

MEMORANDUM OF AGREEMENT  
ON  
SATELLITE TECHNOLOGY SAFEGUARDS  
BETWEEN

THE GOVERNMENTS OF THE UNITED STATES OF AMERICA  
AND  
THE PEOPLE'S REPUBLIC OF CHINA

I. Purpose

This Agreement is entered into between the Government of the United States of America and the Government of the People's Republic of China for the purpose of precluding the unauthorized transfer of sensitive technology associated with the possible launching of U.S.-manufactured satellites from the People's Republic of China. It is understood that, except as described in Section II or otherwise authorized by the export licenses issued by the Government of the United States of America, at no time will there be unmonitored or unescorted access to any of the equipment and technical data described below, nor will such equipment and technical data be transferred by any means, including observation. The Government of the People's Republic of China has no intention to obtain any unauthorized proprietary, technical know-how through performing launch services for these satellites.

This Agreement specifies the security procedures to be followed for launch of U.S.-manufactured satellites from the territory of the People's Republic of China. This Agreement controls access to the U.S.-manufactured spacecraft (satellite and kick motors), support equipment, ancillary items, components and spare parts thereof (hereinafter "equipment"), and all related technical data (hereinafter "technical data" \*).

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\* "technical data" means, for the purposes of this Agreement: (a) classified information relating to the equipment; (b) information covered by an invention secrecy order; and (c) information which is directly related to the design, engineering, development, production, processing, manufacture, use, operation, overhaul, repair, maintenance, modification, or reconstruction of the equipment. This includes, for example, information in the form of blueprints, drawings, photographs, plans, instructions, computer software, and documentation.

This Agreement applies to all phases of launch activities, including activities at all facilities of the satellite supplier (hereinafter "consignee"), transportation of the spacecraft between the United States of America and the People's Republic of China, and in the People's Republic of China.

The security procedures specified in this Agreement take precedence over the procedures detailed in the technology control plans in the contracts regarding the launch of U.S.-manufactured satellites between the consignee and the Chinese launch provider (hereinafter the "Technology Control Plan"). Compliance with both this government-to-government agreement and the Technology Control Plan is required. Any conflict between the provisions of this Agreement and the provisions of the Technology Control Plan will be resolved in favor of this Agreement. If the Government of the United States of America determines that there is clear evidence that any provisions of either this Agreement or the Technology Control Plan between the consignee and the Chinese launch provider have been violated, it may suspend or revoke the export license(s). Furthermore, nothing in this Agreement should be construed to mean that the Government of the United States of America will be constrained from taking any action on the license(s) consistent with United States laws and regulations. Nevertheless, the Government of the United States of America will do its utmost to assure continuity of the license(s) and completion of the transaction covered by the license(s). In the event the license(s) are revoked, the Government of the People's Republic of China agrees to cooperate in the return of any equipment and technical data that was transferred prior to revocation.

## II. Authorized Technical Data

Disclosure of technical data by the consignee will be limited to public domain information and information essential to the fulfillment of contractually designated tasks, and will be limited, additionally, to the interface information specified below.

Disclosure of technical data controlled by the Government of the United States of America will be limited only to the interface information specified below. No additional controlled technical data or other information will be disclosed without the prior written approval of the Government of the United States of America. Only the

following interface form, fit, and function data that describe mechanical and electrical mating requirements for attaching the spacecraft to the launch vehicle are authorized for release: orbit requirements; launch window; weight; center of gravity; envelope; dynamic loading; power usage/conditioning; interface adaptor requirements; environmental requirements; propellant requirements; frequency plans, including telemetry, tracking & control (TT&C); safety plans; test flows; separation characteristics; groundhandling/test equipment; and test/flight event sequences.

The Government of the People's Republic of China agrees not to transfer by any means (including observation or the assigning of personnel to assist third countries or parties) any technical data in any form concerning the satellite or interface systems to any third party or country without the prior written approval of the Government of the United States of America.

### III. Unauthorized Technical Data and Assistance

Disclosure of technical data not specifically authorized is prohibited. The People's Republic of China will not seek, and the consignee will not provide, any assistance, other than that described in Section II, to the People's Republic of China relating to the design, development, operation, maintenance, modification, or repair of the equipment (as defined in Section I), launch facility, or launch vehicle. Any such provision or acquisition of data will constitute a violation of this Agreement.

### IV. Access Controls

#### A. United States Government Oversight

The Government of the United States of America shall oversee and monitor implementation of the Technology Control Plan, and the Government of the People's Republic of China shall permit and facilitate that monitoring.

Access to all equipment and technical data will be controlled on a 24-hour basis by U.S. persons\*\* who have received training in security procedures from the Government of the United States of America. Such persons shall control access throughout launch preparations, satellite transportation, mating/demating, test and checkout, satellite launch, and return of equipment to the United States of America.

