

and is currently installed or under contract in more than twenty-eight US and Canadian military systems. An agreement signed in 1983 with Spain's Santan S.A., a firm that supplies the world market with special Land Rovers, is valued at \$6 million in sales of main and auxiliary fuel tanks over the next five years. In Britain and Italy final negotiations are under way for the joint venture establishment of local manufacturing facilities which will supply Explosafe products for England, Ireland, Belgium and other European countries.

### Better bomb detector

A faster and more sensitive bomb sniffer, that can detect the vapours of explosives in as small quantities as two parts a trillion, may soon be in use in airports across Canada. It was designed by Lorne Elias of the National Research Council (NRC) in Ottawa and has been developed jointly by the NRC and Transport Canada.

The sniffer, which weighs about 15 kilograms and can fit inside a small suitcase, is able to detect the vapours of a variety of explosives including dynamite, nitroglycerine and TNT. In tests to date, it has proven to be between ten and 100 times faster than other methods, having detected simulated bombs on airplanes in as little as two minutes. It can also be used to detect bombs planted in buildings.

Scintrex Ltd, a manufacturer of scientific instruments in Concord, Ontario, is currently manufacturing the sniffer and expects to have it commercially available by the summer of 1984. A variation of the sniffer that can also detect drugs will be produced later in the year by the company.

### Visuprint

A new 'fuming' process that locates and exposes latent fingerprints, has been invented by a Canadian police constable and it is already being used by a number of law enforcement agencies in Canada and abroad. In the process, a compact Visuprint unit 'fumes' the object or area being examined with a special chemical vapour used as the detecting material. After some ten minutes,

any prints present become visible and permanent.

Constable Paul Bourdon of the North Bay Police Identification Bureau spent five years perfecting the 'fuming' process which is now being produced and marketed in a portable Visuprint unit by Payton Scientific Inc of Scarborough, Ontario.

The 10.4-kilogram Visuprint kit can be operated by a mains supply or battery, either in a police laboratory or at the scene of the crime. An entire automobile or complete interior of a room can be 'fumed' by this process. Visuprint will also develop latent fingerprints on more surfaces in a single process than any other conventional method. In addition, it is possible to find fingerprints on hitherto difficult or impossible surfaces including plastic bags, plastics, aluminum, firearms, stainless steel, chrome, silverware, wood, cardboard and paper. Although it has not been fully tested, it may be possible that the process will develop prints on human skin.

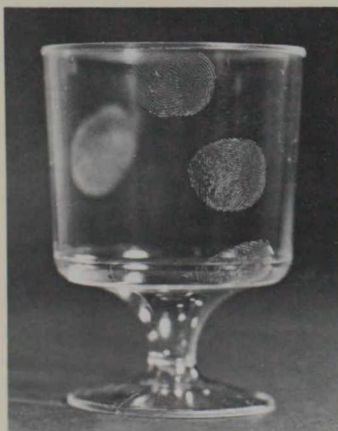


Photo: Ontario Ministry of Industry and Trade

Identification officers with both the Metro Toronto Police and the Ontario Provincial Police using the Visuprint unit in Canada are enthusiastic in their response to the process and claim the invention was an important development in crime detection.

In their efforts to market Visuprint, Payton Scientific has demonstrated the equipment in the United States, France, Belgium, Germany, Italy and Britain and has a large-scale, direct mail program in the United States and Canada as well as a regular schedule of marketing missions and exhibits at international trade shows.

## Immigration

### More British immigrants

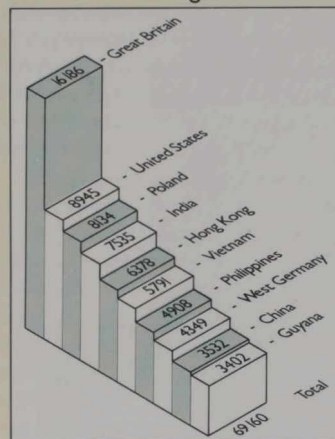


Diagram: Christopher Stanbury

### Top ten immigrant source countries

Preliminary statistics for 1982, compiled by the Immigration Statistics Program Data Directorate of Employment and Immigration Canada, indicate that of the 119,018 immigrants that came to Canada during the year, more came from Britain than from any other country.

### Entrepreneur immigration

New procedures designed to ease immigration requirements and actively seek immigrants who want to come to Canada to open businesses and create jobs came into effect on January 1. A key change in previous policy was the lifting of a restriction that immigrant entrepreneurs must have a day-to-day involvement in the business they intend to establish or purchase. According to Immigration Minister John Roberts, the rule was a major obstacle to entry by people whose special knowledge and skills could directly benefit Canadian industry on a broader scale. Although active personal involvement in the enterprise is still important, a proven track record in business, coupled with the required investment capital, will now be the most important considerations. Other new measures include a higher processing priority for entrepreneurial applicants and a two-year provisional admission for well qualified applicants who have not fully developed their business ventures.

The new program aims to provide fast, efficient service to entrepreneurs whose projects will

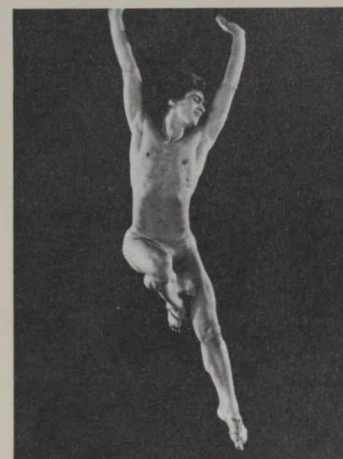
result in direct job creation and other economic benefits to Canada.

Information for prospective immigrant entrepreneurs is available from the Immigration Division of the Canadian High Commission in London, or at the Canadian Consulates in Glasgow and Birmingham.

## Film

### Norman McLaren

Canadian film maker Norman McLaren was acclaimed for his most-recent film *Narcissus* at both the Montreal World Film Festival and Toronto's Festival of Festivals in 1983. From a technical viewpoint, *Narcissus* is considered to be Mr McLaren's most ambitious and innovative film to date. He used blurred-time exposure to enhance a portrait of self-absorption and the results were magical.



Jean-Louis Morin dancing *Narcissus*

*Narcissus* is a filmed dance sequence based on the Greek mythological figure who fell in love with his reflection in a fountain and was then transformed into the flower that bears his name. It stars dancers Jean-Louis Morin of the Martha Graham Company, Sylvie Kinal of the Cleveland Ballet and Sylvain LaFortune of Les Grands Ballets canadiens. Fernand Nault of Les Grands Ballets canadiens was the choreographer.

In the sequences where *Narcissus* and his double are in parallel, Mr McLaren obtained asymmetry by skip-framing, by doubling or tripling frames, by freeze-framing or by withdrawing.

Photo: R S Diamond - NFB Phototheque ONF