SUITS Frequently Asked Questions 2027

General:

1. **What should be included in the Concept of Operations (CONOPS) section?**
   The CONOPS section should specify how your design addresses each of the challenge requirements by detailing how the design evaluator will interface with your device during each procedural step outlined in the mission description. Be as specific as possible about how you display telemetry and other information, as well as how you implement the AI Assistant throughout.

2. **Can we attach videos to our proposal via YouTube links?**
   Assume the people reviewing your proposal will not watch them. However, you may include a video as an additional way to communicate your proposal. We advise keeping proposal videos short.

3. **Are international students able to participate in this challenge?**
   International students can participate and contribute at their institution. However, they cannot be badged to enter NASA's Johnson Space Center (JSC) in Houston, where the test week will take place.

4. **Is there a team size limit?**
   No, however, most teams include 8-15 people. Each team member should contribute within a defined role on their team. Teams will be limited to **eight (8) people** badged during onsite test week (seven (7) students and one (1) faculty member). We recommend large teams split up and submit separate and unique proposals.

5. **Do you want system architecture flowcharts in UML 2.0, SysML, etc.?**
   Use whatever your team feels best describes your architecture.

6. **Can students under the age of 18 participate?**
   No, unfortunately all participants must be at least 18 to sign the Statement of Rights and attend test week.

7. **If we have previously had a proposal for NASA SUITS, can we extend our previous proposal, or should we start from scratch?**
   If aspects from your previous design can carry over to this year's challenges, then you can use that. Make sure you are addressing **this year's** specific requirements first and foremost. We want to see unique ideas.

8. **Are international students allowed to be team leads?**
   Overall team lead must be a U.S. Citizen or Legal Permanent Resident (LPR). However, we are happy to interact with and help anyone contacting us. Therefore, you could have co-

leads, one a citizen and one that is an international student. However, only U.S. citizens and LPRs will be badged to participate in the onsite culminating event.

9. **Does our faculty advisor have to be an active faculty member from our institution?**
   Yes, your faculty advisor is acting on behalf of the university, so they need to be in a position recognized by the university. You can get advice from anyone, so you may also have more than one faculty member helping you.

Technical/Devices:

1. **Can our team use whatever devices we want?**
   If an HMD is used in the field during the EVA, it must be a pass-through AR device, to view the real world directly. This is for safety purposes, as they will need to see the actual ground to walk safely.

2. **What language is the telemetry stream server (TSS) in?**
   Most of the TSS is written in JavaScript and TypeScript.

3. **How do you receive data from the TSS?**
   All TSS data is sent via WebSocket protocol using ws and is in JSON/GeoJSON format. During testing you will change the TSS IP to the IP of the device where you plan to host the TSS. During test week the TSS will be deployed by NASA on a local network (SUITSNET) at the test site. Teams will need to update the server IP address on their devices to match the SUITS host server IP.

4. **Can phones be used as peripheral devices?**
   Teams need to state **all** peripheral devices their design includes and any requirements they might need from the NASA SUITS team (internet, time outside of the scheduled testing for set-up, etc.) during the software design review in April. Approval will either be granted for the devices, or the SUITS team may contact teams for additional follow-up before allowing the external devices on-site.

5. **Can we design our own custom hardware interface?**
   Yes, be sure to include a mock-up of the design and how it interfaces with the augmented reality device in the proposal. If accepted, at the spring software design review, teams will be required to present all external devices before receiving approval from the NASA SUITS team to bring them on-site.

6. **When will the telemetry stream become available?**
   The SUITS team's goal is to provide the telemetry stream to selected teams in mid-December 2026 to early January 2027.

NASA STEM Gateway

1. **Does every team member need to submit a proposal?**
   Only one team member will submit the proposal on behalf of the team (preferably the Team Lead). During this process they will add all team members and the faculty advisor to the proposal by entering their names and email addresses with the proposal.

2. **Does every team member need to have a STEM Gateway profile?** Yes, all team members need to create a STEM Gateway profile unless they already have a profile. If they have a profile, they should review and update their information.

3. **I have already created a STEM Gateway profile for other engagement openings; do I need to create a new profile?**
   No, if you are using the same email address attached to your existing profile, you will receive the notification of being added to the team without needing to set up an additional profile. Please review and update your profile in STEM Gateway.

4. **How do we add team members?**
   During the application process the Team Lead will be prompted to add team members. The Team Lead will do this by entering each team member's name and email address. The Team Lead should check with each team member to ensure they are using the correct email address. Team Leads will need to click the "send invites" button to send the invitations to join the team.

5. **Do we have to include our faculty advisor as a team member?**
   Yes, all team members and faculty advisors must be added to your team roster.

6. **If we encounter technical issues, who do we contact?**
   For any issues related to the NASA STEM Gateway website, you can submit a help ticket using this link: https://stemgateway.nasa.gov/s/create-a-case.
   You may also review the help documents provided in the NASA SUITS description for this year on STEM Gateway.