

# ADELAIDE SOARING CLUB

## Annual Flinders Ranges Camp

2024 Camp – 7<sup>th</sup> to 15<sup>th</sup> September

Rawnsley Park Station

Wilpena Pound Area

Arkapena Station

# Local Geography

- The central feature is Wilpena Pound
  - Rawnsley Bluff is the prominent feature on its southern tip. To its near west is Rawnsley Park Station airstrip (3 km) and accommodation (4 km)
- South east of the Pound (10 km) is Chace Range
  - It runs from north east to south west – commonly referred to as having northern and southern ends. Arkapena airstrip is adjacent to its midpoint and on the northern side
- West of the Pound (15 km) is Elder Range
  - It runs almost north-south and is to the west of Rawnsley Bluff. It is outside local flying – but a strong westerly may produce wave above Rawnsley Park Station to Moralana Scenic Drive / Main Road Intersection

# South Face of Wilpena Pound

Rawnsley Bluff

Point Bonney





# Chace Range





# Elder Range









# Purpose of Camp

- **To fly Ridges and Wave**

- **Wilpena Pound** – North Easterly / Easterly and South Westerly / Southerly winds onto ridges produce ridge soaring conditions. North Easterly and North Westerly may lead to wave (on the lee side).
- **Chace Range** – Northerly to Westerly winds produces ridge soaring conditions and South Easterly winds may lead to wave (on the lee side)
- **Elder Range** – Strong Westerly winds may lead to wave (on the lee side)

# Phil Ritchie over Chace Range





# Wilpena Pound – Wind Direction

South-  
Western Side

Rawnsley Bluff  
Southern  
Eastern Tip

Point Bonney  
Eastern Side

Westerly to south westerly winds

Southerly to easterly winds





Point Bonney





# Travel

- Adelaide — Pt. Augusta — Quorn — Hawker — Rawnsley Park
- Adelaide — Clare — Laura — Wilmington — Quorn — Hawker — Rawnsley Park
- Adelaide — Clare — Jamestown — Orrorro — Hawker — Rawnsley Park
- Adelaide — Burra — Terowie — Peterborough — Hawker — Rawnsley Park
- About 400 km ~ 4.5 hours and a little longer if towing a trailer

# Accommodation

- Rawnsley Park Station
  - Holiday Units
  - Eco Villas
  - Caravan park
    - Powered and unpowered sites
    - Park cabins
    - Bunkhouse
- Hawker
- Wilpena Pound









Piccadilly  
Natural Spring Water  
18 LITRES

EXTRA  
FREE  
PAPER  
TOWELS

WATER

WASH  
LEFTY













# Food / Fuel

- Food

- Hawker — best re-supply — 30 km south of Rawnsley Park
- Rawnsley Park — minor food items at the general store
- Rawnsley Park — Woolshed Restaurant
- Wilpena Resort — 30km north of Rawnsley Park

- Fuel

- Rawnsley Park caravan park
- Hawker
- Wilpena Resort





# De-rigging at ASC

## ● Logistics

- All aircraft require a daily inspection, prior to de-rigging
- All aircraft require removal of tapes, (must clean tape residue and grease), prior to putting glider in trailer
- Each glider in its trailer is to be a complete unit
- Each needs parachute(s), battery, battery charging equipment (no mains power for charging DG's) maintenance release, flight sheets, tie-downs, tyre pressures to be checked, (oxygen systems for all gliders)
- Each trailer needs checking – including electrics, tyres, chains
- Each trailer needs an oversize permit



## ROAD TRAFFIC ACT 1961

*Exemption for Trailers Transporting Gliders to have a Rear Overhang of up to 5 m*

PURSUANT to the provisions of section 163AA of the Road Traffic Act 1961, I, T. N. Argent, Executive Director, Transport SA, as an authorised delegate of the Minister for Transport and Urban Planning, hereby exempt, trailers fitted with a single axle or one axle group which are built specifically for the purpose of transporting gliders:

From the following provisions of the Road Traffic (Vehicle Standards) Rules 1999:

- Rule 20-Compliance with third edition Australian Design Rules, but only in so far as it relates to Australian Design Rule 43.4.2.1 Rear Overhang. All other requirements under Rule 20 must be complied with; and

- Rule 70 (3)-Rear Overhang. Subject to the following conditions:

1. This notice or a legible copy shall be carried by the driver of the vehicle at all times when operating under this exemption and be produced when requested by an inspector appointed under the Road Traffic Act 1961 and/or the Motor Vehicles Act 1959, or a Police Officer.

