



## 2010 HUNTSVILLE ALABAMA L5 SOCIETY (HAL5) ANNUAL REPORT TO THE MEMBERSHIP

Founded in 1983, the Huntsville Alabama L5 Society (HAL5) is a not-for-profit 501(c)(3) organization. We are the Huntsville chapter of the National Space Society (NSS), a grassroots, educational organization that advocates for the exploration and settlement of space. We are a mix of enthusiasts and professionals who share the belief that space development can improve our world with immeasurable benefits in the areas of education, energy, environment, industry, resources, and ultimately room for humanity to grow. We believe that by educating and working with the public, government, and industry, we can speed up the day when routine, safe, and affordable space travel is a reality.

In 2010 HAL5 ramped up our International Space Development Conference (ISDC) 2011 planning activities as we continued our continued with our monthly public lectures, education outreach with local organizations and events, and our Project High Altitude Lift-Off (HALO) educational amateur rocketry program. We supported the Huntsville's third official Yuri's Night party, and the annual Von Braun Astronomy Society (VBAS) Astronomy Day.

### Administrative Activities

The HAL5 Executive Committee met at 6 p.m. on the second Thursdays of every month. The meetings are open to the public, current and prospective members. During these meetings, the officers reported on the status of the chapter and NSS, and discussed upcoming and ongoing project activities and the monthly program. The HAL5 website is used to announce HAL5 and NSS events and news, including HAL5 and Project HALO information, monthly programs, and executive committee meeting times and locations. HAL5 also has a presence on *Facebook* as well as in selected local print media outlets, local online events calendar, such as *OurValleyEvents.com* and WLRH public radio station. Emails are sent to current members and guests who sign up at the monthly programs. Selected event announcement postcards are sent out to those with no current email address and selected members. The annual membership dues for regular and renewal members are \$16, \$20 for families, and \$10 for students, seniors, retired people and the unemployed. We ended 2010 with 38 members.

### Monthly Programs, Outreach, and Special Events

HAL5 holds monthly public lectures or membership meetings on the first Thursday of every month, unless there is a holiday or other conflict, at the Huntsville–Madison County Main Public Library in downtown Huntsville. After each monthly program, a social was held at the local IHOP restaurant with the speakers and interested members and guests. As a thank you, speaker and guest meals at the social are picked up by HAL5.

We started off 2010 with Dr. Barbara Cohen of NASA MSFC on “The Moon is a Planet Too: Lunar Science and Robotic Exploration.” In February, our newest member, Audra Herriges talked about her architectural thesis titled “Next L.E.A.P. to the

future! Lunar Explorational Architecture Possibilities.” In March, local author, Les Johnson, spoke to us about a book he co-authored titled *Paradise Regained: The Regreening of Planet Earth*. In April, Dr. Martin Weisskopf presented a summary of 10 years of Chandra X-Ray Observatory at Space Camp’s Educator Resources Center. Thanks to the U.S. Space and Rocket Center (USSRC) for the use of the facility.



*HAL5 2010 Monthly Program Flyers. See our website at [www.HAL5.org](http://www.HAL5.org) for Larger Sizes and Past Flyers*

On April 10, HAL5 joined Huntsville’s Court Appointed Juvenile Advocates (CAJA) to host the third Yuri’s Night Huntsville. In May, Dr. Jamie Niedert, Chief Scientist, Energetics of U.S. Army Aviation and Missile Research and Design Center talked to us about “The History and Chemistry of Solid Rocket Propellants: Harnessing Energy for Propulsion.” In addition to our regular program, HAL5 Vice President Bart Leahy and members Ed Kiker, James Hopkins, and Ronnie Lajoie staffed a table at the 2010 International Space Development Conference (ISDC) in Chicago to promote ISDC 2011 in Huntsville. The Huntsville/Madison County Chamber of Commerce graciously provided us with brochures and videos. HAL5 was recognized as the 2009 NSS Chapter of the Year at that year’s ISDC. At this year’s ISDC, we received the official award for the 2009 honor, a beautiful statue made of crystal and steel. The award is on display during our monthly meetings.

In June, we held our annual election of officers and membership meeting to talk about the state of the chapter, NSS, Project HALO, ISDC 2011, and soliciting feedback from the members. Our chapter president, Yohon Lo, was nominated by HAL5 officers as Huntsville Area Technical Societies (HATS) as our professional of the year. The award was presented at HATS POY dinner on June 22, 2010. Dr. Marian L. Lewis, retired research professor at UAHuntsville talked about “Life in Space: A Cell’s Perspective” in August.

