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# So long, Agulhas II

#### **Patrick**

At 2 pm on Friday, the 31st of January, the SA Agulhas II backed off from the Antarctic ice shelf and set sail for Cape Town, leaving team S53 to commence their year in solitude.

The Take Over drivers and 5 members of our S53 team had arrived at our small "Summer Station" at the ice shelf 4 days earlier. With the help of ship's crew and NDPW, the containers, cargo and vehicles were back-loaded onto the ship, marking the end of Take Over.

One of the more interesting moments was when the ship Ernest Shackleton joined the SA Agulhas II at the ice shelf, to transfer a new Caterpillar Challenger that it was transporting on our behalf. The Agulhas positioned herself behind the Shackleton, dwarfing the British vessel. Using her massive bow-mounted crane, the Agulhas lifted the Challenger off the Shackleton's aft deck and swung it across. This was a pretty unusual interaction to see in the remoteness of Antarctica and even some of the Germans from the nearby Neumeyer III base turned out to watch the spectacle.



On Friday morning, we were fortunate enough to be swung onto the ship for one last meal and to say goodbye to friends on board.

Standing back on the ice shelf, we watched the SA Agulhas II slowly back away, turn and sail off. But not without a farewell. With the passengers all gathered on deck to wave goodbye, the ship's horn sounded deafeningly and "Ek wil huis toe gaan, na mama toe" was blasted over the loudspeakers. In retaliation we all dropped our dungarees to moon the ship with the message "CHEERS S53" spray-painted across our butt cheeks. After watching the ship sail to the horizon, we trundled back to the Summer Station in our Challengers, with mixed emotions of excitement and apprehension.

That night we got together with the Germans for a party and the following day we set to work sealing up the Summer Station, which we will only revisit in 10 months<sup>3</sup> time.

On Sunday we clambered into our Challengers and left the Summer Station, towing empty cargo sleds. We stopped off at Neumeyer III on the way out, to wish our German counterparts all the best for the year ahead. And then set off into the continent, returning home to SANAE IV.



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# **Finally the Adventure Begins**

#### **Christiaan**

After being left on the ice shelf by the departing S.A. Agulhas II I felt incredibly relieved that the end of Take Over had finally arrived. The hustle and bustle was over. The necessary training to survive the Antarctic experience, lack of comfortable sleep, and discomfort created by a lot of people crammed into a small base was also finally over. A more subtle conclusion, suitably marked by the eerie silence left behind by the departing S.A. Agulhas II, was the bursting of the take-over bubble.

It was as if Take Over detached me from the impending overwintering experience. Allowing for the first steps in Antarctica to be taken without any forethought or awareness of what lies ahead. And now with the very necessary theatrics of Take Over done, we are alone and confronted with what we have dreamed about - a year in isolated Antarctica.

While relieved that Take Over came to an end, I remember, prior to being hoisted onto the ice shelf from the departing S.A. Agulhas II, feeling completely incapable of foreseeing what this overwintering has in store. All of a sudden I was confronted with the intricate nature of living with strangers in a world of never-ending days and nights. Antarctica seems to be a world of contrasts. The soft white pastel coloured beauty versus the harsh reality of the extreme cold. The claustrophobic intensity as well as the impending loneliness of spending a year with only nine people in a suddenly very large base.

Overwintering has jokingly been referred to as being worse than jail, since jail time at least includes the occasional visitor. While I have not experienced hard time, the analogy reminds me of the movie Shawshank Redemption, in which one of the characters released from prison reflects about the excitement a free man feels at the start of a long journey with an uncertain conclusion. This is well and truly the situation we are in – a long and exciting journey with an uncertain conclusion.