The Government of the People's Republic of China agrees that the Government of the United States of America has the right to inspect the equipment and technical data which is provided by the consignee to the People's Republic of China and/or is located at the consignee's facilities, without prior notice to the Government of the People's Republic of China or the consignee. Furthermore, the Government of the People's Republic of China agrees that the Government of the United States of America has the right to inspect and monitor, including electronically through a closed circuit television system and other electronic devices compatible with launch operations and launch safety, all areas where the consignee's equipment and technical data are located, including the spacecraft clean operation area after the mating of the spacecraft to the launch vehicle. The Government of the United States of America does not intend that these actions interfere with the launch preparation and/or harm launch safety.

One side shall give timely notice to the other side of any operations that may create a conflict between access control and monitoring requirements of the two sides so that suitable arrangements can be agreed on to safeguard the controlled equipment, information and technical data of both sides. Under no circumstances shall the United States consignee's control of access and monitoring of all equipment and technical data pertaining to the U.S.-manufactured satellite be denied or interrupted.

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\*\* "U.S. person(s)" means, for the purposes of this Agreement: a natural person who is a citizen or national of the United States of America, or has been lawfully admitted to the United States of America for permanent residence under the Immigration and Nationality Act of the United States of America, as amended, and maintains such a residence.

## B. Badge Access Controls

All persons, including employees of the consignee, Government of the United States of America personnel, and non-U.S. persons, are required to display prominently identification badges while performing duties associated with the launch. In the case of U.S. persons, the badges will be issued by the Government of the United States of America, or a private United States firm designated by the Government of the United States of America, and will identify the individual bearer by name, photo, access authorization, and facility access.

In the case of non-U.S. persons performing launch-associated duties at the consignee's facilities, a temporary identification badge will be issued, distinctive in color, which will be marked "visitor." Issuance of these badges will be controlled by the consignee.

Access to the facilities housing the equipment and technical data or facilities where the spacecraft and/or motors are located, assembled, tested, or stored will only be permitted as specified by the badge and will be limited, to the greatest extent possible, to U.S. persons. Non-U.S. persons will be escorted at all times in these areas by U.S. persons who have received training in security procedures from the Government of the United States of America.

## V. Satellite Processing

### A. Spacecraft to Launch Vehicle Integration

Access by non-U.S. persons or People's Republic of China representatives at the consignee's facilities will be controlled as provided in Section IV of this document. In the case of testing the equipment, non-U.S. persons shall be permitted access only as needed for test validation of the adaptors designed to tie the spacecraft to the launch vehicle. Testing of the adaptors shall be performed at a location separate from the facilities housing the spacecraft. Non-U.S. persons shall not be permitted to observe testing of equipment other than the adaptors.

## B. Transportation of the Spacecraft

The spacecraft, and other equipment, will be transported to the People's Republic of China aboard a U.S.-registered aircraft operated by U.S. persons. Non-U.S. persons may join the aircraft at the point-of-entry designated by the Government of the People's Republic of China to perform navigational duties from the point-of-entry to the launch site. Non-U.S. persons shall not be permitted in the cargo area of the aircraft during flight.

The Government of the People's Republic of China agrees that the aircraft carrying the spacecraft, equipment, and technical data, as well as its cargo, can pass through Customs in the People's Republic of China without inspection, and will not be subject to inspection while in the People's Republic of China. However, the flight manifest will be made available to People's Republic of China Customs officials. Issuance of an export license to the consignee by the Government of the United States of America will be conditioned expressly on the consignee's commitment not to carry aboard the aircraft transporting the spacecraft (and related equipment and technical data) any contraband goods unrelated to the launch activities. A further proviso on the export license will be the consignee's commitment that the aircraft as well as its cargo is in compliance with relevant Customs regulations of the People's Republic of China.

In the event of accident or crash in the territory of the People's Republic of China of the aircraft transporting the spacecraft, recovery terms of Section VI shall apply.

## C. Preparations at Launch Site

Non U.S. persons may unload the aircraft and deliver the sealed crates to the satellite preparation area at the launch site under supervision of U.S. persons. Unless specifically permitted by persons authorized by the Government of the United States of America, non-U.S. persons will not be allowed into the satellite preparation area for any purpose while the satellite or any related equipment, including the kick motors, is being tested and/or prepared for integration. If non-U.S. persons are allowed into the satellite preparation area, they must be escorted at all times by U.S. persons.

#### D. Launch Pad Operations

U.S. persons shall assemble the spacecraft, add propellant to the spacecraft, and place the spacecraft in the fairing. The transport vehicle carrying the sealed container may be driven by a national of the People's Republic of China, under supervision of U.S. persons. Satellite preparation and testing at the launch pad will be conducted by U.S. persons. U.S. persons shall monitor access to the spacecraft clean operation area once the spacecraft and the launch vehicle are integrated.

