
Laser used for artificial legs

A laser device that can scan a three-dimensional object and create a computer model of it is proving useful for making artificial legs and is drawing interest from companies that make engineering models and shoes.

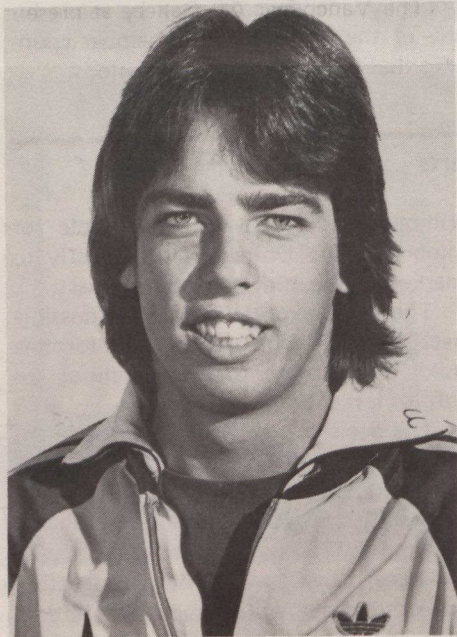
The shape sensor was developed at West Park Research Centre in Toronto's West Park Hospital to study shapes of casts for making prosthetic devices. A low-power helium laser beam scans a vertical line as the body part or object is rotated past it. Measurements from up to 17 280 points are taken with an accuracy of a millimetre in any dimension. A computer collects the readings and can display on a screen a cross-section of the irregular shape at any location along the object.

The information can be fed directly to a numerically controlled model-shaping machine to create a plaster mold. A process that once took days of careful carving and measuring can be completed in a few hours.

Athletes place well

Canadian athletes fared well in World Cup competitions held recently in Europe and the United States.

Canadian ski jumper Horst Bulau, following on the heels of first and second place finishes at a meet held in Thunder Bay, Ontario, won two more competi-



Horst Bulau

tions held in Switzerland.

In a meet at St. Moritz, Bulau registered jumps of 90 and 89.5 metres on the 70-metre hill to finish with a total of 243.6 points and post his second World Cup victory. Bulau also won the 70-metre competition at Gstaad, Switzerland setting hill records on both his jumps. He soared 86.5 metres on his first attempt and then bettered his record with a leap of 87 metres to place first with 246 points.

The victories moved Bulau into second place in the over-all World Cup standings with a total of 145 points; Matti Nykanen of Finland leads the jumpers with 157 points.

At the World Cup downhill skiing event in Sarajevo, Yugoslavia, the defending champion Steve Podborski of Toronto finished second .21 seconds behind winner Austrian Gerhard Pfaffenbichler who covered the course in 1:48.81. The 3 079-metre course is the site of the men's downhill race at the 1984 Olympics.

In a World Cup luge competition held in Lake Placid, New York, Miroslav Zajonc, a Czechoslovakian who settled recently in Toronto, gave Canada its first World Cup medal in that sport. Zajonc, 22, placed second in the event with a time of 2:51.959 behind winner Paul Hildgartner of Italy who had a time of 2:51.911.

Group for hard-of-hearing

Canada's first national consumer group for the hard-of-hearing was set up this fall in Ottawa.

The group co-ordinates activities and raises public awareness about this disability that affects about one in 12 Canadians, said Gordon MacDonald, treasurer of the Ottawa Hard-of-Hearing Club.

"We're concerned about the lack of public awareness of the handicaps created by a hard-of-hearing disability. Most of us are working day to day to remain active participants in the hearing world. We need public support, help and co-operation."

Advocacy and information duties

The new group, called the Canadian Hard-of-Hearing Association, acts as an advocacy group, network and information bank for the more than 30 hard-of-hearing clubs in Canada.

Mr. MacDonald said there has been a

sharp rise in the number of hearing-disabled in Canada in recent years, due mainly to noise pollution and the increasingly aged population. Federal studies in 1976 found 1.5 million Canadians had hearing impairments, 15 per cent of them being totally deaf.

The new organization will try to bring about uniform standards in devices for the hard-of-hearing across the country, such as making all telephones accessible to the hearing impaired. The hearing component on some telephones are incompatible for hearing aid users.

"Standardization is absolutely essential," said Mr. MacDonald. Public meetings also present problems for the hearing impaired. "If there's an all-candidates' meeting and the public is invited, it's not accessible to the hard-of-hearing unless a group auditory device is incorporated into the sound system."

Dictionary of Newfoundlandisms

Canada's newest dictionary, the *Dictionary of Newfoundland English*, introduces a rich and vibrant language that until now has been restricted to the borders of the island and is even unknown to many of its own younger generation.

In Newfoundland, according to its new dictionary, a "fiddler" is someone who plays the accordion, a "hypocrite" is a cripple and a "yes-ma'am" is a bump in the road. There are words such as whizzigging (meaning boisterous or to engage in foolish actions), curwhibble (a sudden lurch), dwy (a squall), flummy dum (hunters' bread), boil-up (a snack), fore (frozen solid) and ballicatter (a spray of water turned to ice).

The dictionary, published by the University of Toronto Press, took more than 20 years to compile. Its three editors, G.M. Story, W.J. Kirwin and J.A.B. Widdowson, working at Newfoundland's Memorial University, combed through written sources dating as far back as 1497 seeking evidence of distinctive Newfoundlandisms. They also relied heavily on taped conversations with longtime residents of the remote outposts.

"Once explained," says reviewer Jack Chambers "the language is rich and clever and colourful. Much more than a book of definitions, this dictionary is a flahoolach (generous, lavish) repository of the folklore and folkways and even the sound and spirits of pre-Hibernian oilfield, pre-Confederation Newfoundland."