

Quarterly magazine of ASRA

# Gyro News

GYRO NEWS Winter 2016

Vol 30 No 2

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**ASRA Nationals:  
bumper issue**

**Safety first:  
The limits of memory**



2000 hrs  
TBO



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## Deadlines for photos, ads & articles

Summer 15th Nov      Winter 15th May  
Autumn 15th Feb      Spring 15th August

### Australian Business Register

Australian Business No: (ABN) 53 412 417 012

Legal Name: Australian Sport Rotocraft Association Inc

Affiliated clubs are permitted to use the association's ABN number for their purchases.



## Cover photography by Greg Postle

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Front: Everyone at the 2016 Nationals  
Back: Dawn at Kununurra Nationals

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## from the President

Paul Campbell

# ASRA Nationals

In April, I set out from Brisbane to drive to the 2016 Nationals at Kununurra in the Kimberley region of WA. After they ended, I took the opportunity to drive down the Gibb River Road to Broome and return to Kununurra via the Great Northern Highway and then continued back home, a round trip of 10,000 kms. This was from Brisbane, other attendees came from the southern States.

Driving through north-west Queensland on my way to Kununurra, I came across the NSW gyros tied down for the night in a lonely outback airstrip at McKinlay, 260 kms before Cloncurry. I had no problem tracking down the pilots – I drove immediately to the Walkabout Creek Hotel (where “Crocodile Dundee” was filmed) and found the pilots enjoying an ale. They were very surprised when the President called in for a snap inspection.

In the days following, I acted as their unofficial support vehicle, checking up on their progress at Mt Isa, Camooweal and the Barkly Homestead. The one disappointment, (and potential relief for the pilots), was that I arrived too early at Daly Waters to see them land there at the historic WW2 airfield. The next time I saw them was at Kununurra.

John and Ann Storey, in conjunction with friends and local gyro enthusiasts, did an amazing job at organising the Kununurra event. The fly in was centred at Farm Hill Airstrip, a local private airstrip once used by a crop dusting company and now owned by Nev and Julie, who could not have done more to make us feel welcome.



This included Nev using his road roller to prepare the strip each morning.

We had 28 gyros on the flight line with factory-builts dominating. Two groups had flown in to Kununurra; one group from Perth and the other from NSW. Two Queensland pilots also joined the NSW flight at Longreach. One lonely Thruster pilot flew in from Darwin to participate and did a great job in the flour bombing competition. In total, there were over 80 people attending, supplemented by lots of local visitors and enthusiastic volunteer helpers.

The general standard of flying at these Nationals was the best I have witnessed. All pilots showed good airmanship and understanding of safe operation of gyros, both in the circuit and on the ground.

The one unfortunate incident was an attempt to remove the ASRA president when one gyro



through glass panels in the floor. The restaurant is owned by a local gyro enthusiast, Thomas Breig, and his partner Dominique, both of whom made us feel very welcome.

A renowned local bird painter, Greg Postle, volunteered to take photographs of the weekend, relieving me of the duty, while providing far more professional results. Some of Greg's photos are featured in this edition of the magazine. A substantial portfolio of his Nats photos is also available on USB stick from John Storey for \$25.00.

One the way home I passed Owen and Bruce from Caboolture, Queensland, transporting their gyros in the opposite direction along the Great Northern Highway. I also stopped at Cape Crawford, an isolated NT roadhouse near the Gulf where Bryce Nietvelt, an ex-gyro pilot from

got behind the power-curve in a competition and landed heavily near where I was standing photographing the events. Fortunately, my experience with palace coups prevailed and, seeing the situation unfold, I was well clear when the rotor blades swept over my original position.

There were two notable social events: the Sunday morning flying to El Questro Resort for a great breakfast, and the presentation dinner, complete with croc feeding from the deck, held at the Pumphouse Restaurant. The restaurant tables are placed around the original pumps and electrical panels and surrounded by paraphernalia to commemorate the original role of the pump station which was to pump water from adjacent Lake Kununurra into the main Ord River irrigation channel. There was even a skeleton, clutching a guitar, in the basement that could be viewed



Caboolture, had his first job as a commercial helicopter pilot flying tourists over the local Lost City sandstone pillars. Bryce took me up in his R44 for a flight and a little retribution. Soon after my visit, Bryce emailed me that he had a new job flying around the NT maintaining the 600 Telstra payphones found there.

Again, I would like to thank John and Ann for volunteering to organise these Nats and roping in a great group of locals to organise an exceptional event in such a remote and beautiful location.

Paul Campbell

President



# Kununurra Nationals: Report

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Your host John Storey reflects on and shares images by Greg Postle of this memorable event

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## ASRA NATIONALS

Kununurra 2016

They came, they flew, and they had fun. What a weekend it was! With our encouragement, our visitors were able to put aside the thought of 'competition' and just join in and have fun. And have fun we did. From a local point of view we were so very grateful not only to all who had made the effort to come such long distances, but also for your enthusiasm and participation. To see the happiness and enjoyment on wives and visitor's faces as well as the pilots was our reward for a lot of hard work preparing. Thank you all so much for coming. Indeed, the effort in preparation from our local team and their helpers, saw the weekend run safely and without a hitch.

*Gyro line up*



With so many participants, it was crucial to keep things moving, and Lars and his team on the ground, with Howard on air control did just that, achieving close to our goal of one minute between take offs for the navigation and rally events. Ann's team of judges and her computer programs ensured instant information always for all pilots and Nev our compere, whilst Chas and Bev and team did a splendid job of keeping people fed from their canteen.

Stuie also was kept busy refueling, and not a single mishap occurred.

To get through each day we needed to start at first light, and it was a wonderful sight to see all the gyros lined up on the strip warming their motors, as the sun's first rays peeped over the horizon.

Flying conditions were near perfect – if not a little warm for some – and allowed the full appreciation of the Kimberley landscape. (Out of interest – Sunday was the hottest May day ever recorded for Kununurra!)

Allowing wives and support crew to go with the pilots in the navigation and rally meant more of our visitors got to see the country, and the real reward were the smiles and expressions on all the faces on returning from the flights – especially the comments on the size of the crocodiles along the Ord River!

With the manual navigation exercise first at dawn on Saturday, we were amazed at the skill of the pilots in doing



*Dawn line up*

the course without electronic navigation equipment. In fact, there was only 0.09 of a minute between the first three places! Wayne and Sue Mitchell trumped it though, with only 0.05 of a minute off their estimated time. A fantastic result!

Encouraging people to form teams of 4 proved a lot of fun as well, as teams were also allowed to help each other by radio and guide them in their flour bomb runs and the other strip events.

The flour bombers again showed that the safest place was right in the middle of the target – that is until Noel Regnaud came along! Noel easily took the prize with an incredible 50cm from the target centre! Well done Noel!

The Carrier Deck Landing followed with not only some excellent flying, but also some excellent decision making as some pilots aborted their attempts in good time instead of pushing the limits. Again there was only 2 points between the first three places with the old master Ian Morcombe putting down perfectly nearly at the start of the deck.

With the Power Off Landing, we included an approach from 600ft from the opposite direction. The different strategies employed by pilots were very interesting and again we saw wise abort decisions being made. There were some excellent performances too, resulting again with only 7 points between the first three places. Wayne Mitchell once more showed his prowess with the highest aggregate score from 200ft and 600ft to claim first place.

The days events were followed by an excellent Thai dinner at the strip on Saturday night that was enjoyed by weary pilots and friends alike.

Sunday morning again saw the gyros silhouetted against a golden dawn sky as engines were warmed up for the flight to El Questro. This course took pilots down the Ord River and past the escarpments of the Cockburn Range to land at El Questro for breakfast. And El Questro turned it on with a hearty breakfast laid out on tables set with white linen.

The return leg took flyers over deep palm lined gorges (one flyer in the gorge!) and over Lake Argyle, then down the Ord River to home. The expressions on all flyers' faces and their stories kept us enthralled – especially as the crocodiles got bigger and bigger!

The evening at the Pumphouse Restaurant over looking the Ord River, watching sunset, and sharing great camaraderie made a wonderful finish to a great weekend and lots of new friendships.

