li>• Glider swinging from side to side behind tug.</li> </ul>	<p>Student trying to use aileron alone to control the glider in roll, thereby inducing large amounts of adverse yaw. In the early stages of learning aerotow, the trainer should assist the student to get back into position, as the effort of students to stop this swinging on their first aerotows often leads to even larger oscillations.</p>
<ul style="list-style-type: none"> <li>• Glider much too low behind tug (very common).</li> </ul>	<p>Failure to use slipstream as primary reference for towing position. Failure to adjust trim to provide stable platform in normal low-tow position.</p>
<ul style="list-style-type: none"> <li>• Student over-controlling on aerotow.</li> </ul>	<p>Student has forgotten, or has never been instructed, that the stable platform works just as well on tow as in straight flight. A good demonstration of this will produce excellent results.</p>
<ul style="list-style-type: none"> <li>• Having got out of position and managed to start moving the glider back into position, student has difficulty in stopping the glider in the correct place.</li> </ul>	<p>Student has not developed the required amount of anticipation needed to apply corrective controls a little before the glider gets into position. Student may possibly have been put onto aerotowing too early in training.</p>



# SAFETY & TRAINING – THREAT & ERROR MGT

## KEY MESSAGES

- Launch emergencies are easily resolved provided thought and planning takes place.
- At all times maintain safe speed near to the ground.
- At all times maintain situational awareness, aircraft control and safety.
- Locate, identify, and operate controls correctly during all phases of practice emergencies.
- Verbalise options for launch failure on all flights, dual or solo.

## COMMON PROBLEMS

Problem	Probable Cause
<ul style="list-style-type: none"> <li>• Student unskilled so unable to handle the extra workload.</li> </ul>	Unit commenced too early
<ul style="list-style-type: none"> <li>• Student just repeats common phrases without assessing if there is sufficient room to do what is stated</li> </ul>	Not understanding how much room is required to land straight ahead or turn back.
<ul style="list-style-type: none"> <li>• Incorrect decisions following rope break</li> </ul>	Insufficient situational awareness
<ul style="list-style-type: none"> <li>• Student makes basic flying errors under emergency practice</li> </ul>	Unskilled. Needs more practice.

# SAFETY & TRAINING – THREAT & ERROR MGT

## THREAT AND ERROR MANAGEMENT

- Do not exceed personal minima.
- If uncurrent on type with some of these exercises undertake refresher practice with your CFI or a more experienced trainer prior to conducting instructing in this unit.
- Student may react much more slowly than you expect, if too slow - take over.
- Don't underestimate the amount of height loss in turnback procedures.
- Turnback or low level rope break practices should not be carried out in busy circuit traffic sequences.
- Watch the rope go before manoeuvring after release is called.
- If sight of the tug is lost at any time, release immediately!!!
- During hook-up procedures watch out for the tug pilot commencing a left turn when the glider is manoeuvring into the left echelon position.
  - This will cause the rope to develop a bow rapidly if the glider does not mirror left turn immediately.
  - Release rope before loop gets anywhere near the wing.

