#### National Aeronautics and Space Admin.

If the Spacelab load fraction (and Shuttle load factor) is:	The element charge fac- tor and Shuttle charge factor will be:		
Greater than 0.87	1.0		

# (iii) Element charge factors for shared pallets.

If the Spacelab load fraction is:	The element charge fac- tor will be:
Less than 0.0189	0.0218 Spacelab load fraction divided by 0.87
Greater than 0.87	1.0

## (iv) Shuttle charge factors for shared pallets.

If the Shuttle load factor is:	The Shuttle charge factor will be:
Less than 0.00375 0.00375 to 0.75	0.005 Shuttle load factor
Greater than 0.75	divided by 0.75 1.0

- (v) *Total reimbursement.* (A) The customer's total reimbursement is as defined in §1214.119(d)(6)(iii).
- (B) If a customer contracts for portions of more than one element, the charges for the use of the elements will apply individually to each element used.
- (vi) Pressurized module experiment volume. Experiment volume in the pressurized module is defined to be the sum of the customer's payload volume in racks and in the center aisle.
- (A) Rack volume is defined relative to basic Air Transportation Rack (ATR) configurations. The customer's rack volume will be defined as the volume of one or more rectangular parallelepipeds (rectangular-sided boxes) which totally enclose the cuss payload. Width dimensions will be either 45.1 or 94.0 centimeters. Height dimensions will be integral multiples of 4.45 centimeters. Depth dimensions will be 61.2 or 40.2 centimeters.
- (B) Center aisle space volume is defined as the volume of a rectangular parallelepiped which totally encloses the customer's payload. No edge of the parallelepiped will be less than 30 centimeters in length.
- (vii) Pressurized module storage volume. Storage volume in the pressurized module is defined as the volume of one or more rectangular parallelepipeds enclosing the customer's stowed payload.

No edge of the parallelepiped(s) will be less than 30 centimeters in length.

(viii) Pallet payload volume. Volume of the customer's pallet-mounted payload is defined as the volume of a rectangular parallelepiped enclosing the pallet payload and customer-dictated mounting hardware. No edge of the parallelepiped will be less than 30 centimeters in length.

#### Subpart 1214.2—Reimbursement for Shuttle Services Provided to Civil U.S. Government Users and Foreign Users Who Have Made Substantial Investment in the STS Program

Source: 42 FR 8631, Feb. 11, 1977, unless otherwise noted.

#### § 1214.200 Scope.

This subpart 1214.2 sets forth:

- (a) The policy on reimbursement for Shuttle services which are provided by NASA to users (as defined in §1214.201) under launch services agreements, and
- (b) Responsibilities for putting such policy into effect and carrying it out.

#### § 1214.201 Definition.

For the purpose of this subpart, the term *users* means:

- (a) For all civil U.S. Government agencies who request Shuttle services from NASA, and
- (b) Foreign users who have made substantial investment in the STS program, i.e., European Space Agency (ESA), ESA member or observer nations participating in Spacelab development, and Canada, when conducting experimental science or experimental applications missions with no near-term commercial implications.

#### § 1214.202 Reimbursement policy.

- (a) Features of policy. (1) All users will be charged on a fixed price basis; there will be no post-flight charges, except for prespecified optional services.
- (2) The price will be based on estimated costs.
- (3) The price will be held constant for flights in the first three years of Space Transportation System (STS) operations.

