



March 1965



March 1966



March 1969

Vol 12 March 2015



Keeping the Memory Alive

THE TRACKERS' CROCKLE

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NASA and the Omega Speedmaster ctd.

From the now defunct website "clubspeedmaster.com".

3. TEMPERATURE-PRESSURE: Chamber pressure maximum of 1.47×10^{-5} psia (10⁻⁶ atm) with temperature raised to 160°F (71°C). The temperature shall then be lowered to 0°F (-18°C) in 45 minutes and raised again to 160°F in 45 minutes. Fifteen more such cycles shall be completed.

4. RELATIVE HUMIDITY: A total time of 240 hours at temperatures varying between 68° and 160°F (20° and 71°C) in a relative humidity of at least 95%. The steam used must have a pH value between 6.5 and 7.5.

5. OXYGEN ATMOSPHERE: The test item shall be placed in an atmosphere of 100% oxygen at a pressure of 5.5 psia (0.35 atm) for 48 hours. Performance outside the specification tolerance, visible burning, creation of toxic gases, obnoxious odours, or deterioration of seals or lubricants shall constitute failure to pass this test. The ambient temperature shall be maintained at 160°F (71°C).

6. SHOCK: Six shocks of 40 g's, each 11 milliseconds in duration, in six different directions.

7. ACCELERATION: The equipment shall be accelerated linearly from 1g to 7.25 g within 333 seconds, along an axis parallel to the longitudinal spacecraft axis.

8. DECOMPRESSION: Ninety minutes in a vacuum of 1.47×10^{-5} psia (10⁻⁶ atm) at a temperature of 160°F (71°C) and 30 minutes at 200°F (93°C).



9. HIGH PRESSURE: The equipment to be subjected to a pressure of 23.5 psia (1.6 atm) for a minimum period of one hour.

10. VIBRATION: Three cycles of 30 minutes (lateral, horizontal, vertical), the frequency varying from 5 to 2,000 cps and back to 5 cps in 15 minutes. Average acceleration per impulse must be at least 8.8 g.

11. ACOUSTIC NOISE: 130 db over a frequency range from 40 to 10,000 hz, duration 30 minutes.

On March 1, 1965, the test results were complete.

Three brands' chronographs had still been in the running. Of those, one brand's entry had stumbled on two separate occasions in the water-resistance test. In the

course of the heat-resistance test it finally came to rest for good. The large seconds-hand had bent and twisted itself around the other hands. And that was that.

To be continued

Whereabouts?

As a result of Paul Dench supplying his "staffing list", augmented courtesy Brian Milne, the "Whereabouts" table of those for whom we have no contact details has expanded to more than one page. Thanks to those who have sent updates.

C Abott	Cheryl? Dixon	Ian Jones
Eric Ainsworth	L Donkin	Vera Kastropil
Gay Albon	John Draper	John Keane
Bill Arbery	Mike Dresser	Mike Keen
Allan Barber	Bruce Duff	Jim Keenan
John (Allan) Barber	I Dunleavy	John Kelman
Matt Barber	Dave Elliot	Roy Mallinson
Keith Barnard	J Erickson	Bob Marr
Barrow	Ian Few	Keith Mathieson
Deidre Beaumont	Ian Findlay	Alec Matthews
Elizabeth Beckett	G Francis	K McCarson
Keith Beveridge	Ben Franklin	Ian McDonald
Michael Billings	David Froom	S McDonald
G Bond	Jamie Gardiner	Frank McGregor
S Boyce	L Gardner	Eileen McLaughlan
Bill Boyle	S Garner	Don McLellan
B Bradley	G Carrick	Nola Meiklejohn (O'Byrne)
Phil Brindley	C George	R Miller
Hans Britz	Joe George	Ray Mills
Dave Brooks	Richard Govern	Marilyn Milner (Gobby)
T.F.A Brown	Brian Gray	Sharon Morgan (Todd)
W Brown	Terry Haggett	J Murray
J Burdett	Peter Hardwicke	Dennis Naylor
R Burdett	Ron Harmes	Gloria Neal
Robert Burns	Anne Harvey (Brookes)	Ellie Nichols
Joy Cameron	D Hatch	K Elton Nickerson
Geoff Cardwell	Gail Heileman	Graham Nielsen
John Cawthrey	Stan Hills	John Noble
Brian Clifford	Ernie Hindley	? O'Brien
Keith Clifton-James	Dave Hine	Joan Oats
Barbara Cobcroft	A Holgate	W Oliver
Jim Crossland	Phyllis Hook (Watson)	Denis Owens
Noel Cunningham	J Hopkins	John Paddon
F Dawes	Deidre Howard	Diane Pitman (Housley)
Andrew Dempster	B Hughes	John Platten
Jean DeVis	Ed Humphreys	D Powell
Marilyn Dick	B Hunter	M.J.K Power
Olive Dick	D Hutchins	Wendy Puccinelli
Neville Dippell		Lorna Quinn