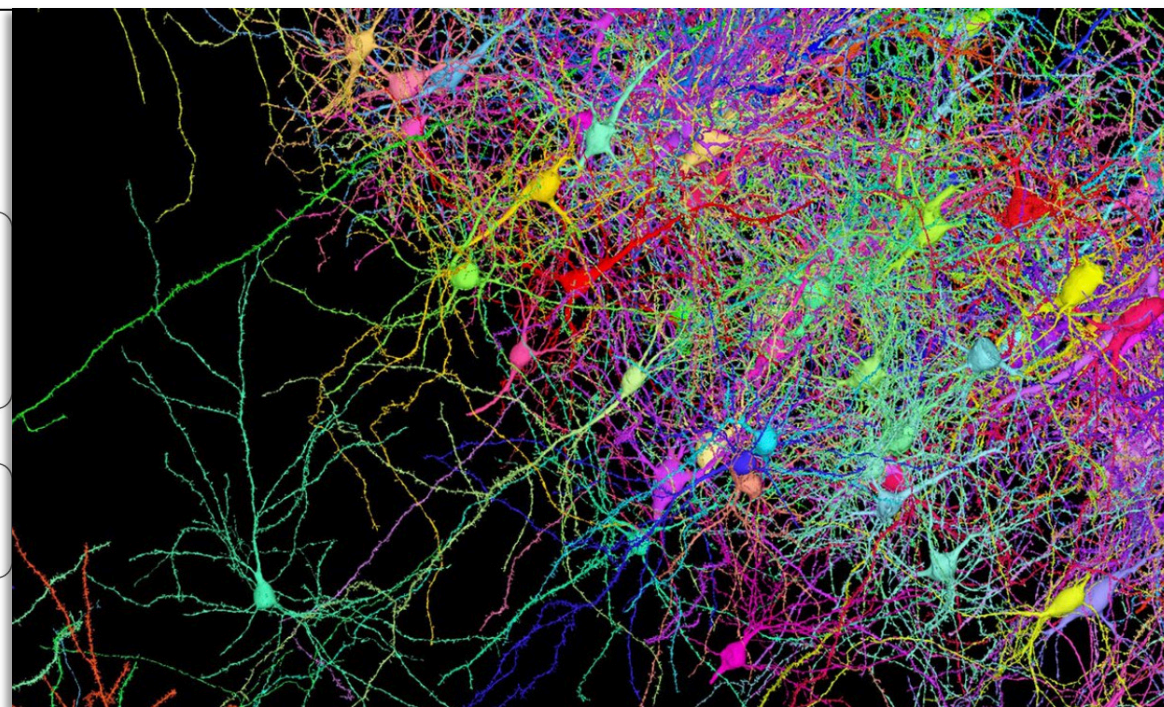
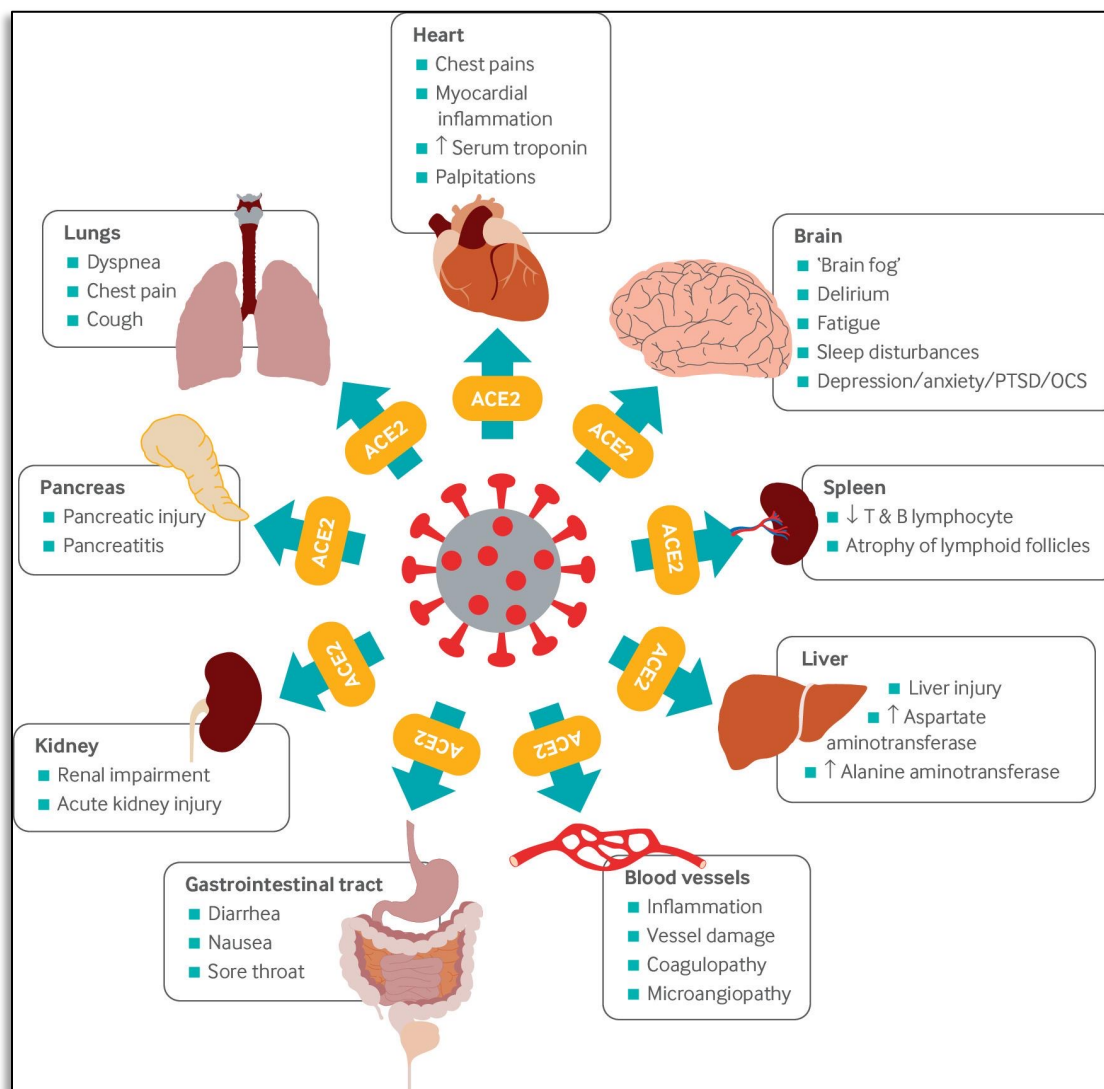
# SAFETY & TRAINING – BETTER OUTCOMES VIA NEW INTEGRATED TRAINING SYSTEM

