

# Dryden crash Pilot's log book preserved

Conservators at the Canadian Conservation Institute, an agency of the Department of Communications in Ottawa, used a new process to preserve the charred pilot's log book and other documents found in the wreckage of the Air Ontario jet that crashed in Dryden, Ontario in 1988, killing 32 people.

The same process has many other uses, from coating minuscule wires for the space shuttle to preserving ancient plant tissues for the study.

The new process is known as parylene coating. Parylene is a polymer, or long-chain, plastic-like molecule. Its unique properties allow it to diffuse, in a vacuum, onto a surface in a layer about a micron (one thousandth of a millimetre) thick. The item to be coated is placed in a chamber where it turns slowly, receiving a thin but even coating. The coating made the fragile, blackened pages of the pilot's log strong enough to be handled.

David Grattan, a conservator at CCI, says the parylene process was being considered, after a few successful information in books that were destroyed in a major library fire in Leningrad a few years ago.

The Canadian Aviation Safety Board sent the pilot's log book from the Dryden crash to CCI to be freeze-dried. Knowing that parylene had preserved the burnt books in Leningrad, CCI scientists offered to use the process on the pilot's log book.

The log book arrived at CCI in chunks. They had been frozen, and were soaking wet, with the pages stuck together. The sections were first freeze-dried, then placed in the parylene coating

chamber.

"The parylene process was extremely well suited to this situation," says Grattan. "It was able to separate and coat the individual pages, because the molecules diffuse out into every available space." Because the coating is so thin, the area into which it diffuses, in this case the space between the pages, can be quite small, he adds.

Once the pages had been separated and strengthened, they were sent to the RCMP forensic lab. There, they were bathed in infrared light, making it possible to read the writing on them.

Parylene was developed by a scientist in Britain during World War II, but it languished on a laboratory shelf until about 15 years ago, when Nova-tran, a U.S. subsidiary of Union Carbide, discovered that a fine spray of parylene could evenly coat transformer wires and electronic components. Since then, the applications have mushroomed.

Parylene is now used to halt the decay of rare old books at the Library of Congress in Washington. It was used to strengthen tiny wires in microcircuits on the space shuttle. Parylene also coats pacemakers and other devices that are implanted in the body.

Staff at the Canadian Conservation Institute first used the parylene coating technique to preserve and strengthen the specimens brought back from the 45-million-year-old forest that was found in the Arctic in 1987. Delicate leaves and cones from the ancient forest can now be handled freely and studied more thoroughly, thanks to the process.

## Schreiber O.P.P.

# Winter driving tips

Here are five driving tips:

(1) On packed snow or ice, start gently and gradually and try not to spin the tires. Keep wheels straight ahead to ease starting.

(2) Get the feel of the road quickly when at slow speeds. Try a light speed increase and test braking to determine the available traction.

(3) If you skid, **RELEASE THE ACCELERATOR** and steer in the direction you want your car to go. **DON'T BRAKE**, the front wheels must be kept rolling in order to steer. **DO** put automatic transmission in neutral or declutch and try to gear down with a standard.

(4) Most accidents in **SCHREIBER/TERRACE BAY** area are caused from "**SPEED TOO FAST**." Posted speed limits are for ideal conditions, that ideal does not refer to Northern Ontario winters. In the winter sometimes half of the posted speed might be too much.

(5) **SEE AND BE SEEN!** Clean and defrost your windows, and the lights. Use your low beam headlights even during daylight hours.

## GRADUATION



The family of David Peter Gillen of Keewatin, Ontario wish to announce his recent graduation from the University of Western in London, Ontario. David graduates with a Bachelors Degree in Philosophy

and Mathematics. He is continuing his studies in Theology at St. Peter's Seminary in London, Ontario. Our appreciation is extended to all those who have contributed to his success.



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- Cutting back from 100 km/h to 80 km/h will save about 18%.

### YOUR HOME

A major amount of our annual energy use goes to heat our homes. Here are a few tips on how to take some of the heat off your home energy costs.

### HEATING

- If you lower your thermostat from 22°C to 20°C during the day and to 17°C at night you could save up to 15% on your heating bills.
- Oil furnaces should be tuned up once a year.
- Clean or replace furnace filters regularly.
- Seal your furnace ductwork with duct tape and insulate hot air ducts passing through unheated spaces.

### WEATHERPROOFING

- Weatherstrip windows and doors.
- Caulk windows and door frames.
- Insulate attic, walls and basement to recommended levels. Install a vapour barrier where necessary.

### YOUR WORLD

Just about every piece of plastic that you use is derived from a fossil fuel. The production of paper, metal and glass uses enormous amounts of energy. So the 3R's of environmental protection are vital as well. Reduce your energy needs whenever you can. Reuse bags, containers, bottles and wrappings when possible. Your community probably has local recycling programs in which you can get involved.

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## Thank You

I would like to extend a very special thank you to all my family, relatives and friends who visited, called, sent flowers, fruit and get well wishes. Thank you also to Dr. Wilkes, the nursing staff of McCausland Hospital, the Home Maker and to the Home Care Nurses, for their excellent care during my recovery. Your kindness and concern is greatly appreciated.



Simonne Singleton



## PUBLIC NOTICE

The Rosspport Islands Management Board, a community based board to regulate the use and development of Crown Land on the Rosspport Islands, needs members. This volunteer position will require a commitment of 2 - 4 evenings a month for the first 6 months to draft a management plan and monthly meetings thereafter. Membership on the Management Board will be as follows: Pays Plat -2; Rosspport -3; Schreiber -1; Terrace Bay -1. If you have the skills to help draft a plan and an interest in environmentally - sound resource management and development, please send a resume to your governing body or town council by **December 7, 1990** to assist them in their selection of a representative. For more information contact: Mary Burnett, Chair, RACDG at 824-2890 evenings or weekends.

## FREE INFORMATION

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