

Canadians honoured with bravery decorations

Governor General Edward Schreyer presented 34 Canadians with awards for bravery at a ceremony held at Government House on March 5.

Ten Stars of Courage, Canada's second highest bravery decoration were awarded, while 24 people were honoured with the

Medal of Bravery, the third level. The Cross of Valour is the highest decoration of bravery.

Star of Courage awards went to:

— Firefighter Randall Bush, 21, of Keswick, Ontario, who died March 25, 1981, after he fell through the ice on Lake

Simcoe trying to rescue Charles Clarke, who also died in the incident.

— Armed forces Private Roger Chiasson, 23, of Petawawa, Ontario, who crossed a mine field, risking direct fire, to rescue a depressed fellow soldier who left his post while on peacekeeping duty in Cyprus, April 20, 1981.

— George Cross, 27, of Thunder Bay, Ontario, wheelsman of the vessel *M.V. Ralph-Misener*, who rescued three injured men from a fire aboard the vessel on August 12, 1980.

— Jim Fehr of Hague District, Saskatchewan, who rescued a woman after her canoe overturned in the South Saskatchewan River on August 8, 1981.

— David Frazee, 22, of West Vancouver, who rescued a crewman trapped in a fishing vessel that capsized outside Victoria on July 22, 1980.

— Doreen Hewitt of Ottawa, who risked her life on December 18, 1980, by helping a taxi driver being held at gunpoint by a passenger. Before police arrived on the scene, the passenger had jumped from the cab wielding a knife and stabbed her.

— Tugboat Captain Andrew Rae, 28, of Lower Sackville, Nova Scotia, who saved a man whose boat was sinking off Labrador on November 28, 1980.

— Fire Department Captain James Worrall and firefighter Ronald Rowe of Dunnville, Ontario, who rescued two people after their sailboat overturned on Lake Erie on September 11, 1980.

— David Wood of Calgary, who disarmed a man who had killed a waitress and wounded another patron in a restaurant.

Medals of Bravery went to: Roy Asselstein, Dunnville, Ontario; Kevin Augustine, Big Cove, New Brunswick; Darla Davenport and Jean Bailey, Brantford, Ontario; Frank Baine, Dundas, Ontario; Gerald Kool, Mississauga, Ontario; Michael Burke, Halifax, Nova Scotia; Richard Cliche, North Hatley, Quebec; Robert Collette, James Donovan and John White, Moncton, New Brunswick; Russell Cribb, Head of Bay d'Espoir, Newfoundland; David Downing, Vancouver, British Columbia; Pierre Gagne, Montreal, Quebec; Robert Provost of Verdun, Quebec; Francois Kache, Moncton, New Brunswick; Douglas Kilpatrick, Norland, Ontario; Charles Henderson, Hamilton, Ontario; Lloyd and Lise MacDonald, Montreal, Quebec; Steven Panteluk, Winnipeg, Manitoba; Sergeant John Reid, Hamilton, Ontario; Alexander Ullock, Chatham, New Brunswick; and Charles Wentzell, Lawrencetown, Nova Scotia.

Canada and United States co-operate in remote sensing

Canadian scientists recently received the first image data from a new instrument aboard *LANDSAT-4*, the latest United States remote-sensing satellite.

Processing of the first scenes from data provided by the new scanner was recorded by Canada's Prince Albert Satellite Station in Saskatchewan. Under an agreement between Canada and the US, the Canada Centre for Remote Sensing (CCRS), a branch of the Department of Energy, Mines and Resources, will receive data from *LANDSAT-4* and distribute the resulting imagery to various Canadian resource agencies.

Remote sensing is a valuable tool in resource management. CCRS has been receiving, processing and distributing satellite imagery to Canadian resource managers since 1972, when the first *LANDSAT* was launched.

LANDSAT-4, launched last July, carries two new scanning instruments which provide colour images of the earth. Data from the multispectral scanner (MSS), a four-band, 80-metre resolution instrument, will soon be available to

Canadian users through CCRS.

The new satellite also carries an advanced scanner, the thematic mapper (TM). This instrument has better resolution — 30 metres — for monitoring surface conditions, such as crop diseases and water pollution, than the MSS. It also gathers data from seven rather than four spectral (colour) bands.

The thematic mapper is being tested during 1983 to enable scientists in the United States, Canada and throughout the world to evaluate the data and develop processing methods that will make the imagery most useful for resource managers.

During this experimental phase, data from the thematic mapper for western North America are being recorded by the CCRS Prince Albert Satellite Station, while the eastern data are acquired by NASA's Goddard Space Flight Center, Greenbelt, Maryland. The first TM data recorded at Prince Albert and processed by NASA are of southeastern Alberta in Canada, and Death Valley in the United States.



Photo of southwest Canada received by remote sensing.