

### First woman pilot in Canadian Forces

Major Wendy Clay (*right*) a 31-year-old flight surgeon, is the first woman in the Canadian Armed Forces to be awarded pilot wings.

Major Clay, a native of Terrace, British Columbia, received her wings on August 30, graduating with five male counterparts from advanced pilot training at Canadian Forces Base, Moose Jaw, Saskatchewan. Her training was identical to that of the men, including formation flying, instrument flying, night flying and aerobatics.

Colonel Ralph Annis, base commander at Moose Jaw, says that although Major Clay will not be an operational fighter pilot, her training will permit her "to talk with pilots on an equal footing".

"Flight surgeons," says Colonel Annis, "should be able to discuss all aspects of aerospace medicine and flying that might affect a pilot's abilities and capabilities in the air."

Major Clay is one of the few officers



in the Canadian Forces qualified as a medical doctor and pilot.

"I became a pilot in the Canadian Forces," Major Clay says, "because I wanted to continue the flying challenge with medicine." She hopes to

continue flying jets as much as her primary medical duties will permit.

She was also recently elected as regional counsellor for Manitoba and Saskatchewan for the Canadian Society of Aviation Medicine.

### World Energy Conference

Federal Energy Minister Donald S. Macdonald addressed the opening session of the ninth World Energy Conference in Detroit, Michigan, September 23 to 27, which is being attended by some 4,000 delegates from the 69 member nations of the Conference, including 250 Canadians.

Theme of the meeting, which marks the fifth anniversary of the conference, is "The Economic and Environmental Challenges of Future Energy Requirements".

Thirteen papers by 22 Canadian authors have been submitted for consideration by the delegates.

W.O. Twaits, former chairman and chief executive officer of Imperial Oil Limited, is chairman of the technical division dealing with resource recovery.

Participants in the conference will have an opportunity to attend one of 16 post-conference tours that have been planned by the organizing committee, guided by its national advisory council and collaborators in Canada. The study tours will be concerned with energy production, transportation and utilization throughout the United States, Canada and Mexico.

### Military trainees from abroad

Two Ghanaian nursing sisters are among 24 officers from African and Caribbean countries who will spend the winter in Canada as trainees and observers.

Under Canada's Military Training Assistance Program (MTAP) the two nurses, both majors in Ghana's defence forces medical services, will spend six months observing procedures and practices in use at the Canadian Forces hospitals in Ottawa and Cold Lake, Alberta.

National Defence Medical Centre in Ottawa is the Canadian Forces largest hospital, while the Cold Lake facility serves an isolated base and offers a wide range of treatment and medical services for members of the armed forces and their dependants.

The MTAP will also bring officer cadets from Cameroon, Ghana, Tanzania, Zambia, Trinidad-Tobago and Jamaica to the Canadian Forces base at Chilliwack, British Columbia for a three-month basic officer-training course. This will be followed by advanced training in infantry, armour and artillery at the combat arms school of the Canadian Forces, Gaagetown, New Brunswick.

### Radar measures ice thickness

The Communications Research Centre has developed a radar for measuring the thickness of fresh water ice from an aircraft. The technique, successfully tested last winter, has considerable potential for making travel across or through ice-covered lakes and rivers both safer and simpler.

The portable, "X band" impulse radar was put through its paces aboard an ice sled, truck, hovercraft, helicopter and DC-3 aircraft. It achieved accuracy as good as 1 per cent, while remotely measuring thickness of ice ranging from about 5 to 18 inches on the St. Lawrence and Ottawa Rivers.

Employing a microwave electronics package no bigger than a television set, the apparatus uses a small horn antenna, aimed directly at the ice surface at a 90-degree angle of incidence. It works by taking advantage of the fact that radio energy travels through fresh water ice at the rate of one foot per 1.8 billionths of a second.

Early applications of the radar could be for ice studies aimed at an expanded navigation season on the St. Lawrence River, or for pinpointing safe "ice bridges" for light or heavy vehicles, from snowmobiles to army trucks.