

# 68<sup>th</sup> IAC

## International Astronautical Congress

ADELAIDE, AUSTRALIA  
25 - 29 SEPTEMBER 2017

### PRESS KIT

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## About the IAC 2017

### *The world's premier global space event*

The International Astronautical Congress has always been the place where space issues - from scientific and technical topics to industry R&D and advancements, international cooperation, education and career development are discussed in a convivial spirit and among worldwide experts. IAC attendees come from very diversified and complimentary backgrounds and experiences and all of them greatly contribute to making the IAC the ideal platform for exchanging ideas and knowledge for:

- ❖ **scientists, engineers and technicians**
- ❖ **agency officials, including Heads of Agencies**
- ❖ **industry representatives, including CEOs of the leading space companies**
- ❖ **university and research centres' staff**
- ❖ **representatives of associations, professional societies and museums**

At the same time the Congress introduces **students and young professionals** to the field.

The previous IAC in 2016, in Guadalajara, Mexico attracted close to 5300 participants, including more than 3000 delegates and press representatives and more than 2000 students and young professionals.

In 2017, for the second time, the IAC comes to Australia, a country where many high-tech companies, with their diverse space industrial facilities, space technology, expertise, and know-how, have much to offer to the international space community.

The theme of this year's congress is "**Unlocking imagination, fostering innovation and strengthening security**". The global economy and security of many nations depends on assured and secure access to satellites that provide communications, timing and navigation services and remote sensing data. Space probes are also vital to our understanding of the solar system and the far universe. The #IAC2017 programme addresses all of these topics and emphasises the important contribution that space makes to STEM education as well.



## About the International Astronautical Federation

### *Connecting @ll space people*

Created in 1951 to establish a dialogue between scientists around the world and to lay the foundation for international space cooperation, the IAF continues to connect space people to this day.

The Federation is the **world's leading space advocacy body with almost 300 members** including all leading space agencies, industries, societies, associations, universities and R&D institutes worldwide.

Over **40 experts' committees** support the Federation in its mission to advance knowledge about space and to foster the development of space assets by facilitating global cooperation.

At its annual International Astronautical Congress (IAC) and other thematic conferences, the IAF brings its **multidisciplinary and international network** to life.

### IAF's Mission

#### ❖ Promoting Cooperation

The IAF's International Astronautical Congress and various IAF committees provide unique collaborative platforms for experts from space agencies, industry and research

#### ❖ Advancing International Development

The IAF is building a future of cooperation, development and international friendship, bringing together experts from experienced and emerging space nations alike

#### ❖ Sharing Knowledge

The Federation has many well-established channels to disseminate information within its global network and the wider space community

#### ❖ Recognising Achievements

The Federation's prestigious awards are presented annually to individuals and groups who have distinguished themselves in the global space community

#### ❖ Preparing the Workforce of Tomorrow

To nurture new talent, the Federation has many activities for students and young professionals to facilitate their attendance at IAF events and connect them with senior experts

#### ❖ Raising Awareness

The global network of the IAF and its dedicated publications help to promote the public appreciation of space activities worldwide

### International Astronautical Federation

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## IAC 2017 Co-organisers

### INTERNATIONAL ACADEMY OF ASTRONAUTICS (IAA)

The International Academy of Astronautics (IAA) was founded in 1960 by Theodore von Karman. The Academy is an independent international community of leading experts committed to expanding the frontiers of space, the newest realm of human activity. To foster the development of astronautics, the Academy undertakes a number of activities, including the recognition of outstanding contributors through elections and awards. It also facilitates professional communication, develops and promotes new ideas and initiatives, engages the public, and fosters a sense of community among the members. The IAA is a unique nongovernmental organisation established in 1960 and recognised by the United Nations in 1996. It is an honorary society with an action agenda. With 1200 elected members and corresponding members from 87 nations, it works closely with space agencies, industry, the academic community and the national science and engineering academies to determine needs and objectives and to help shape policy and forge cooperation by means of studies, position papers, conferences and publications. The IAA has published 52 studies to date and is engaged in the preparation of 40 others. The Academy also publishes the journal *Acta Astronautica* containing refereed papers. The Academy now organises 20 conferences per year and regional meetings focused on the development and promotion of new initiatives. This activity also includes, in cooperation with the International Astronautical Federation and the International Institute of Space Law, the traditional contribution to the International Astronautical Congress (IAC), where the Academy organizes 13 Symposia. The Academy also continues to enjoy its participation in the COSPAR Assemblies by sponsoring and co-sponsoring symposia. Although the IAA has many connections to these and other similar organisations, it is distinctive as the only international Academy of elected members in the broad area of astronautics and space.

#### International Academy of Astronautics

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IAA Shop: <http://shop.iaaweb.org>





## INTERNATIONAL INSTITUTE OF SPACE LAW (IISL)

Founded in 1960, the International Institute of Space Law (IISL) is an independent non-governmental organisation dedicated to fostering the development of space law. The membership of the Institute is composed of individuals and institutions from more than forty countries, elected on the basis of their contributions to the field of space law or other social sciences related to space activities. Additionally, prospective membership is open to students and young professionals with a demonstrated interest in space law. Since 1992, the IISL has organized the annual Manfred Lachs Space Law Moot Court Competition. The competition is based on a hypothetical space law case, and is written by IISL members. Approximately sixty student teams from universities in Africa, the Asia Pacific, Europe, and North America participate. The competition is an important part of the organisation's outreach programme, and is its principal mechanism for engaging future generations of space law experts. The regional champions compete in the World Finals, which take place at the IAC and are judged each year by judges of the International Court of Justice. This unique feature makes the Manfred Lachs Moot Court one of the most prestigious moot court competitions in the world. The IISL is an officially recognized observer at sessions of the United Nations Committee on the Peaceful Uses of Outer Space, and its Scientific & Technical and Legal Subcommittees. In cooperation with the European Centre for Space Law (ECSL), the IISL organizes an annual space law symposium for the delegates and staff attending the sessions of the UNCOPUOS Legal Subcommittee. In addition the Institute organises a variety of conferences on space law throughout the year in locations all over the world. It publishes an annual volume of IISL Proceedings with papers and reports of all these activities during the year. As one of its main activities, the IISL holds an annual Colloquium at the International Astronautical Congress (IAC). During these Colloquia, the IISL strives to address topics that are of interest to all space actors and invites all IAC attendees to attend and participate in its sessions. The themes of the sessions of this year's Colloquium are:

- E7.1: 9<sup>th</sup> Nandasiri Jasentuliyana Keynote Lecture on Space Law and Young Scholars Session
- E7.2: 'NewSpace', New Laws/ How governments can foster new space activities
- E7.3: Refugees and the role of space communications/Status and Practice of Charter for Man-made Disasters
- E7.4: Space law Developments in Asia-Pacific: Diverging national space legislation with regard to the applicability of space law to suborbital flights
- E7.5: Current Developments in Space Law

During the IAC, the IISL also co-organises annual Scientific-Legal Roundtables with the International Academy of Astronautics (IAA), the 32<sup>nd</sup> of which will be held this year in Adelaide (E7.6-E3.5 – Technological and legal challenges for on-orbit servicing). Furthermore, the IISL co-organises a session each year with the IAF (E7.7-B3.8 – Legal Framework for Collaborative Space Activities).

