



Volume 15, Issue 7

July 2010

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President's Report:

John Rombi

A very warm welcome to our July "Prime Focus"

Well, it doesn't feel like half the year has gone, but here we are in July.

Over the last couple of weeks the weather has been very "Forest" like, with local Macarthur temperatures dropping to -5C to make a very chilly morning.

I have often been asked by new members, "How cold does it get at The Forest?" our premier dark site.

If you stumbled through these local temps, you will now have a good idea.

If you attend ANY observing night, please dress for temps at/or below 0C.

Last month we were very privileged to have the return of Prof. Geraint Lewis; his brilliant presentation on "**The Birth, Life and Death of Galaxies**" held our audience of over 50 spellbound for a full 1.5 hours.

As in previous occasions, we didn't want it to end. Geraint has now left Australia for a 6 month sabbatical at Cambridge University, his Alma Mater. He has agreed to return to MAS next year. His question of me was "Aren't you sick of me yet?" My answer was a resounding NO!!

Dudley Chesham Oval hosted our first Public Night of 2010 on June 19th. We haven't used this site for nearly 4 years, but it was great to get back to the darker skies of The Oaks.

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MAS Dates 2010

August 2010

07/8/10	The Forest
14/8/10	Stargard
16/8/10	General Meeting

09/10/10	The Forest
18/10/10	General Meeting
30/10/10	Stargard

September 2010

04/9/10	Stargard
11/9/10	The Forest
20/9/10	General Meeting

November 2010

06/11/10	The Forest
15/11/10	General Meeting

December 2010

04/12/10	The Forest
11/12/10	Stargard

October 2010

02/10/10	Stargard
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President's Report:

John Rombi

We had approx 150 attendees that were taken on a trip around the universe by a group of approx 20 members.

Telescopes had long lines behind them for most of the night, and it was great to hear the amazement and joy that the evening brought to our attendees.

I would also like to thank Geoff Young and Barry Moore for undertaking the very important job of parking attendants.

Stewart Grainger (Our Merchandising Officer) was duly positioned at the front of the line to catch the people with our merchandise and the ever necessary donation tin.

This event has shown that MAS is more than capable of holding a Public Event at our own site. Well Done Everyone.

Our Observing Nights have suffered at the hands of the weather; our recent Forest weekend was washed out.

But ... it appears that July 17th at Stargard will herald a clear sky.

The A.A.O trip is up and running with 28 people making the trip on the weekend of August 13th, 14th, & 15th.

Prof. Fred Watson and another guide (to be nominated) will show MAS members a behind the scenes view of the facility, can't wait!!

The Art Gallery Event "magnitude" will be held from October 4th-9th, more news will be placed on the What's On Page as they become available. But....remember we need as many volunteers as possible.

This month I am very proud to introduce a new speaker to MAS, Assoc Prof Peter Tuthill his presentation will be on *The "Deathstar" Wolf-Rayet 104: Exotic curiosity or harbinger of doom?* For more information, please visit our website and look under "Speakers Presentations"

Until next month,

Clear Skies,
John Rombi.

Secretary's Column:

Roger Powell

Interesting guest speakers have always been one of MAS's great strengths and we had well over fifty people attending the last meeting. What an awesome speaker Professor Geraint Lewis is. We've had some marvellous visitors recently but Geraint really keeps everyone riveted, the questions never stop flowing and John had to call stumps because we were past our time limit.

You just have to admire the intellect of people like Geraint. What he and his collaborators have achieved with their exquisitely sensitive optical sensors is astonishing and Geraint was even prepared to share some of his 'cutting edge' galactic discoveries with us before they were even published. You might read about what he told us sometime next year in *Sky & Telescope*. M31 in Andromeda will never be the same again, now we know that this majestic and serene looking nearby galaxy is actually tearing apart and gobbling up other galaxies and is currently heading in our direction!

The only blot on my evening was driving home, when a large spider appeared on my windscreen. Time for the wipers! Imagine my horror when I realised this fearsome beast was not outside but was actually inside my car. Every driver's worst nightmare! The monster moved around a bit and then started to crawl up the windscreen towards me. So there I was, trying to avoid the power poles in Blaxland Road with one eye. The other eye was watching this nasty looking critter moving towards me with ominous intent, a bit like Andromeda's impending

threat to our Milky Way galaxy but on a much shorter time scale!

Two nights earlier, the Public Night at the Oaks went extremely well, attracting a public attendance of 150-200, not too many and certainly not too few. What a great sense of satisfaction we all get from the enthusiasm generated by the people who are interested enough to take advantage of our free astronomy nights.

I was using a kitchen step-ladder for the kids to reach the eyepiece. Halfway through the evening my step-ladder vanished. I couldn't believe that some wretched mongrel had pinched it and my wife would not be very happy if I went home without it, so I scouted around. I was met with the sight of a pint-sized little girl staggering around with it, so she could get up at all the other telescopes. I persuaded her to give it back to me so others could use it but as soon as my back was turned she was off with it again! The step-ladder was bigger than she was!