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- (4) Payments shall be escalated according to the Bureau of Labor Statistics Index for Compensation per hour, Total Private.
- (5) Subsequent to the first three years, the price will be adjusted annually to insure that total operating costs are recovered over a twelve-year period.
- (6) Pricing incentives are designed to maximize the proper utilization of the STS.
- (b) *Dedicated flight reimbursements.* (1) For the purposes of this policy, a dedicated flight is one sold to a single user.
- (2) The policy is established for two distinct phases of Shuttle operations. The first phase is through the third full fiscal year of Shuttle operations and the second phase consists of nine full fiscal years subsequent to the first phase.
- (i) For a dedicated Shuttle flight during the first phase, NASA shall be reimbursed in an amount which is a prorata share of forecast additive costs averaged over the first phase of three years; however, the price shall not be less than a pro-rata share of forecast total operating costs averaged over both the first and second phases of the twelve year Shuttle operation period.
- (ii) For a dedicated Shuttle flight during the second phase, NASA shall be reimbursed a pro-rata share of forecast total operating costs over both phases to insure that total operating costs are recovered over the twelve year period.
- (iii) The definition of the costs are specified in this subpart are set forth in appendix A to this subpart.
- (iv) Subject to NASA approval, a dedicated flight user may apportion and assign STS services to other STS users provided they satisfy STS user requirements. The price of integrating additional payloads will be negotiated.
- (v) A summary of standard Shuttle services included in the flight price is set forth in appendix B to subpart 1214.1.
- (vi) The prices of optional Shuttle services are being developed and shall be set forth in the Shuttle Price Book which is being developed. A summary of the optional services is set forth in appendix C to subpart 1214.1.
- (vii) For the user with an experimental, new use of space or first time

use of space of great public value, the reimbursement to NASA for the dedicated, standard Shuttle flight in either the first or second phase shall be a prorata share of the average twelve year additive costs as estimated at the time of negotiations. Programs which qualify for this price will be determined by an STS Exceptional Program Selection Process. In all cases, the Administrator will be the selection official.

(viii) For dedicated flight users, NASA and the user will identify a desired launch date within a period of ninety days three years prior to flight. One year prior to the flight, a firm launch and payload delivery date will be identified by NASA. The firm launch date will be within the first sixty days of the original ninety day period. Launch will occur on the firmly scheduled launch date or within a period of thirty days thereafter. The payload must be ready to launch for the duration of that period.

(c) Shared flight reimbursements. (1) The price of a shared Shuttle flight will be a fraction of the dedicated Shuttle flight price. The fraction will be based on the length and weight of the payload and the mission destination at the time of contract negotiations. The formula for computing the fraction is set forth in appendix D to subpart 1214.1.

(2) For shared flight users, NASA and the user will identify a desired launch date three years prior to flight. Launch will occur within a period of ninety days, beginning on the desired launch date. One year prior to flight, a payload delivery date and a firm launch date will be coordinated among the shared flight users. This firm launch date will be within the first thirty days of the original ninety day period. The launch will occur on the firmly scheduled launch date or within a perod of sixty days thereafter. The payloads must be ready to launch for the duration of that period.

(3) A 20 percent discount on the standard flight price will be given to shared flight users who will fly on a space-available (standby) basis. NASA will provide launch services within a prenegotiated period of one year. Shared flight payloads must be flight deliverable to the launch site on the

first day of the one year period and sustain that condition until delivery to the launch site. The user will be notified sixty days prior to the firmly scheduled launch date which has been established by NASA. At that time, NASA will also establish a payload delivery date. The payload must be available at the launch site on the assigned delivery date and ready to launch for a period of sixty days after the firmly scheduled launch date.

- Small self-contained payloads. Packages under 200 pounds and smaller than five cubic feet which require no Shuttle services (power, deployment, etc.), and are for R&D purposes, will be flown on a space-available basis during both phases of Shuttle operation. The price for this service will be negotiated based on size and weight, but will not exceed \$10,000 in 1975 dollars. A minimum charge of \$3,000 in 1975 dollars will be made. If Shuttle services are required, the price will be individually negotiated. Reimbursement to NASA will be made at the time the package is scheduled for flight.
- (e) Options. (1) In order to allow the user greater flexibility in selecting a launch date, the user may purchase a "floating launch date" option. At the time of contract execution, the user will begin to make payments according to a 33 month reimbursement schedule for this launching. At any time during Phase 1 or 2, the user may exercise this option by informing NASA of his desired launch date for this option which will then be negotiated by NASA and the user. This launch date must be at least 33 months after the date of the first reimbursement payment. If the desired launch date is within one year of the date of declaration, the short term call-up option and associated fee will apply. If the desired launch is to occur in a year for which a new price per flight is in effect, the user will pay the new price. The fee for this option is 10 percent of the user's flight price in effect at the time of contract execution and is payable at that time. This fee will not be applied to the price of the user's flight.
- (2) Options must be exercised for a flight by the end of the second phase of operations or the option fee will be retained by NASA.

