

Early Days, ...

F. J. Corbato

- 1949 Whirlwind I operational
- 1956 Phil Morse started Computation Center
 - with IBM 704: MIT one shift
 - ~43 NE colleges one shift
 - IBM one shift + does maintenance

Computation Center Thread

- 1957 McCarthy moved from Dartmouth to MIT in EE and joined CC
 - with Minsky started AI group
- Jan. 1, 1959 wrote memo to Morse for Time-sharing the IBM 709 – needed a few critical mods to hardware



Comp Ctr Thread (cont.)

- IBM agreeable to hardware mods
- Herb Teager, a new EE prof, to do the Operating System, attach 4 Flexowriter terminals
- McCarthy continued to argue for MIT to get a new computer with large amounts of memory
- Long Range Comp. Study Committee formed, Teager chair—15 from key parts of MIT

Long Range Comp. Study Comm.

- Many meetings, no consensus
- After a couple of months, Teager called a meeting, produced a finished report with conclusion to get an IBM Stretch, 137 pages
- Committee revolted, reformed w/o Teager, McCarthy, chair
- April 1961, new report, 47 pages, recommended visiting vendors for large central Time Sharing installation

Comp. Ctr. Thread (cont.)

- Teager efforts to do a T-S OS stalled
 - too ambitious, undermanned
- Summer 1961, Corbato decided to build a “hack” T-S system to demo T-S on IBM 709
 - used 4 Flexowriter terminals
 - mag.tape per terminal for swap storage
- First demo of CTSS Nov. 1961

Other Threads

- BBN with Lick, Fredkin, McCarthy (consult.)
- Jack Dennis and students with TX-0 and PDP-1
- Sputnik (1957) shock and ARPA start (1958)
- Spring (1961) McCarthy gave talk on Time Sharing as part of MIT 100th celebration
- Morse persuaded NSF to get 32k memory bank add-on to 7090, IBM to install 7750 i/o controller for TTYs

Other Threads (cont.)

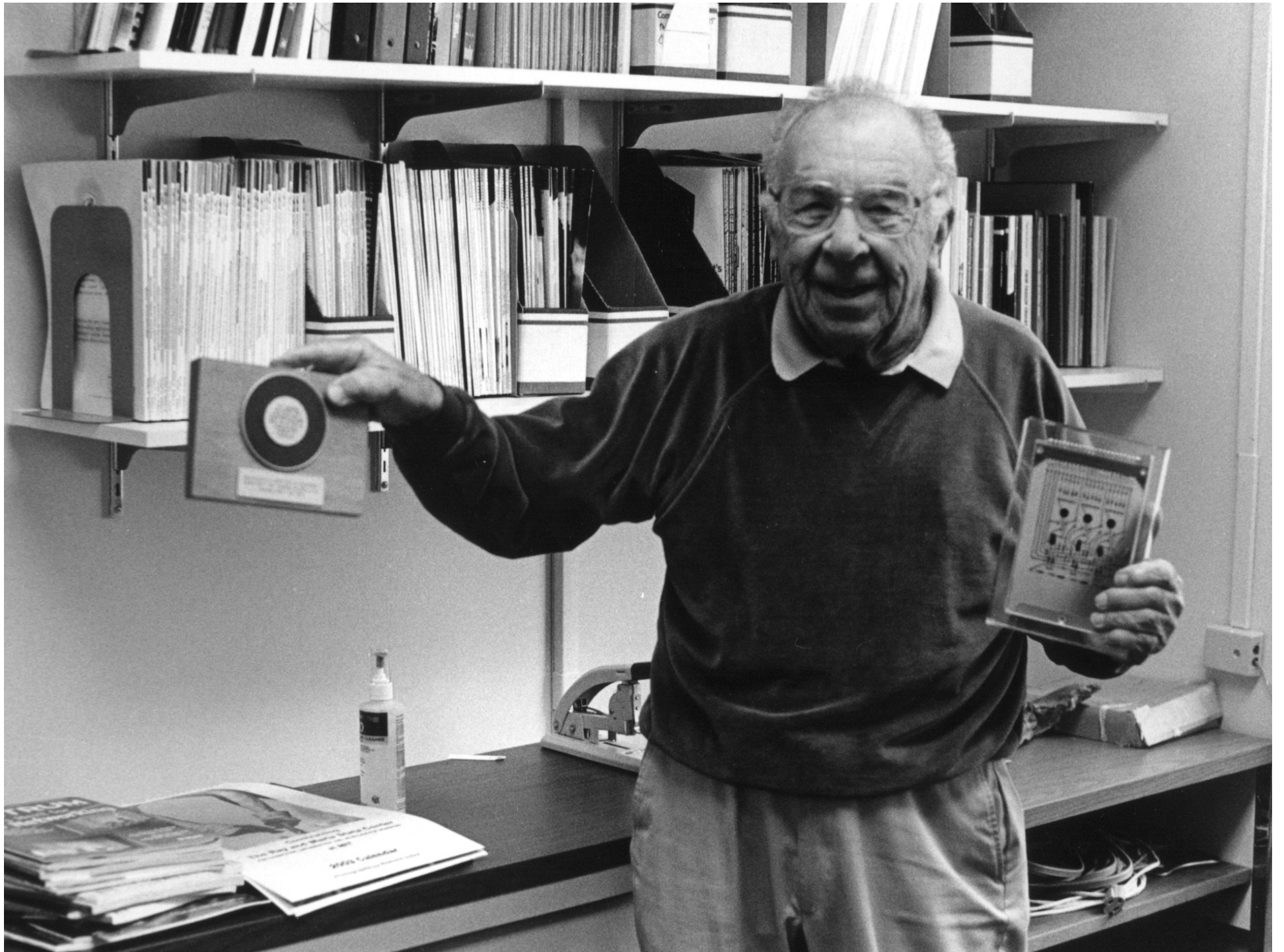
- Licklider- Man Computer Symbiosis paper (March 1962)
- McCarthy felt MIT stalling, went to Stanford (Fall 1962)
- Cuban Missile Crisis (Oct 1962)
- ARPA (Fubini, Ruina), start IPTO with Licklider as first head (Sept 1962)



