

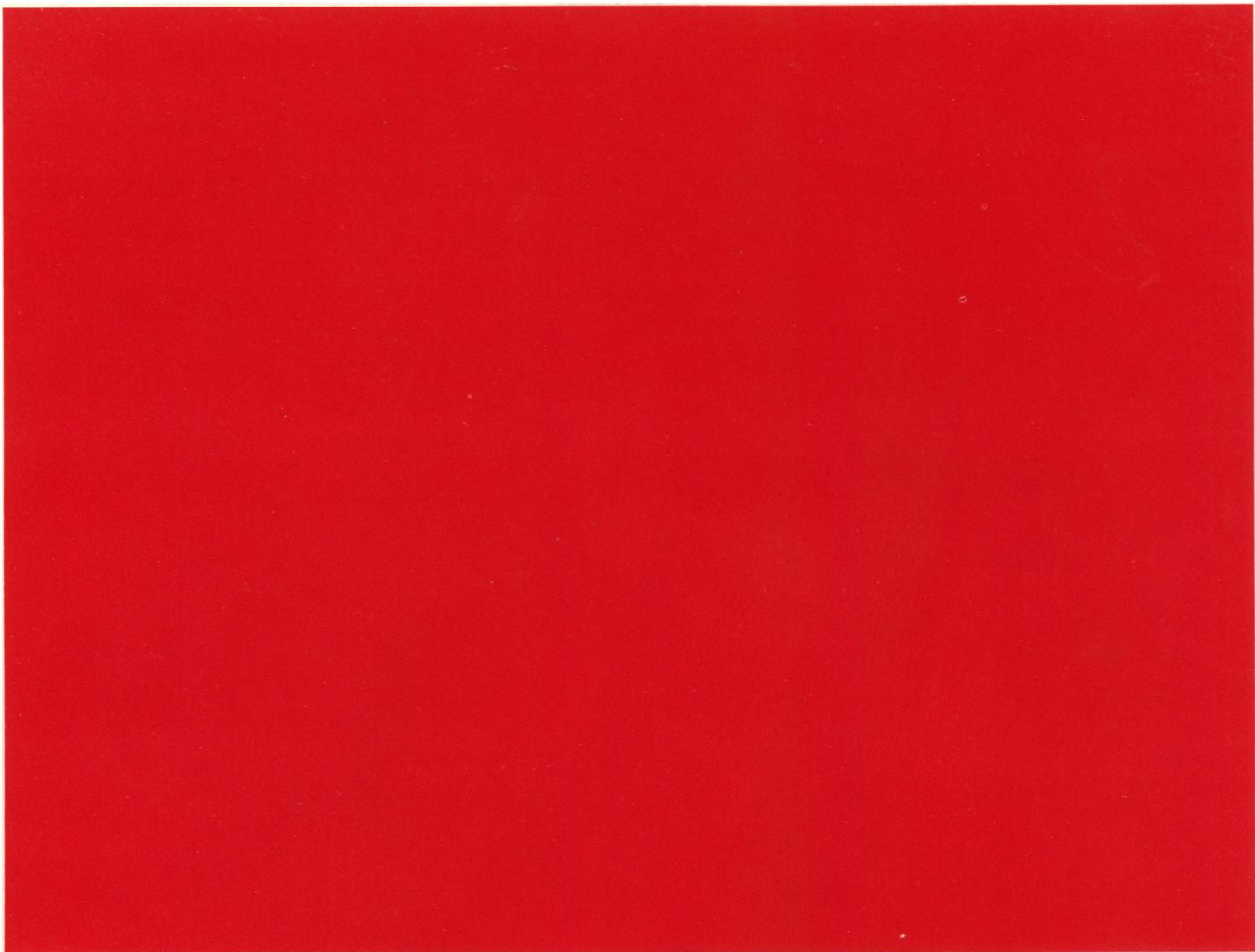
SCIENCE

5 December 1975

Volume 190, No. 4218

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CONDUCTED TOURS

TOUR 1. Introduction to Boston and Cambridge (\$7.50 per person)

1A Wednesday, February 18.

1:30-4:00 pm.

1B Thursday, February 19.

9:30-12:00 noon.

1C Monday, February 23.

10:00-12:30 pm.

TOUR 2. Lexington and Concord (\$7.50 per person)

2A Thursday, February 19.

1:30-4:00 pm.

2B Monday, February 23. 10:30-1:00 pm.

TOUR 3. University Tour (\$6.60 per

person) Including Harvard, M.I.T.,

Boston University, Northeastern,

Radcliffe, Brandeis and others.

Saturday, February 21. 9:00-12:00 noon.

