



Western Electric

**BILLBOARD ANTENNAS**—These antennas used often along the Ballistics Missile Early Warning System (BMEWS) routes and built by Western Electric for the Air Force, tower above a site in Labrador. They form a part of the rearward communications network which flashes information automatically over some 225,000 miles of cable and radio circuits with the speed of light.

## PSYCHOLOGY

## Reaction to Killings

A survey of the public's reaction to the assassination of President Kennedy was made to study the behavior of the people in a national crisis.

► THE PUBLIC FEELING about President Kennedy's assassination was measured scientifically in a small poll of 1,500 persons in all parts of the country by the National Opinion Research Center, Chicago.

The survey began Nov. 26 and ended Nov. 30, with the Thanksgiving holiday intervening. It will be a few weeks before results can be known.

Richard Jaffe, assistant director of NORC, told SCIENCE SERVICE by phone that questions were asked by trained interviewers in "pre-designated areas." Classifications of interviewees, all adults, included both Negroes and white, young parents and others in rural and urban locations.

The questions were aimed at clarifying the American reaction to a national catastrophe, Mr. Jaffe said. In an all-night session, the NORC staff formulated the following types of questions:

Can you think of any other time in your life when you had the same sort of feelings?

Do you think you were more upset than other people?

Who did you think might have done it when you heard the news of the President's assassination?

Did you continue with your normal activities? If not, what did you do?

Were you in communication with others? How did you feel? Angry?

If you are a parent, how did you explain

the assassination to your children?

How many hours did you sit before your TV or radio set Friday, Saturday, Sunday and Monday? Did you turn off your set? Couldn't you get yourself to turn it off? Did you listen more than you wanted to listen?

Did you pray? Cry? Eat or smoke more than usual?

Who did you feel was to blame? Castro? Negroes? Dallas? Birchites?

Were you convinced that Oswald did it? Did you think one or more might be involved? What was your reaction to Oswald's jailing?

What was your feeling toward President Kennedy? Did you think he was 1. Courageous? 2. Cold? 3. Strong? 4. Handsome? 5. Intelligent?

Are any lessons to be learned from the crime?

Will any good come out of it?

What were your feelings about Oswald's murder?

What do you think should be done with Jack Rubinstein, alias Jack Ruby, Oswald's accused murderer?

Mr. Jaffe said that Dr. Peter Rossi, director of NORC, had flown to Washington at his own expense to consult with behavioral scientists who met at the National Institute of Mental Health following President Kennedy's assassination.

Other psychiatrists and social scientists present included these physicians:

Drs. Leonard J. Duhl and William F. Soskin, both of the staff on the professional services branch, NIMH; Drs. Henry Reicken, National Science Foundation, Washington, D. C.; Erich Lindemann, Boston psychiatrist, department of psychiatry, Harvard University Medical School; Mark Fried, Center for Community Services, Massachusetts General Hospital; Robert Bower and Ivor Wayne, both of the Bureau of Social Science Research, Inc., a private group in Washington, D. C.; and Robert Leopold, a psychiatrist at the University of Pennsylvania, Philadelphia, with disaster experience.

Dr. Duhl said the meeting "sprang up" without much direction because of the desire of behavioral scientists to find out what happened.

"Everyone responds to a crisis of this kind in his own way," Dr. Duhl said. "Some fall apart, some cry, some are depressed. Scientists try to find out what really happened."

The reactions of representative college students is being determined by a group of psychologists at San Francisco State College to help throw light on the tragic happenings. About 200 students are being given sentence completion tests to find out their feelings, how they reacted, and their recollections.

Conducted by Drs. Philip McBride and Paul Ekman, psychologists at San Francisco State College, this is part of the activities of an inter-university voluntary group from that college, University of California, Berkeley, and Stanford University. This group is called ABSOP, which stands for "the application of the behavioral sciences to the strategies of peace." They have specialized in quick psychological studies of situations like the Cuban crisis and public reaction to shelters.

A survey of the newspaper and TV coverage of the events is in progress at the University of Michigan's Center for Research on Conflict Resolution, Ann Arbor.

Gallup Poll, Princeton, N. J., which is reported in newspapers, is making one of its assays on the happenings. Another newspaper-published poll by Louis Harris and Associates, New York, showed public confidence in the Johnson Administration.

• Science News Letter, 84:358 Dec. 7, 1963

## GENETICS

## Bacteria-Watchers Have New Methods

► NEW WAYS of spying on bacteria were reported by Dr. Rollin D. Hotchkiss of the Rockefeller Institute, New York, at a meeting of the University of Cincinnati chapter of the Society of the Sigma Xi in Cincinnati.

Bacteria have "well developed" inheritance systems, Dr. Hotchkiss said. Experiments have shown that bacteria evolve, carry and transmit molecules of DNA (deoxyribonucleic acid), bearers of heredity.

Scientists can now study such genetic effects within the cell and also in the test tube, Dr. Hotchkiss said. In the recent past, studies of bacteria were mainly biochemical.

• Science News Letter, 84:358 Dec. 7, 1963