

NASA
Interim
Directive

Effective Date: February 17, 2022
Expiration Date: February 17, 2023
Extended: December 31, 2024

NASA Interim Directive (NID) on the Acquisition of Transportation for NASA or NASA-Sponsored Personnel to the International Space Station (ISS) and low-Earth orbit (LEO)

RESPONSIBLE OFFICE: Space Operations Mission Directorate (SOMD)

1. POLICY

This NID details the NASA policy governing the acquisition of transportation for NASA or NASA-sponsored personnel to the ISS and other LEO destinations. NASA seeks to maintain a continuous U.S. human presence in LEO in order to support the utilization of space by U.S. citizens, companies, academia, and international partners, and to maintain a permanent American foothold on the nearest part of the space frontier. NASA also seeks to encourage increased commercial activity in LEO, including through expanding access for non-NASA personnel to the ISS. As part of executing this strategy, NASA is using the ISS as the near-term and mid-term LEO destination and has engaged in contracts with private U.S. industry to provide crew and cargo transportation to the ISS.

This NID is intended to provide clear direction for the acquisition of transportation for NASA and NASA-sponsored personnel to the ISS and other LEO destinations, in support of the goals and transition principles of the ISS Program, including international cooperation, scientific and exploration research, and the development of a commercial LEO economy, and is consistent with the National Aeronautics and Space Administration Transition Authorization Act (NTAA) of 2017. This NID does not affect the terms of the ISS Intergovernmental Agreement (IGA) and implementing Memoranda of Understanding.

2. APPLICABILITY

a. This NID is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This language applies to the Jet Propulsion Laboratory (a Federally Funded Research and Development Center), other contractors, recipients of grants, cooperative agreements, or other agreements only to the extent specified or referenced in the applicable contracts, grants, or agreements.

b. This NID is applicable to crewed flights to the ISS and other LEO destinations on U.S. commercial providers that are acquired by NASA. This NID is applicable to any crewed flight that contains NASA or NASA-sponsored personnel, regardless of the number of NASA personnel or duration of the mission.

c. This NID clarifies NASA's role in Private Astronaut Missions (PAMs) to ISS. Since there are no NASA or NASA-sponsored personnel on PAMs, NASA will not use contracts under the Commercial Crew Program (CCP) for PAMs. NASA is currently using Focus Area 4 - Private Astronaut Missions to the International Space Station (ISS) under ISS NASA Research

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- d. This NID is not applicable to private astronauts that are using commercial providers for transportation to other destinations or orbital flight.
- e. This NID is not applicable to Soyuz transportation services.
- f. This NID is not applicable to suborbital crew transportation services.
- g. This NID is not applicable to Moon or Mars transportation services.
- h. In this NID, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice, and is recommended, but not required, "will" denotes expected outcome, and "are and is" denotes descriptive material.
- i. In this NID, all document citations are assumed to be the latest version unless otherwise noted.

3. AUTHORITY

- a. National Aeronautics and Space Administration Authorization Act of 2010, 42 U.S.C. 18301 et seq.
- b. National Aeronautics and Space Act, 51 U.S.C. 20101 et seq.
- c. U.S. Commercial Space Launch Activities, 51 U.S.C. 50901 et seq.
- d. Commercial Space Act of 1998, Public Law 105-303 (1998)
- e. U.S. Commercial Space Launch Competitiveness Act, Public Law 114-90 (2015)
- f. 2020 National Space Policy of the United States of America (December 9, 2020)
- g. National Aeronautics and Space Administration Transition Authorization Act of 2017, Pub. L. 115-10

4. APPLICABLE DOCUMENTS AND FORMS

- a. "International Space Station Transition Report pursuant to Section 303(c)(2) of the NASA Transition Authorization Act of 2017" (P.L. 115-10); National Aeronautics and Space Administration, March 30, 2018; can be accessed online at:
https://www.nasa.gov/sites/default/files/atoms/files/iss_transition_report_180330.pdf

b. NPD 1360.2, Initiation and Development of International Cooperation in Space and Aeronautics Programs

c. NPD 8610.12, Orbital Space Transportation Services

d. NPR 8705.4, Risk Classification for NASA Payloads

e. NPD 9080.1, Review, Approval, and Imposition of User Charges

5. RESPONSIBILITY

a. The SOMD Associate Administrator (SOMD AA) is responsible for human spaceflight transportation services for NASA or NASA-sponsored personnel to the ISS and other LEO destinations. In support, the SOMD AA shall arrange and acquire human spaceflight transportation capability from the Commercial Crew Program (CCP).

