

MEDIA REPORT & ANALYSIS

ASU chosen to lead lunar CubeSat mission (LunaH-Map)

OVERVIEW AND IMPACT

On August 24, 2015, NASA announced that it had selected ASU to design, build, and operate the LunaH-Map CubeSat, a shoebox-size spacecraft that will be used to produce a map of the water resources on the moon for future space exploration.

ASU/SESE's media efforts garnered significant press coverage and social media activity, providing a unique opportunity to engage a broad audience in support of ASU's rapidly growing space exploration endeavors. The conversation highlighted that this is the first ASU-led interplanetary mission (all previous NASA mission involvement has consisted of ASU having instruments on other people's missions), and sent a clear message: **Only seven institutions in the United States build interplanetary spacecraft, and ASU is one of them.**

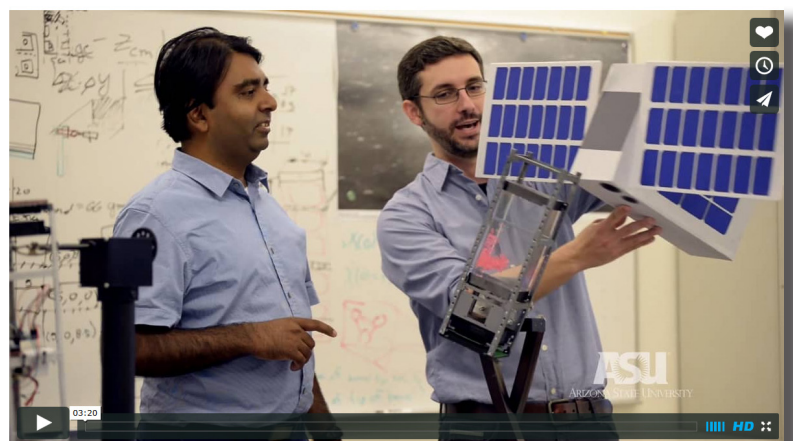


Craig Hardgrove

The collaborative partnership amongst SESE (Nikki Cassis), the ASU News team (Bret Hovell, Penny Walker, Ken Fagan and Scott Seckel), and ASU Media Relations (Jerry Gonzalez), ensured strong messaging reached a broad network of supporters, potential students, and small businesses.

More than **30 news articles** covered this significant ASU milestone, including **seven top-tier placements**. **Four local TV stations** spotlighted this in their newscasts, reaching an estimated **audience of 125,000**. Print versions were circulated to almost **400,000** readers. On social media alone, this announcement reached approximately **967,000** people.

All told, the integrated communication efforts resulted in upwards of **1.5 million** people learning about this accomplishment, a conservative estimate as this number does not include views of online news articles.



LunaH-Map mission to the Moon - SESE - Arizona State University

from Arizona State University PRB 1 week ago NOT YET RATED

Additionally, three businesses contacted NewSpace to discuss future partnerships.

MEDIA COVERAGE SUMMARY

As of September 1, 2015, this story topic had been mentioned in more than **30** news articles, and had garnered coverage in outlets including: Popular Science, USA Today, The Arizona Republic, KJZZ, and Phoenix Business Journal. Based on print edition circulation numbers, the story made it into the hands of an estimated **383,047** readers. Metrics for readership on internet stories is unavailable. Four local TV stations included it in their newscasts as an estimated **125,000** people watched, equating to an estimated publicity value of **\$16,459**. KJZZ reported **15,600** listeners for the hour during which the interview played.

The main drivers of media coverage included: the ASU News story and accompanying video; remarks by and media conversations with Craig Hardgrove (PI), Prof. Jim Bell, and Prof. Jekan Thanga; and two special ASU News stories looking at the history and future of space exploration at ASU.

PRESS / INTERNET

- **Arizona Republic** (Aug. 25 online | Aug. 26 print)
“Out of this world: NASA picks ASU to lead moon-orbiter mission”
- **USA Today** (Aug. 26 online)
“ASU chosen to lead NASA CubeSat mission”
- **KTAR** (Aug. 26 online)
“ASU to lead water-mapping mission on the moon”
- **Phoenix Business Journal** (Aug. 28 online | Sept. 4 print)
“NASA chooses ASU to lead moon mission”
- **Planetary Society blog** (Sept. 2 online)
“CubeSats to the Moon: An interview with the scientist behind NASA’s newest planetary exploration mission”
- **Arizona Daily Star** (Sept. 5 online | Sept. 6 print)
“ASU scientists think small, expect big results”
- **Popular Science** (Oct. 8 online)
“CubeSats Are Paving Mankind’s Way Back To The Moon, And Beyond”

NASA chooses ASU to lead moon mission

Aug 28, 2015, 12:22pm MST

INDUSTRIES & TAGS: Technology, Education, Aerospace, TechFlash

SHARE

Hayley Ringle
Reporter
Phoenix Business Journal

PROVIDED BY ASU
Craig Hardgrove is a... more

PROVIDED BY ASU
Jekan Thanga is an assistant... more



PROVIDED BY ASU
An ASU built CubeSat about the size of a shoebox will be used to produce a map of the... more
Arizona State University has been chosen by NASA to lead a moon mission.
ASU will design, build and operate the lunar CubeSat mission in the \$5.5 million shoebox-sized project on the Tempe campus, said Craig Hardgrove, the postdoctoral research scientist for the ASU School of Earth and Space Exploration.

