

ENGINEERING RESEARCH



Fig. 1. The Engineering Research Building looking north, c. 1971. The two story base, connected to the mechanical engineering building is at the left. [series 9/6, Engineering Research, jf-90]

The Engineering Research Building filled a long-standing deficiency in research facilities in the Engineering department. It was erected in 1967 and opened in 1969.

The Engineering college at the University had been directed in its formative years (1902-1939) by Dean Frederick Turneure who did not see research as a critical part of an engineering education. The dean believed instead that the school should produce experienced practicing engineers. As a result of this slant, the college of engineering did not develop the kind of facilities and reputation for strong basic research enjoyed by other parts of the University, such as the college of agriculture. Although some research did take place in engineering, the facilities were largely improvised and haphazard.¹

Thus it was that in the early 1960s in the dawn of federal support for scientific and engineering

research projects, the college of engineering had only minimal research programs to point to. Most were housed in temporary buildings erected in the 1940s. In 1963 the University planned an eight story research building at the corner of Dayton and North Randall (the current site of Wendt Library). This building was never pursued, but started the process for such a facility.²

The regents in October 1964 approved the new site of the engineering research building as the parking lot "immediately east of the mechanical engineering building." This action was taken to hurry to the planning stage that the NSF required before committing funds. In December 1964 the NSF declined to support the proposal. It was the position of the NSF that the University was still not sufficiently advanced in their planning for the building. Planning proceeded through 1965, with architects Berners, Schober and Kilp of Green Bay appointed in April 1965, and weekly meetings were held through the summer. In January 1966 the regents approved the revision and expansion for three additional floors to the proposed building, and increased funding to \$5.1 million in state and federal matching funds. The request to the state for these funds accentuated the rising graduate enrollment and the increasing importance of research, then housed in deteriorating temporary buildings.³

Included as programs particularly in need of space were: engineering plasma dynamics, computing and data processing, instrument engineering, nuclear waste disposal (later dropped when a critical faculty member was lost), air pollution, solar energy, and the automotive laboratory. The regents were shown a model of the building in February 1966. In March, the regents approved another expansion to \$5.4 million to make room for plasma physics (then being carried on in the old high-energy physics building on the west ag campus). The extra money was to come from non-state money. This effort was eventually dropped, and the physics program was moved to Chamberlin Hall a few years later. Thus it was that well into 1966 the plans were not stable enough to say how many floors or square feet would be built, or who would occupy them. Some of this effect was the result of trying to design the most flexible research facility possible.⁴

In June 1966 the state was asked to increase the funding level again, this time to \$5.7 million, the University citing the rising cost of construction. Also that month a completed proposal was made to the federal HEW's title II graduate academic facilities program for \$727,000. The proposal estimated the NSF support at \$1.7 million. The regents approved the preliminary plans in June 1966, funded with \$3.1 million from the state and the rest from gift and grant funds. The state approval for the funding came in September 1966. Word came from the NSF of a reduction in available funds, and the University increased its request to the Title II program. September also saw another round of revisions of programs to be housed in the building. WARF made a grant of \$185,000 for the building. Final funding was now nearly in place.⁵

The final plans were approved by the regents in March 1967. Utility costs had added another \$301,000 to the total, now \$5.8 million. Planned finishing date was September 1969. The state reapproved this funding in June 1967. Construction contracts were let by the regents on July 7, 1967. The general contract went to Orville E. Madsen of Minneapolis for \$2.278 million.⁶

Construction began on July 17, 1967. Final funding breakdown was: NSF-\$1.2 million; HEW-\$1.1 million; state matching funds- \$3.6 million. In September 1968, a separate contract for air conditioning the building was let for \$190,000 to Bassett Inc. of Appleton. Progress on construction, unlike planning and funding, went smoothly and without major incident. The project was enough on schedule in March 1969 to allow the ordering of furnishings. The first occupants of the building began to move in during August 1969. Site development and landscaping was not finished for another year. In 1985 a major (\$870,000) remodelling took place to increase the energy efficiency of the building.⁷

The building is a fourteen story tower 58 by 97 feet, over a 135 by 187 foot two level base, connected at both lower levels to the mechanical engineering building, and sharing its service entrances. The building is of reinforced concrete, on a ten-foot modular plan, faced with precast concrete panels on the north and south faces, and face brick on the east and west faces. The 274 foot tower is utterly

featureless on the east and west faces, making it one of the starkest buildings on campus.

The building has over the years served an ever changing array of research projects. Since the building is now severely cramped and not expandable, plans are underway to build the Engineering Center Building, which will add more space for research and existing programs.

- 1) Cronon and Jenkins, *The University of Wisconsin* vol. III pp. 724-727.
- 2) Engineering Research Building plans, October 29, 1963, series 24/9/3 box 6.
- 3) *Regent's Minutes*, October 16, 1964, January 7, 1966; Page to Harrington, November 25, 1964, Harrington to Page, December 10, 1964; series 40/1/7-1 box 22; Engineering Research Building, July 12, 1965, Revision to ... Portion of Engineering Research Building, August 9, 1965, Agency Request for State Building Commission Action, January 17, 1966, series 24/9/3 box 6.
- 4) *Regent's Minutes*, February 4, 1966, March 4, 1966; Agency Request for State Building Commission Action, January 17, 1966, series 24/9/3 box 6; Alberty to Harrington, April 11, 1966, series 40/1/7-1 box 22.
- 5) Agency Request For State Building Commission Action, June 13, 1966, Proposal Submitted..., June 30, 1966, series 24/9/3 box 6; *Regent's Minutes*, June 10, 1966, September 9, 1966; Lorenz to Stamberg, September 29, 1966, series 24/9/3 box 8.
- 6) *Regent's Minutes*, March 10, 1967, June 9, 1967, July 7, 1967, exhibit C; Lorenz to State Building Commission, February 28, 1967, series 24/9/3 box 8;
- 7) Roeber to Spuhler, January 2, 1969, Powers to Koch, March 13, 1969, Culbertson to Lorenz, June 19, 1969, series 24/9/2-1 box 7; Buelow to Edsall, October 3, 1969, series 24/9/2-1 box 14. *Regent's Minutes*, October 11, 1985.