

board personnel. During emergency situations prior to liftoff the Space Shuttle commander has the authority to take whatever action in his/her judgment is necessary for the protection or security, safety, and well-being of all personnel on board.

[56 FR 27899, June 18, 1991]

§ 1214.701 Definitions.

(a) *Space Shuttle Elements* consists of the Orbiter, an External Tank, two Solid Rocket Boosters, Spacelab, Upper Stage Boosters (Solid Spinning Upper Stage and Interim Upper Stages) and others as specified in NASA Management Instruction 8040.9.

(b) The *flight crew* consists of the commander, pilot, and mission specialist(s).

(c) A *flight* is the period from launch to landing of a Space Shuttle—a single round trip. (In the case of a forced landing the Space Shuttle commander's authority continues until a competent authority takes over the responsibility for the Orbiter and for the persons and property aboard.)

(d) The *flight-phases* consist of launch, in orbit, deorbit, entry, landing, and postlanding.

(e) A *payload* is a specific complement of instruments, space equipment, and support hardware/software carried into space to accomplish a scientific mission or discrete activity.

(f) *Personnel on board* refers to those astronauts or other persons actually in the Orbiter or Spacelab during any flight phase of a Space Shuttle flight (including any persons who may have transferred from another vehicle) and including any persons performing extravehicular activity associated with the mission.

[45 FR 14845, Mar. 7, 1980, as amended at 56 FR 27899, June 18, 1991]

§ 1214.702 Authority and responsibility of the Space Shuttle commander.

(a) During all flight phases of a Space Shuttle flight, the Space Shuttle commander shall have the absolute authority to take whatever action is in his/her discretion necessary to:

- (1) Enhance order and discipline,
- (2) Provide for the safety and well being of all personnel on board, and

(3) Provide for the protection of the Space Shuttle elements and any payload carried or serviced by the Space Shuttle.

The commander shall have authority throughout the flight to use any reasonable and necessary means, including the use of physical force, to achieve this end.

(b) The authority of the commander extends to any and all personnel on board the Orbiter including Federal officers and employees and all other persons whether or not they are U.S. nationals.

(c) The authority of the commander extends to all Space Shuttle elements, payloads, and activities originating with or defined to be a part of the Space Shuttle mission.

(d) The commander may, when he/she deems such action to be necessary for the safety of the Space Shuttle elements and personnel on board, subject any of the personnel on board to such restraint as the circumstances require until such time as delivery of such individual or individuals to the proper authorities is possible.

[45 FR 14845, Mar. 7, 1980, as amended at 56 FR 27900, June 18, 1991]

§ 1214.703 Chain of command.

(a) The *Commander* is a career NASA astronaut who has been designated to serve as commander on a particular flight, and who shall have the authority described in §1214.702 of this part. Under normal flight conditions (other than emergencies or when otherwise designated) the Space Shuttle commander is responsible to the Flight Director, Johnson Space Center, Houston, TX.

(b) The *pilot* is a career NASA astronaut who has been designated to serve as the pilot on a particular flight and is second in command of the flight. If the commander is unable to carry out the requirements of this subpart, then the pilot shall succeed to the duties and authority of the commander.

(c) Before each flight, the other flight crew members (Mission Specialists) will be designated by the Director of Flight Operations, Johnson Space Center, Houston, TX, in the order in which they will assume the authority of the commander under this subpart