TOUR 4. Woods Hole Oceanographic

Institution Tour and Program (\$6.50

per person)

(Box lunch available. Limit 150 persons.)

Saturday, February 21. 8:30-3:30 pm.

TOUR 5. Audubon Society Field Trip

Newburyport—Plum Island (\$7.50 per

person). Monday, February 23,

7:30-1:00 pm.

CONCERTS

15. Arthur Fiedler conducting the

Boston Pops Orchestra at Symphony

Hall, Boston

Friday, February 20. 8:30 pm.

Floor and first balcony, \$6.50. Second

balcony, \$4.50. All unreserved.

16. An afternoon of Scott Joplin's music performed by the New England Conservatory Ragtime Ensemble, and narrated by Gunther Schuller, President, New England Conservatory of Music.

John Hancock Hall, Boston.

Sunday, February 22. 2:15 pm. All seats

unreserved. \$3.00 per person.

FREE MUSEUM ADMISSION

Admission to the Museum of Fine Arts, the Museum of Science and the New England Aquarium will be made available, free of charge, to conferees wearing registration badges.

FREE UNIVERSITY TOURS

TOUR 6. Boston University

TOUR 7. Harvard University

TOUR 8. M.I.T.

TOUR 9. Northeastern University

These tours are all scheduled for Satur-

day, February 21, 2:30-4:30 pm. Limited

to 150 persons per tour. Transportation

provided.

FREE INDUSTRIAL TOURS

TOUR 10. Abt Associates, Inc. &

Bolt Beranek & Newman, Inc.

Friday, February 20, 8:30-12:30 pm.

TOUR 11. High Voltage Engi-

neering, Corp. & Itek, Corp.

Friday, February 20.

1:30-5:30 pm.

TOUR 12. Damon, Corp. &

Digital Equipment, Corp.

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TOUR 13. Environmental Research

& Technology, Inc. & Raytheon

Company.

Monday, February 23. 8:30-12:30 pm.

TOUR 14. MITRE, Corp. & Arthur D.

Little, Inc.

Monday, February 23, 1:30-5:30 pm.

Limit of 50 persons per tour. Transporta-

tion provided.

FOR YOUR NOTE PAD

Hospitality Headquarters is located at Boston's Sheraton Hotel, Beacon D, Conference Level for complimentary coffee. Tour, concert and Bicentennial information.

All tours will depart from the Dalton Street entrance of the Sheraton-Boston Hotel.

Holders of tour tickets should check at A.A.A.S. Ticket Booth to reconfirm tour reservation(s).

All seats, tours and concerts, are unreserved, some have a participation limit, and all are on a first-come, first-served basis. Minimum number of persons will be required for tours or they may be cancelled.

Refunds on sales will be handled by Dept. R or on site—but must be made 24 hours in advance of tour departure—no refunds thereafter. Concert tickets not refundable.

Tickets will be mailed to individuals beginning January 20, 1976.



Return to A.A.A.S., Dept. R.

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Please circle activity desired. Write number of tickets desired in space next to appropriate number.

1A _____ 1B _____ 1C _____ 2A _____ 2B _____

3 _____ 4 _____ 5 _____ 15 _____ 16 _____

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These tours are free.

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5 December 1975

Volume 190, No. 4218

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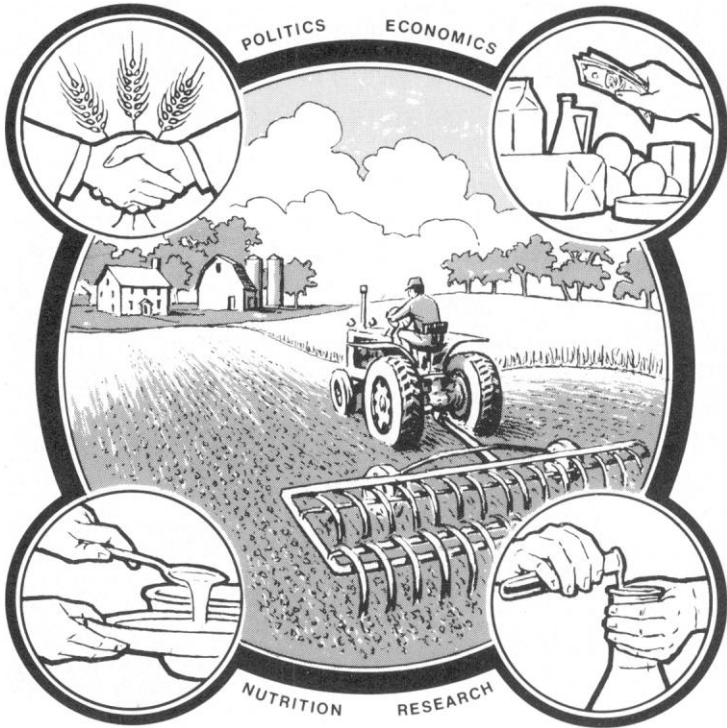
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Detlev Bronk

For all of us, the death of Detlev Bronk means that a steady and generous source of illumination has been extinguished. But in our hearts and memories there remains a warm afterglow.

