

**TAB 19: NATIONAL AERONAUTICS AND SPACE
ADMINISTRATION**

January 15, 2004

IY

TO: Department of State
Attn: OES/STC/Kay Anske

FROM: I/Assistant Administrator for External Relations

SUBJECT: NASA Cooperation with China

NASA received your request of December 2, 2003, for updated information on NASA's cooperation with China from the last reporting period of March 2002 to the present and NASA's plans for future cooperation.

NASA does not have any agreements with China under the U.S.-China S&T Agreement and other NASA cooperation with China remains extremely limited.

As reported to the Department of State in March 2002, NASA has one agreement with China for Earth science research. Signed in 1992 and amended in 1996 and 2002, this agreement is between NASA and the Chinese Academy of Sciences and allows for limited project-specific activities in plate tectonics and geodynamics research. This agreement is due to expire in 2005. The specifics of the agreement and amendments were forwarded to the State Department in the March 2002 NASA report. The 2002 amendment to the Agreement is located at Attachment 1. There is no exchange of funds between the parties under this Agreement. NASA supported the travel of a contractor for a site survey in Shanghai in 2003 and the budget for this travel was \$2,000.00. Under this Agreement, the following visitors from China visited NASA's Goddard Space Flight Center in 2002 and 2003:

In 2002: Dr. Linling, Li, Manager, Shanghai Observatory
In 2003:
Fumin Yang, Vice Director, Shanghai Observatory
Wanzhen Chen, Staff Engineer, Shanghai Observatory
Zhongping Zhang, Staff Engineer, Shanghai Observatory
Juping Chen, Staff Engineer, Shanghai Observatory

Additionally, in the mid-1990's, NASA concluded nine Space Shuttle-related reimbursable agreements with Chinese entities under NASA's Small Self-Contained Payload program. Due to NASA concerns, all of these agreements have been on indefinite hold since 1998. On June 25, 2003, NASA received a request from the Chinese Academy of Sciences to cancel two of these agreements. NASA accepted this request in a September 23, 2003, letter noting that no outstanding balance was due to

either party. A copy of the cancellation letter is at Attachment 2. The other seven agreements remain on hold.

NASA also previously reported on two agreements with U.S. entities that include indirect Chinese participation. In 2000, NASA, in close coordination with the Department of State, provided a grant to the California Institute of Technology (Caltech) to study microfossils in the Doushanto Formation in Yunnan Province, China. The fossils date 30-50 million years before the beginning of the Cambrian period, and may illuminate the road of pre-Cambrian animal evolution. As a result of this grant, on January 2002, Caltech concluded a collaborative research agreement with the Nanjing Institute of Paleontology in China for joint research. This research is ongoing. Additionally, NASA has an agreement with the U.S. Department of Energy (DOE) on the Alpha Magnetic Spectrometer (AMS) Program, a high-energy particle physics space experiment, to study the origins of the universe from the International Space Station. NASA and DOE are conducting the AMS program under the terms of a 1995 Implementing Arrangement. The Massachusetts Institute of Technology, under a cooperative agreement with DOE, is responsible for the development of the AMS science experiment. Sixteen countries are involved in the development of AMS, including China and Taiwan. Summaries of these Agreements are located at Attachment 3.

As agreed with the Department of State, any new cooperation between NASA and China is predicated on China implementing its November 2000 commitment not to assist any country in any way in the development of nuclear-capable ballistic missiles. Potential NASA cooperation is also impacted by the June 1989 sanctions that place China on the proscribed country list of the International Traffic in Arms Regulations. At the present time, there are no new NASA cooperative initiatives with China being contemplated.

Regarding future activities with China, NASA is awaiting direction from the Department of State on guidelines for civil space cooperation with China before undertaking any new initiatives with China.

Should you have any questions regarding this matter, please do not hesitate to contact me, or Ms. Joan Rolf, NASA's China Team Lead, at 202-358-1669.

(signed)

Michael F. O'Brien

Enclosure

Attachment 1

IY

February 21, 2002

Professor Duo Jin
Director, Bureau of Basic Research
Chinese Academy of Sciences
52 Sanlihe Road
Beijing 100864
People's Republic of China

Dear Professor Jin:

The agreement between NASA and the Chinese Academy of Sciences (CAS) in the Dynamics of Solid Earth Program (hereinafter referred to as the "Agreement") was signed in November 1992 and amended in June 1996. In an effort to make this agreement consistent with current NASA guidelines and procedures for its international agreements, NASA would like to establish an agreed termination date for this cooperation. Therefore, NASA would like to propose that the Agreement remain in force for three years from the date of your affirmative reply to this letter.

If the above proposal is acceptable to CAS, I propose that this letter, together with your affirmative reply, constitutes an amendment to the Dynamics of Solid Earth Agreement of 1992, as amended in 1996.

Cordially,

(signed)

Al Condes
Director
Earth Science Division
Office of External Relations

Attachment 2

September 23, 2003

IH

Professor Yuxin Nie
Institute of Physics
Chinese Academy of Sciences
P.O. Box 603
Beijing 100080
China

Dear Professor Nie:

Thank you for your letter of June 25, 2003, requesting cancellation of two Chinese Academy of Sciences' reservations for Get Away Special (GAS) Numbers G-770 and G-771, hereinafter referred to collectively as "the Reservations," and requesting that NASA reimburse the Chinese Academy of Sciences the \$6,400 paid to NASA for the Reservations.