**Kununurra Nationals ... contd next page**

## Kununurra Nationals ... contd

It was here that we first saw the 'trophies', that Maria and Greg had prepared. And they didn't disappoint!

Photos of the area set on plastic blocks were a sight to see with the sun illuminating them from behind. Tom & Dom had closed the restaurant to the public so that it was ours for the night and the food was excellent. Unfortunately, with a chef away, Tom was not able to socialise too much and had to cook all the 94 pizzas that we consumed. Dom too, was kept busy behind the bar, and we thank you both so much for a very lovely night.

Our three local pilots – Tom, Chas and Stuie – with the help of Bruce Layt took out the team award closely followed by Team Jacks and Jills and Team Stiffy in equal second place.

In the Rally event to El Questro, Vince and Robyn Mack proved too good for the opposition taking out the 60 knot group whilst Bec Henggeler took out the 40 knot group with a perfect score!

Whilst not winning an individual event local pilot Stuie Black certainly showed us his flying abilities, and with a great overall performance took out the Grand Champion award. Well done Stuie!

Our ASRA board members and Howard, our air controller, short listed four pilots for the airmanship award, including newcomer Steve Braddy from Darwin. It was eventually agreed though that there was one pilot who stood out not just for his flying ability, but for his demeanour, courtesy and attention to radio calls and all things aviation – Well done Wayne Mitchell!

With such circuitous routes flown to get here, furthest travelled had to be decided on a 'straight line from Kununurra' basis and much to his great delight, Mark Andre (Clock) claimed this with only a mile to spare.

Unfortunately after Max and Ira Tate's great effort in coming down from Darwin – with both so looking forward to their flight to El Questro for breakfast – an overheating problem kept them grounded that morning. Never the less, the beautiful hard luck trophy that Maria and Greg had prepared provided some consolation for them and a great memory of the weekend.

And so ended our 2016 Nationals with many new friendships being made, wonderful memories, and – yes – we all look forward to catching up again.

Safe Flying Everybody

John Storey

*Coming down the Ord River*



# Kununurra Nationals: Event placings

*Bec Henggeler dropping a flour bomb*

## Manual Navigation

Place	Name
1st	Wayne Mitchell
2nd	George Harris
3rd	Ian Morcombe
4th	Lionel Angel
5th	Ken Wilkinson
6th	Rick Elliott
7th	Chaz Langford
8th	Stuie Black
9th	Bec Henggeler
10th	Tom Breig



6th	Chaz Langford
7th	Ian Morcombe
8th	Bec Henggeler
9th	Steve Braddy
10th	John Storey
11th	Ann Storey
12th	Mark Andre
13th	Wayne Mitchell
14th	Tom Breig
15th	Bruce Layt
16th	Tim Pettitt
17th	Lionel Angel
18th	Ken Wilkinson
19th	Ian Adams



*Pilots preparing for the manual navigation exercise*

## Flour Bomb Drop

Place	Name
1st	Noel Regnaud
2nd	Stuie Black
3rd	Murray Beck
4th	Rick Elliott
5th	Malcolm Pascoe



*Aerial view of gyros*

# Kununurra Nationals pics

Greg Postle guest photographer

*Steve Braddy from Darwin*



*Rick Elliot*



*Mark Andre and Ian Adams*

*Time for a drink.  
Volunteers  
Brian Bethune  
& Jackie Ellis*



*Ken Wilkinson*

*Wayne and Sue Mitchell & Ian and Bev Morcombe*



*Dawn line up*

*Lionel Angel carrier deck landing*



*George Harris gets a push*

# Gyro tourers' trip to Kununurra

Rick Elliot

It all started around August/September 2015 when I asked around if anyone was interested in flying to Kununurra for the 2016 Nats.

"Where the hell is Kununurra?" was the most common response. After explaining the location and how amazing the flying is, I had about twenty pilots interested in making the journey. That number fluctuated down-wards getting as low as six at one point. The final number confirmed to make the trip was nine, so all planning was based on nine pilots and on the 21st of April 2016 the first three of the group left Somersby (Sydney) to start the journey north.



## *Not a bad back drop*

We were joined in the air over the Hunter Valley by the sole Newcastle representative and together we all flew to Gunnedah a day earlier than planned to beat some bad weather due the following day east of the Great Dividing Range.

The next day we flew a short hop to Moree to meet up with two boys from Tamworth and one from Ebor.

Pneumatic problems on one of the Tamworth machines delayed their departure and we eventually caught up with them in Dirranbandi.

Now there were seven of us.

## *The famous Bungle Bungles*





*No sir, it definitely wasn't us*

We flew north west through Charleville, Blackall and then to Longreach where we met up with the final two pilots from Queensland; the group was now complete, let the fun begin!

It wasn't a great start out of Longreach as one of the machines had developed a crack in one of the vacuum hoses on the turbo air box.

The pilot aborted his takeoff and went back to the GA parking area for repairs. A broken drip tray underneath one of the carbies was also discovered. Both problems were easily fixed and we were airborne within half an hour. We landed in Winton with about a 20knot crosswind which was fairly challenging for some of the guys. I'm not sure whether it was on takeoff or landing but one of the gyros suffered a bent steering control rod and had to return to Winton to undergo some minor repairs as it was causing a rudder vibration in flight.

The next stop was McKinlay, which is famous for being the location used for the Crocodile Dundee movie.

We had a good tailwind today and were averaging around 90 knots over the ground and up to 100 at times.

I had arranged to meet a fixed wing pilot at McKinlay who was interested in getting into gyros and Beau, a local gyro pilot from Julia Creek, also flew there to meet us in his Xenon.



*Caused a bit of a stir in Daly Waters*

**Gyro tourers... contd next page**

## Group tourers' trip ... contd



The fixed wing pilot was suitably impressed with the 20knot crosswind landings and I believe is already undergoing gyro training.

Our commander in chief, Paul Campbell, just happened to be passing through McKinlay on his driving trip north and caught us all having a well-deserved beer at the local pub.

### *Arriving at Karumba*

From here we kept heading north-west to Mt Isa where we received amazing help from airport staff offering a vehicle to go into town to buy fuel. Just as we were tucking into our breakfast, Paul Campbell, "the stalker", popped up again in the airport terminal - I'm assuming to keep an eye on his flock, and fortunately we were on our best behaviour.

Away we go again to Cammowear and then on to Barkly Wayside Inn where the Premium fuel pump that we had been relying on had broken down which forced us to resort to Avgas at \$3.00 a litre. Next stop was Tennant Creek for more Avgas and during our departure one of our group noticed an unusual stick shake that he was not comfortable with.

He and I returned to Tennant Creek and after some investigation found no obvious problem but, to his credit, he decided that safety was more important than continuing on and flew home commercially and arranged to truck his gyro home.

Sadly, there was now only eight of us and I had a job to catch up with the rest of the crew a bit further north at a truck stop called Dunmarra. We then flew to Daly Waters and after taxiing into town for fuel, were treated to chaotic scenes as every man and his dog wanted to get their photo taken next to one of these funny looking little helicopters.

Up bright and early the next morning for the final day on our trip to the Nats, with only one more stop at Timber Creek, before heading in to Kununurra airport.

The next day we had the morning off before heading out to the Nats site aptly named Farm Hill.

I'm sure there will be other reports on the Nats so I won't go into a lot of detail but, suffice to say, that the Kununurra Nats were a showcase of what can be done when the community gets behind an event of this type.

*Just another fuel and food stop*



I have been to the last couple of Nats which were absolutely amazing but, I think that the Kununurra crew took it to a new level. Having said that, the weekend of the Nats had the highest May temperature for Kununurra in recorded history - unbelievably hot.

During our seven day stay in Kununurra we had a number of flights around the area including flying to El Questro for breakfast, an amazing flight over the Bungle Bungles and around Lake Argyle. Do yourselves a favour if you ever get the opportunity to fly in this region, don't miss it whatever you do.

## The Return Journey

Right, time to start heading home. A daybreak start to try and beat the headwinds and we were back at Timber Creek by 9am with the next scheduled fuel stop at Killarney station, before heading back to Daly Waters for another night of laughs.

