

Students and faculty rescue MIT's iconic radar dome

By [Hiawatha Bray](#) Globe Staff, Updated May 20, 2021, 6:48 p.m.



structural repairs to its pedestal. MIT-EAPS

One of the most distinctive landmarks of the Massachusetts Institute of Technology is coming down — but not for long.

The vast golf ball-shaped installation, known as a radome, that's been teed up atop the [Cecil and Ida Green Building](#) for more than a half-century will soon be demolished. Originally built for radar research, it still houses a large antenna dish that will come down as part of renovations to the Green building.

But the dome is steeped in MIT history as well as student lore. Now, a coalition of students, faculty, and alumni has raised nearly \$2 million to replace the dome and the electronic systems inside.



“I don’t like seeing a nice thing being destroyed,” said Milo Hooper, who is graduating in June with a degree in mechanical engineering. Hooper is also president of MIT’s 111-year-old amateur radio society, which uses the radome to broadcast to radio buffs worldwide, by bouncing signals off the moon.

parabolic dish antenna about 18 feet in diameter, as well as a motorized mounting that dates back to World War II. In those days, MIT's famed Radiation Lab made a series of breakthroughs in radar technology that gave the United States and its allies a major edge over the Axis powers. Among the researchers was Pauline Austin, one of the first women to earn a physics doctorate at MIT.



An aerial view of Building 54, or the Green Building, at MIT. The radar dome, or "radome," perched atop the MIT Cecil and Ida Green Building was saved from demolition by the student-led MIT Radio Society, which had found creative new uses for it. MIT NEWS

The dome itself was erected in 1966 atop the 300-foot-tall Green Building, which is about half a block west of Ames Street and a block north of Memorial Drive. It was placed atop MIT's tallest structure to help Austin study the use of radar in weather forecasting. Her work led to modern weather radar systems that can track rain showers or snowstorms in real time.



ZOLUCKY UP TO 50% O

The dome also became a familiar symbol on the campus skyline. “MIT even uses that visual on its alumni fund-raising stuff,” said Hooper. “It’s everywhere. It’s iconic.”

The radome also played a role in a couple of MIT’s famous “hacks” — high-profile gags perpetrated by students. In 2005, for instance, it was decorated to resemble the cover of the classic science fiction novel “The Hitchhiker’s Guide to the Galaxy.”

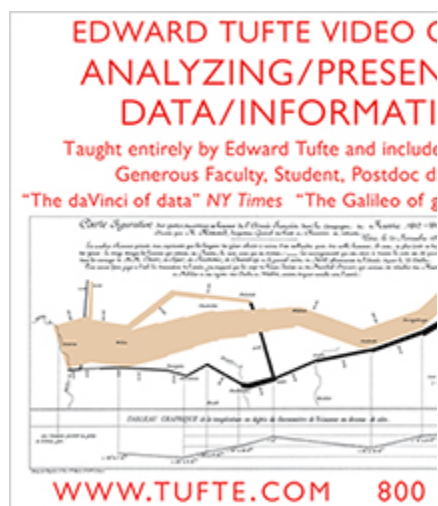
But by then, more advanced radar systems had supplanted the Green radome. Today it’s mainly used by the amateur radio society, as well as the occasional radio astronomer tuning in to signals from deep space.

In 2019, MIT announced a plan for \$60 million in renovations to the Green Building, which houses the university’s Department of Earth, Atmospheric and Planetary Sciences. And since the department had no further use for the aging, weather-beaten radome, the MIT administration decided to eliminate it.

“Just like everybody with a household budget, we had to prioritize,” said Rob van der Hilst, head of the planetary sciences department.

But the news dismayed Hooper and other members of the radio society. It was also bad news for Kerri Cahoy, associate professor of aerospace engineering and codirector

launch them into low Earth orbit. The radome antenna's military-grade mounting can quickly move the dish back and forth, making it perfect for tracking satellites as they zip through the sky over Cambridge.



“Hey, wait a minute,” Cahoy remembered thinking. “This could be a really good asset. We should keep it.”

Luckily, MIT facilities managers said they would refurbish the installation, if the Radio Society could come up with the money. It wasn't until March that they found out how much it would cost — \$1.9 million. And the radome's defenders had until May 1 to raise the money.

Students and faculty reached out to alumni once more and came up with \$300,000. But the big breakthrough came when [Amateur Radio Digital Communications](#), a nonprofit group of radio enthusiasts, came up with the remaining \$1.6 million. “It felt like a miracle, to be honest,” said MIT radio astronomer Mary Knapp.

Once the overhaul is complete, MIT's radio buffs, astronomers, and satellite researchers will have a tool that will serve them for decades. And they'll have also

“This is a very good way for me to end my time at MIT,” said Hooper.



Powerful German He Aids Crushing the M

hear.com

MOST READ IN THIS SECTION

'It's mind-boggling': On Cape Cod, soaring home prices create an unprecedented seller's market

With so few homes on the market, house hunters are going to extremes: forking over full-cash payments, skipping inspections, and waiving appraisal contingencies. Some are putting together offers after a FaceTime viewing — or without seeing a property in person at all.

Long before divorce, Bill Gates had reputation for questionable behavior

Melinda French Gates voiced concerns about her husband's relationship with Jeffrey Epstein and a harassment claim against his money manager.

Biogen taps Ginkgo Bioworks to work on gene therapy manufacturing program

The companies' goal is to make the production process more efficient.

RI BUSINESS

Breeze Airways to launch nonstop flights from Rhode Island to S.C., Va., and Penn.

The new budget from the founders of JetBlue will offer fares starting at \$39, and will take off from T.F. Green Airport in July.

Boston's Jock MKT, a trading platform for fantasy sports, raises \$10 million

Jock MKT (pronounced “jock market”) taps into the realm of fantasy sports, where individuals use online

INNOVATION ECONOMY

A team from MIT makes it to the finals of Elon Musk's competition to find a faster way to dig tunnels

A team from MIT makes it to the finals of Elon Musk's competition to find a faster way to dig tunnels.

New life for an old 'Garage?' Plans filed to remake a Harvard Square landmark

Trinity Property Management, which owns The Garage, has filed plans to redevelop the funky multistory shopping center into a more modern retail and office complex.

'I live on Zillow these days': Pandemic briefly gave Boston tenants the upper hand, but the old crush is back

Not so long ago, in the depths of the COVID-19 pandemic, Boston-area renters had a rare advantage in their long-running struggle with landlords to find a good apartment they can afford. That time is ending.

Eastern Standard, a Kenmore Square stalwart, may be closing for good

The Eastern Standard story is an example of the chess game playing out across the city, with restaurants hit hard and a wave of closings underway.



Bedtime Trick For Ne

Sutera.com

LEARN

[CONTACT](#)

[PRIVACY POLICY](#)

[SUBSCRIBE](#)

©2021 Boston Globe Media Partners, LLC