6. DELEGATION OF AUTHORITY

None.

7. MEASUREMENT/VERIFICATION

a. Compliance with this NID will be evaluated on a continuing basis by the SOMD, which will consider all the factors that impact the efficient acquisition of human spaceflight transportation services to the ISS and other LEO destinations. These include timely and comprehensive exchange of information concerning space transportation vehicle capabilities, manifests, schedules, cost of services, and requirements.

ATTACHMENT A: DEFINITIONS

Commercial Crew Providers - Companies providing crew transportation under the Commercial Crew Transportation Capability (CCtCap) contracts or follow-on NASA contracts.

Commercial Crew Transportation Capability (CCtCap) Contracts - The CCtCap contracts provide completion of the design, development, test, evaluation, and certification of an integrated crew transportation system capable of transporting NASA crew members to and from the International Space Station and low-Earth orbit. The contracts also include the issuance of task orders for post certification missions to and from the station that include ground, launch, lifeboat, on-orbit, return and recovery operations. The task orders can be for any mission duration and transport 1, 2, 3, or 4 NASA or NASA-sponsored personnel per mission. There is also a provision in the contracts to enable a 5th seat which could be utilized by a NASA or non-NASA astronaut (pending flight configuration certification).

Commercial Element - Any individual habitable module, external platform, or deployable structure attached to ISS, owned and operated by a U.S. Entity to accommodate on-orbit activities.

Government Astronauts - An individual who meets the definition of “government astronaut” under 51 USC § 50902 (4). This term includes both Federal Government personnel and International Partner personnel.

International Partner Astronaut - An individual who meets the definition of “International Partner Astronaut” under 51 U.S.C 50902(5). (An individual designated under Article 11 of the International Space Station Intergovernmental Agreement, by a partner to that agreement other than the United States, as qualified to serve as an International Space Station crew member.)

ISS Crew Member - Any person approved for flight to the ISS beginning upon assignment to the crew for a specific government or commercial mission and ending upon completion of the post-flight activities related to their mission. For the purposes of this definition, the term “crew” includes all astronauts, regardless of whether each individual meets the definition of “crew” under 51 U.S.C. 50902(2).

Long-Duration Mission - A mission of more than 30 days aboard the ISS.

Mixed Crew Mission - A mission comprised of both Government Astronauts and Private Astronauts.

NASA and NASA-Sponsored Personnel - Personnel assigned by NASA to be transported between Earth and the ISS or low-Earth orbit. This may include International Partner Astronauts. For the purposes of this definition, a Private Astronaut is not considered NASA sponsored personnel.

Private Astronaut - An astronaut that does not qualify as a “Government Astronaut” as defined by 51 USC 50902(4) or an International Partner Astronaut as defined by 51 U.S.C 50902(5) and

whose transportation to and from the ISS is acquired directly from a Private Astronaut Mission provider.

Private Astronaut Mission - Commercial mission consisting of activities conducted exclusively by Private Astronauts to/from and on the ISS or in a Commercial Element attached to the ISS. These missions are privately funded, fully commercial spaceflights on a commercial launch vehicle for the purpose of enabling tourism, outreach, commercial research, and approved commercial and marketing activities on the space station. These are FAA launch and reentry licensed missions that meet ISS integration and certification requirements for ISS operations.

Private Astronaut Mission Provider - A U.S. Entity that is responsible for the execution a Private Astronaut Mission.

Short-Duration Mission - A mission of 30 days or less aboard the ISS.

Professional Foreign Sovereign Astronaut - An astronaut who is an employee of, or sponsored by, a national government that is not a party to the Intergovernmental Agreement, which has in place a government-to-government agreement with the U.S. and/or NASA under which ISS activities could appropriately be carried out.

ATTACHMENT B: ACRONYMS

CCP - Commercial Crew Program

CCtCap - Commercial Crew Transportation Capability

IGA - ISS Intergovernmental Agreement

ISS - International Space Station

LEO - low-Earth orbit

NRA - NASA Research Announcement

NTAA - National Aeronautics and Space Administration Transition Authorization Act

PAM - Private Astronaut Missions

SOMD - Space Operations Mission Directorate

ATTACHMENT C: POLICY IMPLEMENTATION

C.1 ACQUISITION OF COMMERCIAL TRANSPORTATION FOR NASA AND NASA-SPONSORED PERSONNEL TO ISS AND LEO

a. The CCP is the office responsible for acquiring all NASA's requirements for the transportation of NASA and NASA-sponsored personnel to the ISS and LEO.

