

OVERVIEW

GETAWAY SPECIAL COMPETITION

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## Getaway Special Competition

On October 13 -- at a press conference in Ottawa -- Telesat Canada, The National Research Council and Spar Aerospace Limited -- announced a competition for all Canadians to think of something they would like to put into space. Spar, in our view, had the most exciting end of the competition, since we addressed ourselves to ordinary citizens to come up with an idea. We cared not whether it was handwritten or typed -- elaborate or simple. And we reaped the returns by the hundreds ...all based on the notion that experiments in space were not necessarily the domain of the experts and scientists in white coats.

From the 515 entries submitted to Spar -- 91 in French -- and all carefully review by Spar engineers and then screened by a blue ribbon panel -- we selected the nine finalists. As it was announced in the handsome brochure provided by Canada Post, the most important thing was the idea. Right along with this criterion was the question of do-ability -- or feasibility as the official word had it. The experiment had to be so constructed that it would survive up to eight weeks on the launch pad before liftoff. Finally, the experiment had to be affordable -- to be placed in a drum-size container weighing no more than 30 kilograms.

On that basis some finalists deserve special mention. They are:

Denis Carrier of Notre Dame du Nord in Quebec who submitted an experiment to verify the behavior of wooden particles in a magnetic field under conditions of weightlessness and a vacuum. However, the engineering problems in operating such an experiment in a canister without human intervention seemed formidable.

Guy Lambert, Michael Dennis and Normand Rondeau of Westmount, Quebec for testing the reaction in space of non-mixable liquids.

Gilles Primeau of Cookshire, Quebec for the imaginative construction of an entire satellite.

Brian Smith of Weston, Ontario to test the effects of weightlessness on sea urchin embryos. Since calcium growth (or loss) is a vital consideration in future, long-duration space flights, the experiment could have shed some light on how sea urchins develop their casing in space. The major problem proved to be insurmountable in the canister environment. How to change the water every other day?

Douglas de la Matter, Sheryl Boyle and John Kotash of the Madawaska Valley District High School in Barrie, Ontario, for determining the reaction in weightlessness of magnetized steel spheres.

Hugo Hohener of Elsa, Yukon Territory, to examine the effects of space on cancer cells.

Jessie Deslauriers of Kingston, Ontario to study the configuration of slime molds in weightlessness.

All of these experiments were imaginative, but posed special problems in terms of survivability or engineering. We were struck by the broad range of ideas: cockroaches, fruit flies, bread molds, fertilized eggs, silkworm cocoons, insulin, bacteria, cattle and chicken embryos, rat semen, wine, iron filings, bees and spiders spinning webs, to name but a few.

At the risk of being accused of unwarranted selectivity, let me cite just a few of the more imaginative ones that confronted the judges.

Four year old Matthew Lyons of Toronto for suggesting spiders in space.

Peter Pawlyschyn of Toronto for designing what has to be the first popcorn making machine in space.

David Brody of Port Hardy, British Columbia for sending in his five year old son's idea for seeing how a yo-yo would work in space.

Pauline Ebelshauser of Bramalea, Ontario for asking whether cockroaches would "still be pestering us in future colonies in space."

A registered nurse from Willowdale, Ontario, named B. Britz wonders whether your nose would still be able to smell "a rose, truffid or a roast beef out there in space" ...and wishes good luck out there in the final frontier.

Seven year old Benjamin Freeland from Sidney, British Columbia writes us simply in bold hand-writing, "I would like to send a duck into space to see how it flies with no gravity." Benjamin's dad writes that he is in Grade 2 of the French immersion program in North Saanich and that the program "has stimulated an interesting discussion here that I think will be of long term value even if Benjamin does not win".

Could there be a more resounding endorsement of this competition?

Nine year old Paul Dinga of Welland, Ontario asks that we put an iron net on the space arm to "catch a few meteors. See if there is life on them." He also provided a sketch of a habitat to "make space livable for people to live in like this picture."

Stanley Liu of Burlington, Ontario sends in an idea we will "probably think is crazy." It is for an entire house in space "with all the luxuries of home."

A.J. Maloney of Hamilton, Ontario asks in a poem "that we take along at least one empty container to fill up with refuse and garbage ...so you'll not litter space as you have the earth."

Jane Hill, age 11, of Scarborough writes that the "astronauts should try playing catch next year in the spacecraft ...P.S.: What is the prize and may I have a list of the winners? Thank you."

Winslow Clayborn of Montreal asks with the eloquent simplicity of a 10 year old: "I would like to see what happens to medicines ...will they last as long as they do on earth."

Helen Whelan, a housewife from Toronto, muses on what would happen to dishwashing in space ..."When I wash my dishes using liquid detergent, will bubbles form? What shape will they take ...I think it is time to research a few more domestic matters in space, apart from my wish to know about bubbles, that is."

