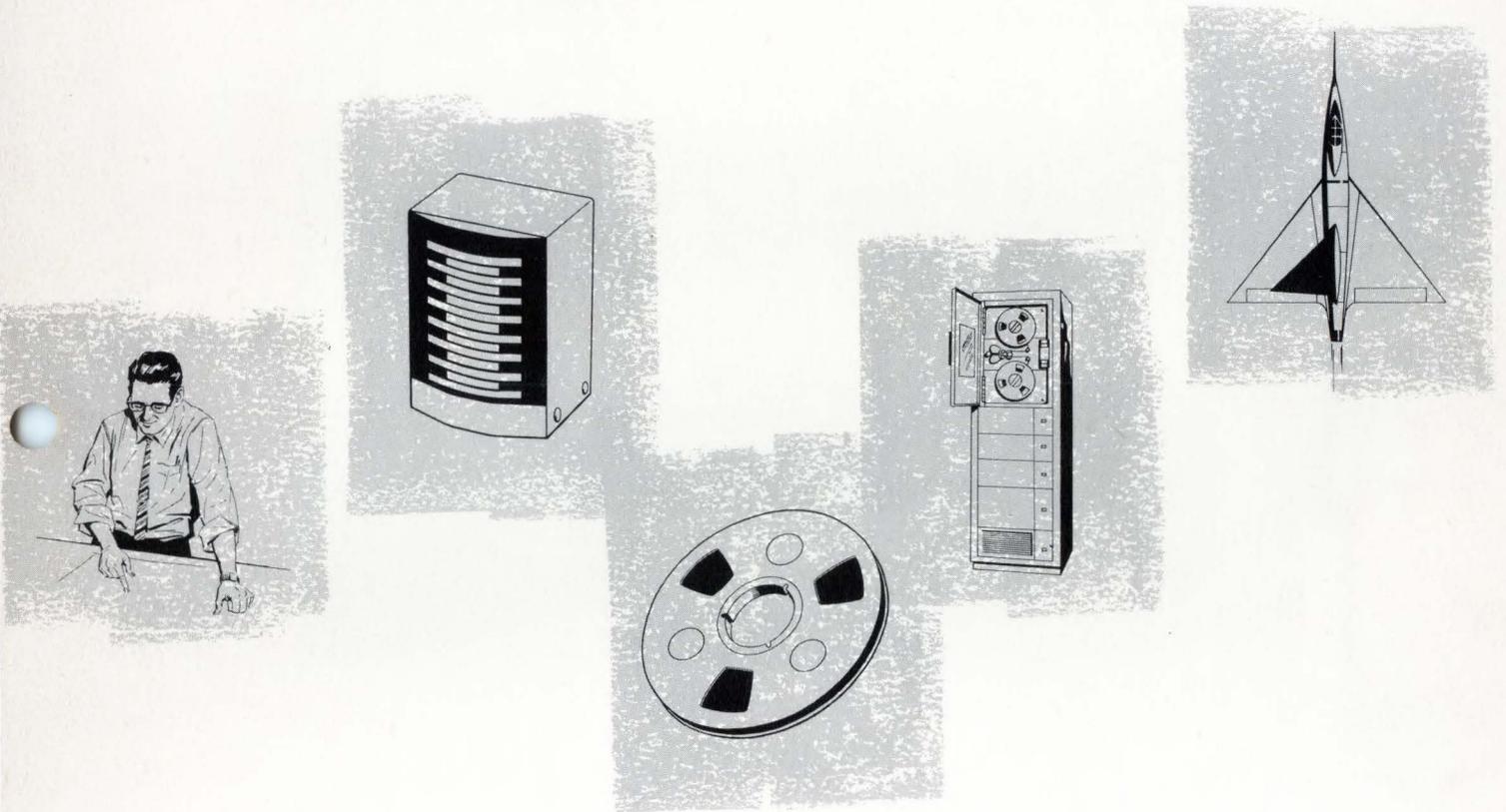


AMPEX INSTRUMENTATION DIVISION

Magnetic Tape Applications...

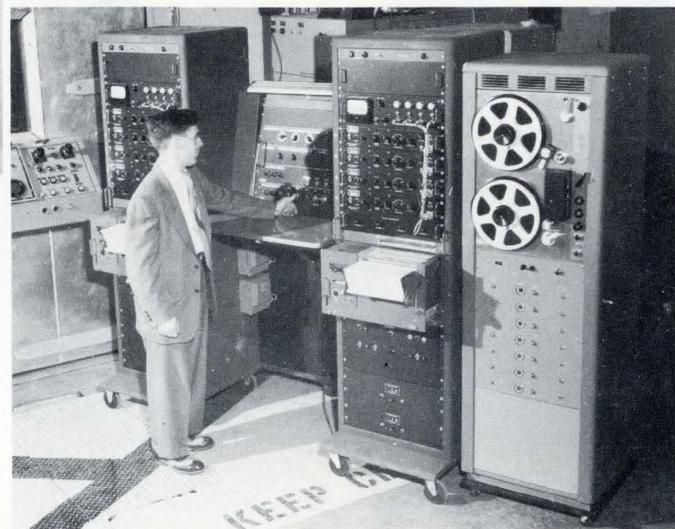
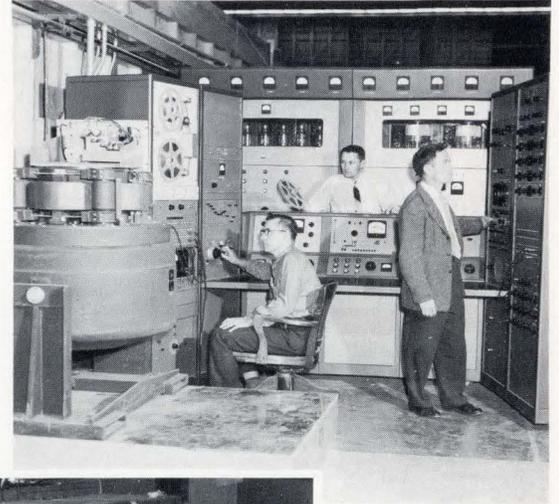


*A photo brochure showing
some of the ways
magnetic tape has been used
to solve a myriad of scientific
and industrial problems*

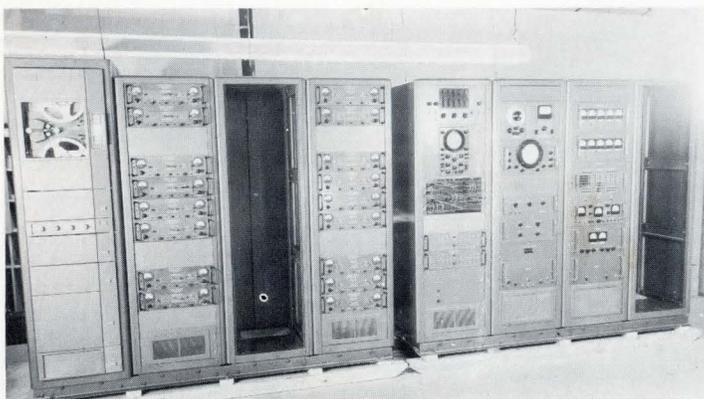


An engineer at WHITE SANDS PROVING GROUND demonstrates the modular plug-in units of an FR-100 instrumentation recorder used in an extensive data-reduction facility.

At CONVAIR, FT. WORTH, a tape-actuated shake table duplicates in-flight vibrations to insure that B-58 components meet highest standards of performance.

