IAA-PDC-15-P-22

The 2013 SGAC Name An Asteroid Campaign – Overview, Results, Lessons Learned – A Strategy for IAWN to Educate the General Public

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Keywords: *Outreach, Naming Campaign, Education, General Public, Communication, IAWN*

ABSTRACT

Most members of the general public are fascinated by the opportunity to name a celestial object. SGAC was donated the discoverer's naming privilege for two asteroids to use in outreach. In 2013 SGAC held a global asteroid naming campaign open to the general public of all ages. The aim was to engage as many people as possible to submit a name as well as to provide educational material about NEOs in the form of links for the interested participants. During the seven week campaign over 1500 entries were received from 85 countries. The submissions were grouped into two age groups, shortlisted, and sent to the IAU's CSBN who approved all six suggestions.

Observations from the campaign included that regardless of age and country of origin, preconceived notions about asteroids could be broadly grouped into 2 categories: they either bring death and destruction or are a symbol of hope and a better future for humanity. The level of knowledge about the actual facts can be considered low despite the availability of educational material.

In September 2014 the SWF hosted a two-day workshop on communication about NEOs for the benefit of IAWN. One of IAWN's aims that has been discussed is for IAWN to establish itself as a trusted and credible source of information for the general public for NEOs. One of the recommendations of this workshop was for IAWN to establish a 5-year plan with actions to reach that goal.

While the SGAC naming campaign was aimed at raising awareness about NEOs it did not aim to educate the general public about the facts and threats of asteroid impacts, it can nevertheless be used as an example how such a campaign could look like by building upon the lessons learned.

This paper will outline the SGAC Name An Asteroid Campaign including its results and lessons learned. Further it will recommend a strategy for IAWN to utilize similar campaigns around the globe to reach its aim of establishing itself as a credible and trusted source for the general public about NEOs while simultaneously raising the awareness and knowledge about NEOs among the general public.

1. Introduction

The Near Earth Object (NEO) Project Group (PG) of the Space Generation Advisory Council (SGAC) is dedicated to help the worldwide planetary defense community to meet one of nature's greatest challenges. The group provides a youth perspective to planetary defense through annual reports, competitions, conference attendance, and public outreach projects related to Near Earth Objects.

In 2011 the SGAC NEO PG got the offer by astronomer Vishnu Reddy to utilize the naming privileges for one of the asteroids he discovered to use in outreach.

A second unnamed asteroid was later added to allow grouping the entries into two age groups: below 18 and over 18.

To keep it simple, entrants had only to submit their proposal along with a rationale and basic personal data such as name, age, citizenship and email address.
Links to basic NEO information was provided on the campaign website to allow interested members of the general public to learn more.

SGAC partnered with the Minor Planet Center for support in adhering to the official naming rules as well as social media announcements regarding the campaign.

2. Campaign

The campaign utilized the volunteer network of SGAC. Each country has up to two National Points of Contact (NPoC) – volunteers that represent SGAC in their country. Asking them to spread the word within their country about the campaign was key to reaching the general public. It is obvious that the response varies from person to person depending on aspects such as time availability, interest, personality, etc.
The word about the campaign was spread mainly via social media and email.

3. Results

Within the 7 week campaign in which entries were accepted, over 1532 entries from 85 countries were received via the online form.

3.1 Participants

The following graphs show the distribution among age groups and origin.