- Safety Commitment & Policy
- “This means doing the right things,  
to high standards, the right way.”
- Outcomes through normal operations  
airworthiness & training
- Positive Safety Culture
- Standardisation
- Time Critical Responses Interventions
- Tug Upset Examples
- Thresholds of Intervention
- Threat & Error Management





# SAFETY & UNKNOWN IMPACTS – LONG COVID



- Brain Fog, Decision Making, Fatigue, Concentration, Complexity, Sleep Disturbances, Anxiety, Depression, Respiratory Impairment, Clotting, Microclots, Palpitations, Endocrine...



**NSWGA TRAINERS COACHES  
INSTRUCTORS MEETING  
JULY 2022**



**SAFETY MANAGER DISCUSSIONS  
+ Q&A FORUM**

**DREW MCKINNIE**

MOSP PART 1  
ADMIN

MOSP PART 1

Governance

Organisation

Manuals

MOSP PART 2  
OPERATIONS

MOSP PART 2

Operations  
Safety

Standards

Qualifications

Training

Audits

Manuals

MOSP PART 3  
AIRWORTHINESS

MOSP PART 3

AW Safety

Certification

AW Standards

BSE & Manuals

Qualifications

Training

Audits

MOSP PART 4  
SOARING DEVEL

MOSP PART 4

Competition  
Safety

Qualifications

Organisation

Manuals

MOSP PART 5  
SAFETY MGT SYS

MOSP PART 5

Safety Policy  
Commitment

Culture

Risk Mgt

Responsibilities

Emergency  
Response

Reporting

Auditing

Education



MOSP PART 5  
SAFETY MGT SYS

MOSP PART 5

Safety Policy  
Commitment

Culture

Risk Mgt

Responsibilities

Emergency  
Response

Reporting

Auditing

Education

Emergency  
Response Plan

Risk Register

Club Templates

Club SM Guide

Ops Safety  
Bulletins

CFI Guidance  
Accidents

Safety Bulletins

Educative  
Materials

Independent  
Safety Reviews

Competition  
Safety Pack

Media Response  
OAN 3/12(1)

Competition SM  
Guide

Occurrence  
Summaries

AW Advisories  
Bulletins

AW Occurrence  
Briefs

