

The First Three Years
of Tracking the Two Largest Orbits
in Space Commercialization

The Sino-US Space Commercialization Dialogues

2019-2021



SECURE
WORLD
FOUNDATION



In Partnership with

Caelus Foundation

About Secure World Foundation

The Secure World Foundation strives to be a trusted and objective source of leadership and information on space security, sustainability, and the use of space for benefits on Earth. We use a global and pragmatic lens to study and evaluate proposed solutions to improve the governance of outer space. While recognizing the complexities of the international political environment, SWF works to encourage and build relationships with all willing stakeholders in space activities, including government, commercial, military, civil society, and academic actors. Central to this approach is increasing knowledge about the space environment and the need to maintain its stability, promoting international cooperation and dialogue, and helping all space actors realize the benefits that space technologies and capabilities can provide.

This project was conducted in partnership with the Caelus Foundation:

About Caelus Foundation

The Caelus Foundation is a 501(c)(3) non-profit with a mission to “Bring Space Back Down to Earth”. Caelus Foundation believes that every individual on Earth is a stakeholder in the development of the space domain, and that maximizing the benefits of space requires deliberate and thoughtful engagement from all stakeholders. By focusing on the human elements of space, i.e. diplomacy, commercialization, policy, and public engagement, CF works to expand space industry participation and to shine a light on problematic areas within the space sector.

www.caelusfoundation.org

Published: August 2022

This report by the Secure World Foundation is licensed under a Creative Commons Attribution —Non-Commercial No Derivatives 4.0 International License.



The Sino-US Space Commercialization Dialogues

Since 2019, Secure World Foundation and Caelus Foundation have been engaged in a research and dialogue program focused on the commercial space component of the United States-China relationship. Research focused on illuminating existing perceptions, primary sources of miscommunication, and identifying meaningful subjects for targeted dialogue. The dialogue itself, the most substantial element of this program, has consisted of multiple workshops that brought US and Chinese commercial stakeholders together to share perspectives in order to better understand how both countries are working towards the commercialization of space.

Why Are We Doing This?

The US and China are two of the world's leading space powers; and have the two most capable space industry sectors. Both countries are ambitiously seeking to position their space programs as drivers of economic growth, diplomatic leverage, and security advantage. As the global commercial space sector continues to rapidly develop, the decisions these two countries make, both together and separately, will have significant implications for the rest of the global space community, and for the stability of the space domain. This project is motivated by a desire to increase mutual understanding of space industry activities in each country; reduce potential misunderstandings; and potentially identify where there are shared interests. It seeks to increase information exchange, inform stakeholders, and possibly reduce misperceptions and tensions.

When it comes to the commercialization of space, China has emerged as one of the cornerstones for how the US operates. Major policy initiatives and investment decisions such as the expansion of ITAR, the establishment of the US Space Force, and the direction of billions of dollars of congressional budget allocation have been at least partially motivated in response to China's emergence as a growing space power. However, despite how prominent China is in the minds of decision makers, China's commercial space sector is generally misunderstood in the US, in particular in the business and civil sectors where little information is available for effective strategic decision-making.

This is largely due to two important reasons. First, information on the Chinese commercial space ecosystem is sparse. Many aspects of China's aerospace ecosystem seem opaque, and less formal reporting systems exist as compared to the US system. In the US, although there is a general awareness of China's rising space capabilities and an increasing amount of analysis

of those capabilities, the majority of the literature focuses on the national security dimension, with economic aspects often treated in a secondary nature. It is uncommon to see differentiation in analysis between commercial, private, and national structures within China's burgeoning space capabilities. The second reason is that due to a combination of geopolitical realities and legislation limiting interaction between the two sides, there are few relevant stakeholders directly engaged and gathering information firsthand. Therefore, we saw a need and an opportunity to create a platform where relevant stakeholders can engage directly, share meaningful insights, and generally make it easier for both sides to be aware of each other's activities. Ultimately, this program is intended to fill an important information gap in one of the most challenging and important dynamics impacting the commercialization of space.

