

KRON-TV REVISITED

Yesterday's "Dream Station"
is Today's Reality



FIRST LOOK at "How KRON-TV Planned an All-Color Station" is reported in BROADCAST NEWS, Vol. No. 131, December 1966.

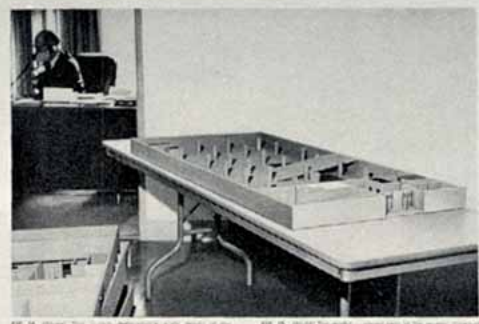


FIG. 14. Above: The model shows the layout of the building. Below: A computerized plan of the building, showing the layout of the building and the location of the various rooms and equipment.

The Building Model
The model shows the layout of the building, which is a complex of interconnected rectangular blocks. The model is a computerized plan of the building, showing the layout of the building and the location of the various rooms and equipment.

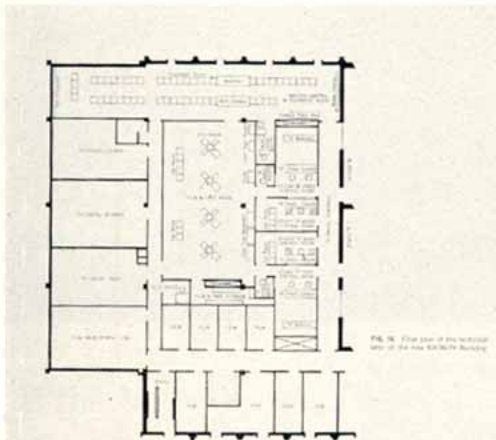
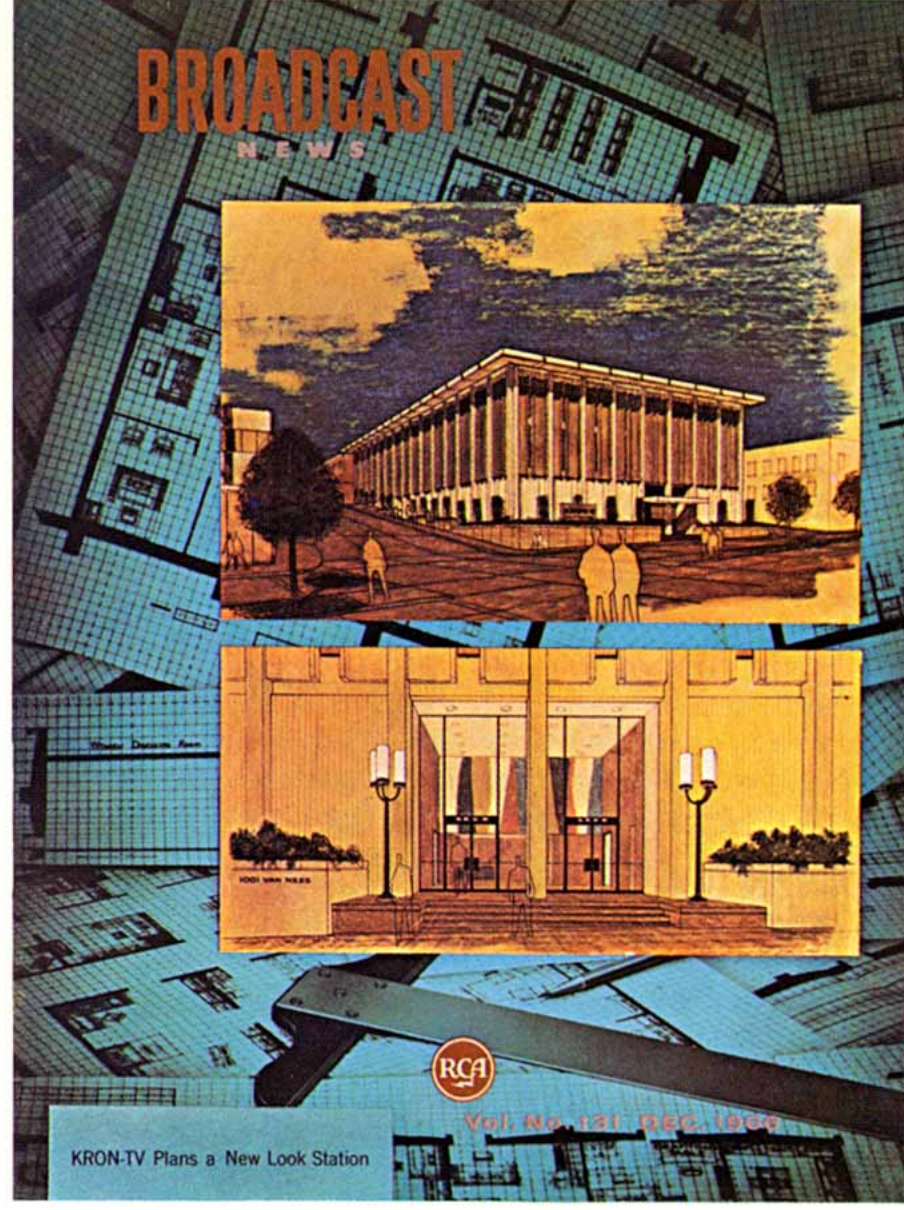
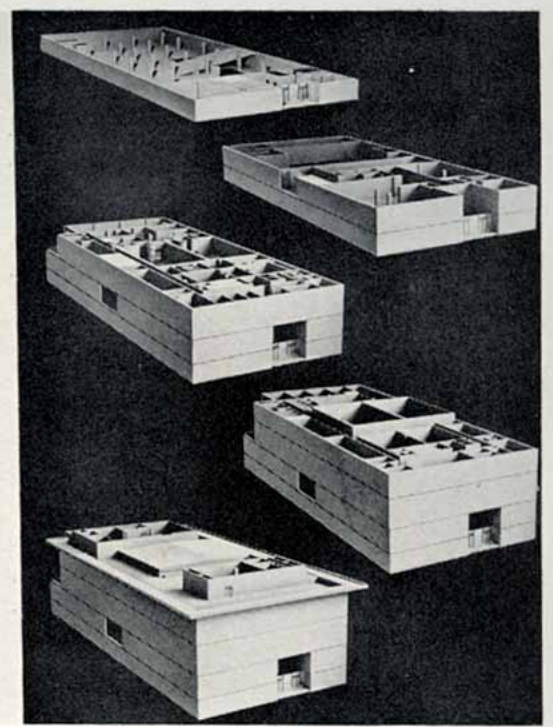


