May 1969

June 1965

June 1966

Keeping the Memory Alive

Vol 12 June 2015

THE TRACKERS' CRO NICLE

Included in this issue:

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NASA and the Omega Speedmaster ctd.

From the now defunct website "clubspeedmaster.com".

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.

The crystal of a second brand's chronograph had warped and come away from the case during the heat test. The same unfortunate occurrence took place with a second model of the same make during the decompression test. No go here, either.

Only the Omega Speedmaster passed and so was chosen as the official chronograph for the space program. NASA's testers, the soul of sobriety, were more matter-of-fact: "Operational and environmental tests of the three selected chronographs have been completed; and, as a result of the test, Omega chronographs have been calibrated and issued to three members of the GT-3 crews."

"GT-3" (Gemini Titan III) was a reference to the first Gemini flight, which took off at 04:52 on March 23, 1965, with astronauts Virgil Grissom and John Young on board. Both men wore Omega Speedmaster wristwatches and the Speedmaster became part of the standard equipment issued to all astronauts. The watch was worn on the outside of the pressure suit with the use of a large black velcro band. It was worn during the first walk in space by an American, Edward White, in 1965 and the following year Omega added the word 'Professional' to the dial. Thus, the Omega Speedmaster Professional was born…

1965 Reaprasial

Two years before the first lunar landing, a memo by Donald K. (Deke) Slayton, then director of Flight Crew operations at NASA, indicated a need for "a wrist chronograph that would be qualified for use in a hostile environment existing on the lunar surface." He pointed out the difficulties in temperature protection and pressure suit garment interface needed by astronauts on the lunar surface. He once again suggested that in order to measure elapsed time, a chronograph would be best suited for these purposes.

Due to its performance and reliability, the Speedmaster Professional (as it was now known) was selected again as the official chronograph by NASA for project Apollo. Each astronaut wore one chronograph for spaceflight as a standard issue. Most, however, wore two during spaceflight. One watch was set on Mission Elapsed time (MET) and the other was set on Greenwich Mean Time (GMT) or Houston time.

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
Eric Ainsworth
Gay Albon
Bill Arbery
Allan Barber
John (Allan) Barber
Matt Barber
Keith Barnard
Barrow
Deidre Beaumont
Elizabeth Beckett
Keith Beveridge
Michael Billings
G Bond
S Boyce
Bill Boyle
B Bradley
Phil Brindley
Hans Britz
Dave Brooks
T.F.A Brown
W Brown
J Burdett
R Burdett
Robert Burns
Joy Cameron
Geoff Cardwell
John Cawthrey
Brian Clifford
Keith Clifton-James
Barbara Cobcroft
Pat Coffey
Jim Crossland
Noel Cunningham
F Dawes
Andrew Dempster
Jean DeVis
Marilyn Dick
Olive Dick
Neville Dippell

Cheryl? Dixon
L Donkin
John Draper
Mike Dresser
Bruce Duff
I Dunleavy
Dave Elliot
J Erickson
Ian Few
Ian Findlay
G Francis
Ben Franklin
David Froom
Jamie Gardiner
L Gardner
S Garner
G Carrick
C George
Joe George
Richard Govern
Brian Gray
Ann Green
Terry Haggett
Peter Hardwicke
Ron Harmes
Anne Harvey (Brookes)
D Hatch
Gail Heileman
Ernie Hindley
Dave Hine
A Holgate
Phyllis Hook (Watson)
J Hopkins
Deidre Howard
B Hughes
Ed Humphreys
B Hunter
D Hutchins

Ian Jones
Vera Kastropil
John Keane
Mike Keen
Jim Keenan
John Kelman
Roy Mallinson
Bob Marr
Keith Mathieson
Alec Matthews
K McCarson
Ian McDonald
S McDonald
Frank McGregor
Eileen McLaughlan
Don McLellan
Nola Meiklejohn (O'Byrne)
R Miller
Ray Mills
Marilyn Milner (Gobby)
Sharon Morgan (Todd)
J Murray
Dennis Naylor
Gloria Neal
Ellie Nichols
K Elton Nickerson
Graham Nielsen
John Noble
? O'Brien
Joan Oats
W Oliver
Denis Owens
John Paddon
Diane Pitman (Housley)
John Platten
D Powell
M.J.K Power
Wendy Puccinelli
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

Last of Catch the Buzz DVDs

The last of the "Catch the Buzz!" DVDs are now available for just $5.50 plus postage from the museum.