### International Institute of Space Law

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## LOCAL ORGANISING COMMITTEE (LOC)

The 2017 IAC Local Organising Committee is composed by the following institutional representatives:

- ❖ **Michael Davis** – ex-officio Chair
- ❖ **Brett Biddington AM** – Chief Executive
- ❖ **Jennifer Doyle** – Commonwealth Department of Industry, Innovation and Science
- ❖ **Alice Gorman** – Senior Lecturer in Archaeology at Flinders University
- ❖ **Jeff Kasparian** – Consultant in Telecommunications Research
- ❖ **Naomi Mathers** – IPC Co-Chair
- ❖ **Peter Nikoloff** – Co-founder and a director of Nova Systems
- ❖ **Anne-Marie Quinn** - Managing Director of All Occasions Group (AOG)
- ❖ **Nicola Sasanelli AM** – Government of South Australia Representative
- ❖ **Chris Schacht** – Former Senator for South Australia in the Australian Parliament
- ❖ **Mary Snitch** – Lockheed Martin Corporation Representative

### Local Organising Committee

IAC 2017 Secretariat

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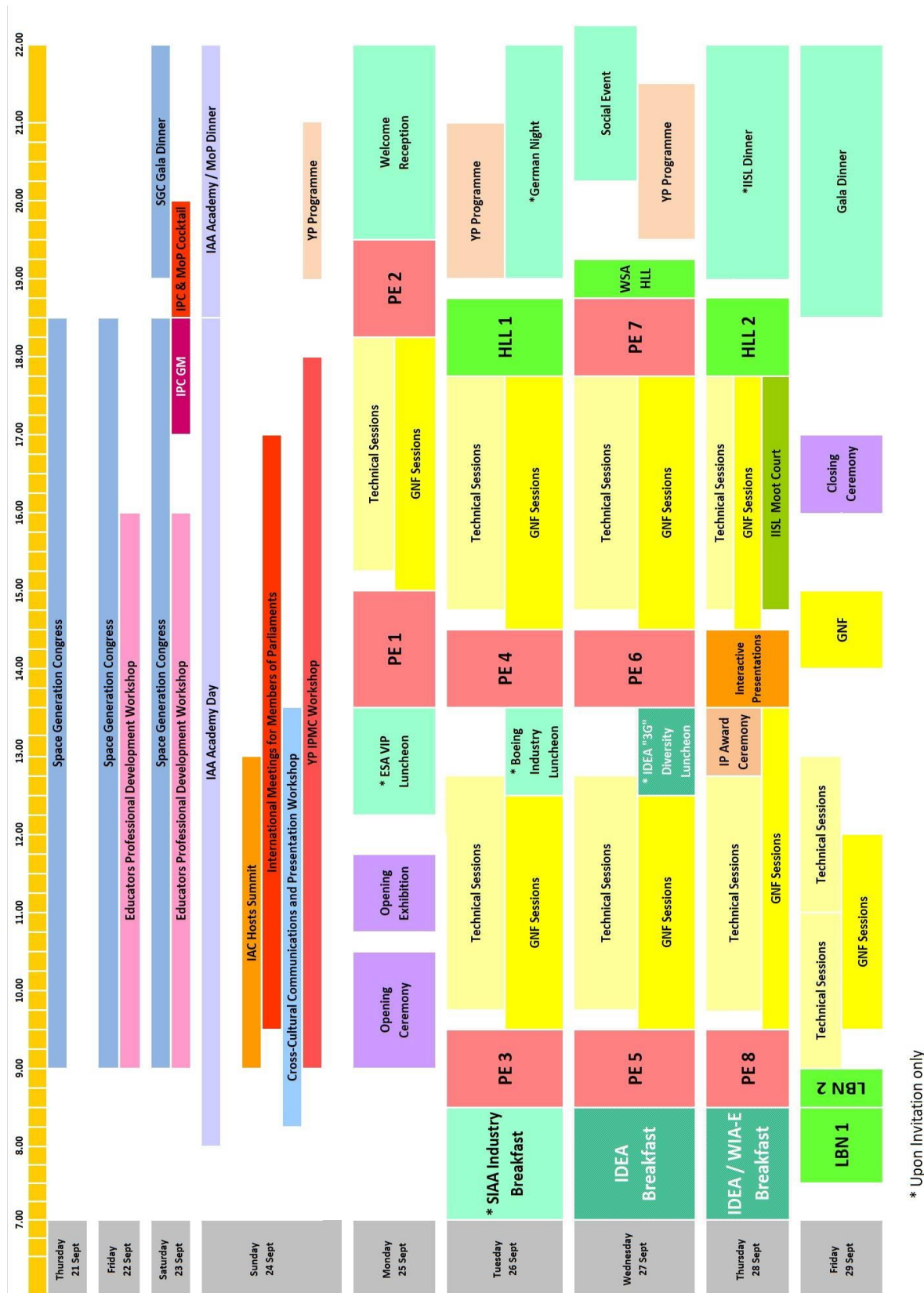
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## IAC 2017 at a glance

- ❖ **8 Plenary Events, 3 Highlight Lectures, and 2 Late Breaking News**
- ❖ **180 Technical Sessions** in the fields of:
  - **Science and Exploration**
  - **Applications and Operations**
  - **Technology**
  - **Infrastructure**
  - **Space and Society**
- ❖ As in past years, the IAF is organizing a **Global Networking Forum (GNF)** and this year it will feature a very intense programme all along the IAC week. Some of the highlights of this year's GNF programme include:
  - ✓ A Dedicated Industry Day on Tuesday
  - ✓ Deep space exploration post 2024 scenarios
  - ✓ The 50th Anniversary of the Outer Space Treaty: Global Governance for Space Activities
  - ✓ Space and Sustainable Development Goals
  - ✓ Space 4.0 – Building a Space Entrepreneurship Ecosystems: The Innovation Fuel for the Benefit of Industry and Agencies
  - ✓ Astronauts Event
  - ✓ Space X – Elon Musk Presentation
- ❖ **IAC 2017 Exhibition** with over 50 exhibitors from industry, space agencies, research centres and universities, associations and space societies.

## IAC 2017 at a glance





## **IAC 2017 Agenda**

### **PRE CONGRESS EVENTS**

#### **Space Generation Congress (SGC)**

The Space Generation Congress (SGC) is the annual meeting of the Space Generation Advisory Council (SGAC) held in conjunction with the International Astronautical Congress. SGC gathers a select group of top university students and young professionals from various areas of the international sector – government, industry, and academia, who have a passion for space.

**Thursday 21 – Friday 22 September, 8:30 – 18:00**

**Saturday 23 September, 9:00 – 18:00**

**Venue:** University of Adelaide, North Terrace Campus, Faculty of Engineering, Computer and Mathematical Sciences, Ingkarni Wardli Building, Adelaide, South Australia 2005, Australia

**Website:** <http://spacegeneration.org/event/sgc/space-generation-congress-2017.html>

#### **IAF/ISEB Educators Professional Development Workshop**

Ian Christie, Outreach Co-Ordinator and Curriculum Designer, Victorian Space Science Education Centre (VSSEC), Melbourne, Australia, will introduce participants to the nine classroom techniques for which there is real evidence that student outcomes are improved by teachers who use these techniques.

**Saturday 23 September, 8:00 – 16:00**

South Australian Museum

#### **Cross-Cultural Communications and Presentation Workshop**

The Cross-Cultural Presentation Workshop is organised for Emerging and Future Space leader Grants recipients and Next Generation Plenary speakers to provide them with the opportunity to improve their oral skills for their presentations and to sensitize them to the issues of speaking at large multi-cultural events.

