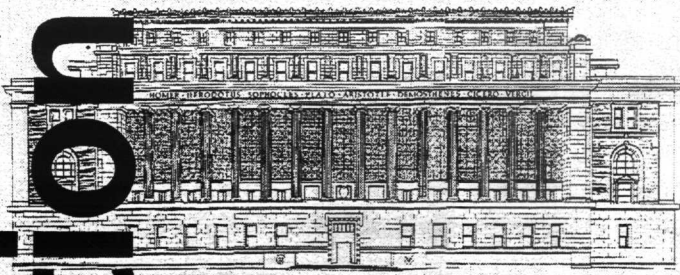
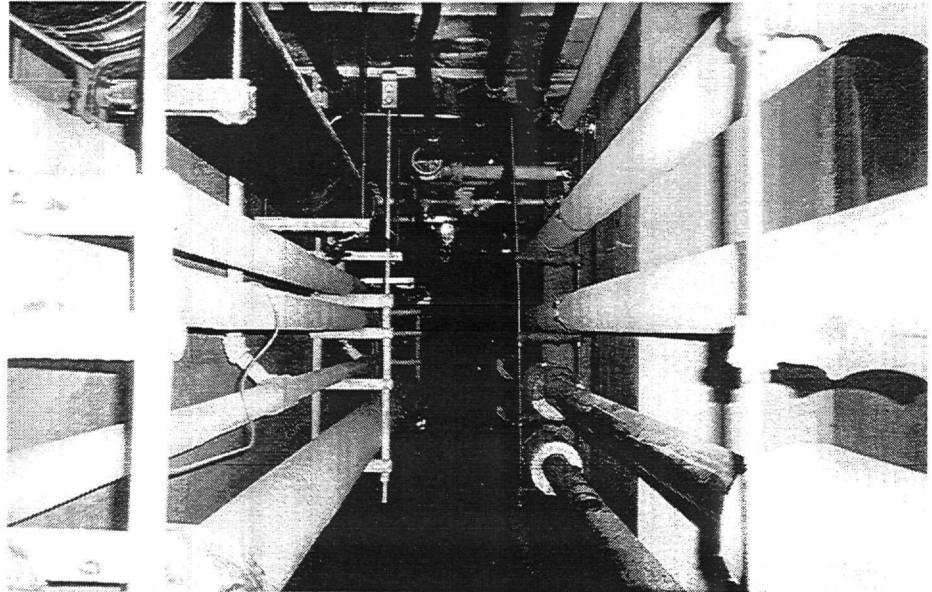


# Renovation News



## Butler Library Renovation

Columbia University Libraries  
Butler Renovation News  
March/April 1996  
v. 1, no. 2



New pipes have been installed in the sub-basement tunnels of Butler

### March/April In Brief:

- Installation of new power and equipment in sub-basement to bring air-conditioning to stacks by this summer
- Preparation and installation of M1 mechanical shaft (in southwest corner)
- Demolition and construction in north hall of level 100 and in stack tier 1
- Completion of risers 1 - 4

### “What Is A Riser?”

You may have seen signs labeling them throughout the library, or you may have read about them in the first issue of *Renovation News*. They are “risers” and they will eventually bring heightened comfort and improved service to all of Butler, including air-conditioning for the stacks this summer. Risers are technically just pipes for the flow of electrical power or fluids, but they make up the backbone of the new infrastructure that is being installed in the library.

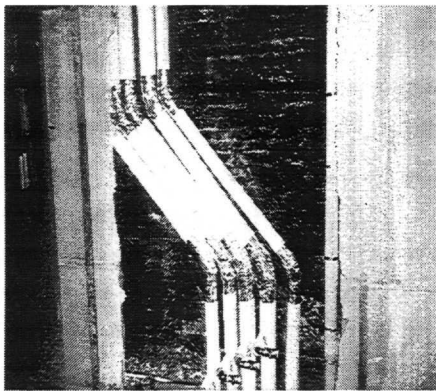
**One of the main objectives of the Butler Library Renovation is to modernize the mechanical and electrical systems** in the more than

sixty-year-old building. In Phase I of the renovation, the foundation is being laid to achieve this goal. The existing heating, ventilation, air-conditioning, electrical power, fire protection and plumbing will be enhanced through complete replacement of the sub-basement mechanical plant, a combination of replacement, removal and re-use of existing shafts, and the construction of new riser shafts throughout the facility.