We turned due south from here down to Tennant Creek via Elliott.

The gyro that we had left at Tennant Creek was still parked on the apron and was a sad reminder of one of our crew not having made it to Kununurra with us.



*Fixed wings are pretty useful*

From Tennant Creek

we were heading into new territory, flying due south tracking for Ayres Rock via Ti Tree. On landing at Ti Tree we contemplated taxiing into town for fuel as it is quite remote and safe to do so. We decide against it and as we were pushing our gyros the couple of hundred metres to the servo, the local cops pulled up and set up a radar right out the front of the servo. Good decision boys!!

Well, it had to happen, and that night it started to rain and rain and rain. The best rain they have had in central Australia in three years. What this meant to us was, apart from being stuck in Ti Tree for an extra day, every dirt airstrip in central Australia was out of bounds for the foreseeable future. Ozrunways was working overtime to try and sort this out.

We worked out a strategy to get to Ayres Rock and after a lay day in Ti Tree headed off to Tillmouth Well.

The owners at Tillmouth Well had advised that their dirt strip was not in bad shape, but, unfortunately while airborne, there was a heavy rain squall over Tillmouth Well and on arrival, we found fairly treacherous conditions. Seven of us found reasonable landing areas but, unfortunately, one of the crew lost control during landing in the mud and water and rolled his gyro causing extensive damage. Fortunately, the pilot was relatively unhurt. We were all gutted by the accident and once again had to leave one of the boys in a relatively remote part of Oz, once we had made sure he was okay, and able to get into Alice Springs to catch a flight home.

There wasn't a lot of talk on the next leg down to Ayres Rock; we were all still trying to process what we had just witnessed but, realized we had to let it go and concentrate on flying and doing so safely.

**Gyro tourers... contd next page**

## Group tourers' trip ... contd

Flying into Ayres Rock is a bit unusual as it is a CTAF airfield but, it is controlled by an air traffic controller.

As luck would have it while we were there, the duty controller was an ASRA member whom I had met at the AGM last year. We had a beer with him that night and were given our own flight level around the Rock - 500 feet lower than all other traffic – because we're special (thanks Tony)!

As you can imagine, flying around icons like the Rock, the Olgas and the Bungles is quite surreal and it becomes difficult to process all the amazing sights that we have seen on the trip.

The next day we headed off to William Creek via Kulgera and Marla for a day off and catch up on washing etc. On our day off, everyone, except myself, decided to take a short flight to the Painted Hills and Prominent Hill mine just west of William Creek. I did the flight last year and told them that it is another flight not to be missed. They came back gobsmacked.

Another daybreak start and we are away again, heading south to Leigh Creek and then east to Broken Hill, with a short fuel stop at a godforsaken property in the middle of the Strezlecki desert. One of the lads from Broken Hill flew out in his gyro to meet us and show us some sights on the way in and then was kind enough to help out with transport for fuel (thanks Deggy).

The next morning the two QLD boys departed to the north east and we were to head east. As the five of us were departing Broken Hill, one of the gyros suffered a surging problem with partial engine failure. We all returned to Broken Hill and a local LAME worked on it and seemed to fix the problem. This had us leaving Broken Hill at around 11am with about six hours flying to get to Narromine before dark. It was going to be close!

After quick fuel stops at Wilcannia and Cobar and, sitting on 80-85 knots IAS all the way, we arrived at Narromine



**Australian Government**  
**Civil Aviation Safety Authority**

## SO YOU'VE HAD A CLOSE CALL?

Why not share your story so that others can learn from it too? If we publish it, we'll give you **\$500**.  
Email us at **[fsa@casa.gov.au](mailto:fsa@casa.gov.au)**

Articles should be between 450 and 1000 words.  
If preferred, your identity will be kept confidential.  
If you have video footage, feel free to submit this with your close call.



*Please do not submit articles regarding events that are the subject of a current official investigation. Submissions may be edited for clarity, length and reader focus.*

with about 45 minutes of daylight left.

We spent our last night together in the Aero club reflecting on various parts of the trip: some amazing, and some pretty damn sad, but, I'm pretty sure that everyone had the time of their life and I for one would be happy to do it again....after a bit of time at home, of course.

I would like to thank all of the pilots that took part in the trip and say what a pleasure it was to spend an amazing three weeks with such a wonderful bunch of guys and also thanks to Lionel's wife, Joy, and Wayne's wife, Sue, for making the effort to join us up in Kununurra.

For those interested in statistics, during the trip we covered some 9200 kilometres, flew for over 78 hours and spent over \$3000.00 each on fuel.

The pilots that undertook the trip were George Harris in a Cavalon, Wayne Mitchell in an M16, Tim Pettit in an ELA, Chris Giblett in a Calidus and Lionel Angel, Ian Adams, Ken Wilkinson, Mark Andre (Clock) and Rick Elliott in MTO Sports.

## **SOUTH EAST QUEENSLAND GYROPLANE CLUB 25 YEAR REUNION UPDATE**

For all those wishing to join in the camaraderie of celebrating the 25th year since the formation of the SEQGC in 1988, a venue has been chosen and a date has been fixed:

The Geebung RSL Club,  
323 Newman Road, Geebung, Qld 4034

The Small Newman's Room

at 5.30 pm on

Saturday, 6th August, 2016

The Small Newman's Function Room has access to the Bistro and Bar for anyone wishing to enjoy a meal and refreshments during the course of the Reunion get together.

To show our appreciation to all attendees, the first round of drinks will be on us.

Please contact either Terry Emsden (on (07) 3359 6559)

or Chris Taylor (on mobile: 0411 725 429) to confirm attendance

and/or contribute any photos and memorabilia they would like to share at the event.



Gyro News from the past and a new year begins

## Chris Foord editor

Dear readers

Welcome to curling up with the Winter edition of Gyro News.

From the wonderful wrap up by John and Ann Storey describing the fantastic 2016 National Fly-In in Kununnurra, to a highly interesting technical article from Mark Regan, to CASA's thought-provoking safety article and everything else jammed packed between the covers of the winter GN, there seems to be an ever increasing array of topics to ignite our interest in gyros.

I am certain you will love the conclusion to Willi Ewig's epic "Iceland Adventure" – it has been a real treat to follow his escapades in the last two issues and I would like to thank him once again for contributing such a unique story for our readers.

I am always on the lookout for more writers, so please take this as a call to anyone who is willing to put pen to paper – or, I should say, fingers to the keyboard. Carol and I would love to receive your articles of interest or personal yarns for the enjoyment of all.

Even some wonderful photography with brief captions would do the trick to help fill the pages of our quarterly magazine. Everybody loves to know what everybody else is doing!

I have a few more people to thank for their contribution this time around to the GN and these are our corporate sponsors. Support waned for a little while, and understandably from an economic point of view, however, I am delighted that 2016 has brought a resurgence of interest from a range of new and varied advertisers.

Corporate support is greatly appreciated as the monies raised from the purchase of advertising space go towards alleviating the costs associated with the printing of the magazine. My sincere thanks to all concerned.

Change is in the wind for me and I am about to move house.  
But to where? I have no idea! Just to where the wind takes me.

Safe and happy flying,  
Chris Foord

### Deadlines for photos, ads & articles

Summer	15th Nov	Winter	15th May
Autumn	15th Feb	Spring	15th August



Membership not renewed? You are illegal and uninsured!

## Registrar's report

Dear members

I am surprised at the number of late Membership Renewals and Gyro Registration Renewals that I am still receiving 5 months after the expiry date of 31st December 2015.

Bulk emails are sent to all members with email addresses on 31st December, and again on 31st March to remind them that they are not currently financial, but ultimately, it is the member's responsibility to remain current.

Members flying after 31st December of each calendar year without having renewed their Membership and/or their Gyro Registration Certificate are operating illegally and without 3rd Party Insurance cover.

### From the Operations Manual – Pilot Certificate – Section 2.05 - Period of Validity:

4. Unless cancelled or suspended by the Operations Manager, an ASRA Pilot Certificate shall remain valid subject to the following conditions being met:
  - a. The Pilot is a financial member of ASRA; and
  - b. The Pilot abides by the conditions of the ASRA Operations Manual and the relevant CAO's.

