

# UK Space Conference

(Incorporating BROHP)

March 27-29<sup>th</sup> 2008 at Charterhouse School

## **SPACE CONNECTS**

**Bringing the UK Space Community Together**

**Parallels on History, Education, UK Space Research,  
INSET training for Teachers, Model Rockets and much more**

We are delighted to announce that the opening session of the UK Space Conference on March 27 will feature David Williams Director General of BNSC and Major General Joe Engle distinguished astronaut and test pilot. The BROHP conference has run successfully for nine years but we feel that it is appropriate that the conference evolve. We intend to keep doing the things BROHP has done well but add a little more. The Conference will embrace the leading edge of Space Research and Astronomy, Education and Outreach as well as our traditional strength in History. Major General Joe Engle and David Williams will speak in the first session of the 2008 conference. David Williams became Director General of BNSC in 2006. With the International Astronautical Congress coming to Glasgow later in the year we greatly look forward to hearing the Director General's thoughts.

Joe Engle is one of the great test pilots. He was chosen to fly the rocket powered hypersonic X-15 and completed sixteen flights exceeding Mach 5 on ten of those flights. On one flight he reached 3,886 miles per hour or Mach 5.71. He also gained his astronaut wings flying above an altitude of 50 miles on three occasions. Selected by NASA in 1966 he was on the support crew for Apollo X and was back up pilot for Apollo XIV. One of the Test pilots on the Space shuttle he flew Columbia on the second shuttle mission. He flew Columbia from orbit from Mach 25 through to subsonic and landing. This was the first and only time that this has been done. Joe Engle then is a remarkable pilot having both flown into space and flown down from orbit.



More information from [brohp2@aol.co.uk](mailto:brohp2@aol.co.uk)  
0151-281-1134

<http://www.spaceconference.org.uk/>

## **But what about the History?** **Black Knight Anniversary**

**BROHP will still continue to organise the history parallel of the UK Space Conference. This year topics will include Black Knight and the History of UK Space Science. It is appropriate that we remember Black Knight this year because this is the fiftieth anniversary of its launch. It was first launched in December 1958 from Woomera. At the 2001 conference Colin Hicks then Director General of BNSC congratulated members of the Black Knight team at the Conference Dinner.**



**Standing Derek Bollworthy, Colin Hicks, Charles Martin, Ray Wheeler and  
Andy Jeffs  
Sitting John Scott-Scott, Roy Dommett and Jim Sedgwick**

**Nick Hill has produced a booklet for BROHP on the history of Black Knight. Nick will be talking about Black Knight and why we thought a booklet accessible for children was a good idea. We hope to have a number of individuals from the Black Knight team at the conference.**

## **Professor Ken Pounds** **An Overview of the History UK Space Science'**

**In the last fifty years the UK has made significant contributions to Space Science. A contribution that is not fully appreciated by the general public. We are privileged to have in the programme a presentation by Professor Ken Pounds titled 'An Overview of the History UK Space Science'. Who better equipped than Professor Ken Pounds to take us from the early experiments launched on Skylark and Black Knight through to the present day. Professor Pounds Fellow of the Royal Society, Emeritus Professor of Physics at Leicester University, former President of the Royal Astronomical Society and formerly Chief Executive of PPARC. In a distinguished career Professor Pounds has had experiments launched on Skylark and found time to play a key role in the National Space Centre visitor attraction in Leicester.**

## **UK Space Conference To be Held At Charterhouse** **March 27 – 29<sup>th</sup>**

For many of us who have attended BROHP conferences Charterhouse and its staff have become stars of the show. The friendliness of the staff, the excellent food and the ambience of the campus has helped make the whole event special. I certainly remember last year Francis Spufford reading from his account of the launch of Prospero while we stood on the lawn on a beautiful spring evening sipping champagne.

This year the new Language Block at Charterhouse offers excellent rooms for presentations and better audio visual aids support. After nine successful years, BROHP is continuing to organise the history parallel but inviting others interested in Space to bring a greater variety of presentations, workshops and much more.

There will be schoolchildren competing to design an experiment that will actually be flown on a satellite, Student competitions, model rockets, discussions and exhibitions.

There will be fifty speakers in the final programme, visit the web site for the latest details. On the final day of the conference Saturday March 29<sup>th</sup> David Southwood Head of Science at ESA and Sir Martin Sweeting of SSTL will be speaking. David is a favourite at the conference presenting his talks with gusto and humour. We are very pleased to welcome Sir Martin Sweeting for the first time. Surrey Satellite Technology Limited is not only a wonderful success story it is an object lesson in innovation, good engineering and smart management.

### **The 40th anniversary of Apollo 8**

This year, 2008, is the 40th anniversary of Apollo 8, man's first circumlunar flight and REG TURNILL doyen of Aerospace correspondents will describe what it was like covering it – the politics and problems surrounding it.

### **Apollo 8**

In many ways Apollo 8 was more exciting than Apollo 11, the actual landing, which Apollo 8 made possible only 8 months later. It was the first human expedition to the moon, the first time that men looked directly at the far side. It was the first time that men had been launched on top of the enormous Saturn-V rocket. Because the Lunar Module was still not ready for a first rehearsal even in Earth orbit, the final Apollo missions were switched around so that a landing might still be possible 'within the decade' - the target set by President Kennedy.

