

From: secretary@areciboscience.org
Subject: Arecibo Science Advocacy Partnership: September 2014 Member Newsletter
Date: September 9, 2014 10:53:04 AM EDT
To: ASAP members <members@areciboscience.org>
▶ 1 Attachment, 46.1 KB

Arecibo Science Advocacy Partnership



Dear ASAP Member,

The ASAP Board had decided late last year to undertake the development of a set of "Blue Skies" documents, summarizing the excellent science that the Observatory can be expected to carry out over the next few years. Over the last several months this effort has reached an important milestone. About 20 "White Paper" drafts are now posted on the ASAP Website, and several others are still expected. We believe that this is the most complete and extensive compilation of advocacy papers ever assembled for the Observatory, and we must thank both ASAP members and AO staff for their work in drafting them. This is an area where ASAP's management of the science advocacy effort is absolutely crucial because the NAIC partners, SRI, USRA and UMET have not been able to do so.

This "white paper" development is now very timely, because the Observatory will face a critical "Mid-Term Review" by the NSF in November, and it is critical that a powerful science case be assembled in support of AO's future. The decisions made in November will very likely foreshadow NSF policy about a possible recompetition less than two years hence.

Therefore, ASAP's immediate work will be to assemble the science communities in each subject area to constructively revise and enhance each "white paper" draft so as to produce highly effective science advocacy documents in each science area. We will thus be contacting many of you who are members of the various science communities to assist in this work. And we would be pleased to hear from members with suggestions or offers to undertake parts of the work.

Some ASAP members may already know that USRA Assistant Director Fernando Camilo was dismissed by USRA in August under a cloud, so his position is now open and needs to be filled again promptly. Planetary Science Head Mike Nolan has generously stepped into the breach, but his hands were already more than full running the ever more active planetary radar work at the Observatory. Please have a look at the [USRA tender](#) and spread the word about it. It is possible that USRA would appoint an interim person to this position while searching for a permanent replacement, and ASAP should give the Observatory all possible assistance in identifying appropriate people for this key administrative position.

Finally let us report further on the repair following the January 13, 2014 magnitude 6 earthquake. The Observatory was out of service for two months while waiting for heavy steel components to come by sea from the mainland, came back into operation seamlessly just as scheduled on March 12th.

As we had reported earlier, the damaged cable was the "short" cable delivered 12 feet too short by Bethlehem Steel in 1962 and then spliced so it could go into service at that time on Tower 8. All scientific work requiring triangle motion was terminated the morning after the earthquake. It was feared that the 20-ton, 500-foot damaged cable could actually part and drop on to the reflector, ruining its delicate alignment.

Since our last report, the cable has been repaired through one of the most remarkable—surely even heroic—actions by the Observatory's staff in its long history. As depicted in our last report, the damaged section was close to the top of Tower 8, between the "splice box" and the tower-top cable saddle. The remainder of the cable was undamaged, so the repair entailed a gargantuan turn-buckle arrangement to secure the splice box to unused slots in the saddle that were left over from the original construction.

The repairing device, interestingly called a "weldment", weighed about a ton overall, and some of its parts were so heavy that they had to come to Puerto Rico from the mainland by ship! Designed by Eng. Felipe Soberal and his team in collaboration with Ammann & Whitney consulting engineers, the device was constructed in the Observatory maintenance shop. It was then winched to the top of Tower 8 and installed by members of the Observatory's platform maintenance crew.

Within three days of the earthquake, the Observatory announced a schedule for the repair. Regular work was to resume on March 12 after the repair was completed and after Phil Perillat had a weekend to recalibrate the pointing and bring the instrument back into full operation. And, indeed, on the morning of March 12, observations resumed. The planning and teamwork that was needed to make this happen was impressive. No other recent situation so exemplifies the intelligence, commitment and resourcefulness of the Arecibo staff community.

The fabrication crew included Carmelo Sein, Miguel Nieves, Angel Millet, Juan M. Rodriguez, Osvaldo Rodriguez and Rafael Roman; the rigging/hoisting crew was Joselito Diaz, Heriberto Toledo, Hiram Crespo and Jose M. Chacon; and Maria I. Mercado handled purchasing. Jose (Anibal) Rosado was the field supervisor under the direction of Engs. Jaime Gago and Felipe O. Soberal at AO as advised by Engs. James Gould (Senior Associate), Joel Stahmer (Vice President) and Vincent M. Antes at Amman & Whitney in New York City. The cable repair was covered in two publications we know of, here are links to an [SRI News](#) posting and the [Planetary Society](#).

With sincere thanks and regards,
The ASAP Board