### From the Operations Manual – Section 5.01 – Gyroplane Certification:

2. Gyroplane registrations must be renewed annually by January 1st using the ASRA F006 form.

I believe that it is incumbent on all members to be aware of these requirements and to ensure that they remain current at all times.

Peter Baker  
Registrar

Rotationally moulded cross linked polyethylene

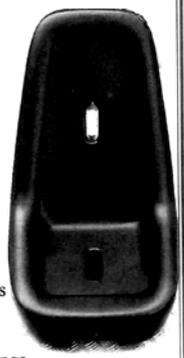
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It is impossible for us to ensure that advertisements submitted for publication comply with the Act. Advertisers and advertising agents will appreciate that it is imperative to ensure that the provisions of this legislation, including the sections specified above, are complied with strictly.

It is suggested that in case of doubt, advertisers and advertising agents seek legal advice.

All information contained in the Gyro News, or validity of claims made in advertisements, is printed in good faith and has been provided to us either by the owner or from sources ASRA believes to be accurate. ASRA is not in a position to invite reliance on the contents of Gyro News. For this reason, the Board of ASRA denies liability to those who choose to rely on such information.

# ***ASRA AVALON 2017***

***THURSDAY 2 to SUNDAY 5 MARCH 2017***

**AT THE AUSTRALIAN INTERNATIONAL AEROSPACE & DEFENCE  
EXPOSITION — GEELONG - VICTORIA - AUSTRALIA**



ASRA is aiming to once again be the standout drawcard enclosure within the General Aviation & Air Sport Precinct in 2017. In 2015 ASRA was deliberately allocated the most prominent display location because gyros always create lots of interest. 2015 was SPECTACULAR!

ASRA encourages and invites gyro owners to fly-in or trailer in their gyros for static display. Members exhibiting a gyro receive 2 full-week Exhibitor's Passes as well as allocated parking (if needed), plus ASRA funded public liability insurance. It is a condition of participation that the gyro remain on public display in a roped-off enclosure for the Friday, Saturday and Sunday.

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## from the Incidents Registrar

Allan Wardill

# Accidents and incidents

### REPORT 01/2016

The pilot of this gyroplane with a fully enclosed cabin failed to ensure that the doors were securely latched before takeoff. Shortly after takeoff, the left hand door opened and it was detached by the slipstream.

The detached door passed into the arc of the propeller causing one blade to detach resulting in severe vibration. The pilot immediately shut the engine down and executed a forced landing during which the left hand main wheel and nose wheel were severely damaged. The pilot was not injured.

STATUS: CLOSED

Comment:

*All before takeoff checklist should contain a reminder to check hatches and harnesses before initiating the takeoff roll. On most checklists, it is the last item on the checklist. Had the pilot of the accident gyro used and properly actioned the items in his checklist, it is unlikely that the above accident would have happened.*

### Note

This was the only occurrence reported in the first quarter of 2016 which is a pleasing result. We can but hope that gyro flying is becoming safer for all rather than assuming that occurrences are not reported.

The board has finally approved the construction of a new incident reporting system which will, it is hoped, be much more user friendly than the current system.

I suspect that many occurrences are not reported because of the complications associated with using the current system.

The beta version should be in the testing phase by the end of May and will go live shortly thereafter. I'll send out a bulk email to all members when that happens.

That's all for this issue.

Stay safe.

Allan Wardill.



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# Kununurra Nationals: Best hardluck story

This winning entry for the best “Hardluck Story” from those attending the Kununurra Nationals, was written by Max Tate after an overheat problem at the Fly-in.

Been to the fly-in,  
What a bloody good show.  
Lots of great people and we're ready to go  
Trailer along with a gyro on top  
Heading to Darwin and reluctant to stop.  
Sun in our eyes, heading east,  
Only thoughts “I'm going to fix this beast”  
Install a muffler while on the job  
Probably find one at scrap man Bob.  
Arrive home and start her up,  
The old girl runs good, what luck!  
Check compressions, all are the same  
Remove thermostat and it looks a bit lame.  
Place in boiling water and it stays shut,  
But next test, wide open like a s##t.

Therefore, my diagnosis is a faulty part  
Replace with a new one and ready to start.  
High in the sky she lifts her nose  
Kissing the clouds, as pretty as a Rose.





Your medicals, flight reviews and training records

## Training & Safety Manager's report

Hi everyone,

I am really pleased to report that the ASRA Training Organisation/Instructor audits have commenced and that the standard of documentation being maintained by our Instructors for student training records has been very good so far.

I would also compliment the high flying standards also being shown by our Instructors. I would encourage all students to ensure that your Instructor completes your training records in the Pilot Training Manual and that the cumulative number of training hours are also entered next to the entry for hours flown during the training flight.

For our Instructors, please ensure that your own pilot log book entry for any student training flight corresponds with a training record entry in the student's Pilot Training Manual (a copy which is then held by both the student and instructor). These 2 records are cross referenced with each other for auditing purposes.

An increasing number of our pilots living in remote areas and with no access to an Instructor for a 1000km's are now using our Video Flight Review procedure.

This is a great advantage to our remote members to keep your flight reviews current. If you fall into this category and would like to submit your review in this

way, please send me an email and I will explain the procedure and requirements.

If your BFR expires then you are not permitted to fly until the flight review is completed.

I would like to explain that the 2 medicals on the ASRA database (Solo and Instructor/Passenger), are separate data base entries. These 2 entries do not talk to each other on the data base, so when you receive an electronic notification that your medical has expired when you have a higher medical that is still current, it will likely be that the solo medical entry requires an update.

I thought it was strange when I received my notification under these circumstances at first. Having the solo declaration date match your higher medical entry date is helpful if you require both medicals for your flying.

Thanks also to those people that have indicated they wish to assist with ASRA administrative roles. It's greatly appreciated and I will get back in touch with you soon to take up offers to assist.

Best Regards,

Jeff.

**To send articles, photos & ads for Gyro News**

**Contact Chris Foord Editor**

**Email [editor@asra.org.au](mailto:editor@asra.org.au) Ph 0414 468 416**

## Being human: Safety and the limits of memory

A tragedy in Western Australia has much to teach everyone involved in aviation safety—if we can face up to its harsh truths.

There are no aircraft of any kind in this story. But as a story about error, and the unintended consequences of well-intentioned actions, it illustrates the basic human factors issues that underlie aviation safety.

In October 2013, a man in Perth, Western Australia, left his 11-month-old son in a car on the hottest day of the year since summer. He forgot to drop the child at day care, and the baby died from heat stress.

Similar ghastly events happen in the US between 15 and 25 times a year, Washington Post reporter, Gene Weingarten, wrote in his Pulitzer-prizewinning investigation of the phenomenon.

Asking ‘What kind of person forgets a baby?’ he found a disquieting lack of consistency. The commonsense idea that error and idiocy went together was wrong.

‘The wealthy do, it turns out. And the poor, and the middle class,’ Weingarten wrote. ‘Parents of all ages and ethnicities do it. Mothers are just as likely to do it as fathers. It happens to the chronically absent-minded and to the fanatically organized, to the college-educated and to the marginally literate. In the last 10 years, it has happened to a dentist. A postal clerk. A social worker. A police officer. An accountant. A soldier. A paralegal. An electrician. A Protestant clergyman. A rabbinical student. A nurse. A construction worker. An assistant principal.



It happened to a mental health counsellor, a college professor and a pizza chef. It happened to a paediatrician. It happened to a rocket scientist.'

This is disturbing because most people's reaction to error is that 'You have to be an idiot to do it, and I'm no idiot.' But non-idiocy is no defence.

A neurologist told Weingarten that catastrophic forgetting was, literally, part of human nature. 'The important factors that keep showing up involve a combination of stress, emotion, lack of sleep and change in routine, where the basal ganglia is trying to do what it's supposed to do, and the conscious mind is too weakened to resist. What happens is that the memory circuits in a vulnerable hippocampus literally get overwritten, like with a computer program. Unless the memory circuit is rebooted—such as if the child cries, or, you know, if the wife mentions the child in the back—it can entirely disappear.'

