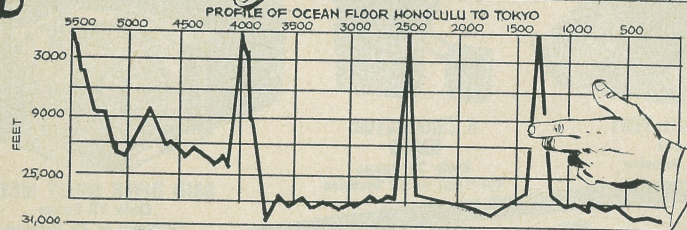


Chip Martin

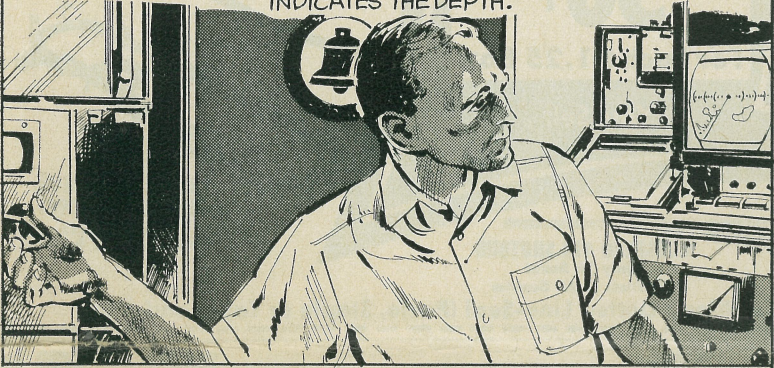
COLLEGE REPORTER and THE U.S.-JAPAN CABLE

CHIP HAS HEARD THAT THE LAYING OF THE BELL SYSTEM'S UNDERSEA TELEPHONE CABLE TO JAPAN WAS A FAR FROM ORDINARY UNDERTAKING. HE IS FOLLOWING UP THIS LEAD BY TALKING TO A BELL SYSTEM ENGINEER...

