

Space Hacker Workshop -- Final Report to SpaceGAMBIT

Accomplishments

A two-day Space Hacker Workshop was successfully produced at the Frontiers of Flight Museum in Dallas, TX on 20-21 July 2013. 58 people participated.

Workshop materials and videos have been made available at: <http://www.citizensinspace.org/space-hacker-workshop-dallas/>

A vacuum-chamber test facility for small payloads was assembled and successfully demonstrated. An initial report is available at: <http://www.citizensinspace.org/2014/02/a-small-vacuum-chamber-test-facility/>

Lessons Learned

Publicizing the workshop was more expensive and time-consuming than we had anticipated (although not drastically so). The first Space Hacker Workshop, in Mountain View, CA, was produced in cooperation with the Silicon Valley Space Center. In that case, much of the publicity effort fell on the SVSC, which had strong local ties. The Dallas workshop took place in our home region, so we doubled as local host as well as the national producer. This gave us insights into the importance of the local host organization.

For future workshops, it is critical that we identify strong local hosts to partner with.

One of our goals was to produce a workshop "kit" in the form of materials and videos which can be used by groups wishing to produce their own independent Space Hacker Workshops. Talking to people at the Dallas workshop, and various other space events, we have found that there is limited interest in such independent workshops at this time. We have met quite a few individuals who would like to see Space Hacker Workshops in their own cities, but so far, none have expressed an interest in producing such a workshop on their own. It is apparent that we will have to continue to play a lead role in producing Space Hacker Workshops for the foreseeable future.

There was some interest expressed in having shorter format meetings on a regular continuing basis (perhaps monthly). We plan to investigate this possibility, as well as other, alternative formats. The monthly meeting format would not be feasible outside of our local home area, however, so it has limited applicability to other parts of the country.

One of the challenges going forward will be tailoring the Space Hacker Workshop to the size of the venue. The first Space Hacker Workshop, at the Hacker Dojo in Silicon Valley, had 103 registered attendees. Admission was cut off at the point to prevent overcrowding. Most hackerspaces cannot accommodate a crowd of that size, however. Even 58 (as in Dallas) might be too large. We will need to limit attendance or seek

larger alternative venues. (The museum, which we used in Dallas, is an example of one possible venue.)

Future Plans

Although the work funded under this contract is complete, we plan to continue conducting Space Hacker Workshops in the future using other sources of funding.

We had intended to conduct a workshop in Florida this spring, at Space Florida's Life Sciences Building at Kennedy Space Center. Unfortunately, escalating cost estimates forced us to abandon those plans. We are currently investigating alternative locations in Florida.

We are also looking at Space Hacker Workshops at hackerspaces in Huntsville, AL and Houston, TX. It is our hope to produce workshops at all three locations in 2013. We are also looking at the possibility of doing a greatly abridging, three-hour workshop for teachers at the Conference for the Advancement of Science Teaching in November. CAST is one of the largest science-teacher conferences in the nation, with recent attendance topping 7,000 teachers.