responsibilities are most closely related to the particular scientific or engineering discipline associated with a payload. For all other payloads, the payload sponsor is identified by the Associate Administrator who contracts with the agency or organization, whether foreign or domestic, private-sector or governmental, to fly a payload on the STS.

(h) Unique requirements. The need for a highly specialized or unusual technical or professional background or the need for instrument operations requiring a highly specialized or unusual background that is not likely to be found in the group of mission specialists or cannot be attained in a reasonable training period.

§ 1214.302 Background.

(a) The Space Transportation System (STS) has been developed to expand the Nation’s capabilities to utilize the unique environment of space. It provides opportunity for individuals other than career astronauts to participate as onboard members of the flight crew under specified conditions. The purpose of such participation by these individuals is to ensure the achievement of the payload or mission-related objectives.

(b) The STS will provide these additional crew members with a habitable working environment and support services in such a way as to require a minimum of dedicated space flight training, allowing them to concentrate their efforts on the accomplishment of their scientific, technical, or mission objectives.

§ 1214.303 Policy.

(a) General. (1) The Challenger accident marked a major change in the U.S. outlook and policies with respect to the flight of other than NASA astronauts. NASA and interested external parties, domestic and international, must re-examine previous understandings, expectations, and commitments regarding flight opportunities in light of the new policies now being enunciated.

(2) NASA policies and their implementation recognize that:

(i) Every flight of the Shuttle involves risks;

(ii) Flight opportunities will now generally be limited to professional NASA astronauts and payload specialists essential for mission requirements; and

(iii) Top priority must be given to:

(A) Establishing, proving, and maintaining the reliability and safety of the Shuttle system;

(B) Timely and efficient reduction of the backlog of high priority scientific and national security missions; and maximum utilization of the Shuttle capacity for primary and secondary payloads that require transportation to or from orbit by the Space Shuttle.

(3) All Shuttle flights will be planned with a minimum NASA crew of five astronauts (commander, pilot, and three mission specialists). When payload or other mission requirements define a need and operational constraints permit, the crew size can be increased to a maximum of seven. Any such additional crew members must be identified at least 12 months before flight and be available for crew integration at 6 months.

(4) NASA policy and terminology are revised to recognize two categories of persons other than NASA astronauts, each of which requires separate policy treatment. They are:

(i) Payload specialists, redefined to refer to persons other than NASA astronauts (commanders, pilots, and mission specialists), whose presence is required onboard the Space Shuttle to perform specialized functions with respect to operation of one or more payloads or other essential mission activities.

(ii) Space flight participants, defined to refer to persons whose presence onboard the Space Shuttle is not required for operation of payloads or for other essential mission activities, but is determined by the Administrator of NASA to contribute to other approved NASA objectives or to be in the national interest.

(b) Payload specialists. Payload specialists may be added to Shuttle crews when more than the minimum crew size of five is needed and unique requirements are involved. In the case of foreign-sponsored missions and payloads, the need and requirements for payload specialists will be negotiated.