FIG. 16. The plan of the building, showing the layout of the various rooms and equipment. The plan is a detailed architectural drawing that shows the layout of the building and the location of the various rooms and equipment.

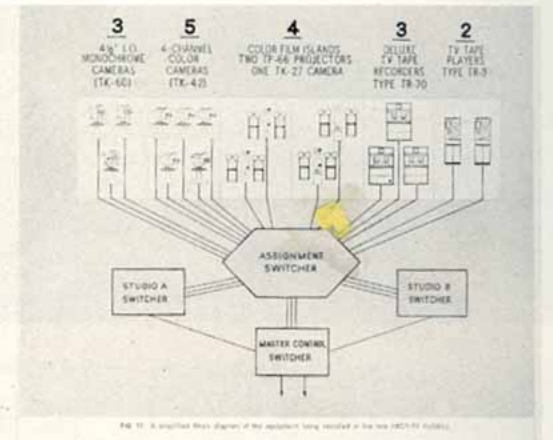


FIG. 17. A simplified block diagram of the equipment being installed in the new KRON-TV studio. The diagram shows the connections between various pieces of equipment, including cameras, projectors, and tape recorders.

Back in 1966, the pages of Broadcast News featured the master plan of an "all-color, New Look, television station, KRON-TV".

In the first few paragraphs, it was reported: "None of the notable features of the new KRON-TV installation—the beauty, the efficiency, the flexibility, the modernity—happened just by chance or good fortune. On the contrary, it was all planned to come out that way. Harold See, President; Al Constant, Vice President; and Lee Berryhill, Chief Engineer, started planning the new KRON-TV more than four years ago. More than two years of intensive planning preceded the letting of contracts. Another two years will have elapsed by the time the new installation goes into use early next year. It could have been done quicker—but not so well. Harold See, whose record in broadcasting goes back to the early thirties, had envisioned this 'dream' station for a long while. When the time finally came to build it, he wanted to be sure it came up to his dream in every way."

The article—written at the time when KRON-TV was completing construction and beginning to install the first of their all "new look" equipments—details the careful preparations, planning and design of this "dream station" . . . this whole new studio plant to be built from scratch.

In the following pages, we revisit KRON-TV. And present a "through-the-lens" tour of a dream which has become a reality.



Traffic Flow; San Francisco Style

THE PUBLIC VIEW. Picasso-print tapestries and original sculptures greet program audiences as they pass up the stairs to third-floor studios where programming is full-color.



“One additional type of information is required before the architect or planner can start making his floor plans. This is a prediction of traffic flow patterns. A standard approach to this is to make up a functional and/or departmental flow chart. The planner (and architect) use this chart in planning the location of the various areas. The goals, of course, are (1) to keep the high-density traffic paths as short as possible, and (2) to keep the paths followed by the public separate from the internal station traffic. In some cases planners also try to keep a



AN AGENCY LOOK. Through this main reception area passes the everyday business traffic of KRON . . . to sales offices equipped with conference-projection facilities for both large and small groups.



third classification, "talent", away from both of the other two. Usually it is not possible to do this entirely, but good planning will avoid all but occasional intermingling of traffic patterns."