2. That the trailer is fitted only with a single axle or one axle group.

3. That the rear overhang, measured from the centre of the trailer axle or axle group to the rearmost point of the trailer or rearmost point of any load carried on the trailer, shall not exceed 5 m.

4. That the width of the load carrying area or body of the trailer shall not exceed 2 m, if the rear overhang, measured from the centre of the trailer axle or axle group to the rearmost point of the trailer or any load carried on the trailer, exceeds 3.7 m in length.

5. That the overall length of the trailer measured from the point of articulation of the trailer and the towing vehicle to the rearmost point of the trailer or rearmost point of any load carried on the trailer, shall not exceed 12.2 m.

6. That the trailer shall only be used for the purpose of transporting gliders and any accessories associated with the sport of gliding or for empty travel.

7. That if the rear load area of the trailer is longer than the front load area there shall be a positive downward force on the towing vehicle's tow coupling in the static condition.

NOTES: The overall length of the towing vehicle and trailer combination including any load shall not exceed 19 m.

That the distance from the point of articulation of the trailer and the towing vehicle to the centre of the trailer axle or axle group shall not exceed 8.5 m.





RAWNSLEY PARK  
STATION





Chace Range

Rig & De-rig  
at Arkapena

Arkapena Airstrip

Airstrip turn off  
Turn Right from Rawnsley  
on Main road & then  
First Left >

< To Wilpena

To Hawker >

Main road turn off  
to airstrip & cabins

Rawnsley Park Station Airstrip



# Rawnsley Park Station

Elder Range

Caravans & Camping

Ulowdna Range

Cabins

Office

Woolshed Restaurant





# Rawnsley Park Station Airstrip

## Rawnsley Bluff



Getting ready to fly from Rawnsley Park

# Gliding

## ● Operations

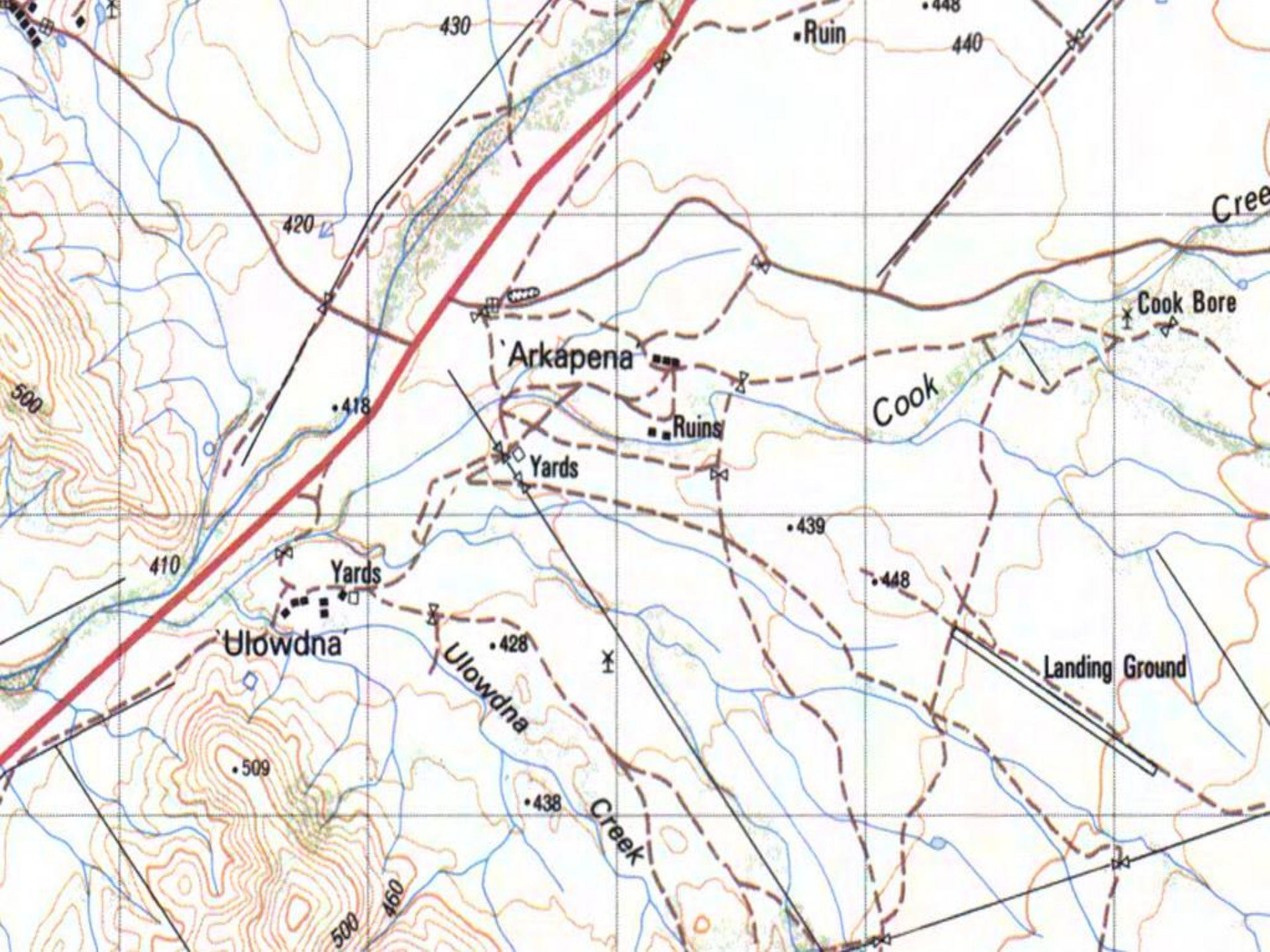
- All pilots require a briefing prior to flying
- All pilots who haven't flown in the area will require a site check
- At the option of the Duty Instructor any pilot may be required to have a site check – if you have not flown at the Flinders for more than 3 years & subject to general experience site check is required
- Aircraft are rigged / de-rigged at Arkapena, Rawnsley Park Station airstrip only if creek crossing an issue and flown to Arkapena
- Arkapena airstrips, 11/29 and 07/25
- Rawnsley Park airstrip 03/21
- Airfields are about 1400 feet AMSL, ie, altitude = 1,400 feet