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

CARNARVON SPACE & TECHNOLOGY MUSEUM

From A Carnarvon Viewpoint - ctd.

Gemini III

The first Gemini manned flight.
24 March 1965 AEST
By Hamish Lindsay

That corned beef sandwich. (ctd.)

"N*ASA has lost control of the astronaut group,*" boomed hostile voices around the floor of Congress. The result was a tighter control over what astronauts could take into space. Grissom later admitted that the sandwich was one of the highlights of the mission for him.

Going over Africa the crew were told to look out for the second stage Titan II booster. The spacecraft was in the dark but the booster should be in daylight. It should have been 37 kilometres below and behind them. Unfortunately they were facing the wrong way at the time so never saw it. Their change in orbit meant they were actually passing under the booster.

At 2:17:00 GET (0241:00 AEST), over the ship Coastal Sentry Quebec (CSQ) in the Indian Ocean, they performed a 109 second translational burn of 10 feet per second to change their flight path slightly to result in their landing some 55 to 74 kilometres north of their present trajectory landing target. A slight leak of ¼° per second in the yaw thruster caused comment but was not regarded as a significant problem.

Carnarvon's second Pass.

On the second pass over Carnarvon we temporarily lost contact with Mission Control at the Cape for about ten minutes. At 2:23:25 GET (0247:25 AEST) Gemini III hove over our Indian Ocean horizon and straight into a blood pressure reading on Young.

Conrad, "*We'd like to get a blood pressure on the pilot please, and could I have your status?*"

Grissom, "*Okay, blood pressure coming up and our status is 'green.*'

Conrad, "*Good. We don't have any communication with the Cape at this time...*"

Conrad towards the end of the pass, "*You'll probably go over the hill, Gus. You look good here on the ground. We'll see you on your next go.*"

Grissom, "*Roger, thanks, Pete.*"

At 2:53:41 GET (0317:41 AEST) Neil Armstrong, Capcom at Hawaii, confirmed that Gemini III was going to go on to a third orbit, "*Molly Brown Hawaii Capcom. Everything looks good on the ground. We will see you on the next time around. Aloha.*"

In the third orbit Grissom completed a fail-safe plan with a 2½ minute OAMS burn that dropped the spacecraft perigee to 72 kilometres to make sure of re entry even if the retro-rockets failed to work. This was added to the flight plan to protect the Gemini 3 crew against being stranded in space in case of a failure of the retro rockets, prompted by Martin Caidin's movie "*Marooned*".

Carnarvon's third pass.

At 3:56:00 GET (0420:00 AEST) we had our last pass. In the middle of the technical exchanges Conrad called, "*If you are looking at the ground, Molly Brown, Carnarvon has a big bonfire going for you down here.*"

Grissom, "*We are blunt end forward. We can't see them yet.*"

As there was no further mention of the fire, it would seem they did not see it.

Coming to the end of the mission Young reported the spacecraft still had 55% of its fuel on board, which rated high approval from the systems flight controllers.

To be continued

The Carnarvon Space Festival 2012 ctd.

By Hamish Lindsay

"It has many functions associated with accreditation and certification and continuing professional development of engineers, but it also has a function in identifying and recognising sites and projects having engineering heritage and it does have a branch called Engineering Heritage Australia which has satellite committees… pun intended… throughout the country, including a Western Australian branch – Engineering Heritage Western Australia – the group Richard and I are representing today. The heritage recognition program is now in its twenty-seventh year. It's a very select group and the result of a very rigorous process of nomination and selection.

The recognition of the tracking station here in Carnarvon is special in many ways, not the least is that it is the first site to be recognised by Engineers Australia for its international significance, namely the collaboration between the USA and Australia to develop and operate the facility.

Engineering Australia Heritage Panel
Photograph - Louise McGreevy

The marker that accompanies the interpretation panel, which is the circular white and red disc sitting below the panel over here on my right, is the first of its type, and reads '*International Heritage International marker.*' The interpretation panel is headed '*Carnarvon's Key Role in Space Exploration'* and details the role of the tracking station and the shire of Carnarvon in supporting the NASA programs of the time, and recognises the inspiring technical and human achievements of these missions. I should stress this is not the final location of the panel - it's just mounted here today for this ceremony. It is with great pleasure I would like to invite the shire President Karl Brandenburg and Brendan Grylls to jointly unveil the panel."