- (f) Fixed price period and escalation. (1) The price will remain constant for flights during the first phase of Shuttle operations. For flights during the second phase, the price wil be adjusted on a yearly basis, if necessary, to assure revovery of total operating costs over a twelve-year period. These adjusted prices will be applicable only to agreements executed after the adjustment is made.
- (2) Shuttle services for both phases will be contracted on a fixed price basis. The payments in the contract will be escalated to the time of the payment using the Bureau of Labor Statistics Index for Compensation per hour. Total Private.
- (g) Earnest money. Earnest money shall be paid to NASA prior to NASA's accepting a launch reservation. The earnest money required shall be \$100,000 per payload; however, if the payload is a small self-contained payload, the earnest money shall be \$500.00 per payload. The earnest money shall be applied to the first payment for each payload made by the customer, or shall be retained by NASA if a launch services agreement is not signed.
- (h) Reimbursement schedule. (1) Reimbursement shall be made in accordance with the reimbursement schedule contained in this subsection. No charges shall be made after the flight, except as negotiated in the contract for prespecified extra services. Those users who contract for Shuttle services less than three years before the desired launch date will be accommodated and will pay on an accelerated basis according to the reimbursement schedule.
- (2) Standby payloads. (i) Before the establishment of a firmly scheduled launch date, the number of months before launch will be computed assuming a launch date at the mid-point of the designated one-year period.
- (ii) Once the firmly scheduled launch date is established, the user shall reimburse NASA to make his payments current according to the reimbursement schedule.
  - (3) Rembursement schedule.

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[Percent of price]

Number of months before launch flight is scheduled	Months prior to scheduled launch date					
	33	27	21	15	9	3
33 months or more 27 to 32 months	10	10 21	17 17	17 17	23 23	23 23
21 to 26 months			40	17 61	23 23	23 23
9 to 14 months					90	23

This schedule holds unless there are offsetting advantages to the U.S. Government of an accelerated launch schedule.

- (4) Contracts for Shuttle services made one year or less before a flight and up to three months before a flight will be made on a space-available basis unless short term call-up option is elected.
- (i) Short term call-up option. (1) For flights contracted on year or less before launch, but not less than three months before launch, short term call-up will be provided to dedicated flight users at the dedicated flight prices according to the reimbursement schedule.
- (2) For dedicated flight users requiring short term call-up flights less than three months before launch, NASA will provide STS launch services on a space-available basis. NASA shall be reimbursed the dedication flight price according to the reimbursement schedule plus short term call-up additional costs. The additional costs will be based on estimated costs to be incurred.
- (3) For shared flights contracted one year or less before launch, but more than six months before launch, users may elect the short term call-up option. The user shall reimburse NASA the standard shared flight price according to the reimbursement schedule plus a load factor-recovery fee. The load factor-recovery fee is half the difference between a dedicated flight price and the user's shared flight price or the difference between a dedicated flight price and the total adjusted reimbursements from all shared users, whichever is less.
- (4) For shared flights contracted six months or less before launch, but more than three months before launch, users may elect the short term call-up op-

tion. The user shall reimburse NASA the standard share flight price according to the reimbursement schedule plus a load factor-recovery fee which is the difference between a dedicated flight price and the total adjusted reimbursement from all shared flight users.