I thought that was priceless but I also recall two charming young ladies arriving halfway through the session and becoming increasingly gobsmacked and goggle-eyed at every object I showed them:

RP: "This is the planet Saturn."
Response: "WOW!!!!!!".

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Secretary's Column:

Roger Powell

RP: "This is a globular cluster, 15,000 light years away."
Response: "WOWWWW!!!!!!!!!!!!!!".

RP: "This galaxy is 27 million light years away."
Response: "WOWWWWWW!!!!!!!!!!!!!!".

RP: "Could you repeat that?"

R e s p o n s e (i n u n i s o n) :
"WOWWWWWW!!!!!!!!!!!!!!"
!!!! (giggle giggle).

At the other end of the public spectrum that night was a teenage girl who was accompanying her parents and younger sister. She just did not want to be there. "IT'S COLD!!" she said very loudly. "I WANT TO GO!!" She

spent the whole time arguing with her little sister and complaining about everything. "THIS IS BORING" she moaned. "WHY CAN'T WE GO HOME NOW?" I guess you can't please them all!

Finally, just another reminder that we would welcome any comments or suggestions on our current constitution, which is now under review. Please let Trevor, Tony or myself know as soon as possible if you have any suggestions on this.

It Is Amazing Who You Meet on the Moon Pt 6 Craters McAuliffe - Scobee - Smith - McNair - Onizuka - Resnik and Jarvis David M Jones

There are moments when you just have to walk away and cry. *Lou Angeli*

The vast lunar crater **Apollo** has a diameter of 538 km and is situated on the far side of the Moon. Within its embrace there are seven special smaller craters that stand today as memorials to seven courageous mortals who had one thing in common; they died catastrophically, together, on January 28th, 1986. These craters are: McAuliffe - Scobee - Smith - McNair - Onizuka - Resnik and Jarvis. The crew perished just 73 seconds into launch, with the world looking on, when the Challenger Space Shuttle tragically disintegrated. This month's article may serve as a small tribute to those seven brave souls, and if nothing else, give them more than 'just a name'. (Wikipedia, 2010)

Sharon Christa McAuliffe (1948-1986), a 38 year old American Junior High School teacher. Sharon is probably best remembered as being '*the first teacher in space*'. She was selected from more than 11,000 applicants to take part in the NASA **Teacher in Space** program. Her official position on STS 51-L Space Shuttle Challenger was that of Payload Specialist (PS). Her specific tasks were to have been to conduct experiments and teach two lessons from space. STS-51-L was the twenty-fifth flight of the American Space Shuttle program, and marked the first time a civilian had flown aboard the Space Shuttle. McAuliffe has had many facilities named in her honour in the USA. On July 23rd, 2004, she was posthumously awarded the Congressional Medal of Honour by President George W, Bush. (National, 2010)



Francis Richard "Dick" Scobee, (1939-1986), was the commander of the Space Shuttle Challenger. Scobee enlisted in the USAF in 1957. He first served as a reciprocating engine mechanic; a world away from space rocketry. Whilst off duty, Scobee studied at San Antonio College (a community college). In 1965 Scobee received a Bachelor of Science degree in Aerospace engineering from the University of Arizona. In that same year he also received an officer commission from the USAF. *Dick* Scobee attended flight school, earning his wings in 1966, serving as a combat aviator in the Vietnam War. As with many who become astronauts, Scobee's career path followed that of the intrepid test pilot. *Dick* Scobee was picked for NASA's astronaut program in January 1978 and completed his training in August 1979. Scobee was promoted to the role of space craft commander for the fateful Challenger flight. His last recorded words were: "*Roger, go at throttle up*". In 2004, Scobee was posthumously awarded the Congressional Medal of Honor and the Purple Heart medal. (Wikipedia, 2010)

Michael J Smith, (1945-1986) was a married man with three children. He graduated from Beaufort High School, Beaufort, North Carolina, in 1963; received a Bachelor of Science degree in Naval Science from the United States Naval Academy in 1967 and a Master of Science degree in Aeronautical Engineering from the U.S. Naval Postgraduate School in 1968. Michael was a career naval aviator. After completing his aviation jet training at Kingsville, Texas in 1969, he was assigned to the Advanced Jet Training Command (VT-21), where he served as an instructor. Throughout a distinguished career, he saw service in Vietnam, qualified as a US Navy test pilot, cooperated in the development of the A-6E (attack aircraft) and Cruise missile guidance systems, worked as an instructor, and flew twenty-eight different types of military and civilian aircraft; logging 4,867.7 hours of flying time. He was selected for the NASA



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David M Jones

Space Program in May 1980, qualifying as a space shuttle pilot after a year of training. Had he lived, Smith would have piloted Shuttle mission 61-N, tabled to launch in the autumn of 1986. Michael Smith's honours include: The Defence Distinguished Service Medal (posthumous), Navy Distinguished Flying Cross, 3 Air Medals, 13 Strike Flight Air Medals, and the Navy Commendation Medal with "V", the Navy Unit Citation, and the Vietnamese Cross of Gallantry with Silver Star. (Centre, 2003)