The Engineering Australia Heritage Panel is unveiled.
Photograph - Louise McGreevy

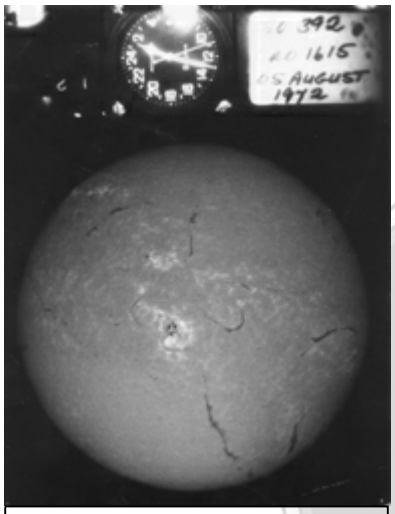
"Before I hand back to Lyn I need to acknowledge some people who were involved in this process, in particular Ian Maitland, Don Young and Richard Hartley, … Richard's sitting in the audience here… after all the hard work they did putting the nomination together that led to this day, and in particular for the valuable input provided by Paul Dench, who worked at the station for many years … there he is… he recently co-authored a book on his experiences of that time. I'd also like to thank the Shire of Carnarvon and its President, and to Phil Youd for allowing us to participate in the museum opening, and finally to Anne-Maree and Jody for organising it."

To be continued

Extracts from "Recollections From My Years At Carnarvon"

David Johns

With these three instruments: the Razdow telescope, the radio telescopes and the white light telescope, we were able to monitor the sun and detect solar flares when they occurred.



35mm photograph of the sun

Plages would come and go. They may be small and only last a few hours or they may be complex and grow in area to about 100 square solar degrees over several weeks and then decline at the same rate.

Flares would occur in the plages. The flare would consist of a small part of the plage heating to a very bright intensity with an explosive beginning and a tapering return to normal plage intensity.

Flares were quantified by their size and intensity. Small flares may only last a couple of minutes with very big flares taking up to a couple of hours for the surface to return to normal intensity.

Flares are complex but can be thought of as a volume of intensely heated material from below the sun's surface rising due to convection and breaking through the surface of the sun.

Just as a boiling pan of fat in the kitchen spits hot fat, the heated material breaks through the surface of the sun and emits a flood of particle and electromagnetic radiation.

Flares emit everything from short wave x-rays to long wavelength radio emission and particles, out into the solar system. Most of the radiation goes harmlessly into space but NASA had a concern that if a big flare occurred while the astronauts were outside of the earth's protection, the astronauts would be badly radiated.

Although x-rays and gamma radiation was a concern, NASA was mostly concerned about particle radiation, that is fast electrons and protons, hitting the exposed astronauts, thus the word 'particle" in the name, Solar Particle Alert Network.

An added complication is that a magnetic field spirals out from the sun, past earth and out to the outer reaches of the solar system.

Particle radiation heading towards earth is ducted by the field and follows a looping path and or may not hit the earth.

Thus it was possible to be subjected to big flares from which there would be substantial auroras and other terrestrial effects, and on other occasions there could be equally large flares with little effect on earth.

I could write pages about observing the sun and its flares but suffice it to say that Don and I had the job of observing the sun and sending two written teletype messages per day to NASA Mission Control in Houston Texas and to SPAN control at Boulder, USA.

Information copies of our solar messag-es also went to Goddard Space Flight Centre in Washington DC, the SPAN site at the Canary Islands NASA Tracking Station, the US Air Force (USAF) early warning centre under Cheyenne Mountain in Colorado, to other USAF solar observatories and the Australian Ionospheric Prediction Service in Sydney.

NASA Mission Control used SPAN data and data from other sources, to make assessments about astronaut safety leading up to and during the Apollo moon missions.

To be continued

9th Picnic Day

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

The Perth Chapter of the CRO Trackers held their ninth annual picnic / barbeque at Whiteman Park, Mussel Pool, despite the weather forecast.

L-R - Trevor Mosel Terry Kierans, Barb King, Tito Teraci, John Preece, Phil and Debbie Youd, Barbara Mitchell.
Photograph - Valerie Kierans

Unfortunately the bad weather obviously deterred many from attending, as can be seen (not counting those who got lost). But those who did brave the elements had a great time swapping reminiscences.

