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## Vancouver stages women's field hockey event

Canada, for the first time, will host the women's world field hockey championships in Vancouver this summer.

The tournament, which is scheduled to run from August 16 to 30, will bring together teams from 18 countries attempting to earn entry in the newly named Olympic event at the 1980 Moscow Olympics.

The Canadian women's field hockey team consists of seven British Columbia players, four Ontario players and one player each from Alberta, Manitoba and Quebec. The team's coach, Marina van der Merwe, said she expects the team to be highly competitive and to improve its position over that of the last world tournament. Canada finished fifteenth at the last world tournament in 1975.

Canada Post recently announced that it would commemorate the world championships with a stamp, which is designed to pay tribute to the participation of women in sport. At present, approximately 40,000 Canadian women play field hockey.

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## Researcher wins international award

A Canadian researcher has been presented the international Electrochemical Society's annual Thomas D. Callinan Award for outstanding contribution to the advancement of the science and technology of electrical insulation.

Dr. Rudolph J. Kriegler, manager of advanced devices research with Bell-Northern Research in Ottawa, was recognized for his pioneering work in discovering a new method of removing sodium from silicon dioxide and protecting it from the undesirable effects of sodium contamination.

A microscopic layer of silicon dioxide, the chemical compound that makes up sand is used as insulation in computers and a variety of electronic products and systems. The insulation separates the electrical contacts in the transistors and is critical to their operation. The presence of sodium in the insulating material makes the transistors electrically unstable.

Dr. Kriegler and his colleagues discovered that sodium could be removed from silicon dioxide through exposure to a chlorine containing gas at high tempera-

tures. He also found that further treatment with a similar gas made the oxide immune to the unstabilizing effect of sodium.

Dr. Kriegler emigrated to Canada from Hungary in 1956 and received his PhD in molecular physics from the University of Toronto in 1966.

The Electrochemical Society represents some 5,000 scientists and technologists in Canada, the United States and Europe.

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## Archeologists find old Toronto fort

A group of archeology students has unearthed what it believes are the oldest remains of a European settlement in Toronto.

The group has found a section of floor that appears to belong to Fort Rouille, built by the French in 1750 and 1751, said Don Brown, a member of the group.

The base of a stockade was discovered at the site of the Canadian National Exhibition, but the floor is the first evidence of a structure.

The floor was found about two metres underground. Pieces of dishes, metal nails and glass also were found.

Mr. Brown, a PhD student at the University of Toronto who planned the search, said he knew the general location of the fort from documents and maps.

Fort Rouille was the third French establishment to be built in Toronto. Fort York, now restored, was built east of the exhibition site in 1794 by the English.

The French fort was named after Antoine Louis Rouille, the minister of colonial affairs for France. Fort Rouille was later known as Fort Toronto.

The fort, composed of six buildings was used as a trading post to prevent Indians in the north from trading with the English in the south.

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## Air pressure holds roof in place

Raising the massive stainless steel roof at Dalhousie University's new recreation centre in Halifax was as easy as inflating a balloon.

In less than 15 minutes, the 1.25-acre sheet of welded stainless steel rose, entirely under the power of air pressure provided by the building's gigantic ventilation fans.

University officials say it is the world's first air-supported metal roof.

Stainless steel sheets one-sixteenth of an inch thick were shop welded into pie-shaped sections as large as tennis courts and then rolled up and shipped to the job site. There they were welded to springy stainless steel expansion joints, and anchored to the top perimeter of the wall.

The ventilation fans must maintain the air pressure or the roof deflates into a concave shape. Even then, the design allows the roof to stay firmly anchored to the walls. Its high-strength stainless steel could even support heavy snow loads.

The design, by Sinoski Engineering Ltd. of Willowdale, Ontario, provides a clear span of 40 metres by 76 metres, without any of the columns or steel trusses that clutter buildings of similar size. As construction progresses, lights and a domed ceiling of thermal and acoustic insulation will be suspended from the roof.

The combined physical-education, recreation and athletic centre is scheduled to open in September.

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## Watch your language!

The world's "first truly portable, hand-held computer" which can translate words and several complete sentences into three languages at a time is now on the market.

The Amis MC 400 Translator, as it is called, resembles an ordinary pocket calculator except for its keyboard display of both letters and figures. It holds up to three language capsules at a time, each containing a basic 1,500-word vocabulary.

More advanced capsules are planned to hold up to 25,000 words — 8,000 words more than the average college graduate can retain.

Commonly used phrases such as "Do you cash travellers' cheques?" and requests for directions appear across the gadget's tiny screen in blue lighting.

Capsules are now available for six languages: English, French, German, Spanish, Italian and Japanese.

A capsule for Russian now is being rushed into production because of a 1,000-unit order from NBC television for reporters covering the 1980 Olympic Games in Moscow.

The Amis is priced at \$270 a computer and \$40 a capsule.