At the commencement of joint operations \*\*\*, each side shall insure that an official from its appropriate government office, who has comprehensive knowledge and understanding of the requirements of this Agreement, is at the launch site. These officials shall have the necessary authority and seniority to require all personnel of their respective sides, including launch facility, launch vehicle, and satellite personnel, to implement the provisions of this Agreement.

#### VI. Launch Failure, Delay, or Cancellation

U.S. persons shall control or supervise removal of the fairing or access to the payload bay or any U.S.-supplied equipment in the event of a launch delay requiring such procedures. U.S. persons must be present if the satellite is exposed or removed from the launch vehicle after the satellite is mated to the launch vehicle. The satellite shall be under U.S. control from the launch pad to the satellite preparation area, where it shall be repaired for remating or dismantled for return to the United States of America. U.S. persons shall control the satellite upon return to the launch pad and shall remate the satellite. In the event the launch is cancelled, the satellite, equipment, and technical data shall be loaded under the control of U.S. persons onto a U.S.-registered aircraft

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\*\*\* "joint operations" means, for the purposes of this Agreement: operations where nationals of both sides require direct physical and visual access to the satellite, launch vehicle or associated equipment in order to perform integration and testing. Typically this begins with activities associated with integration of the satellite to the launch vehicle adaptor.

for return to the United States of America under the same procedures pursuant to which the satellite and related equipment and technical data initially entered the territory of the People's Republic of China, including the provisions of Section V(B) of this agreement.

In the event of a launch failure after liftoff, the Government of the People's Republic of China agrees to permit U.S. persons to assist in the search for and recovery of any and all parts/debris from the spacecraft resulting from the accident. A U.S.-controlled "satellite debris recovery site" shall be located near the launch facility. Access to this location shall be controlled as provided in Section IV of this agreement.

The Government of the People's Republic of China shall return all items associated with the spacecraft recovered by its nationals immediately to the United States of America without having examined or photographed them in any manner. The People's Republic of China shall permit Government of the United States of America satellite accident search and recovery personnel to have access to the accident site.

#### VII. Post-Launch Procedures

All equipment and technical data associated with the launch brought into the People's Republic of China, including equipment to test the satellites and "failed units," shall be dismantled by U.S. persons, and such equipment and data shall be returned to the United States of America aboard a U.S.-registered aircraft. Procedures described in Section V(B-D) will be followed, including exemption from customs inspection.

#### VIII. Conduct of U.S. Persons While in the PRC

U.S. persons, while in the People's Republic of China supporting these launch activities, shall observe the published laws and regulations of the country. These persons shall not engage in business or commercial activities beyond or in conflict with the provisions of this Agreement. U.S. persons shall not engage in activities that will harm launch safety or would lead to the transfer of Chinese launch vehicle and launch operations technology.



IX. Settlement of Disputes

Disputes between the parties, regarding the application and interpretation of this Memorandum of Agreement, shall be resolved by consultation through diplomatic channels.

X. Entry into Force

The Agreement shall enter into force upon signature by the Government of the United States of America and the Government of the People's Republic of China. Upon entry into force, this Agreement shall supersede the Memorandum of Agreement on Satellite Technology Safeguards between the Governments of the United States of America and the People's Republic of China, done at Washington, December 17, 1988.

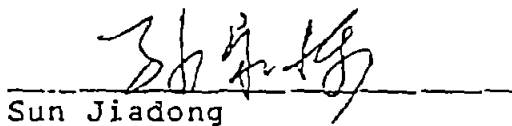
In witness whereof, the undersigned, being duly authorized by their respective governments, have signed this Agreement.

Done at Beijing in duplicate, in the English and Chinese languages, both texts being equally authentic, this 11<sup>th</sup> day of February, 1993.

For the Government of the  
United States of America

  
J. Stapleton Roy

For the Government of the  
People's Republic of China

  
Sun Jiadong

Excellency:

I have the honor to refer to recent discussions between representatives of our two governments concerning the launch of the U.S.-manufactured Asiasat-II satellite scheduled occur from the territory of the People's Republic of China in August 1995 ("the Asiasat-II launch") and the Memorandum of Agreement on Satellite Technology Safeguards concluded by our two governments on February 11, 1993 ("the MOA"). I have the honor to propose that our governments agree as follows:

- 1) For purposes of the Asiasat-II launch only, notwithstanding the first sentence of section V(B) of the MOA, the satellite may be transported to the People's Republic of China aboard a U.S.-registered aircraft operated by non-U.S. persons, who shall not be permitted in the cargo areas of the aircraft during the flight.
- 2) All other provisions of the MOA shall remain applicable to the Asiasat-II launch.

If the foregoing is acceptable to your Excellency's Government, I have the further honor to propose that this Note, together with your Excellency's reply to that effect, shall constitute an agreement between our two governments effective from the date of Your Excellency's reply.

Accept, Excellency, the assurances of my highest consideration.