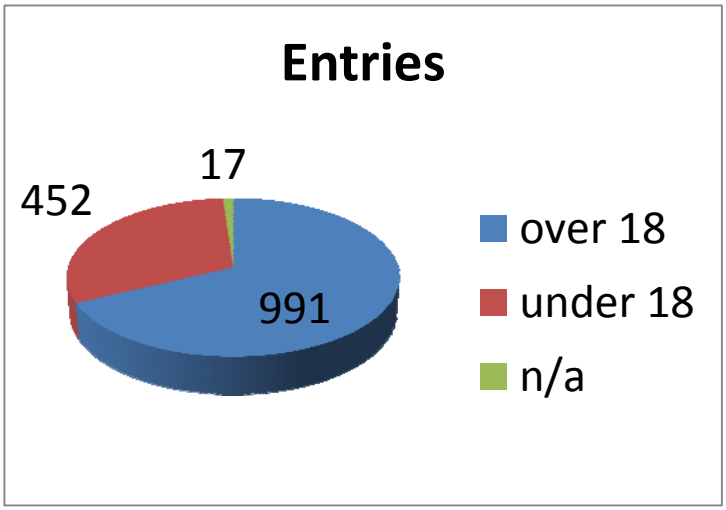

Figure 1 – Entries received per age group

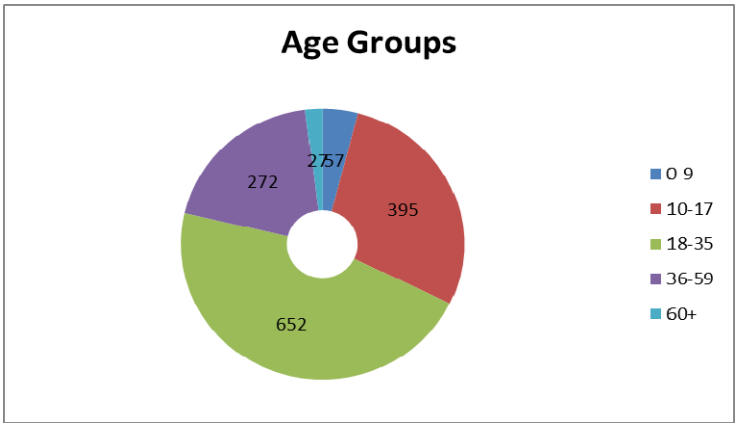

Figure 2 - Participant numbers by age group

Not surprisingly, SGAC's target group, students and young professionals between 18 and 35 made up almost half of the entrants. It has to be noted that reaching out to the general public was successful as the whole age spectrum was covered by this campaign. Considerable numbers of entries were also received by the age groups 10-17 and 36-59.

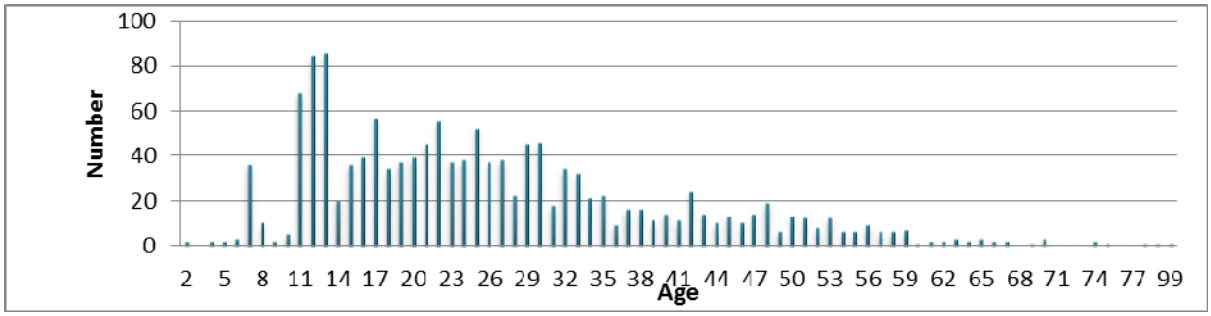

Figure 3 - Age distribution

A closer look at the true age distribution reveals several peaks. The peak at ages 7 and 8 was due to submissions by two school classes who learned about the campaign and sent in submissions with the help of their teacher. The same counts in part for the peak ages 11-13 but from this age on only individual submissions were received.

Figure 4 - Participant origin

As seen from the country distribution, the SGAC campaign managed to reach the general public on all continents.