Entrance to Arkapena airstrip— eastern  
side of Hawker to Wilpena Road – 200  
metres south of Rawnsley Park Station  
turn-off












Gates – if it's closed when you get there –  
make sure you leave it closed when you leave









Be mindful of the dust – Particularly in  
proximity of Ulowdna Station homestead –  
**DRIVE SLOWLY**

# Arkapena Airfield

- **Dry Weather:** umbrella, hat, sunscreen, dark glasses, table, chairs, water, (camel-back), lunch and snacks, insect repellent, veils for flies, there will be much dust
- **Wet Weather:** mud – stay back at cabins – see Steve Pegler, Brenton Swart or Frank Johann before you go out to Arkapena. Severe damage to tracks will occur in wet conditions.
- There are no toilet facilities at Arkapena.
- You must take all your rubbish away with you at the end of the day
- The scenery is spectacular so bring your camera / video / binoculars, and telescope for the night skies



# Arkapena Airstrips 11/29

- 11/29 is the main airstrip.
- It is about 1000 m long.

# Runway 11

- Runway 11 slopes uphill towards the Chace Range
- There is a hill prior to the threshold
- Be cautious not to undershoot – the uphill slope can be deceptive
- Avoid the rocks and ruts on the side of the strip – prior inspection.
- Precision flying is required - near enough is not good enough to avoid damage!
- Landing close to last light is deceptive – it can be very difficult to accurately judge your approach



A wide-angle photograph of a dry, open landscape. In the foreground, there is a vast, flat expanse of dry, brownish-yellow earth with sparse, low-lying vegetation. A dirt road or path leads from the bottom left towards the center of the image. In the middle ground, a dirt runway is visible, with several small, white aircraft parked on the left side. A few cars and people are also present near the aircraft. In the background, there are several large, rugged mountains with a mix of green and brown vegetation. The sky is overcast with light clouds.

Arkapena airstrip

Runway 11

The hill on approach to 11





Beware - crab holes





Beware - rocks





Beware – more rocks

Hat shows scale.

Even small rocks can  
damage gliders.