Project MAC Beginning

- Lick with \$10M (\$78M today) came to MIT to sound out interest in Fall 1962
- Meeting a disaster of bickering!
- Fano stepped up to start an MIT response
- Fano chose name, wrote proposal in a week, got MIT approval quickly, needed space, senior staff, etc.
- Project MAC started 1/1/1963 in Tech Sq.

- Top two floors of Tech Square
- Fano with Oliver Selfridge, Dick Mills, Dottie Scanlon were administration
- Summer Study planned (6 weeks)
- About 100 attendees from U.S. and Europe
- With 2nd 7090 on order, used Comp Center 7090 for CTSS



Early Mac

- Bell Labs joins with Project MAC
- Mac recruits key people from Summer Study—
Glaser, Weizenbaum
- Internal meetings over future system
- IBM announces 360 series, Apr. 7, 1964
- Visits to potential vendors
- Mac/Bell Labs choose GE for next machine
- 6 papers presented at FJCC Nov. 1965

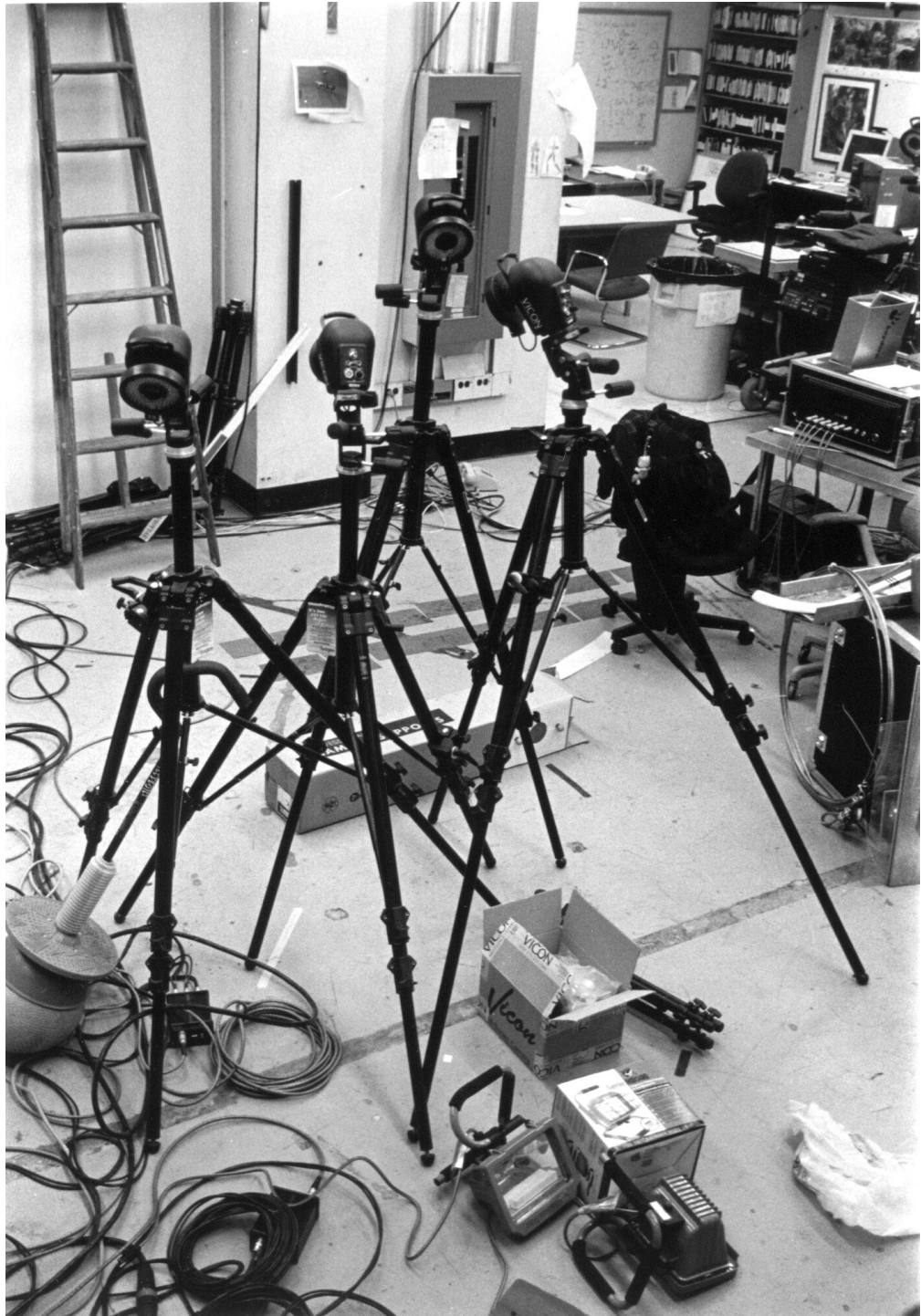
Other Major Contributions

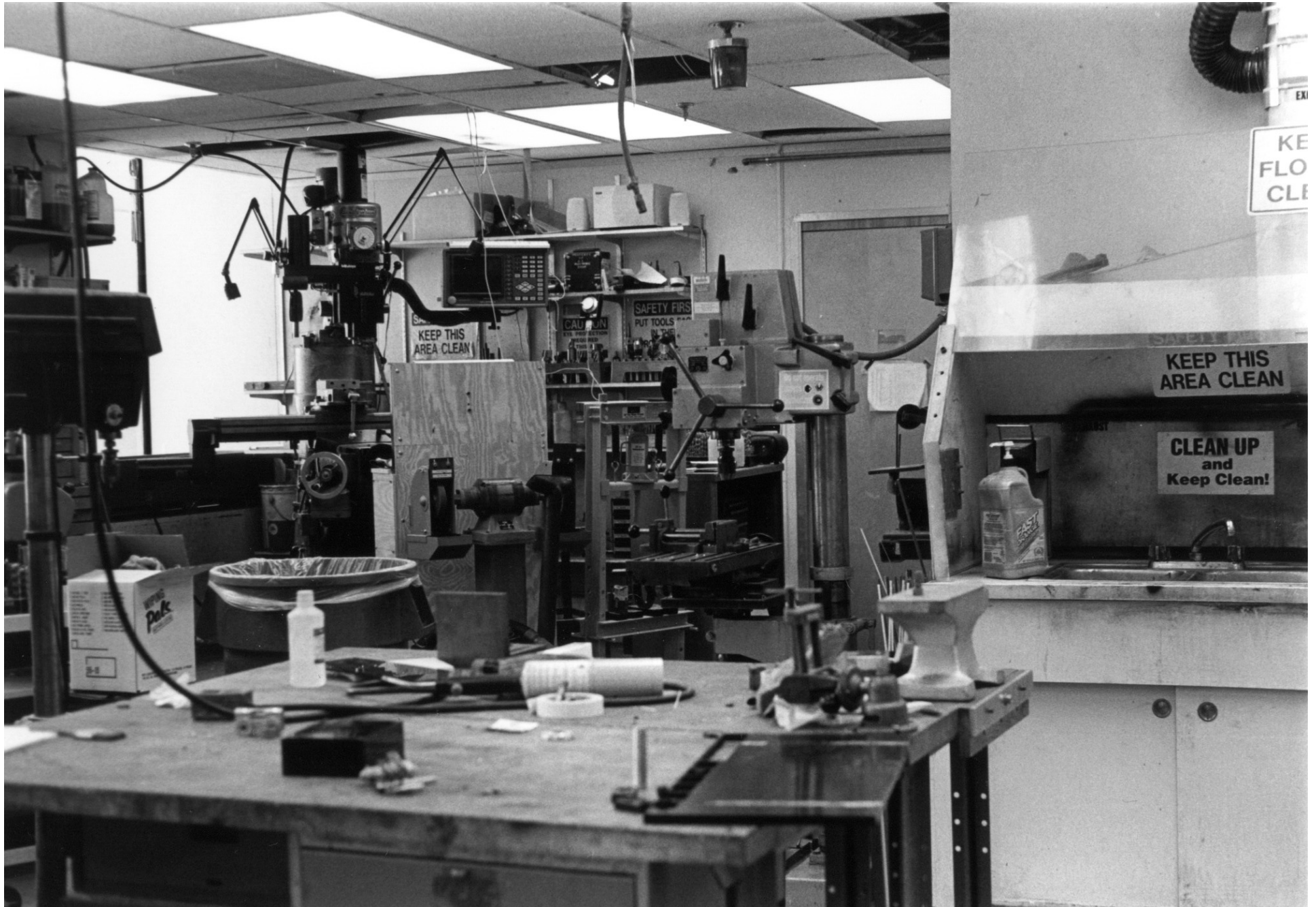
- About 1968, A review committee was formed to see if the Multics effort should continue!
- Fortunately Ed Fredkin was on the committee and persuasively argued against the death knell.
- With the advent of the Web in 1993, Tom Van Vleck created the site “multicians.org”, a major resource about the Multics effort.











