

World Cycling Championships to be held in Montreal

The 1974 World Cycling Championships will be held in Montreal from August 14 to 25. For ten days leading international cyclists, amateur and professional, will compete for the highest honours in cycling: the coveted rainbow-coloured sweater, symbol of supremacy, which may only be worn by world champions.

This will be the first time in recent history that the World Cycling Championships, which are usually held in Europe, will take place in North America. The last time the combined amateur and professional championships were held outside Europe was in 1912, when they were held at Newark, New Jersey, U.S. In 1968, the amateur events were held in Montevideo, Uruguay.

Second time in Canada

The world cycling series started officially in 1893 at Chicago. In 1899, world championships were held in Montreal. In 1974, after an interval of 75 years, Montreal will again become the meeting place of the world's greatest cyclists. To commemorate the occasion the Canada Post Office will issue an 8-cent stamp on August 7.

The World Cycling Championships are open to both amateur (men and women) and professional (men) competitors. Athletes from some 50 countries are expected to take part in the track and road events.

Types of race

Both amateurs and professionals compete in sprint events. Unlike the running sprinter who relies on an opening burst of speed, the pedalling sprinter is in no hurry at the beginning of the race. The chief concern is to be in the



right position during the last 200-metre dash to the finish line, where a speed of 40 to 45 miles an hour will be attained. Tandem sprints are also held.

In the individual-pursuit event, only two riders are on the track, one start-

ing in the home straight, the other exactly half-way around the track. The aim is to cover the distance in the shorter time, or to catch up to your opponent and win by a knockout. Team-pursuit events take place with two teams of four riders each starting on opposite sides of the track.

Time-trial races are also held. The kilometre time trial is a track event where the individual competitor is on the track alone in a test of sustained speed. The 100-kilometre time trial is a road race where four riders as one team ride one behind the other to take advantage of the slipstream effect and maintain an average speed of 30 miles an hour.

The motor-paced event, where the cyclists ride closely behind high-powered motor-cycles, is perhaps one of the more interesting events for the spectator. The motor-cycle driver sets the pace, and the cyclist relies entirely on the driver's judgment in determining the race strategy.

The road races will take place on Mount Royal, in the centre of Montreal. Professional men will compete in a 300-km (187 miles) race, amateur men in a 200-km (125 miles) and amateur women in a 70-km (44 miles) race. Cyclists average a speed of 22 to 27 miles an hour during a road race.

Canadian petroleum recovery researchers visit Soviet Union

The future is looking brighter for oil-recovery researchers today with a growing demand for the technology to increase recovery from known reserves.

Researchers at the Petroleum Recovery Research Institute at the University of Calgary, are devoting their efforts to improving the recovery of Alberta crudes, but Dr. Necmettin Mungan, the institute's chief research officer, is quick to point out that the problem is an international one.

A few weeks ago, for example, Dr. Mungan led a small group of Canadian oil-recovery experts to Moscow to participate in the first Soviet-Canada symposium on "Improved Oil Recovery", sponsored by the Soviet and Canadian Governments. Some 150 Soviet and eight Canadian experts attended by invitation to hear 20 Soviet and six Canadian papers and discussed ways to recover oil difficult to exploit by conventional methods.

The Canadian delegation also visited the All Union and several regional research centres. Highlighting the symposium were field trips to oil fields in Tartaria and Komy, U.S.S.R., where among other things, the Canadians observed an underground mining method for the exploitation of the Yaregoskoye heavy oil field.

The PRRI has been working on an average of five research projects annually and has made numerous contributions to the understanding of oil-recovery processes and fluid flow in porous media. The resulting increase in oil recovery from the PRRI's work could be in the millions of barrels.

The opportunities for improvements in recovery methods are significant. According to Dr. Mungan, "even an increase in recovery of 1 per cent would represent more than 300 million barrels and would be the equivalent of finding a major new oil field".

More helicopter flight simulators for West Germany

CAE Electronics Ltd of Montreal has been awarded a contract valued at more than \$3 million to develop and manufacture two CH-53 heavy-lift helicopter simulators for the Federal Republic of Germany.

The simulators will feature CAE's compact "six-degrees-of-freedom" motion systems and automated training facilities similar to those employed on the two complexes of four UH-1D light-transport helicopter simulators also being produced by CAE for the West German Defence Forces.

CAE is currently building a CH-47C helicopter simulator with visual system for the Imperial Government of Iran and five commercial aircraft flight simulators — a DC-9 and Boeing 727 for Air Canada, DC-9s for North Central Airlines of the United States and for Swissair, and a Boeing 747 for British Airways.