Dr Ronald Ervin McNair (1950-1986), physicist and astronaut. Unlike Smith and Scobee, McNair was not a career pilot or a military man. He is perhaps best described as an academic who had great musical talent. In 1971, he received a bachelor's degree in physics (*magna cum laude*). In 1976 he received his PhD in Physics from



the Massachusetts Institute of Technology, so becoming nationally recognised for his work in the field of laser physics. In addition, McNair received three honorary doctorates, numerous fellowships and commendations; and on top of his academic accolades he also achieved a black belt in karate. After graduating from MIT, he became a staff physicist the Hughes Research Laboratory in Malibu California. In 1978, he was selected from a pool of ten thousand for the NASA astronaut program; he flew on STS-41-B, aboard Challenger in February 1984, as a mission specialist. He became only the second African American to fly in space. As history recalls, he was later selected for the fateful flight STS-51-L. His task on the mission was linked to the **Music in Space** program. McNair, a very accomplished saxophonist, was to have recorded a saxophone solo, which would have made it the first original piece of music to have been recorded in space. (Wikipedia, 2010)

Ellison S. Onizuka (Lieutenant Colonel USAF) (1946-1986) – survived by his wife, Lorna, and two daughters. Born and educated in Hawaii, Onizuka graduated from Konaewaena High School, in 1964. He received Bachelor and Master of Science degrees in Aerospace Engineering in June and December 1969, respectively, from the University of Colorado. Another defence career crew member, Ellison embarked on active duty with the USAF in January 1970. He pursued a distinguished career as an aerospace flight test engineer and participated in many flight test programs. In July 1975, he was assigned to the USAF Test Centre at Edwards Air Force Base, where his duties involved instruction of USAF Test Pilot School courses, and management of all flight test modifications to general support fleet aircraft. He is

recorded as logging more than 1,700 hours flying time. Selected as a candidate by NASA in January of 1978, Onizuka logged a total of seventy-four hours of space flight time before the disastrous STS-51-L Challenger flight. His honours include the Air Force Commendation Medal, Air Force Meritorious Service Medal, Air Force Outstanding Unit Award, Air Force Organisational Excellence Award, and the National Defence Service Medal. He was posthumously promoted to the rank of Colonel, and posthumously awarded the Congressional Space Medal of Honour. (Centre, 2007)

Dr Judith Arlene Resnik PhD (1949 –1986) was an American engineer and a NASA astronaut. She is shown here on the right in weightlessness. At the time it was taken, this photo caused quite a stir for viewers more used to



seeing 'crew-cut' males in space. She has the honour of being the first Jewish woman in space. Judith was recruited into the astronaut program in January 1978; her first space flight was as a mission specialist on the maiden voyage of *Discovery*, from August to September 1984. It was during this flight Resnik's sense of humour came to the fore; she gained a reputation for her weightless acrobatics, and she once held up a sign reading '**Hi Dad**' to the camera. Since her death, Resnik has been awarded many posthumous honours. Numerous public buildings and facilities have been named after her, mostly schools and educational facilities, including a dormitory at her alma mater, Carnegie Mellon, and the main engineering lecture hall at the University of Maryland. (Wikipedia, 2010)

Gregory Bruce Jarvis (1944-1986) – Air Force Captain Rtd. Jarvis had a B.S. in Electrical Engineering, and also gained a Masters in Electrical Engineering in 1969. He joined the USAF also in 1969, completing his period of service in 1973; he was honourably discharged with the rank of Captain. On returning to 'Civy Street' he went to work for Hughes Aircraft. Jarvis was selected as a Payload Specialist for flight STS-51-L. About six weeks after the disaster, the remains of the crew decks were discovered on the ocean bed. Gregory Jarvis' remains were discovered in the lower mid-deck, with the remains of McNair and McAuliffe. During recovery, the remains escaped from the debris. His body was rediscovered during a final recovery attempt and eventually returned to shore. Gregory Jarvis was posthumously awarded the Congressional Space Medal of Honour in 2004. (Wikipedia, 2010)



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In concluding this article, I can only comment that whilst a lunar site for these seven memorials is fitting, the fact that they lie on the far side of the Moon – facing forever towards the darkness of space, seems somewhat incongruous and melancholy in its complete isolation. One can only hope that - 'out of sight' - is not - 'out of mind' – for this glaring human failure that cost the lives of seven worthy people.

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A SMALL EDITION

You may notice that this month's issue is much smaller than usual. Personal issues have prevented some of the usual contributors from providing articles, and no-one else has submitted anything. To repeat what John and I have said before—this magazine is only what you make it. I am getting the impression that we are not all that worried about providing anything for Prime Focus. I hope that I am proven wrong.

Prime Focus Article Submission

Deadline for article submissions for the next edition of Prime Focus is

Monday 9th August 2010

All Articles can be submitted via email editor@macastro.org.au

Or via snail mail to the MAS Postal address

PLEASE NOTE THE CHANGE OF EMAIL ADDRESS FOR SUBMISSIONS!!!