The neurologist went on to mention that he himself had once forgotten his grandchild was asleep in the car, until reminded by his wife. To reinforce the point that even the smartest people make extraordinary errors, it is worth mentioning that professor James Reason was inspired to begin his study into the psychology of human error after a domestic 'disaster' when, attempting to multi-task in the kitchen, he primed his teapot with cat food.

Reason's typology of active errors and latent conditions is grimly appropriate to these cases. The active errors are the acts of forgetting. The latent conditions are the less apparent failures of organisation or design that allowed active errors to happen, or allowed them to cause harm.

One of these latent conditions is the safety-inspired rule change that caused young children to be encapsulated and carried in the back seats of cars.

Weingarten analyses: 'Two decades ago, this was relatively rare. But in the early 1990s, car-safety experts declared that passenger-side front airbags could kill children, and they recommended that child seats be moved to the back of the car; then, for even more safety for the very young, that the baby seats be pivoted to face the rear.'

This can be a hard lesson for those making the rules, and why public and industry consultation is an important part of developing new regulations. It's not enough for experts to ask what unintentional consequences might flow from a change. In this case, many heads are better than one.

### **What are the lessons of this tragedy that can make you a safer aviator?**

**Firstly.** Remember, that error is universal: it could happen to you under the right (or rather, wrong) combination of circumstances.

**Secondly.** Fatigue is the parent of error. Sure, you don't always make mistakes when you're tired, but the message from reporting systems and studies is clear. You are more likely to make a mistake. In other words: doing critical aviation work while tired is like playing Russian roulette. Sometimes you get away with it, sometimes you don't.

**The third lesson:** Beware of distraction and get rid of it as much as you can. One of the tragic cases Weingarten reported was a man who got a mobile call about a new job as he was driving his baby son to childcare. That call, in retrospect, sealed the baby's fate. For aviators and engineers, controlling distraction might mean leaving the mobile switched off for the flight or the job, putting up a 'do not disturb' sign.

The countermeasures to human errors, like their causes, have two layers. One is personal: with Reason's category of active errors. The other is environmental: matching Reason's category of latent conditions.

Visual reminders and protocols are one layer of defence. Weingarten's story recommended parents use visual reminders such as deliberately leaving work-related items in the back seat, or placing a teddy bear in the child seat, and moving this symbol to the front seat whenever the child seat was occupied. Protocols have a place, such as childcare centres having standing instructions to call if a child doesn't arrive.

Checklists, drills and protocols are imperfect, of course. The childcare centre may be chaotic; the tool control officer may be on lunch hour; the take-off checklist may be interrupted by an ATC instruction. But they are measurably better than relying on the human mind, which is not designed to be perfect time after time.

Perfection should never be expected or relied upon—that's why aviation safety is a network of systems, none of them perfect, but all of them overlapping. (ATC overlaps with radio monitoring, TCAS, and soon, ADS-B. The pilot's daily walk around overlaps with the engineer's final sign-off.)

So should we give up trying to be perfect? Of course not. But we urgently need to give up the idea that we can be perfect, as aircrew or engineers. It's better and safer to pay attention and obedience to the systems that are all we have to save us from ourselves.



Radio frequency use, congrats on the Nats and more...

## Operations Manager's report

### Nationals

I was unable to attend the Nationals this year due to a family wedding in the US which conflicted with the dates of the event. Preliminary reports indicate that the event was well planned and run, as expected. John, Ann and their team are to be congratulated for their efforts.

One minor incident occurred during the "competitions" with no injuries. Congratulations too to the many pilots who travelled to Kununurra to attend. There were some epic treks and I'm sure these will be reported upon in this magazine in due course.

### Ops Manual

An amendment to this manual is being formulated at the moment. It deals with the refinement and clarification of the requirements for provisional and non-provisional gyros. Its release will depend on CASA approval.

You will be advised when it has been uploaded onto the website. As always, if you find something in the manual that requires clarification or updating, please let me know as soon as possible. The CASA approval process can sometimes take some time.

### CASA Regs

A discussion group has been formed within CASA to take a further look at the requirements for radio frequency use outside controlled airspace. The current requirement is that when operating in the vicinity of a

non-controlled airport (NCA) that is marked on Avigation charts, the correct frequency to use is 126.7.

When in the vicinity of a NCA that is not marked on avigation charts, the frequency to use is that associated with the flight information area within which the airport is located, i.e. the area frequency. Apparently there are some safety concerns associated with the current procedure. Normally, a discussion paper will be formulated and released for public comment.

Following a nominated time frame, the comments are collated and the results used to formulate the final policy which is then submitted to the appropriate department for approval and publishing. You will be advised when the consultation document is released and you will be encouraged to comment on the proposals therein.

### Thanks

Finally, my thanks to Jeff Blunt our Training Manager, who most ably stood in for me during my recent absence. Jeff did a wonderful job and stood the test of a couple of difficult issues that popped up. Thanks Jeff.

That's it from me.

Take care and fly safe.

Regards,

Allan Wardill



# Technical Topics :

## Modern Concepts of Rotary-Wing Lift

by Mark Regan Technical Manager

The aviation world splits into two camps when explaining the theory of lift. Old schoolers brought up on Bernoulli's Theorem focus on pressure differences between the upper and lower surfaces of airfoils to explain lift. Modern revisionists instead focus on Newton's 3rd Law, which involves explaining that for every action there is an equal and opposite reaction, and for a 600 kg gyroplane to remain aloft it needs to be continually deflecting downward an air mass at least equivalent to 600 kg. This is called the Newtonian approach.

Both explanations are correct, and each is really the opposite side of the same coin. The pressure differential explanation concentrates more on what is happening near the airfoil surface itself, whereas the air mass deflection explanation takes into account the overall effect that the transit of the aircraft has on the total surrounding air mass.

For rotary wing devotees, the Newtonian air mass deflection explanation is much simpler and more intuitive than the Bernoulli pressure differential explanation, because the Bernoulli pressures surrounding rotor blades are continually fluctuating wildly in an exquisitely complex environment as the rotor constantly spins and advances through the air.

So, to use the more appropriate Newtonian approach, a great starting point is a stationary helicopter. No-one will doubt that a helicopter deflects a mass of air downward. The effect of the downwash is there for all to see (and feel).

All heavier-than-air flying machines generate a constant downwash while flying, which is normally invisible. In special circumstances evidence of the downwash becomes strikingly visible, such as in this stunning "cloud-cutting" picture.

But, now let's consider a gyroplane stationary 20 feet above the ground pointed into a 30 knot wind, mimicking hovering. Where is the downwash? The answer is that it's there, but the downwash velocity is much lower than with a hovering helicopter of equivalent weight and its being blown away and dissipated in the constant 30 knot wind as well. You'd need a raft of sensitive scientific instruments to detect it.



### Translational Lift

Every gyroplane knows that a gyro needs constant airflow through the rotor to keep the autorotation going and for the rotor to generate sufficient lift, achieved 99% of the time by maintaining a good forward airspeed. In rotary-wing terms, the rotor of a gyro with forward airspeed is "translating" horizontally and is benefiting significantly from translational lift. Translational lift is especially important in gyroplanes because our rotors are fixed-pitch and don't have helicopter collective-type mechanisms to adjust the amount of lift created, nor are our rotors powered in flight.

On the ground with no wind, a gyro fitted with a very powerful pre-rotator can spin the rotor up to near-flight rpm, but it still won't get airborne

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## Technical topics ... contd

although it may feel noticeably lighter on its wheels. What is needed to get airborne is forward airspeed. Forward airspeed simply means that the rotor needs to move through and "work on" a greater mass of air to develop enough lift to get airborne.

All rotor systems benefit significantly from translational lift and the benefit is reasonably linear, increasing steadily with increasing translating airspeed. Unfortunately the benefit from translational lift begins to be cancelled out at higher airspeeds by the rapidly increasing parasite drag from the entire machine. This is why gyros are most efficient in the 50 to 80 knot range. Below or above that much higher power is required.