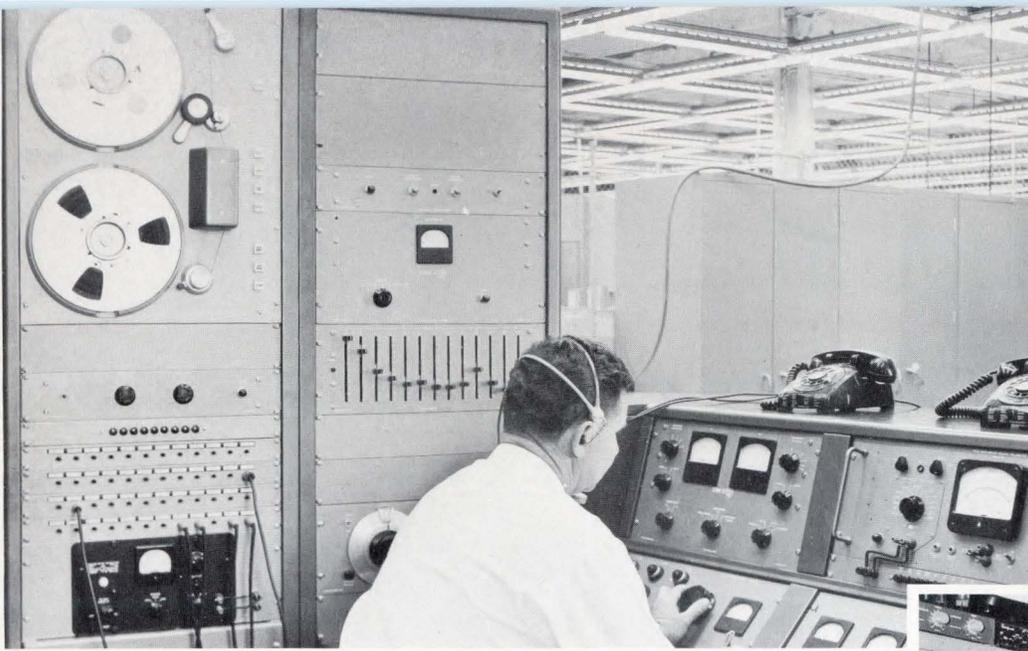


In the GENERAL ELECTRIC Dynat system for evaluating airborne armament and guidance systems, an instrumentation recorder helps simulate air battles on the ground.

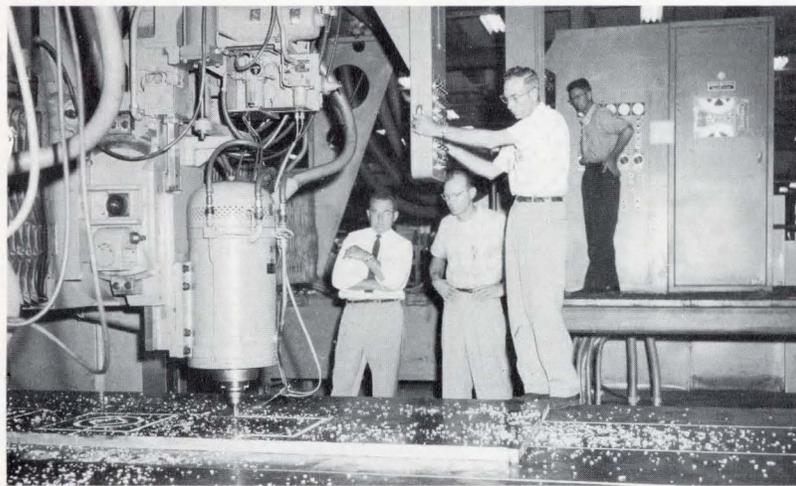


A digital data-handling system incorporating an Ampex FR-100, ready for installation at a major missile subsystems manufacturing plant.

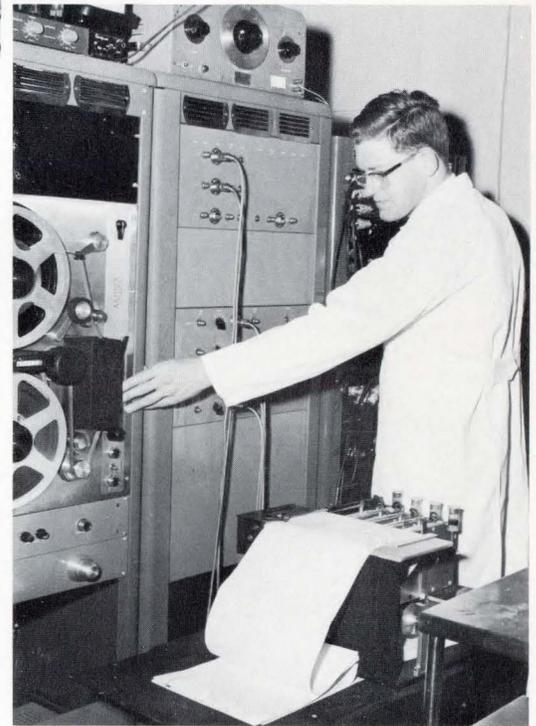
MAGNETIC TAPE APPLICATIONS



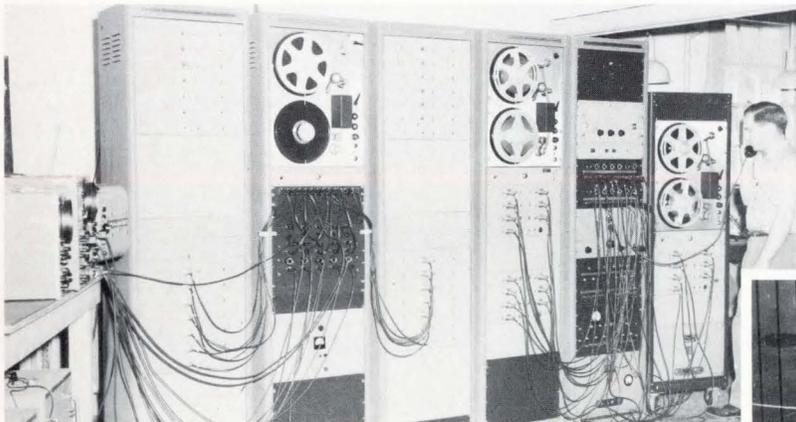
In the RAMO-WOOLDRIDGE testing facilities at Los Angeles, an FR-1100 teams up with units of Ling Electronics equipment for service in the environmental laboratory.



At THE MARTIN COMPANY, in Denver, Colorado, an Ampex-equipped Giddings & Lewis numerically-controlled milling machine works on the U.S. Air Force's Titan program.

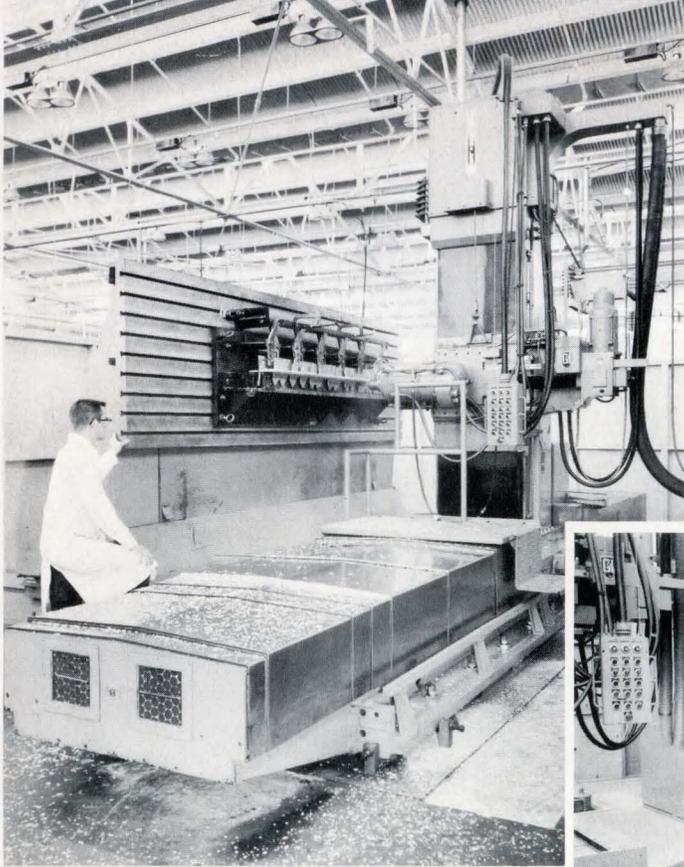


An FR-1100 instrumentation recorder goes on medical duty recording electroencephalographic data at the NORTHAMPTON V.A. HOSPITAL, Northampton, Mass.

