

Counsellor : Huang Haijun  
Chief Editor : Weng Jingnong  
Executive Editor : Cui Yizhuo / Guo Yuanyuan  
Editor : Tan Yumin / Jin Tian / Yang Dongkai / Wang Xinsheng / Wu Falin  
Layout Design : Wang Xin / Feng Biao

# NEWSLETTER

**No.10** <sup>2 0 1 7</sup>  
The Tenth Issue  
Serial No.010

Exchange · Promotion · Development



*Promoting the peaceful use of space  
technologies for the benefit of all humankind*

ADD: East Wing of Library, Beihang University, No. 37 Xueyuan Road,  
Haidian District, Beijing, 100191, P. R. China  
TEL: +86-10-82339734  
FAX: +86-10-82339734  
WEB: [www.rcssteap.org](http://www.rcssteap.org)

Regional Centre for Space Science and Technology Education in Asia and the Pacific (China)  
(Affiliated to the United Nations)

联合国附属空间科学与技术教育亚太区域中心 (中国)

# Contents

Preface	3
Special Focus — <i>Journey of Chinese Aerospace and Culture 2017</i>	4
Overview	4
Feedback	9
Highlights — <i>Global Space Exploration Conference</i>	11
Overview	11
SpaceUp Activity	12
Wonderful Moments	13
Feedback	13
RCSSTEAP (China) Activities	15
Beihang Delegation Visited RCSSTEWA, Brazilian Space Agency, CRECTEALC and University of Brasilia	15
Representative of Beihang University Was Invited to Give Lectures at International Seminars on Positioning and Navigation Technologies	17
Representatives of the Centre Was Invited to Give Reports on China-Arab States BDS Cooperation Forum	17
Dr. Awni, General Director of RCSSTEWA Visited RCSSTEAP	19

Beihang University and Russian State Agrarian University Jointly Organized Video Conference on the Application of Global Navigation Satellite Systems for the Agribusiness	20
Representatives of the Centre Visited GISTDA and Chulalongkorn University	22
Representatives of the Centre Attended the 60 <sup>th</sup> Session of UNCOPUOS	25
Education and Training Programs	27
Team Pilot Project Conclusion Defense	27
Thesis Defense	28
Thesis Proposal	29
Enrollment of MASTA Program & DOCTSTA Program 2017	30
Graduation	31
Graduation Ceremony & Course Completion Ceremony for MASTA/DOCSTA	31
Wonderful Moments	33
Media	39
Construction of WeChat Platform and Website Homepage	39
Additional Words	41

## Preface

Years ago, it was at the beginning of the summer, all of you gathered here at Beihang University from all over the world because of the same choice.

Now, at the end of the summer, you are going to leave Beihang University and start different journeys heading to different places because of your different dreams.

All the passing time carries the dreams we used to have,

But that was old time we could not go back to;

Those green days mixed with the bewilderment we used to have,

And now we can clearly see the road forward.

You said, thank you China, for it made your dream come true and empowered you with courage to explore the world;

You said, thank you Beihang University, for it sharpened your edge of wit and made you confident enough to light the universe;

I would like to say, upon graduation, please cherish the beautiful memory, light up your smiling face and continue to fight with your high spirit and full energy.

Congratulations and best wishes!



## Special Focus——

### Journey of Chinese Aerospace Technology and Culture 2017

#### Overview

##### Background

Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) (RCSSTEAP for short) was established at Beihang University on November 17<sup>th</sup>, 2014 after ten years' preparation. It is responsible for Ministry of Industry and Information Technology of the People's Republic of China and China National Space Administration. The Director shall take responsibility for the Centre under the leadership of the Governing Board. The Centre has been advocating the mission of promoting the peaceful use of space technologies for the benefit of all humankind by integrating the world's excellent educational resources and innovating talent cultivation model. Exploring and exploiting the mysteries of the universe for the benefit of all humankind is the common pursuit of all countries and people in the world. It seeks to contribute to the implementation of "Programme on Space Applications" promoted by COPUOS and to the



enhancement of the education and training level as well as application capacity of space science and technology in the Member States of the Centre through capacity building, information communication, training programs and professional visits. Presently, the Centre has ten (10) Member States including Algeria, Argentina, Bangladesh, Bolivia, Brazil, China, Indonesia, Pakistan, Peru and Venezuela.

Mainly recommended by the Asia-Pacific Space Cooperation Organization (APSCO), UN Regional Centres and related aerospace agencies and departments, the participants of the Centre are professional talents or reserve talents in the field of space science and technology in their home countries and will also become important partners of China in space international cooperation in the future.



The Centre, focusing on talent cultivation, has been effectively promoting space education since its establishment. The students here are expected to be space professionals with international perspectives. At present, the Centre offers courses mainly in five academic fields: Remote Sensing and Geographic Information Systems (RS&GIS), Satellite Communications, Global Navigation Satellite System (GNSS), Micro-satellite Technology, Space Law and Policy. It has recruited more than eighty (80) students in MASTA and DOCSTA programs in the year of 2015 and 2016. Presently, ninety-five (95) students from eighteen (18) countries are studying at Beihang University for their doctoral and master degrees, of which sixty (60) are master candidates while thirty-five (35) are doctor candidates.

### Purpose and Meaning

In purpose of enhancing MASTA and DOCSTA students' knowledge in Astronautic Culture and promoting their abilities and interest of aerospace, RCSSTEAP and APSCO jointly organized a series of activities called *Journey of Chinese Aerospace Technology and Culture 2017*. It was supported and sponsored by Ministry of Industry and Information Technology of the People's Republic of China (MIIT).