**Sunday 24 September, 8:15 – 13:30**

**Venue:** City Room 3 & 4, Adelaide Convention Centre (ACC)

#### **IPMC Young Professionals Workshop**

In connection with the IAC, the IAF's International Project Management Committee (IPMC), the Young Professionals Programme organizes an annual workshop for young professionals in the international space community to discuss topics of mutual interest with a view toward nurturing and empowering the next-generation workforce.

**Sunday 24 September, 9:00 – 18:00**

Meeting Rooms L2 & L3, Adelaide Convention Centre (ACC)

#### **Young Professionals Networking Events: Welcome Reception**

Cocktails and light appetizers will be served.

**Sunday 24 September, 19:00 – 21:00**

Foyer M, Adelaide Convention Centre (ACC)



## **IAC OPENING CEREMONY**

**Monday 25 September, 9:00 – 10:30, Hall A – D**

Come and enjoy the IAC Opening Ceremony at the Adelaide Convention Centre (ACC). The IAC Opening Ceremony will feature a good mix of artistic performances from Australian artists and high-level speeches from top-level local and international representatives, including Australian Ministers and Dignitaries.

## **PRESS CONFERENCES**

### **IAC 2017 Kick-off Press Conference, IAF President, Jean-Yves Le Gall**

- **Sunday, 24 September**, Panorama Suite, Adelaide Convention Centre (ACC)

### **Heads of Agencies, Press Conference**

- **Monday, 25 September**, 15:15 – 16:00, Panorama Suite, Adelaide Convention Centre (ACC)

### **Bill Nye, Press Conference**

- **Tuesday, 26 September**, 18:45 – 19:45, Panorama Suite, Adelaide Convention Centre (ACC)

### **MoonMars Villages for Science, Technology, Innovation, Cooperation, Security and Inspiration, Press Conference**

- **Wednesday, 27 September**, 14:45 – 15:45, Panorama Suite, Adelaide Convention Centre (ACC)

### **From up There to Down Here Big Space Data driving Sustainable Development and Economic Growth on Earth, Plenary 8 Press Conference**

- **Thursday, 28 September**, 09:30 – 10:30, Hall M, Adelaide Convention Centre (ACC)

### **Lockheed Martin, Press Conference**

- **Friday, 29 September**, 08:30 – 09:30, Panorama Suite, Adelaide Convention Centre (ACC)

### **Space X, Elon Musk, Press Conference**

- **Friday, 29 September**, 14:45 – 15:30, Panorama Suite, Adelaide Convention Centre (ACC)

### **Science Channel Debate, Press Conference**

- **Friday, 29 September**, 15:30 – 17:00, Panorama Suite, Adelaide Convention Centre (ACC)

## **PLENARY EVENTS**

Plenary panellists are carefully chosen among the best experts within their respective fields. The events last one hour, but in the special case of the Heads of Agency Plenary and the Host Country Plenary they are extended up to a maximum of one hour and thirty minutes. Depending on the number of participants (4 to 8 panellists), they take the form of debate or round-table discussion with a moderator.



For more information on the speakers of the plenaries please visit:

<http://www.iafastro.org/events/iac/iac-2017/plenary-programme/>

## PLENARY 1: HEADS OF AGENCIES

**Monday 25 September, 13:30 – 15:00, Adelaide Convention Centre – Hall C & D**

As at previous IACs, the International Astronautical Federation is organising a prominent plenary with world space agency leaders. The theme for this year's plenary is "Business before Science or Science before Business". Participating Heads of Agencies will present and discuss the focus of their respective agency on new forms of business partnerships and traditional science activities. The event will be divided into 3 main sections. During the first part, the Heads of Agencies will be requested to give a 3-4 minute presentation. In the second part, the Heads of Agencies will be presented with a series of questions by the moderator, engaging them into a lively discussion. The Plenary will conclude with an interactive session with the audience.

### Panellists:

- **Robert Lightfoot**, Administrator, National Aeronautics and Space Administration (NASA), United States
- **Tian Yulong**, Secretary General, China National Space Administration (CNSA), China
- **Igor Komarov**, Head, Federal Space Agency (ROSOSMOS), Russia
- **S. Somanath**, Director of Liquid Propulsion Systems Centre (LPSC), Indian Space Research Organisation (ISRO), India
- **Naoki Okumura**, President, Japan Aerospace Exploration Agency (JAXA), Japan
- **Jan Woerner**, Director General, European Space Agency (ESA)
- **Sylvain Laporte**, President, Canadian Space Agency, Canada

### Moderator:

- **Jean-Yves Le Gall**, IAF President, President, French Space Agency (CNES), France
- **Jan Woerner**, Director General, European Space Agency (ESA)

## PLENARY 2: THE SPACE INDUSTRY'S ECONOMIC AND SOCIAL IMPACT

**Monday 25 September, 18:15 – 19:30, Adelaide Convention Centre – Hall C**

This plenary will explore the value of the global space industry with particular reference to the current Australian discussion about its future space policy. The plenary is conceived as a panel of global experts that can contribute informed opinions on the industry, how it is evolving, and how this is relevant to Australia's current space activities and the future direction.

Some of the themes that could be explored include:

- How the value of the industry is measured
- The industry in the USA, Europe, Asia Pacific and Middle East, and the challenges/opportunities in a global market
- The contribution/value of commercial activities and public good services
- How value is perceived and exploited along the value chain
- The transition from predominantly Government funded to more commercial models



- The role of major corporates/SMEs/start up entrepreneurs
- Opportunities/challenges
- Frameworks for generating growth. What works in an established space industry, what works in an emerging space industry? (Space agency structures, incubators, access to venture capital funds etc.)

**Panellists:**

- **Mohammed Al Ahbabi**, Director General, UAE Space Agency, United Arab Emirates
- **Brian Schmidt**, ANU Australia, Australia
- **Lisa Callahan**, Vice President and General Manager – Civil Space, Lockheed Martin, United States
- **Michael Davis**, Chair, Space Industry Association of Australia, Australia

**Moderator:**

- **David Williams**, Executive Director – Digital, National Facilities And Collections, CSIRO, Australia

### **PLENARY 3: SPACE TRAFFIC MANAGEMENT – GLOBAL CHALLENGE TO PROTECT STRATEGIC DOMAIN OF SPACE**

**Tuesday 26 September, 08:30 – 09:30, Adelaide Convention Centre – Hall C**

This Plenary Event will open Industry Day where a distinguished speaker will describe how technological innovations and advancements in the broad arena of space traffic management will be critical to securing a safe environment in the increasing congested space domain. Following the opening remarks, a plenary panel of experts who will discuss technological, regulatory, policy and industry challenges currently faced in establishing a comprehensive space traffic management system. The panellists will describe how the challenges associated with Space Weather, Space Situational Awareness, NEOs and Orbital Debris are interrelated with Space Traffic Management architectures and solutions.

**Panellists:**

- **George Nield**, FAA Associate Administrator, Commercial Space Transportation, United States
- **David Ball**, Deputy CEO, Space Environment Research Centre (SERC), United States
- **Scott Kordella**, Portfolio Director, National Space Programme National Security Engineering Center FFRDC MITRE Corporation, United States
- **Simonetta Di Pippo**, Director, United Nations Office for Outer Space Affairs (UNOOSA), Austria
- **Paul Welsh**, Vice President of Business Development, Analytical Grap, United Kingdom
- **BG Phillip Garrant**, Vice Commander, USAF Space and Missiles Center, United States

**Moderator:**

- **Robie I. Samanta Roy**, VP, Technology and Innovation, Lockheed Martin Space Systems Company, United States



## PLENARY 4: 50 WAYS TO LEAVE YOUR EARTH

**Tuesday 26 September, 13:30 – 14:30, Adelaide Convention Centre – Hall C**

After several years of intensive development work and marketing efforts, a number of commercial endeavours are close to launching their suborbital spaceflight services. Furthermore, two companies are intensely working on vehicles to transport people to the ISS and into LEO. On the other hand, Russia and China continue to modernize and operate their respective national crew transportation systems.