# 1st Month as a Team

#### **Charles**

After take over and the extended stay of the SANSA scientist, we were finally just the ten over-wintering team members. We had lost one team member and awaited our new one. He duly arrived and has fitted in like a glove, with the team welcoming him with open arms and a cold beer. The first real test was how only the ten of us would manage the base skivvies (cleaning of the base and making water from ice) and the other duties which were that much easier with the support teams that were here. During the two months that we had the Take Over teams and NPWD staying, we had their support and assistance with these duties. We found out just how difficult and how much time it took to complete just one base skivvy alone (down from a team of six per skivvy area). But as time went on we got used to it and started to enjoy helping and assisting each other in our duties as we were building a family unit that will sustain and hold us together for the rest of the year. So with that in mind and us being the family of ten we are looking forward to the winter months and getting to know each other better and see if as a family we too can tolerate each other.



## **SANAE Inhouse Game Challenges**

#### **Brandon**

Well as most of you would already know here is not much to do at SANAE except for the normal overload of work. So for the most of us here we have daily challengers in the different games we have available for us such as table tennis, pool and darts (well not so much darts); and mainly when we not too busy with our number one game in the bar, DRINKING.



So how do the games work? Everyone has a position on the log for each game, a position originally obtained by challenging all the other players, with the most wins giving you the number one position, and so forth.

At the present moment table tennis is the most played game and number one on that log is Francois, who was also our takeover games winner. Second is Christiaan and Patrick is at number three. Unfortunately I am at number 5 and having a hard time trying to get pass the beginner Hendrik with his evil back hand and spin. Once a day you are allowed to challenge the person directly above you on the log, so climbing to the top is slow going.

On the other hand, our second most played game would be pool, where due to my professionalism and skill I am number one, sinking balls like dozers falling off the ice shelf into the water. Following me closely is Francois and then Patrick, and while we often exchange places in the ranking, I remain number one.

We also have darts; Leonard is the man in that department. conclusion. This is well and truly the situation we are in – a long and exciting journey with an uncertain conclusion.



#### **Raymond**

Imagine answering the doorbell and being handed a special delivery letter. As you open it and begin to read, your eyes bulge out with excitement. You realize that this letter could change your life and make your financial dreams come true.

The personnel office of a huge, international corporation has invited you to apply for a cushy, high-level job in which your starting salary will be three times what you currently earn—with substantial raises every year and staggering bonus opportunities. Surprisingly, the qualifications are within your reach. All you have to do is complete the enclosed application form and return it to corporate headquarters. You sit down immediately and fill out the form. The application states that you must submit to a thorough identity check. The personnel office requests that you send a packet of material that describes in detail who you are.

#### What will you send?

You would probably start with a photograph, the most flattering and professional pose you can find. Your photos that you do have are out of date and kind of laughable. You decide to visit a professional photographer and do it right. You definitely want to put your best face forward in this situation.

Next you prepare a resumé, a lengthy, detailed record of your education, career history, and civic duties. You may be tempted to add to the packet a list of your notable accomplishments, including offices held, honors and awards received, and promotions earned. For good measure you may slip in a few glowing letters of recommendation from friends and colleagues who know what a fine person you are.

You send off your packet and sit back with a contented smile. You are confident that when the personnel people read through your application materials, the job is in the bag. But in a few days the packet is returned to you with a note from the personnel office: application incomplete. Your packet tells us what you look like, how well you perform, and what you have achieved, but you have not told us much about who you are.

So There's More to You Than Meets the Eye (Who are You?)



# A Night with my Dozer, We have no Penguins

#### Hendrik

On my way to Antarctica, I was looking forward to try out a relationship with the indigenous species of Antarctica. See, I am a very lonely man that could not find a partner of his own species.

According to some scientists, the ape is far, far removed family and is the closest to the human, but that is to close for me. Whereas penguins also have an erect posture and bipedal locomotion. With that in mind, I argued that the penguin is close to the Homo sapiens, but not too close (Editor: see http://en.wikipedia.org/wiki/Human for more info). Plus they are furry. So I went to Antarctica to find my lifelong partner.