As the extension of traditional courses, this series of activities focused on the development of space science and technology covering academic lectures, science and cultural visits, forums and meetings, which gave the participants more chances to communicate and share opinions with each other as well as have a deeper understanding of what they learned.

### Activities

From March to June, 2017, the participants were organized to visit more than ten (10) space related organizations and agencies. All the participants got a better understanding of the development of the forefront space science and technology, China aerospace, Chinese culture, and gained a better recognition of Chinese technology, methodology as well as the forefront of space science and technology development through technical visits, academic lectures, student forum, etc.

#### 1) Raising professional awareness by visiting scientific research institutes

The popularization of space technology is an inevitable trend in the integration of natural science and social science, high technology and humanities, which has become a new

interdisciplinary and cross-disciplinary research direction now. During this activity, the participants visited Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences (RADI), International Centre on Space Technologies for Natural and Cultural Heritage under the Auspices of UNESCO (HIST), Satellite Application and Research Center of China Geological Survey International (AGRS), Xinglong Observatory of the National Astronomical Observatories, Chinese Academy of Sciences (NAOC), etc. Under the guidance of the experts, the participants got a profound understanding of the structures, working principles, data analysis of the equipment and systems, such as the Digital Earth platform, Land and Resource Satellite Application System, the Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST), and 2.16-m Telescope, etc.

Mr. MORALES BARRERA REINALDO, a participant from Peru, said, "It was an interesting visit for me. I didn't know as much as others students about Remote Sensing and Digital Earth and I learned a lot from this visit. It is incredible

that people who lives so far from South America are thinking to protect our cultural heritage using Space Technology."

#### 2) Broadening international perspective by visiting international organizations

International organization, as a link among the member states, has a positive and significant influence on social economic development and international peace maintenance. During this activity, the participants were organized to visit the Asia-Pacific Space Cooperation Organization (APSCO). They have learned about the formation, development, classification and structure of APSCO through the professional introduction. It is also a good way to expand international horizon, raise global awareness and cultivate a healthy attitude in respecting diversity of the world.

At the Exhibition Hall on the first floor of APSCO, those gorgeous models surprised every participant and they could not wait to take photos. Those beautiful models signified a series of stories of Chinese scientists who devoted their whole life





to space exploration and development with great passion. Mr. KEAWKAEW CHINNATAT, a participant from Thailand, expressed his thankfulness to have such a precious chance to visit APSCO, for it gave him a better understanding of APSCO and China's space development.

### 3) Perceiving the Chinese model by visiting the government departments

The Chinese government has always advocated strengthening international exchanges and cooperation on the basis of equality, mutual benefit, peaceful use and inclusive development. In order to increase participants' understanding of Chinese Government, Chinese philosophy and Chinese style, the participants were organized to visit National Disaster Reduction Center of China (NDRCC) and the Reputable Highest Court in the People's Republic of China, which gave the participants chances to be immersed in the Chinese model in person.

In NDRCC, Dr. Liu Ming delivered an excellent lecture titled "*Space-based Technology*

*Application for Disaster Management in China*", giving a detailed introduction about disaster characteristics and management in China, space-based technology in disaster monitoring and assessment, etc. He also introduced Disaster Management System, Remote Sensing Data Acquisition Capacity, HJ-1-A/B Satellites Coverage, Routine Disaster Monitoring and other professional and technical knowledge. In the Reputable Highest Court in the People's Republic of China, Ms. Li Xiaohui demonstrated Big Data Management and Service Platform in serving the people, the judicial trial and enforcement through a lecture of "Making Full of Information Technology in the Court of China". After the lectures, the participants raised their questions and discussed heatedly with the lecturers.

### 4) Accessing to cutting-edge information by visiting the aerospace enterprises

In recent years, dedicating in improving the basic capability of aerospace industry, China launched a series of key scientific projects,

like new generation launch vehicles, BeiDou Satellite Navigation System, High Resolution Earth Observation System, manned space flight, lunar exploration, Mars exploration, etc. China is gradually making improvement in space science, space technology and space application. Presently, Chinese aerospace enterprises are the important supports in improving innovation and realizing synergetic development in China. As a great power of responsibility, China not only seeks its development in aerospace, but also like to assume more international responsibilities, share its successful experience of China's space development and try to help the developing countries improve their space application capability.

In this activity, the participants visited Beijing Aerospace TITAN Technology Company Limited (TITAN), the Twenty First Century Aerospace Technology Co., Ltd. (21AT), Space Exploration Museum of Beijing Garden Expo Park, and Beijing BDSTAR Navigation Co., Ltd., and they got the chance to talk with technicians face-to-face on the topics of research and development, use, maintenance of cutting-edge products. Most of participants said that they learned the latest information of related aerospace products and



services through visiting these enterprises, and they would like to cooperate with these enterprises in the future as well.

### Conclusion

What is the color of the sky? How large is the universe? Human beings have great curiosity towards the earth, towards the universe for thousands of years. Chinese people have written down a lot of historical stories, like the fairy tale of "*the Goddess Chang'e Flying to the Moon*", "*The First Bold Attempt of Manned Space Flight by Wan Hu*". Now, the development of space science and technology welcomes humanity to a new era - observing the earth from the space in which the ancient myths "Thousand-mile Eye" and "Long Ear" come into reality. But still, we, humankind, are continuing making progress in discovering the unknown space.