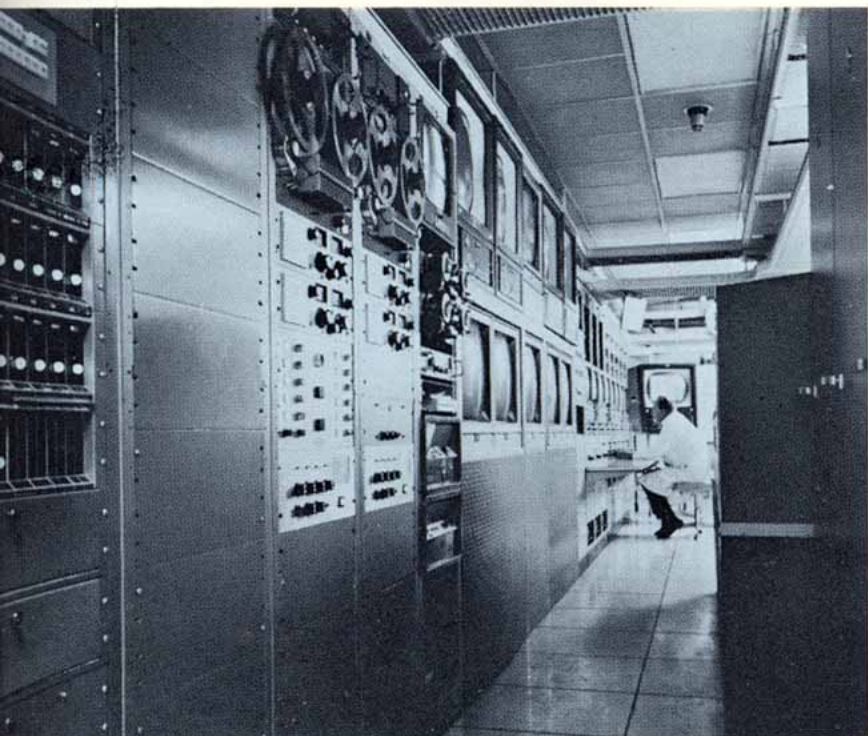
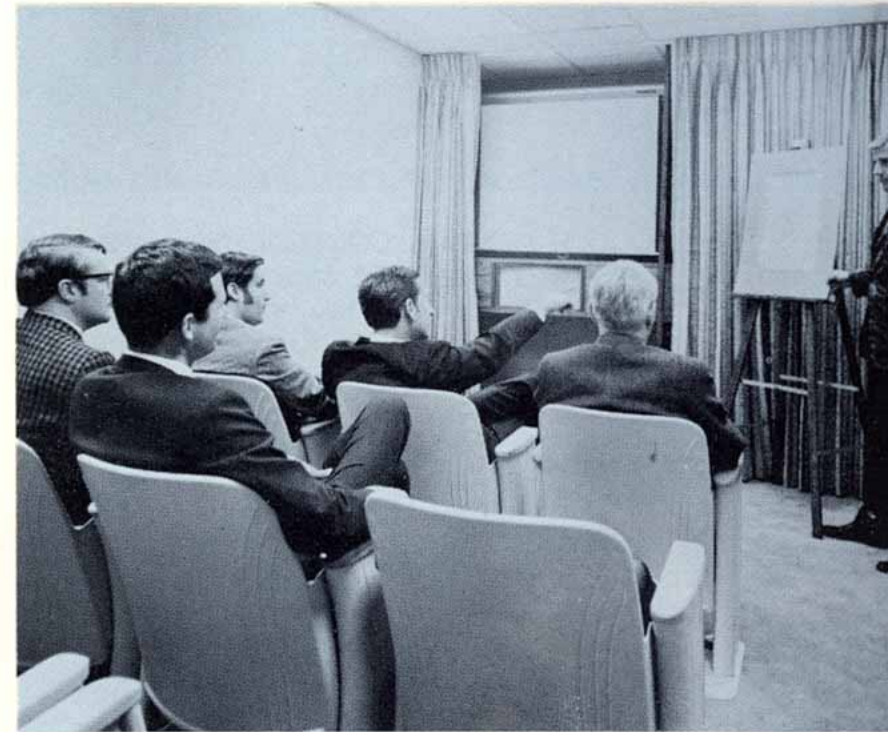
"San Francisco style" refers here to topography—a factor that station planners used quite ingeniously. Situated on one of the local hills, the building has street access to three of its four floors.

The main, "business", entrance is at 1001 Van Ness. This is the bottom of the block . . . the first floor with its sales offices, reception, and access by elevator to promotion, community affairs, and general administrative offices.

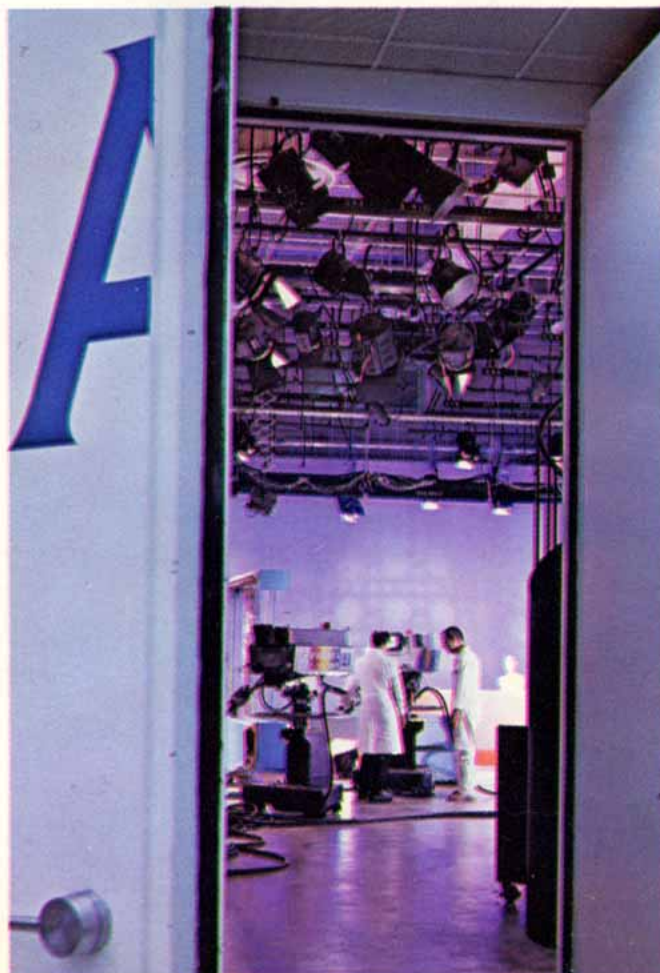
Up the block, on O'Farrell Street, is the "general public" entrance . . . to the second floor. Here a spacious lounge and waiting area accommodates visitors, before they ascend a flight of stairs to the third floor studios for some special show.

