system, including those designed for supersonic types, in automatically controlled and repeatable conditions. Main features of the installation are a simulated cabin of 2,500 cu ft capacity, with three 600 cu ft altitude chambers which can be used individually or combined to increase cabin capacity to 4,300 cu ft. The vacuum pumps will have adequate capacity to produce simulated altitudes of well over 60,000ft. Two separate high-pressure air supplies are available, one at 200lb/sq in and the other at 350lb/sq in, with flow rates of up to 350lb/min and 206lb/min respectively. Combustion heaters, capable of raising the temperature of air deliveries to 650°C, are also available. Low-pressure fans will supply large quantities of ram air which can be heated to a temperature of 150°C.

Tests are currently being carried out in existing facilities, already "the most comprehensive of their kind in Europe," and the new plant will be phased progressively into use.

Hawker de Havilland Visitor Mr Laurie R. Jones, sales manager of Hawker de Havilland of Australia Pty Ltd, reached the UK last week (June 13) on an overseas trip which includes visits to Canada, France and the US. In the UK and Canada, Mr Jones is discussing with the manufacturers matters relating to recent sales by Hawker de Havilland Australia Ltd of 18 Caribou to the RAAF and the DH. 125 to the Australian Department of Civil Aviation.

USA

Boeing Consolidate for Competition The Boeing Company have recently consolidated their Transport and Military Aircraft Systems Divisions into a single organization, to be known as the Airplane Division. Mr J. O. Yeasting, formerly head of the Transport Division, heads the new division as vice-president and general manager.

In a comment on this re-organization the Boeing president, Mr William J. Allen, says that the company's military and commercial aircraft endeavours "can gain the greatest benefit from their common technologies, while providing adequately for the unique requirements of each; the company can best assure the technical excellence of its present and future aircraft products" and can "most effectively concentrate its strong technical and management talents on its major aircraft programmes."

New Garrett Contracts Garrett-AiResearch recently signed two major contracts within 30 minutes, one for the development and manufacture of refrigeration units and temperature control sets for the General Dynamics/Fort Worth F-111 (TFX), valued at approximately $1½m; and the other for development and manufacture of air-conditioning and ice protection systems for the Douglas DC-9, valued at $5,808,625.

The F-111 contract calls for systems to be built for 23 aircraft and test packages for both the F-111A (Air Force version) and the F-111B (Navy version). The system is described as "a simple, air cycle system which cools hot pressurized air, led from the aircraft's main engines, providing the pilot with complete comfort."

The DC-9 contract calls for Garrett to develop and produce a specified number of systems.

Sylvania Electric Products, Inc (subsidiary of General Telephones & Electronics Corp, 730 Third Ave, 55th & 56th St, New York 17, NY), has recently developed a new parachutist-carried command pack to permit anti-guerilla fighters to maintain radio contact with friendly forces. A parachutist with the pack can talk with ground troops within a 25-mile radius, with aircraft within a 100-mile radius, or to a base headquarters within a 300-mile radius. He can also use the pack to send a homing signal to an aircraft 500 miles away. Under optimum conditions the various ranges could be increased. The pack weighs only 37lb

Beryllium in Rocket Propellant Atlantic Research Corp, Alexandria, Va, announce the development of a new family of solid rocket propellants which use the metal beryllium as a high-energy ingredient. Developed under the sponsorship of the Air Force Rocket Propulsion Laboratory (Edwards AFB) and the Advanced Research Projects Agency, Department of Defense, these new propellants are expected to find important applications in upper-stage rockets.

This breakthrough in propellant technology follows in the tradition of Atlantic Research's pioneering use of aluminium as a propellant ingredient which led to the high-performance propellants now in use in the Polaris and Minuteman missiles. Vice-Admiral William F. Raborn, Deputy Chief of US Naval Operations for Development, described Atlantic Research's work with aluminium-containing propellants as a ". . . key development which made possible the Polaris weapon system."

Atlantic Research first noted the potential of beryllium as a propellant ingredient through theoretical studies in the early 1950s. The company's pioneering development effort on beryllium began at a later date, under a contract with the Air Force, supported by the Advanced Research Projects Agency's Project Principia.

Atlantic Research's Chemical Engineering Division, working in a specially selected, isolated and carefully engineered facility, has experimented with a great number of beryllium-containing propellant formulæ to perfect and prove the present high-performance family. Advanced rocket motors using the new propellant are currently under development at Atlantic Research.

Because of the toxic nature of beryllium, the company has constructed extensive special facilities for handling and testing this new propellant. These include specially designed equipment for the handling of ingredients and a system by which all exhaust gases are purified before release.

Atlantic Research is continuing its experimental work with improved propellants and has recently demonstrated the feasibility of a paste-consistency propellant, known as "gel solid." Also a producer of rockets, Atlantic Research's products include the Arcas and Iris sounding rockets, the Army-Marine Corps Red Eye guided missile propulsion system, an advanced sustainer for the Navy's Terrier and a line of control rockets for space vehicles. In addition to its rocket work, the company has expanded its activities to include electronics and communications, pyrotechnics, plastics research and fabrication, and specialized dehumidification equipment.

Lockheed Computer Contract Beckman Instruments Inc, 2200 Wright Avenue, Richmond, Calif, recently announced the receipt of a $500,000 contract from Lockheed-California Co for two analogue computers for use in aircraft and space vehicles. They are scheduled to be installed at Lockheed-California, Burbank, in September and will be available for all projects of the division.

Space Computer A compact space computer, capable of performing more than 7,000 calculations per second, has been developed for the NASA Gemini two-man spacecraft by the Space Guidance Center of International Business Machines Corp, Owego, NY. In a description of this computer, IBM United Kingdom Ltd, 101 Wigmore Street, London W1, say that it will help the two-man crew to determine the craft's position in space and guide it into position for the final docking manœuvres. The astronauts will then take over and manually control the craft's manœuvring rockets to make rendezvous with the Agena rocket.

Sweden

Svenska Flygmotor Change Mr Erik Andrén has relinquished his appointment as managing director of Svenska Flygmotor AB in order to take up a position with the management of Rationellt Naringsliv AB. He is being succeeded by Mr Arne Körling, at present a director of Volvo-Kopingverken, who takes up his new post on October 1.