*Journey of Chinese Aerospace Technology and Culture 2017* has ended successfully, and it is a beneficial exploration in education. In the future, in order to better contribute to the internationalization of China aerospace, we will further rich contents, expand the depth and width of activities, cultivate more talents and international partners for promoting the peaceful use of space technologies for the benefit of all humankind through innovative development.

## Feedback

*Journey of Chinese Aerospace Technology and Culture 2017* was ended with a complete success. During the last three months, participants expanded horizon and got a better understanding of China's space through a series of academic lectures, cultural and technical visits, etc., which would have a great promotion for their study. Let's share their experience.

- It was an interesting visit for me. I didn't know as much as others students about Remote Sensing and Digital Earth and I learned a lot from this visit. It is incredible that people who lives so far from South America are thinking to protect our Cultural Heritage using Space Technology.



- It was also very interesting during the conversation with the operators of the station know that they built a system based on artificial intelligence especially the cities and distribution of the city which allowed them to have an approximate number very accurate to the reality on the inhabitants of each city. These databases are created with satellite images.
- It was excited for me to have such a precious chance to visit APSCO, which made me have a better understanding of APSCO and China's space development.

- The visit to BDStar was really exciting because of the level of knowledge acquired first hand, the capacity to develop and produce articles and services in the area of satellite navigation. I was able to observe directly the range of historic and cutting-edge products they have developed. Allowing me to enjoy the climbing and technological innovation achieved. I was extremely interested in the miniaturization level of the receivers for positioning, as well as each of the products and applications developed, not only for the product itself but for what represents the approach of navigation technology and positioning where BeiDou and CHINA are setting standards, it is very interesting to obtain the level of quality in the products and services of positioning, which demonstrated with the number of awards obtained by their level of quality.



- The exhibition area of the Space Future Pavilion is about 2600 square meters. All of the content are presented in the form of participation, experience and interaction. The Space Future Pavilion is a strongly self recreational interactive space comprehensive display. The content and the experience mode of it can be said to be the first in Asia.
- The visit has been very enriching for us as future professionals as we have been shown to the organization of this research center. In addition, we can see how the remote sensing technology and geological applications have relevance to the real problems in our world. My favorite part was when they performed a detailed demonstration of their image processing and management software called "Land and Resource Satellite Application System. It is a very good training for me.



- Mr. Liu Ming elaborated the role of NDRCC China. In addition, he told us that natural disasters occurred beyond the physical boundaries of the countries, so these disasters should be tackled through something that was also beyond physical boundaries like remote sensing. We know how NDRCC responded to disasters and really understand that remote sensing is playing a vital role in disaster mitigation and emergency management.





# GLOBAL SPACE EXPLORATION CONFERENCE (GLEX 2017)

6 - 8 June 2017  
Beijing, China

## SpaceUp Activity

On the afternoon of June 5<sup>th</sup>, 2017, SpaceUp Activity, co-organized by International Astronautical Federation (IAF) and Chinese Society of Astronautics(CSA), was held at Beijing International Convention Center. Participants of the Centre were invited to attend it.

Seven (7) participants of the Centre majoring in space technology applications, were invited to deliver speeches. They shared their research achievements in remote sensing and geographic information system, global navigation satellite system, space law and policy, micro-satellite

technology, etc. In addition, hot spots of the space development and exploration was discussed.

At the end of this activity, the participants expressed their thanks to IAF and CSA for their kind invitation. They also thanked the Centre for giving them the opportunity to express their views at this international conference and communicate with other young space experts in the world. They said that it was an excellent chance for them to develop their thinking patterns and make more friends.



## Highlight——Global Space Exploration Conference

### Overview

From June 6<sup>th</sup> to 8<sup>th</sup>, 2017, Global Space Exploration Conference (GLEX), jointly organized by International Astronautical Federation (IAF) and Chinese Society of Astronautics(CSA), was held in Beijing. The theme of this conference was "Sharing and Cooperation". More than one thousand (1000) people from over fifty-one (51) countries in the world, such as scientists, entrepreneurs, representatives of institutions and the like attended the conference for further discussion of space exploration. Mr. Weng Jingnong, Deputy Director of the Centre and participants of the Centre were invited to attend it.

Through key reports, global network forum and technical forum, the achievements made in the field of space exploration in the past few years were reviewed, and the challenges, solutions and future development were discussed. Focusing on thirteen (13) scientific fields such as the infrastructure in space exploration, space station, lunar exploration, Mars exploration, near-Earth asteroid exploration, space legal issues, etc., this conference aims to promote global space science and technology development as well as international cooperation for the benefit of all humankind.



# RCSSTEAP

### Wonderful Moments

On the Technical Forum, two papers written by three participants of the Centre were accepted by the conference. Mr. PEDRO HENRIQUE DE OLIVEIRA NOGUEIRA and Mr. RENAN FELIPE OLIVEIRA gave a report based on their paper *Micro-satellite's Energy Balance Analysis Based on Thermal-Electrical Modeling*. Ms. NATALIA INDIRA VARGAS CUENTASTHE gave a report on her paper *Salar the Uyuni as a Simulated Mars Base Habitat in South America*.