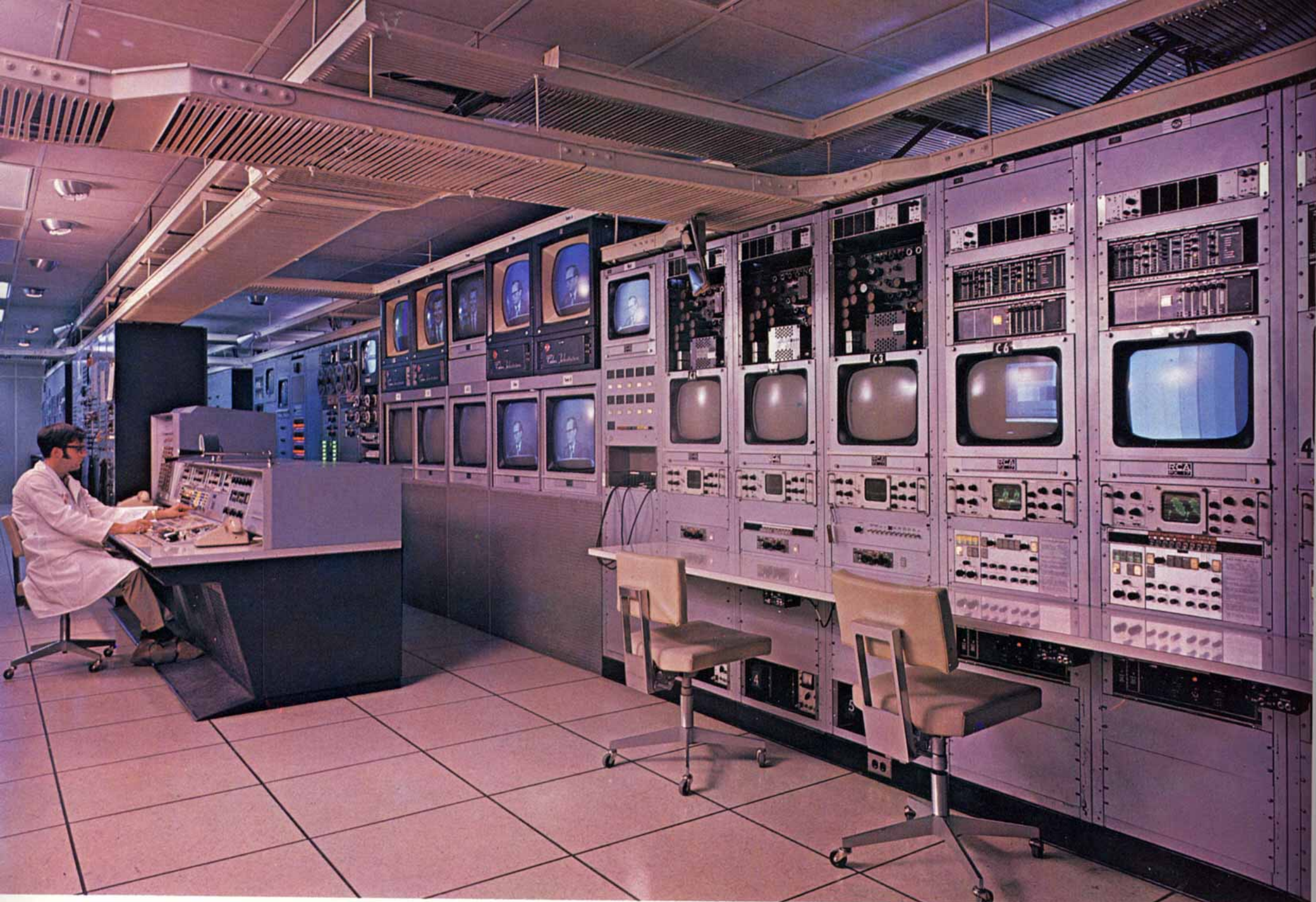
Farther up the block (still on O'Farrell) is the "receiving" entrance . . . with truck access to the third floor. This is the delivery area for films, supplies, and technical equipment. It permits drive-in access directly to the studios for props, automobiles . . . even cable cars. See front cover.

And thus the many workings of a television station are conducted . . . expeditiously, efficiently . . . each in their own area . . . with minimum crossover, maximum utility.



A BACKSTAGE PERSPECTIVE. Drive-in access to third-floor studios is at street level to serve technical, property, and production needs without ever interrupting the normal flow of business or public traffic.





COLOR CAMERA CONTROL dominates this view of OCR. Three TK-42 and two TK-43 cameras are controlled from this location. They can be assigned to studios or OCR for use in production or on-air operation.

LONG VIEW OF VIDEO SWITCHING SYSTEMS looms large at the opposite end of OCR. Five TS-40 systems are housed here—assignment, Studio A, Studio B, master control, and house monitoring.



Solution to Unrestricted Operating Flexibility: the Assignment Switcher

“The heart (or maybe it should be called the brain) of the KRON-TV studio system is an assignment switcher. An essential feature of KRON-TV’s planning was that either of the two studios, or master control, be capable of operating as a completely independent operation center. Thus, for example, Studio A might be producing a taped show while Studio B was being used for rehearsal and Master Control was airing a program from tape, film or network. Most stations can do this to a limited degree by patching or manual switching. KRON-TV wanted complete, unrestricted flexibility—with automatic switching. The answer RCA systems engineers arrived at was the assignment switcher.”