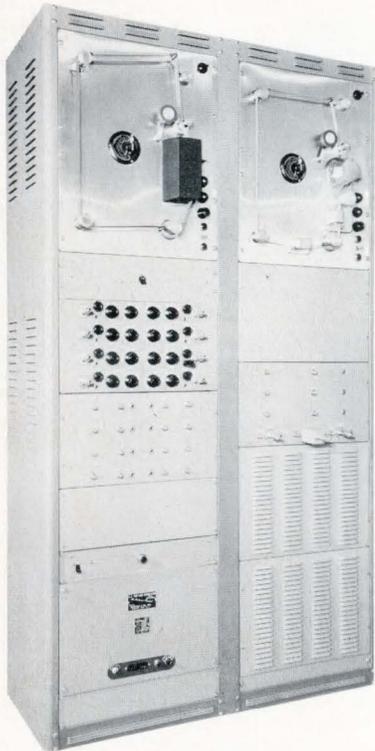
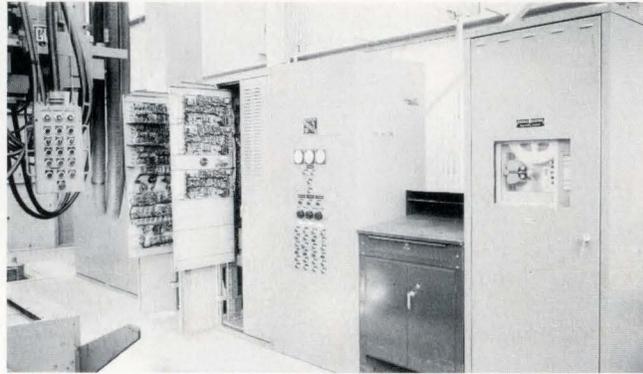


At the PICATINNY ARSENAL in Dover, New Jersey, versatile tape recorders capture all the data gathered at test firings. Recording at a tape speed of 60 ips and reproducing at 3 ips affords a data expansion of 20:1 for visual readout and analysis.

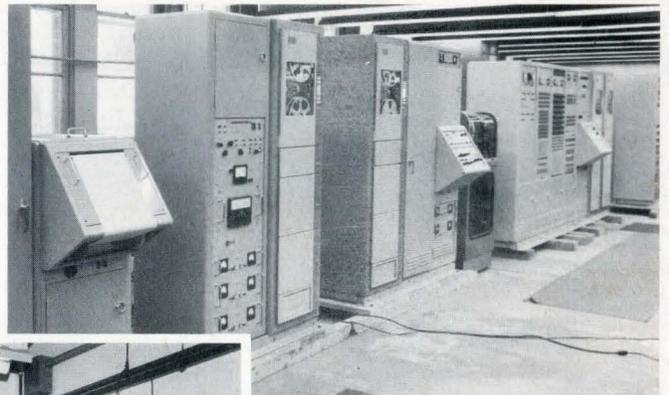




At the Chula Vista plant of ROHR AIRCRAFT, a complicated wing part for the KC-135 jet tanker takes shape on an Ampex-equipped Giddings & Lewis automatic profiler.



In another PICATINNY ARSENAL application, highly specialized instrumentation recorders employ tape loops, variable heads and automatic timers for complex-data analysis.



FR-100 recorders in a digital data processing system to be used with flight simulation tests at HOLLOMAN AFB, New Mexico.



An FR-1100 recorder at work in a Ling Random Complex Wave Console at the Santa Monica, California environmental testing laboratory of DOUGLAS AIRCRAFT for actual-condition programming of rugged tests for components.



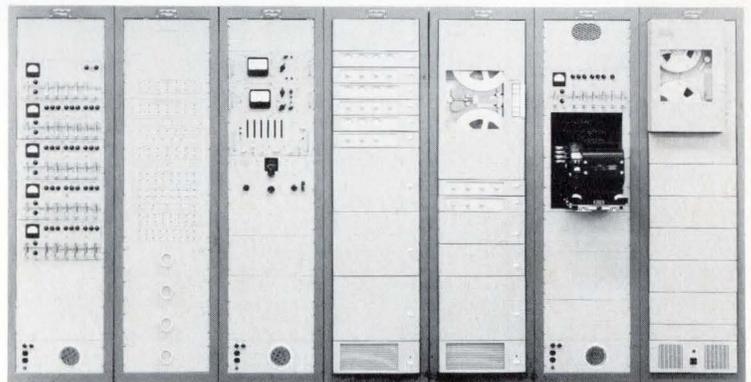
An Ampex UNQ-7 dual-track recorder in operation aboard a U.S. Navy submarine. This rugged machine is used to record and playback audio-frequency data in a variety of special Navy installations.



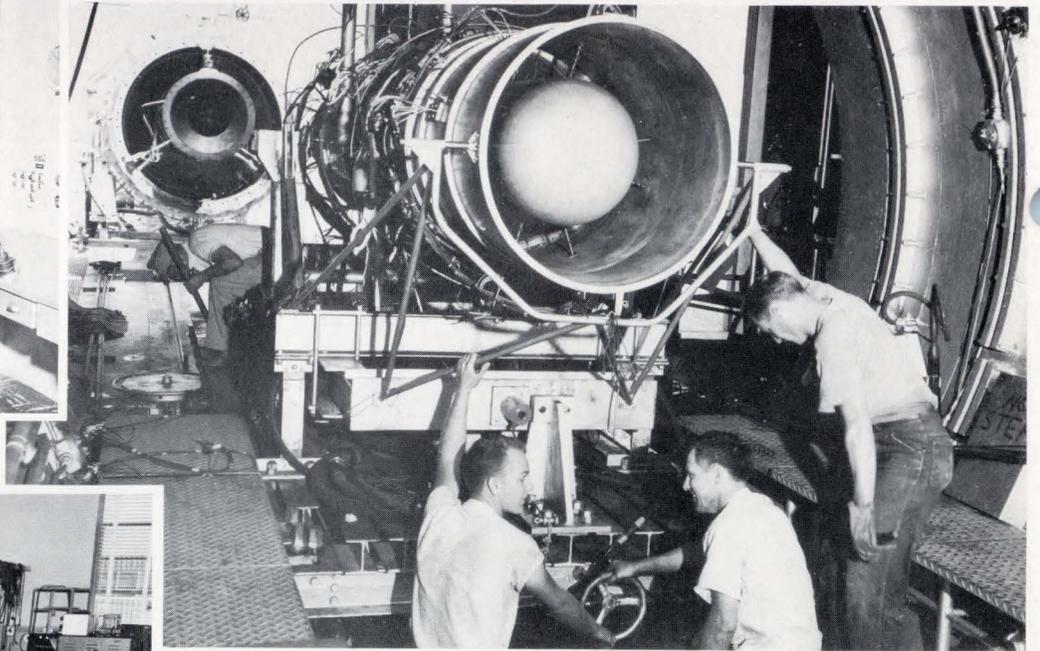
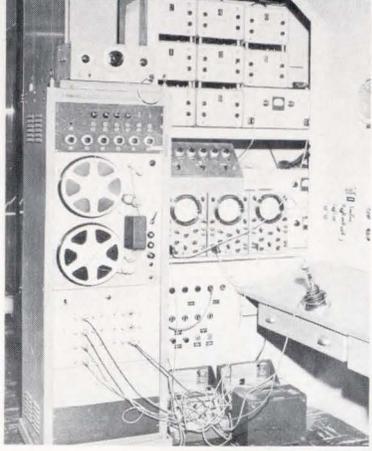
At CONVAIR, Ft. Worth, an engineer holds the roll of magnetic tape used to control the machinery which turned out the B-58 wing slug held by the man at left.



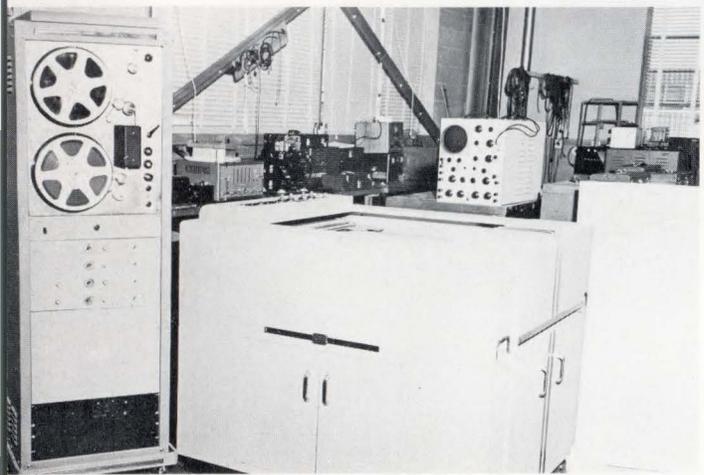
A bank of FR-100 recorders at the U.S. NAVAL MINE DEFENSE LABORATORY at Panama City, Florida. These instruments reproduce tapes recorded by on-the-spot data-acquisition recorders.