In September, HAL5 members Bill Brown and Ethan Chew, who is also a member of Makers Local 256, talked about their involvement of Makers Local 256 to send a weather balloon, with payload, into near-space to capture pictures of the Earth’s horizon, and to return the payload safely to the ground and to retrieve the payload. Also in September, Steve and Carrie



HAL5 and VBAS Member Megan trying out HAL5's Own Suitcase Rocket (L). Emily & Peter staffing the HAL5 display table (R)

Mustaikis hosted our annual end of summer cookout. In October, Gordon Woodcock, the last president of the L5 Society, gave a talk about "Strategy for Space Development." This is an updated talk that Gordon gave at 2010 ISDC and at AIAA Space 2010 conference. On October 16, HAL5 officers along with Carol Johnson, NSS Region 3 Director, participated at the annual VBAS Astronomy Day. In addition to the hybrid suitcase rocket from Tim Pickens at Dynetics, HAL5 also debuted our own hybrid suitcase rocket powered by nitrous oxide and acrylic using a propane torch as the igniter. ISDC 2011 status and planning meeting in November. Dr. Charles A. Lundquist, researcher at UAHuntsville wrapped up the year with a talk on "Sociological Factors for Space Exploration." We wrapped up 2010 with our annual Christmas party at the residence of Tim and Melanie Pickens.

Yuri's Night Huntsville 2010

HAL5 partnered with CAJA to host Huntsville's 2010 Yuri's Night celebration at the USSRC Davidson Center for Space Exploration. The event helped raise funds for advocate services for children and juveniles in the court system. Yuri's Night Huntsville featured a special VIP event that allowed participants to meet and talk with area space luminaries, including Owen Garriott, Mike Griffin, Homer Hickam, and Ed Buckbee. The local branch of the 501<sup>st</sup> Stormtrooper Legion opened the party (left) that was open to general admission featured local bands DiscOasis, which showed up in Star Trek uniforms, and "geek rock" band Foot Pound Force, which our Education Chair David Hewitt is a member of. Live stream of the Yuri's Night global were played on the big screen. It was a great success, raising \$5,000 for CAJA.



ISDC 2011 – Huntsville



The ISDC 2011 committee is up and running at full speed to make this conference a resounding success. Led by our chairman Bart Leahy, and our vice chair, Yohon Lo, the event will take place at Von Braun Center and Embassy Suite Hotels on May 18 – 22, 2011. The Governor's Dinner Gala will take place at the Davidson Center for Space Exploration at the U.S. Space and Rocket Center. The conference theme is *From the Ground Up...How Do We Get There?* The theme and the conference logo pay homage to

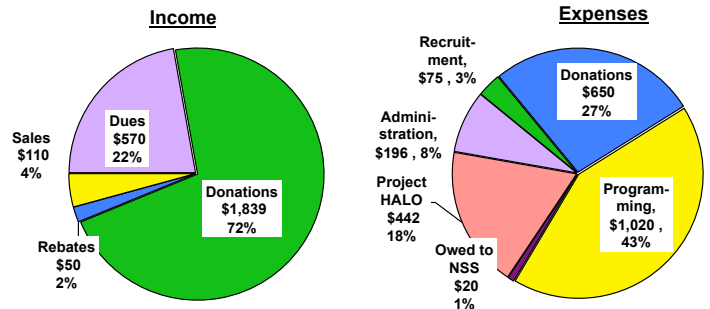
humble beginnings of Huntsville as a cotton town to its growth into the Rocket City. ISDC 2011 will focus not just on Huntsville's past, but on what the Rocket City and our diverse technology expertise and people can do to keep space exploration moving in the future from the ground up. We need your support and participation to make this the best ISDC ever. Please contact us or visit the ISDC 2011 website [ISDC.NSS.org/2011](http://ISDC.NSS.org/2011). We would like to thanks to all of our sponsors, supporters and volunteers that have already sign up!

Project HALO

Project HALO team meets every Wednesday night. In 2010 the team embarked on a new rocket based on nitrous oxide and ethane. The demonstration unit uses carbon fiber wrapped empty aluminum beverage bottles. Firing of the unit will take place in early 2011. HAL5 also built our own version of the hybrid suitcase rocket for education outreach events. The suitcase rocket was demonstrated to the HAL5 members at our summer picnic at The Mustaikis, and to the public at Astronomy Day.

Financial

The HAL5 bank accounts had a net increase in 2010 of about \$1,000, thanks primarily to a net grant from CAJA for supporting Yuri's Night Huntsville 2010 (\$1,500 - \$500 donated back). Otherwise, HAL5 member dues and donations balanced HAL5 Administration, Programming, and Project HALO expenses. Breakdowns of income and expenses are shown below. Most of the Administration expenses were for our P.O. box rental. Our Education Outreach (Programming) expenses increased to cover our new suitcase rocket. We also donated \$100 to HATS STEDTrain. Overall, we are doing very well, thanks to you, our members.



2010 HAL5 Officers (June 2010 to June 2011)

- President: Yohon Lo
- Vice President: Bart Leahy
- Treasurer: Ronnie Lajoie
- Secretary: Peter Turek
- Public Relations: Doshia Wilson (till Dec. 2010)
- Education Outreach: David Hewitt
- Membership: Emily Hewitt

In closing, we thank you for your continued support for our endeavors to educate the public and to promote a spacefaring civilization. We could not have accomplished all we have without your support, time, and dedication. We welcome your inputs and suggestions on how we can better serve you and our community. See you at our next gathering and at ISDC 2011!

- HAL5 Executive Officers