| **SATELLITE REGISTRATION**  To: 18th Space Control Squadron (18 SPCS), Vandenberg AFB, CA | |
| --- | --- |
| **Step Zero: REGISTER THE SATELLITE OPERATORS ON** [**WWW.SPACE-TRACK.ORG**](http://www.space-track.org) | |
| **1. FROM:** *(Satellite Owner/Operator Company Name and Location)* Stanford Student Space Initiative, Stanford CA    **Country: United States of America**  **Primary Contact Person(s)**  *(Name, email, phone number)*  *Flynn Dreilinger,* [*flynnd@stanford.edu*](mailto:flynnd@stanford.edu)*, (415) 530-9000*  *Grant Regen,* [*gregen@stanford.edu*](mailto:gregen@stanford.edu)*, ‭(818) 414-5548‬*  *Isobel Porteous,* [*isobelporteous@stanford.edu*](mailto:isobelporteous@stanford.edu)*, (917) 863-0018*  *Jacob Mukobi,* [*jmukobi@stanford.edu*](mailto:jmukobi@stanford.edu)*, (360) 440-7271* | **2. SATELLITE NAME(S) AND TRACKING**       Sapling  **2a. Have you checked the satellite catalog to make sure there is not already a satellite with this name on orbit?**☒  **2b. Does the satellite have GPS or any other means of determining the orbit independently?**  **YES** ☒ **NO** ☐ |
| **3. LAUNCH DATA**  **3a. Launch Provider**SpaceX    **3b. Launch Vehicle** Falcon 9    **3c. Launch Date** November 7th    **3d. Primary Payload or Launch Name** Transporter 6    **3e. Planned Orbit (initial and final if there will be an orbit change)** SSO, 525km altitude, 10:00 LTDN. Orbiter SN-1 will make an orbit change *after* Sapling is deployed. | **SMALL SATELLITE DATA (up to 600 kg):**  **4. International Space Station (ISS) or Cygnus Deployments, if applicable**  **4a. Method/Identifier of Deployment**    **4b. Deployment Date**    **5. If NASA supported, Educational Launch of Nanosatellites (ELaNa) Number**    **6. Name of launch facilitator/broker if applicable**       Launcher Inc. |
| **SATELLITE & ORBIT INFORMATION** | |
| **7a. Size of the satellite** *(U’s for CubeSats, or mass in kg for larger satellites)* 1U    **7b. Will anything will be deployed from it?** *(anything to change its shape)* Sapling is equipped with a dipole antenna (measuring tape)    **7c. Type of propulsion, if any** N/A    **7d. Expected mission lifetime** 3-5.5 years until de-orbit  **7e. Will you be providing predicted ephemeris data to 18 SPCS? YES** ☒ **NO** ☐  **If yes, please provide emails for the people/groups who will need to be able to upload the files** Flynn Dreilinger, flynnd@stanford.edu | |
| **WWW.SPACE-TRACK.ORG: ORGANIZATION ACCOUNT DATA**  (If you already have an organization account, just enter the name and skip the rest of this section) | |
| *Note: once owner/operators have registered on Space-Track, an account will be created using the name of the organization. People and satellites are linked via this account. Please see instructions for more details.*  **8a. Organization name for account** Stanford Student Space Initiative    **8b. Primary representative(s): name and email address as registered on Space-Track** *(these can determine who gets conjunction notices and manage contact information – see instructions)* MUST BE REGISTERED ON Space-Track! Flynn Dreilinger, flynnd@stanford.edu    **8c. Close Approach Notifications (CANs)** RECIPIENTS MUST BE REGISTERED ON Space-Track! | |
| Flynn Dreilinger flynnd@stanford.edu |  |
| **8e. Emergency notification phone number(s)** *(for someone who speaks English, please)* 4155309000, 8184145548‬ | |
| **You’re Done! Please submit form to** [**18SPCS.doo.customerservice@us.af.mil**](mailto:18SPCS.doo.customerservice@us.af.mil) | |