ACROBITS '73

The Festival Hall at the Pony Club Grounds was the venue for the Carnarvon Tracking Station Social Club's combined Show held on Sunday, 15th April, 1973.

Following are the first prizewinners from each section:

BABY SHOW Birth to Six Months - Piers Andrew FORD
Six - Twelve Months - Kirby GLASS
12 months - 2 Years - Christine ROBINSON

Champion Baby - KIRBY GLASS

CRAFTS - Adu1ts

Norah Wilbourne

CRAFTS - Under 12 Years

Allison Dench

HOBBY KITS

Sue Brindal

ART - Adult

Derek Hutchins

ART - Under 12 Years

Luke Brennan

AUSTRALIAN WILD LIFE

Diane Troup

DOGS Mr V Batty

CATS Mrs B Walker

BIRDS Mr A Thomas

He may not have won "First Prize" But he's mine. Says Niel Richmond.

Most Unusual Pet - Mouse - exhibited by Carolyn Garth

The weather was fine and cool and at 11:00 am the Judging commenced in the Arts and Crafts sections. The Judges from the High School Art Department took not a little time determining the exhibits of Crochet, Beaten Copper, Enamelling, Art in many forms, Model Boats, Tapestry and Stonework.

After lunch Pony Club Members dressed in Fancy Dress ranging from a Headless Horseman to Ghosts and a Skeleton, rode their ponies round in a circle for everyone's entertainment and enjoyment.

At 1:30 pm Children and Adults paraded their varied and variegated pets. The Judges, Mr and Mrs Dench, and Mr Jacomb (Mrs Jacomb who was also to have been a Judge was still overseas on holiday and unfortunate1y could not attend) managed with remarkable rapidity to determine section winners.

Finally amid much noise and fun, the Hall was cleared of all Pets and encumbrances and the Baby Show could commence.

At 2:00 pm Sister Evans, Assistant Matron from the Regional Hospital assisted in judging the delightfully attired and very well behaved infants.

Refreshments were then served and Trophies presented, ending a very enjoyable Family Day.

-4-

Opening of Museum - Phase 2

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

(With apologies to Shakespeare)

Saturday morning and the time had come to travel up to the old OTC site for a visit to the new Museum and attendance at the official opening ceremony.

By the time we arrived there was already a large crowd in the area and I had to queue to get into the museum building.

I was amazed at what Phil Youd and his team of helpers had achieved. The first sense was one of space (no pun intended), heightened by the very subdued environment lighting with the exhibits suitably lit.

Photograph - Laraine Glocke

I swiftly made my way to the theatre area to view the Trackers' Tribute. Teeny Bopper had beaten me to it and, was busy taking photographs of her photographs.

Viewing the display brought back so many fond memories of earlier times, places and people, and it was with somewhat moist eyes that I completed my tour and made my way to a front seat for the formal proceedings.

At this stage a white knuckled Andy Thomas arrived, driven in "*Primrosë*", a 1928 Austin 7, by its owner Tito Teraci; returning from a visit to the site of the old NASA Tracking Station.

Photograph - Lauri Glocke

It was then that I realized I had lost my companion, Sue van Dongen, but she was soon found and a suitable seat found for her.

Flag Raising
Photo - Terry Kierans

All the officials took their turn on the dais prior to Andy Thomas making the formal declaration. Of particular note was the Australian flag raising ceremony. It was the original flag that used to fly over OTC back in that dim and distant past.

With a heart warming speech, frequently referring to the part played by Carnarvon, Andy Thomas formally declared open the second phase of the Museum, accompanied by tumultuous applause.

Opening by Andy Thomas
Photo - Terry Kierans

No visit to Carnarvon by an astronaut could pass without a permanent memorial, the hands in cement ceremony, and today was no exception.

Sunday came too soon and we boarded the return flight. En route we heard that stormy weather was forecast for Perth; that was an understatement. The last part of the journey gave me a taste of what astronauts must feel during takeoff.

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Quotations

"*Science has not yet mastered prophecy. We predict too much for the next year and yet far too little for the next 10.*"
~ Neil Armstrong

" *There is still no cure for the common birthday.*"
~ John Glenn

Keeping the Memory Alive

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 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 .

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