Beware – the result of a rock strike



# Runway 29

- The reciprocal of runway 11
- Runway 29 slopes downhill away from the Chace Range
- Again – inspection of strip required before flying!
- Landing late in the afternoon can be complicated with extreme sun glare – visibility can be greatly impaired
- The setting sun obscures the runway. One option is to approach with left sideslip and look through the clear vision panel. The other option is to use runway 11 (the sun behind you) and accept the cross wind or tail wind – mindful of loss of aileron and rudder control at the end of roll – subject to wind being suitable





Arkapena airstrip  
Runway 29



# Arkapena Airstrips 07/25

- 07/25 is the secondary airstrip
- It is about 600m long.



# Runway 25

- Runway 25 is commonly used for landing
- There is a fence at the threshold and a couple of 6 foot high posts
- A glider trailer will be used to mark the fence and posts at the threshold of the runway and is placed just to the right of the runway
- When landing be cautious of the rocks particularly on the left hand edge of the strip
- The runway slopes down hill
- Be cautious not to overshoot – the downhill slope can be deceptive – creek at end!
- Landing late in the afternoon can be complicated with extreme sun glare – visibility can be greatly impaired
- The setting sun obscures the runway. One option is to approach with left sideslip and look through the clear vision panel. The other option is to use runway 11 (the sun behind you) and accept the cross wind or tail wind – mindful of loss of aileron and rudder control at the end of roll – subject to suitable wind conditions



Arkapena airstrip

Runway 25

Trailer marking fence line  
– just to the right









Arkapena airstrip  
Runway 25





Beware – more rocks





# Runway 07

- Runway 07 is rarely used by sailplanes
- The runway slopes up hill
- Can also be used if operating from 11 & that strip is full
- The tug will often use Rwy 07 when Rwy 11 is congested.



# Taking Off

- The pilot is strapped in and completes their pre-flight checks prior to the glider being pushed out onto the runway. (This is to keep the runways as free of obstacles as possible)
- All vents/hatches must be closed to keep the dust outside on take-off
- Dust is a major problem on take-off. Forward visibility is about 6 feet! Flight is IFR – I Follow Rope!
- Launch failure options: land straight ahead, the cross strip or a 180 degree turn. If you cannot make it safely onto the airstrip better to find a clear spot to put down (rather than low turn & strike ground).
- For club gliders usual flight times are 60 minutes





On the side of the airstrip  
Pre flight checks completed  
Strapped in and ready to go



Windsock on North side of 11/29



The take-off roll

In cross wind bias glider on upwind side of tug





Now you see me



Not much cross wind!

Now you don't





A small white aircraft is flying over a dry, dusty landscape. The aircraft is positioned in the middle ground, slightly to the left of the center. A large, thick plume of dust is being kicked up behind the aircraft, extending across the middle ground. In the background, there are low, rocky mountains under a clear blue sky. The foreground is a flat, dry, brownish-grey field.

Clear of the dust

“High Tow”  
(just above tug  
slipstream)

Is recommended until  
safe failure option  
available















# Landing

- It is vital that landings are well planned before joining the circuit
- To avoid congestion in the circuit, landing pilots to radio intention prior to leaving the ridge - perhaps 5 minutes before joining circuit
- Give joining circuit call. Ground crew to announce arrival “incoming aircraft” so there is sufficient manpower to retrieve the sailplane
- Two to three ground crew to take dolly and position themselves adjacent to the anticipated end of roll
- After landing be prepared to get out of your aircraft quickly and to get it off the strip as soon as possible. The quickest way is to push it to side of the strip - not back down the strip



# Landing (cont.)

- For club gliders usual flight times are 60 minutes
- Common sense is the key. If the landing area is congested and other aircraft have signaled their intention to land then perhaps it would be a good idea to do another couple of runs up the ridge or take another thermal
- All pilots and ground crew need to keep a good lookout particularly as the number of air movements increase
- If you need to land and the runway is congested overfly or consider using the other strips





Ground Crew – ready to retrieve an incoming glider



# Out-Landing

- Out-landing is simply not an option – something will get broken!
- Aim is always have final glide to Arkapena
- Rawnsley Park Station has a runway 03/21 about 3 km south of Rawnsley Bluff
  - Hard compact surface, few stones
- Rawnsley Bluff to Arkapena Airstrip is about 5.5 km
- Hawker is 30 Km south and has one bitumen strip
- Emergencies only at Wilpena (they will not ‘welcome’ you there)
- Everywhere else:
  - Low trees, stones, wash-aways, fences, stock – generally unlandable





Arkapena and Rawnsley Park Station  
strips from Rawnsley Bluff



A wide-angle photograph of a dry, rocky landscape. The foreground is covered in numerous small, light-colored rocks and pebbles of various sizes, interspersed with sparse, low-lying vegetation. A few taller, thin, leafless trees stand in the middle ground. In the background, a large, forested mountain rises, its slopes covered in dense green and brown trees. The sky is clear and blue. The overall scene suggests a semi-arid or high-altitude environment.