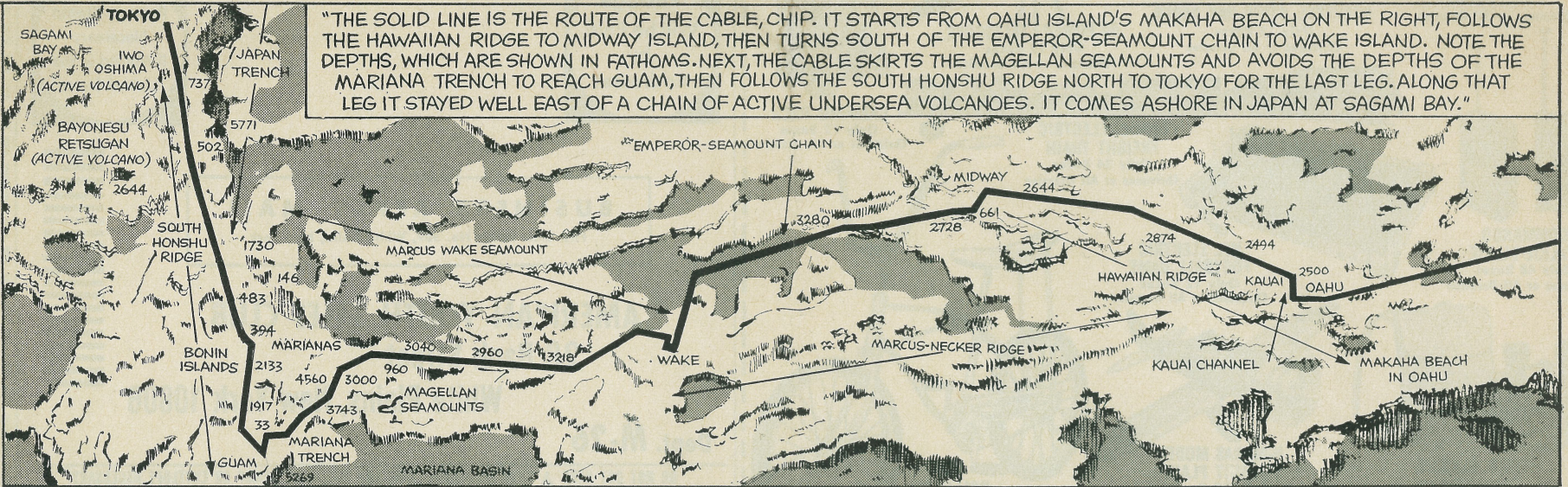
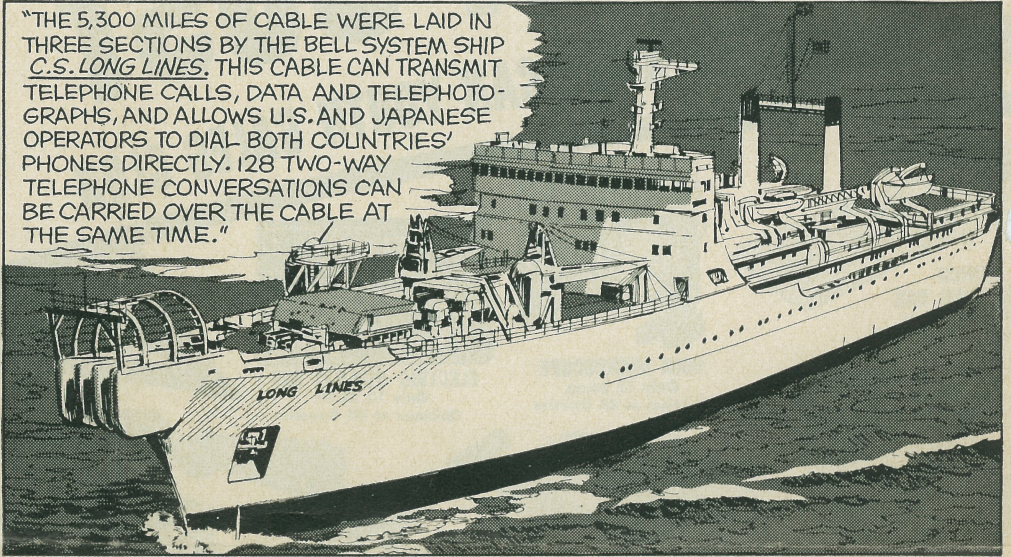


WHAT YOU HEARD WAS RIGHT, CHIP. IT WAS ONE OF THE LONGEST, MOST DIFFICULT JOBS OF LAYING CABLE THAT WE'VE FACED YET. THIS PROFILE OF THE PACIFIC BASIN FROM HAWAII ON THE RIGHT TO JAPAN ON THE LEFT GIVES YOU SOME IDEA OF THE "UPS AND DOWNS" WE ENCOUNTERED. AT HAWAII, THE CABLE JOINS EXISTING CABLES TO THE MAINLAND.

"FOR MONTHS BEFORE THE ACTUAL LAYING, U.S. AND JAPANESE HYDROGRAPHIC VESSELS SURVEYED THE OCEAN'S BOTTOM BETWEEN HAWAII AND TOKYO, HELPING BELL SYSTEM ENGINEERS CHART THE SHORTEST ROUTE THAT AVOIDED DEEP TRENCHES, HIGH SEAMOUNTS AND ACTIVE UNDERSEA VOLCANOES. DEPTHS WERE PLOTTED WITH ECHO SOUNDERS, WHICH BOUNCE SONAR-LIKE SOUND WAVES OFF THE BOTTOM. THE TIME IT TAKES FOR THE SOUND TO RETURN INDICATES THE DEPTH."