Program Objectives

- 1. To improve the knowledge and information base space stakeholders in each country have regarding the activities of the other.** State-level discussions between the US and China on the subject of space activities are largely limited and conducted in closed-door settings. Informal dialogues between American and Chinese space-industry stakeholders can complement these state-level discussions and create a more holistic awareness of current realities. By establishing better flows of information and by producing novel insights that create better awareness of on the ground realities, this program aims to increase nuance and reduce hyperbole in the information used in business and policy strategy.
- 2. To reduce potential misunderstandings and limit the potential for conflict.** Dialogue of the type described in this program can help promote transparency in objectives and intent while respecting the sovereign requirements of each state; thus, supporting and maintaining long-term stability. Increasing information and discussion can act to reduce misperceptions and the need for "worst case scenario" assumptions in the absence of meaningful information. The program also aims to explore and inform the conversation around the socio-economic aspect of the US-China space relationship, broadening beyond the national security aspects that typically receive the most focus.
- 3. To identify areas of mutual interest.** Even in the midst of an overall competitive relationship, the US and China might face shared challenges as they each seek to develop and commercialize space industry capabilities. This program seeks to identify, where possible, these areas of shared challenges. It then seeks to facilitate the difficult conversations between the two countries' space stakeholders on potentially addressing those shared challenges in areas like orbital debris, economic policy, and sustainability of the space domain.

Where We Are Now

As of December 2021, we have held four formal dialogue events and several informal interactions, produced novel research illuminating the underlying challenges behind US-China dialogue, and have generally helped ground this conversation in basic principles of respectful and critical understanding.

First Dialogue: 2019 April in Changsha, China

The Caelus Foundation, Secure World Foundation, and the Chinese Society of Astronautics hosted a half-day workshop as a dialogue to improve shared understanding of US and Chinese commercialization of the space domain. The Workshop was held on the margins of the 2019 China Space Conference, in Changsha, China. The purpose of the workshop was to commence a dialogue on the potential for space commercialization related information exchange between the US and China.

WORKSHOP SPEAKERS AND TOPICS

Chinese Side

FACILITATOR:

Zhang Yao, Director, International Relations, Chinese Society of Astronautics

SPEAKERS:

Gan Yong, Deputy Director of Intezperation Department, China National Space Administration

Zhang Xiaodong, Executive Vice President, China Great Wall Industry Corporation

Chen Dong, Assistant Technical Manager of Hongyan Constellation, China Academy of Space Technology

Wang Chong, Deputy Director of the Hongyun Project Department of CASIC Space Engineering Development Co.

US Side

FACILITATOR:

Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation

SPEAKERS:

Lincoln Hines, Cornell University

Alanna Krolikowski, Missouri University of Science and Technology (*via video*)

Ian Christensen, Secure World Foundation

Blaine Curcio, Orbital Gateway Consulting

Research: Terminology (2019)

Communicating Value: Investigating Terminology Challenges in "Newspace" and "Commercial Space"

Partially inspired by the conversations held in Changsha, Secure World Foundation and Caelus Foundation investigated inconsistently used space sector terminology. Today, the terminology used to describe the activities of the commercial space sector can create confusion and contribute to tensions and uncertainties that affect the development of sustained economic value through space activities. The analysis in this project found that these terms are used to convey different meanings by different users, resulting in tension points with implications across a given space enterprise. This paper was not directly tied to the US-China dialogue program, however insights that emerged from that research heavily informed recurring themes throughout the current dialogue program. In particular, a number of somewhat oversimplified but illuminating, questions emerged and remained consistently present, such as *"does China have a commercial space sector?"*. This terminology research has played a vital role in enabling us to dissect, refocus, amplify, and pull additional insights from these seemingly basic questions.

Informal Dialogue: October 2019, Washington DC

On October 23, 2019 The Caelus Foundation, and Secure World Foundation (in consultation with the Chinese Society of Astronautics) held a 1.5 hour informational discussion with a group of US and Chinese parties interested in the commercialization of the space domain. This discussion was held on the margins of a major international space-sector conference: the International Astronautical Congress (IAC). Until the week of the IAC, this had been a planned formal workshop with invited high-level speakers. However, last minute visa challenges that forced the delayed arrival of all official Chinese delegates caused us to re-plan and re-strategize the event. As multiple Chinese stakeholders, including our partners at the Chinese Society of Astronautics, were unable to obtain their visas on time, we agreed to use this opportunity to hold an off-the-record informal discussion to outline some thornier issues facing the dialogue. Our goal was to

explore and identify topics that could be discussed in depth in future workshops, as well as to outline areas where the US and Chinese delegations did not see eye to eye.