All above operators will select and train each passenger, whether he or she will be an astronaut or non-professional, based on their individual selection criteria and training programs. This session thus intends to highlight different criteria and approaches for passenger selection, individual and flight training of the various LEO and suborbital systems: An invited expert on astronaut selection & training as opening speaker shall introduce the subject of individual, operational and environmental challenges of a spaceflight for professionals and amateurs – the launch experience, weightlessness, the effect of seeing the Earth from above, the individual ways of coping with the risk of launch failure, behaving in critical situations etc.

### Panellists:

- **Ariane Cornell**, Business Development & Strategy, Blue Origin, United States
- **George Nield**, FAA Associate Administrator, Commercial Space Transportation, United States
- **Chris Furgurson**, Director of Crew & Mission Systems, Boeing (former astronaut), United States
- **Tony Antonelli**, LM Space Systems-Civil and Commercial (former astronaut), United States
- **Pamela Melroy**, Senior Advisor for Space Strategy, Nova Systems, United States
- **Sergey Krikalev**, Executive Director of Piloted Spaceflights, ROSCOSMOS, Russian Federation

### Moderator:

- **Brienna Henwood** (ex NASTAR; trained 550 space adventurers), United States

## PLENARY 5: NEXT GENERATION PE\_INNOVATIVE METHODS FOR ASSURED AND SECURE ACCESS TOSPACE RESOURCES

**Wednesday 27 September, 08:30 – 09:30, Adelaide Convention Centre – Hall C**

The global economy and security of many nations depends on assured and secure access to space resources that provide communications, timing and navigation services and remote sensing data. There are many threats to this assured and secure access including space debris, hacking, space weather, ground environment, unexpected spacecraft-to-spacecraft interference (e.g. EMI), ground system uplink/downlink interference, and unstable economic and political situations. There are industry, academia, agency, national, and international efforts under way to address this broad spectrum of human-made and environmental challenges.



In this plenary, students and young professionals (approximately 35% of the IAC attendees) who are contributing to these efforts and working on how to recognize, detect, prevent, avoid, and overcome these challenges as well as addressing the legal and economic systems necessary in managing the space environment will engage in a panel discussion with other students and young professionals from around the world and interact with the audience while discussing their efforts in addressing and managing these challenges to make the space environment safe for everyone to operate in.

#### Panellists:

- **Christianna Taylor**, National Society of Black Engineers (NSBE) Space Special Interest Group, United States
- **Doris Grosse**, Research Scientist, Advanced Instrumentation and Technology Centre (AITC), Australian National University (ANU) Research School of Astronomy and Astrophysics, Australia
- **Andrew Ratcliffe**, Head of Launch Systems, Chief Engineers Team, UK Space Agency, United Kingdom
- **Wei-Yu Louis Feng**, Student, Master's degree (M.Phil) in Space studies, University of Cape Town, South Africa
- **Matjaz Vidmar**, PhD student, Science, Technology and Innovation Studies, University of Edinburgh and Royal Observatory Edinburgh, Scotland

#### Moderator:

- **Michael K. Simpson**, Executive Director, Secure World Foundation, United States

### PLENARY 6: MOONMARS VILLAGES FOR SCIENCE, TECHNOLOGY, INNOVATION, COOPERATION, SECURITY AND INSPIRATION

**Wednesday 27 September, 13:30 – 14:30, Adelaide Convention Centre – Hall C**

The panellists will review recent MoonMars science discoveries and key projects towards robotic & human villages on the Moon & Mars. They will discuss potential MoonMars research (planetary & space science, human spaceflight, astrobiology, astrophysics, technologies, life support, operations, technical validation and development). They will debate the benefits and values of MoonMars Villages for Innovation, Cooperation, Security & Inspiration. The panel will address various aspects and questions from the community e.g.:

- 1- What are the current MoonMars plans for different space agencies and space actors?
- 2- How to use MoonMars data to unlock imagination, inspire youth, public, engineers & stakeholders?
- 3- What are Knowledge Gaps and precursor robotic missions towards robotic villages?
- 4- Why MoonMars robotic and human villages?
- 5- How can MoonMars Villages foster peaceful innovation and make our world safer?
- 6- How to establish infrastructures on the Moon surface and then on Mars to benefit multiple users?
- 7- What is the role of small or emerging space countries and new partners?
- 8- How to collaborate effectively between countries, agencies and new stakeholders?



#### Panellists:

- **Jan Woerner**, Director General, European Space Agency (ESA), France
- **Pascale Ehrenfreund**, Chair of Executive Board, DLR, Germany
- **David Korsmeyer**, Director of Engineering Directorate, NASA Ames, United States
- **Sergei Krikalev**, Executive Director for Manned Spaceflight, Roscosmos, Russian Federation
- **Tai Sik Lee**, President, Korean Institute of Civil Engineering & Building Technology (KICT), Korea, Republic of Korea
- **Simonetta Di Pippo**, Director of the United Nations Office for Outer Space Affairs (UNOOSA), Austria
- **Francois Rivasseau**, Director of Security Policy & Space Policy, European External Action Service (EEAS), France
- **Joao Lousada**, Analogue astronaut, 2017 PMAS Simulation at LunAres Base, SGAC, Poland
- **Monika Johanna Pardo Spiesse**, Winner of SGAC/ILEWG IAC2017 article prize competition

#### Moderator:

- **Bernard Foing**, Astrophysicist, MoonMars Scientist (ESA ESTEC), Executive Director ILEWG, France

### PLENARY 7: NEXT GENERATION ON-ORBIT SATELLITE SERVICING AND REFUELING PROGRAMS

**Thursday 28 September, 08:30 – 09:30, Adelaide Convention Centre – Hall C**

Satellite servicing is creating a paradigm-shift in the space industry and could potentially transform in-orbit architectures. It changes the economics of satellite fleet management by providing commercial satellite operators and government agencies with more flexibility in the timing of replacement satellites and will enable a new generation of spacecraft that can be assembled on orbit and can share existing bus resources.

The panel will address advances in remote manoeuvres, the mechanics of on orbit operations and how these services will increase resilience. The innovative missions that will be discussed will inspire new ways of thinking about both GEO and LEO orbit.

#### Panellists:

- **Shahida Barick**, Head of Satellite Operations, Effective Space Solutions, United Kingdom
- **Robert Feierbach**, Vice President, Business Development, Space Infrastructure Services, United States
- **Michel Frezet**, Head of On-Orbit Servicing, Airbus Defence and Space, France
- **Peter Swan**, President, International Space Elevator Consortium, United States
- **Joerg Kreisel**, CEO of JKIC and Chairman of iBOSS GmbH, Germany
- **Paul Sheridan**, Vice President, Optus Satellite, Australia

#### Moderator:



- **Tony Colucci**, Vice President of Business Development, Space Systems Loral (SSL), United States

## **PLENARY 8: FROM UP THERE TO DOWN HERE BIG SPACE DATA DRIVING SUSTAINABLE DEVELOPMENT AND ECONOMIC GROWTH ON EARTH**

**Thursday 28 September 2017, 08:30 – 09:30, Adelaide Convention Centre – Hall C**

Plenary 8 will explore how the dramatically expanding, diverse “big space data” sets from satellite based Earth observations can be leveraged to support global sustainable development and economic growth on Earth and, ultimately, beyond it.