EXIT
KEEP
FLOOR
CLEAN

KEEP THIS
AREA CLEAN

SAFETY FIRST
PUT TOOLS
IN THE
DRAWER

KEEP THIS
AREA CLEAN

CLEAN UP
and
Keep Clean!

Wiping
Pac

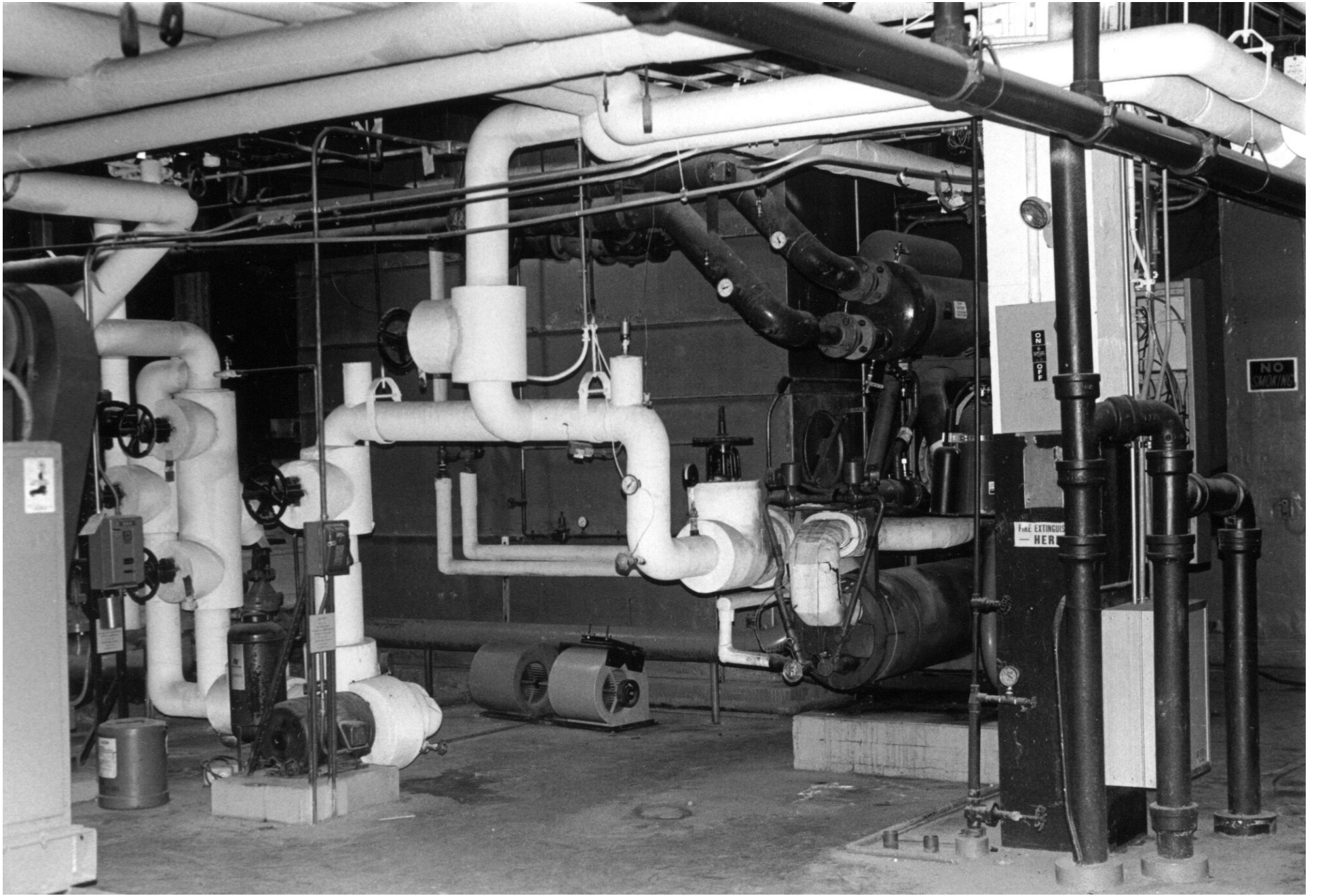












Organizing Committee:

General Chair: G. Bekey (USC)
Executive Chair: R. Brooks (MIT)