With my arrival in Antarctica, I was greatly disappointed. There were NO penguins anywhere near our base. At the Akta Bukta Bay there were some, but I just didn't have time to socialise with them. For a week my longing just stood there in the distance.

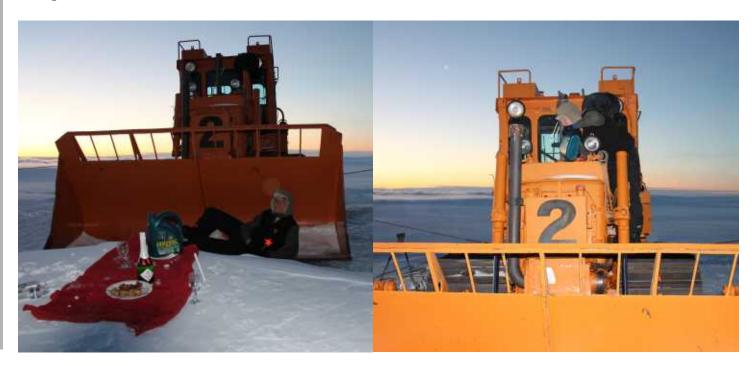
But, in the helicopter, as I get closer to the base, things started to get clear to me. She just stood there, waiting for me in front of the base. And I couldn't take my eyes of her. The brute beauty of a machine, my love, a dozer!

I wouldn't say our relationship has been a smooth ride. I knew nothing about dozers. As this is not the usual relationship, there was no one to go to for relationship help. The only persons I can go to for help are the diesel mechanics, but they are not very fond of our relationship, so they do not help a lot. I think it is jealousy.

At the beginning things were a bit hard and cold. There are even times that she is a leaking nasty mess; a thing any man want to stay away from. One month, (I would never forget that, it is engraved into my nightmares), she had a huge spill of hydraulic fluid. It required a huge clean up. The corridor and waste room were oily for the following two weeks.

She also has her moods. She is very moody early in the morning and requires 15 min of flirting just to get her moving. But once she moves, there is nothing that can stop her, she just keeps going, and if required, she can last all night long. Oh, and she loves to receive things from behind and she can take a huge load. It takes over 300 litres just to fill her up.

As the year develops, I hope we can grow close to each other and enjoy each other's warmth and protect each other form the harsh Antarctica environment.

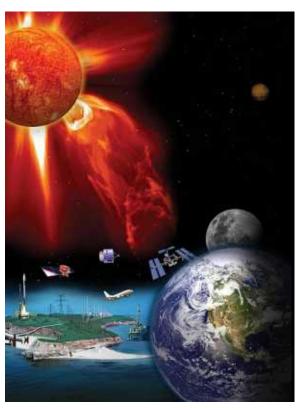


# **Space science in Antarctica**

#### Cornelia

So, what are we actually doing here? I don't mean "what do we do here", cause that you should be able to pick up from the newsletters. Why do we have a team of ten crazy people staying in the most desolated, the coldest and the driest place in the world? Cause let's be honest, we are actually being paid to be here. Well, the diesel mechanics and the rest of the technical team make sense. They keep us alive. So does the doctor. But why are we all here in the first place?

We are here in the pursuit of scientific discovery.



Impressive sounding, isn't it? I am one of four scientists on the team (if you count the meteorologist as well) and I am the Space Scientist. Or the Space Weather Engineer, responsible for nine of the science instruments around the base. These instruments are all managed by the South African National Space Agency (SANSA). I report to their Space Science directorate, and specifically the Research Support Unit, which consists of a group of engineers, effectively creating the physical link between the researchers and the real world. My role at SANAE will be to ensure that the researcher in South Africa (and across the world) receive data from the instruments in the field. Which means that if a computer dies, I resuscitate it; if a cable gets damaged I replace it or if a storm blows an antenna over I invent some new swear words and fix it.