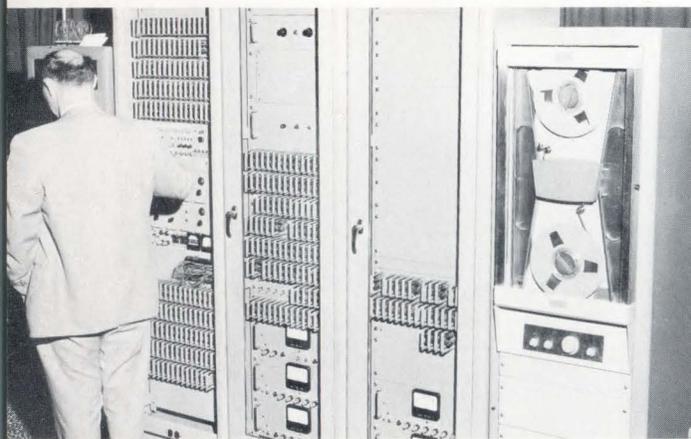
A Hallamre data-reproduction station, utilizing FR-100 and FR-1100 recorders, installed at N.O.T.S., Pasadena, California.



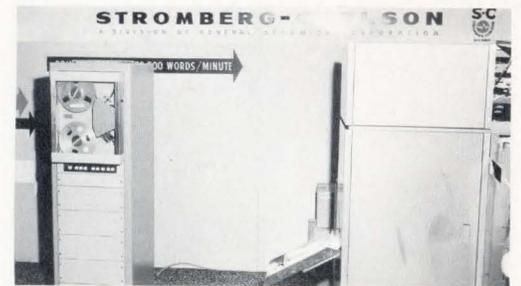
At ARO, INC., Tullahoma, Tenn., separate Ampex 300-Series recorders are used to acquire and playback FM data obtained in Aro's jet test cells.



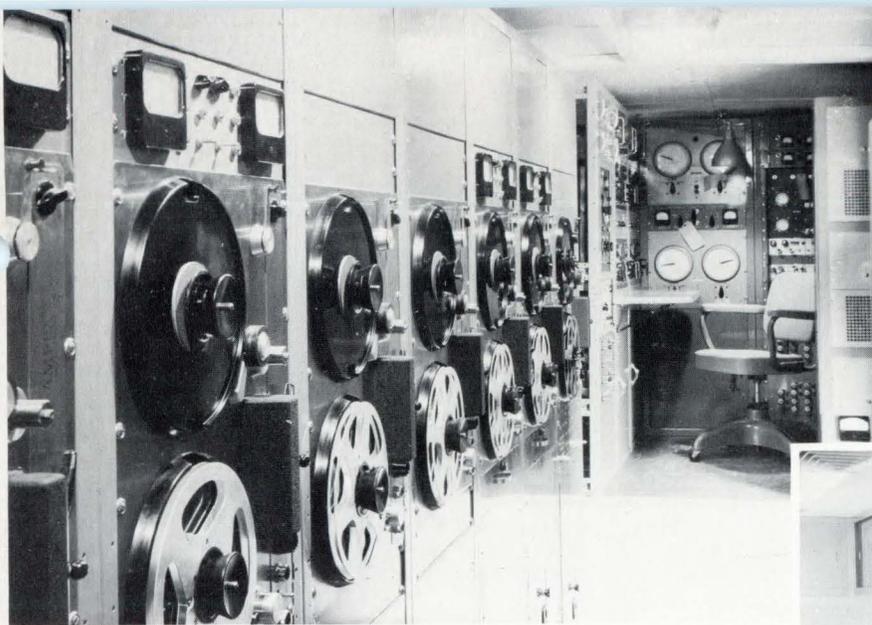
An Ampex Videotape recorder, in use at WHITE SANDS PROVING GROUND Electronics Warfare Division, is employed for such purposes as recording radar emissions from a missile in flight.



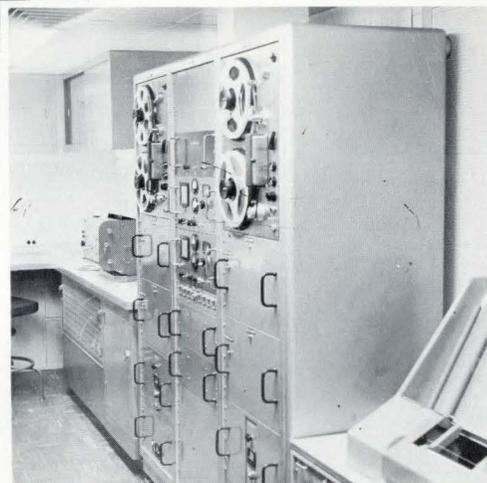
An FR-300 digital recorder operates in conjunction with an electronic computer translator system built by ELECTRONIC ENGINEERING COMPANY of California.



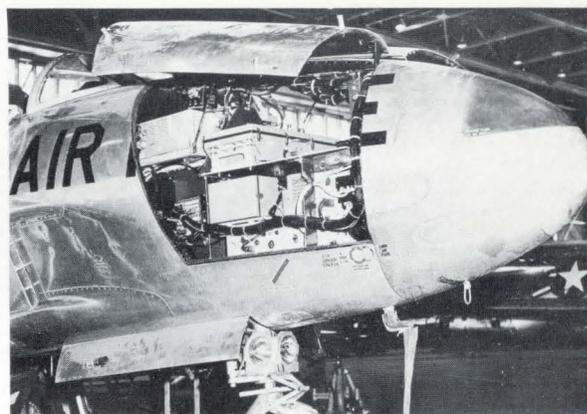
For translating computer data into printed copy at rates as high as 100,000 words per minute, the STROMBERG-CARLSON S-C 5000 Printer uses an FR-400 digital tape handler.



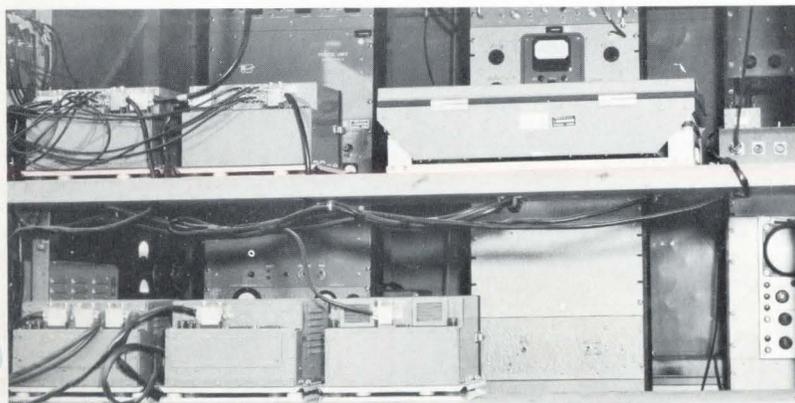
Series 300 recorders installed in recording vans at PATRICK AFB, Florida. As flight-test missiles pass down-range stations, telemetered data is received and recorded in these vans.



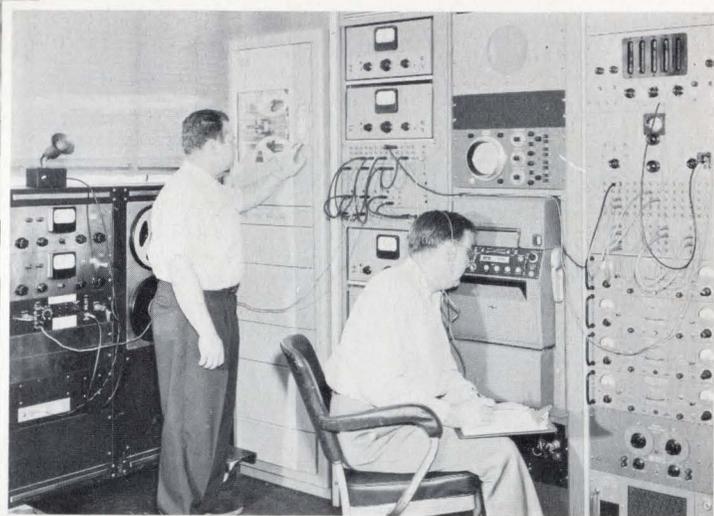
The wing tank on this NORTH AMERICAN AIRCRAFT FJ-4 holds a Model 800 recorder, and permits rapid transfer of the complete recording installation from one plane to another.