Second Dialogue: September 2020 Remote

On September 19, 2020, Secure World Foundation and the Chinese Society of Astronautics co-hosted a half-day session under the theme of a Perspectives Dialogue: Key Views for Areas of Interest and Understanding. During the session, commercial space-related stakeholders from both the US and China shared their viewpoints on trends, challenges, and opportunities in the commercialization of space. The purpose of this event was to share and understand perspectives from both US and Chinese stakeholders on how space commercialization is happening in both countries, and what can be done to increase transparency between both commercial contexts. The session was held on the margin of the 2020 China Space Conference in Fuzhou, China. US speakers at the event participated remotely through pre-recorded video presentations, while the Chinese participants gathered in an in-person setting.

WORKSHOP SPEAKERS AND TOPICS	
<p>Chinese Side</p> <p>FACILITATOR:</p> <p>WANG Yiran, Vice President & Secretary General Chinese Society of Astronautics (CSA) and Ms. Yao Zhang; Director, International Relations, CSA</p> <p>SPEAKERS:</p> <p>WANG Yiran, Vice President & Secretary General Chinese Society of Astronautics (CSA): Opening and Closing Remarks</p> <p>ZHANG Dong, Executive Vice President of CHINAROCKERT CO., LTD, General Director of the Smart Dragon 1(SD-1) Launch Vehicle: <i>“Link the World, Achieve the Dream—the Development and Future of China’s Commercial Space”</i></p> <p>PI Benjie, Assistant Engineer in Chief of Leobit Technology CO.,LTD: <i>“Satellites-IoT (Xingyun Project) Ground Application System Constructions Exchange”</i></p> <p>HUO Jia, Beijing Interstellar Glory Space Technology Co., Ltd. (iSpace): <i>“Private Commercial Launch Vehicle Company in China”</i></p>	<p>US Side</p> <p>FACILITATOR:</p> <p>Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation</p> <p>SPEAKERS:</p> <p>Opening Remarks: Ian Christensen, Director of Private Sector Programs, Secure World Foundation: Opening and Closing Remarks</p> <p>Jeffrey Manber, CEO, Nanoracks: <i>“Perspectives on US-China Commercial Engagement in Space Exploration”</i></p> <p>Bhavya Lal, Research Staff Member, IDA Science and Technology Policy Institute. <i>“Overview of STPI Report on Evaluation of China’s Commercial Space Sector”</i></p> <p>Ken Hodgkins, President, International Space Enterprise Consultants: <i>“Perspectives on Cooperating Towards Responsible Space Behavior”</i></p> <p>Rob Ronci, Executive Director, Caelus Foundation: <i>“The Role of Communication in Bringing Space Back Down to Earth”</i></p>

Research: Perceptions (2020-2021)

In February 2021, Secure World Foundation and Caelus Foundation released a paper entitled [“Lost Without Translation: Identifying Gaps in US Perceptions of the Chinese Commercial Space Sector.”](#) Through interviews with private sector professionals across the space industry in the US, this research explores current perspectives that US commercial space stakeholders have on the emerging Chinese commercial space sector and identifies significant questions and gaps in

information that these stakeholders have. By comparing common US stakeholder perspectives with discourse and analysis on China's commercial space sector, this paper highlights where more effort is required to better understand these emerging dynamics. This research challenges common narratives of a Chinese commercial space sector with unlimited financial support, direct government control, and a long-term vision. It illuminates barriers to understanding the complexities and conflicts within China's commercial ecosystem, thus providing nuance for one of the most challenging and heated topics in the space industry: US-Sino space relations.

Third Dialogue: April 2021 Remote

The Caelus Foundation, Secure World Foundation, and the Chinese Society of Astronautics hosted a full-day workshop as part of a continued dialogue to improve shared understanding of US and Chinese commercialization of the space domain. The Workshop was held on the margins of the 2021 China Space Conference, in Nanjing, China. The purpose of this workshop was to have an interactive dialogue between key national space leaders from the Chinese space industry, and leaders in the US commercial space industry. There were an estimated 75 people in the audience, mostly Chinese students and science officials. There was also representation from both US Embassy and the Chinese government. Operating from remote locations on videoconference were members of SWF and Caelus Foundation teams, as well as US speakers. Local Chinese media were also present.