Det Bronk was one of the most sought after and influential men in science. He made original and fundamental scientific observations, he served as president of two major universities, he was president of the National Academy of Sciences for 12 years, and his contributions to this country were such as to deserve its highest civilian honor, the Medal of Freedom. What were the essential characteristics that set this man apart? We think an important one was that he enjoyed what he did; he valued the scientific life. Another was that he really cared about people, and they reciprocated. In his address on retiring from the presidency of the American Association for the Advancement of Science in December 1953, there is a glimpse of what science meant to him:

"As a scientist, I think of intellectual adventure in terms of scientific research and inquiry. As members of the greater community of scholars, we should think of science as encompassing all significant knowledge which enriches life. Science in that broader sense is a great odyssey of the human spirit. Because it is just that . . . the future I envision is one of glad, confident mornings of new days of greater satisfaction."

This indicates another of Bronk's characteristics. He took the broad view. As a beginning scientist, he felt that the pinnacle of his desire was the sanctuary of the laboratory, but he soon realized that he could not allow external forces to control the life and future of the scientific community. Again, his philosophy is expressed in his presidential address:

"Science shapes the lives and thoughts of men and the destiny of nations; many who are not scientists are thus tempted by the will to serve or by the lust for power to control the policies and conditions under which scientists must work. Scientific research and knowledge are essential elements of modern life; the changing patterns of civilization are influenced by and, in turn, have a profound effect on the nature and the course of scientific activity.

"This is justification for inclusion of some who are neither scientists nor professional scholars in any field among administrators and trustees who play a powerful role in guiding the affairs of science and its uses. It does not justify their lack of understanding of science and the conditions under which it can flourish. . . .

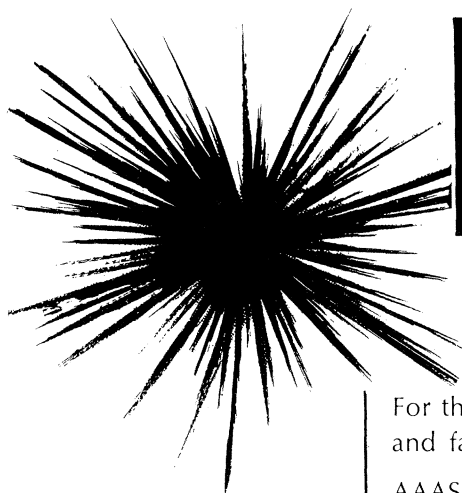
"Men of affairs and social influence need more knowledge of and appreciation of the traditions, ideals, and significance of science. Scientists are in part to blame for such lack of awareness . . . we have emphasized too much our discoveries and their useful applications. We have inadequately revealed science as a great intellectual adventure. Unless this quality of science is more generally comprehended, we shall be subject to adverse pressures that result from lack of understanding."

As president of Johns Hopkins University in the McCarthy era, Bronk learned something about adverse social pressures, but it was another of his characteristics that he had courage and knew when to display it:

"Progress requires courage. If we are to fulfill our rightful role in the furtherance of science, we need abundant courage. For this we are fitted by tradition and by the nature of our calling, for we are discoverers and teachers of new knowledge which is usually challenged and disputed. And so, there is no place in science for timid men and women who are unwilling to defend their necessary freedom for inquiry and free unprejudiced discussion."

But Bronk was no arrogant dissenter. He was basically a shy person, and like many great men he was modest. He was aware of his own place and the place of science in the larger scheme of things. It is told that some time during his years as president of the Rockefeller University he received a gift of money, which his fellow scientists pressed him to use for some worthy investigation or other; instead he spent it on a flower garden.