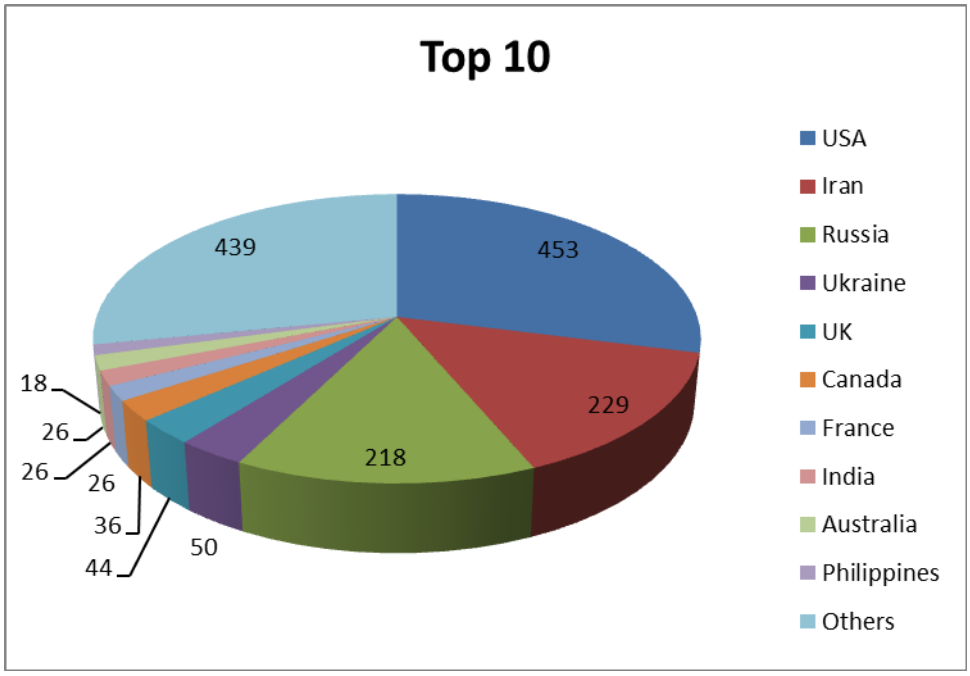

Figure 5 - Top 10 countries by participants

A closer look at the distribution by country that almost 60% of the submissions came from 3 countries: USA, Iran, and Russia. The main reason is due to the fact that the volunteers were particularly active in spreading the word of the campaign via social media and managed to mobilize many members of the general public to participate.

3.2 Names

After a preliminary sighting of the entries after which the ones who did not adhere to the official naming rules of the IAU were removed, a shortlist of three names for each age group was created and submitted to the IAU. It was recommended by the MPC to send three in case the first choice would not be accepted. As the CSBN only convenes once a month it would save time in case of rejection of the first proposal. To our surprise the CSBN accepted all six names that were submitted to them.

Under 18:

(4633) Marinbica
Marin Dacian Bica (1970–2013) was a Romanian professor of physics and astronomy, and a popular tutor to Romanian middle school students participating in International Astronomy and Astrophysics Olympiads.
Name proposed by Cristian Lazar (22), Ioana Tatarciuc (17), Daniel Cosovanu (17), Rares Iova (16), Alexandru C. (16), Jessica A. (16), Alina M. (17), Roxana (22), Ignat O. (40), Simanoa C. (39), all from Romania.

(4668) Rayjay
Sri Lankan-born and raised Ray Jayawardhana (b. 1971), known as “RayJay”, is an astronomer at the University of Toronto, and an award-winning science writer.
Name proposed by Chanaka P. (16) from Sri Lanka.

(151834) Mongkut
King Mongkut (or Rama IV, 1804-1868) was the monarch of Siam from 1851 to 1868. He embraced Western innovations and initiated the modernization of Siam, both in technology and culture, earning him the nickname “The Father of Science and Technology”.
Name proposed by Sethapong Pattaramekanon (13) from Thailand.

Over 18:
(3757) Anagolay
Anagolay is the goddess of lost things in ancient Philippine Tagalog mythology.
Name proposed by Mohammad Abquary Alon (20) from Philippines.

(3988) Huma
The Huma (or Homa) are legendary birds within Iranian mythology and Sufi fable. A huma is a bird of fortune since its touch, or even sight of its shadow, is said to be auspicious.
Name proposed by Homa Samanabadi (48) and Foad K. (56) from Iran.

(4784) Samcarin
Samcarin is the Sanskrit word for wanderer.
Name proposed by Aafaque R Khan (23) from India.

3.3 Media dissemination

Press releases were prepared and sent to the NPoCs of the countries from which the selected proposals came from (India, Iran, Philippines, Romania, Sri Lanka, and Thailand) and a request to disseminate the news among the local, regional and national media was made. Very good media coverage was reported from Iran, Thailand and Romania that included TV interviews with the person who submitted the selected name and featured magazine articles.

