

**PROTOCOL ON ICBM AND SLBM THROW-WEIGHT RELATING TO THE  
TREATY BETWEEN THE UNITED STATES OF AMERICA AND  
THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE REDUCTION AND  
LIMITATION OF STRATEGIC OFFENSIVE ARMS**

Pursuant to and in implementation of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Reduction and Limitation of Strategic Offensive Arms, hereinafter referred to as the Treaty, the Parties hereby agree upon procedures governing the determination and accountability of ICBM and SLBM throw-weight.

**I. Determination and Accountability of ICBM and SLBM Throw-weight**

1. The throw-weight demonstrated in a flight test of an ICBM or SLBM shall be:
  - (a) for an ICBM or SLBM the final stage of which executes a procedure for dispensing reentry vehicles, the aggregate weight of that stage including its propellant and elements not separated from the stage, at the time at which the first release of a reentry vehicle or penetration aid occurs, and its payload;
  - (b) for an ICBM or SLBM that is not an ICBM or SLBM the final stage of which executes a procedure for dispensing reentry vehicles, the weight of the payload of the final stage or final stages.
2. For each ICBM or SLBM of an existing type, the accountable throw-weight shall be the greatest throw-weight demonstrated in flight tests of an ICBM or SLBM of that type.
3. For each ICBM or SLBM of a new type, the accountable throw-weight shall be the greatest throw-weight demonstrated in flight tests of an ICBM or SLBM of that type, which shall be determined subject to the following provisions:
  - (a) The greatest throw-weight demonstrated in flight tests of an ICBM or SLBM of a new type shall be no less than the maximum calculated throw-weight that an ICBM or SLBM of that type could deliver to a distance of 11,000 kilometers for ICBMs, or to a distance of 9500 kilometers for SLBMs.
  - (b) None of the first seven flight tests shall be taken into account in determining the greatest throw-weight demonstrated in flight tests of an ICBM or SLBM of a new type unless the throw-weight demonstrated in such a flight test exceeds the greatest throw-weight demonstrated in subsequent flight tests by more than 20 percent or 250 kilograms, whichever is less, prior to an ICBM or SLBM of that type becoming subject to the limitations provided for in Article II of the Treaty.

4. The maximum calculated throw-weight that an ICBM or SLBM of a new type could deliver to a particular distance shall be calculated by the Party developing such a missile using its own methods of calculation, subject to the following conditions:

- (a) the distance to which the throw-weight is delivered shall be measured along the projection of the missile's flight trajectory on the Earth's surface between the launch point and the point that a reentry vehicle that is released immediately after termination of the main engine thrust of the final stage is projected to impact the Earth;
- (b) a spherical, non-rotating Earth;
- (c) a vacuum ballistic trajectory for the reentry vehicle;
- (d) a full propellant load for each stage; and
- (e) the residual propellant in each stage shall not be greater than one percent for solid-propellant ICBMs or SLBMs, or two percent for liquid-propellant ICBMs or SLBMs.

5. Each Party undertakes not to increase the accountable throw-weight of an ICBM or SLBM of an existing type, as determined in accordance with paragraph 2 of this Section, by more than 21 percent of its initial accountable throw-weight.

6. Notifications concerning data on throw-weight of ICBMs or SLBMs in connection with this Protocol shall be provided in accordance with Section III of the Notification Protocol. Throw-weight values, measured in kilograms, shall be specified to the nearest value evenly divisible by 50.

7. In the event of a dispute concerning the initial value of accountable throw-weight of an ICBM or SLBM of a new type, or an increased value of accountable throw-weight of an ICBM or SLBM of an existing or new type, specified in a notification provided in accordance with Section III of the Notification Protocol, the accountable throw-weight shall be the value specified in such notification until such dispute is resolved in the Joint Compliance and Inspection Commission.

## **II. Verification**

1. Verification of compliance with provisions of this Protocol shall be by national technical means of verification.

2. To facilitate verification, for an ICBM and SLBM of each new type, two preannounced flight tests shall be conducted either in the 12-month period prior to an ICBM or SLBM of that type becoming subject to the limitations provided for in Article II of the Treaty, or from among the last five flight tests prior to an ICBM or SLBM of that type becoming subject to the limitations provided for in Article II of the Treaty.

3. No more than one pre-announced flight test of an ICBM or SLBM shall be conducted pursuant to paragraph 2 of this Section in any 30-day period.

This Protocol is an integral part of the Treaty and shall enter into force on the date of entry into force of the Treaty and shall remain in force so long as the Treaty remains in force. As provided for in subparagraph (b) of Article XV of the Treaty, the Parties may agree upon such additional measures as may be necessary to improve the viability and effectiveness of the Treaty. The Parties agree that, if it becomes necessary to make changes in this Protocol that do not affect substantive rights or obligations under the Treaty, they shall use the Joint Compliance and Inspection Commission to reach agreement on such changes, without resorting to the procedure for making amendments set forth in Article XVIII of the Treaty.

Done at Moscow on July 31, 1991, in two copies, each in the English and Russian languages, both texts being equally authentic.

**FOR THE UNITED STATES OF AMERICA:**

George Bush  
President of the United States of America

**FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:**

M. Gorbachev  
President of the Union of Soviet Socialist Republics