Program Chair: A. Knoll (U Bielefeld)
Finance: S. Schaal (USC & JST)

Conference Information:

<http://humanoids.usc.edu>
<http://humanoids.uni-bielefeld.de>
<http://humanoids.usc.edu>

Submission Deadline:
April 21, 2000

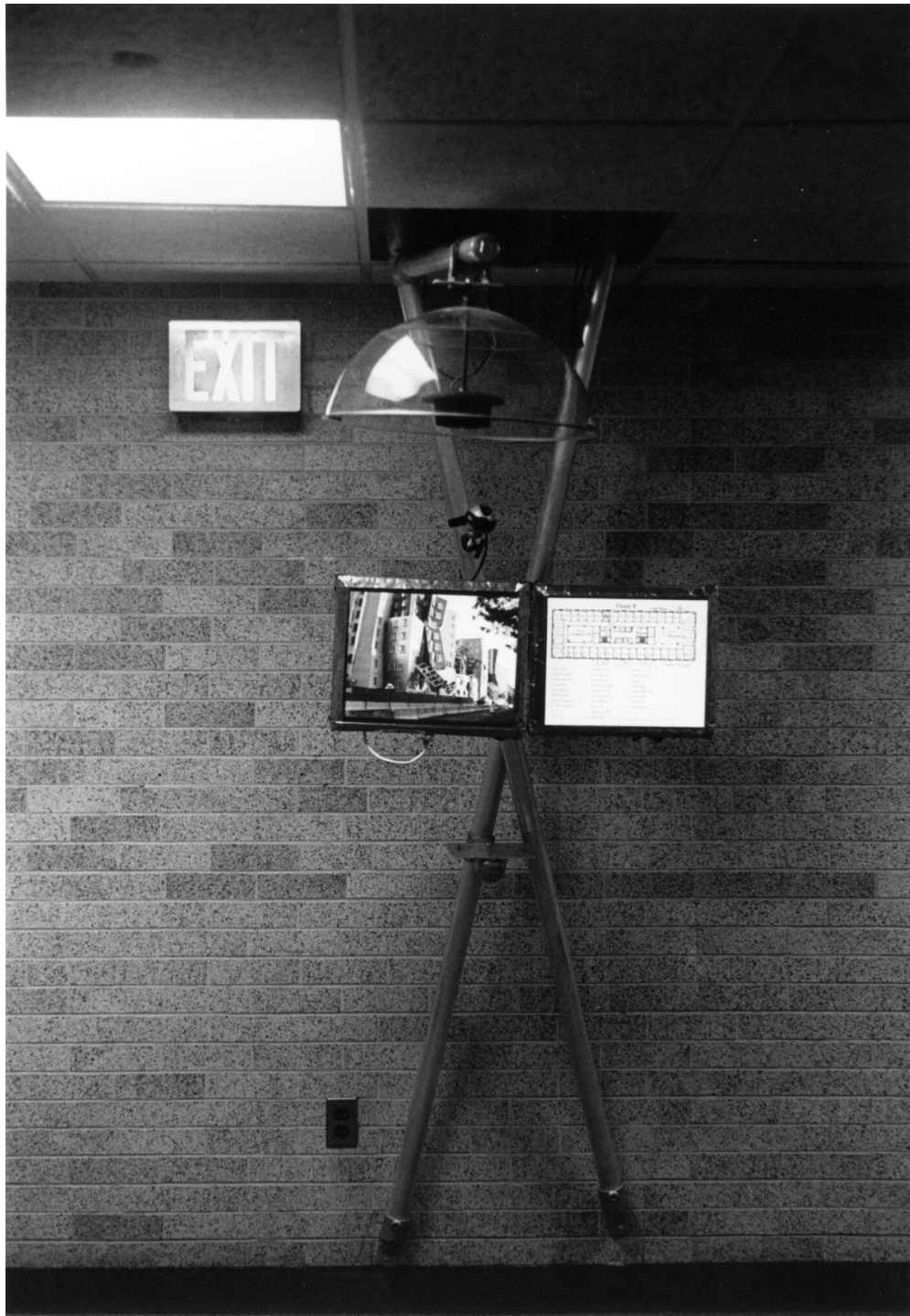
Program Committee:

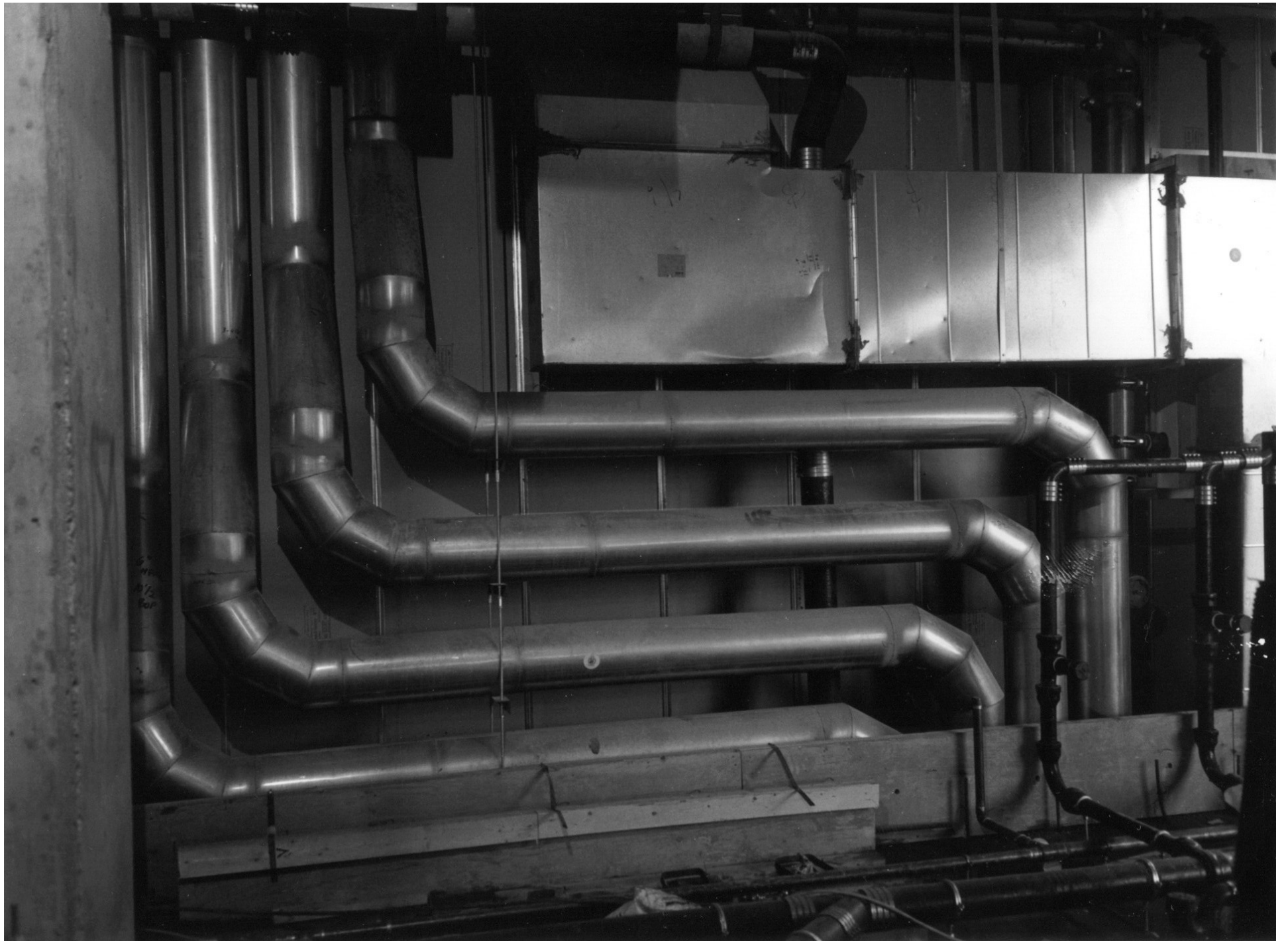
M. Asada (Osaka U)
C. Atherton (Göteborg)
T. Christaller (GMD-Bonn)
T. Fukuda (Nagoya U)
S. Hoshino (U Waseda)
H. Inoue (U Tokyo)
K. Kawamura (Vanderbilt U)
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P. Khosla (CMU)
Y. Kuniyoshi (ETL, Tsukuba)
M. Mataric (USC)
R. Pfeifer (U Zürich)
S. Schaal (USC & JST/ERATO)
S. Sugita (U Waseda)
M. Wheeler (U Stirling)
S. Yuta (U Tsukuba)
T. Kohayashi (U Waseda)