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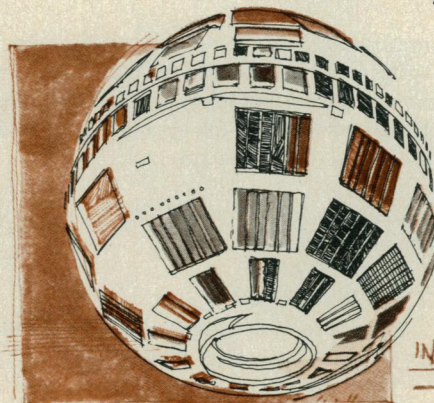
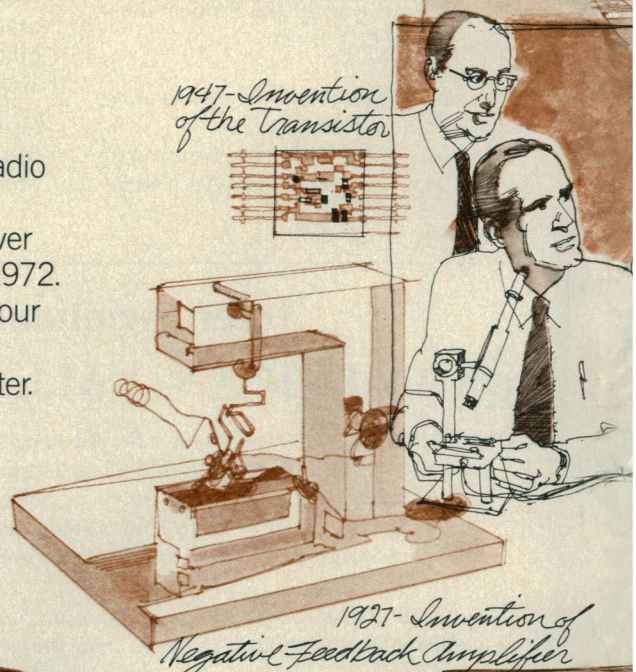
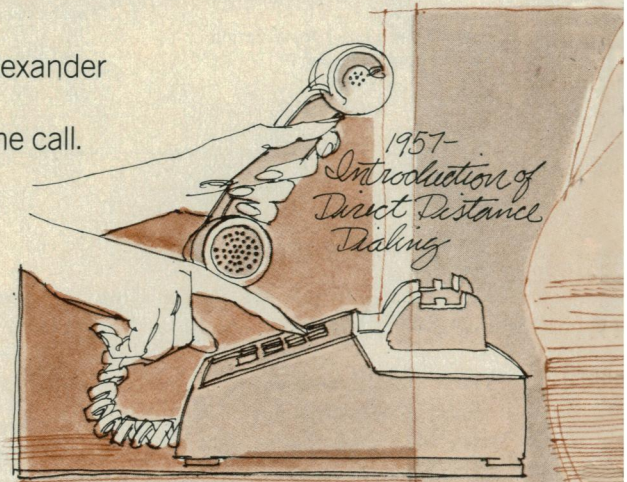
As an outgrowth, we receive an average of more than two patents every working day. And nearly half the things Western Electric will make this year didn't even exist four years ago.

In the next 10 years, we plan to expand the capacity of the telephone network as much as we have in the past 100 years.

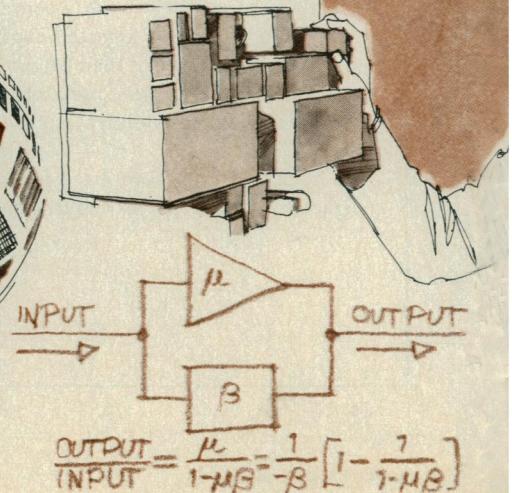
To keep this network operating and growing takes the innovative teamwork of Bell Labs and Western Electric.

The kind of innovative teamwork that makes us say:

One Bell System. It works.