The quest continues; the list has got a bit shorter, thanks to George Allen; Sue van Dongen et al. I have been given information concerning the possible whereabouts of a few of these, but so far have not been successful in obtaining, or confirming, details. The last Reunion Dinner brought out some missing persons, but there are also a few who do not wish to be contacted.

Whereabouts? ctd.

Roger Ramsden
A Rees
Dave Rendell
Frank Rice
Doug Richards
D Richardson
Harry Richmond
Ralp Richmond
Dave Rickards
G Riley
Brian Robinson
Lynne Rosser
Ted Rosser
Lindsay Sage
Stewart Sands
Ron Sargeant
Bob Scott
Lorraine Scott-Malcolm (Erlandsen)
Michael Scott-Malcolm
Russell Schwarzer
Dorcas Sefton-Bellion

George Sefton-Bellion
D Selby
Ron Shand
Fred Sharland
? Sheehan
Jeff Shuttleworth
Ray Skender
Lyn Smart (Willis)
J Smith
George Small
P Smith
Roger Smith
Dave Standbury
John Stanton
Bill Smythe
Hazel Snook (Howse)
Barbara Stephenson (Vernon)
Barbara Teahan
Barbara Teasdale
Des Terrill

Christine Thomas
Howard Thomas
Don Thompson
Jack Thompson
Patsy Thompson (Nolan)
Larry Tomkins
Frank Toomey
Mike Travell
Ernst Uhl
Tony Vingerhoets
Dave Walker
Tom Ward
Mrs B Ward
N Wardle
A Watermeyer
Irene West
Bernie Wilbourne
Glen Williamson
Garnet Wilmott
Brian Wilson
Ray Zatorski

Catch the Buzz

The "Catch the Buzz!" DVDs are now available for sale at the museum. Cost is \$22.00 plus postage. It features:



- Carnarvon Airport Welcome;
- Kids Q & A;
- Cocktail Party, which includes Buzz's inspirational speech, and
- Opening of museum

It is a great memento if you were there; if you weren't ...you'll wish you were! But at least now you'll feel part of one of Carnarvon's biggest events.

Please order through the website at:

<http://www.carnarvonmuseum.org.au/buzz.html>



From A Carnarvon Viewpoint - ctd.

Gemini III

The first Gemini manned flight.

24 March 1965 AEST

By Hamish Lindsay

That corned beef sandwich.

Another event which seemed minor but became big with repercussions reverberating all the way up to Congress, was John Young's corned beef sandwich. The back-up Commander Wally Schirra had given it to him.

Schirra confessed that Young had mentioned there was no meal scheduled for the five hour flight, and if you added the 2½ hour countdown, he thought they were bound to get hungry, *"So I went to Wolfie's restaurant in Cocoa Beach and bought a corned beef sandwich on rye with two dill pickle slices. I kept it in a refrigerator in the crew's quarters and got word to Young it was there."*

At 1:52:26 GET (0216:26 AEST) the discussion from the on-board tape recorder:

Grissom *"What is it?"*

Young, *"Corned beef sandwich."*

Grissom, *"Where did that come from?"*

Young, *"I brought it with me. Let's see how it tastes. Smells, doesn't it?"*

Grissom took a couple of bites, *"It's breaking up. I'm going to stick it in my pocket."*

Young, *"Is it? It was a thought anyway."*

Grissom, *"Yep."*

Young, *"Not a very good one."*

Grissom, *"Pretty good though - if it would just hold together."*

Young, *"Want some chicken leg?"*

Grissom, *"No, you handle that."*

Four minutes later they tried the official snack.