The nose of an F-80 at EDWARDS AIR FORCE BASE contains a 14-track Model 800 used in flight-test-data acquisition.



Model 800 recorders and associated electronics in use in a test-data-acquisition installation at SANDIA CORPORATION, Albuquerque, New Mexico.

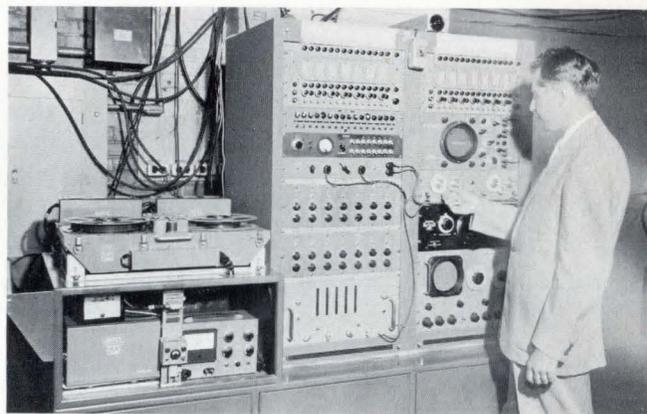


Ground station playback system, employing Model 300 and FR-100 equipment, in use at the NACA Cleveland facility.

A Model 800 installed as a flying test laboratory in an F-94 aircraft installation, in a study of aerodynamic sound, at NACA, Cleveland, Ohio.



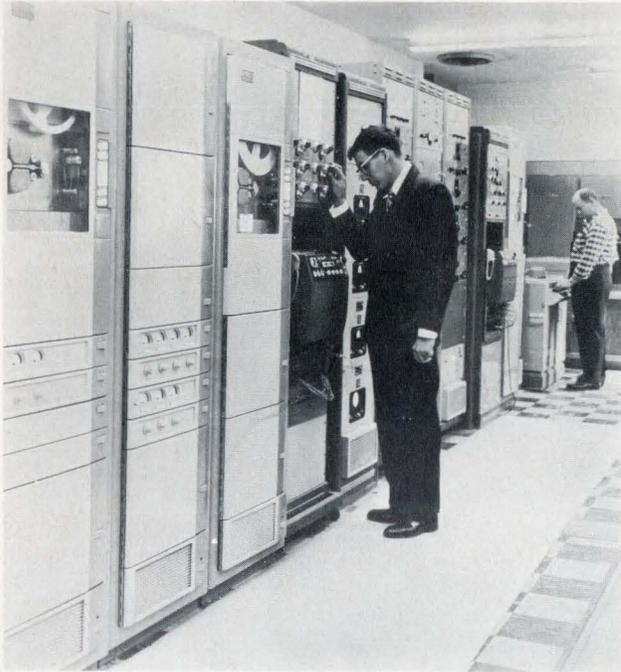
A trailer-mounted instrumentation laboratory designed by a nuclear weapons development laboratory for use on a desert proving ground, employing a Model 800 14-track recorder.



Dolly-mounted Model 800 in use at GENERAL ELECTRIC's Small Aircraft Engine Department, in a convenient, highly mobile test assembly.

A shipboard installation of Ampex instrumentation recorders, used by BELL AIRCRAFT CORPORATION in a study of ship motion aboard the SS Mariposa.





A bank of FR-100 recorders used at White Sands Proving Ground by TELECOMPUTING CORPORATION in the processing of data into graphs, digital tapes, punched cards, and other forms.



A trailer-van installation used in Florida by GENERAL ELECTRIC Missile & Ordnance System Department. FR-100 recorders collect data from nose-cone instruments in missile firings.

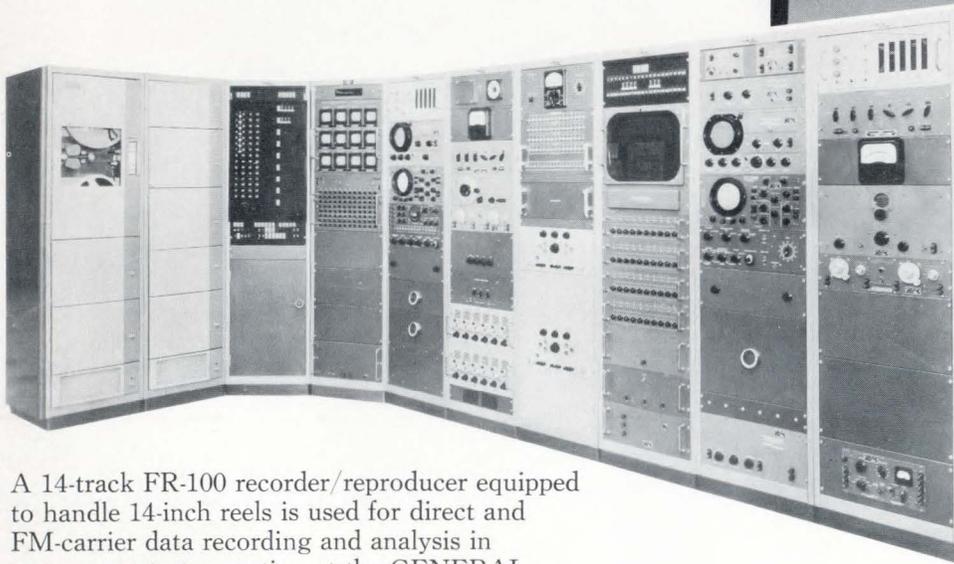
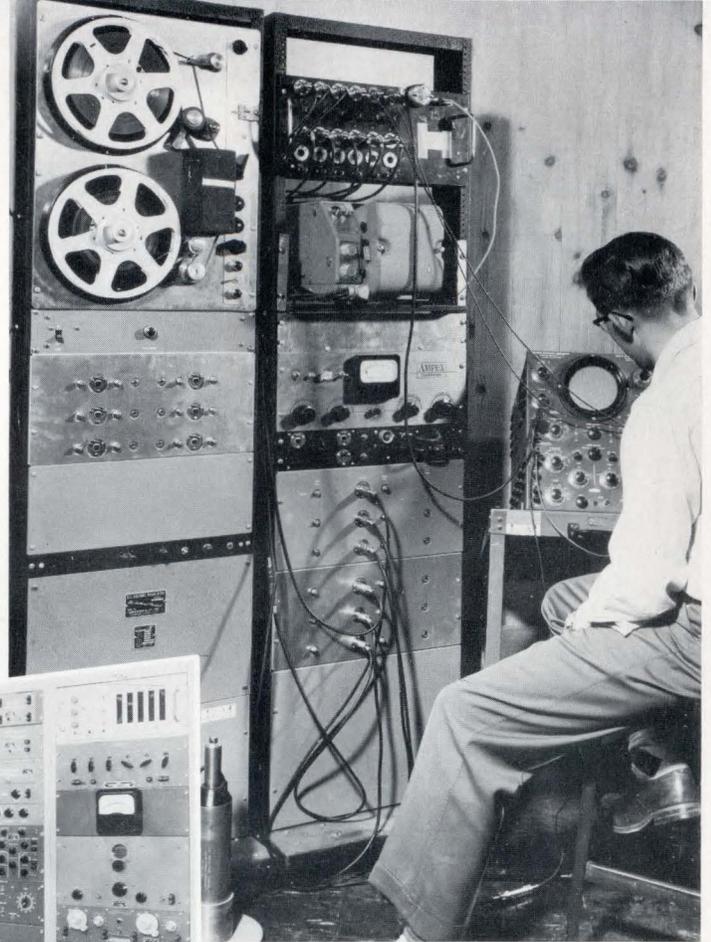


Simulation system at the U.S. Army's Talos unit, WHITE SANDS PROVING GROUND, New Mexico, which uses Ampex instrumentation recorders to simulate enemy attacks and to train operating personnel.



