an improved method of measuring unusual stellar motions that would indicate the presence of planets. The technique measures any "wobbles" in the star's motion that would indicate it is being influenced by the mass of a nearby large object. Until recently, the detection technique required a planetary companion at least twenty times the size of Jupiter, the largest planet in our system. According to Campbell, the new method can detect a planet only one-fifth the mass of Jupiter - not quite earth

Canadian Astronauts

By 8 August 1983, almost 4400 hopeful Canadians had applied to become members of Canada's first astronaut corps. Of the six team members that were finally selected, only two are actually scheduled to fly as "payload specialists," astronauts trained to perform a single experiment on a single mission. The two astronauts will each conduct, and later assess with help from back-up team members, one of two experiments: The Space Vision System Experiment or the Space Adaptation Syndrome Experiment. The Space Vision System uses state-of-the-art robotic technology to give the Shuttle eyes, especially important when Canadarm is in use. An entirely different experiment is concerned with Space Adaptation Syndrome - a euphemism for misery. If you think being car-sick is ghastly, imagine the same condition under zero-gravity and when it is essential that you keep working.

The six astronauts are the product of a winnowing process that was long and carefully done. Of the original 4400 applicants, 1816 were sent packages of background information with long (long, long!) questionnaires. Of these, about 1600 came back. The next hurdle for the applicants was the Screening Committee. The fivemember committee was composed of representatives from NRC, the Department of National Defence (DND), and the Ministry of State for

sized, but more likely to be found around the types of stars under investigation. The instrument making the survey is the Canada-France-Hawaii Telescope where the team has been recording data on certain stars for the past two years. It is limited to stars near the sun in size (which is why it did not make the Vega discovery), and review of the information gleaned is just getting under way. Campbell is confident that if the planets are there, the new "watch the wiggle" technique will uncover them.

Science and Technology. Sixty-eight applicants from across Canada were invited to interviews scheduled between October 18 and November 9. In Halifax, Montreal, Ottawa, Toronto, Calgary, and Vancouver, candidates were briefed, extensively interviewed, and introduced to the media. Only 20 of these people were invited to further interviews in Ottawa.

The Finalist Selection Committee. with representatives from the same departments, also included people from the departments of Communications and Energy, Mines and Resources. The 20 candidates went through orientations sessions, technical briefings on the two experiments, and full medical examinations, given by DND and evaluated according to NASA standards. The advice of Paul J. Weitz, commander of the sixth Shuttle mission, the first Challenger flight in April 1983, contributed to the short list the Finalist Selection Committee passed on to the final selection group, the Selection Panel.

On 6 December 1983, the Selection Panel picked the six best candidates and recommended them to the National Research Council. (The astronauts are employees of NRC for terms of up to three years.) The Honourable Donald Johnston, Minister of State for Science and Technology, announced the names of Canada's first astronauts on the next day at the NRC news conference.

The astronauts-in-training start work in January 1984.