Figure 6 – Screenshots from TV programs from Thailand and Romania reporting about the asteroid naming

4. Lessons learned

Several lessons learned could be identified during the course of the campaign:

1. Responses from a particular country depended strongly on the enthusiasm and time availability of the volunteers to be able to spread the word.

2. Involvement of school classes increases the participation of younger ages considerably.

3. Participation was related to expected technology user level among the ages, i.e. the under 30 year olds who use social media on a daily basis had a higher participation rate than individuals over 30 years of age.

4. On the educational side, while many entries give no indication whether the person knows a lot or nothing about asteroids and the threats they can potentially pose, the ones who do elaborate in their rationale about it can be split in two opposed groups: One group describes asteroids as a symbol for hope for the future and humanity along the lines of using these unexplored worlds as a new beginning and the possibilities it brings along, while the other group fears the destruction they can bring and the end of the world. The idea that asteroids will inevitably come and hit Earth to destroy life seems to be a common misconception among both adults and kids. While this points to an awareness of the danger (presumably based on Hollywood movies) it is clearly not the full picture and there is room for improvement in educating the public about the basics of planetary defense, from detection, warning and risk communication to deflection and mitigation.

5. Outreach to local, regional and national media related to spreading the news of a local naming an asteroid depended again strongly on the abilities and network of the volunteers.

5. IAWN

IAWN is the International Asteroid Warning Network that was created within the UNCOPUOS framework as a result of the work of Action Team 14 on Near Earth objects. [1]

In September 2014 the SWF hosted a two-day workshop on communication about NEOs for the benefit of IAWN. One of IAWN's aims that has been discussed is for IAWN to establish itself as a trusted and credible source of information for the general public for NEOs. One of the recommendations of this workshop was for IAWN to establish a 5-year plan with actions to reach that goal. [2]

A proposal on actions how that goal can be reached based on the results and lessons learned from the SGAC Name An Asteroid Campaign is outlined as follows.

In order to become a trusted and credible source of information for the general public for NEOs, IAWN has first of all to be recognized by the general public. For an institution that was just founded it is naturally a difficult endeavour to establish its brand. This could be done by holding national asteroid naming campaigns in as many countries as possible around the globe and utilize the press coverage to engage the general public and establish itself as a known 'brand'. Whether those campaigns should be held in parallel or following a certain sequence should be discussed within IAWN under consideration of the available resources.

In fact, the resources needed to run such campaigns would require comparatively little resources from IAWN itself.

In order to run a national campaign, IAWN would need a yet to be named asteroid, a website and connections to the right people who help support the national campaigns. There are plenty of asteroids that have not been named yet available. Naming privileges are with the discoverer. The Planetary Defense Community should have sufficient discoveries to their credit to be used for this purpose. The WISE mission alone discovered more than 33.000 new objects. [3]

The general IAWN website (see recommendation from SWF workshop) could contain a subpage for the naming campaigns. Participants could select their country and have general NEO information in different languages available that also allows the general public to inform themselves about NEOs and the associated risk.

Partnering with national space agencies or research institutes will facilitate access to local language, media, communication and PR professionals that should make the campaign generally more effective than the volunteer led SGAC campaign. It will also help in the creation of local news reports, video clips and other resources that can be used by IAWN and support in creating its visibility.

NASA is a highly visible and well known entity around the world, although many times based on Hollywood portrayal and not based on the actual missions, associating IAWN with NASA would generate a higher sense of credibility among the general public. Since NASA is represented within the IAWN Steering Committee it could just be sufficient to display the logos of the supporting IAWN agencies on the website to reach that positive associative effect.

By broadening the advertisement of the campaigns outside the social media outlets, to newspapers, radio, TV as well as preparing materials for schools, more parts of society would be reached.

Through these asteroid naming campaigns a Win-Win scenario would be created. IAWN would establish itself and be recognized as the go to organisation for NEO information for the general public, while the general public has the opportunity to name an asteroid and will gain knowledge about NEOs.

6. Conclusion

The SGAC Name An Asteroid Campaign has shown how to successfully utilize a global network of volunteers for NEO outreach among the global general public. It can be used as an example how IAWN could accomplish its goal of becoming a credible institution for the general public to inform themselves about NEOs.

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