Natalia Indira Vargas Cuentas



Pedro Henrique de Oliveira Nogueira



Renan Felipe Oliveira

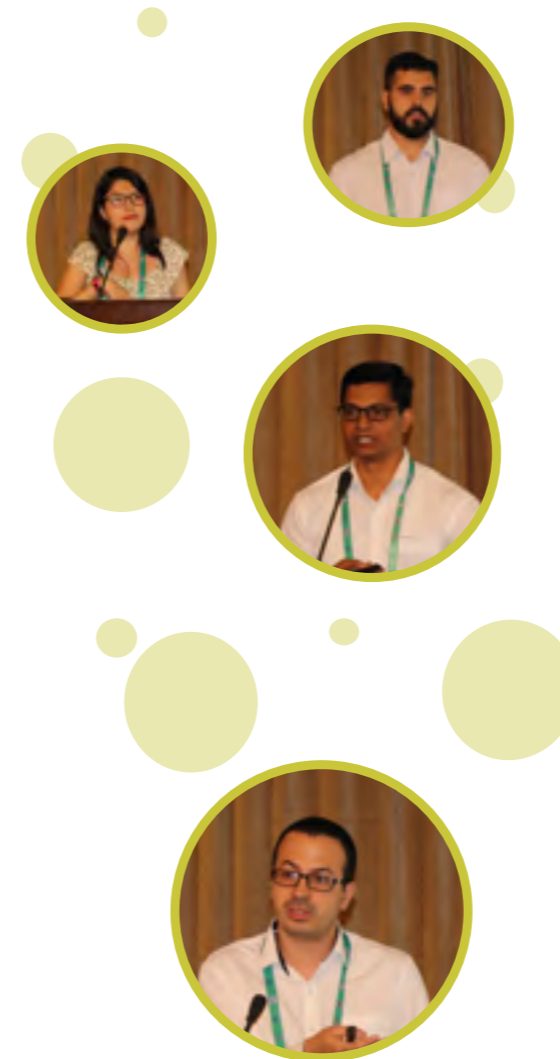
### Feedback

Mr. RENAN FELIPE OLIVEIRA (Brazil):

It was an honor to attend to this extremely important conference in space science and engineering. I had the opportunity to publish a paper and without the help of Beihang it wouldn't be possible to had this wonderful experience. The experience to face an audience and talk about my work results qualified me more for future challenges. In addition, the lectures gave me a great view of the international compromise and state-of-the-art technical developments. Furthermore, it was an great honor to have the opportunity to listen to the wise words of Buzz Aldrin, one of the first man to step on the moon.

Mr. GONZALES VALLEJOS MICHAEL CARLOS (Bolivia):

Glex was a great experience, seeing developing initiatives from many countries, future projects to make the moon and mars achievable, and China taking the lead of space exploration was definetly something out of this world. I am more than interested in participate and support the space exploration from my career.



Mr. RENAN FELIPE OLIVEIRA (Brazil):

It was an honor to attend to this extremely important conference in space science and engineering. I had the opportunity to publish a paper and without the help of Beihang it wouldn't be possible to had this wonderful experience. The experience to face an audience and talk about my work results qualified me more for future challenges. In addition, the lectures gave me a great view of the international compromise and state-of-the-art technical developments. Furthermore, it was an great honor to have the opportunity to listen to the wise words of Buzz Aldrin, one of the first man to step on the moon.

Mr. ERDENEBADRAKH TSENDBAYAR (Mongolia):

The experience of GLEX 2017 is enriching for every participants. The congress gives us the chance to cooperate and learn from other high levels and agencies. The GLEX 2017 provided young participants with a great network and opportunities. It means the congress is great way to meet people and make new cooperation.

Ms. VARGAS CUENTAS NATALIA INDIRA (Bolivia):

For me the experience of attend to the Global Space Exploration Conference (GLEX 2017), was quite rewarding, since I think that I have grown professionally, in the academic field and in the personal aspects, as I have been able to learn about the trending topics in space exploration and all the different initiatives and perspectives of different institutions to reach the Moon and Mars, or other destinations. For me as a young professional from Bolivia, who is an emerging country in the space theme, it has been very profitable to expose a personal research work and also to do networking to establish future cooperation and projects in my country.





## RCSSTEAP Activities

### Beihang Delegation Visited RCSSTEWA, Brazilian Space Agency, CRECTEALC and University of Brasilia

From 4<sup>th</sup> to 10<sup>th</sup> of May 2017, Mr. Weng Jingnong, Dean of Beihang International School and Deputy Director of RCSSTEAP visited RCSSTEWA in Amman, Jordan, Brazilian Space Agency, CRECTEALC in Brazil and University of Brasilia.

Dr. Awni, Director of RCSSTEWA and Mr. Raimundo, Director of Brazilian Space Agency warmly welcomed the Delegation. RCSSTEWA, established in May 2012, is supported by Royal Jordanian Geographical Centre. CRECTEALC, established in 2006, is managed by Brazil and Mexico.

From May 4<sup>th</sup> to 5<sup>th</sup>, the delegation visited Royal Geographic Center located in Amman, Jordan. Both parties gave an introduction of their Centres and education programmes. Then, they visited the new site (the first project) of RCSSTEWA which covered 7000 square meters. Both parties expressed their expectations to strengthen education cooperation especially in joint seminar, scientific technological cooperation, degree and non degree education, etc. Dr. Awni expressed his strong desire to send students to study at RCSSTEAP. Prof. Weng Jingnong warmly invited him to attend the 1st China-Arab State BDS Cooperation Forum.

