EECS Building Roof-Top Tower Project for the U-M Amateur Radio Club

Summary

The University of Michigan Amateur Radio Club (UMARC) would like to erect a guyed 40' tower on top of the EECS building to support their antennas and related equipment. The club has been active at the University since 1913 and such a tower provides the basis for high performance antenna systems. To insure the long-term safety of the EECS building, its occupants, and surroundings, the tower design will be approved by a structural engineer and all appropriate University departments, and all construction will be undertaken or approved by U-M Plant. The tower base will be placed toward the center of the EECS building roof to accommodate the guy wire lengths. Placement at the roof's center will also minimize the structure's visibility from the ground. As engineers we believe the visible part of the structure is aesthetically pleasing as well as technically inspiring—and will thus enhance the landscape of Michigan's North Campus.

Tower and Antenna Description

The proposed tower is 40' in length (height above the roof line), and is composed of four (4) 10-foot sections of Rohn 45G galvanized steel commercial tower, a roof-mount tower base, and three (3) sets of guy wires and guy wire supports. The tower will serve as a support for several antennas including a rotatable HF Yagi-Uda mounted on the top of the tower, and several smaller VHF/UHF/microwave mounted at various locations on the tower. The upper 10 to 20' of the tower and top-mounted antennas will be visible from various locations in the vicinity of the EECS building. An illustration of how the HF antenna and tower installation would look for the North Campus diag is shown below. This is a photo of the EECS building taken in front of the east Duderstadt Center entrance. An image of the antenna and tower (from the antenna manufacturer) is added to this photo electronically.



Illustration of the Telrex/Hy-Gain TH7-DX Yagi-Uda antenna mounted on a tower atop the EECS building. The vantage point is the east entrance of the Duderstadt Center.

Thank you for your consideration. Please direct any questions to:

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