Beware – more rocks



Typical – unlandable country





# At the End of the Day

- The gliders need to be put to bed!
- Paperwork: Update Maintenance release. Flight sheets to Person nominated for each glider. Leave updated maintenance release in gliders
- Remove main batteries and parachutes from all gliders.
- Batteries to be recharged in rooms at Rawnsley Park
- Stick forward (elevator down) with harness (use front harness in twins to rear stick)
- Close canopies and vents
- Seal canopy hinges, nose release, statics – one of each group to have a match stick taped to let it “breathe” Total energy to have a balloon or rubber glove taped over it, pitot tube to be taped, rudder lock installed and air brake boxes sealed. Bring lots of coloured electrical tape.
- Tie downs – each wing tip, at base of rudder, use wing walker, tail dollies and wing sleeves to tie and peg into ground, may need nose tie-down if strong winds anticipated, bring mallet.





Sunset on the Chace Range



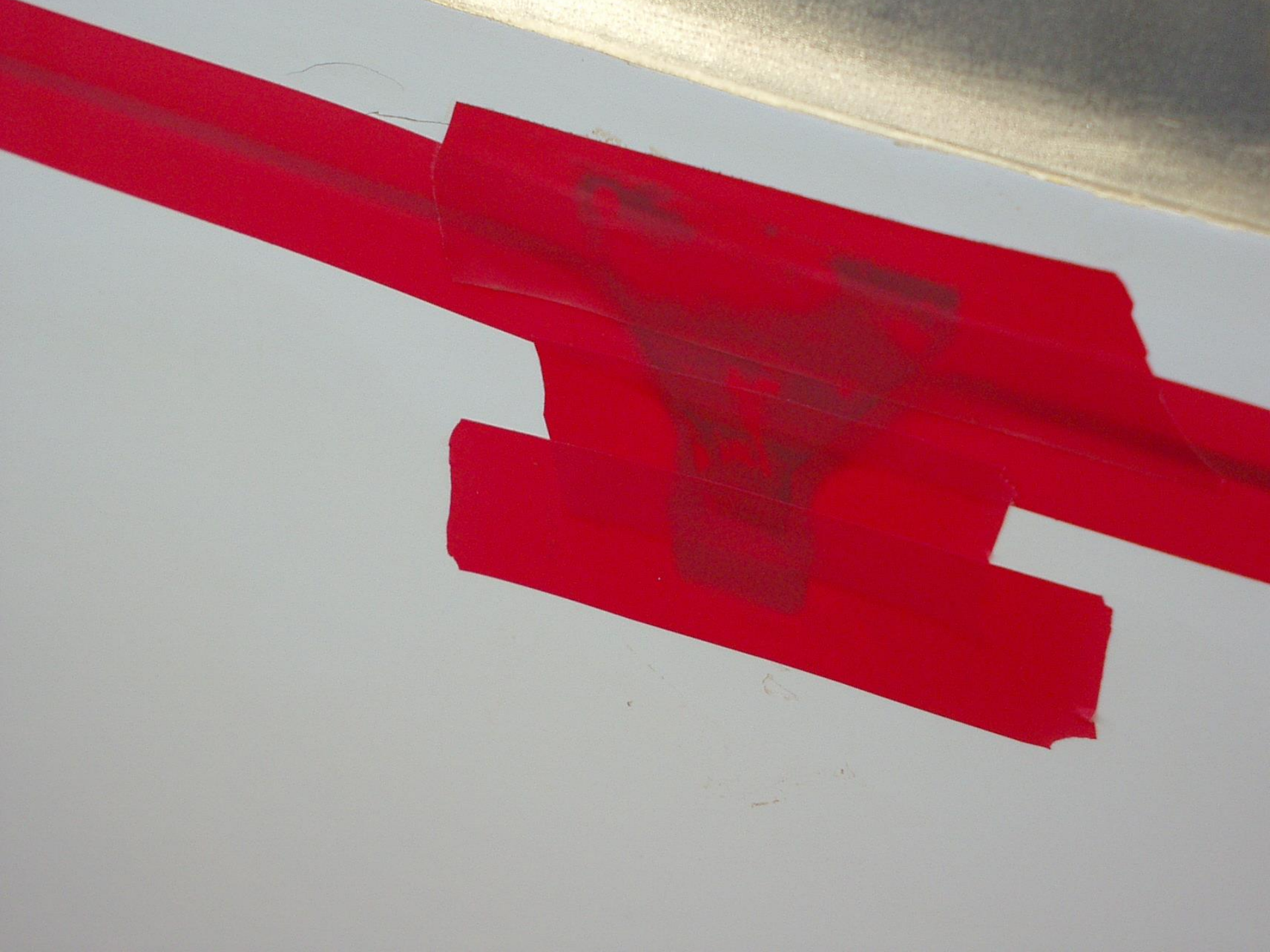


We don't tape canopies any more!

























