be able to suggest ways that automobiles can be redesigned, hopefully simply, to prevent these injuries," he added.

Helmet testing

ore

the

ace

ead

nem

num

ruc-

ring,

nical

ress

rash

ly an

ds to

d the

icate

pact.

col-

acci-

dum

ctual

t vic-

oring

have

ment

of col-

earing

crash

t built

could

s and

crash

to real

ant to

In addition to their main studies on seatbelts, the company is also still actively engaged in research on how the design and manufacture of protective headgear can be improved to prevent serious head injuries and save lives. Helmets collected from use with motorcycles, hockey, equestrians and the police are used in the research as well as information compiled from more than 600 motorcycle accidents across North America.

The helmet research involves dropping them from heights of 3.5 metres onto different types of steel anvils to see how much impact they can absorb; subjecting them to temperatures between -30° and 50° to test adhesives, plastics and other construction materials; and attaching them to a special machine that tests the strengths of rivets, chinstraps and buckles and measures how easily the helmet can roll off the wearer's head. For penetration testing of policeman's helmets, testers drive nails or fire bullets into the helmets.

In addition to testing helmets for such groups as the Canadian Standards Association, Biokinetics helps helmet manufacturers improve the design and testing methods for their products. The firm also has a contract from the Department of National Defence to design new helmets for pilots of the *CF-18* fighter aircraft.

New Yukon leader

Willard Phelps, who was elected leader of the Conservative Party in the Yukon, has become the new leader of the government in northern territory.

Mr. Phelps, a 43-year-old lawyer and third-generation Yukoner assumed power of the 16-seat legislature from Christopher Pearson, who retired after seven years as government leader. As Mr. Phelps is not a member of the legislature, he will run in a by-election in the seat vacated by Mr. Pearson.

The leadership convention was only the second for the Conservative Party in the Yukon since 1978 when the territory received self-government. Prior to then, the Yukon was controlled from Ottawa by a locally elected non-partisan territorial council.

Canada's Yukon territory encompasses 482 515 square kilometres but only has a population of about 23 000. Some of the ridings are routinely won by a margin of only a few votes.

Regulations for the transportation of dangerous goods

Transport Canada has issued new regulations governing the transportation of all types of dangerous goods, including hazardous wastes. Developed in co-operation with both industry and the provinces, the regulations provide a uniform system for the identification of wastes and the control of their transportation across Canada while ensuring public safety and the protection of the environment.

In the announcement, Minister of the Environment Suzanne Blais-Grenier said that Canada's "capacity to react to environmental emergencies will be greatly improved by the regulations". She added that "shipments of all dangerous goods and hazardous wastes will now have to be clearly and properly labelled and records of movement kept. This will enable all jurisdictions involved in preparations for potential accidents to be advised".

The regulations include a manifest to be

completed by all parties involved in the movement of hazardous wastes. It will provide detailed information on the origin and on the types and amounts of hazardous wastes being shipped; a record of the various firms or individuals involved in the shipment; and information on the type of handling methods (treatment, storage and/or disposal) for hazardous wastes when they reach their final destination.

In Canada, regulations require that the manifest forms be submitted to provincial authorities for information matching purposes. The provinces verify that the wastes that were shipped were the same wastes received at the authorized facilities.

The regulations will also enable Environment Canada through a pre-notification system to be advised of any import and export of hazardous wastes.

Defence agreement signals radar warning system

One of the agreements finalized by Prime Minister Brian Mulroney and President Ronald Reagan at the Quebec City summit involves the modernization of North America's air defences for the 1990s. The \$7-billion agreement was signed earlier by Defence Minister Erik Nielsen and Secretary of State for External Affairs Joe Clark.

Under the terms of the agreement, the United States will pay about 88 per cent of \$7 billion for the new air defence system and Canada will pay about \$840 million. The cost of a \$1.5 billion northern warning system will be split, with Canada paying 40 per cent or \$600 million and the United States 60 per cent.

Canadian control

Details of the defence agreement and the northern warning system were announced

by Mr. Nielsen. He said it reasserts Canadian sovereignty over its own territory and places new responsibility on Canada for continental air defence against bomber and cruise missile attack from the north.

Canada will have complete control over



Erik Nielsen

new radar stations that will replace the equipment that is part of the existing Distant Early Warning (DEW) line, he said. The equipment, which has been operational since the

late 1950s is considered obsolete.

The defence minister said that while the DEW line has served the country well, Canadians did not control it; the United States Air Force did.

Radar across north

The new system will consist of a chain of 52 ground radar stations across northern Alaska, the Canadian Arctic and the coast of Labrador. Eleven of 13 long-range radar stations and 36 of 39 unmanned short-range stations will be on Canadian territory.

The Canadian and US governments have said the system will provide detection against hostile bombers and cruise missiles which the existing system cannot handle. It will identify hostile aircraft or missiles for interception by Canadian *CF-18* fighters.

Canada will be responsible for over-all management and systems integration of the project, and for the design, acquisition and installation of the communications network in Canada, the design and construction of all new facilities required in Canada and operation and maintenance of the Canadian portion of the system.

Canada and the United States will also share the cost of eliminating a radar defence line that has operated south of the DEW line since the 1950s, called the Pinetree line. Mr. Nielsen said 17 of the 24 Pinetree radar stations will be closed, and the US government will pay 55 per cent of the cost of assisting communities affected by closing of the stations.