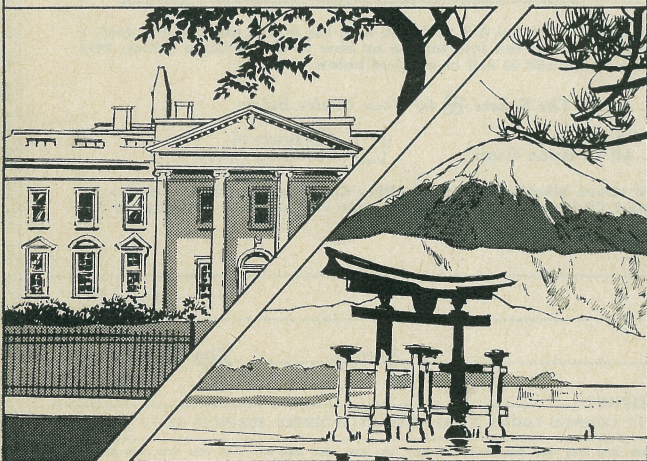


"THE 5,300 MILES OF CABLE WERE LAID IN THREE SECTIONS BY THE BELL SYSTEM SHIP C.S. LONG LINES. THIS CABLE CAN TRANSMIT TELEPHONE CALLS, DATA AND TELEPHOTOGRAPHS, AND ALLOWS U.S. AND JAPANESE OPERATORS TO DIAL BOTH COUNTRIES' PHONES DIRECTLY. 128 TWO-WAY TELEPHONE CONVERSATIONS CAN BE CARRIED OVER THE CABLE AT THE SAME TIME."

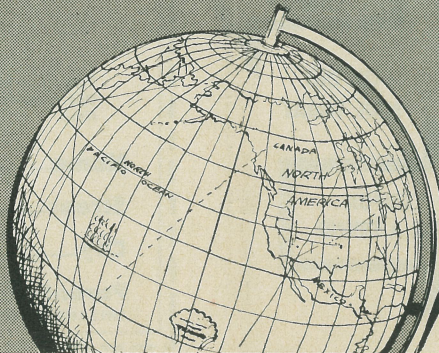


"THE SOLID LINE IS THE ROUTE OF THE CABLE, CHIP. IT STARTS FROM OAHU ISLAND'S MAKAHA BEACH ON THE RIGHT, FOLLOWS THE HAWAIIAN RIDGE TO MIDWAY ISLAND, THEN TURNS SOUTH OF THE EMPEROR-SEAMOUNT CHAIN TO WAKE ISLAND. NOTE THE DEPTHS, WHICH ARE SHOWN IN FATHOMS. NEXT, THE CABLE SKIRTS THE MAGELLAN SEAMOUNTS AND AVOIDS THE DEPTHS OF THE MARIANA TRENCH TO REACH GUAM, THEN FOLLOWS THE SOUTH HONSHU RIDGE NORTH TO TOKYO FOR THE LAST LEG. ALONG THAT LEG IT STAYED WELL EAST OF A CHAIN OF ACTIVE UNDERSEA VOLCANOES. IT COMES ASHORE IN JAPAN AT SAGAMI BAY."

"SERVICE WAS INAUGURATED JUNE 8, 1964 BY PRESIDENT JOHNSON IN AN HISTORIC PHONE CALL TO JAPAN'S PRIME MINISTER, OVER 10,000 MILES AWAY."



CHIP, THIS IS ALL PART OF THE BELL SYSTEM'S CONSTANT EFFORT TO KEEP UP WITH THE GROWING NEED FOR COMMUNICATIONS NOT ONLY IN AMERICA, BUT TO KEEP IN TOUCH WITH ALL THE WORLD.



THE REMARKABLE THING TO ME IS THAT THE TELEPHONE SERVICE ON THIS AND OTHER CABLES IS AS CLEAR AS IF YOU WERE CALLING ACROSS TOWN.



Bell System

American Telephone and Telegraph and Associated Companies