Missile-flight data is processed here in an installation employing 24 FR-100 recorders at the Philadelphia facility of GENERAL ELECTRIC's Missile & Ordnance Systems Department.

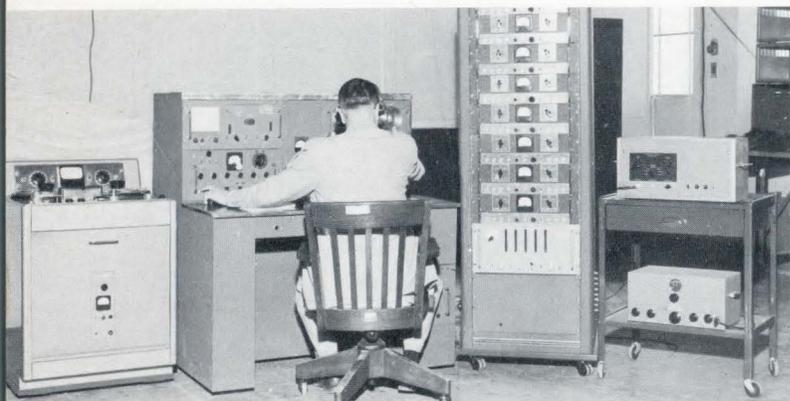
A Series 300 instrumentation recorder in use in a laboratory test installation at the UNIVERSITY OF MICHIGAN for recording and analyzing seismic and acoustic research information.



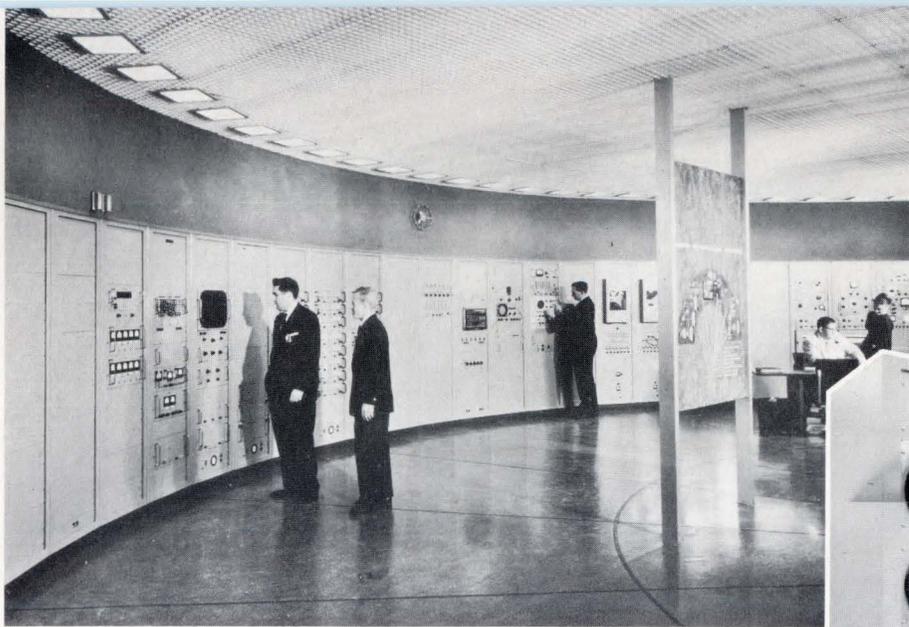
A 14-track FR-100 recorder/reproducer equipped to handle 14-inch reels is used for direct and FM-carrier data recording and analysis in component test operation at the GENERAL ELECTRIC Flight Propulsion Laboratory.



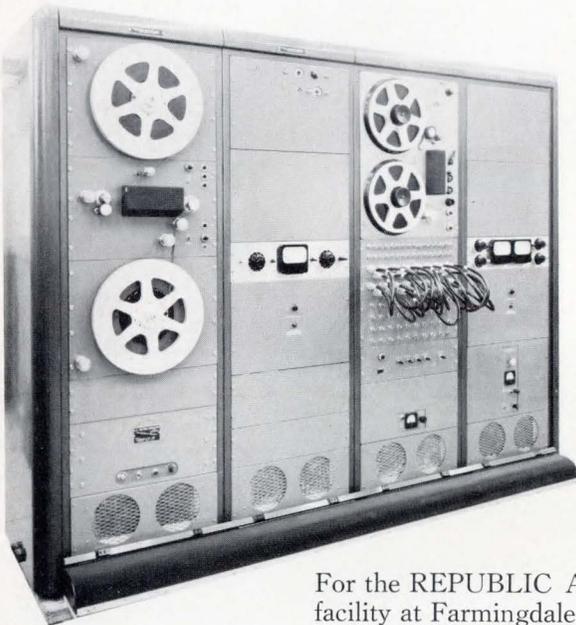
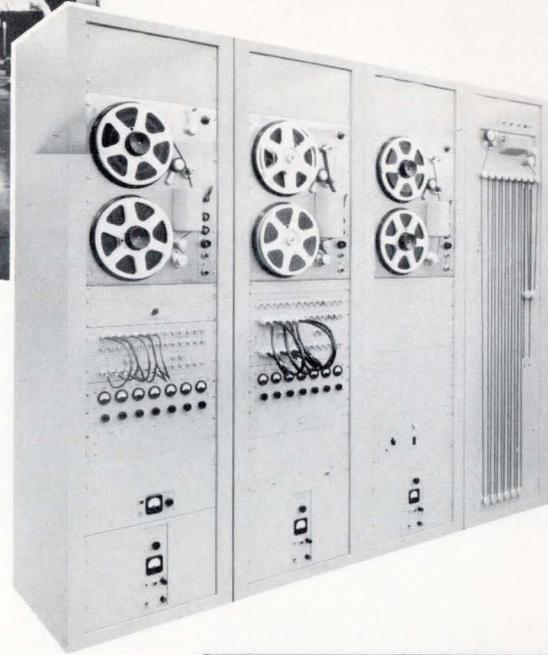
Model 500 used in preserving telemetered information in a mobile-van installation at the U.S. NAVAL ORDNANCE TEST STATION, China Lake, California.



A console-mounted Series 300 data recorder in use at Lindbergh Field, San Diego, in a CONVAIR testing facility.



A portion of the extensive instrumentation facilities at the RAMO-WOOLDRIDGE data center in Los Angeles, utilizing Series 300 recorders and FL-100 loop recorder shown in inset.



For the REPUBLIC AVIATION data-processing facility at Farmingdale, Connecticut, an Ampex 14-inch-reel transport with 1-inch tape is teamed with a ¼-inch tape transport, both servo speed controlled and equipped for direct, PDM and FM recording. The tape transport at left may be adapted for use with a continuous loop of tape, for maximum utility in complex-wave analysis.



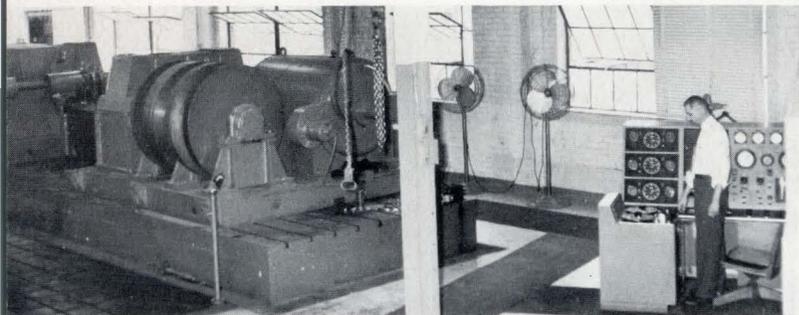
An installation in Milan, Italy, at Laboratory Gomma facilities of SOCIETA PIRELLI. The instrumentation recorder here serves in intensive tire-research programs.