An easy way to visualise the process of translational lift is to consider that at slightly over 59 knots a rotor is translating sideways at 100 feet per second. If the rotor has a diameter of 30 feet it will be slicing sideways the equivalent of 3.3 diameters each second, entraining and "working on" a much greater mass of air compared to the example of an equivalent hovering stationary helicopter frantically pulling air inward and deflecting it downward in the hover.

### Force equals mass times velocity

Force equals mass times velocity and it is easy to understand that the greater the amount of air mass translating through the rotor the less the rotor needs to accelerate that mass downward to produce a given amount of lift. This is the key to the increasing efficiency of rotor systems during "translation".

Translational lift progressively boosts the lifting efficiency of the rotor as airspeed increases, and is the real key to gyroplane flight efficiency, considering the fixed pitch rotor. Another amazing characteristic of a gyro rotor is that it will maintain remarkably constant rpm, only increasing during some manoeuvring (such as harder turns or flares). Also, careful observers will note that a gyro's stabilized rotor rpm will be slightly higher at greater airspeeds as a slightly greater proportion of the rotor becomes driving rather than driven and that equilibrium will re-establish once acceleration ceases.

### The Mass ("Weight") of Air

Air has measurable mass (or weight). It is more correct to talk in terms of mass, rather than weight. At sea level and 15 degrees C, dry air has a mass of about 1.25 kg per cubic metre, or roughly 38.7 grams per cubic foot, or .085 lbs per cubic foot. Most readers will already know that this mass per cubic foot reduces noticeably with higher temperature, higher humidity, and higher altitude.

### Calculating downwash velocities

If it was possible for a 600 kg gyro with a 30 foot rotor to hover like a helicopter, we can calculate what the average downwash velocity would be across the rotor disk.

The formula is the square root of: -- the gyro weight (in pounds) (600 kg / 1,322 lbs) divided by 2 times air density x the disk area in sq. feet.

Dry sea level air density is .002378 slugs/feet cubed and disk area equals 707 square feet.  $707 \times .002378 = 1.68$ . Multiply  $1.68 \times 2 = 3.36$ . Divide 1,322 by 3.36 = 393.5. Square root of 393.5 = 19.836 feet per second downwash (or a quite gentle 13.5 mph or 21.7 kph).

This calculation is a mathematical example, achieving an average calculated downwash velocity. It ignores the reality that in any hovering rotor wake there are varying downwash velocities from low in the core to highest between 2/3 and 3/4 radius, but it does give the reader quite an accurate idea that downwash velocities in light sport rotorcraft are potentially very mild.



Large military helicopters on the other hand, like this 16 ton Sikorsky CH53, can generate almost hurricane downwash velocities.

### Lower downwash velocities with translating rotors

Now, consider the much more "real world" example of the same 600 kg gyroplane cruising straight and level at just over 59 knots airspeed. It will now be 'translating' horizontally at 100 feet per second, with the 30 foot rotor disk "working on" an imaginary rectangular parcel of air 30 feet wide and 100 feet long each second. A reasonably accurate shortcut way of estimating the downwash velocity is simply to increase the virtual disk area by 3.3 (up to 2,333 square feet) because 100 feet is 3.3 times 30 feet.

Substituting 2,333 into the calculation produces a downwash of about 11 feet per second (7.5 mph or 12 kph), or just over half the hovering example downwash velocity.

It doesn't take too much additional arithmetic to work out that the rotor at 59 knots will therefore deflect downward at least 25,664 cubic feet of air weighing 2,181 pounds in that one second to keep the 1,322 pound gyro airborne.

Put another way, because a "translating" rotor is entraining or "working on" a much greater mass of air in a given unit of time, the downwash velocity needed to generate 1322 pounds or 600 kg of lift compared to the hovering example is almost halved.

### Downwash from smaller aircraft generally dissipates rapidly

These calculations show why the downwash from a stationary hovering helicopter can be quite noticeable, whereas that same helicopter flying past at 60 knots will hardly cause any disturbance at all. The downwash velocity as it flies past is roughly half the hover downwash velocity, and is moving with the translating helicopter over the ground (rather than churning down over a fixed place) as well as being rapidly diffused and absorbed into the surrounding undisturbed still air, making it even less noticeable.

The same principle applies to a gyro rotor in translational flight - assuming a rotor rpm of 360, during each second the rotor makes 6 revolutions with a forward advance of 16.6 feet per revolution. What the gyro rotor is required to do in these conditions is to influence or induce the surrounding still-air mass to accelerate downward by roughly 11 feet per second. As quickly as the gyro passes, the downward accelerated air mass will rapidly dissipate into the surrounding still air. The practical effect of this is that blades of grass or leaves on the ground will barely even be ruffled by a gyro passing a few feet overhead coming in to land.

### Is a tilted-back gyro rotor disk "skimming" through the air?



ALL flying machines with lifting surfaces MUST continually deflect air downward to counteract weight to remain in straight and level flight. Constant auto-rotation during steady straight and level flight can generally only be maintained with the rotor 'disk' tilted away from the direction of flight by something like 8 or 9 degrees.

Because most gyros fly with the rotor disk tilted back 8 or 9 degrees, it creates an illusion that the "rotor disk" is skimming through the air like a towed boogie-board skims over the surface of water or that the rotor flies like a kite or powered parachute. These sorts of

"boogie board skimming", "kite" or "parachute" ideas are not really adequate analogies because they ignore the elegance and subtlety of the creation of lift by an auto-rotating rotor.

An auto-rotating rotor is in fact a dynamically complex system based on 2 or more slender rotating blades (wings) held taut by centrifugal force, kept auto-rotating at a remarkably constant rate by the interaction of the aerodynamically driving portions of each blade counterbalancing the drag from the driven portions of each blade, and rapidly following the control inputs of the pilot as he or she tilts the rotor spindle.

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## Technical topics ... contd

By having the rotor disk tilted back, the rotor blades are also sweeping through a much, much greater volume of air than if the rotor was translating completely flat (ie, horizontal), resulting in guaranteed safe autorotation together with greater rotor efficiency. The price to pay for all that whirling complexity is that for a given airspeed a rotor is 2 to 3 times more “draggy” than a fixed wing generating equivalent lift.

Each auto-rotating blade experiences airflows coming from constantly and rhythmically changing directions and angles of attack, with the overall effect being the minor miracle of a rotor spinning by itself, not needing any direct power, and generating precisely the amount of lift and manoeuvring moments that the pilot requires.

### Shape of the Aircraft Downwash Patterns



In general, the downwash pattern from all aircraft is more or less the same, but obviously varying in size and scale. Here's a spectacular picture of a Boeing 747.

Using the huge size of the B747 as a reference, the downwash is absolutely enormous, with many hundreds of tons of air deflected downward by the passage of the jet. The “core wake” is in the middle and this is where most of the deflected air mass resides. The two whirling patterns on either side of the core wake are high energy vortices that originated at each wingtip as well as the tips of the outermost flaps (if extended) which then combine and enlarge by robbing or stealing energy from the core wake.

These energized vortices from heavy jetliners can endanger following aircraft for minutes afterward before dissipating because they are usually invisible.

### Tip Vortices

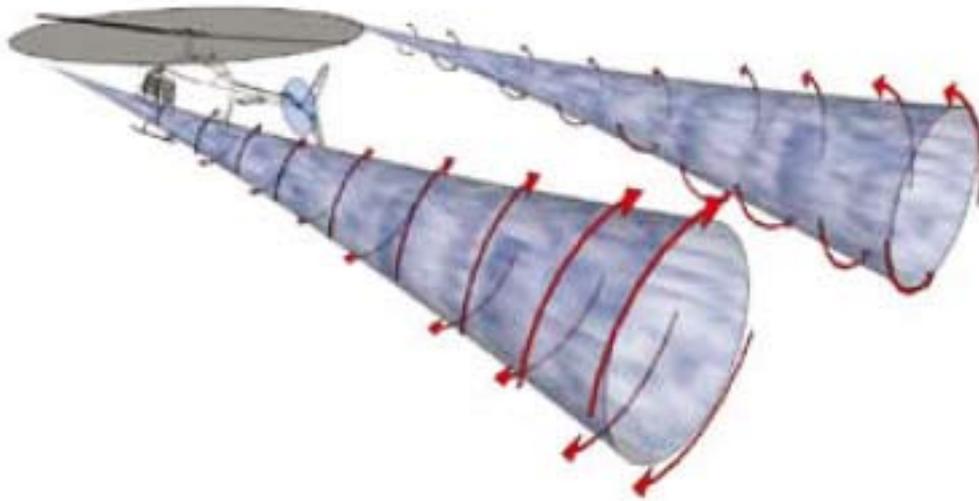
Like helicopters, a gyro's auto-rotating blades produce small-diameter energetic tip vortices caused by air swirling around the blade tip from the lower surface to the upper. The tip vortices follow a swirling pattern on the retreating side of the rotor disk and a more sweeping arc pattern on the advancing side.

