

Brookhaven lab to transport ultrasensitive device to new home near Chicago

BY SOPHIA CHANG
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Brookhaven National Laboratory's brigade of scientists and researchers are accustomed to highly specialized and rigorous work. But a recent challenge has given them their biggest equation ever to solve.

BNL officials had to figure out a way to send its sister institute Fermilab near Chicago a huge piece of equipment, a muon storage ring whose heart is a 50-foot-wide circular electromagnet.

The problem was the 14-ton electromagnet in the ring can't be taken apart or bent — or even wobble more than an eighth of an inch along the way, lest the internal superconducting wires be destroyed.

So the BNL and Fermilab scientists had to come up with a way to ship the delicate electromagnet a circuitous 3,200 miles — with nary a quiver — in the largest move in the lab's history. With dozens of lab staffers involved, it is costing \$3 million.

"It's an effective use of taxpayer money because it was built here and is now being reused," said Fermilab scientist Chris Polly, project manager in charge of the move. Building a new storage muon ring at Fermilab would cost about 10 times more than moving the original one, project officials said.

The muon storage ring helps the labs study the properties of tiny subatomic particles. With the more advanced facilities available at Fermilab, the scientists in Chicago will make better use of the muon storage ring for research that can shed light on new realms of science, lab officials said. "There's Nobel Prize-winning physics lurking out there," Polly said.

Officials first considered moving the ring by attaching it to a Sikorsky helicopter, but the risk of vibrations was too high — as well as the public risk of flying such a large object strapped to a helicopter over half the na-

tion.

"You can't even pick up something like an SUV and fly it over houses," Polly said.

They settled on a combination of trucking and barging the ring. The ring will be attached to a custom truck fixture and driven — at a maximum speed of 10 mph — out of BNL and down William Floyd Parkway to Smith Point Marina. The drive is expected to take four to six hours.

The ring will then be loaded onto a specially prepared barge in Fire Island inlet. "It will take us a couple days to get it on the barge and secure it, making sure everything is set to sail," said Terry Emmert of Emmert International, a Portland-based company hired for the move. "Once you sail, it's gone and you're not going to see a lot of it until it gets to New Orleans."

The ring — held with special fixtures to keep it stable — is to make its way down the Eastern Seaboard, around Florida, into the Gulf of Mexico, and then up the Mississippi River to Illinois. Once the electromagnet is loaded off the barge, it will be trucked to Fermilab in Batavia, Ill., over two consecutive nights — a trip that will require shutting down a couple of highways in the Chicago area.

They said they hope to start the move about June 20. The entire journey to Fermilab may take nearly two months. Polly said if hurricanes churn up during the voyage, the barge will have to dock and wait out the weather.

"There are only certain areas where you can park this size of load, so we have to time it so that it's not impacting the public," Emmert said.

Christine Biber of Upton attended a May public information meeting about the move, on behalf of her retirement community, Colonial Woods Whispering Pines, which sits across William Floyd Parkway from BNL.

"We live across the street," she said, describing the move as fascinating. "We'll be watching."



The pending sale of St. Ignatius Jesuit Retreat House has stirred the Manhasset community.

NEWSDAY FILE PHOTO / ALEXANDRA VILLA

Many fighting sale of mansion

BY BART JONES
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Community residents and civic leaders are protesting the pending sale — and possible demolition — of a magnificent "Great Gatsby"-era mansion where a future pope once stayed.

The sale of St. Ignatius Retreat House on Nassau County's Gold Coast is expected to close in late July, with housing developers planning to subdivide the 33-acre site, according to the Jesuit priests selling the property.

The Jesuits say they cannot continue to operate the center because it is too expensive.

Local civic associations are seeking to preserve the "historic jewel," and residents have organized a letter-writing and phone campaign opposing the planned development.

"I think it is an atrocity," said Patricia Eren, a librarian from New Hyde Park who has attended retreats at the center for 15 years. "Too much of Long Island is being paved over to make mini-malls and

condos, and we're becoming one huge parking lot."

The Council of Greater Manhasset Civic Associations has come out against the possible demolition, not only because of the 87-room, castle-like mansion's historic value, but because of the potential impact of a housing development on local schools, roads and other infrastructure, said the group's president, Robert Bentley.

The Rev. Vincent Cooke, who is handling the sale for the Jesuits' New York Province, said they have a firm offer in hand with developers he declined to identify. Cooke said the potential buyers have not decided whether to demolish the mansion.

The listing price for the mansion and land was \$49 million. The Jesuits have not divulged details of the pending sale or development plans.

Community members opposed to the sale are urging the Jesuits to break the contract and pursue another offer made by a Queens-based group that wants to turn the mansion into a spiritual well-

ness center for patients with cancer, major concussions and other ailments.

But Cooke said that group, Community Wellness Centers of America, never made a firm offer and presented its proposal after the Jesuits had already gone to contract.

"Am I supposed to cancel a contract that is already signed, sealed and delivered in order to negotiate with these guys who never put a single cent on the table?" Cooke asked yesterday.

He noted that "the most valuable part" of the mansion, the second-floor St. Genevieve Chapel, will be dismantled and transferred to Fordham University, where it will be reconstructed. The Vatican granted rare special permission for the chapel to be placed inside the mansion.

The North Hills building was completed in 1920 by leading Roman Catholic philanthropists Nicholas and Genevieve Brady. Cardinal Eugenio Pacelli, who later became Pope Pius XII, stayed at the mansion during a monthlong trip to the United States in 1936.