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A newsletter for non-scientists (and scientists) interested in MAGIC

The last update was two weeks ago today, and I left the following day for Los Angeles to watch installation of the AMF2 (the containers and instruments that will take the measurements during MAGIC) aboard the *Horizon Spirit*. The plan was that the *Spirit* would arrive early Thursday morning and we would meet it at the dock with our crew and with welders and others we had contracted to help brace the deck for the weight of the AMF2 containers (which are 20 feet long by eight feet high by eight feet wide), install the power system, etc. Due to unforeseen circumstances the *Spirit* arrived a bit later than planned, and as a consequence of that and of other events, we didn't get to load the AMF2 on the ship. Thus, I'm flying back to Los Angeles tomorrow, where we try again.

Several thought I would be disappointed by the turn of events, but on the contrary, I left feeling quite optimistic. Things like this happen (as my previous career as an oceanographer taught me), and nothing can be done about them other than to be as prepared as possible and wait patiently. The containers are on the dock waiting to be loaded later this week, so the delay is only temporary. Plus, our visit was by no means unproductive. Much of the work required to reinforce the deck was done, the power system was installed, and the meteorological instruments were placed on the mast. We visited the locations in the Long Beach area where the instruments were shipped, and where the vans will be stored when they come off the *Spirit* next February before it goes to dry dock (this is a nice location, with power, where the containers and instruments can be turned on, tuned up, etc.). We got to meet some of the crew members who weren't on the *Spirit* last February when we rode it on Leg0, and saw several others who remembered us from then.

I also got to meet, for the first time, the technicians who will be taking the measurements during MAGIC. Tom is a former navy person with a lot of submarine experience, so being on ship won't phase him at all. He seems totally unflappable and competent to handle anything that arises. Mark hasn't been on ships much, but he has installed radars all over the world (a nice bonus) and seems eager to get started. Both of them seem excited about the project, and both will be assets to this endeavor. I am confident that MAGIC will be in good hands with them in charge.

Although we didn't get the AMF2 containers loaded in Los Angeles, MAGIC is taking data as you read this! Mike Reynolds flew to Hawaii where he boarded the *Spirit* a week ago tomorrow and has been riding back. He got the meteorological system up and running and installed an instrument that measures sea surface temperature. Mike, who has started two companies that manufacture and install meteorological instruments for marine use, has been with MAGIC since its inception. He is on the MAGIC science team and has been a consultant for the logistic side, and he is the perfect choice to be the first person to ride the *Spirit* during MAGIC. He has been a great resource for all aspects of the project, as well as a great source of scientific, logistical, political, and spiritual advice (the latter referring to keeping me calm when things seemed to get a bit too crazy).

The Argonne personnel in charge of the deployment, Mike and Nicki, are probably as anxious/excited as I am, but whereas I am basically an observer at this point, they have been doing all the hard work and dealing with the zillions of details necessary to make MAGIC become a reality. There are several dozen instruments that had to be shipped, calibrated, renovated, marine-hardened, tracked, and ready to be placed on the ship; all the people who have to ride the ship either to or from Hawaii, who require paperwork for getting in the cargo area and on the ship, flights and lodging in Los Angeles and in Hawaii, etc.; all the contractors in Los Angeles and the logistics there that have to be dealt with, including storing the instruments, getting them to the ship, getting the cranes lined up to load them, etc. (remember, Mike and Nicki are doing this from Chicago); and probably a lot of other stuff that happens behind the scenes that not even I am aware of. I'm sure they haven't been sleeping nights, but they're the reason I have been!

The current plan is that the *Spirit* arrives in Los Angeles Thursday morning, and all three of the AMF2 containers will be loaded, as will the Ka-band radar and other smaller modules. The containers will be unloaded and railings will be placed on the tops of them upon which instruments will be mounted. The computer, data backup, and communication systems will be readied, and instruments will be turned on and set to collect data. After the *Spirit* sets sail on Saturday, the technicians will start attempting weather balloons launches, and MAGIC data will start flowing. I am confident that in the next update I can report the successful installation of AMF2 aboard the Horizon *Spirit*!

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Please address any questions or comments to elewis@bnl.gov.

All updates and other MAGIC information are at <http://www.bnl.gov/envsci/ARM/MAGIC/>.