

this paragraph (h), and this contract shall be modified in writing accordingly.

(i)(1) If, before delivery and acceptance by the Government, any aircraft is damaged, lost, or destroyed and the Government has under this clause assumed the risk of that damage, loss, or destruction, the Government shall either

(i) Require that the aircraft be replaced or restored by the Contractor to its condition immediately prior to the damage or

(ii) Terminate this contract with respect to that aircraft.

(2) If the Government requires that the aircraft be replaced or restored, an equitable adjustment shall be made in the amount due under this contract and in the time required for its performance, and the contract shall be modified in writing accordingly.

(3) If this contract is terminated under this paragraph (i)(1)(ii) with respect to the aircraft, and under this clause the Government has assumed the risk of the damage, loss, or destruction, the Contractor shall be paid the contract price for the aircraft (or, if applicable, any work to be performed on the aircraft) less any amounts the Contracting Officer determines (i) that it would have cost the Contractor to complete the aircraft (or any work to be performed on it), together with any anticipated profit on the uncompleted work and (ii) to be the value, if any, of the damaged aircraft or any remaining portion of it retained by the Contractor. The Contracting Officer shall have the right to prescribe the manner of disposition of the damaged, lost, or destroyed aircraft or any remaining parts of it, and, if the Contractor incurs additional costs as a result of such disposition, a further equitable adjustment shall be made in the amount due to the Contractor.

(j)(1) If the Contractor is at any time reimbursed or compensated by any third person for any damage, loss, or destruction of any aircraft, the risk of which has been assumed by the Government under this clause and for which the Contractor has been compensated by the Government, it shall equitably reimburse the Government.

(2) The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any such damage, loss, or destruction and, upon the request of the Contracting Officer, shall at the Government's expense furnish to the Government all reasonable assistance and cooperation (including the prosecution of suits and the execution of instruments of assignment or subrogation in favor of the Government) in obtaining recovery.

[61 FR 55772, Oct. 29, 1996]

#### **1852.228-71 Aircraft flight risks.**

(a) As prescribed in 1828.311-2, insert the following clause:

#### **AIRCRAFT FLIGHT RISKS (DEC 1988)**

(a) Notwithstanding any other provision of this contract (particularly paragraph (g) of the Government Property (Cost-Reimbursement, Time-and-Materials, or Labor-Hour Contracts) clause and paragraph (c) of the Insurance—Liability to Third Persons clause), the Contractor shall not: (1) Be relieved of liability for damage to, or loss or destruction of, aircraft sustained during flight or (2) be reimbursed for liabilities to third persons for loss of or damage to property or for death or bodily injury caused by aircraft during flight, unless the flight crew members have previously been approved in writing by the Contracting Officer.

(b) For the purposes of this clause—

(1) Unless otherwise specifically provided in the Schedule, "aircraft" includes any aircraft, whether furnished by the Contractor under this contract (either before or after Government acceptance) or furnished by the Government to the Contractor under this contract, including all Government property placed or installed or attached to the aircraft, unless the aircraft and property are covered by a separate bailment agreement.

(2) "Flight" includes any flight demonstration, flight test, taxi test, or other flight made in the performance of this contract, or for the purpose of safeguarding the aircraft, or previously approved in writing by the Contracting Officer.

(i) With respect to land-based aircraft, flight commences with the taxi roll from a flight line and continues until the aircraft has completed the taxi roll to a flight line.

(ii) With respect to seaplanes, flight commences with the launching from a ramp and continues until the aircraft has completed its landing run and is beached at a ramp.

(iii) With respect to helicopters, flight commences upon engagement of the rotors for the purpose of take-off and continues until the aircraft has returned to the ground and rotors are disengaged.

(iv) With respect to vertical take-off aircraft, flight commences upon disengagement from any launching platform or device and continues until the aircraft has been re-engaged to any launching platform or device.

(3) "Flight crew members" means the pilot, copilot, and, unless otherwise specifically provided in the Schedule, the flight engineer and navigator when required or assigned to their respective crew positions to conduct any flight on behalf of the Contractor.

