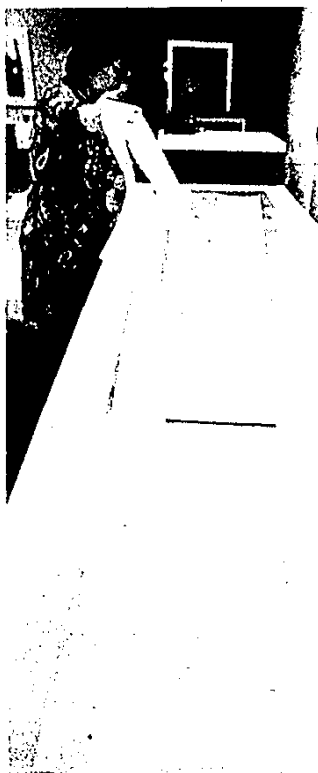
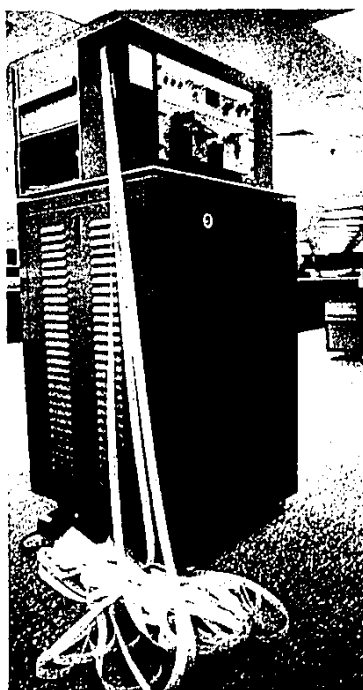


6 The Photon 713 sets type at around 35 lines a minute.



Strips of photographic paper are taken from the phototypesetting machines, developed, and laid out to dry.



8 The Compugraphic 2961 is used as back up equipment.

THE COMPUTER-generated tape is fed into one of three types of photocomposition machines: The Photon 713 (Illustration 6) is used to set news stories and small headlines; the Photon 560 (Illustration 7) is used to set advertising type and larger headlines; the Compugraphic 2961 (Illustration 8) is used for back up.

The way photocomposition machines work is simple. Images of the various letters of the alphabet in a variety of type styles are contained on a rapidly revolving drum. Impulses from the perforations on the paper tape flash a light in synchronization with the letter passing by on the drum and record the image on photographic paper. The size of the image of the letter is determined by various lenses through which flashes pass; the style of type to be used is set by whichever part of the drum the light flashes through.

THE PHOTONS at Observer Newspapers produce type at 35 or more newspaper lines per minute, around five times faster than was possible with the old linotype "hot metal" equipment. This means that type can be set later than in the hot type process, with the result that the reader gets later news in his newspaper.

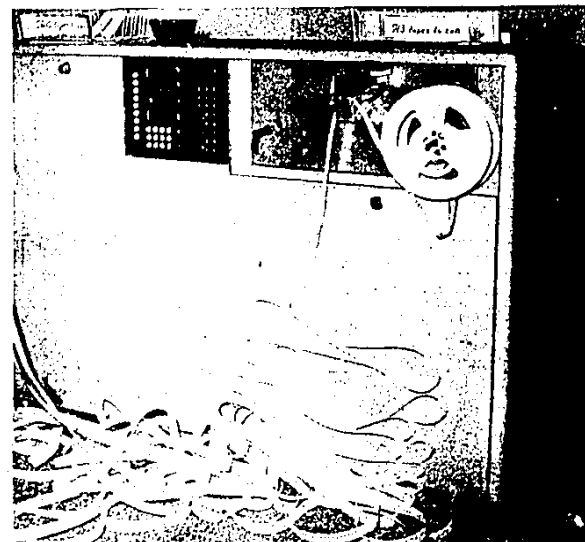
The advertiser benefits by having a much greater choice of type styles and sizes than are available with hot type. For example, the type drum in the Photon 560 machine contains 16 type styles ranging from six points (1/12 inch) to 72 points (one inch) in size.

The photographic paper from the photocomposition machines is then developed and laid out on a drying table (Illustration 9) for sorting and trimming.

With all this complicated electronic equipment in use, bringing undreamed of speed and flexibility to the typesetting process, constant maintenance is required. A full-time, highly skilled maintenance man keeps the equipment up and running, using the well-equipped machine shop in the new Observer building.



COMPOSING ROOM Foreman Howard Thompson and electronics technician Fred Lasich look over one of the Photon photocomposition machines. Their skilled and effective work keeps the composing room humming along at peak efficiency.



7 The Photon 560 is used to set type for ads and large headlines.