- (5) Shared flights contracted three months or less before launch will be flown on a space-available basis. NASA shall be reimbursed the shared flight price according to the reimbursement schedule plus short term call-up additional costs. These additional charges will be based on estimated costs to be incurred.
- (6) For the purposes of this paragraph, *adjusted reimbursements* is defined to be reimbursements assuming all shared users are among those defined in §1214.201.
- (7) The load factor-recovery fee will never be less than zero.
- (8) The load factor-recovery fee is payable upon receipt of NASA's billing therefor.
- (j) Accelerated launches. For users who reschedule a launch so that it occurs earlier than the planned launch, the user will pay on an accelerated reimbursement schedule. The user will reimburse NASA to make his payments current on the new accelerated reimbursement schedule. If the time from notification of acceleration is less than one year from the new launch date, short term call-up reimbursements will also apply.
- (k) Postponements—(1) Non-standby payloads. (i) A user can postpone a flight of his payload one time with no additional charge if postponement occurs more than one year before launch. For subsequent postponed flights more than one year before launch, the user shall reimburse NASA a postonement fee of 5 percent of the user's flight price. For postponements one year or less before launch, the user shall reimburse NASA 5 percent of the user's flight price plus an occupancy fee according to the occupancy fee schedule in appendix B.
- (ii) If the postponement of a flight causes the payload to be launched in a year for which a different price per flight has been established, the new price shall apply if it is higher than the originally contracted price.

- (2) Standby payloads. (i) For flights postponed more than six months prior to the beginning of the negotiated one-year period, NASA shall renegotiate a new one-year period during which launch will occur. No additional fee will be imposed.
- (ii) For flights postponed six months or less prior to the beginning of the negotiated one-year period, the user shall reimburse NASA 5 percent of the user's flight price plus an occupancy fee according to the occupancy fee schedule set forth in appendix B.
- (3) Postponement fees are payable upon receipt of NASA's billing therefor
- (4) Flights postponed will henceforth be treated as newly scheduled launches according to the reimbursement schedule. The number of months prior to launch will be taken as the total number or months between the date postponement is elected and the new launch date. Short term call-up options and associated fees shall apply.
- (5) Minor delays (up to three days) caused by the users will not constitute a postponement. No fee will be charged for a minor delay.
- (I) Cancellations—(1) Non-standby payloads. Users who cancel a flight more than one year before launch shall reimburse NASA 10 percent of the user's flight price. For a cancelled flight one year or less before launch, the user shall reimburse NASA 10 percent of the user's flight price plus an occupancy fee as set forth in appendix B.
- (2) Standby payloads. (i) Users who cancel a flight more than six months prior to the beginning of the negotiated one-year period shall reimburse NASA 10 percent of the user's flight price.
- (ii) For a flight cancelled six months or less prior to the beginning of the negotiated one-year period, the user shall reimburse NASA 10 percent of the user's flight price plus an occupancy fee as set forth in appendix B.
- (3) Cancellation fees are payable upon receipt of NASA's billing therefor.

[42 FR 8631, Feb. 11, 1977, as amended at 49 FR 17736, Apr. 25, 1984]

#### § 1214.203 Optional reflight guarantee.

- (a) If reflight insurance is purchased from NASA, NASA guarantees one reflight of:
- (1) The launch and development of a free flying payload into a Shuttle compatible mission orbit if, through no fault of the user, the first launch and deployment attempt is unsuccessful and if the payload returns safely to earth or a second payload is provided by the user.
- (2) The launch of an attached payload into its mission orbit if the first launch attempt is unsuccessful through no fault of the user, and if the payload returns safely to earth or a second payload is provided by the user.
- (3) A launch of a Shuttle into a payload mission orbit for the purpose of retrieving a payload if the first retrieval attempt is unsuccessful through no fault of the user. This guarantee only applies if the payload is in a safe retrievable condition as determined by NASA
- (b) Reflight insurance is not applicable to payloads or upper stages placed into orbits other than the Shuttle mission orbit.

#### § 1214.204 Patent and data rights.

- (a) When accommodating missions under this subpart, i.e., experimental science or experimental applications missions for ESA, ESA member states or Canada with no near-term commercial implications, NASA will obtain for U.S. Governmental purposes rights to inventions, patents and data resulting from such missions, subject to the user's retention of the rights to first publication of the data for a specified period of time.
- (b) The user will be required to furnish NASA with sufficient information to verify peaceful purposes and to insure Shuttle safety and NASA's and the U.S. Government's continued compliance with law and the Government's obligations.

### § 1214.205 Revisit and/or retrieval services.

These services will be priced on the basis of estimated costs. If a special dedicated Shuttle flight is required, the full dedicated price will be charged. If the user's retrieval requirement is