Find a rag to protect the fuselage from rope chaffing





GRO



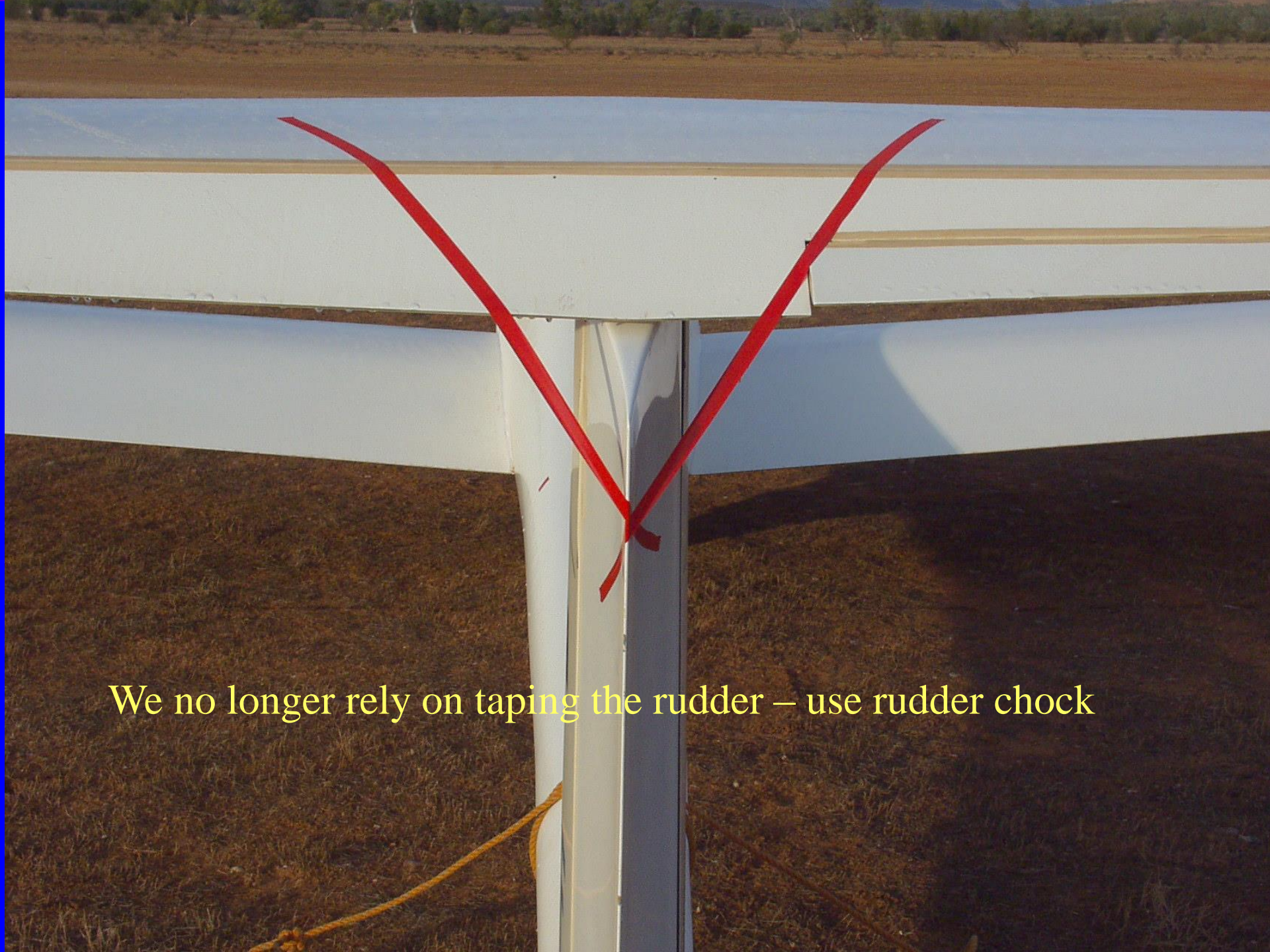




SUPPLIED BY  
EDMUND SCHNEIDER PTY. LTD.  
TWO WELLS ROAD (AERODROME)  
GAWLER - SOUTH AUSTRALIA.







We no longer rely on taping the rudder – use rudder chock







# Daily De-Brief

- Following the completion of the day's flying the gliders are "Put to Bed" and everyone assembles for the de-brief (time based on group consensus of most suitable time).
- The debrief is compulsory. It is held at the outside fire place, Rawnsley Park Station cabins, about one hour after departure from the field
- The purpose is to summarise the day's events, raise any concerns, improve safety or running of the operation and prepare for the following day
- Flight sheets to Person "I/C" of specific gliders.
- Batteries to be charged
- Parachutes to be stored over night in a cabin or insulated car under cover.



The de-brief







The morning after



# In the Morning

- Chamois all dew off aircraft – surprisingly, there will be litres!!
- Remove all tapes and tie downs
- Put in batteries
- Daily inspection
- Throughout the day have a chamois handy for repeated cleaning of the canopy – both inside and out
- Ensure you speak to the flight coordinator and advise of your flying requirements – written flight list to be used so pilots / family members do not miss out! Advise the Duty Instructor of your status for pilots not current or having been checked out at site: You cannot fly until you have been briefed.









VH-WUF

FN







# Early Start





# Daily Ops

- As always the Duty Instructor is responsible for all aspects of flying and safety. The DI will rotate on any day, however many instructors will attend. They are all qualified to make operational comments.