HUMANOIDS 2000

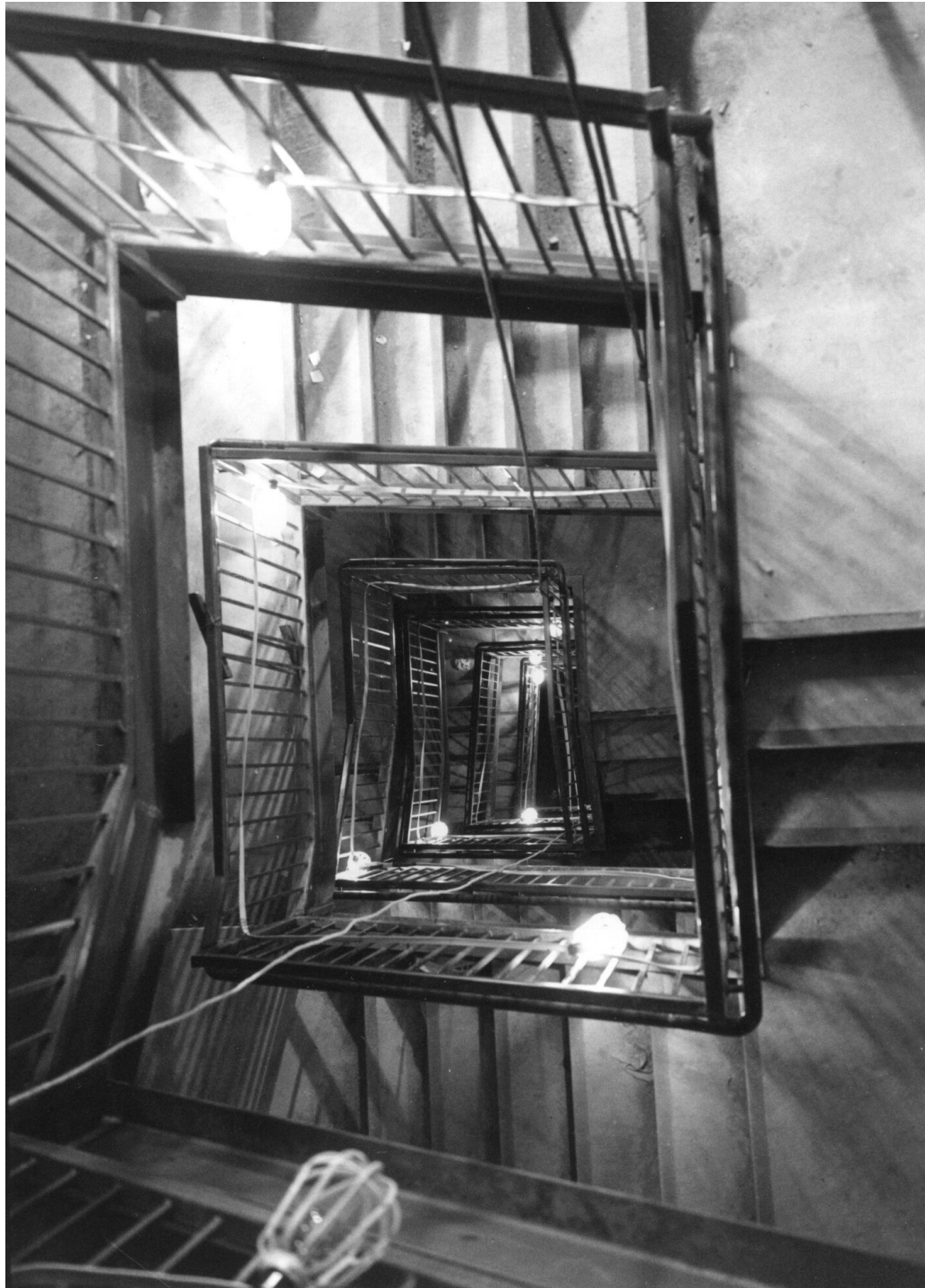
First IEEE-RAS International Conference on Humanoid Robots
Co-Sponsored by the Robotics Society of Japan
September 7-8, 2000
Massachusetts Institute of Technology