**New copper pipes are being run up through the building’s perimeter walls** at eight riser locations on every floor. A total of over 75 locations for risers have been designated by signs throughout the building. The pipes will carry hot water and chilled water to each location. In

future phases, as each floor is renovated, offshoot pipes will be run from the risers to individual window units (called Fan Coil Units, or FCU's), supplying rooms with hot or cool air.

**In the stacks, additional risers will be constructed on each floor to hold electrical wiring and conduit.** The existing electrical infrastructure for the library will be replaced. As with the heating and cooling pipe risers, the electrical risers



Inside riser 2 on fourth floor

will be utilized for distribution of new power at the time of renovation of the individual floors.

**In addition to the risers, there are larger shafts under construction,** such as the M1 mechanical shaft in the southwest corner of the building. The mechanical shafts are located adjacent to the central stack core of the building. Larger than the risers, the shafts will contain supply and return ventilation ductwork, electrical conduit, communication conduit, hot water lines and chilled water lines. In the basement, high-capacity air handling units are being replaced in stages so that fresh air will be supplied continuously.

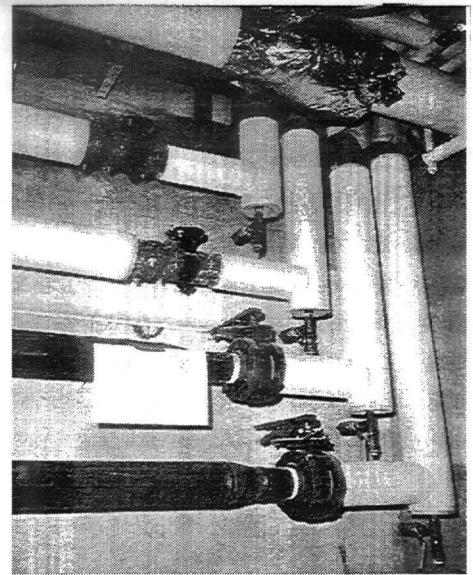
**To date, the perimeter riser installation is about half-complete.** Initially, unknown conditions slowed down the process to

a degree. With risers one to four now nearly finished, work on remaining risers is expected to go more quickly. Installation of all risers will be completed before the end of Phase I (December 1997).

**Installing a riser requires several steps.** First, existing furniture such as bookcases are removed and relocated, then area dust protection is installed, demolition, chopping and drilling occurs, and a temporary cover is built. This work takes place intermittently over several weeks. Next, piping is installed at all the riser's locations, typically taking a week or two with workers returning to each location from time to time. The final steps involve testing for leaks with air and water, covering pipes with insulation, fire-stopping, re-pouring floor slabs, closing holes, and finishing enclosures and surfaces. These last steps take another week or two of intermittent work to complete.

**The installation of risers and mechanical shafts in Phase I will permit flexibility** in the accomplishment of future renovation work, rather than limit the sequence of phases to strictly floor-by-floor progress up through the building. Once the infrastructure is in place, floors can be renovated in any order.

**As usual, we will post signs notifying you of disruptive activity in advance.** Every effort will be made to keep interruptions to a minimum. To find out if your favorite spot in the library will be affected by work, check signs of "This Week's Work" posted in the entrance lobby and elevator waiting areas on the second floor. There you can find additional copies of this bulletin, which is also available at all departmental



Riser pipes run upwards from sub-basement

libraries. Ideas for future issues of *Renovation News* are welcomed, so that we can cover topics of particular interest to you. Also watch for a renovation homepage on the World Wide Web in coming months.

**Please feel free to send your comments or questions** directly to Aline Locascio, at (212) 854-1641 (email: locascio@columbia.edu), or Kris Kavanaugh, at (212) 854-7754 (email: kavanaug@columbia.edu). We all look forward to the successful completion of this project and appreciate your patience.

#### Butler Study Areas Affected By Renovation Activity

Floor	Area
2	College Library Philosophy Library
3	Main Reading Room Periodical Reading Room Reference Room
4	Burgess-Carpenter Library
5	Microform Reading Room Electronic Text Service Hall corridors
6	Papyrus & Epigraphy Reading Rm
7, 8, 9	Isolated carrels/cubicles
Stacks	East and west ends of all stacks
Stack 2	Entire stack tier