The pleasing phenomenon of “blade slap” - especially during manoeuvring - is caused by blades cutting through these high energy tip vortices and through airflow “sheets” shed during the sweep of the preceding blade.



The rotor tip vortices, shown above with a 3-blade rotor example, continually peel or strip away from each blade in a process known as tip-vortex shedding. In humid conditions these small diameter tip vortices are sometimes visible in helicopters as thin wispy foggy ribbons moving downward.

To the writer's knowledge this phenomenon is almost never observed in gyroplanes because of their generally significantly lower disk loadings and different airflow patterns up through the rotor. The invisible “wake” of a gyro rotor in forward flight is characterised by the constant shedding of small tip vortices and the central downward-deflected core wake being made turbulent by drag and disturbance from the inner portions of the blades, rotor hub, and the rotor mast.



Also, just like with an aircraft, there are two invisible main “disk vortices” peeling away from the port and starboard tip portions of the “rotor disk” itself.

### The Core Wake and the Disk Vortices

So, while the main central portion of the rotor wake continues downward, the outermost portions of the core wake form swirling vortices in exactly the same way as is seen created in the picture of the B747 (above). This drawing of a Bell Jetranger is a somewhat exaggerated depiction of disk vortices. Below is a photo of rarely visible helicopter disk vortices (taken in Arctic conditions).



These parasitic swirling disk vortices involve significant portions of the wake or down-wash spiralling wastefully upward again in a swirling horizontal funnel on each side of the core wake. The vortices contribute significantly to the overall drag of the machine. Another way of considering disk vortices is that they steal energy created by the engine and convert it uselessly into two horizontal funnels of energized air.

**Gyroplanes (and helicopters) are much less efficient than equivalent airplanes**

In gyroplanes, the constant creation of the counterbalancing auto-rotative driving and driven forces, as well as the creation and shedding of the smaller tip vortices and the much bigger disk vortices, together with the parasite drag of the inner portions of the rotor disk, hub-bar, hub, rotor mast and the remaining body of the gyro, all add up to create a higher fuel consumption per mile and a much lower overall efficiency when compared to an airplane of equivalent weight. But, bare efficiency or inefficiency is not the full story, especially in machines used predominantly for recreational purposes.

As gyronauts we all full well know that there is simply nothing that compares to the thrill and enjoyment of gyroplane flight, and that the deep satisfaction that comes from a flight well done is incomparable.

Happy Flying!

Mark Regan – ASRA Technical Manager

# Adventure Iceland: Part 3

by Willi Ewig

*This is the third and concluding part of a most amazing adventure.*

## DAY 5, Heaven and Hell

One day Iceland shows us its pure beauty, the next day, she gives us hell.

Heavy rain, visibility under 1 km, crazy, gusty winds. We are stuck.

The camping ground, just next to the golf course where we landed yesterday, has only limited facilities. One open room with a makeshift kitchen, a few tables and a few chairs. One little electric heater tries really hard to heat up this room but, it's simply too small. The little heater

becomes my friend for this day and I sit right next to it and don't move while we are waiting for the rain to clear. My tent is flat, not upright, as the wind simply flattens the definitely-not-Iceland-approved tent.

Weather forecast and rain radar indicate that the rain will clear at 1800 hours. We are patient as there is nothing else to do. We wait, and wait, and wait....at 1800 things remain simply unchanged and rain still comes, almost





vertical, from the grey mass right above us. The last chance to move on would be 2000 hours.

That would give us enough time to fly to the next airfield about 120 km east. Sunset, plus 30 minutes, means landing at 2330. The stupid thing is, we know there are blue skies at this airfield. We sit in the middle of a local low pressure system and this rain is just circling around us. The rest of Iceland has blue skies and not much wind – very funny!

Okay, we call the day, back to the tent. In the meantime, little lakes are forming inside my tent and my sleeping bag is also nicely wet. I can handle this only with a good sip of my single malt whiskey.

## DAY 6

At 0500, Mikkel yells out "Willi, Otmar, get out of your tents!" "Is it flyable?" I ask Mikkel. "Yes, it is" he replies elatedly. Not perfect conditions, but the rain has dumped its load and we take the chance to get out of this hole.

Our take-off at the golf course is quite bumpy. The air comes over the ridge with heavy turbulence, plus an accelerated breeze along with it, however, we get away and head to the coast. Cloud level is still low, so it's the safer way to go.

Our heading is Skaftafell, a small airfield on the foot of the Glacier Vatnajoekull. The airfield has fuel for us as they do joy flights in a Beachcraft twin over the Glacier Oeraefajoekull and also the highest mountain in Iceland, Hvanadalshnukur. As we still have some juice in our fuel tanks, we decide to climb up to the top of the Glacier Oeraefajoekull. It's amazing how the ice pushes itself down in huge spillways. 7,500 feet and we are on top and, once again, Iceland shows us how beautiful nature is and how it created this small, unique world.

Okay, stop dreaming! It's time to land and fuel up. We are early, but, we don't want to waste time. It's perfect weather for flying. The wind has dropped to nothing and we need to get back this afternoon to Saydisfoerdur where our ferry is leaving tomorrow.

**Adventure Iceland... contd next page**

## Adventure Iceland... contd



The second leg this morning goes via Skaftafel, where the ice of the Glacier has broken off and forms lakes with blue icebergs floating around. How amazing this looks! As weather allows, we now head directly back to Seydisfjoerdur, via Egilstadur, right over the edge of the biggest Glacier in Europe. The biggest mass of ice. This is all so unreal, flying at 6,000 feet over untouched, thousands-of-years-old glaciers. How can I possibly describe these impressions? All I can say is "OMG, it's f---g AMAZING!"

Ten miles inbound from Seydisfjoerdur, Mikkel calls the guys from the harbour and gets the latest weather information. It's still blue skies and landing is cleared in a small carpark right behind the cruising ship terminal. Clouds roll over the hills pushing in from the south-east. This time, we are faster than the clouds and have clear view into the fjord.

Mikkel overflies the carpark and reckons it's too short to land as approach is not clear because of light poles. I think it's okay and do the first landing. Unfortunately, a truck, right on the approach, turns out to be a crane and its arm extends just when I turn final, and the crane



is exactly in the middle of my approach. I have to fly around it and touch down in the middle of the 100 m long carpark. Mikkel is number two to land, and Otmar is number three. Now, all nine wheels are safely on the ground after an epic trip. A huge relief.

Big smiles on our faces, what we have just done is not only special, it's spectacular! It's a once in a lifetime experience. A flying expedition over one of the world's most amazing landscapes; so unreal, it is hard to believe it is true. Sometimes, I thought we were sitting in a flight simulator with animated, hand-drawn background pictures. When I see the pics we did today, I get tears in my eyes. Feelings come out.

Fulfilment, happiness, appreciation of how lucky to be able to see what the majority of humans, even pilots, will never see in their entire life. Are we just lucky? Or, do we just do what we like to do, and be happy to share our experience, feelings, of our views out of the window of these fantastic auto-gyro machines?