From May 8<sup>th</sup> to 9<sup>th</sup>, the delegation visited Brazilian Space Agency, CRECTEALC and University of Brasilia. They were impressed by the teaching facilities and the state ground station a lot. The two parties exchanged ideas on the development of the

UN Regional Centres, the establishment of the UN Regional Centre Alliance and University Alliance, the preparation of a series of text books of space technology applications, exchanges of students and teachers, undergraduate programmes in space technology applications, aerospace science practice of teenagers, space management training programmes. etc. It was tentatively decided that Forum on Space Technology Applications would be jointly organized by RCSSTEAP and CRECTEALC during August 21<sup>st</sup> to 26<sup>th</sup>, 2017 in Brazil and the preliminary arrangement was decided.

This visit positively promotes exchanges and cooperation between the two UN Regional Centres and achieved the desired results.



### Representative of Beihang University Was Invited to Give Lectures at International Seminars on Positioning and Navigation Technologies

From May 9<sup>th</sup> to 19<sup>th</sup>, 2017, International Seminars on Positioning and Navigation Technologies was held by Beihang University, Ecole Nationale de l'Aviation Civile (ENAC) and Ohio University. Mr. Wu Falin, expert of RS&GIS of the Centre, associate professor of School of Instrumentation Science and Opto-electronics Engineering, was invited to give lectures on behalf of Beihang University.

Fourteen (14) scholars and experts from France, China, the United States and Austria related this area were invited to give lectures to students majoring in the field of satellite navigation, young scholars and engineers. This seminar mainly focused on global satellite positioning and navigation technologies, multi-sensor integrated navigation technology, positioning and navigation technology applications, etc.

Mr. Wu Falin made three reports, introducing the current situation and development of BeiDou Navigation Satellite System, high-precision differential satellite navigation technology, and

the chances and challenges of multi-constellation and multi-frequency satellite navigation positioning respectively. During the seminar, he was invited to visit laboratory of ENAC and exchanged ideas with representatives from ENAC and Ohio University about further cooperation of scientific research and education in the field of navigation positioning. International Seminars on Positioning and Navigation Technologies 2018 will be held at Ohio University.



### Representatives of the Centre Was Invited to Give Reports on China-Arab States BDS Cooperation Forum

On May 24<sup>th</sup>, 2017, the First China-Arab States BDS Cooperation Forum was held in Shanghai. This forum was co-organized by China Satellite Navigation Office, Chinese Secretariat of the China-Arab States Cooperation Forum, Secretariat of the League of Arab States and Arab Information

Communication Technologies Organization. This forum, bringing together experts of satellite navigation from different countries, aimed to build up a multilateral platform for international cooperation and communication on satellite navigation. Mr. Weng Jingnong, Deputy Director

of the Centre, attended the forum and delivered a report on Beidou/GNSS Education.

Through signing agreements, reporting and communicating, visiting exhibitions and other activities, this forum provides a great platform for China and Arab government officials, technology experts and entrepreneur representatives to discuss on China-Arab satellite navigation cooperation, which has a positive impact on promoting cooperation between China and Arab states.



### Dr. Awni, General Director of RCSSTEWA Visited RCSSTEAP

On May 28<sup>th</sup>, 2017, Dr. Awni, General Director of Regional Centre for Space Science and Technology Education for Western Asia (RCSSTEWA) visited Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (RCSSTEAP). Mr. Weng Jingnong, Deputy Director of RCSSTEAP, Dean of International School, Beihang University and Mr. Jing Guifei, Dean of BeiDou Belt & Road School, Beihang University warmly welcomed the guests.

Mr. Weng extended a warm welcome to Dr. Awni on behalf of RCSSTEAP and gave a general introduction about the Centre in terms of talent

cultivation, capacity building and international cooperation, etc. Dr. Awni expressed his thanks for the warm reception and hoped to further promote cooperation between the two Centres in the space technology education training, staff/student exchange, program collaboration under the "Belt and Road" initiative proposed by Chinese President Xi Jinping.

After the meeting, *Memorandum of Understanding on Cooperation between RCSSTEAP and RCSSTEWA* was signed.

Dr. Awni's visit is significant for better communication and cooperation between the two Centres. It also lays a good foundation for the Meeting of the Directors of the UN Regional Centres which will be held in June in Vienna.

At present, six (6) UN Regional Centres have been established in all over the world. They aim at promoting the peaceful use of space technology for the benefit of all humankind. RCSSTEAP, the UN Regional Centre in China, was established in November 2014 at Beihang University. It has been actively promoting exchanges and cooperation with the other Centres as well as sharing educational resources and information. Up to now, RCSSTEAP has sent experts to two Centres for training courses and reached cooperation intention with three Centres on resource sharing, joint organization of training courses and establishment of UN Regional Centre Alliance.



RCSSTEAP

### Beihang University and Russian State Agrarian University Jointly Organized Video Conference on the Application of Global Navigation Satellite Systems for the Agribusiness

On May 31<sup>st</sup>, 2017, Beihang University and Russian State Agrarian University jointly organized a video conference on the Application of Global Navigation Satellite Systems for the Agribusiness. The conference was held at the Centre by Internet-based video conference system. Mr. Meng Zhijun, Researcher of Beijing Engineering Research Center for Information Technology in Agriculture, Mr. Jin Tian, GNSS expert of the Centre, associate professor of School of Electronic Information and Engineering, Beihang University, Mr. Yang Lei from Shandong Agricultural University, Prof. Zeyliger, Prof. Shulga and Dr. Varvara from Russian State Agrarian University gave six (6) reports on the application of the satellite navigation system in various fields of agriculture respectively. More

than ten (10) international graduates of the Centre attended all the lectures.