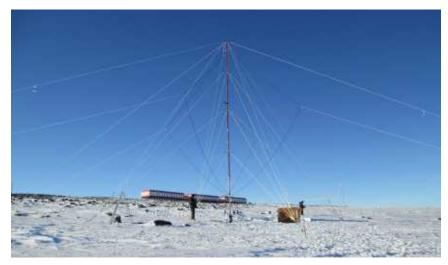
But what is Space Weather Science and why do we go to the end of the earth to do it? To paraphrase a

researcher in the field:

Space weather describes the conditions in space that affect Earth and its technological systems and is a consequence of the behaviour of the sun, the nature of Earth's magnetic

field and atmosphere, and our location in the solar system. Solar eruptive events (such as solar flares and coronal mass ejections (CMEs)) are the main drivers of space weather.

So basically we are interested in how behaviour of the sun influences the earth and its magnetic fields. And if you remember your high school physics you'll know that the earth's magnetic fields converge at





the poles, making Antarctica the perfect place to study space weather.

Why should we care about the sun's influence on our field? magnetic Space weather can damage or disrupt space craft electronics (and fry astronauts doing space walks), damage or disrupt satellite systems, avionics on planes, disrupt HFradio communication and create ally induced geomagnetic currents in power systems.

This affects the GPS you use in your car or in the field, maybe putting you 100 meters of your course. It can disrupt our data communication and sat phone on the ship and on the islands. It can also bring

our electrical grid to our knees (without the help of politicians this time). The so called "Halloween storm" of 2003 knocked out third of Canada's electrical grid. A couple of months ago there was a solar eruption so large that it could have knocked out electrical grids across the world, damaging the transformers, resulting in blackouts that would last days to weeks, depending on the availability of spare transformers. Luckily for us the event occurred on the other side of the sun. But we would have not been at the complete mercy of the sun. With the current technology we have a one to four day warning time of solar events, enabling us to warn electrical suppliers beforehand so they can take preventative measures.

One of the more visual and beautiful consequences of the sun's influences of the earth's magnetic field would be the aurora australis and aurora borealis, the southern and northern lights. The word "aurora" is from the Latin word "sunrise" or the Roman goddess of dawn. A beautiful light display in the middle of the winter, named after the goddess of dawn, only visible in latitudes that have darkness for months at a time. I can't wait.



Leonard

Or let's rather talk about metal birds due to the scarcity of real birds at SANAE IV.

Yes, we do get quite a few of during summer those during especially Take-over when there is a lot of aviation activity happening as takeover personnel get flown to and ship from the and interconnecting flights have to land here on their way to deliver supplies and people to other bases on the continent. planes needs Some refuelled. Field parties are also flown out to areas for surveys and science work.



"So what does that have to do with the SANAE IV team?" you might ask. Well for a start they need a landing strip and helipad which is maintained and serviced by the year team. The landing strip has to be graded by towing a very heavy metal bar behind a Caterpillar. Then the strip also has to be demarcated with flags and a windsock. These items also need to be stored again after the season. Otherwise they will just be blown away by the storms or covered in drifting ice.

Some of the team is also involved in the transport of goods and PAX (passengers on board aircraft) to the base when there are delays in flights due to weather or when crew and passengers need a meal. When this need arises the team is more than willing to exhibit their expert culinary skills in exchange for a conversation or two with people of different nationalities, which could include Swedes, Norwegians, Russians, Germans or any other nation that is involved in the Antarctic treaty. It could also involve some Royalty of these nations. I myself am however more involved with the safety aspects of aviation. All these flights have to be monitored and coordinated from a control centre via VHF radios as well as email and all other channels that are available to us. Even Whatsapp comes in handy from time to time. The Position Heading Bearing or Radial of the aircraft, as well as the time of departure from distant stations and estimated time of arrival, is monitored



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throughout the flight. Should something go wrong and the craft has to land in emergency we should know exactly where it is so that a search and rescue operation can be conducted.