The CCtCap contracts include Post-Certification Mission (PCM) flights, each with four seats. NASA plans to utilize this capability to enable a U.S. Orbital Segment (USOS) crew of four onboard the International Space Station (ISS) for six-month duration missions through the mid-2020s and either extend the CCtCap contracts or use follow-on contracts for the duration of the lifetime of the ISS. The CCtCap contracts will be used to accommodate NASA missions to ISS or LEO, where all the seats are occupied by NASA or NASA-sponsored personnel.

b. The CCP is also responsible for the acquisition of Mixed Crew Missions, where there is a combination of NASA and non-NASA personnel.

c. NASA may purchase a Mixed Crew Mission to accommodate NASA and NASA-sponsored personnel. The commercial provider will have the option to commercially sell the remaining seats. Outfitting, training, or other requirements related to the private astronauts including government equipment or services are the responsibility of the commercial provider unless negotiated as part of the CCtCap contract. The terms of the CCtCap contracts will apply regardless of whether the mission is a NASA mission or a Mixed Crew Mission.

C.2 ACQUISITION OF TRANSPORTATION FOR OTHER U.S. GOVERNMENT AGENCIES

a. If a U.S. government agency (non-NASA) requests crew transportation to the ISS from NASA for one of their employee astronauts NASA may provide the transportation (and other associated mission support needs, such as training, on-orbit support, etc.) via an inter-agency arrangement. Once that agreement is established, the U.S. government agency (non-NASA) employee astronauts will become NASA-sponsored personnel and NASA will provide the transportation via the CCP.

b. U.S. government agencies (non-NASA) are not required to request transportation from NASA. They should acquire transportation via private astronaut mission providers when such service is reasonably available, and the transportation is not part of a collaborative interagency activity.

C.3 ACQUISITION OF TRANSPORTATION FOR PRIVATE CITIZENS

a. Private citizens or private entities requesting transportation to the ISS will use private astronaut mission providers. NASA does not plan to enter into agreements with private citizens or private entities for private astronaut missions to the ISS unless it is in support of a U.S. government policy objective.

C.4 ACQUISITION OF TRANSPORTATION FOR INTERNATIONAL PARTNER AND PROFESSIONAL SOVEREIGN ASTRONAUTS

- a. Under the terms of the ISS Intergovernmental Agreement (IGA) and implementing Memoranda of Understanding, the U.S. provides transportation for U.S., Canadian, European, and Japanese partner astronauts to the ISS. The CCP provides for transportation in fulfillment of NASA's obligations to ISS International Partners as set forth in the IGA. The CCP may also provide transportation for Professional Foreign Sovereign Astronauts.
- b. If an ISS International Partner requests transportation to the ISS from NASA above the allocations of the IGA, NASA may provide the transportation (and other associated mission support needs, such as training, on-orbit support, etc.).
- c. If a Professional Foreign Sovereign Astronaut's government requests transportation to the ISS from NASA, NASA may provide the transportation (and other associated mission support needs, such as training, on-orbit support, etc.) via a government-to-government agreement. This would be in support of mutually beneficial technical cooperation and/or in support of U.S. government policy objectives. Once that government-to-government agreement is established, the Professional Foreign Sovereign Astronaut will become NASA-sponsored personnel and NASA will provide the transportation via the CCP.
- d. Professional Foreign Sovereign Astronauts or International Partner Astronauts, trained for an ISS mission, will be permitted to fly on a NASA mission under the CCtCap contract and will be required to comply with applicable FAA regulations.
- e. Non-U.S. governments, including ISS International Partners, are not required to request transportation to the ISS from NASA. They may acquire transportation via private astronaut mission providers under the conditions specified in Attachment D.

ATTACHMENT D: PRIVATE ASTRONAUT MISSIONS

Private Astronaut Missions shall use U.S. transportation vehicles that meet NASA's ISS visiting vehicle requirements. There will be no NASA or NASA-sponsored personnel on private astronaut missions, and NASA is not certifying the system (launch vehicle or spacecraft) for safety of persons on board or the public.

Since there are no NASA or NASA-sponsored personnel on private astronaut missions and NASA is not certifying the vehicles for passenger safety, NASA will not authorize private astronaut missions through the CCP. The Commercial LEO Office is designated as the responsible office for private astronaut missions, and will use Focus Area 4 - Private Astronaut Missions to the International Space Station (ISS) existing ISS NASA Research Announcement (NRA) NNJ13ZBG001N Research Opportunities for ISS Utilization for private astronaut mission agreements.

NASA may, at its sole discretion and subject to applicable legal and policy requirements, choose to acquire services (e.g., crew time or up-mass) from a private astronaut mission provider, if available.