WORKSHOP SPEAKERS AND TOPICS

Chinese Side

FACILITATOR:

Mr. Yufu Cui, Chief Designer, China Satellite Communications, LTD and **Ms. Yao Zhang**; Director, International Relations, Chinese Society of Astronautics

SPEAKERS:

WANG Yiran, Vice President & Secretary General Chinese Society of Astronautics (CSA)

WU Ji, Professor, National Space Science Center of Chinese Academy of Sciences: *"Space Tourism"*

JIN Xin, Vice President, Chinarocket Co Ltd, China Academy of Launch Vehicle Technology: *"Opening and Integration, Innovation and Driving, Create a Commercial-Aerospace Integrated Solution"*

ZHAO Qiming, Vice President of Hi Wing Satellite Operation Division of the Third Institute of China Aerospace Science and Industry Corporation: *"Discussion on Systematic Innovation of Commercial Aerospace"*

CHEN Dong, Professor, Department of Telecommunication and Navigation Satellites of China Academy of Space Technology: *"On the Global Development of Low Orbit Satellite Internet."*

WANG, Xiwei, Professor of China Academy of Launch Vehicle Technology, *"Some Thoughts About Cislunar Exploration and Exploitation in New Space Era."*

XIANG Bin, Vice President of Leobit Technology Co. Ltd, *"Current Situation and Development of Satellite Internet of Things."*

US Side

FACILITATOR:

Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation and **Ian Christensen**, Director of Private Sector Programs, Secure World Foundation

SPEAKERS:

Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation: [Opening](#) and Closing Remarks

Ian Christensen, Director of Private Sector Programs, Secure World Foundation: [Opening](#) and Closing Remarks

Richard DalBello, Vice President, Global Engagement, Virgin Galactic: ["Commercial Spaceflight – New Opportunities for Science and Research"](#), interviewed by Ian Christensen

Kevin O'Connell, Founder and CEO, Space Economy Rising LLC: ["American Views on the Space Economy"](#), interviewed by Jose Ocasio-Christian

Rob Ronci, Executive Director, Caelus Foundation: ["Lost Without Translation: Identifying Gaps in U.S. Perceptions of the Chinese Commercial Space Sector."](#)

Fourth Dialogue: October 2021 Remote

The Caelus Foundation, Secure World Foundation, and the Chinese Society of Astronautics co-organized *the Space High-end Dialogue Series 2021: Commercial Human Spaceflight - the Blue Dream of Humankind*. The agenda included keynotes followed by a short period of Question and Answer interactions after each speaker, as well as a dedicated 1-hour panel discussion to close the event. US speakers participated via an online connection as well as pre-recorded remarks, while attendees in China gathered in person in Beijing. US speakers participated via videoconference, and Chinese participants gathered in-person in Beijing. Speakers were as follows:

WORKSHOP SPEAKERS AND TOPICS

Keynotes Chinese Side

WANG Yiran, Vice President & Secretary General Chinese Society of Astronautics (CSA): Opening and Closing Remarks

YANG Kuan, Assistant Professor, Institute of Space Policy and Law, Beijing Institute of Technology: *“Legal Regulation of Suborbital Space Travel”*

HE Huidong, Senior Engineer, Beijing Institute of Space Science and Information, *“Demand Survey and Market Analysis of Space Tourism”*

ZHAO Qiming, Vice President of Hi Wing Satellite Operation Division of the Third Institute of China Aerospace Science and Industry Corporation: *“Discussion on Systematic Innovation of Commercial Aerospace”*

CAI Jingqi, General Manager, Beijing Interstellar Glory Space Technology Co., Ltd: *“Development and Practice of Private Commercial Aerospace Industry in China.”*

Keynotes US Side

Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation: Opening and Closing Remarks

Ian Christensen, Director of Private Sector Programs, Secure World Foundation: Opening and Closing Remarks

Richard DalBello, Vice President, Global Engagement, Virgin Galactic: *“Perspective on Commercial Human Spaceflight & Virgin Galactic’s Role”*, interviewed by Ian Christensen

Peter Martinez, Executive Director, Secure World Foundation: *“Launch for Chinese Translation of the Handbook for New Actors in Space”*

Rachel Lyons, Executive Director, Space for Humanity: *“To Space, For Earth - Embracing a Culture of Interconnectedness As We Venture Into the Stars”*

CLOSING PANEL DISCUSSION

MODERATOR:

CUI Yufu, Chief Designer, China Satellite Communications, LTD

SPEAKERS:

Jose Ocasio-Christian, Chairman of the Board, Caelus Foundation

Ian Christensen, Director of Private Sector Programs, Secure World Foundation

YANG Kuan, Assistant Professor, Institute of Space Policy and Law, Beijing Institute of Technology

ZHAO Qiming, Vice President of Hi Wing Satellite Operation Division of the Third Institute of China Aerospace Science and Industry Corporation

DONG Lu, Director, Strategic Development, Beijing Commsat Technology Development Co Ltd.