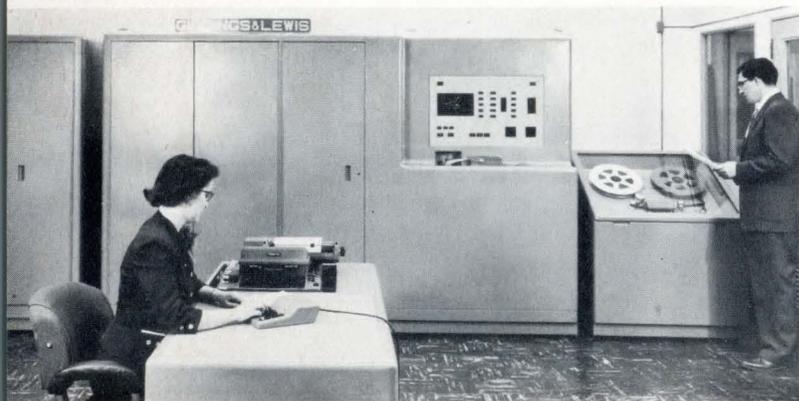
At the Dallas, Texas facilities of CHANCE-VOUGHT AIRCRAFT, two Series 300's and an FR-100 record and reproduce data telemetered from aircraft in flight.



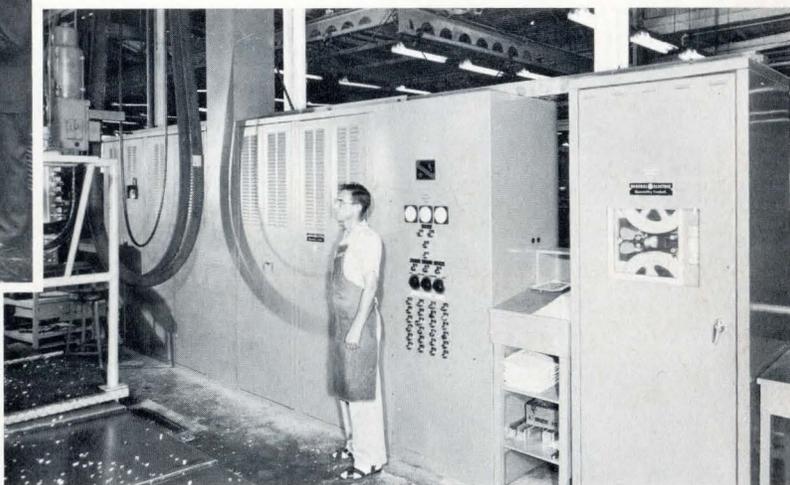
A portion of instrumentation-van equipment used in conjunction with Ampex recorders at AVRO CANADA for receiving and processing telemetered flight test data.



At the laboratory testing facilities of TIMKEN AXLE in Detroit, Mich., an operator stands at the Series 300 console used in simulation of actual road conditions in the dynamic testing of axles.

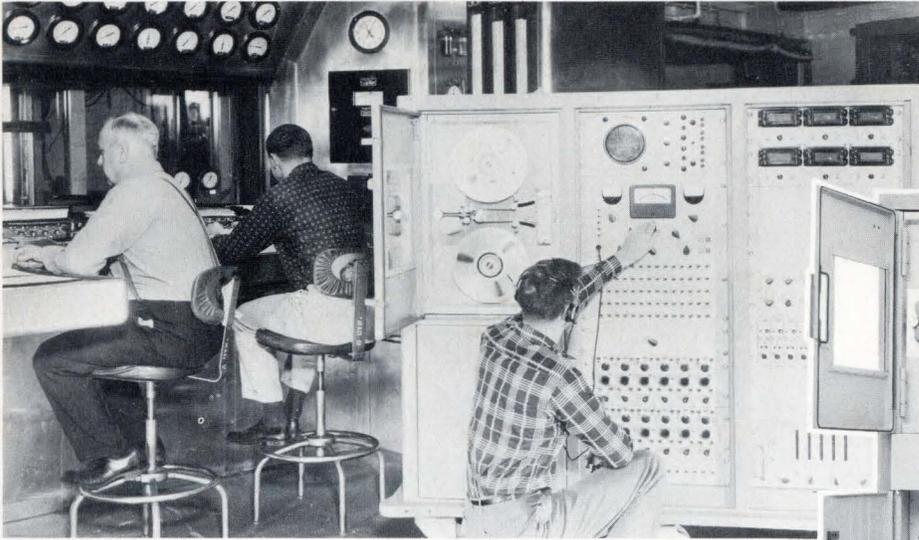


An operating console at GIDDINGS & LEWIS MACHINE TOOL CO., Fond Du Lac, Wisc., used in programming tapes for G & L numerically controlled milling machines.

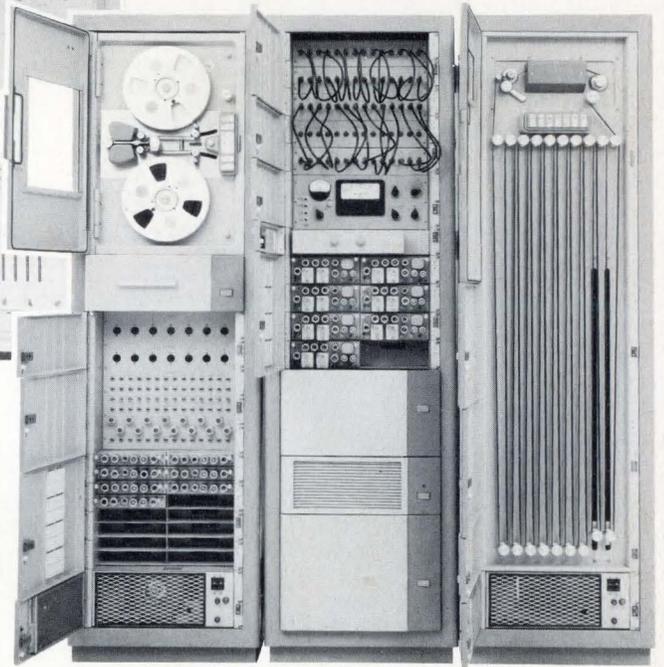


At LOCKHEED AIRCRAFT in Burbank, California, a Giddings & Lewis tape-controlled milling machine operates in accordance with control signals from the Ampex-equipped General Electric Specialty Control system.

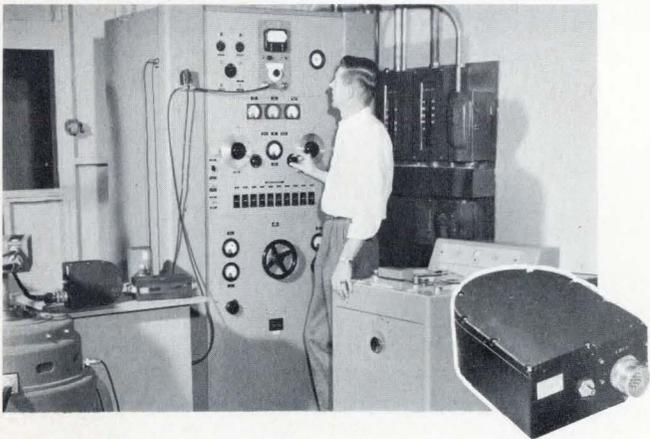
MAGNETIC TAPE APPLICATIONS



A major jet-engine manufacturer's test cell facility utilizes a specially designed dolly-mounted magnetic recording assembly, built to withstand frequent trucking between separated plant locations.



A laboratory test installation of Ampex recording equipment designed to process the jet test-cell data obtained with the dolly-mounted recording assembly.



An FR-1100 plays back complex vibrations to program a shake table, used here to give the AMPEX MR-100 missile recorder a rugged final checkout before delivery. Inset shows close-up of MR-100.