Russian State Agrarian University, founded in 1865, is one of the first higher education institutions in agriculture in Russia. According to the requirements of the Working Group on the Joint Application of the Working Group on Education and Training, Russian State Agrarian University and Beihang University jointly promote the training of satellite navigation systems in both China and Russia. After the video conference, the two sides exchanged views on the educational cooperation, teaching materials, cooperative research and the like, and decided to hold the next video conference in October 2017.





### Representatives of the Centre Visited GISTDA and Chulalongkorn University

From May 31<sup>st</sup> to June 3<sup>rd</sup> in 2017, the delegation led by Mr. Weng Jingnong, Dean of International School, Beihang University and Deputy Director of the Centre, visited Geographical Information and Space Technology Development Agent (GISTDA) and Chulalongkorn University in Bangkok, Thailand.



On June 1<sup>st</sup>, Mr. Anusorn Rungsipanich, Acting Rector of GISTDA Academy, warmly welcomed the delegation. Mr. Anusorn Rungsipanich briefly introduced the basic information of the agent, and explained its development progress on space technology research and education training. Representatives from GISTDA also reached the agreement with the delegation on



the arrangement of the training program that would be launched in September in Thailand. Mr. Anusorn Rungsipanich said that three (3) members of GISTDA staff attended the welcome meeting were graduated from Beihang University. They were really excellent and had already become backbone members in GISTDA. He also expected more cooperation between Thailand and China in the future, especially more opportunities on education training, scientific researches and project cooperation with Beihang University. Additionally, he welcomed more Beihang graduates join GISTDA.



During June 2<sup>nd</sup> to 3<sup>rd</sup>, the delegation visited Chulalongkorn University, the top 1 university in Thailand and Space Krenovation Park. Prof. Chlrmchon Satirapod of Chulalongkorn University briefly introduced the overall situation

of the university, the foundation of space technology and talent cultivation. Then, Mr. Weng Jingnong introduced the development of Beidou International Exchange and Training Centre at Beihang University and the newly established BeiDou Belt & Road School. Then, representatives from both sides exchanged ideas on promoting the development of BeiDou/GNSS Laboratory for Education, Education and Research Sharing Network of Location Based Service for the Belt and Road Countries as well as encouraging exchanges of teachers and students. Both sides expressed their wishes on strengthening interdisciplinary talent cultivation training and bilateral cooperation.

During the visit, Mr. Weng Jingnong, Dean of International School, Beihang University, and Mr. Supot Teachavorasinskun, Dean of Faculty of Engineering, Chulalongkorn University, signed *MEMORANDUM OF UNDERSTANDING ON THE ESTABLISHMENT OF THE BEIDOU BELT & ROAD SCHOOL (DRAFT)*.

In addition, the delegation also tested the data and updated the software of the BeiDou Ground Station in Bangkok, which laid a better foundation for building CORS station, popularizing BeiDou applications and promoting relevant industry development, etc.



RCSSTEAP

## Representatives of the Centre Attended the 60<sup>th</sup> Session of UNCOPUOS

During June 12<sup>th</sup> to 14<sup>th</sup>, 2017, Mr. Huang Haijun, Vice President of Beihang University, and Mr. Weng Jingnong, Deputy Director of the Centre and Dean of International School, Beihang University, Ms. Guo Yuanyuan, Program Manager of the Centre, and Ms. Wang Xin, Director of Brand Designer of the Centre, attended the 60<sup>th</sup> Session of UNCOPUOS as members of Chinese Government Delegation.

At the meeting, Mr. Weng Jingnong delivered a report on Progress and Plan of the UN Regional Centre in China (RCSSTEAP) based on the topic of the development of UN Regional Centre, sharing his thoughts and suggestions on UN Space Application Programme on behalf of RCSSTEAP (China).

During June 13<sup>th</sup> to 14<sup>th</sup>, RCSSTEAP (China) and the Office for Outer Space Affairs (UNOOSA) hosted the director conference of UN Regional Centres. Directors and other representatives from six (6) Regional Centres and directors of UNOOSA Space Applications Project, more than twenty (20) people in total, attended the conference. Madam Simonetta Di Pippo, Director of UNOOSA, and Mr. Huang Haijun, Vice President of Beihang University attended the opening ceremony of the conference and addressed speeches on behalf of the organizers respectively. It was agreed to form an Alliance of Regional Centres (potential acronym ARC) proposed by RCSSTEAP (China) to promote combined efforts of Regional Centres and to build



synergies for mutual benefits. Through voting, all participants of the conference unanimously nominated Mr. Weng Jingnong, Deputy Director of RCSSTEAP (China), as the first President of ARC. The Secretariat of the alliance will be established at RCSSTEAP (China). Alliance of Regional Centres (ARC) was initiated by RCSSTEAP (China), went through more than one year's preparation and discussion, and got strong support from UNOOSA and positive responses from other Regional Centres. The establishment of ARC will further promote exchange and cooperation among the Regional Centres, and better cohesive Regional Centres to achieve more development on UN Space Application Programme.

Representatives from Sri Lanka and many other countries made their statements at the conference, and expressed their support for the establishment of ARC.

United Union has established Programme on Space Application since 1982, which proposes each country's space technology applications for peaceful use and benefits all humankind. In order

to promote this programme, UNOOSA decided to establish Regional Centres for Space Science and Technology Education in every region of the world. Since the first establishment of the Regional Centre in India in 1995, UN has already built up six (6) Regional Centres in India, Nigeria, Morocco, Brazil and Mexico (joint centre), and China respectively. Regional Centres are instituted director responsibility system and led by the governing board. The administrator of each country's national space agent is generally appointed as the chairpersons of each Regional Centre.