Few people still believed it was possible, and the media had almost lost interest in space exploration. The Vietnam War was going badly for America, and that was the big story. Also no one expected that the first Saturn-V flight could safely demonstrate anything more than that it had the potential to hurl a manned payload into space. But its creator, Wernher von Braun, told Turnill that once it was launched it made no difference where it went – and all the indications were that the Soviet Union was almost ready to make the first circumlunar flight with Zond. Turnill reported the possibility in June that year, but NASA chiefs were still hesitating. A failure would be a political catastrophe. What happened

during Christmas 1968 could, in Turnill's view, be regarded as the most significant event of the 20th Century.

We will have in the audience Joe Engle and George Abbey who were both participants in the Apollo programme. We believe that this will give the opportunity for an informed and wide ranging discussion after the presentation.

### **Pat Norris**

We are glad to welcome Pat Norris, chair of the Royal Aeronautical Society back to the conference to talk about his new book. Read a review below.

### **Spies in the Sky - Surveillance Satellites in War and Peace**

"stunning": Jennifer Meyer in *Nature*

Since the launch of Sputnik 1 in 1957, the contribution made by satellites to society has been enormous: instant awareness of sporting, political, and human events across the globe; immediate communication undreamt of 50 years ago; and the chance to see close-ups of planets and stars and share the excitement of astronauts in space. But this book casts a spotlight on a little-known aspect of the Space Age – the military dimension and how the superpowers used spy satellites.

Today, military satellites represent 25 percent of all satellites in orbit. In *Spies in the Sky*, Pat Norris argues that the development of spy satellites has prevented nuclear Armageddon. He believes that the 'race to the Moon' between the two superpowers was a side effect of the Cold War, and that the most important event was the use of spy satellites by military powers to prevent the Cold War becoming a 'hot war.' He then focuses on the regional tensions of today, and looks ahead to what the future holds – a time when spy satellites could be the only defense against a nervous nuclear power using its nuclear weapons needlessly.

### **John Boyes – Project Emily - The Thor IRBM and the RAF**

John Boyes returns to the conference to talk about his new book about Thor. The Thor IRBM was based in the UK for five years before being removed in 1963.

### **Eric 'Winkle' Brown**

Captain Eric 'Winkle' Brown is a national treasure. We are delighted that he is returning to speak at the conference. Having two of the greatest Test Pilots of all time speaking at the conference is truly a privilege. We have invited Joe Engle to join Eric on the platform and to share with us their flying experiences.

## History

History does not change the past however often we rewrite it. History changes the present, at its best it unrolls a narrative that inspires. The history of the UK Space community is full of drama, personalities, challenges and achievements. The BROHP conferences have not only helped record some of that history but spawned a series of programmes broadcast on television and radio giving a higher profile to the UK's historical achievements but also raising awareness of present day programmes.

George Abbey the former director of the Johnson Spaceflight Center addressed the BROHP conference in 2007 and called attention to the significant contribution of British engineers to the Apollo programme. These achievements if not recorded are lost to our national narrative. This year BROHP has published a short booklet on Black Knight a very successful project supported by the United States because of the value of the data it gathered on re-entry. The booklet was written to be accessible to young people and we will be following it with others recording the history of UK Space science and Astronomy.

At the UK Space Conference BROHP together with the Centre for Contemporary British History at London University intends to organise a parallel which on the topic of Cassini-Huygens. The normal academic publication will be supplemented by podcasts. Another topic will be the Black Knight which was first launched in 1958.

There will also be presentations on Cassini-Huygens, the James Webb Space Telescope and the leading edge of UK Space Science. There will be a conference dinner in Brooke Hall as usual and The Sir Arthur Clarke Awards on 29<sup>th</sup>. The students are planning a social event on the evening of the 28<sup>th</sup> and much – much-More. This is a real opportunity to come together as a UK Space Community celebrate its history, inspire the youngsters who will be entering the competitions, help some of the students with the careers event, recognise achievement at the Arthurs and stay up very late talking about Space, Astronomy, rockets and our heroes. Come and join us.

## **Jim Sedgwick**

We were sad to hear of the death of Jim Sedgwick and we extend our sympathy to Pat Sedgwick and her family. Jim Sedgwick was a generous and humorous man who we will all miss.

## UK SC Registration Form 2008

Date	Includes	Residential	Accompanying Partner	Non-Residential	Total
If you need to stay on the night of the 26 <sup>th</sup> or the night of the 29 <sup>th</sup> , this can be offered but numbers are strictly limited		£30 per person per night			
27 <sup>th</sup>	Lunch, tea breaks, dinner (res)	£55 inc. Accom.	£30	£40	
28 <sup>th</sup>	Breakfast (res), lunch, tea breaks	£55 inc. Accom.	£30	£40	
28 <sup>th</sup>	<b>Conference Dinner</b>			£40	
29 <sup>th</sup>	Breakfast (res) Lunch, tea breaks	See Above for Accom.		£40	
29 <sup>th</sup>	The Arthur's Black tie event. Limited places only.	£50 per person			
	Speakers Discount	Subtract £40			
				<b>TOTAL</b>	

**Please state if you have mobility problems:**

**Please tick if you have special dietary needs**

**Please specify if you have ticked the box above:**

**Please make cheques payable to BROHP and send cheque, form and contact details to Lesley Wright, Treasurer, 17 Elsmere Avenue, Aigburth, Liverpool, L17 4LB. Payments received after 12<sup>th</sup> March 2008 will incur a late payment charge of £20.**

**PLEASE COMPLETE**

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