18 SPCS SATELLITE REGISTRATION, JUL 2020

SATELLITE REGISTRATION FORM INSTRUCTIONS

| **Block #** | **Title** | **Comments** |
| --- | --- | --- |
| 0 | Space-Track Registration Reminder | You can register as many individual or group emails on [www.Space-Track.org](http://www.space-track.org) as you’d like. We recommend that anyone who will be involved in daily operations be registered. |
| 1 | From | Who are you, and what is your contact information? |
| 2 | Satellite Name(s) | List the names of all of your satellites on this launch (please submit a different form for each launch).  2a. To prevent future confusion, please check to make sure you have a unique satellite name.  2b. Does the satellite have an independent means of identification? While the 18 SPCS will most likely be able to find and track all of the objects from the launch, we do not receive telemetry or beacon signals, so we'll need your help to give the right name to the right object. |
| 3 | Launch Data | 3a. Launch Provider: *SpaceX, Arianespace, etc.*  3b. Launch Vehicle: *Falcon 9, Ariane 5, etc.*  3c. Launch Date: *if it hasn’t launched yet, just give the current schedule or your best guess.*  3d. Primary Payload: *For small sats, if it’s a rideshare, what’s the big payload? If the launch is all small satellites, is there a name for the launch?*  3e. Orbit information: *apogee, perigee, inclination. If there will be a secondary orbit change such as with a space tug, give the method of the change and both initial and final orbits.* |
| SMALL SATELLITE DATA (Requested information for satellites less than 600 kg in size) | | |
| 4 | ISS/Cygnus Deployments | 4a. Method/Identifier of Deployment: *JAXA J-SSOD, Nanoracks NRCSD, etc.*  4b. Deployment Date:  *if it hasn’t deployed yet, just give the current schedule or your best guess.* |
| 5 | NASA supported small sats | ELaNA number |
| 6 | Launch Broker | Are you getting assistance from another organization, such as *Spaceflight* or *Innovative Solutions In Space?* |
| SATELLITE & ORBIT INFORMATION | | |
| 7 | Satellite Info  Orbit Info | 7a. Size: 1U, 3U, 25 kg, 5000 kg, etc.  7b. Secondary deployments (you’re welcome to add drawings as an appendix if you’d like). We just want to know if the satellite is suddenly going to change size.  7c. Propulsion: does it have any?  7d. Expected lifetime: if we don't hear from you, we'll consider the satellite no longer active after this time (not actively screened for conjunctions).  7e. 18 SPCS can screen owner/operator predicted ephemeris against our catalog. Our "Spaceflight Safety Handbook" (at https://www.space-track.org/documentation#/odr) gives details on how to format and submit files. |
| SPACE-TRACK.ORG ACCOUNT INFORMATION | | |
| 8a | Organization Name for Space-Track Account | We recommend using the organization’s name. If you launch any more satellites in the future, they can be added to the same account. |
| 8b | Primary Representative(s) | A primary representative for the organization's account has the ability to edit most of the information in it. You can get more information on Primary Representative privileges by downloading the Space-Track Handbook for Operators, available on the OPERATOR/MANAGE page. |
| 8c | CANs | A Close Approach Notification is sent for any predicted event that meets reportable criteria, and it contains basic information. The 18 SPCS or the account’s primary representative can set up permissions to receive these messages. See our "Spaceflight Safety Handbook" for the CAN creation criteria at https://www.space-track.org/documentation#/odr. |
| 8d | Emergency Notification Phone Number | If a predicted conjunction event meets very tight criteria, we will call your operations center to tell you about it. See our "Spaceflight Safety Handbook" for the phone notification criteria at https://www.space-track.org/documentation#/odr |

*Please send the form to us at 18SPCS.doo.customerservice@us.af.mil*

*We request that you send in the form at least a few weeks prior to launch/deployment, but we’ll accept it any time.*

Thank you from the 18 SPCS Space Situational Awareness Sharing Team.

If you have questions, we’re happy to help out: +1-805-605-5219 or +1-805-605-4600