

Sunspot Ties Up Wire and Radio Service

**Communications All
Over World Disrupted;
Los Angeles Cut Off**

Communication systems extending around the globe were virtually paralyzed yesterday morning by what scientists described as electrical disturbances on the sun.

Tremendous earth current which followed the appearance of a huge spot on the sun impaired telegraph, telephor and short-wave radio service to such an extent that cable to Europe and the Orier were dead for more than three hours and telegraphi circuits out of Los Angeles were out of order for an hour and a half.

The American Telephone and Telegraph Co., largest land-line owner in the country, said it was the worst case of traffic impairment its engineers could recall. Some said the worst in 3 years.

WIRES PILE UP

The breakdown was particularly disastrous, here at least when a spokesman for the Western Union Telegraph Co. reported that while its circuits out of Los Angeles were dead, thousands of Easter greeting messages beside many other private messages, piled up on the desks by the thousands awaiting transmission.

Scientists agreed that the sun spots were responsible for the phenomenon.

EARTH BOMBARDED

Director William Barton of the Hayden Planetarium, New York explained it this way: The sun spot is caused by a tremendous electrical disturbance on the sun which bombards the earth with a stream of electrical charges.

The earth's magnetic force deflects this stream of charges toward the North and South poles and the stream, in heading toward the poles, disrupts other electric currents traveling at right angles, like conflicting streams of traffic.

LIKE NEON LIGHT

The aurora borealis, or northern lights, is a manifestation of this rush of particles to the poles; passing through the atmosphere, it lights up just like a current illuminates the gas in a neon tube sign. The aurora was not visible, however.

A solar observer at Mt. Wilson Observatory said the powerful explosions on the sun send streams of ultra-violet light and electrons earthward, which have an ionizing effect on the electrical fields above the earth and the magnetic field of the earth.

SPOTS VISIBLE

The spots on the sun are now large enough to be visible to the naked eye, Dr. Seth B. Nicholson of Mt. Wilson Observatory said.

Strength of the earth currents generated by the bombardment of these electrons was often as high as 500 volts.

In San Francisco, Globe Wireless, Mackay Radio and R.C.A.

Turn to Page 7, Column 4

Sunspot Ties Up Wire Service

Telephone, Telegraph and
Short Wave Radio From
Europe and Orient Dead

Continued from First Page

all reported serious trouble on their communication with the Far East.

CIRCUITS OUT

Mackay Radio said its circuits to Tokyo, Honolulu and Manila were out most of the morning and that it was unable to reach New York for nearly eight hours.

The disturbance began suddenly about 7 a.m. and lasted in most cases until about 9 a.m. However, poor reception in all of the communication systems was reported until late yesterday afternoon.

HAVE TO WAIT

"When the earth current strike us," one local telegraph company official said, "we are powerless. We just have to sit calmly and wait for the line to open up."

When the lines finally did open up operators doubled up for several hours frantically dispatching the season's greetings and urgent messages.

MOST CIRCUITS DEAD

The telephone company reported that only 3 of 13 circuits between here and New York were open during the period—and these frequently would cease to operate. The phone company reported "double trouble"—being forced to endure serious line trouble at Amarillo, Tex. on top of the other misfortune.

Telephoto circuits which bring pictures by wire from all over the nation suffered principally among the many circuits of the telephone company. Static and high voltage, which would suddenly charge wires extending across the country, completely disrupted service for several hours.

BROADCASTS HAMPERED

Transcontinental broadcasts which are carried from New York to Southern California on the telephone lines, were also hampered.

For example, a company spokesman pointed out, if a broadcast were being sent from Los Angeles to New York and the earth currents should hit the direction of the broadcast would be reversed and the program would double back over the lines.

All three of the major networks were out of service intermittently during the period, it was stated.

Broadcasting stations here noticed frequent and severe static interferences during the time.

Britain Reports Telephone Wire Service Disrupted

LONDON, March 24. (U.P.) — Magnetic disturbances connected with today's unusual manifestation of the Aurora Borealis temporarily disturbed British telephone and telegraph communications and crackling noises were heard from radio receivers. Normal conditions returned quickly, however.