RCSSTEAP (China) was established on November 17<sup>th</sup>, 2014 in Beihang University under the approval of the State Council. The Administrator of China National Space Administration (CNSA) was appointed as the chairperson while the President of Beihang University was appointed as the Director of the Advisory Committee. At present, RCSSTEAP (China) has ten (10) member states including Algeria, Argentina, Bangladesh, Bolivia, Brazil, China, Indonesia, Pakistan, Peru and Venezuela.

# Education and Training Programs

## Team Pilot Project Conclusion Defense

In the spring semester of 2016, thirty-five (35) participants of 2015 MASTA Program majoring in GNSS, RS&GIS, and Space Law and Policy were engaged in Team Pilot Project (TP). After hard work on practice from March to May, the participants completed their project conclusion defense in May. All the teams submitted their final reports and showed their posters they made for the project conclusion defense.



## Thesis Defense

In June 2017, twenty-two (22) MASTA Program candidates majoring in GNSS, RS&GIS and Micro-satellite Technology, and one (1) DOCTSTA Program candidate majoring in Space Technology Applications completed and passed their thesis defense and degree evaluation. All of them successfully graduated and acquired the Degree of Master/Doctor of Engineering in Space Technology Applications.



### Thesis Proposal

From June 20<sup>th</sup> to 22<sup>nd</sup>, 2017, thirty-five (35) participants of MASTA Program who registered in 2016 majoring in GNSS, RS&GIS, Space Law and Policy successfully completed their thesis proposal defense at the Centre. A panel of supervisors reviewed the literature reviews and thesis proposals submitted by the participants, and gave comments and advice accordingly. Most of the participants' research topics are closely related to the requirements of space technology applications in their home countries. Participants of 2016 MASTA Program are expected to graduate in June 2018.



### Enrollment of MASTA Program & DOCSTA Program 2017

In 2017, the Centre enrolled MASTA Program and DOCSTA Program students majoring in three academic fields including GNSS, RS&GIS and Micro-satellite Technology. After stringent review of application materials and online interviews, the enrollment has been completed successfully. Fifty-five (55) candidates have been offered admission, including forty-three (43) master's candidates and twelve (12) doctoral candidates. These students are expected to complete registration in September this year.

#### Enrollment of MASTA & DOCTSTA Students in 2017

Program	Major	Number of Candidates	Countries
MASTA	GNSS	12	Bolivia, Thailand, Turkey, Pakistan, Mongolia, Bangladesh, Peru
	RS&GIS	16	Brazil, Bolivia, Turkey, Pakistan, Mongolia, Bangladesh, Iran, Peru, Nigeria
	Micro-satellite	15	Bangladesh, Brazil, Venezuela, Thailand, Turkey, Pakistan, Mongolia, Iran, Peru
DOCTSTA	Space Technology Applications	12	Algeria, Venezuela, Thailand, Pakistan, Iran, Bangladesh, Turkey



## Graduation

### Graduation Ceremony & Course Completion Ceremony for MASTA/DOCSTA

On June 21<sup>st</sup>, Graduation Ceremony and Course Completion Ceremony for MASTA/DOCSTA was held in the conference room No. 8 of the conference center in New Main Building, Beihang University. Mr. Li Xinjun, Secretary General of APSCO, Mr. Egemen Ozalp, Deputy Secretary General of APSCO, representatives from China National Space Administration and Department of Military-Civil Technology Integration, Ministry of Industry and Information Technology, staff of International School, Beihang University, and representatives of RCSSTEAP attended the ceremony. Twenty-three (23) master candidates and one (1) doctor candidate who will graduate in June, 2017 and thirt-five (35) master candidates who completed their course and entered into thesis writing period attended the ceremony. The ceremony was hosted by Mr. Weng Jingnong, Dean of International School, Beihang University.

Prof. He Linshu, senior experts of the Centre and Mr. Li Xinjun, Secretary General of APSCO, issued the certificates to the graduates. Ms. Jianghui, Division Director of Department of International Cooperation, CNSA and Mr. Li Gaofeng, Vice Consultant of Department of Military-Civil Technology Integration, Ministry of Industry and Information Technology, issued the certificates to "Excellent Graduate". Mr. Egemen Ozalp, Deputy Secretary General of APSCO, Mr. Mohammad Ebrahimi, Director General of Department of Education and Training and Database Management of APSCO issued the

certificates to Course Completion participants.

At the Graduation Ceremony, Mr. Li Junxin, on behalf of APSCO, extended his congratulations to all graduates and his thankfulness to Beihang University. He mentioned that APSCO focused on improving multilateral exchange and cooperation in aerospace and promoting peaceful use of space technology in these years. They hoped to have more cooperation with Beihang University and home countries of the participants and promote the development of space science, space technology and space applications together.

Prof. Tan Yumin, GNSS expert of RCSSTEAP expressed her best wished to all the participants. She hoped that the participants would insist on studying, keep working hard and learn to think, and become professionals in the field of space technology applications and make contributions to the peaceful use and development of the space technology. Mr. DE OLIVIVA NOGUEIRA PEDRO HEWWQUE, the Excellent Graduate from Brazil delivered a speech on behalf of all the graduates. He thanked Beihang University for it provided all the students with high-quality studying resources and gave them virtue of helping others, the spirit of innovation and truth-seeking. Ms. JAGIRANI AISHA, a participant of MASTA 2016 from Pakistan, made a speech on behalf all the current participants. She reviewed the growth they had with upper-graders, and wished a bright future for them. At meantime, she also thanked APSCO, Beihang University and



RCSSTEAP for their guidance and help with their study, and showed her resolution of working harder and becoming a great Beihang student.