BROADCAST

- **KTVK/3TV** (Aug. 26)
“ASU to lead NASA lunar mission”
- **KJZZ** (Aug. 27)
“ASU Leading Its First NASA Mission”
- **HORIZON** (Sept. 10)
“ASU CubeSat Mission”

	Number of Readers (based on daily circulation)
The Arizona Republic	214,285
Arizona Daily Star	154,715
Phoenix Business Journal	14,047
	383,047

	Est. Audience	Est. Publicity Value
Fox 10	62,845	\$2,670
KNXV (ABC 15)	25,285	\$5,710
KPHO (CBS 5)	18,716	\$3,978
KPNX (NBC 12)	18,187	\$4,101
	125,033	\$16,459



SPANISH-LANGUAGE MEDIA

- **Mixed Voces** - Front page story
<http://mixedvoces.com/comunidad/nasa-selecciona-a-asu-para-proyecto-espacial-40755>
- **Arizona Bilingual** - Featured on webpage and shared via Twitter
<http://azbilingual.com/?p=13207>
- **Univision** - Featured on webpage and newscasts 8/26 and 8/27
<http://www.univision.com/noticias/tecnologia/universidad-en-az-dirigira-mision-lunar>



SOCIAL MEDIA ANALYSIS

New-media tactics such as encouraging students to help share the content, tagging the reporters/news outlets in social media shares, and creating a Facebook campaign helped boost the social media relevance and extend the conversation beyond the confines of the campus.

Taking into account the number of Twitter followers and Facebook fans, retweets, mentions by other users including large social media players such as ASU, Michael Crow, and Discovery magazine journalist Corey S. Powell, ASU's LunaH-map announcement reached approximately **967,439 people on social media**.

A related noteworthy metric: The average time spent on the ASU News story page was 4:18 minutes (according to Nielsen Norman Group, the average page visit lasts a little less than a minute).

SOCIAL MEDIA SNAPSHOT	REACH	ENGAGEMENT (Likes, Shares, Clicks, Views, Comments, Retweets, Favorites)	EXPOSURE / IMPRESSIONS
SESE Facebook story post	6,200	721	
SESE Facebook video post	7,700	395	
ASU Facebook story post	184,117	7,484	
Michael Crow Facebook post	4,000*	1,072	
ASU News story URL	8,600*	11,870	
AZ Republic online story	2,393*	2,393	
Video on Vimeo	2,478	2,366	
Bitly	1,695	1,695	
ASU Instagram	28,500	1,285	
Tweet Reach: story title	98,260	N/A	120,079
Tweet Reach: story link	206,899	N/A	367,087
TwitterReach: keyword: LunaH	49,142	N/A	85,450
SESE Twitter (21 SESE tweets)	241,575	210	486,867
ASU Twitter	125,880	N/A	140,610
TOTAL	967,439	29,491	1,200,093

Reach
 The size of your maximum unique potential audience.

Exposure
 The total number of times tweets were delivered to timelines, including repeats.

*Exact reach not available; metric based on # of Followers or "Likes".

Facebook Campaign

To boost visibility of this announcement, two small-cost Facebook campaigns were launched. The ASU News story post was set at a budget of \$5. It targeted prospective students (ages 14-25) and reached 1,763 users. It resulted in 449 post likes, 2 shares, 8 clicks and 1 page like. The video was the second campaign with a budget cap of \$15, targeted at users age 16-23. The 3,477 paid reach resulted in 54 post likes, 17 clicks, 2 shares and 3 page likes.

ASU MESSAGING

ASU News published three stories timed to coincide with the NASA announcement. The first story went live after the announcement (upon receiving NASA approval). Its purpose was to highlight ASU's unique ability to design, build and test space instruments on campus, elevating the university to among a handful of universities that can perform these functions according to NASA guidelines.