Grissom, *"How do you like this going backwards? You can tell you're going backwards, can't you."*

Young, *"Never a doubt. That's not bad for apple sauce."*

Grissom, *"I'll take a bite of apple sauce - if you don't eat it all."*

Young, *"It's getting tough to squeeze it out of there."*

Grissom, *"If we had some pork chops to go with it, we'd be all right."*

Young, *"Yes."*

Grissom, *"Here it is back."*

Young told me, *"It was no big deal I had this sandwich in my suit pocket. The horizon sensors weren't workin' right so I gave this sandwich to Gus so he could relax there was nothing he could do in the dark to make that thing work, until we got back into the daylight."*

Others didn't have Young's view. *"It negated the flight's protocol,"* thundered the doctors. *"The crumbs could have got into the equipment,"* complained the engineers."

To be continued

The Carnarvon Space Festival 2012 ctd.

By Hamish Lindsay

So an honourable and noble record, but really the absolute height was the Moon landing, and that's why we're so thrilled to welcome Dr Buzz Aldrin here today. And an extra little piece of information, which I love, is that you brought back lots of rocks, and as I was telling you yesterday, three of those rocks had never been found previously on the Earth, two were found very promptly afterwards, one was named after the initials of the three who travelled to the Moon. Another was called Tranquillityite, after the Sea of Tranquillity, on which you landed.

Well, I am delighted to report that Tranquillityite has now been found, it was found three months ago by Professor Birger Rasmussen, again of Curtin Uni, and it was found right here in the Pilbara – so bringing it all home to base again.

So it's my absolute pleasure now to introduce Phil Youd, who's the chairman of the Carnarvon Space and Technology Museum."

Phil Youd,



Photograph Louise McGreevy

"Good morning everyone, thank you all for coming. My speech will be very,

very brief because I just don't do speeches.

I'm one of those guys who is happy to be behind the scenes rather than standing up here in front of everyone. As I said last night, I feel like I'm part of a team. This is phase 1 of our journey, and phase two is just over the fence there, right behind where the tent was last night, hopefully with the shire and government support. Thank you very much for coming. Thank you very much to Buzz...and Michelle...and Christina...and James for coming all this way. It's been a long, long flight for them...back to you Lyn."

Professor Lyn Beazley,

"Well said Phil. Let me now introduce Winthrop Professor Mark Bush, who is the chair of the Heritage Committee of Engineers Australia...so Professor Mark Bush, welcome."

Professor Mark Bush,



Dr Mark Bush presenting the Engineering Australia heritage award. Photograph Hamish Lindsay

Before proceeding, I need to tell you a bit about Engineers Australia, the body that is affording this recognition. It is the National Organisation of Professional Engineers, having around 100,000 members.

To be continued

Extracts from "Recollections From My Years At Carnarvon"

David Johns

NASA did not have long-term data on the intensity or frequency of solar flares and solar radiation. Accordingly, NASA had built three solar observatories around the world: one at Boulder USA, one at the Canary Islands Spain and one at Carnarvon Australia.

The purpose of the observatories was to monitor the sun from dawn to dark every day and build up a 24-hour per day, seven days per week database of the frequency and intensity of solar flares and if possible, learn the precursors and be able to predict solar flares. That was to be my work for the next two years.

When viewed through the telescope eyepiece, the sun looked like the mottled surface of a navel orange, with bright pages and darker areas where gas clouds that were suspended above the solar surface attenuated the light emitted by the surface.

Plages were first named by French scientists who thought the bright areas looked like hot sand beaches and thus the name "plage". Plages are areas of elevated temperature on the surface of



the sun and there are often dark roundish spots embedded in the plages.