The weatherman also has a lot on his hands to supply me with up to date actual and predicted weather reports. These include the visibility and contrast factors, which plays a major role in any aviation and transverse operations in Antarctica. The weather reports of all stations involved in a flight have to be collected and conveyed to the pilots.

These birds may consist of various types of Fixed and Rotary Wing Aircraft (RWAC). The biggest of this is the Illusion. I have not had the opportunity to fly or see one as it can only land at Troll or Novolavarefskaya, the Russian base with a decent air traffic control unit and a long runway. So far as plane spotting is involved the only fixed wing variety I have seen so far is either the trusty old DC3, which is upgraded with turbine propeller engines, and the Twin Otter. The rotary wings consist mainly out of Bell212 heli's, a descendant of the old Hue heli's, which is well suited for either limited cargo lifting or passenger transportation. On a previous visit we also had a contra rotating Camof with very good lifting ability, but it not so high up on the passenger comfort list. Being cramped into a 1 meter space between a gearbox and the floor for more than an hour's flying to Neumayer was really not nice.

Only one problem with SANAE is that the control centre is not a tower, but is situated in the middle of the base on the bottom floor. So I have to do flight ops and give landing instructions to an incoming aircraft that I cannot even see. And this does not contribute in any good way to this nerve wrecking task where any small mistake can lead to the loss of human life. Luckily the department has bought an outdoor camera for this purpose, which I



am now installing and it will hopefully relieve some tension during the next season.

On my previous overwintering expedition the opportunity for a prank arose out of this situation, which was seized by my previous supervisor. fool After trying to without success he turned his attentions the to weatherman which had take my position at flight as I was elsewhere ops occupied. Sitting in one of helicopters the on the helipad he called in to base on the dedicated air band frequency and pretended to be the captain of a Boeing 747 which had to divert and make an emergency landing at SANAE with an engine on fire.



He was so convincing that after half an hour sweating and stressing and running up and down for weather observations the weather guy nervously verbally guided the Boeing through the emergency landing. Big was his surprise when he eventually ventured outside to see that the plane has disappeared. He is still mad at us until this day.

Of course having these machines around also allows for opportunities to get onboard for a bit of sightseeing and aerial photography - if you are not afraid of flying like me. However I do brave it sometimes, mostly because of the team's peer pressure. Afterwards, I am glad that I did, especially while scrutinising my photography attempts that were taken with an iced up claw clutching a camera and clinging for dear life with the other hand trying not to fall out the side of a chopper with the door open (despite the fact that I am safely strapped in to my seat).



# And from the other side of the Ocean a farewell poem

**Liese Mann** 

As dit vir 'n korter tyd was, was dit seker makliker, maar dis vir veertien maande!!
Twee Kersfeese sonder jou!
Twee maal Nuwejaar wat ek alleen moet hou!
Maar ek kyk in jou oë... en ek kan sien:
Jy het hierdie geleentheid dubbel en dwars verdien!

Ek is SO trots op jou, my Blom!
Ai, hoe wens ek, dat ek saam met jou kon kom?

Net nog enkele daggies om die laaste ure saam te verwyl met pret en plesier en baie lag... en skelm huil...

My hart brand, soos jy my hand liefdevol in joune hou, my wese is seer, totaal en al omgekeer, 'n wipplank van twyfel en wanhoop teenoor liefde en trou.

'n Mengelmoes van gedagtes, te veel om te noem bedrieglik-stil, wanneer jou warm-sagte lippe myne soen... maar dit beur met krag, borrel op, maal in my kop as jy jou laaste goed inpak... en ek hou jou dop... Jou opwinding is merkbaar, ek is saam met jou bly, maar vannand hou ons mekaar vas, en hoop die nag gaan nooit verby...

Dis dagbreek!
Ek maak koffie... my bene hardloop, maar my voete sleep...
Alles is gepak, gereed om te gaan,
Vir oulaas, alleen, stort ek nog 'n laaste traan...