Having the best choices for our common future depend on putting space observations to work down here on Earth through efforts to raise living standards, and give more people the opportunity to realize their potential. This economic growth must be socially and environmentally sustainable, if it is to translate into permanent, rather than transient, benefits.

Ultimately, the same sorts of challenges we face in ensuring sustainable development here on Earth will be ones we need to face as we start to scale-up exploration and development, of other planets. They may help us create the necessary conditions for realizing the ideas we have now while creating space for ideas that have not even been thought of yet.

### **Panellists:**

- **Stuart Minchin**, Chief, Environmental Geoscience Division, Geoscience Australia, Australia
- **Aditya Agrawal**, Director, Data Ecosystems Development, Global Partnership for Sustainable Development Data (GPSDD), United States
- **Grega Milcinski**, Chief Executive Officer and Co-Founder, Sinergise, Slovenia
- **Brendan Bouffler**, Manager, Amazon Web Services Research Cloud Program, Amazon Web Services, United Kingdom

### **Moderator:**

- **Harry Cikanek**, Director (acting), Center for Satellite Applications and Research, US National Oceanic and Atmospheric Administration, United States

## **HIGHLIGHT LECTURES**

The Highlight Lectures (HLL) are devoted to topics of broad interest to all congress participants as well as external audience. An invited speaker introduced by a moderator gives a 40-minute presentation, generally adapted to a non-specialist audience. The event ends with 15 – 20 question/answer session.

## **HIGHLIGHT LECTURE 1: FLIGHT BY LIGHT WITH BILL NYE LIGHTSAIL™ & INNOVATIONS IN SOLAR SAILING**

**Tuesday 26 September, 17:45 – 18:45, Adelaide Convention Center – Hall C**



Bill Nye, CEO of The Planetary Society and one of the world's leading science educators, will highlight IAC 2017 themes through the inspiring story of LightSail®, a solar sailing spacecraft that became a global phenomenon. Leveraging this case study as context, Nye will explore stories of solar sailing origins, applications, planned missions, and future possibilities. LightSail is a citizen-funded cubesat that demonstrates solar sailing propulsion technology: flight by sunlight. In addition to discussing solar sailing, Nye will address broader themes relevant to the global space science community, including NASA's role under the current U.S. administration.

The Planetary Society is the world's largest independent non-profit space organization, with more than 50,000 members in over 100 countries worldwide. Co-founded by Carl Sagan, Bruce Murray, and Louis Friedman, the group's mission is to empower the world's citizens to advance space science and exploration.

**Speaker:**

- **Bill Nye**, CEO of the Planetary Society, United States

**Moderator:**

- **Erin Greeson**, Director of Communications, The Planetary Society, United States

**IAF WORLD SPACE AWARD HIGHLIGHT LECTURE: GROWING OPPORTUNITIES FOR INTERNATIONAL COOPERATION IN SCIENCE AND ASTRONAUTICS**

**Wednesday 27 September 2017, 18:45 – 19:15, Adelaide Convention Center – Hall C**

**Speaker:**

- **Charles F. Bolden**, President/CEO, The Bolden Consulting Group LLC, United States

**Moderator:**

- **V. Koteswara Rao**, VP Honours and Awards, International Astronautical Federation (IAF), India

**HIGHLIGHT LECTURE 2: THE GREAT BARRIER REEF: ASSESSING ITS HEALTH FROM SPACE**

**Thursday 28 September, 17:45 – 18:45, Adelaide Convention Center – Hall C**

Stretching for over 2300 km, Australia's Great Barrier Reef (GBR) is one of the great natural wonders of the world. It is home to a vast number of marine species and provides recreational opportunities for visitors from all over the globe. The Reef hosts more than 600 different types of soft and hard coral, and fish and mollusc species number in the thousands. This vast number of ecological communities make it one of the most complex natural ecosystems in the world.

This gem of the world is under severe attack. Coral bleaching is devastating the very fabric of the reef with ominous consequences for the species that inhabit the reef. It only takes an increase of one degree Celsius in the local water for approximately one month to generate a bleaching event. Presently, the GBR is undergoing another severe bleaching event.

Heat from the atmosphere is finding its way into the ocean contributing to ocean warming. Satellite observations are helping to monitor the health of the GBR indirectly by measuring



various ocean parameters and directly by studying the reef itself. This highlight lecture will discuss: 1) the history of the reef; 2) the health of the reef; 3) the causes of the attack; 4) how we can measure and track the conditions from space; and 5) what the prognosis is for the reef and the species that reside there.

**Speaker:**

- **Paul Hardisty**, Chief Executive Officer, Australian Institute of Marine Science, Australia

**Moderator:**

- **Chiaki Mukai**, Senior Advisor of JAXA and Vice President of the Tokyo University of Science, Japan

## LATE BREAKING NEWS

### Late Breaking News 1

#### WE ARE EXPLORERS: LATE-BREAKING NEWS ABOUT MARS BASE CAMP AND THE DEEP SPACE GATEWAY

**Friday 29 September 2017, 07:30 – 08:30, Adelaide Convention Center – Hall C**

Never before in history have we had the technology and global interest to move human exploration out to the Moon and Mars. Lockheed Martin's blueprint for exploration includes Mars Base Camp, a detailed orbital mission reference architecture for the start of Martian system exploration. By relying on existing technologies and available systems, this mission could be fielded as early as the late 2020's. On Friday, Lockheed Martin will show how the recently announced Deep Space Gateway will prove out the technologies needed for the build-up of the Mars Base Camp Deep Space Transport elements, emphasizing the science value, international partnership opportunities, and commercialization paradigms enabled by NASA's exploration vision. Lockheed Martin will also unveil their highly-anticipated lander – a reusable, single stage aero-spacecraft based on already-flown vehicles which can revolutionize our thinking about Mars surface access, while enabling a water-based economy in cis-lunar space and enabling a commercial lunar surface infrastructure within the next decade.

**Speakers:**

- **Timothy Cichan**, Space Exploration Architect, Lockheed Martin Corporation, United States
- **Rob Chambers**, Director of Human Spaceflight Strategy and Business Development, Lockheed Martin Corporation, United States
- **Danielle Richey**, Advanced Programs Exploration Architect, Lockheed Martin Space Systems Company, United States

### Late Breaking News 2

#### WHEN INNOVATION BECOMES SUSTAINABLE – SKY AND SPACE GLOBAL CONDUCTED FIRST EVER VOICE CALL USING ITS NANO SATELLITES

**Friday 29 September 2017, 08:30 – 09:00, Adelaide Convention Center – Hall C**



First ever voice call has been successfully conducted using nano-satellite technology, a standard smartphone and SAS proprietary hardware and application. Performing the first ever phone call facilitated by nano-satellites marks a major milestone for the telecoms and satellite communications industries. This technology will enable the delivery of low cost satellite connectivity in remote locations and emerging markets that have no access to a communications network infrastructure.

Until recently nano-satellites have been predominantly used for earth observation and imagery but with advancements in miniature space technology their capabilities have become increasingly sophisticated in recent years. Sky and Space Global is the first company to successfully use narrowband connectivity provided by nano-satellites to deliver a voice call.