A camera was mounted to the telescope and set to automatically take a photo of the sun every thirty seconds. The film was later sent to Boulder

for developing and later scanned for flares and then stored by NASA.

About 40 metres north of the SPAN building was a fibreglass dome about six or eight metres in diameter with a



Photograph Terence Kierans

parabolic tracking aerial at the centre of the dome.

The aerial was hour angle / declination mounted and tracked the sun all day. The aerial fed into receivers that detected solar emitted radio waves and the receiver outputs were displayed on chart recorders in the SPAN building. The solar radio telescope was tuned to monitor solar RF radio emission at approximately, 1.5, 2.9 and 4.9 GHz because it was considered that there was an approximate correlation between solar RF emission at these frequencies and flare induced particle showers.

Another instrument we used on a daily basis was a 6-inch Newtonian reflector telescope to project a white light image of the sun onto a screen.

When an ordinary image of the sun is projected onto a screen the sun shows up as a bright disk with dark spots on its surface: sunspots.

Sunspots are areas where strong magnetic fields enter or exit the sun's surface. At those points, the surface is a couple of hundred degrees cooler than the surrounding surface and thus emits less light, which makes that part of the surface seem dark in comparison to the rest of the solar surface.

To be continued

9th Picnic Day

"Five years is still a long time between drinks."

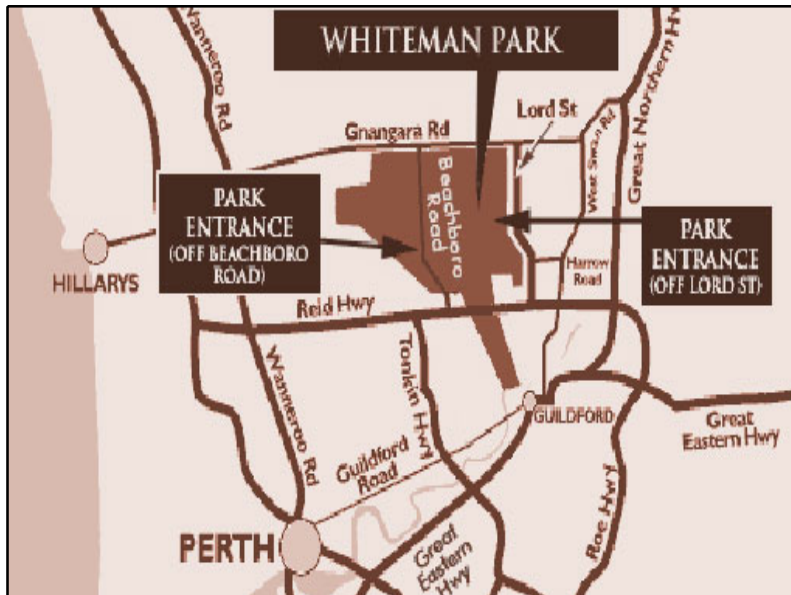
So ...the Perth Chapter of the CRO Trackers will be holding their ninth annual picnic / barbeque at:

Whiteman Park, Mussel Pool,

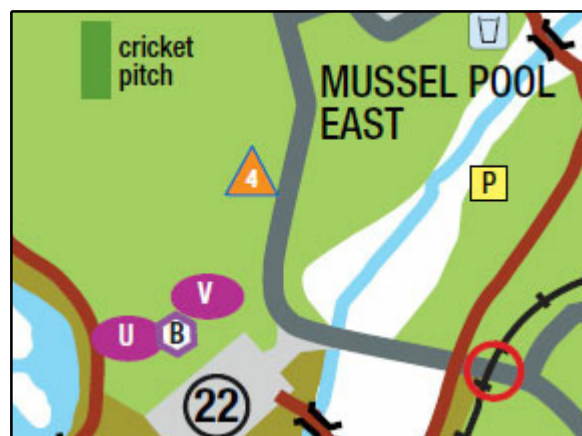
some 20 kms and 25 minutes from the Perth CBD.

Date: Sunday April 12th 2015 (1st Sunday after Easter)
Time: Kick off 11 am WST
BYO: Everything

Look out for the banner at Shelter V



... and for those who get lost



Please note: Donations to defray the cost of hiring will be accepted, gratefully, on the day. Thank you.