By die skip is alles in rep en roer, geen kans vir emosies of harte om te sloer.

Dit wemel van mense, net soos ek en jy om tot siens te sê aan almal wat saam met die Agulhas II moet ry. Hoe verder jy met die trappe van die skip opklim, hoe kouer omsluit my die "lagie van beskerming"!

Ons waai, ons neem foto's, ons lag en ons sing, wyl die skutmuur van my hart blyk of dit berusting wil bring.

Tot ek julle nie meer kan sien nie, staan ek op die kaai vir die laaste groet... die laaste waai...

Terug by die huis voel ek sterk, gereed en aangetrek met 'n wapenrusting van Bo, sonder enige gebrek.

Jy moet weet, ek is dapper ... en baie lief vir jou! en jy kan op my staatmaak, my volkome vertrou!

Met al die kommunikasie en moderne apparaat kan ons gelukkig skryf, "skype" en praat, en met albei ons harte in "survival-mode" is ons saam sterk, kan die branders maar kom, ons is reg om te "cope". 'n Jaar gaan gou om, jy sal sien, my dierbare Lief, en voor ons ons kom kry is jy terug, my Hartedief!

# **Review: Pubs of Cape Town - Sastrugi Bar**

#### **Francois**

At SANAE you can find one of the most underrated pubs in Cape Town. This bar is a "must", truly a nostalgic hideaway from the harsh conditions of the continent. It's also the furthest pub from the inner city still considered to be part of the Cape Town metropolis. In the bar there is a lot of history with many items on display on the walls and in the bar from legendary explorers, and in the beginning of a new expedition there is a good selection of wine and beer on offer. The selection and atmosphere constantly changes and a new wave of energy is injected every year. During the summer months the Sustrugi bar is crowded and lively and an influx of tourists ensures a constantly evolving atmosphere.

It's difficult to summarize the vibe in the bar as the vibrancy of summer months turns into a more informal and homely vibe during winter. On many weeknights you will only have a few bearded men with a beer in the hand sitting at the bar embracing the solitude on offer. But yet at this bar you can find some of the best theme parties around irrespective of the season.

The bar extends into a games room and TV lounge, which includes games such as pool, table tennis and darts. There is also ladder for these games which allows each person to challenge once a day, keeping the games quite active and competitive in the bar.

**Pros:** Classic bar scene, Good for entertaining clients and groups, Extended bar hours, Pool lounge

Cons: No animals, loud music, random playlists

**Dining options:** Good selection from the dry and cold store

I would say that this is one of the best bars I have visited in 2015 and give it a rating of 9/10.





I will give a short description of the St Patrick's day celebrations on the 17th of March 2014 that was hosted by Hendrik.

It started with a relaxed which meal surprisingly green. Green foods included pancakes, cheese sauce and tunamayo. After the meal it moved towards Sustrugi bar and all drinks including beer was green for the evening. The bar was definitely

large enough to handle the crowd of 10, yet you would always also have enough people in the games room and TV lounge.



At SANAE we have "a socialist" every week responsible for two social evenings. There is one team member (our Metkassie) that excelled in this task to the extent that he is now known as "the Socialist". To mention a few, we have had a poker evening, wine tasting evening, fondue in the Sustrugi, Games in the hanger (climbing, badminton and volleyball), movie nights and the list goes on.



# **Cape Argus**

#### Sonja

When March rolls in and every bicycle in South Africa starts heading towards Cape Town, the fact that we are 4200 km from the actual Cape Argus Cycle Tour is no excuse for not participating. So the SANAE 53 over-wintering team prepared for the cycle by taking our brand new spinning bike out of the box and assembling it in the games room, next to the pool table, facing the dart board. A dedicated few spun their legs for some minutes during the Friday night party preceding the event - this cool party accessory will be staying in the games room.