Pictured on these pages are views of master control—operating control room (OCR), as KRON calls it. Here the operator’s job is to keep feeding the signals (network, tape, film or live) to the transmitter. He’s not concerned with production at all, just with keeping the station on the air. He calls out the assignments. And they are physically executed at the film, tape and camera control position. Readout at his console keeps

him apprised of what is being assigned where. Equipment most likely to require his attention is located close to him. Other equipment not likely to require attention is progressively farther away.

Technically, the assignment switcher consists of a group of individual units, each designed to handle a section of necessary control leads or signals to be switched from one area to another. The groups are broken into Video, Pulse Intercom and Control Circuitry. The group switchers are not mounted next to each other, they rather appear within the associated equipment racks of their function sources. (Audio racks, Video, etc.) A control panel enables the operator to assign any of 17 input sources to one of the three operating areas. (OCR, A control, or B control.)

The system here meets not only the present, but the future needs of KRON-TV. It is designed and built for integration with fully automated operation. Interface equipment is already installed; automation equipment need only be added.

CLOSEUP ON MASTER CONTROL where the operator’s job is to keep the station going. A preset switching system, TSA-3, at left, is used to automate many of the station break sequences.

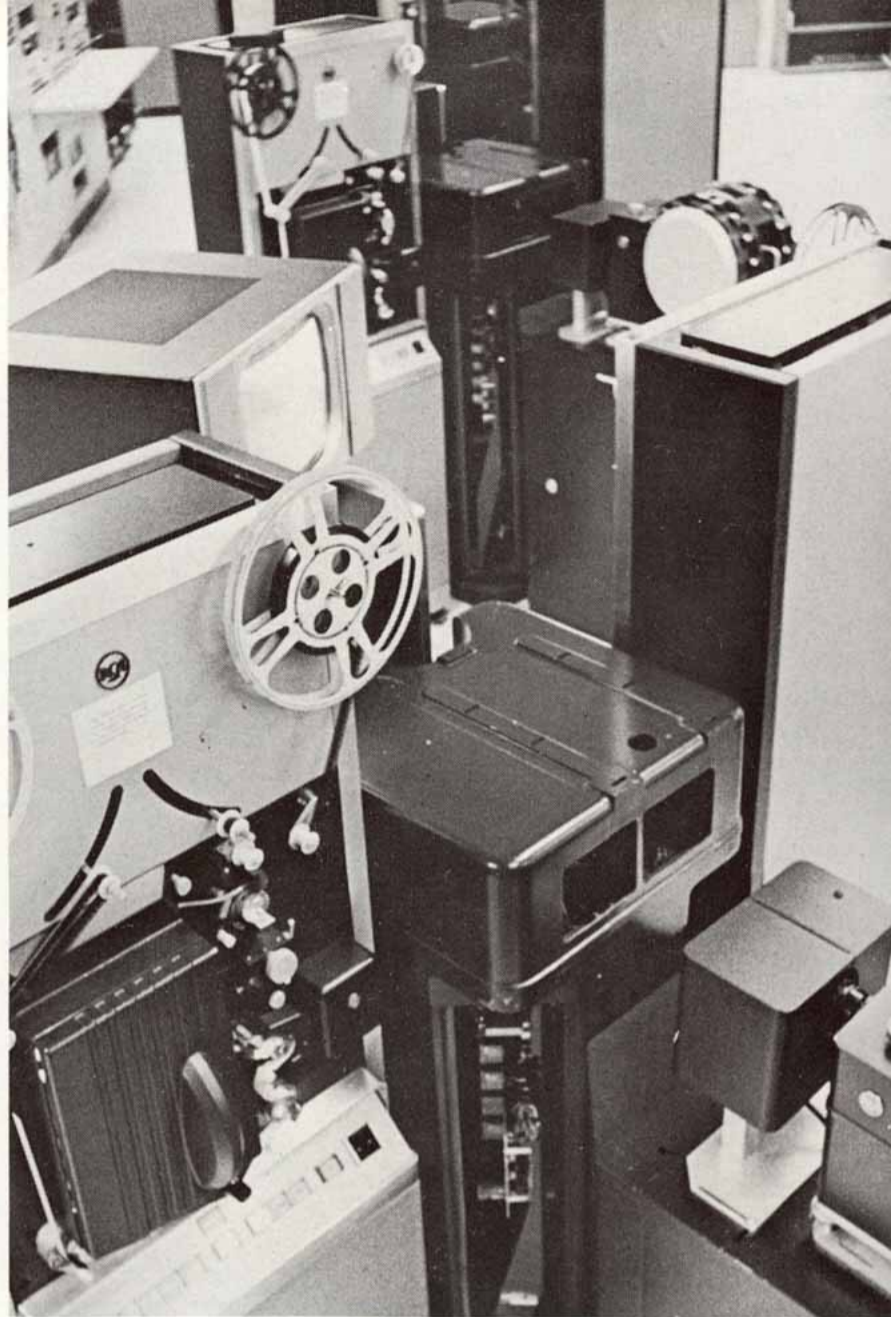


Tape and Film . . . to be Delegated

The original article described the delegate system for film and tape—where any of five tape machines or four film chains might be arranged to operate independently or as an adjunct to either studio control room or master control. The article went on to mention:

“A notable feature of the technical area is a large film-tape room. Noting the increasing trend to recorded programs, KRON-TV has planned generously for this type of operation. To begin with, this area will have four color film islands and five color tape machines. There is a room for future addition of more tape machines and a TV film recorder.”