ACROBITS '73

Carnarvon Town Oval was the scene for the C.T.S.S.C. 's Annual Children's Sports Day held on the 5th May, 1973.

CHAMPION GIRL: BETTY HUNTER jnr

CHAMPION BOY: TERRY HUNTER

The Sport's events began at midday and lasted until approximately 5 pm during which time Ice cream, Cordial and for the older generation - amber fluid was very welcome for parched thirsts.

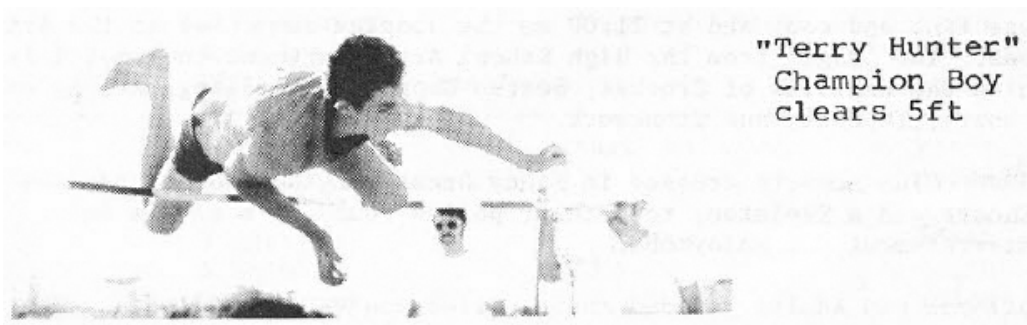
Highlights of the Day:

Mrs Constable challenged Mrs Unwin to a race and won! Congratulations Brenda. How about returning the challenge next year Mrs Unwin?

Because of Terry Hunter's great height and obvious sports prowess, he has without fail, each year won the High Jump event in the 12-16 years Boys Section. This year strategy prevailed and the other 12-16 year old Boys challenged Terry to a mile long run BEFORE attempting the High Jump. Much to their utter chagrin Terry won the mile long run and THEN won the High Jump.

On behalf of the 12-16 year old Sons of Trakkers I would like to wish Terry the very best success in his application to join the Air Force next year.

Bar-b-ques were lit and the only sound to be heard was the sizzling of meat, the happy post mortem of the events (When I was younger son••••!) and the feeble cheers for the Trakkers Soccer Club as they massacred (?) (!) the Plantations International Soccer Team - 9 to 2.



An exhausting but enjoyable day was had due to the organising and help of the Social Club Committee members with the able assistance of Mrs Brennan, Mr and Mrs Jacomb, all competitors, spectators, parents and friends.

Special thanks to Mrs David Troup for her perfect scheduling, typing of many copies of all the events into a chronological programme. (Perhaps you would care to apply for Ann Harvey's job)

Opening of Museum - Phase 2

*"And ex-trackers of Australia
shall think themselves accurs'd,
they were not here"*

(With apologies to Shakespeare)

Awakened refreshed I headed for a shave and shower session prior to toggung up for the evening ahead.

My partner for the evening was Sue van Dongen, my host for the weekend. We arrived somewhat early to be greeted by Phil Youd's team of helpers and the strains of the band for the evening. Motech.



As the photograph shows, the décor was lowly-lit and somewhat "lunar" in design. The band's theme was also "space-oriented" with David Bowie's "Space Oddity" a clear winner.

Appetites were treated to a variety of nibbles during the evening, and after a couple of glasses of wine we settled down to Andy Thomas's presentation.

The presentation, accompanied by profuse videos, summarised Andy's career as a NASA astronaut. The videos showed his many EVAs during his missions STS-77, 89, 91, 102, and 114. Part of his service aboard the Russian Space Station Mir was included.

During the videos he talked about the effects of weightlessness together with his thoughts on the future of space exploration.

Some of these thoughts included the detailed study of asteroids which he said would provide a better understanding of early life. He also believed that man would go to Mars by the year 2040.