What is unique about the Sky and Space Global service offering is that it delivers phone call, text and data services at a fraction of the cost of traditional satellite communications providers. Along with enabling a voice call, the 3 Diamonds Nano-satellites, which Sky and Space Global launched into space in late June 2017, have also demonstrated their capability to facilitate the exchange of text messages, voice recordings and images between different users. As part of this process, SAS has successfully tested the “store and forward” capability of its technology, which includes sending a message to the satellite, keeping it in satellite memory and downloading it to a receiver. The company has also demonstrated that its services can provide indoor connectivity, by enabling users to install a Radio Frequency (RF) section on a roof top or another outdoor area and connecting it to an indoor Wi-Fi hot-spot to add multiple users to the network.

**Speaker:**

- **Meir Moalem**, CEO & Managing Director, Sky and Space Global, United Kingdom

## TECHNICAL PROGRAMME

The IAC technical programme is structured in more than thirty symposia, themselves broken down into different technical sessions. Technical Sessions are devoted to scientific and technical presentations, done either orally or during an interactive presentation.

IAC 2017 has 180 Sessions, each composed of up to twenty presentations. A list of the symposia includes:

- ❖ A1. SPACE LIFE SCIENCES SYMPOSIUM
- ❖ A2. MICROGRAVITY SCIENCES AND PROCESSES SYMPOSIUM
- ❖ A3. SPACE EXPLORATION SYMPOSIUM
- ❖ A4. 46th IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) – The Next Steps
- ❖ A5. 20th IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM
- ❖ A6. 15th IAA SYMPOSIUM ON SPACE DEBRIS
- ❖ A7. SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS
- ❖ B1. EARTH OBSERVATION SYMPOSIUM
- ❖ B2. SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM
- ❖ B3. HUMAN SPACEFLIGHT SYMPOSIUM
- ❖ B4. 24th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS
- ❖ B5. SYMPOSIUM ON INTEGRATED APPLICATIONS

- ❖ B6. SPACE OPERATIONS SYMPOSIUM
- ❖ C1. ASTRODYNAMICS SYMPOSIUM
- ❖ C2. MATERIALS AND STRUCTURES SYMPOSIUM
- ❖ C3. SPACE POWER SYMPOSIUM
- ❖ C4. SPACE PROPULSION SYMPOSIUM
- ❖ D1. SPACE SYSTEMS SYMPOSIUM
- ❖ D2. SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM
- ❖ D3. 15th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT
- ❖ D4. 15th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE
- ❖ D5. 50th IAA SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES
- ❖ D6. SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES
- ❖ E1. SPACE EDUCATION AND OUTREACH SYMPOSIUM
- ❖ E2. 45th STUDENT CONFERENCE
- ❖ E3. 30th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS
- ❖ E4. 51st IAA HISTORY OF ASTRONAUTICS SYMPOSIUM
- ❖ E5. 28th IAA SYMPOSIUM ON SPACE AND SOCIETY
- ❖ E6. BUSINESS INNOVATION SYMPOSIUM
- ❖ E7. 60th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE
- ❖ E8. IAA MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM
- ❖ GTS. GLOBAL TECHNICAL SYMPOSIUM

Time / Room (Monday - Thursday)	25/09/2017 15:15-18:15	26/09/2017 09:45-12:45	26/09/2017 14:45-17:45	27/09/2017 09:45-12:45	27/09/2017 14:45-17:45	28/09/2017 09:45-12:45	28/09/2017 14:45-17:45	29/09/2017 09:00-11:00	29/09/2017 11:00-13:00
Hall N	A3.1	A3.2A	A3.2B	A3.3A	A3.3B	A3.4A	A3.5	A3.2C	A3.4B
Hall O	D2.1	D2.2	D2.7	D2.3	D2.4	D2.5	D2.6	D2.8/A5.4	D6.2/D2.9
Hall A	C1.1	C1.2	C1.3	C1.4	C1.5	C1.6	C1.7	C1.8	C1.9
Hall E1	A6.1	A6.2	A6.4	A6.3	A6.9	A6.5	A6.6	A6.7	A6.8
Panorama Room 1	B4.2	B4.1	B4.3	B4.4	B4.5	B4.6A	B4.6B	B4.8	B4.7
Hall E2	B1.1	B1.2	A5.2	B1.3	A5.1	B1.6	B1.5	B1.4	B4.10/A6.10
City Room 3	B3.1	B3.2	B3.3	B3.4/B6.5	C3.3	B3.5	B3.6/A5.3	B3.7	B3.8/E7.7
Hall E3	C4.1	C4.2	C4.9	C4.3	C4.4	C4.5	C4.6	C4.7/C3.5	C4.8/B4.5A
Panorama Room 2	C2.1	C2.2	C2.3	C2.4	C2.5	C2.6	C2.7	C2.8	C2.9
City Room 1	C3.1	C3.2	E5.1	E5.2	E5.3	E5.4	E5.5	B6.3	E8.1
City Room 2	A1.1	A1.2	A1.3	A1.4	A1.5	A1.6	C3.4	A1.7	A1.8
Panorama Room 3	E1.6	E1.3	E1.4	E1.8	E1.5	E1.7	E1.9	E1.1	E1.2
Riverbank 3	D1.1	E6.1	D1.2	D1.3	D1.4A	D1.4B	D4.3	D1.5	D1.6
Meeting Room L2	E4.1	E7.1	E7.2	E7.3	E7.4	E4.3A	E4.2	E7.5	E4.3B
Meeting Room L3	B2.1	B2.2	B2.3	B2.4	B2.5	B2.6	B5.2	B5.1	B2.7
City Room 4	B6.1	E3.1	E3.2	E3.3	E3.4	E3.5/E7.6	B6.2	E3.6	C4.10
Hall B	A2.1	A2.2	A4.1	A2.3	A2.4	A4.2	A2.5	A2.6	A2.7
Riverbank 5	A7.1	A7.2	E6.2	D5.1	E6.3	D5.2	D5.3	D5.4	A7.3
Riverbank 4	D4.1	D3.1	E2.1	D3.2	D4.2	D3.4	D3.3	D4.5	D4.4
Riverbank 2	E2.3/GTS.4	D6.1	B4.9/GTS.5	E2.2	B3.9/GTS.2	D6.3	B2.8/GTS.3	E2.4	
Category A Science & Exploration	A1→A8		Category C Technology		Category D Infrastructure		Category E Space and Society		C1→C4
Category B Applications & Operations	B1→B6								D1→D6
									E1→E8



## EVENTS AT THE IAF GLOBAL NETWORKING FORUM

### MONDAY 25 SEPTEMBER, Hall D

- 15:00 – 15:30 GNF Opening
- 15:15 – 16:15 Commercial Nano-Satellites Constellation – The SAS story
- 16:15 – 16:45 SPUTNIK Event
- 16:45 – 17:30 Strategic Partnership of Energia and Boeing in Space
- 17:30 – 18:00 Presentation by European Commission's Deputy Director General Pierre Delsaux

### TUESDAY 26 SEPTEMBER, Hall D

- 09:30 – 10:00 Deep Dive: Space Situational Awareness
- 10:00 – 10:30 Deep Dive: Clean Space
- 10:30 – 11:00 Deep Dive: Near-Earth Objects
- 11:00 – 11:30 Deep Dive: Impact of Constellations
- 11:30 – 12:00 Deep Dive: Reusability of Launch Vehicles and Small Sats
- 12:00 – 12:30 Deep Dive: Space Communications and Surveillance for National Security
- 14:30 – 15:30 Disruption of New Starts on the Asia Pacific Space Turf
- 15:30 – 16:30 Opening the Market Aperture for New Start Opportunities
- 16:30 – 17:30 Space 4.0 – Building a Space Entrepreneurship Ecosystems: The Innovation Fuel for the Benefit of Industry and Agencies

