

Exercising made easier

An Ottawa fitness instructor has designed a computerized exercise bicycle that provides a personal exercise program for the user and at the same time makes working out more interesting.

René Ephraim helped develop the lifecycle, as it is called, in the United States from an 18-year-old prototype.

"The lifecycle is the coach. It is in control of the person. What it does is increase the effectiveness of the training. The result? They get results, so they are motivated to do more," explained Mr. Ephraim.

A computer chip in the cycle is pre-programmed with endless combinations. The user punches in the program selected to suit his own condition, then starts pedalling.

Automatically, the cycle puts him through strenuous exercises that simulate a hilly terrain. Pedal resistance is automatically changed from a warm-up to a test period, then through a series of four hills and a warm-down period.

Most who use the lifecycle, from the 20-year-old athlete and middle-aged mother to senior citizens, think it is a boon to fitness.

"I get bored on a standard stationary bike. I don't know where I am (what peak of activity I am at)," said Georgina Galway of Ottawa. "This bike makes me push myself. It's more competitive, I'm competing against myself."



René Ephraim demonstrates his computerized exercise bicycle.

Hockey for the handicapped

A Canadian university professor has made a dream come true for two handicapped boys in Cambridge, Ontario.

Jamie and Peter Fleet have arthrogryposis, a lack of muscle tissue and deformity of the joints that makes it impossible for them to skate or grasp hockey sticks. Their adoptive parents asked Greg McNeice, a civil engineering professor at the University of Waterloo in Waterloo, Ontario to design special wheelchairs with studded wheels that give traction on ice.

Dr. McNeice also developed a control stick that helps Jamie manipulate the controls with his arms. Then Dr. McNeice and some of his students came up with devices that fasten hockey sticks to the wheelchairs. Jamie, who has use of both arms, can operate his stick by moving his shoulder forward and back. Peter, who can only use his right arm, has a stickholder attached to his left forearm. The boys can now go skating along with their parents and move a puck along the ice with them.

Canada-African co-operation

Canada will contribute up to \$15 million to the rehabilitation of the Nacala-Entrelagos Railway Line in Mozambique.

The contribution was announced in Maseru, Lesotho on January 28 by Jean Lapierre, Parliamentary Secretary to Deputy Prime Minister and Secretary of State for External Affairs Allan MacEachen. Mr. Lapierre led the Canadian delegation to the annual ministerial consultations of the Southern African Development Co-ordination Conference (SADCC) which is sponsoring the Nacala project.

Canadian assistance in 1982-83 to member countries of SADCC is expected to be about \$100 million. The Nacala project is designed to improve rail communication among several of SADCC's member countries; Canada's contribution constitutes a major element in the growing program of co-operation between Canada and SADCC. While in Lesotho Mr. Lapierre visited one of the sites involved in the South African military operation in Maseru on December 9, 1982 and offered sympathy to the family and friends of some of the victims.

In his address to the SADCC meeting,

Mr. Lapierre congratulated the organization on the achievements of its first three years. He emphasized the urgency of SADCC's mission of economic liberation and assured the conference of Canada's support. Calling for "rapid and profound change in South Africa", Mr. Lapierre said Canada looked forward to the day when normal and full co-operation could be resumed between South Africa and its neighbours.

He also said Canada shared the hope expressed by several SADCC spokesmen that an independent Namibia would soon be able to take its place as a member of SADCC.

US firms profitable in Canada

Large foreign-controlled companies were more profitable in Canada than large Canadian-owned companies in 1980, according to Statistics Canada. US-controlled ones were the most profitable of all, reported the agency.

In 1980 (US) corporations accounted for 73.9 per cent of the assets, 76.1 per cent of the sales and 78.5 per cent of the profits of foreign-controlled non-financial firms, according to the Canadian statistics.

Differences between domestic and foreign companies were particularly evident for the leading 25 non-financial companies, with the foreign-controlled sector being more profitable and having a sales-to-assets ratio almost double the Canadian sector, the agency added.

However, assets of Canadian companies rose at a faster rate than those of foreign companies, reducing the share of assets of non-financial companies to 27.3 per cent.

Investment up

Statistics Canada also said preliminary estimates, based on 1979 data, indicated that foreign direct investment — long-term investment that gives the investor a say in the operation of an enterprise — at the end of 1981 amounted to \$62 billion, up moderately from \$60 billion at the end of 1980.

Direct investment from the United States which accounted for 79 per cent of total foreign direct investment, grew by almost 12 per cent in 1979 to \$42.79 billion. Direct investment by Britain rose by 15 per cent to \$5.16 billion.

Investment from West Germany, the third-largest direct investor in the country, continued its rapid growth, rising by 31 per cent to \$1.39 billion, following 32 per cent growth in 1978.