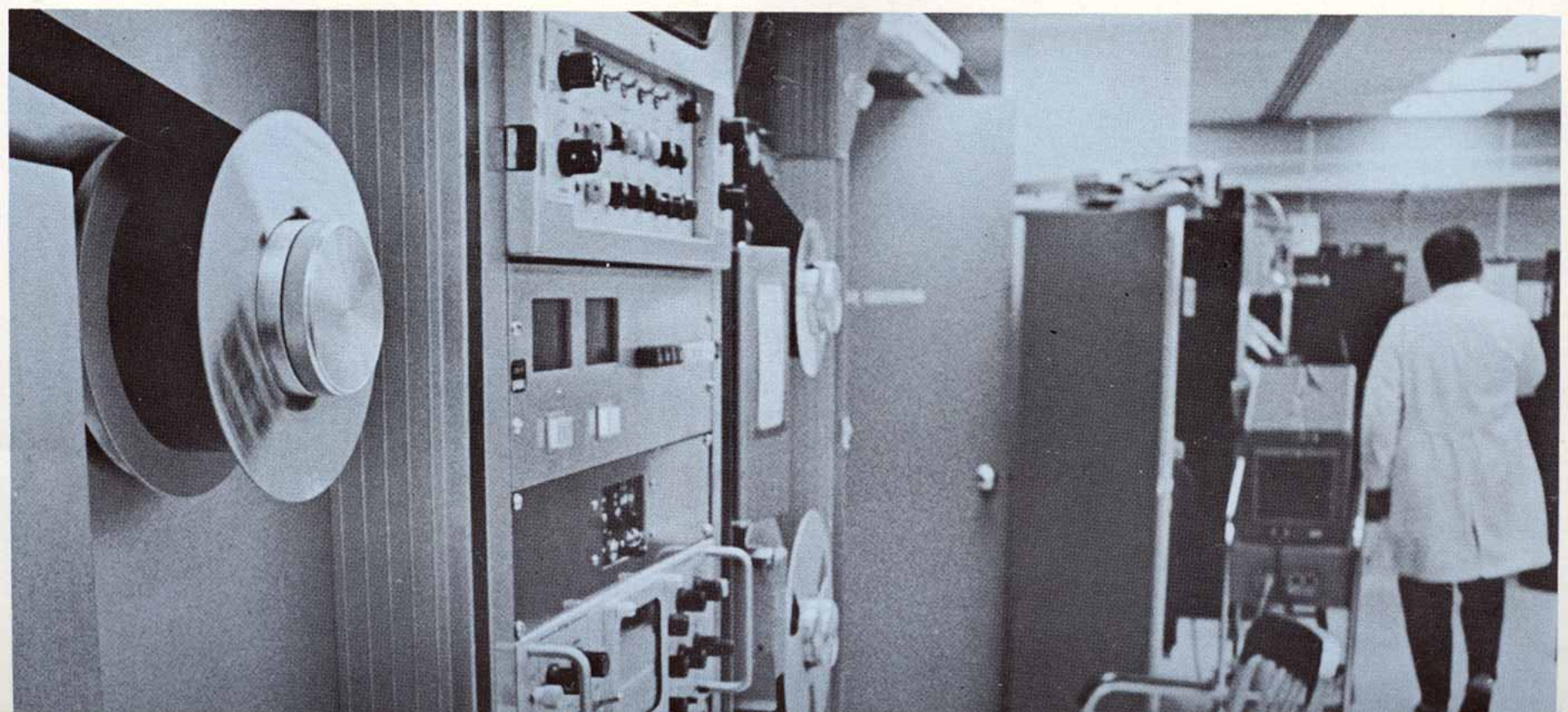
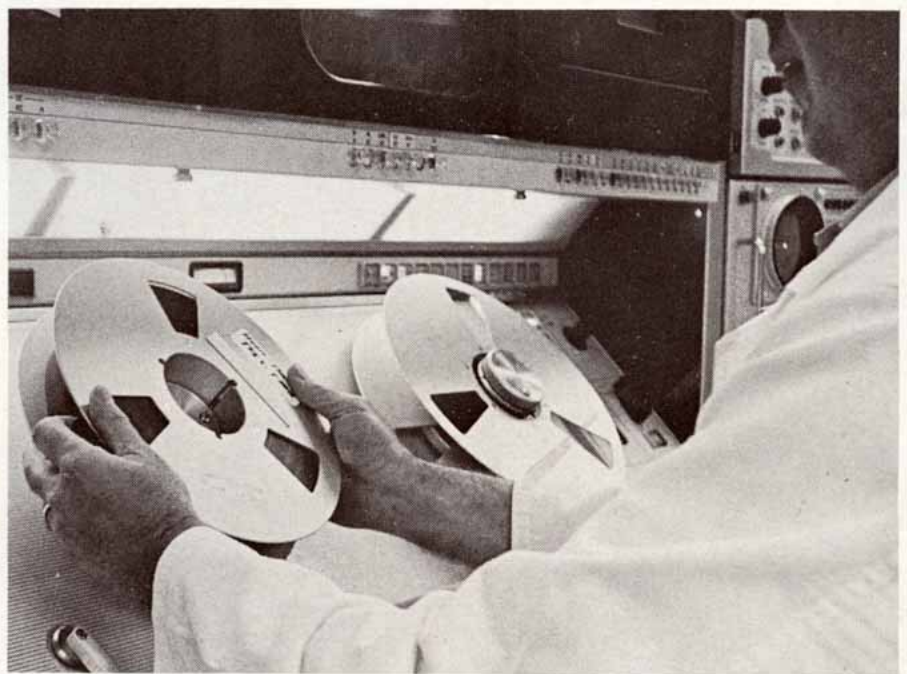
This planned generosity of space has already been rewarded. Since the photos on these pages were made, another TR-70 highband color recorder has been





added—bringing the equipment complement to four TR-70 series recorders, two TR-3 tape players, and four TK-27 color film chains. Two control centers, each handling two film islands, are also located in the room.

