Ultra-violet dental camera

Alphametrics Ltd, a Winnipeg, Manitoba manufacturer best known for its advanced electro-optical equipment, has introduced an ultra-violet dental camera for use in a variety of clinical and laboratory studies including the early detection of tooth decay.

Developed by Alphametrics in cooperation with the University of Manitoba Dental School and the Manitoba Research Council, an agency of the Department of Industry and Commerce, the UV31 dental camera makes it possible to take reproducible photo-, graphs inside the oral cavity with either ultra-violet or visible light.

"With this ultra-violet camera," says Alphametrics president R.J. Tarry, "tooth decay can be detected many months earlier than by conventional methods."

Initially, the camera is being used in

Multidimensional approach to international aid

A combination of aid with new trade arrangements, capital-investments flows and other means of transferring resources – a multidimensional approach – will be one of the main thrusts in Canada's future relations with developing countries.

The paper Strategy for International Development Co-operation 1975-80, described by Secretary of State for External Affairs Allan J. MacEachen in his address to the United Nations in New York on September 3 (see Canada Weekly dated September 10), states that Canada's development assistance programs will become much broader in scope.

Development aid, administered by the Canadian International Development Agency (CIDA), will be directed mainly to the problems of food production, education, public health, housing and energy. In addition to limiting its assistance to fewer sectors, Canada will concentrate efforts on the poorer developing nations and on the poorest of their inhabitants. Up to 90 per cent of bilateral assistance, in the form of grants and interest-free loans, will go to countries having *per capita* incomes of less than \$375.

The energy crisis and skyrocketing prices, which have created unpre-

cedented needs in the developing countries, have caused the Canadian Government to reaffirm its intention of achieving the United Nations' target of providing development assistance funds equal to .7 per cent of gross national product. Last year, Canadian assistance represented .53 of GNP.

Assistance will be more flexible

CIDA will continue to use such means as its bilateral and multilateral programs to transfer resources to developing countries, but they will be used in a more flexible way. The Cabinet will determine the shares of each program annually. For the next few years, food aid is expected to take up to 25 per cent of the budget. Of the remaining funds, 25 to 35 per cent will be allocated for international institutions. such as the World Bank and UN agencies, 50 to 70 per cent will go to bilateral programs, direct Canada-to-country assistance, and the balance to support the development programs of Canadian and international voluntary agencies. A greater role will be taken in tackling major world problems through assistance to international research institutions, such as the Ottawa-based Intertional Development Research Centre.

universities for caries research, plaque studies, oral biology, restorative materials, soft-tissue studies and the evaluation of prophylactic compounds.

"We have sold three units to the State University of New York for use in dental research," Mr. Tarry said.

The camera, which sells for approximately \$8,000, was developed on a cost-sharing basis with the Manitoba Research Council.

The UV31 ultra-violet camera is used for surface examinations and is intended to supplement the X-ray. It employs a special lens which uses only quartz-fluorite elements to achieve high resolution from the far ultra-violet to near infrared wavelength regions without refocusing.

A feature of the unit is a patented interchangeable mouthpiece set designed for quick sterilization and easy attachment. It allows labial-buccal, lingual and occlusal tooth surfaces and soft-tissue areas to be photographed.

In world emergencies planning will be improved and CIDA will work closer with the Canadian Armed Forces and international relief agencies.

A wide range of measures will be used to ensure a more flexible and liquid means of transferring resources to developing countries.

Future Canadian assistance will take account of the particular needs of the "better off" developing countries. A large variety of technical and management assistance could be provided to speed up technology advances.

As such countries have a reduced need for concessional financing, future CDA loans to them will have an interest rate of 3 per cent and a 30-year repayment schedule. Also, CIDA and the Canadian Development Corporation will consult on the types of financing these countries require as they become less dependent on foreign-exchange assistance. Greater use will be made of more liquid forms of resource transfers such as lines-ofcredit and program assistance to key sectors of the economy.

"Untied" loans

In other measures to provide increased assistance, the Government is allowing the bilateral development loans to