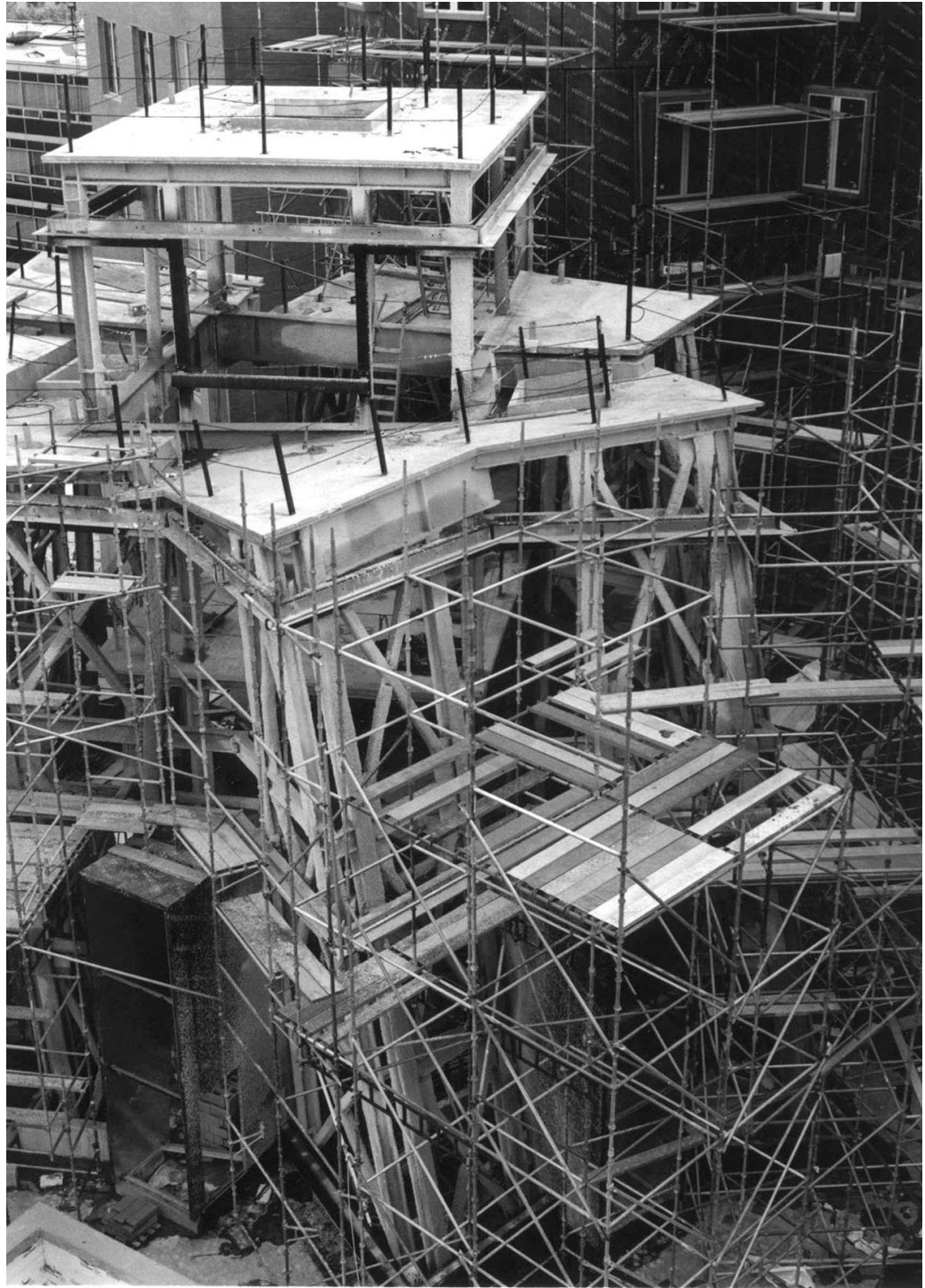
























GE-645 SYSTEM

For More info:

Google: “Fano 1985 Lecture”
(6 min. intro + 91 min.)

Google: “YouTube 1963 TimeSharing”
(27 min. TV show)

Google: “CTSS Walden Van Vleck”