He concluded with a video of his wife, Astronaut Shannon Walker, demonstrating the techniques involved in shampooing long hair in a weightless environment.

Deafening applause marked the end of Andy's fascinating talk.

Selected local schoolchildren then queued to ask Andy questions; each one received a studied response.

Andy was presented with an especially crafted tie-pin in remembrance of his visit by jeweller Mark Cox. Phil Youd was also called to the platform to receive one to mark appreciation of his work.

Another visit to the bar and a circuit of the room to meet up with, and chat with, old faces and current friends.



Andy Thomas
Photograph Lauri Glocke



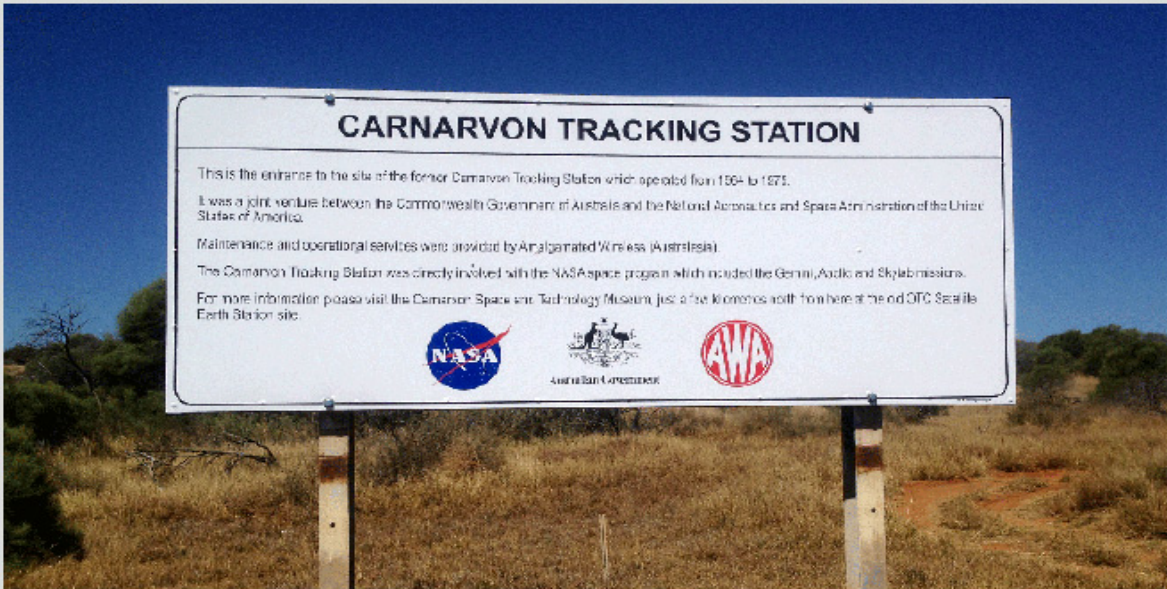
Lauri Glocke and Wendy Wilkinson Yarnold

To be continued

KEEPING THE MEMORY ALIVE



Carnarvon Tracking Station 1964 - 1975



Present Day

[Click for full size](#)

*Mick and Sue Coffey's Carnarvon Steel Supplies of Cornish St Carnarvon fabricated and donated the sign
Signwriting generously donated by W&K Painting of Egan St, Carnarvon
Photograph by Phil Youd - Edited by Terence Kierans*

[Click here to commence entry to the original station](#)

My sincere thanks to all of those who have contributed to the website so far; listed at: http://crotrak.com/thank_you.htm .

LOS



It is with much regret that I have to advise the passing of Ron Burgess on New Year's Eve 2014.

Ron had been legally blind for many years, and his recent poor health had necessitated his taking up residence in a nursing home.

He will be remembered, not only for his considerable technical skills but also his passion for sailing his beloved "Trekka".



Trekka
Photograph Lesley Boulton

Keeping the Memory Alive

Keeping in Touch



Evonne (Martell) & Fred Vey



Trevor & Jocelyn Housley



Mavis & Colin Winrow (et al)

If undelivered, please return to:
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