Robin Sturdy of Crawford Bay, British Columbia, wants to build a ceramic kiln in space and measure the effects of space on the first ceramic tile made in space ...and adds: "Don't you guys forget my decal."

Then there was C.A. Simonsen of Alta, Alberta, who proposes sending the prime minister along for the ride.

Finally, the arts ...Martin Kramer of Toronto who wants to be the poet laureate of the Canadian space program.

Or Paul Hibbert of Nepean who wants to tell jokes in space -- "They should turn out to be funnier in space due to reduced gravity."

Now to the heart of the matter. The winners selected by a judging panel had ideas that were meritorious, eminently do-able and, in the view of those who are concerned with these matters, they were affordable. Coming from Nova Scotia, Quebec, Ontario, Alberta and British Columbia their suggestions, on handwritten notepaper or carefully typed entries, had one point in common: How would yeast react to the vacuum and weightlessness of space.

These were all solid experimenters -- no pie in the sky for them. Instead it was bread -- the first Canadian bread in space. After some consultation with researchers it was determined that the effects of space on yeast and enzymes has not been fully explored.

All of the finalists were guests of the Sheraton Centre for a two-night stay in Toronto, that included a meeting with U.S. astronaut Colonel John Fabian, who is in charge of the Canadarm and the Getaway Special Program. Canadian astronaut Dr. Roberta Bondar joined Fabian in the first public appearance of Canadian and U.S. astronauts together. With the assistance of experts in yeast experiments, Spar will develop an experiment to be placed aboard the shuttle late in 1985.



It has been an exciting competition which the Globe and Mail summed up best with their editorial on Leavening Space: Man may not live by bread alone, but a surprising number of Canadians have bread on their minds. When Spar Aerospace Limited invited suggestions for an experiment to be placed aboard the U.S. space shuttle next year, nine of 515 entries proposed sending up bread to see whether the yeast could survive in the cold weightlessness of space. And when the winning entry was announced at Toronto's Ontario Science Centre the other day, it was bread that carried the day.

ALEXANDER CURRAN is President and Chief Executive Officer of SED Systems in Saskatoon, a high technology systems engineering and production company. Before joining SED, Mr. Curran was Assistant Deputy Minister of the Space Program for the Department of Communications, and spent several years with Northern Telecom Canada Limited and Bell Northern Research. In addition to his professional accomplishments, Mr. Curran is a member of several national technology committees, and has authored more than 20 publications.

LYDIA DOTTO is a partner in Dotto and Schiff Science News Service, and co-director of Canadian Science News, a weekly syndication service. A freelance science writer since 1978, Ms Dotto specializes in computers, space, aviation, environment, ocean technology, and physiology. She has been the recipient of many science and journalism awards, including the Royal Canadian Institute Sir Sandford Fleming medal, and a National Newspaper Award, as well as honorable mention in the National Magazine Awards for 1978 through 1981.

GERALD FARNELL is Dean of the Faculty of Engineering at McGill University in Montréal, a position he has held since 1974. Dean Farnell joined this faculty in 1954 as an assistant professor, and has continued with the university in several positions, including Chairman of the Department of Electrical Engineering for seven years. He is the author of over 50 papers, is a member of several science and engineering committees, and has been the recipient of a Nuffield Fellowship, and an Institute of Electrical and Electronics Engineers Centennial medal.

KAREN GIRLING joined Spar Aerospace Limited in 1981 as Manager, Corporate Public Relations. Before assuming this position, she was with the Education Resources Division of the Addiction Research Foundation of Ontario. She is a member of the International Association of Business Communicators and the Canadian Public Relations Society, sitting on the program committee of the latter. Ms Girling has received numerous awards

from technology and communication organizations including IABC and the Society for Technical Communications.

WALLACE IMMEN joined the staff of The Globe and Mail in 1972, and has worked at the science desk for the past three years. His most recent major stories include activities at the Ice Station CESAR, and two weeks at the Canadian High Arctic settlements, as well as extensive coverage of the United States space shuttle program. A member of the Canadian Science Writers' Association Executive Board since 1980, Mr. Immen is President for 1983-84.

JAY INGRAM has been the host of CBC Radio's science program Quirks and Quarks since 1979, which has garnered several national and international awards since his tenure. Mr. Ingram joined CBC as a freelance science journalist, after several years teaching chemistry and biology at Ryerson Polytechnical Institute and CJRT Radio's Open College program. His background and interest in science is extensive, but focuses on the history of science, evolutionary biology, and astronomy.

FRASER MUSTARD is the President of The Canadian Institute for Advanced Research. Dr. Mustard was with McMaster University for 16 years, holding the position of Chairman, Department of Pathology, Dean of the Faculty of Medicine, and Vice President of Health Sciences. He has participated on many committees and research organizations, including his present appointment as Director of the Ontario Heart Foundation. Dr. Mustard is a Fellow of the Royal College of Physicians of Canada and the Royal Society of Canada.

