(b) Customers with payloads whose Shuttle load factor is equal to or greater than 0.5 are entitled to request that a customer-selected payload specialist be flown with the customer's payload. Dedicated-flight customers are entitled to request the flight of two customer-selected payload specialists.

(c) NASA may approve the flight of a customer-selected payload specialist with payloads whose Shuttle load factor is less than 0.5 if, in NASA's judgment, there is sufficient scientific need to warrant such a flight.

(d) The standard Spacelab flight price is based on operation of the customer's payload by two NASA-furnished mission specialists. Accommodations for, and mission-independent training of, any payload specialists and backups required for the customer's mission shall be provided as optional services and shall be paid for by the customer. The price for this service shall be the same for both customer-furnished and NASA-furnished payload specialists.

§ 1214.813 Computation of sharing and pricing parameters.

(a) *General.* (1) Computational procedures as contained in the following subparagraphs of this paragraph of this section shall be applied as indicated. The procedure for computing Shuttle load factor, charge factor, and flight price for Spacelab payloads replaces the procedure contained in the Shuttle policy.

(2) Shuttle charge factors as derived herein apply to the standard mission destination of 160 nmi altitude, 28.5° inclination. Customers shall reimburse NASA an optional services fee for flights to nonstandard destinations.

(3) The customer's total Shuttle charge factor shall be the sum of the Shuttle charge factors for the customer's individual (dedicated, complete, or shared) elements, with the limitation that the customer's Shuttle charge factor shall not exceed 1.0.

(4) Customers contracting for pallet-only payloads are entitled to locate minimal controls as agreed to by NASA in a pressurized area to be designated by NASA. There is no additional charge for this service.

(5) NASA shall, at its discretion, adjust up or down the load factors and load fractions calculated according to the procedures defined in this section. Adjustments shall be made for special space or weight requirements which include, but are not limited to:

(i) Sight clearances, orientation, or placement limits.

(ii) Clearances for movable payloads.

(iii) Unusual access clearance requirements.

(iv) Clearances extending beyond the bounds of the normal element envelope.

(v) Extraordinary shapes.

The adjusted values shall be used as the basis for computing charge factors and prorating services.

(b) *Definitions used in computations*—(1) L_C=Chargeable payload length, m. The total length in the cargo bay occupied by the customer's experiment and the Spacelab element(s) used to carry it.

(2) W_C=The weight of the customer's payload and the customer's pro rata share of the weight of NASA mission-peculiar equipment carried to meet the customer's needs, kg.

(c) *Dedicated-shuttle spacelab flight (1-day mission).* The total reimbursement is as defined in § 1214.804(e)(3).

(d) *Dedicated-pallet flight (1-day mission).* (1) The Shuttle load factors and charge factors for dedicated-pallet flights are shown in table 1. Subject to other STS Spacelab structural limits, customers are entitled to utilize the payload weight capability of the pallets as indicated in table 1. Payload weights in excess of those shown are subject to NASA approval and may entail optional services charges.

TABLE 1—SHUTTLE LOAD FACTORS, CHARGE FACTORS, AND NOMINAL CAPACITIES FOR DEDICATED PALLETS

Number of pallets	Load factor		Charge factor		Nominal payload capacity, kg	
	With Igloo	FMDM configuration	With Igloo	FMDM configuration	With Igloo	FMDM configuration
1	0.228	0.189	0.305	0.252	2,325	2,950
2	0.392	NA	0.523	NA	4,470	NA
3-pallet train[1]	0.556	NA	0.742	NA	4,435	NA
2+1 configuration	0.594	NA	0.792	NA	7,750	NA

[1] Three pallets requiring the "1+1+1" configuration shall be flown on a dedicated flight basis [See § 1214.804(a)].

(2) *Total reimbursement.* The customer's total reimbursement is as defined in § 1214.804(f)(3).

(e) *Dedicated FMDM/MPESS flight (1-day mission)*—(1) *Shuttle charge factor.* The computed charge factor for dedicated FMDM/MPESS flights is defined as:

$$\frac{\text{Shuttle Load Factor}}{0.75}$$

(2) *Shuttle load factor.* (i) The Shuttle load factor is defined as the maximum of:

$$\frac{L_C}{18.29} \text{ or } \frac{W_C + 767}{29{,}478}$$

(ii) The minimum value of L_C is based on the element length, plus clearances, and is 1.18 m.

(3) *Total reimbursement.* The customer's total reimbursement is as defined in § 1214.804(f)(3).

