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NSS LAUDS NASA ISS CREW AND VISITOR CRITERIA

The National Space Society commends NASA and the ISS partners for persevering in the development of crew and visitor criteria for visiting the ISS. NSS is encouraged that NASA states that it is committed to working with international partners, space tourism companies and other space advocacy groups in order to continue to set the standards for safe travel for all those participating in short and long-duration spaceflight. Moving forward, NSS hopes that NASA will provide more detail on medical and training requirements for spaceflight candidates in addition to the conduct-related criteria specified in order to permit all interested parties to comment and provide further guidance on refining such criteria, thereby maximizing the possibility of opening the space frontier to all of us.

Specifically, NSS applauds NASA's recognition of two categories of ISS "crewmembers", "Professional Astronaut/Cosmonaut"; and "SpaceflightParticipant." The latter category composes ;individuals (e.g. commercial, scientific and other programs;crewmembers of non-partner space agencies, engineers, scientists, teachers,journalists, filmmakers or tourists) sponsored by one or more partner(s)." That concept seems to include all that space advocates have requested.

The document further breaks down crewmembers into two categories: ";Expedition (Increment) Crewmembers"; (the;main crew responsible for implementing the planned activities for an increment" [which we assume means a mission]) and ";Visiting Crewmembers"; (whotravel to/from ISS but are not expedition crewmembers), who";may be eitherprofessional astronauts/cosmonauts or spaceflight participants.

The document (Part V.B specifically states,"Spaceflight participants will not be assigned to an expedition until suchtime as the ISS has a crew complement of more than 3 persons." That means that until two Soyuz returnvehicles (instead of the current one) or a separate Crew Return Vehicle (CRV)(if one is ever built) can be attached to ISS, Spaceflight. Participants willbe limited to being only Visiting Crewmembers for short stays. While we regret the need, this is areasonable limitation.

Under part IV, each ISS partner must certify that allcrewmembers (including Visiting Crewmembers) meet the criteria specified. Those criteria are (A) General Suitability -- which basically includes everyonewho does not have specifically disqualifying circumstance in his or he history,e.g., criminal or drug abuse history, membership in organizations that mightaffect confidence in any ISS partner. Further, those circumstances do not mean automatic disqualification, butmay be considered on a case to case basis as to their seriousness. This criterion seems about as broad andinclusive as space advocates could reasonably want.

(B) Medical -- whatever criteria (which include"medical aspects of behavioral assessments) are established by ISS medicaloperations board. This also basicallyreasonable, however, more detail needs to be defined to insure that thoseboards get unduly restrictive.

(C) Behavioral Suitability -- the sponsoring agency is todetermine if the

candidate has the necessary interpersonal and communications skills, which seems reasonable. However, the agency is also to consider the following attributes: (a) relevant operational experience, (b) demonstrated performance under stress, (c) ability to function as a team member, (d) high moral integrity, (e) adaptability / flexibility, and (f) motivation consistent with program mission. While possession of all these attributes is not mandatory NSS hopes that NASA will provide more detail on these conduct-related criteria specified in order to permit all interested parties to comment and provide further guidance on refining such criteria. (D) Linguistic Ability -- oral and reading fluency in English is "required." The ability to communicate effectively in other languages "may" be required. "Candidates must possess both the capacity and interest to learn a foreign language.

This attribute also could be construed in an excessively limiting manner. (E) Adherence to the ISS Crew Code of Conduct.

Part V.A. states specifically, "Space flight participants will be eligible to be assigned as visiting scientists, commercial users or tourists."

As to the language requirement, it provides that "crew members should be capable of achieving a suitable level of language capability to correspond with his or her functional duties and type of transport vehicle." Visiting crew should achieve a minimum level of 1- [defined as "an Intermediate Low level of proficiency on a scale previously accepted for ISS use] in Russian or English (as appropriate to the transport vehicle) prior to flight or they should fly with crew members who can provide interpretation support."

: Considering that ISS is multi-lingual, and assuming the 1- standard is not oppressive, that seems as generous a minimum language requirement as can be contemplated.

The final assignment of crew members "takes into account the composition of the full crew from the viewpoints of performance, language abilities and safety." Again, a reasonable principle, provided it is not invoked excessively to eliminate Spaceflight Participants.

Per Part VI, "In the case of visiting crew and spaceflight participants, a minimum ISS training program will be defined by the International Training Control Board." The reasonableness of this provision will depend on how strictly the ITCB defines "minimum."

Under Appendix A, sponsoring agencies have until 6 months prior to flight to present their candidates. This short lead time seems most conducive to arranging visits by Spaceflight Participants.

In conclusion, except for the possibility that these Principles may make it more difficult (though not impossible) to offer visits by lottery, they seem to be very hospitable to private space travelers, and NSS is pleased and appreciative of NASA's regard for the future on non-professional space travelers.