

rates lowers this ratio to 51.1 per cent in the age group 5-14; 50.7 per cent for persons 15-24; 50.4 per cent for those 25-44; down to 49.5 per cent for those 45-64; 47.7 per cent for those 65-69; and 44.0 per cent for persons over 70 years of age.

The steady drop in the birth-rate during the 1960s is reflected in the decreasing numbers in the 0-4 age-group. In 1961, there were 2,256,400 in this age-group; in 1966, 2,197,000; and in 1969 an estimated 1,868,300, a drop of 388,000, or 17 per cent, since 1961. The lower birth-rates of the early 60s are also reflected in the very slight increase in the 5-9 age-group between 1966 and 1970. There would have been a decrease but for the addition of immigrants to this group during the period. The effects of the high birth-rates of the years 1946-1959 are now showing in the age-groups from 10 to 24, where the increase in population is still affecting high-school and college attendance and showing also an increase in marriage.

AIR ELECTRONICS TO AIR NEW ZEALAND

Air New Zealand has placed the first order for a "new-generation" visual system for the flight-simulators in which pilots must learn to fly the aircraft of the 1970s with CAE Electronics Ltd. of Montreal. ANZ has also ordered from CAE a DC-10 flight-simulator.

The visual system, which will provide pilots with full-colour viewing of an airport and the surrounding terrain during taxiing, take-off, approach and landing in the simulator, will be developed by CAE and CBS Laboratories, Stamford, Connecticut.

It is a full-colour closed-circuit television system using a field sequential camera-chain and an Eidophor projector. The projector is similar to those used in the NASA Manned Space Craft Centre, Houston, to follow the progress of manned space flights from launch-pad to splashdown, and at other centres such as NASA, Cape Kennedy.

CAMERA ACTION

A three-dimensional terrain model of a typical airport and surrounding countryside provides the camera subject.

The camera moves over the model to duplicate precisely the movement of the flight-simulator through any training exercise. The picture that the camera sees is projected on a screen in front of the cockpit windshield. It is precisely what the pilots would see if they were in an actual aircraft performing identical flight manoeuvres at the real airport.

Daylight, dusk or night-time effects, including all runway lighting and adjacent town lighting can be simulated in any type of weather condition, with the capability for certain "blind landing" approaches.

When Air New Zealand takes delivery of its new

DC-10 flight-simulator with visual system in the autumn of 1972, it will lead the world in the application of real life visual simulation in airline pilot training.

The total cost of the simulator, with its visual system, is about \$3,600,000.

DEVELOPMENT PROGRAM IN MOROCCO

Canada and Morocco signed two agreements late in December in the Moroccan capital Rabat, on the extent of Canadian participation in the DERRO project, a vast rural and economic development program in the western Rif mountains of North Africa. The agreements were for a loan for technical and capital assistance. The Government of Canada and the government of Quebec will co-operate in implementing this joint project under a previous agreement, signed on March 3, 1970, and greeted as "a happy initiative in federal-provincial relations" by Mr. Mitchell Sharp, Secretary of State for External Affairs, and by Mr. Marcel Masse, at the time Quebec Minister for Intergovernmental Affairs.

Under the March agreement, the Canadian International Development Agency, which is responsible for administering Canada's programs for international development, has already sent seven experts from Quebec to work in the Rif region as members of the technical mission for rural and economic development.

Canada will take part in the DERRO project, in the Moroccan province of Tetuan, by supplying experts in rural and economic development for a five-year study and operational mission and providing special equipment for the team, such as vehicles, agricultural tools and miscellaneous implements. The long-term, no-interest loan agreement will also put \$500,000 at the disposal of Morocco for the purchase in Canada of services or goods required to carry out the program. Five Moroccan technicians will benefit from the first study and training fellowships to be provided in Canada under the program in 1971.

The DERRO-Tetuan project involves Canada in the implementation of a far-reaching program worked out by Morocco with the help of the United Nations to ensure in 25 years, at a cost of some \$300 million, the rural and economic development of the country's six northern provinces. The fight against soil erosion and the impoverishment of this mountainous region of 7,000 square miles vitally affects one-tenth of the Moroccan population. The Canadian team will be working near Tetuan, which was the capital city of the former Spanish Morocco. International organizations such as the UN Food and Agriculture Organization, the UN Special Fund, the World Food Program and the World Bank, as well as such countries as France, Belgium and Germany, have agreed to co-operate in the DERRO project.