Annual Report of the Office of Science Education and Public Outreach
January 1, 2007 to December 31, 2007

The Hilo based Office of Science Education and Public Outreach (SEPO) was formed in October 2003. Science educational endeavors consisted of visitations to 14 public, private and charter primary, secondary and post-secondary schools from around Hawaii Island. Eighteen school visits featured multimedia presentations and interactive activities, impacting 1120 students.

24 Hours in the Life of the NASA IRTF

SEPO produced a documentary film on what transpires within an astronomical observatory on Mauna Kea: the NASA Infrared Telescope Facility. The video illustrates the constant work required to observe the cosmos, maintain the telescope and instrumentation, and the types of careers that support the science of astronomy.

High School Career Fairs

SEPO (along with IFA staff in electronics technology, machine works, software engineering) participated in two career fairs, which were attended cumulatively by more than 620 high school and college students.

Community Involvement

Public outreach endeavors of SEPO included interaction with several civic groups and membership in eight committees and boards including the Hawaii Island Economic Development Board Science and Technology Committee, Hawaii Island Chamber of Commerce Education Committee, Business-Education Partnership and the Hawaii County Workforce Investment Board. Presentations have been made to several groups including Youth Council, STEM Conference and HI Board of Education.
Mauna Kea Tour Packages
Mauna Kea Observatory tour packages that included meals at the Hale Pohaku mid-level facility, nature walks and Hawaiian culture presentations at the Visitor Information Station were provided to over 172 visitors in 14 groups. Several tour packages were gift certificates the IFA donated to charitable organizations for their fundraising events. One very special tour was provided for a medical group from the East Coast.

AstroTalk - Free Public Lecture Series
SEPO maintained an informal public lecture series entitled “AstroTalk” in collaboration with the University of Hawaii at Hilo Physics and Astronomy Department. AstroTalk speakers included world renowned astronomers and featured live video webcasting and streaming video archiving capabilities for viewing after the event. Over 800 people attended AstroTalk events through the year, many thousands over the internet have viewed the podcasts.

AstroDay Festival 2007
AstroDay Festival attracted over 15,000 visitors from around the world, thanks in part to a cruise ship and national advertising. AstroDay has earned its second “Best Astronomy Day of the Year” award, edging out programs from 21 different countries and every state of the union. AstroDay has also won national awards every year since its inception in 2002.

Technology-based Education: Robotics
SEPO continued its involvement in robotics this year through collaborations with the AstroDay Institute to offer a summer enrichment camp and a Hawaii Island based robotics festival.

Hilo Youth Robotics
SEPO teamed up with the AstroDay Institute to seek funding and coordinate the Hilo Youth Robotics summer enrichment camp for youngsters ages 9 through 13 years. Two separate, two-week workshops were sponsored by the Institute for Astronomy, Hawaii County and private donations. Along with 50+ students, the workshops also trained 26 teachers and parents and provided robotics kits and curricula for their respective schools and community centers.

RoboFest Hawaii - High-Technology and Engineering Fair Disguised as a Robotics Festival
SEPO was a co-sponsor of the 2nd Annual HELCO RoboFest Hawaii, held on Saturday, November 17 at the University of Hawaii at Hilo New Gym. The event featured a Lego robotics competition with a field of eight teams coached by teachers and parents who underwent training during our Hilo Youth Robotics summer camp (see story above). There was also an open-league Mini-Sumo robotics tournament and several robotics demonstrations. Joining the competition were exhibits from high school engineering academies, Hawaii Community College, University of Hawaii at Hilo, and high-tech industry. Hawaii is a unique place in the world, where cutting-edge science conducted from the tops of the tallest mountains to the depths of the deepest oceans rely on diverse technologies. Students can become a part of these fields of research at any level: as a technician, an engineer or as the scientist or researcher themselves, by following a path of education that can be illuminated by our partners at this event.