- We will require a Flight Coordinator to record pilots' intentions and requirements. This is suggested to rotate around & several people can undertake this on any given day (hand over to enable FC's to fly as well).
- Aircraft will be allocated on the basis of individual requirements with preference being given to those who arrive early and assist in preparing the gliders for the day's activities. Out of that checks followed by instruction.
- Lower priority is given to those club members who just "rock up" and the "lowest" is for public passenger flights.
- All pilots are to complete their checks and be strapped in, off the runway prior to the glider being pushed out onto the runway
- "All vents closed" is an addition to the "LCARD" pre take-off challenge



# Altimetry, Airspace and Radios

- As with all aviation activities in Australia we operate with altimeter set to QNH. Before takeoff set the altimeter to 1,400ft
- The airspace is Class G from ground level to FL125. from FL125 to FL245 it is Class E
- There are other aircraft in the area – notably scenic flights operating from Rawnsley Park Station and Wilpena airstrips
  - Local pilots will broadcast their intentions on 126.7 MHz
  - As a matter of courtesy acknowledge the broadcast advising the approximate positions of the airborne sailplanes. Normally this only needs to be done by a single sailplane pilot



# Altimetry, Airspace and Radios (cont.)

- The Wilpena area is a Special Procedures area as listed in ERSA – SP 13 – Wilpenna Pond
  - Broadcast area – surface to 5,000feet
  - We cannot comply with 13.1.b. i & iii
- NOTAM has been issued for the period of the camp
- CTAF frequency is 126.7MHz
- Rolling call by tuggie on 126.7MHz with intended flight path
- When transiting through 5,000feet, up or down, transmit on 126.7MHz
- Gliding Safety Frequency of 122.7MHz should only be used above 5,000feet