The terms for NASA's launch of these payloads were established under the two separate agreements signed on August 15, 1996, entitled, *Agreement(s) Between the United States of America Represented by the National Aeronautics and Space Administration and the Chinese Academy of Sciences for Small Self-Contained Payload Launch Services* (Agreement Number 1688-010-00A pertaining to Payload Identification Number G-770 and Agreement Number 1688-011-00A pertaining to Payload Identification Number G-771, hereinafter referred to collectively as "the Agreements"). Pursuant to Article VIII.2 of the Agreements, and your letter of June 25, 2003, NASA understands that the Chinese Academy of Sciences is exercising its right to terminate the Reservations.

Pursuant to the Code of Federal Regulations (CFR) 1214.904(d)(1), in effect at the time the Agreements were concluded and referenced in Article VIII.2 of the Agreements, NASA shall retain the \$1,000 earnest money paid by the Chinese Academy of Sciences to NASA on April 22, 1996, for the Reservations.

Article I.5 of the Agreements states that the Standard Flight Price for each Reservation is \$27,000. NASA acknowledges receipt of payment by the Chinese Academy of Sciences of 10% of the Standard Flight Price in October 1996, in the amount of \$2,700 for each Reservation, totaling \$5,400. Noting that NASA and the Chinese Academy of Sciences have concluded Launch Services Agreements (the Agreements), but that a date for payload delivery to the launch site has not been designated, the provisions of CFR

1214.904(d)(1) require that users who cancel the flight of a payload pay NASA a launch termination fee for standard services in the amount of 10% of the user's standard services price. This amount is \$2,700 for each Reservation. As the sum paid to NASA in 1996 equals the sum due to NASA upon cancellation of the Reservations, NASA has determined that there is no outstanding balance due to either NASA or the Chinese Academy of Sciences resulting from this cancellation.

Please feel free to contact me should you have any questions.

Cordially,

(signed)

Al Condes
Director, Human Space Flight
And Research Division
Office of External Relations

Attachment 3

NASA-DOE-MIT Alpha Magnetic Spectrometer Program

Cooperative Arrangement

NASA has an agreement with the U.S. Department of Energy (DOE) on the Alpha Magnetic Spectrometer (AMS) Program, a high-energy particle physics space experiment, to study the origins of the universe from the International Space Station. NASA and DOE are conducting the AMS program under the terms of a 1995 Implementing Arrangement. The Massachusetts Institute of Technology (MIT), under a cooperative agreement with DOE, is responsible for the development of the AMS science experiment. Sixteen countries are involved in the development of AMS, including China and Taiwan.

Points of Contact

NASA: Dr. Mark Sistilli
NASA AMS Program Manager
Phone: 202-358-2242

DOE: Dr. Asook Wagner
Phone: 301-903-5475

MIT: Dr. Samuel Ting
Phone: 617-253-5065

Funding

NASA's budget for the AMS program is approximately \$22 million over a ten-year period. There is no NASA exchange of funds with any Chinese entities.

NASA Site Access:

1. NASA Johnson Space Center: October 28-November 1, 2002

Qi Li	Southeast University, Nanjing
Cairong Zou	Southeast University, Nanjing
Yusheng Lu	Chinese Academy of Science
Feng Yaoqi	Beijing Institute of Satellite Environment Engineering

2. NASA Johnson Space Center: June 1-30, 2003

Zudong Cai	Massachusetts Institute of Technology (MIT)
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3. NASA Kennedy Space Center: January 12-17, 2003

Wenjiang Den	Shanghai Jiao Tong University
Chaohui Du	Shanghai Jiao Tong University
Zhongliang Jing	Shanghai Jiao Tong University

Yiping Li	Shanghai Jiao Tong University
Ying Su	Shanghai Jiao Tong University
Jungi Yan	Shanghai Jiao Tong University
Qinghao Ye	Shanghai Jiao Tong University
Dewang Zhang	Shanghai Jiao Tong University
Weimin Zhang	Shanghai Jiao Tong University
Jian Gong	Southeast University, Nanjing
Jiangqing Li	Southeast University, Nanjing
Qi Li	Southeast University, Nanjing
Junzhou Luo	Southeast University, Nanjing
Wei Ye	Southeast University, Nanjing
Cairong Zou	Southeast University, Nanjing
Shengyuan Li	Beijing Institute of Satellite Environment Engineering
Shuhong Xiang	Beijing Institute of Satellite Environment Engineering

NASA – California Institute of Technology Fossil Study

Grant Summary

In 2000, NASA, in close coordination with the Department of State, provided a grant to the California Institute of Technology (Caltech) to study microfossils in the Doushanto Formation in Yunnan Province, China. The fossils date 30-50 million years before the beginning of the Cambrian period, and may illuminate the road of pre-Cambrian animal evolution. As a result of this grant, on January 2002, Caltech concluded a collaborative research agreement with the Nanjing Institute of Paleontology in China for joint research.

Points of Contact

NASA: Dr. Terri Lomax

Fundamental Space Biology Division Director
Phone: 202-358-1418

Caltech:

Dr. Eric Davidson
Norman Chandler Professor of Cell Biology
Phone: 626-395-4937

Funding

NASA granted Caltech approximately \$1.2 million for conduct of the study through 2005. NASA has obtained written confirmation from Caltech that no NASA funding is being provided to Chinese entities.

NASA Site Access:

There were no Chinese National visits to any NASA sites in association with this program.

Cooperative Arrangement

NASA has an agreement with the U.S. Department of Energy (DOE) on the Alpha Magnetic Spectrometer (AMS) Program, a high-energy particle physics space experiment, to study the origins of the universe from the International Space Station. NASA and DOE are conducting the AMS program under the terms of a 1995 Implementing Arrangement. The Massachusetts Institute of Technology (MIT), under a cooperative agreement with DOE, is responsible for the development of the AMS science experiment. Sixteen countries are involved in the development of AMS, including China and Taiwan.

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