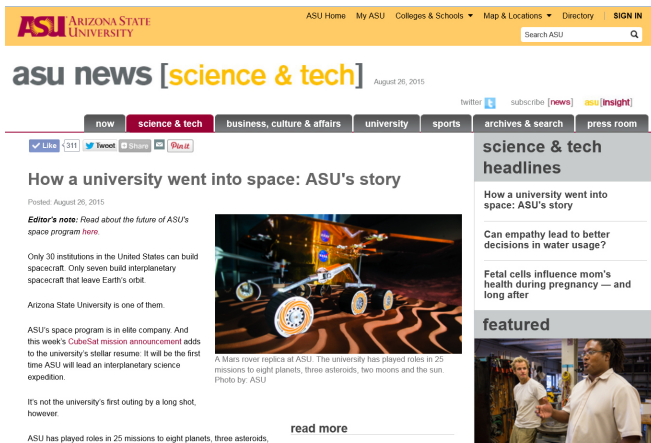
The second story is a nod to the past, providing a stratospheric overview of how ASU has come to be a powerhouse in space exploration.

The third story is a glimpse into what the future holds for SESE. Nikki Cassis wrote the first story titled "ASU chosen to lead lunar CubeSat mission"; ASU News reporter Scott Seckel authored the two accompanying stories. The main story was included in the 8/25 issue of ASU News Now (~45K subscribers) and the 8/28 issue of Insight (~12K subscribers).



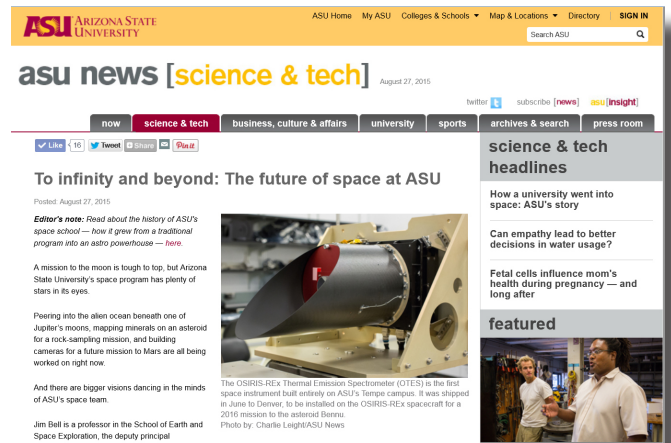
The screenshot shows the ASU News website interface. The main article is titled "ASU chosen to lead lunar CubeSat mission" and is dated August 25, 2015. The article text describes a spacecraft mission to map water-ice on the moon. A large image shows a satellite in orbit over the moon's surface. The right sidebar contains "science & tech headlines" and a "featured" section with a photo of two men in a lab.

<https://asunews.asu.edu/20150825-LunaH-CubeSat>



The screenshot shows the ASU News website interface. The main article is titled "How a university went into space: ASU's story" and is dated August 26, 2015. The article text discusses ASU's history in space exploration. A large image shows a Mars rover replica. The right sidebar contains "science & tech headlines" and a "featured" section with a photo of two men in a lab.

<https://asunews.asu.edu/20150826-asu-space-program-history>



The screenshot shows the ASU News website interface. The main article is titled "To infinity and beyond: The future of space at ASU" and is dated August 27, 2015. The article text discusses ASU's future in space exploration. A large image shows a satellite component. The right sidebar contains "science & tech headlines" and a "featured" section with a photo of two men in a lab.