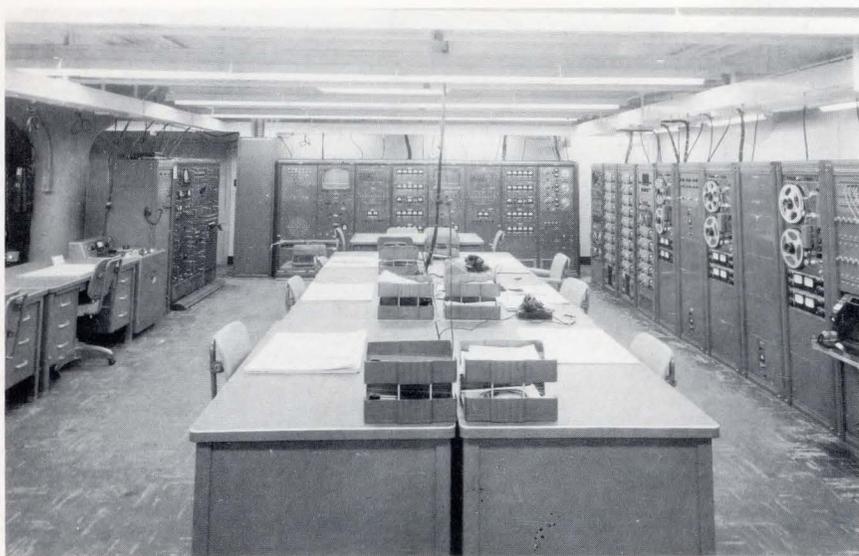
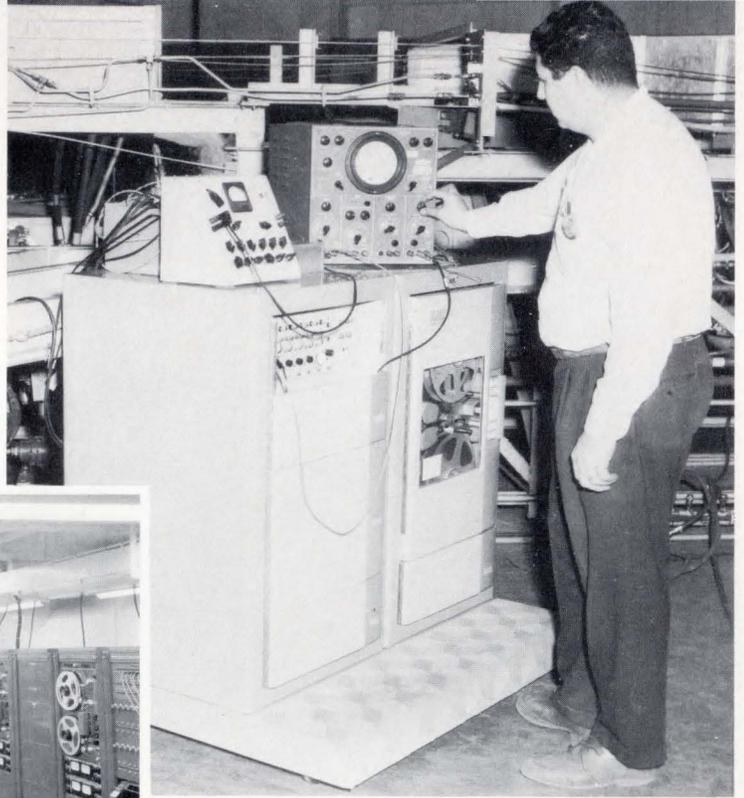


DOUGLAS AIRCRAFT COMPANY's test facilities near Sacramento, California, where FR-100 recorders are used to process data acquired by other Ampex recorders located at missile static-test firing sites.



An FR-100 in use to record brain-wave signals at ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN, Pediatric Department, Temple University School of Medicine, Philadelphia.

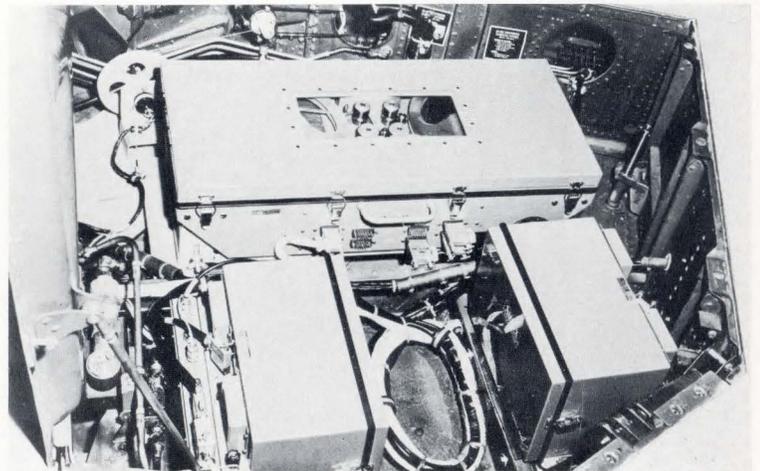
A dolly-mounted FR-100 at McDONNELL AIRCRAFT CORPORATION, used throughout an extensive ground development laboratory in a variety of test-data acquisition uses.



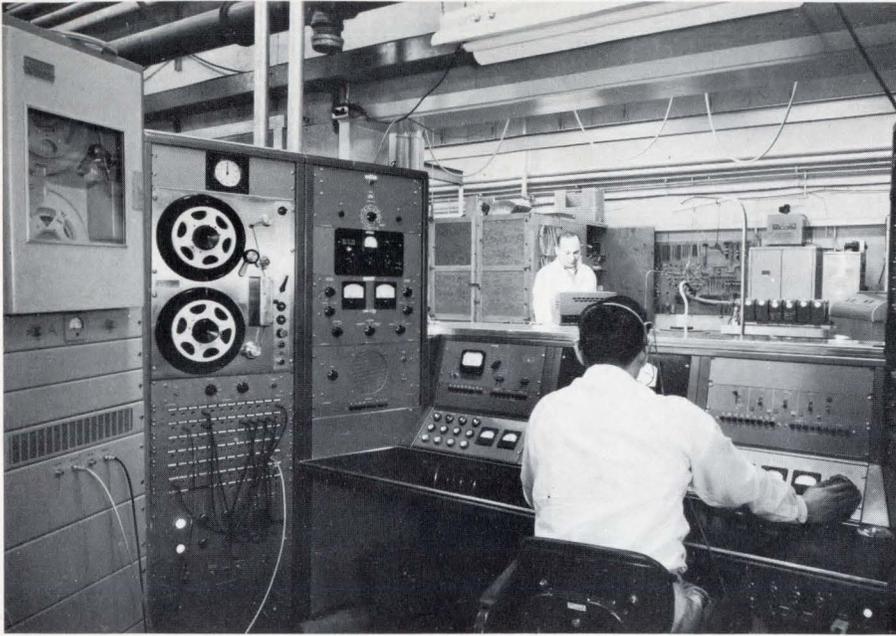
Telemetry receiving station at the GLEN L. MARTIN CO., where rack- and console-mounted instrumentation recorders serve double duty by recording data as it is received and replaying it for analysis.



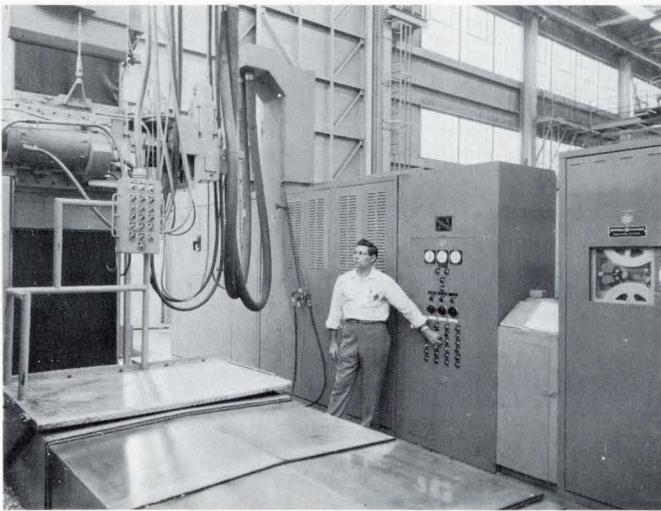
A 7-track Model 800 airborne recorder mounted in an F-86 jet fighter at EGLIN AIR FORCE BASE, Florida. Photo courtesy AFAC, Eglin AFB.



This Model 800 recorder is mounted in a DOUGLAS F-4D fighter aircraft for recording in-flight test data. Photo courtesy Douglas Aircraft.



At JET PROPULSION LABORATORY, California Institute of Technology, a rack-mounted Series 300 recorder/reproducer plays complex-wave data to program shake-table tests for insuring component reliability.



A Giddings & Lewis numerical profiler for manufacturing components for the F-102A supersonic interceptor at CONVAIR, San Diego. Inset shows director facility for converting information from punched-paper tape to magnetic tape, which then controls operation of the automatic profiler.



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DIVISION**



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