CAI Jingqi, General Manager, Beijing Interstellar Glory Space Technology Co., Ltd

Informal Dialogue and Presentation at Paris Peace Forum: November 2021

On November 11, 2021, Secure World Foundation and Caelus Foundation hosted a Small Group Dialogue on Space Traffic Management and Space Safety between American and Chinese commercial space stakeholders on the margins of the Paris Peace Forum. This informal not-for-attribution dialogue was part of our foundations' ongoing dialogue and research program aimed at enhancing understanding of space commercialization perspectives between the US and China. The following day, SWF, Caelus Foundation and the Chinese Society of Astronautics shared our collective experience in dialogue with a virtual panel session as part of formal Paris Peace Forum agenda, entitled "[How to Establish a Space Commercialization Dialogue between the US and China?](#)" (recording via YouTube).

Media Coverage

As our efforts have expanded, so too has our recognition. Our program has been featured in:



呈现航天主流新闻 传播航天正能量



HOST DR. DAVID M. LIVINGSTON



China's National English News Weekly Since 1958



Outcomes

We have established that this program is effective, viable, and meaningful. By developing a clear, respectful, and productive relationship with our partners, we have created a platform for a critical exchange of views. This has enabled us to bring on increasingly relevant and meaningful contributors to participate and has enabled us to uncover valuable insights.

Some of the more important ideas we have uncovered include:

1. **Both US and Chinese commercial stakeholders want to learn more about the other to make better informed strategic decisions.** US stakeholders view Chinese firms as inevitable future competitors. They largely welcome this competition, but they want it to be under fair and defined rules, and therefore most want to better understand how the Chinese commercial sector operates. Chinese stakeholders want to learn from US companies as examples of best-practice in terms of business acumen and strategy. For example, during our dialogues there was a clear expression that Chinese companies are waiting to see if US space tourism firms can be successful before they consider trying to develop that market capability domestically. Chinese commercial stakeholders also hope that US progress will inspire and spur more substantial Chinese national policy.

2. **Unmatched perspectives and misperceptions play a powerful role in shaping the discourse around this relationship.** One of the earliest and most notable ironies we found while investigating this subject, is that stakeholders in both countries identically argue that the other has major unfair advantages. Both believe the other is better funded, has better government support, and less bureaucratic hurdles. US stakeholders are largely skeptical to how “commercial” China’s commercial space sector really is, believing that the Chinese government plays a dominant role in the sector’s development. Likewise, their Chinese counterparts argued that the two countries’ commercial sectors are quite similar in this regard. Both views are valid to some extent, but are also not quite complete.
3. **China’s commercial sector is dynamic, constantly shifting, and poorly understood.** One of the biggest contributors to these misperceptions is simply how new China’s space sector is. Since it is so young in its development, massive changes can be shockingly rapid. There are also less established reporting and transparency mechanisms in the Chinese context, which makes it very hard to follow unless you are a dedicated watcher and having conversations with active stakeholders. Importantly, Chinese stakeholders told us this difficulty in accessing information was true for them as well and not just an external problem. We have identified multiple important and poorly understood dynamics that would benefit from further investigation. For example, while the common belief is that the national government is the primary direct supporter of Chinese space companies, provincial governments actually play a more dominant role in investment and development funding than the national government. Another important dynamic is the nature of internal competition within the commercial space sector, particularly the growing divide between the “National Team” and the “private companies”. The Chinese commercial space ecosystem is not monolithic and there are a wide range of “commercial” company types in China that could be better understood. Finally, despite the US perception that the Chinese government provides immense support to Chinese commercial companies, it is not uncommon to see these companies express that they feel under-supported compared to their US counterparts.
4. **The difficulty of mapping out and fully understanding the space sector in general exacerbates these misperceptions.** An overarching and fundamental obstacle to better understanding how the two countries are approaching the commercialization of space is: language. Not simply the English - Mandarin divide, which is significant as well, but the language used to describe the value of space. Words like “commercial space”, “Newspace vs old space”, and even “space company” all are poorly defined and create flimsy lenses through which to evaluate current sector realities. If one were to compare the roles of Chinese SOEs to US Prime Contractors, they would likely find many similarities between the two, though they have firmly different associations attached to them. As the global space sector matures, and a clearer view emerges, it will become much easier to effectively compare the realities of commercial development in the US and China. In the meantime, maintaining an active recognition that this field is rapidly developing and going through constant changes is vital while attempting to understand how other countries are attempting similar processes.