(c) (1) If any aircraft is damaged, lost, or destroyed during flight and the amount of the damage, loss, or destruction exceeds \$100,000 or 20 percent of the estimated cost, exclusive of any fee, of this contract, whichever is less, and if the Contractor is not liable for the damage, loss, or destruction

under the Government Property (Cost-Reimbursement, Time-and-Materials, or Labor-Hour Contracts) clause of this contract or under paragraph (a) of this clause, an equitable adjustment for any resulting repair, restoration, or replacement required under this contract shall be made: (i) In the estimated cost, the delivery schedule, or both and (ii) in the amount of any fee to be paid to the Contractor, and the contract shall be modified in writing accordingly.

(2) In determining the amount of adjustment in the fee that is equitable, any fault of the Contractor, its employees, or any subcontractor that materially contributed to the damage, loss, or destruction shall be taken into consideration.

(End of clause)

[54 FR 28340, July 5, 1989, as amended at 61 FR 55774, Oct. 29, 1996]

**1852.228-72 Cross-waiver of liability for space shuttle services.**

As prescribed in 1828.371 (b) and (e), insert the following clause:

CROSS-WAIVER OF LIABILITY FOR SPACE SHUTTLE SERVICES (SEP 1993)

(a) As prescribed by regulation (14 CFR part 1266), NASA agreements involving Space Shuttle flights are required to contain broad cross-waivers of liability among the parties and the parties related entities to encourage participation in space exploration, use, and investment. The purpose of this clause is to extend this cross-waiver requirement to Contractors and related entities under their contracts. This cross-waiver of liability shall be broadly construed to achieve the objective of encouraging participation in space activities.

(b) As used in this clause, the term:

(1) *Contractors* and *Subcontractors* include suppliers of any kind.

(2) *Damage* means:

(i) Bodily injury to, or other impairment of health of, or death of, any person;

(ii) Damage to, loss of, or loss of use of any property;

(iii) Loss of revenue or profits; or

(iv) Other direct, indirect, or consequential damage;

(3) *Party* means a person or entity that signs an agreement involving a Space Shuttle service;

(4) *Payload* means all property to be flown or used on or in the Space Shuttle; and

(5) *Protected Space Operations* means all Space Shuttle and payload activities on Earth, in outer space, or in transit between Earth and outer space performed in furtherance of an agreement involving Space Shuttle services or performed under this contract. "Protected Space Operations" ex-

cludes activities on Earth which are conducted on return from space to develop further a payload's product or process except when such development is for Space Shuttle-related activities necessary to implement an agreement involving Space Shuttle services or to perform this contract. It includes, but is not limited to:

(i) Research, design, development, test, manufacture, assembly, integration, operation, or use of the Space Shuttle, transfer vehicles, payloads, related support equipment, and facilities and services;

(ii) All activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services.

(6) *Related entity* means:

(i) A party's Contractors or subcontractors at any tier;

(ii) A party's users or customers at any tier; or

(iii) A Contractor or subcontractor of a party's user or customer at any tier.

(c) (1) The Contractor agrees to a waiver of liability pursuant to which the Contractor waives all claims against any of the entities or persons listed in paragraph (c)(1)(i) through (c)(1)(iii) of this clause based on damage arising out of Protected Space Operations. This waiver shall apply only if the person, entity, or property causing the damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. This waiver shall apply to any claims for damage, whatever the legal basis for such claims, including but not limited to delict (a term used in civil law countries to denote a class of cases similar to tort) and tort (including negligence of every degree and kind) and contract, against:

(i) Any party other than the Government;

(ii) A related entity of any party other than the Government; and

(iii) The employees of any of the entities identified in (c)(1)(i) and (c)(1)(ii) of this clause.

(2) The Contractor agrees to extend the waiver of liability as set forth in paragraph (c)(1) of this clause to subcontractors at any tier by requiring them, by contract or otherwise, to agree to waive all claims against the entities or persons identified in paragraphs (c)(1)(i) through (c)(1)(iii) of this clause.

(3) For avoidance of doubt, this cross-waiver includes a cross-waiver of liability arising from the Convention on International Liability for Damage Caused by Space Objects, (March 29, 1972, 24 United States Treaties and other International Agreements (U.S.T.) 2389, Treaties and Other International Acts Series (T.I.A.S.) No. 7762 in which the person, entity, or property causing the damage is involved in Protection Space Operations, and the person, entity, or property damaged is