The two Cavalons, one powered by Rotax 914 turbo, the other with Rotax 912S, and my Calidus, powered by Rotax 912S, behaved very well. Faultless running engines didn't miss a beat. To fly on an island where 99% of country and water is simply not a good idea for an out landing, you feel so much more relaxed in a reliable machine. If you feel like this is on your bucket list, contact Mikkel Palmbo on email: [mikkel@auto-gyro.dk](mailto:mikkel@auto-gyro.dk). He will lead future tours and maybe to Iceland as well.

Be aware, Iceland is an amazing Island, but not an easy place to fly. Lots of experience is needed as low cloud base, strong, gusty winds, small airfields and changing weather conditions require maximum pilot attention and experience. However, it is worthwhile coming here. I give Iceland 10 out of 10. Landscapes I have never seen before, unique and out of this world. And, if you ask me where my favourite place is, it is the area of Lake Myvatn.

For sure, I will have an overflow of feelings tomorrow when we board the ferry and leave this magic place. But, Iceland, I will be back again!





## Back Issues Available

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# Instructor list

current May 2016



Rating	Name	Town	State	Numbers	Email	Ac- tive train- ing	Grd Instrn	Ex- ams	FIt Re- views	2 Place Train- er avail- able	2 Place Gyro- glider avail- able
CFI											
	Blunt, Jeff (R)	Valentine	NSW	0421 784 088	jeff@paulbennetgroup.com.au	✓	✓	✓	✓	✓	
	Bridger, Alan	Prospect	NSW	02 9831 1393	arjbridger@gmail.com	✓	✓	✓	✓	✓	
	Duncan, Russell (R)	Valentine	NSW	0412 630 092	russel.duncan164@gmail.com	✓	✓	✓	✓	✓	
	Wright, Phil	Kotara South	NSW	02 4943 9070	gyro_pilot@hotmail.com	✓	✓	✓	✓	✓	
	Wardill, Allan	Mooloolabah	QLD	07 5444 1316	g747@ozemail.com.au	✓	✓	✓	✓	✓	
	Traeger, Kevin	Lameroo	SA	08 8576 3300	traegair@bigpond.com	✓	✓	✓	✓	✓	
	Morcombe, Ian	Wahring	VIC	0427 003 271	sportcopter@bigpond.com	✓	✓	✓	✓	✓	
	Mitchell, Paul	Ballina	NSW	02 6686 6040	paul_mitchell128@gmail.com	✓	✓	✓	✓	✓	
Senior Instructor Gyro											
	Farr, Neil (R)	Tamworth	NSW	0427 936 430	neil@libertysky.com.au	✓	✓	✓	✓	✓	
	Cramer, Don	St George	QLD	0409 699 115	doncramer@mac.com	✓	✓	✓	✓	✓	
	Layt, Bruce	Wavell Heights	QLD	07 3266 6800	bnlayt@ozemail.com.au	✓	✓	✓	✓	✓	✓
	Black, Stuart	Kununurra	WA	08 9168 1800	stuknx@wn.com.au	✓	✓	✓	✓	✓	
	Polyak, Sam	Yass	NSW	02 6227 1450	sampolyak1@bigpond.com	✓	✓	✓	✓	✓	
	Baker, Peter	Bunbury	WA	0407 929 479	petenlor@bigpond.com	✓	✓	✓	✓	✓	
	Stoffels, Adrian	Two Rocks	WA	0427 094 552	stoffels@ozemail.com.au	✓	✓	✓	✓	✓	
Instructor Gyro											
	Boatwright, Wayne	Mittagong	NSW	04018 643 082	wayne@emaustralia.com.au	✓	✓	✓	✓	✓	
	Coulter, Peter (R)	Angourie	NSW	02 6646 8693	peter@coulters.com.au	✓	✓	✓	✓	✓	
	Elliott, Rick (R)	Berowra Heights	NSW	0408 969 118	rick@aluglas.com.au	✓	✓	✓	✓	✓	
	Mueller, Oliver (R)	Mullumbimby	NSW	0487 502 550	oli.jamu@gmail.com	✓	✓	✓	✓	✓	
	Waldon, Michael	Kiama	NSW	0418 422 714	gyrocopter-illawarra@skymesh.com.au	✓	✓	✓	✓	✓	
	Jaques, Anthony (R)	Mareeba	QLD	0417 073 046	nat@jaquescoffee.com	✓	✓	✓	✓	✓	
	Killip, Kenike (R)	Sydney	NSW	0411 295 496	info@alohamaluretreat.com.au	✓	✓	✓	✓	✓	
	Mauloni, Robert	Mourilyan	QLD	0423 798 911	rob.mauloni@gmail.com	✓	✓	✓	✓	✓	
	Storey, John	Kununurra	WA	08 9169 1932	storey@antmail.com.au	✓	✓	✓	✓	✓	
	Owen, David	Goolwa	SA	048 884 976	david@flyagyro.com.au	✓	✓	✓	✓	✓	
	Perry, Brett	Altona	VIC	0413 018 163	brett28@live.com.au						
Senior Instructor Glider											
	Layt, Bruce	Wavell Heights	QLD	07 3266 6800	bnlayt@ozemail.com.au	✓	✓	✓	✓	✓	✓
Instructor Glider											
	Wardill, Allan	Mooloolabah	QLD	07 5444 1316	g747@ozemail.com.au	✓	✓	✓	✓	✓	✓

**Note:** (R) denotes training endorsed only in Autogyro, ELA, Arrow, Magni or Brako manufactured aircraft.

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current May 2016



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Wardill L, Allan	MOOLOOLABA	QLD	07 5444 1316	g747@ozemail.com.au
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Stoffels, Adrian	TWO ROCKS	WA	0427 094 552	stoffels@ozemail.com.au

**Note:** (R) denotes certified to approve only Autogyro, ELA, Arrow, Magni or Brako manufactured craft

The Technical Advisors listed below are certified to approve *single place powered machines only*.

Name	City/Suburb	State	Phone No	Email Address
Regnaud, Noel	VIVEASH	WA	08 9274 4876	regnaud@bigpond.net.au

## Making the best of your GyroMart ads

This is just a reminder to anyone wishing to advertise in the Gyro Mart.

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The photos need to be in high resolution and supplied as a separate attachment, not embedded in the blurb describing the sale item.

Payment is required prior to the advertisement being published and an invoice will be sent accordingly.

Payment options are provided on the invoice; however, the preferred type of payment is by EFT using the specified ASRA bank details.

This payment entitles the member to have the advertisement published in two consecutive editions of the Gyro News.

For continued advertising, the editor should be contacted with a request that the advert be rerun and another invoice will be issued.

All good wishes

Chris Foord

Editor

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### Affiliate

#### South East Qld Gyro Club Inc

Pres: Mark Robertson 07 54458111  
gyro.qld@bigpond.com  
Sec: Bruce Layt 07 32666800  
bnlayt1@bigpond.com

### Non-affiliates

#### SA Rotor Club Inc

Pres: Shaun Murphy 0409675875  
coptair@bigpond.net.au  
Sec: Anthony Walker 08 85724073  
anthonywalker@internode.on.net  
www.sarotor.org

#### Tasmanian Gyro Rotorcraft Club

Contact: Greg Mitchell 0401 254851  
03 63834908  
Bill Hills 03 62611049

#### Central Australia Sport Aircraft Inc

Pres: Glen Saxby 08 89526000  
redcentre@ozemail.com.au

#### Superlight Aircraft Club of WA (SLAC)

Pres: Adrian Stoffels 08 95612979  
0427094552  
Sec: Bob Shanks 08 92998008  
Gyro rep: Malcolm Pascoe 08 92443695

#### Northern Rivers Gyro Club Inc

Pres: Ross Fife 02 66513012  
rossjfife@gmail.com  
Sec: Judy Boatswain 02 66431920  
0428 431920  
judyandterryb@gmail.com  
northernriversgyroclub@gmail.com

#### The Moruya Light Aviators (NSW) Inc

Pres/Sec: Scott Hogan 0412 227434  
info@locating.com.au

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### **Gyro News design, layout & editorial assistance**

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## Gyro News Advertising Rates

1 x 1/6 page	\$40
1 x 1/4 page	\$60
1 x 1/3 page	\$70
1 x 1/2 page	\$110
Full internal page	\$175
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