(f) *Complete pallets (7-day mission).* (1) The Shuttle load factor and charge factor for a complete pallet are 0.198 and 0.228, respectively, and its payload weight capability is 2,583 kg. Subject to other STS or Spacelab structural limits, customers are entitled to utilize this payload weight capability. Payload weight in excess of 2,583 kg is subject to NASA approval and may entail optional service charges.

(2) *Total reimbursement.* The customer's total reimbursement is as defined in § 1214.804(g)(3).

(g) *Shared elements (7-day mission)*—(1) *Spacelab load fractions and Shuttle load factors*—(i) *Pallet.* Spacelab load fraction is the greater of:

$$\frac{W_C}{2{,}583} \text{ or } \frac{\text{Payload volume, m}^3}{15}$$

Shuttle load factor is the greatest of:

$$\frac{W_C}{13{,}045} \text{ or } \frac{\text{Payload volume, m}^3}{76}$$

(ii) *Pressurized module.* Spacelab load fraction and Shuttle load factor are identical and are the greater of:

$$\frac{W_C}{4{,}319} \text{ or } \frac{2 \times (\text{Experiment volume}) + \text{Storage volume, m}^3}{40}$$

(2) *Shuttle charge factors and element charge factors for pressurized modules.* Shuttle charge factors and element charge factors are identical and are defined as follows:

If the Spacelab load fraction (and Shuttle load factor) is—	The element charge factor and Shuttle charge factor shall be—
Less than 0.00435	.005.
0.00435 to 0.87	Spacelab load fraction divided by 0.87.
Greater than 0.87	1.0.

(3) *Element charge factors for shared pallets.*

If the Spacelab load fraction is—	The element charge factor shall be—
Less than 0.0189	0.0218.
0.0189 to 0.87	Spacelab load fraction divided by 0.87.
Greater than 0.87	1.0.

(4) *Shuttle charge factors for shared pallets.*

If the Shuttle load factor is—	The Shuttle charge factor shall be—
Less than 0.00375	0.005.
0.00375 to 0.75	Shuttle load factor divided by 0.75.
Greater than 0.75	1.0.

(5) *Total reimbursement.* (i) The customer's total reimbursement is as defined in § 1214.804(h)(3).

(ii) If a customer contracts for portions of more than one element, the charges for the use of the elements shall apply individually to each element used.

(6) 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.

(i) Rack volume is defined relative to basic Air Transportation Rack (ATR) configurations. The customer's rack volume shall be defined as the volume of one or more rectangular parallelepipeds (rectangular-sided box) which totally enclosed the customer's payload. Width dimensions shall be either 45.1 or 94.0 centimeters. Height dimensions shall be integral multiples of 4.45 centimeters. Depth dimensions shall be 61.2 or 40.2 centimeters.

(ii) 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 shall be less than 30 centimeters in length.

(7) 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 parallepiped(s) shall be less than 30 centimeters in length.

(8) 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 shall be less than 30 centimeters in length.

Subparts 1214.9–1214.10 [Reserved]

Subpart 1214.11—NASA Astronaut Candidate Recruitment and Selection Program

SOURCE: 54 FR 37940, Sept. 14, 1989, unless otherwise noted.

§ 1214.1100 Scope.

It is NASA policy to maintain an integrated Astronaut Corps. This subpart 1214.11 sets forth NASA procedures and assigns responsibilities for recruitment and selection of astronaut candidates. It applies to all pilot and mission specialist astronaut candidate selection activities conducted by the National Aeronautics and Space Administration.

§ 1214.1101 Announcement.

(a) Astronaut candidate opportunities Will be announced nationwide and publicized periodically unless specifically canceled by NASA.

(b) Civilian applicants may apply at any time.

(c) Military personnel on active duty must apply through and be nominated by the military service with which they are affiliated. Military nominees will not be part of the continuing pool of applicants. The military services will convene their internal selection boards and provide nominees to NASA. The military nominees will be evaluated by NASA and the military services will be notified promptly of those nominees who are finalists.

(d) The Assistant Administrator for Equal Opportunity Programs, NASA Headquarters, will provide assistance in the recruiting process.

[54 FR 37940, Sept. 14, 1989, as amended at 68 FR 19948, Apr. 23, 2003]

§ 1214.1102 Evaluation of applications.

(a) All incoming applications will be reviewed to determine whether or not applicants meet basic qualifications. Those not meeting the basic qualification requirements will be so notified and will not be eligible for further consideration. Those meeting the basic qualification requirements will have their applications retained for review by a designated rating panel.