### WEDNESDAY 27 SEPTEMBER

#### Hall C

- 09:30 – 10:30 Space Technology Education and Training Exchange Platform Open to the World
- 10:30 – 11:00 Spaceport Norway 2018: Towards a Space Society
- 11:00 – 11:30 SpaceTech – Space Systems and Business Engineering
- 11:30 – 12:00 OG Summit – Space Diplomacy in the Age of NewSpace
- 12:00 – 12:30 Shaping the future with Ariane 6
- 14:30 – 15:30 Reducing Diversity Gaps – Inducing Space Environment Dynamic with Benefits for a Country's Economy, Education, Strategy and Sovereignty
- 15:30 – 16:00 New Trends of Commercial Developments in Space Domain
- 16:00 – 17:00 SGAC Entrepreneurship Event
- 17:00 – 17:45 The 50th Anniversary of the Outer Space Treaty: Global Governance for Space Activities

#### Hall D

- 09:30 – 11:30 The evolving relation between Public Procurement and Industry on Space and Defence programmes
- 11:30 – 12:30 The Role of Space Agencies in Support of Emerging Countries
- 14:30 – 16:00 A Low Earth Orbit Space Station – the Way Forward



- 16:00 – 17:30 Deep space exploration post 2024 scenarios
- 17:00 – 17:45 The 50<sup>th</sup> Anniversary of the Outer Space Treaty: Global Governance for Space Activities

## THURSDAY 28 SEPTEMBER

### Hall C

- 09:30 – 10:30 2026 Spatial Industry Transformation and Growth Agenda Action Plan
- 10:30 – 11:30 Science in Germany
- 11:30 – 12:30 Reusable Launch of Small Satellites Using Scramjets
- 13:45 – 15:15 ESA DG Jam Session
- 15:15 – 15:45 Orbital ATK and the Future of Space Logistics
- 15:45 – 16:45 Space and Sustainable Development Goals
- 16:45 – 17:45 New Generation Recoverable Satellite — An Advanced Space Platform for Space Environment Utilization

### Hall D

- 09:30 – 10:30 Promoting Space Access through Global Partnerships
- 10:30 – 11:30 Space Mining – Law, Politics, Perspectives
- 11:30 – 12:30 Space 4.0 – Bringing the Technology Transfer to the Next Level
- 12:45 – 13:45 The Status of Citizen Science in Global Earth Observation Systems
- 13:45 – 14:45 Understanding the Universe and improving life on Earth with Australian Astronomy
- 14:45 – 15:45 Earth Observation – Trends and Paradigm Shifts
- 15:45 – 16:45 The Value of being part of Space Exploration
- 16:45 – 17:45 Space Optics: Next Steps of Optical Communications Enhancing Our Interconnected World

## FRIDAY 29 SEPTEMBER

- 09:30 – 11:00 Astronauts Event, Hall D
- 11:00 – 12:00 Global Real Time Data Exchange Satellite Constellation Project, Riverbank 7&8
- 14:00 – 15:00 Space X – Elon Musk Presentation, **Halls A – D**

## IAF IDEA “3G” Diversity Breakfast

during

**IAC 2017 in Adelaide, Australia  
(Wednesday 27 September 2017)**

### “First Woman on the Moon”



In continuation of the IAF President’s initiative on fostering the principle of 3G Diversity in astronautics and as an important element of the IAF 3G Diversity Day on 27 September 2017 at IAC 2017 in Adelaide, Australia, the IAF is using its IDEA platform to offer an IAF IDEA 3G Diversity Breakfast to all delegates focusing on the epochal and historic event in mankind’s future of the first woman to set foot on the Moon under the title “First Woman on the Moon”.

Based on the initiative of the International Lunar Observatory Association (ILOA), the organiser of regular Galaxy Forums and IAF member since 2011, and with strong support by the European Space Agency, The American Institute of Aeronautics and Astronautics (AIAA) and Lockheed Martin Corporation, this breakfast event shall provide an opportunity to hear about the perspectives of the first female astronaut setting foot on the Moon, the plans of space agencies and industry in advancing a “Moon village” concept with an inclusive participation and the opinions of those who have been and will be the ambassadors of humankind in exploring the universe – our astronauts.

With this event the IAF and its partners wish to draw the attention of a global space community on the long overdue consideration of the historic significance of the first woman on the Moon as was the first man on the Moon almost 50 years ago, when humanity will reclaim its existence as a multi-world species and at that time become a multi-world civilization – a Moon Village prototype – in peace for all, and for good.

**Date:** Wednesday, 27 September 2017

**Time:** 7:00 – 8:30

**Venue:** Adelaide Convention Center, Foyer E

### Programme

Welcome and Introduction (07:10 – 07:20)

**Jean-Yves Le Gall** (IAF President)



Keynote “The Historic Significance of the First Woman on the Moon” (07:20 – 07:30)  
**Steve Durst** (Founding Director of the International Lunar Observatory Association ILOA)

Keynote “The Moon Village Concept” (07:30 – 07:40)  
**Jan Woerner** (Director General of the European Space Agency ESA)

Keynote “Industry’s Role and Commitment to Supporting a Moon Village Concept” (07:40 – 07:50)  
**Danielle Richey** (Systems Engineer at Lockheed Martin SSC)

Keynote “The Astronauts’ Perspective” (07:50 – 08:00)  
**Sandy Magnus** (Executive Director of the American Institute of Aeronautics and Astronautics AIAA)

Concluding Remarks (08:00 – 08:10)  
**Mary Snitch** (IAF Vice President for Diversity Initiatives)

Networking (08:10 – 08:30)



**IAF International Platform for Diversity and Equality in Astronautics IDEA & Women in Aerospace Europe WIA-E**  
 are proud to invite you to a Joint Breakfast

**A Gender Diverse Space Workforce –  
 A Key for Unlocking Imagination, Fostering Innovation  
 and Strengthening Security**

**Date:** Thursday 28 September

**Time:** 7:00-8:30

**Venue:** Foyer E, ACC

Introduction:

**Jean-Yves Le Gall** (President IAF), **Luisella Giulicchi** (President WIA-E)

Panellists:

**Pascale Ehrenfreund**, Chair of the DLR Executive Board

**Roberto Battiston**, President of the Italian Space Agency

**Sarah Jane Pell**, Australian artist, researcher and occupational diver

**Jan Woerner**, ESA Director General

Moderator:

**Christiane Lechtenboerger** (WIA-E International and Institutional Director)

Closing remarks:

**Mary Snitch** (IAF VP for Diversity Initiatives)

## **IAC EXHIBITION**

**Location: Halls F - Link**

The IAC2017 Exhibition will feature over 50 exhibitors from industry, space agencies, research centres and universities, associations and space societies.



## Opening

### Monday 25 September, 10:45 – 11:45

Kick-off with a cutting of the ribbon to open the Exhibition Hall, followed by the **IAC customary Exhibition VIP tour**, including the presence of Head of Agencies.