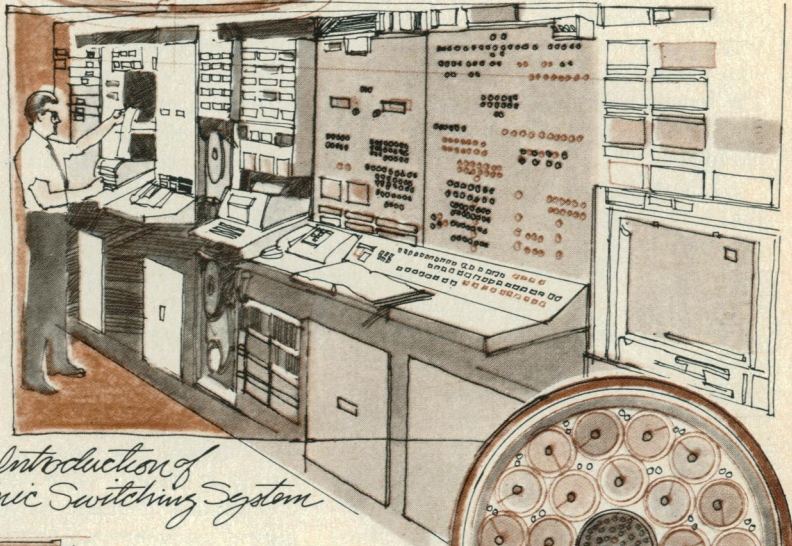
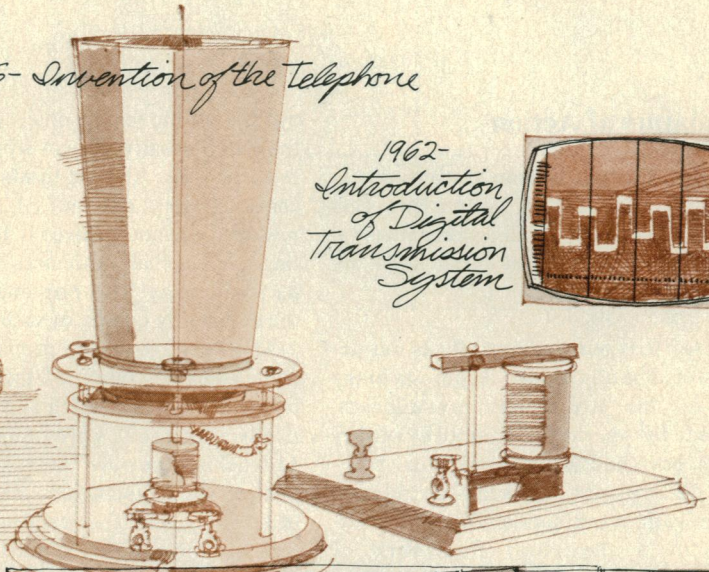
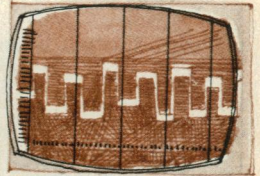
1962- Launch of Telstar™ Communications Satellite



YOUR NEXT PHONE CALL

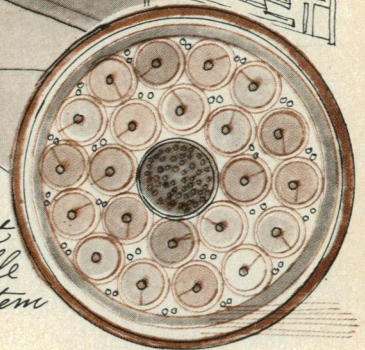
1876- Invention of the Telephone

1962-
Introduction
of Digital
Transmission
System

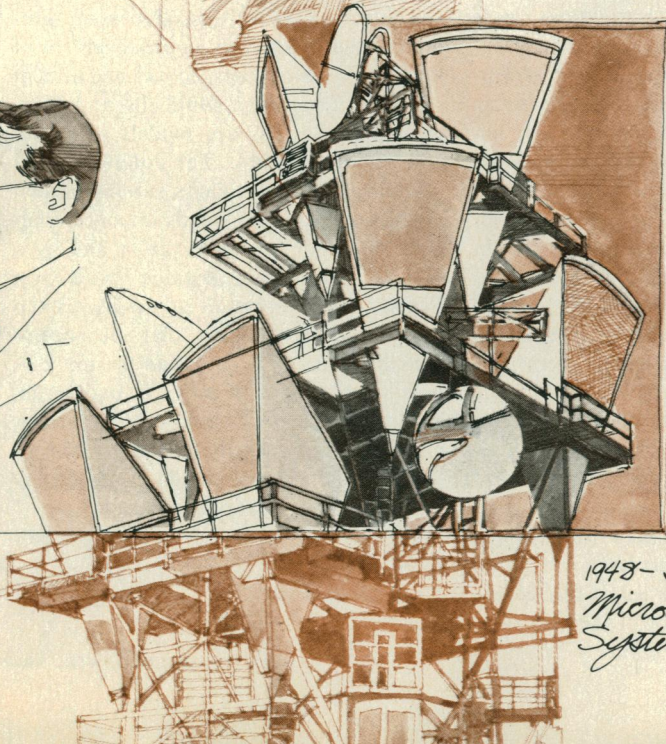


1960- Introduction of
Electronic Switching System

1929- Development
of Coaxial Cable
Carrier System



1948- Introduction of
Microwave Transmission
System



**Bell Labs
Western Electric**