At the end of the ceremony, Mr. Weng Jingnong thanked the support of Minister of Industry and Information Technology, China National Space Administration, APSCO and other partners. He also extended his sincere hope that the graduates could put what they learnt in Beihang University into practice, and become the ambassadors of between China and their home countries to promote international cooperation and the development of aerospace technology and applications. At last he wished them could dare to dream, pursue the dream and realize the dream.

MASTA/DOCSTA Program was established in 2006 at Beihang University. This program get substantial support from China Scholarship Committee, and most students of the program

get full scholarship of "Chinese Government Scholarship". Based on this program, APSCO Education and Training Centre in China and Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) were set up respectively at Beihang University in 2013 and 2014. This program is a well-designed one with the support of Chinese Government, focusing on promoting peaceful use of space technology. Along with the establishment of RCSSTEAP (China), this program has become one of the famous brands of Beihang University. The graduates in 2017 is the first batch of graduates since the establishment of RCSSTEAP, and they are mostly from Member States of APSCO and RCSSTEAP. In 2017, this program will enroll international students in three professional fields, including GNSS, RS&GIS and Micro-satellite Technology. Currently, the enrollment has entered the final stage, and the new participants will register in early September this year.



北航唯实大厦 VISION HOTEL

2 0 1 7

Wonderful Moments



**Editor's Note:**

It is the graduation time again.  
As the photograph stilled our images, we forget the distance of missing.  
Hope you could still remember my young face;  
hope you could remember the beautiful time we once had.





# 2017 · Graduation Time



## Media

### Construction of WeChat Platform and Website Homepage

In the internet era, WeChat platform and official website of the Centre are important information windows and communication platforms for people all over the world to learn about the Centre. Since been established, the Centre aims to use internet technology to make more efficient and accurate transmission of information and achieve seamless joint between online and offline, and continue to strengthen information construction.

In the first half year of 2017, thirty-seven (37) pieces of news have been released according to the WeChat platform of the Centre. In term of the official website, the Chinese website homepage has been updated for thirty-two (32) times and the English version for twenty-eight (28) times. The number of visits reached eight thousand nine hundred and twenty-three (8923). The goal of complementary advantages of traditional website and WeChat platform has been achieved, which accelerates the speed of information transmission, and provides strong support for the brand building of the Centre.



## Additional Words

This issue records the main work of RCSSTEAP from May to July, including events like Global Space Exploration Conference (GLEXP 2017), representatives of RCSSTEAP attending the 60<sup>th</sup> Session of UNCOPUOS, 2017 new students enrollment, etc.

In June, the three-month activity, *Journey of Chinese Aerospace Technology and Culture 2017*, had been successfully ended. It was a beneficial exploration in education. It also provided participants with more opportunities to get closer with and learn about the development of China aerospace and to enjoy the charm and the beauty of Chinese aerospace culture. This event has a significant impact on enhancing international exchange and cooperation as well as pushing Chinese Aerospace to the international stage.

The Centre has been focusing on innovation and characteristics development since its establishment. Everything has been running smoothly with an increasingly profound influence of the Centre.

Thank you for your concern and support all the time. Your precious comments and advice are highly welcomed. We will continue to do our best to make *Newsletter* better and better.

Editor

## Glance of the Centre

### Name List of the Governing Board Members

No.	Title	Name	Gender	Country	Affiliation & Position
1	Chairperson	Xu Dazhe	Male	China	Administrator of China National Space Administration (CNSA)
2	Member	Houari Karim	Male	Algeria	Director of International Cooperation of Algerian Space Agency (ASAL)
3	Member	Felix Menicocci	Male	Argentina	Secretary General of Argentina National Commission of Space Activities
4	Member	Md. Dilwar Bakhth	Male	Bangladesh	Chairman of Bangladesh Space Research and Remote Sensing Centre
5	Member	Jaime Antonio Mendoza Gonzales	Male	Bolivia	Space Segment Engineer of Bolivian Space Agency (ABE)
6	Member	Jose Raimundo Braga Coelho	Male	Brazil	President of Brazilian Space Agency (AEB)
7	Member	Thomas Djameluddin	Male	Indonesia	Head of National Institute of Aeronautics and Space (LAPAN)
8	Member	Imran Iqbal	Male	Pakistan	Member of Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)
9	Member	Jose Julio Cesar Humberto Acuña	Male	Peru	Representative of National Commission on Aerospace Research and Development (CONIDA) of the Republic of Peru
10	Member	Victor Cano	Male	Venezuela	President of Bolivarian Agency for Space Activities of Venezuela (ABAE)

### Name List of the Representatives of Observers

No.	Name	Gender	Affiliation & Position
1	Simonetta Di Pippo	Female	Director of the United Nations Office for Outer Space Affairs (UNOOSA)
2	Li Xinjun	Male	Secretary General of Asia-Pacific Space Cooperation Organization (APSCO)

### Director of the Advisory Committee

No.	Title	Name	Gender	Country	Affiliation & Position
1	Director	Xu Huibin	Male	China	President of Beihang University



The 1<sup>st</sup> GB Meeting, Nov. 17, 2014



The 2<sup>nd</sup> GB Meeting, Nov. 28, 2015

### Campus of the Centre



### Secretariat of the Centre