### Weekly opening hours

**Monday, 25 September** 11:45 – 18:00

**Tuesday 26 September – Thursday 28 September** 09:00 – 18:00

**Friday 29 September** 09:00 – 13:00

### IAC CLOSING CEREMONY

**Friday 29 September, 16:00 – 17:00, Hall A – D**

The Closing Ceremony provides a formal closing of the activities of the 68<sup>th</sup> IAC.

The IAF President will present the **IAF's annual awards**, given to individuals and groups that have distinguished themselves in space cooperation and space activities at the global level.

- ❖ **Allan D. Emil Memorial Award**, presented for an outstanding contribution to space science, space technology, space medicine or space law, this year goes to **Lei Fanpei**, in recognition to his outstanding long-term contributions to space technology and international cooperation in astronautics.
- ❖ **Frank J. Malina Astronautics Medal**, awarded to an educator who has demonstrated excellence in taking fullest advantage of the resources available to promote the study of astronautics and related space science, this year goes to **Lynn Cominsky**, who has presented an outstanding contribution to space education and promotion to the study of astronautics and space science.
- ❖ **IAF Hall of Fame** is this year awarded to **Robert Briskman, Richard Kline, Berndt Feuerbacher**, and **Stanislav Konyukhov** in recognition to contribution during the course of their careers to the progress of astronautics within the framework of the IAF activities.
- ❖ **Luigi G. Napolitano Award** is presented by the Space Education and Outreach Committee of the IAF to a young scientist under the age of 30 years, who has contributed significantly to the advancement of aerospace science and has given a paper at the IAC on the contribution.
- ❖ **The Young Space Leaders Recognition Programme** is awarded to **Minoo Rathnasabapathy, Patrick Hambloch, Stephanie Wan, Timiebi Aganaba-Jeanty**, and **Laszlo Bacsardi** for demonstrating leadership in their academic or early careers.
- ❖ **IAF Student Awards** recognise the best papers presented by students at the IAC in the undergraduate and graduate categories

At the end of the ceremony, the **Congress flag** will be handed over to the next host country – Germany.



**IAC 2018**  
**Bremen, Germany, 1 – 5 October 2018**  
***IAC 2018 - involving everyone***

The IAC 2018 will take place in Bremen, Germany. More information will soon be available on the IAF website: <http://www.iafastro.org/evenements/iac-2018/> and on the IAC 2018 website: [www.iac2018.org](http://www.iac2018.org).



**69<sup>TH</sup> INTERNATIONAL  
 ASTRONAUTICAL CONGRESS  
 BREMEN 2018**

**1 - 5 OCTOBER 2018 | GERMANY**



[www.iac2018.org](http://www.iac2018.org)



TEAM  
GERMANY





## Practical information

### PRESS BRIEFING

**Sunday, 24 September, 12:00 – 13:00**

Location: Panorama Suite

### MORNING MEETINGS

**Monday, 25 – Friday 29, September, 8:15 – 8:45**

Location: **Press Center – Hall L**

You will also receive daily agenda emails every morning.

### CONGRESS VENUE



ADELAIDE CONVENTION CENTRE

**Host Venue: The Adelaide Convention Centre**

Set at the heart of Adelaide's Riverbank precinct, the Adelaide Convention Centre opened as Australia's first convention centre in 1987. Regarded among the world's top convention centres, the multi-award winning venue recently completed a \$397 million redevelopment which saw the Centre reborn as Australia's newest, most versatile and technologically advanced meetings and events venue.

The Centre comprises three distinct yet seamlessly integrated buildings—East, Central and West— with the exterior inspired by the South Australian landscape. The West Building, launched in March 2015, was inspired by the dramatic layered geology and colour of the nearby Flinders Ranges (Australia's most accessible outback), while the East Building, launched just last month (August 2017), was inspired by the great granite boulders of the Remarkable Rocks on Kangaroo Island, another leading South Australian tourist region.

The new East Building is home to the Centre's main Plenary Hall with tiered seating for 3,500. It also houses the world's largest rotating seating drums (revolving auditoriums), which can be rotated 180 degrees in minutes to quickly reconfigure the space. Another striking feature of the East Building's design expected to appeal to delegates visiting for the International Astronautical Congress is the spectacular 'Starry Night' backdrop; made up of more than 35,000 fibre optic lights, the 'starry night' has been designed to give the experience of South Australia's outback night sky.

"Our newly expanded facility represents a new breed of convention centre in terms of its innovation and flexibility," comments Alec Gilbert, Chief Executive, Adelaide Convention Centre. "The East Building brings together rotating drums, hinged seating and operable walls in one building for the first time, making it one of the most flexible convention centres in the world."

The 2017 International Astronautical Congress (IAC) is the first major event to be held in the newly expanded Adelaide Convention Centre. In addition, with 4,000 delegates in attendance from around the world, it is the largest international conference ever hosted in Adelaide.



“We are extremely proud to play host to the International Astronautical Congress, which is using every inch of space we have,” adds Mr. Gilbert. “It’s a fantastic launch pad for us to showcase our own state-of-the-art technologies to an international audience, not to mention a fitting event for the Centre as both our venue and the city focus on innovation and future possibilities.”

For further information on the Adelaide Convention Centre, please visit [www.adelaidecc.com.au](http://www.adelaidecc.com.au).

Media Enquiries: Amy Christie, Communications Manager, [amy.christie@avmc.com.au](mailto:amy.christie@avmc.com.au).



## INTERNATIONAL PRESS CENTRE

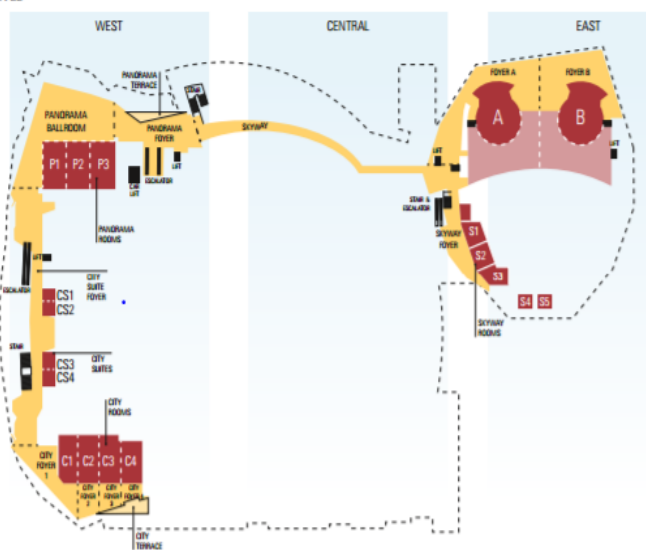
**Location:** Hall L

**Opening hours:** Sunday, 24 September – Thursday, 28 September: 08:00 – 19:00

Friday, 29 September: 07:00 – 18:00

## ADELAIDE CONVENTION CENTRE

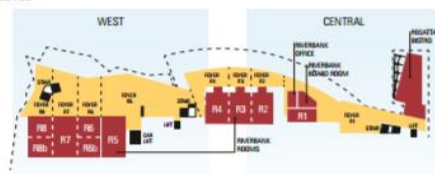
UPPER LEVEL



GROUND LEVEL



LOWER LEVEL





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## IAC2017 Local Organising Committee (LOC)

IAC 2017 Secretariat  
 Tel: +61 8 8125 2200  
 Email: [IAC2017@aomevents.com](mailto:IAC2017@aomevents.com)

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*\*Note: The IAC2017 Press kit is published on 18 September 2017 and doesn't take into account any subsequent changes in the IAC programme or participants.*