The whirring of reels, both tape and film, characterize this busy room. The equipment here is in constant use—providing a commercial or public service announcement to master control at station break time, dubbing the news for the evening show, auditioning a tape on the house monitoring system, flashing a title for a commercial in preparation, and handling the hundreds of everyday programming tasks.



Individuality Through Custom Switching

"A highlight of the KRON-TV installation will be the control consoles which RCA engineers designed especially for KRON-TV and which are being built in the RCA plant at Camden, New Jersey."

It's been said that no two stations operate alike. This becomes especially apparent as you visit their control rooms—for it is here that the engineering staff really expresses its individuality.

The two studio control rooms at KRON are mirror images of one another and identically equipped. One of these control rooms is pictured here. The video switcher, and director's position is fronted by the classic bank of monitors. The audio man sits alone at his console in a separate room. A glass partition gives him full view of the activity and monitors in the adjoining room. It only takes a glance at his console,



with its linear faders and other special provisions, to determine the emphasis that KRON places on superior program sound.

But the emphasis on superior operation doesn't stop at the audio. The TS-40 Switchers associated with each video console (and master control console) incorporate all of the most modern concepts—including "program" and "preset" buses, transition control by cut-bar or levers, built-in dissolves and special signals, and all the latest techniques.

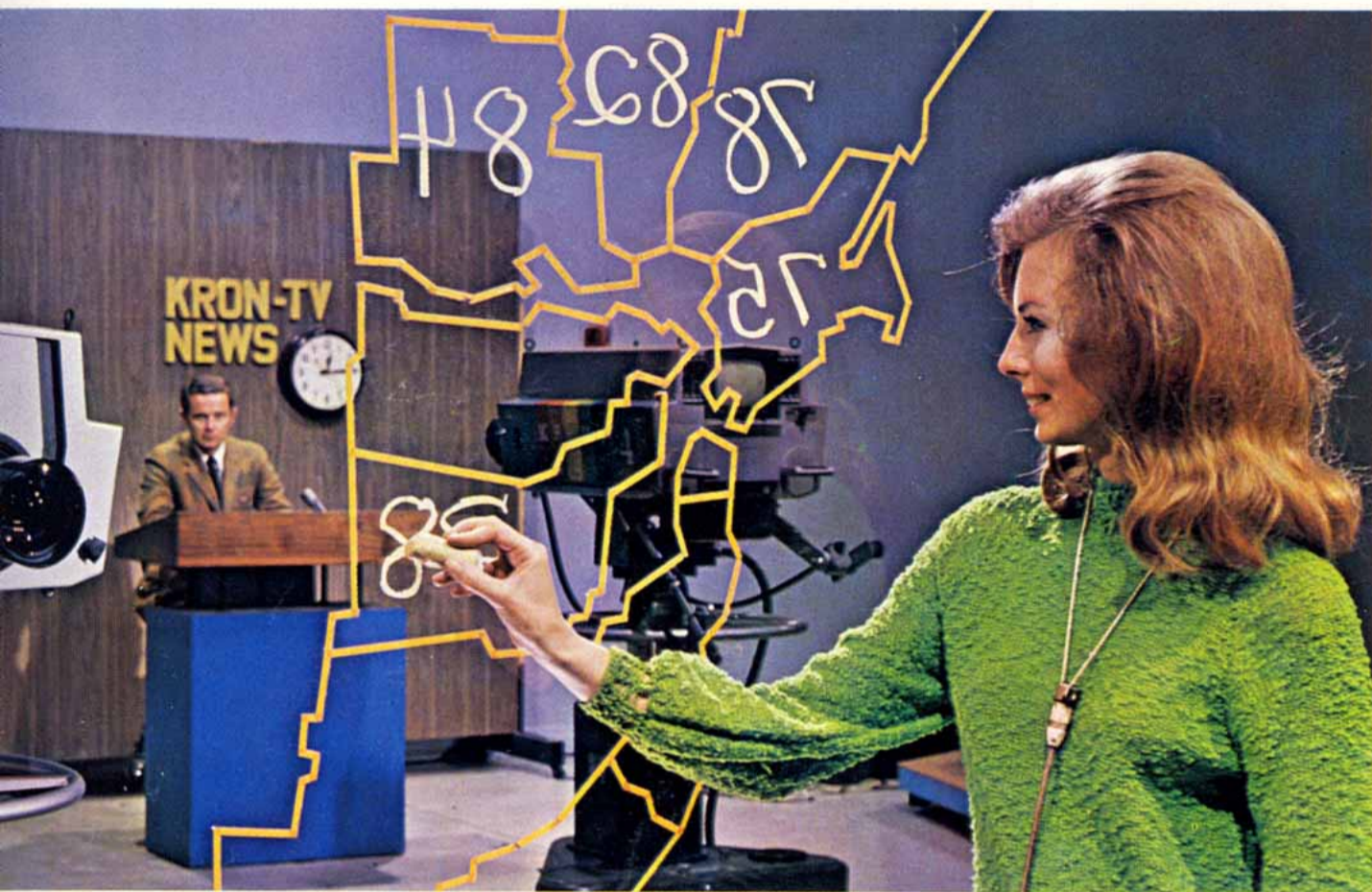
The audio consoles house multiple audio control facilities which with the associated audio equipment racks form the basic audio system. Each audio console is, in effect, "tied" to its associated video console. Thus when a film or tape source is assigned to a particular video control by the assignment switcher, the associated audio is simultaneously routed by the audio section of the assignment switcher to the corresponding

audio control console. Microphones in the studios may be similarly associated if desired. A special feature of the audio consoles are voice-triggered AGC-type microphone channels for multi-microphone panel discussions or similar applications.