<https://asunews.asu.edu/20150827-space-future>

Media Placement

1	DATE	MEDIA OUTLET	TITLE	LINK
2	8/25/15	Arizona Republic	Out of this world: NASA picks ASU to lead moon-orbiter mission	http://www.azcentral.com/story/news/local/tempe/2015/08/25/asu-nasa-spacecraft-moon-mission/32115957/
3	8/25/15	Channel 12 News	ASU chosen to lead NASA CubeSat mission	http://www.12news.com/story/news/local/valley/2015/08/25/asu-chosen-lead-nasa-cubesat-mission/32362577/
4	8/25/15	State Press	ASU leads mission to map water on the moon	http://www.statepress.com/article/2015/08/asu-leads-mission-water-moon
5	8/25/15	High Beam	Asu Chosen to Lead Lunar Cubesat Mission	http://www.highbeam.com/doc/1G1-426647526.html
6	8/26/15	KTAR	ASU to lead water-mapping mission on the moon, first ever for univers	http://ktar.com/story/597252/asu-to-lead-water-mapping-mission-on-the-moon-first-ever-for-university/
7	8/26/15	Channel 3 / AZ Family	ASU to lead NASA lunar mission	http://www.azfamily.com/story/29888760/asu-to-lead-nasa-lunar-mission
8	8/26/15	Univision	Universidad en AZ dirigirá misión lunar	http://www.univision.com/noticias/tecnologia/universidad-en-az-dirigira-mision-lunar
9	8/26/15	USA Today	ASU chosen to lead NASA CubeSat mission	http://www.usatoday.com/story/news/local/valley/2015/08/25/asu-chosen-lead-nasa-cubesat-mission/32362577/
10	8/26/15	The Tennessean	Out of this world: NASA picks ASU to lead moon-orbiter mission	http://www.tennessean.com/story/news/local/tempe/2015/08/25/asu-nasa-spacecraft-moon-mission/32115957/
11	8/26/15	Channel 5 / KPHO	ASU to lead NASA lunar mission	http://www.kpho.com/story/29888760/asu-to-lead-nasa-lunar-mission
12	8/26/15	KSLA	ASU to lead NASA lunar mission	http://www.ksla.com/story/29888760/asu-to-lead-nasa-lunar-mission
13	8/26/15	WNEM	ASU to lead NASA lunar mission	http://www.wnem.com/story/29888760/asu-to-lead-nasa-lunar-mission
14	8/26/15	Fox 10	ASU to lead NASA lunar mission	http://www.fox10tv.com/story/29888760/asu-to-lead-nasa-lunar-mission
15	8/26/15	KFVE	ASU to lead NASA lunar mission	http://www.k5thometeam.com/story/29888760/asu-to-lead-nasa-lunar-mission
16	8/26/15	Space Ref	Arizona State University Chosen To Lead A Lunar CubeSat Mission	http://spaceref.com/nasa-hack-space/arizona-state-university-chosen-to-lead-a-lunar-cubesat-mission.html
17	8/26/15	Suffield Times	CubeSat to create a map of water ice on the moon	http://www.suffieldtimes.com/science/cubesat-to-create-a-map-of-water-ice-on-the-moon/52381/
18	8/26/15	World Now	ASU to lead NASA lunar mission	http://raycomgroup.worldnow.com/story/29888760/asu-to-lead-nasa-lunar-mission
19	8/26/15	Astronomie.NL	'Schoenendoos' gaat op zoek naar maanijns	http://www.astronomie.nl/#/actueel/nieuws/_detail/external_gli/schoenendoos-gaat-op-zoek-naar-maanijns/
20	8/26/15	Explore Deep Space	Out of this world: NASA picks ASU to lead moon-orbiter mission	http://exploredspace.com/news/todays-deep-space-extra-wednesday-august-26-2015/
21	8/27/15	Parabolic Arc	ASU CubeSat to Explore Moon	http://www.parabolicarc.com/2015/08/27/asu-cubesat-explore-moon/
22	8/27/15	Sun Times	ASU to lead NASA moon mission with 'cube' satellite	http://phoenix.suntimes.com/phx-news/7/83/263850/asu-lead-nasa-moon-mission-cube/
23	8/27/15	Space Daily	ASU chosen to lead lunar CubeSat mission	http://www.onenewspage.com/n/Science/7556le2di/ASU-chosen-to-lead-lunar-CubeSat-mission.htm
24	8/27/15	Moon Daily	ASU chosen to lead lunar CubeSat mission	http://www.moondaily.com/pageone/mondaily-2015-08-28.html
25	8/27/15	KJZZ	Arizona State University Leading Its First NASA Mission	http://kjzz.org/content/183869/arizona-state-university-leading-its-first-nasa-mission
26	8/27/15	Lunar Enterprise Daily	ASU CubeSat May Lead Moon South Pole Water / Ice Search	http://www.lunarenterprisedaily.com/2015/08/26/thursday-27-august-2015/
27	8/27/15	Mixed Voces	NASA selecciona a ASU para proyecto espacial	http://mixedvoces.com/comunidad/nasa-selecciona-a-asu-para-proyecto-espacial-40755
28	8/28/15	Phoenix Business Journal	NASA chooses ASU to lead moon mission	http://www.bizjournals.com/phoenix/blog/techflash/2015/08/nasa-chooses-asu-to-lead-moon-mission.html
29	8/28/15	Spacepage.be	Stuur eens een 'schoendoos' naar de Maan	http://www.spacepage.be/nieuws/ruimtevaart/verkenning-van-het-zonnestelsel/stuur-eens-een-schoendoos-naar-de-maan
30	9/2/15	Planetary Society Blog	CubeSats to the Moon	http://www.planetary.org/blogs/casey-dreier/2015/09/02-cubesats-to-the-moon.html
31	9/7/15	Arizona Daily Star (Tucson)	ASU scientists think small, expect big results	http://tucson.com/news/blogs/scientific-bent/asu-scientists-think-small-expect-big-results/article_32b7244c-35b7-5ded-9ff6-d8e71657862f.html
32	9/10/15	Cosmos Magazine	Space cubes – the tiny satellites transforming space exploration	http://blog.cosmosmagazine.com/blog/2015/9/9/space-cubes-the-tiny-satellites-transforming-space-exploration
33	10/8/15	Popular Science	CubeSats Are Paving Mankind's Way Back To The Moon, And Beyond	http://www.popsoci.com/cubesats-are-paving-mankinds-way-back-to-moon-and-beyond

ASU Connections podcast: <http://conklinradio.com/drcraighardgrove/>