NASA-CNSA Collaboration

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Problem Definition

The US has repeatedly banned **Chinese scientists from** attending NASA conferences, resulting in the loss of mutual beneficial gain through the exchange of information





Public Law 112-55, SEC. 539

- a. No funds may be used for a bilateral policy in any way with China or any Chinese-owned company
- b. Applicability the limitation applies to hosting official Chinese visitors at NASA facilities
- c. Certification doesn't apply to activities certified by NASA/OSTP to pose no risk in the transfer of technology, data, or other information
- d. Deadline any certification must be submitted to the Committees on Appropriations of the House of Representatives and the Senate 2 weeks prior and must include a description of the purpose, its major participants, and its location/timing



Government Statements & Legislation

1998

Congressional commission led by Christopher Cox found that China used technical info from US meant for commercial satellites to improve ICBMs Close Sino-US partnership rejected by several American politicians

1999

Rep. Frank Wolf: "They [China] are the evil empire"

2010

Rep. John Culberson urged Obama not to allow contact between NASA & CNSA without Congressional authorization

2011

112th US Congress officially banned NASA from bilateral collaboration with China through Public Law 112-55, SEC. 539

Agenda Setting - Government Opinions

- Chinese space program has a "very heavy military component" Dean Cheng, a policy analyst for the Heritage Foundation
- ▶ Worried about security of research centers that house US high-tech secrets
- Chinese scientist & NASA contractor Bo Jiang caught on way out of US in March 2012 with unauthorized information on a NASA-issued laptop

"Historically, working with Russia has benefited the American space program. Rep. Culberson does not see a benefit for NASA to work with China in the current climate because they've proven to be aggressive in stealing American information."

- Culberson's spokesperson

Agenda Setting - NASA Scientists

- NASA & CNSA administrators both express interest in working together despite
 US law constraining bilateral cooperation
- Scientists willing to exchange scientific data and space situational awareness & space traffic management information

"CNSA is willing to join our hands with other international partners for the benefit of human civilization and progress of human society."

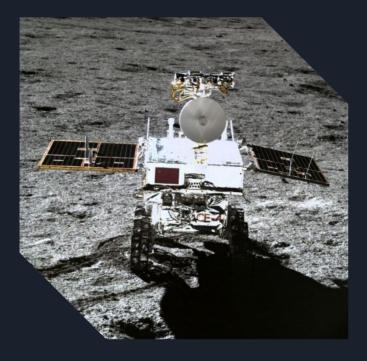
> Zhang Kejian, CNSA administrator, during a panel at the 69th International Astronautical Conference Oct 1, 2018

Criticism of Chinese Exclusion Policy

- 2013 American scientists boycotted NASA meeting to protest NASA Ames officials prohibiting Chinese nationals from attending conference
- "completely shameful and unethical" Geoffrey Marcy, astronomy professor
- "Deplorable 'own goal' by the US" Sir Martin Rees, Astronomer Royal of GB

Recent Developments

- 2003 China = 3rd nation to launch astronauts into orbit
- Russia and China are the only 2 countries
 capable of sending astronauts into space
- Jan. 2019 NASA & China collaborated on observing the landing of Chang'e 4 using NASA's Lunar Reconnaissance Orbiter (LRO)





Main Policy Proposal

Modify Public Law 112-55, Sec. 539 so that official Chinese visitors will be explicitly allowed to attend conferences/conventions in the US without the need for certification

- \triangleright Conferences pose no/low-risk \rightarrow all public information \rightarrow nothing to lose
 - Unpublished research data still secure
- ▷ No delay in issuing visas for visitors
- Open exchange/discussion of ideas to gain knowledge from each other
 - Get-to-know recent Chinese developments

Policy Alternate 1

Only issue visas to Chinese scientists who have submitted presentations for conferences/conventions

 China must agree to mutual exchange of information



Policy Alternate 2

Allow a NASA spokesperson to the Committees on Appropriations of the House of Representatives during times of certification

- NASA insight on bilateral collaboration activity
- Clarifications

 quicker enactment of legislation



Implementation

- Propose a new bill to modify the Public Law 112-55, Sec. 539
- The host of the conference/convention (i.e. a university, research institution) sends a list of all the Chinese scientists who have submitted presentations to the Cmte. on Approp. of the House of Rep. & the Senate
- Started online petition on change.org to raise awareness of issue



Evaluative Criterion

- US scientists create summary of information presented by Chinese representatives to track the amount and topics of the presentations
 - Evaluates benefit of knowledge gained
- Economy not impacted, Chinese reps pay for visa application, lodging, transportation, and conference application
- Public opinion shifts from distrust to the willingness to exchange knowledge (with caution)
- National security still protected, as we are not giving China access to our raw data or our research facilities



Next Steps

- Use the evaluative criterion to decide whether to further loosen or tighten regulations regarding bilateral collaboration between NASA and China
- Educate the public about this topic through social media forums
- Survey the general public about their opinions regarding this issue to gain greater insight about how the mass feels

Thank you for listening