Moving Forward

The first three years of this program have been fascinating, challenging, inspiring, occasionally painful, and ultimately rewarding. We’ve had critical conversations, engaged important stakeholders, and illuminated difficult to reach subjects. Put simply: we’ve learned a lot. But this was just the beginning. From here, our plan is to build upon what we have started and establish a sustainable platform that works beyond our small organizations, produces greater insights, and facilitates even more critical conversations. From here we have three primary focus growth areas:

Expanding the Dialogue

The primary dialogue workshops will continue, and the next workshop is being planned for Fall 2022. The workshops will continue to be wide ranging in terms of subjects and potential participants. Alongside these workshops we are developing a more focused series of conversations. These will be publicly broadcast conversations between relevant US and Chinese stakeholders (online) that will focus on one subject per event. Subjects that we are working towards currently are Space Traffic Management (STM) and Space Tourism. Beyond these planned activities, our goal moving forward is to enhance the program by improving its overall quality and sustainability. We plan to do this on three fronts:

1. **Adding additional stakeholders:** We are proud of what our three organizations have achieved with this program in the first three years. However, we also know that in order to make it sustainable for the long-term, this program needs to exist beyond us. On this front, we are working to engage organizations outside of the space realm with more mature expertise that can add new insights, new capabilities, and new approaches to ensure this program is as effective and meaningful as possible.
2. **Maturing the Track II:** By necessity, the first three years of this program were scrappy and experimental. This enabled us to establish what could work and what could not. But now it is time to mature the program. To ensure this program remains effective, our focus will be on more firmly establishing the Track-II nature of the dialogue, working towards clearer bilateral balance. We will better establish the Track II nature of the dialogue by more clearly engaging with our US government counterparts and helping facilitate difficult conversations that are difficult to hold in more diplomatic settings. With this in mind, we know there must be a clear balance of presentation and events that shows that this is a program with equal US and Chinese participation. Covid-19 and geopolitical realities have forced us to shift from a back-and-forth program that takes turns being held in each country. To ensure that the program does not appear too one sided, we will focus on maintaining a clearer balance and utilizing third party country environments as necessary.
3. **Increase public engagement:** Finally, we know we must endeavor to engage with more individuals and be clear and transparent in our work. The US-China relationship is a highly contentious and sensitive subject, particularly in the field of space. We know this, that is why we are here working on it. However, this does bring extra scrutiny to our work and our intentions. By improving on our transparency and increasing awareness on our work, we may not allay all concerns of a dialogue between the US and China, but we hope to at least demonstrate the value of our work and show that there are good reasons to engage in it, regardless of one's personal views.

Summation

Where the US and Chinese conversation in space goes, so does the world. It is undisputed that decisions made in Beijing and Washington impact the planet, space is no different. As such, a dialogue about what space can provide commercially will provide transparency and clarity to the world. Dialogue can also promote clearer understanding of similarities – and, importantly: differences – in understandings and approaches to space commercialization, and thus reduce potential tensions. Caelus Foundation and the Secure World Foundation have established a working relationship with the Chinese Society of Astronautics that provides opportunity for ongoing on informal dialogue between the US and China on commercial space related topics, that can complement state to state level dialogue. The key is to ask the right questions, rather than expecting immediate solutions to such a complex problem.



525 Zang Street, STE. D
Broomfield, CO 80021 USA
v: + 1 303 554 1560
e: info@swfound.org

1779 Massachusetts Ave. NW
Washington, DC 20036 USA
v: + 1 202 568 6212
e: info@swfound.org