On Sunday morning, shortly before 11am, the cyclists appeared next to bike, ready for 109km. A few last minute preps were made, Monster Energy Drink and Castle Lite was put on ice and the first participant jumped on.



Christiaan had to cycle up hill. But he got help through the window of the smoker's lounge with a cigarette for motivation.

The bicycle has an odometer, but when cycling furiously only about 14 - 15 km/h is reached. We realised that this would be the speed we could be running with the same energy expenditure, i.e. do not trust the "trusty steed". Unfortunately for Christiaan, we noted a little later, that the bike needed to be on complete downhill to get anywhere.

Francois was our next rider, who remembered the real Argus's rule of "no helmet, no ride". By now we also had a carrot motivating our cyclists - everyone had to take a bite during their ride - vitamins and all that stuff.





Next up was Patrick, ready in his sporty outfit:

During the cycling, the spectators entertained themselves with pool or table tennis.



Our motivational poster was collected from the gym, but promptly adapted to be more realistic.



Charles cycled along and beat his troublesome knee



Brandon cycled, accompanied by his usual phone / Facebook addiction

Around this time, only a couple of hours into the race, we got a message from Neumayer, stating that they had completed the Argus. We strongly suspect doping.

To keep us motivated, our strongest supporters, Cornelia and Leonard, brought us snacks and hot dogs for lunch. Way better than the brown bananas that the guys in Cape Town get.



Raymond impressed with his fitness

I got the second last shift, up Chapman's Peak and Suikerbossie. By this time we had however given up on increasing the difficulty of cycling and just wanted to each get our 14,5km done.



The guys got a picture of our Monster-sponsored calendar on the dart board for motivation.

I'm not really motivated by this, so the guys made a quick plan - Thank you





And then, our last rider got on: Hendrik, who decided that the topless photo shoot went so well, he might as well cycle that way.

And so, after 7h30min and 109km (according to the lying odometer), the SANAE team finished the 2014 Argus.

Watch this space for SANAE 53 kicking ass at future sporting events!!

**Quote of the month:** Christiaan (Metkassie)

To Sonja on measuring fitness:

"How long can you lie on your back ...?"

Song of the month: Brandon

**Pussy Money Weed (Lil Wayne)** 

**Movie of the month:** Sharknado

F-Ups of the month:

1) Hendrik + Sonja Breaking off the caboose door

2) Cristiaan Dropping a spade into the smelly

3) Francois + Brandon Flooding the poop plant

4) Patrick Breaking the hanger door

Weather statistics for March 2014:

	Maximum	Minimum	Average
Pressure	897.8 (1 <sup>3th</sup> )	863.4 (23 <sup>th</sup> )	882.4
Temperature	-8.8 (7 <sup>th</sup> )	-22.8 (17 <sup>th</sup> )	-16.1
Humidity	95% (23 <sup>th</sup> )	17% (12 <sup>th</sup> )	64%
Wind gust	30.9 m/s (10 <sup>th</sup> )		
	60.1 knots		
	111.2 km/h		

# **Sponsors**

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### Wine



Allesverloren



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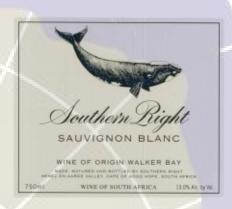








HAMILTON RUSSELL VINEYARDS





MAN VINTNERS







PRO CLEMENTIA BENEFICIUM "In aid of humanity"





### **Food**







# **Hot Beverages**





# **Comics & Board Games**



# **Brandy**



VAN RYN'S

COLLECTION
RESERVE
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# **Toiletries**



# **Music Instruments**

Klavier | Klawerbord | Trekklavier | Blokfluit | Kitaar Baakitaar | Mondfluitjie | Musiekteorie | Verkielenbrid van style, Ekwerene: Usiaa, Royal Schools, Trinity, ALMSA Gestrud Neveling 083 708 4044

# **Optics**