# Altimetry, Airspace and Radios (cont.)

- Area frequencies – above 5,000feet
  - North of Arkapena (YRKP) – 122.0MHz Melbourne Centre
  - South of Arkapens (YRKP) – 123.9MHz Melbourne Centre
- Our NOTAM states maximum altitude that will operate to is FL235
- Whilst flying is in progress a responsible person on the ground at Arkapena must be monitoring a radio on the CTAF frequency 126.7 MHz



# Ridge Soaring – Aviate and Stay Safe

- Ridge soaring can be dangerous
- You must maintain an effective lookout at all times
- Ridge Etiquette:
  - Advise by radio when joining the ridge
  - All turns must be outward – away from the ridge
  - A glider when overtaking another glider when ridge soaring shall do so by passing between the overtaken glider and the ridge
  - If two gliders approach each other head on (and at the same height or near so), the glider which has the ridge to its left shall give way by turning away from the ridge
  - Advise when leaving the ridge by radio
  - Do not venture to the leeward side of the ridge (exception - wave) or unless thermalling (with double ridge lift & well clear of ridge top)
  - **DON'T SOAR RIDGES IN MARGINAL CONDITIONS**



# Solar glare

- Late in the afternoon on final to runway 25 and 29 at Arkapena it may be necessary to open the clear vision panel and side-slip to the left to achieve an effective clear view of the runway
  - You can always land on an alternate strip
- When flying the southern side of the Wilpena Pound ridge to the north west from Rawnsley Bluff the late afternoon sun makes visibility extremely difficult.
  - Use the radio to advise your position
  - Pilots traveling in the opposite direction (south east) should be aware of the problem and give consideration to other pilots, they also must give way in accordance to ridge rules.



# Wave

- Wave occurs on the lee side of Chace Range, Wilpena Pound and Elder Range
- Depends on wind direction and strength
- Usually occurs early or late in the day but can last all day with the right conditions
- If there are clouds, then the primary and secondary waves may be marked by rotor cloud, with Foehn gaps (clear sky). Wavelength depends on wind strength . Lenticular clouds may or may not form.
- Wave is flying like you have never flown before – quiet, no sensation of movement - in smooth lift
- Oxygen may be required as high altitude can be achieved





Rotor Cumulus Cloud in  
the lee of Chace Range

Wind from Left to Right of screen

Lift on upwind side of the Rotor Cu



What a great experience

View the other direction – “Foehn Gap” visible





“The wave’s on”

View from the  
Ground!





# Oxygen

- Mandatory above 10,000 feet
- DG 1000, DG505, Discus and LS8 all have “EDS”
- Training is required in the use of oxygen systems



# Packing Up

- Aircraft need to be de-rigged at Arkapena unless advised by Steve Pegler or Brenton Swart
- The aircraft are de-rigged with parachutes and Maintenance Releases in the cockpits
- Equipment for each glider to be kept in its trailer for return to ASC
  - Parachutes
  - Dolly, wing walker, wing sleeves, tow out bar
  - Oxygen
    - This means that when the glider returns to ASC it has its full complement of equipment and can be used straight away at Gawler – rather than bits missing, still at Arkapena
- On return to ASC the aircraft are rigged and DI'ed ready for flight at Gawler



# Miscellaneous - Notes

- Costs: There are additional charges to normal flying at Gawler
  - Cost of ferrying the tug to the Flinders
  - Cost of maintenance of runways at Arkapena & owners administrative costs.
- Other: Suggested time for DI'ing gliders in the morning is 07:30 (wave occurs early)
- Flight Coordinator: one needed each day (can rotate on the day), organise list of pilots, paperwork for pilot friend passengers, passengers off the street, advise retrieve ground crew of incoming aircraft, radio watch, air traffic control
- Eagles: if aggressive – talons out – depart – they can cause significant damage to your sailplane



# Miscellaneous - Notes cont.

- Adelaide Soaring Club obtains the landowner's permission in advance for use of the airfield
- ASC members enjoy a 10% reduction in accommodation charges
- Both Telstra and Optus mobile services work at Rawnsley Park.
- Rawnsley Park Station contacts
  - Tel: 8648 0700
  - Email: [reception@rawnsleypark.com.au](mailto:reception@rawnsleypark.com.au)
  - [www.rawnsleypark.com.au](http://www.rawnsleypark.com.au)





Fun





More fun





Even more fun





But wait there's still more fun



# Safe Flying

Special acknowledgement for the  
original 2006 production of this  
presentation to

**Bill Verco**

What a great job!