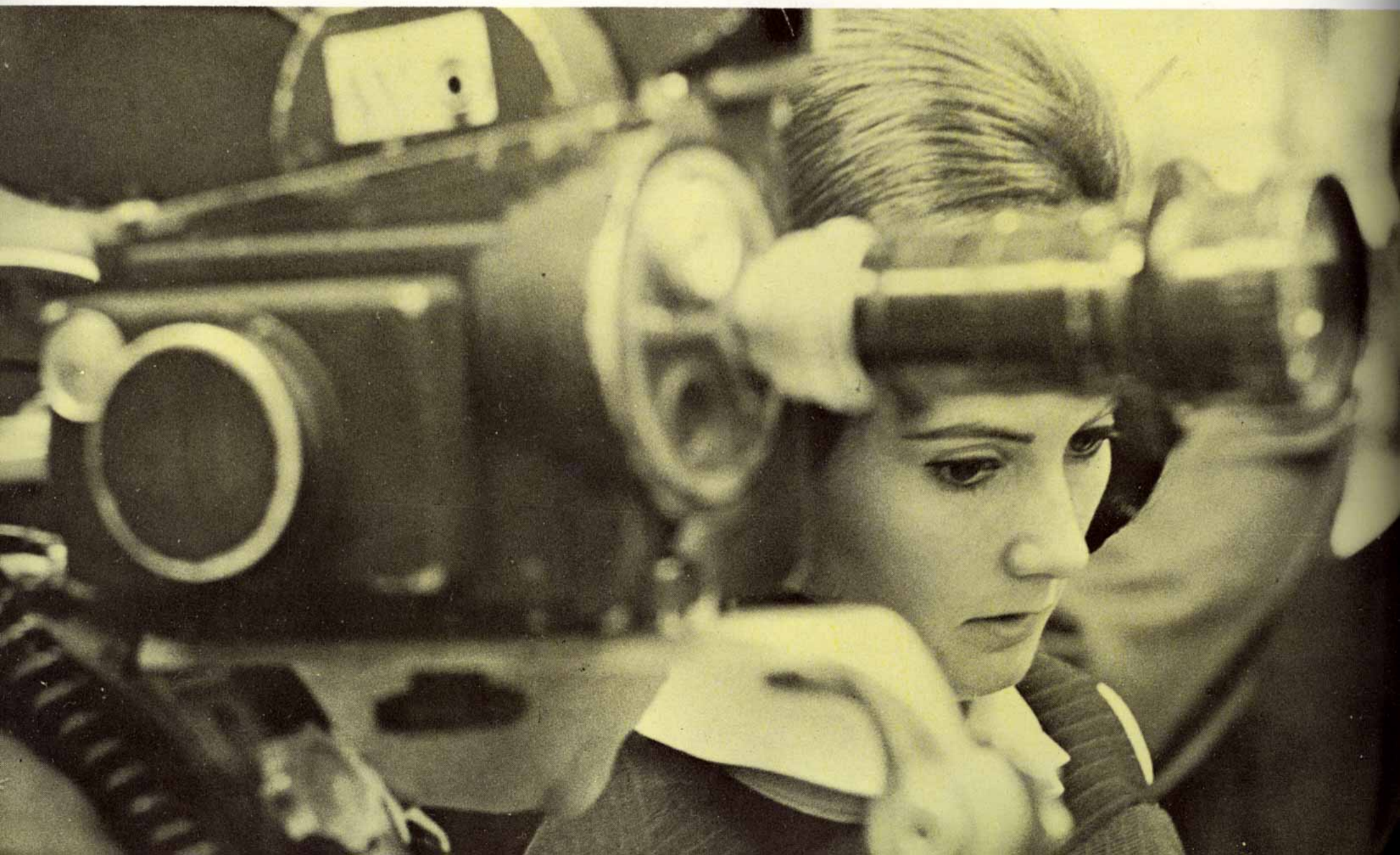
The camera consoles incorporate camera control panels, switching and machine control. Camera control panels are switched to perform with the assigned cameras (live and/or film) by the control portion of the assignment switcher (as are the VTR controls). Control functions for live cameras are Gain, Iris, Lens Cap and Pedestal as well as on-air tally. There are corresponding controls for film cameras—and for operating modes of tape machines, film projectors and slide projectors.

In its totality, this is a custom system conceived to meet the growing needs of most sophisticated television programming for many, many years to come.





In Local Programming . . .
It's the News





And the weather. And documentaries. Four separate shows with two and one half hours of locally-produced news each day. Plus community interest specials.

In fact, KRON's first revision to its newly completed building was the expansion of its news department. Public demand for the news—especially that of the San Francisco scene—encouraged this expansion. Today KRON-TV employs a team of over 40 writers, field reporters, cameramen and producers to collect, interpret, and present the news.

Photos on these pages portray the station's "spirit" of the news. Because the news is the "spirit" of KRON-TV's local programming. And that's what they've equipped to do.