DAVID ONLEY is host of CKO Radio Network's SpaceWatch, a daily radio show profiling international activities in space. Mr. Onley is the author of Shuttle, which was nominated for Canadian Book of the Year in 1981. He is an active member of the Aviation-Space Writers Association, the Royal Canadian Air Force Association, and the Canadian Science Writers' Association.

WLADIMIR PASKIEVICI is the Director of Research for Ecole Polytechnique in Montreal. Dr. Paskievici has been with Ecole Polytechnique since 1958, holding both academic and administrative positions. He is a member of the Research Committee at the University of Montreal, and President of the Direction Committee of the Institute of Research in mineral exploration, as well as several science committees in the United States.

CHRISTOPHER TRUMP joined the Chairman's Office of Spar Aerospace Limited in 1982 after a 15-year career at Columbia University's Graduate School of Journalism, culminating as associate dean in charge of administration, student professional development, and external relations. Previous to Columbia, he operated as information director for NASA's New York-based Institute for Space Studies, and as lecturer for NASA's national educational programs. He is a member of the Canadian Science Writers' Association, serving as Membership Chairman for 1983-84.

TUZO WILSON has served as Director General for the Ontario Science Centre for 10 years, following almost three decades of teaching and administration at the University of Toronto. A member of several science committees, including the NATO Science Committee and the Science Council of Canada, Dr. Wilson is an Officer, Order of the British Empire, a Companion, Order of Canada, and the Chancellor of York University.

GETAWAY SPECIAL COMPETITION - FINALISTS - April 11, 1984

Annette Van Adrichem

New Lowell, Ontario

Annette Van Adrichem is a poultry farmer in New Lowell, approximately 90 miles north of Toronto. Married, with two children and expecting a third in October, Mrs. Van Adrichem claims that her Getaway Special idea was prompted by a home baking session.

With a background as a correctional officer, this versatile 28-year old also worked in the private sector before embarking on her new career in farming.

Mrs. Van Adrichem and her engineer husband returned from Winnipeg with their family last September to their poultry farm and have ordered 30,000 chickens to arrive in mid-April.

Annette's husband, John, also entered the competition. Both were somewhat disappointed that the Canada in Space decal sent to all contestants was not the iron-on variety.

Pam Cathcart

Greenwood, Nova Scotia

Pam Cathcart is an energetic 34 year old mother of two who supply teaches, is in charge of the maritime provinces' DES Action Canada group and has lived from coast to coast in Canada with her Canadian Forces husband.

Mrs. Cathcart's husband and a friend were discussing the Getaway Competition and asked her what she would send. "Bread," was her one word answer. Of course, she is quick to point out, it would have to be her own special multi-grain bread which she calls "everything but the kitchen sink."

Warren Chin

Toronto, Ontario

Warren Chin was born and lives in Toronto, where he is employed at the University of Toronto conducting scientific research in physiology, pathology and immunology. Dr. Chin returned from post doctoral work in Australia in October -- just in time to enter the Getaway Special Competition. He read about the Park Seed Company experiment that put seeds into space and adapted his idea as a further refinement.

Married, Dr. Chin is a sports and camping enthusiast, and at the moment is taking gourmet cooking classes.

Kathy Clayton

Calgary, Alberta

Kathy Clayton has lived all her 36 years in Calgary. This mother of two now works part-time in marketing research after a career with Environment Canada as a lab technologist in water analysis.

An avid stamp collector, Mrs. Clayton was visiting her post office when she saw the Getaway Special brochure. After testing a recipe at home she decided to submit her idea to the competition.

Mrs. Clayton claims that her family members are all space buffs. Her husband's position as a computer analyst and her part-time studies at the University of Athabasca have kept all of them well-informed on technological developments.

Jennifer Dufour

Richmond, British Columbia

Jennifer Dufour of Richmond, British Columbia credits her part-time employment with a western Canada grocery chain as the inspiration for her imaginative activities in the kitchen as well as her Getaway Special idea.

Married to a record salesman, this 30 year old mother of one is an arts and crafts enthusiast and is developing her interest in writing.

Eric and Isobel Lowden

Pincourt, Quebec

"We are essentially retired," says Eric Lowden as he shares credit with his wife Isobel for the inspiration for their Getaway Special entry. The Lowdens, both in their 60's and grandparents of eight, emigrated from Scotland to the Province of Quebec in 1955 and continue to pursue their many interests in Pincourt, near Montreal. She is the housepainter, gardener and oil painter, while he applies his background in electronics to his book and article writing. In fact, Mr. Lowden was mailing one of his manuscripts at his local post office when he saw the Getaway Special brochure which prompted the couple's entry.

Dorothy Munroe

Galiano, British Columbia

Dorothy Munroe lives on Galiano, a gulf island at the southern edge of British Columbia.

A native of Western Canada, Mrs. Munroe is a fifth generation Canadian who has lived in Vancouver as well as in Vernon, where she worked for 15 years in the surgical ward of a hospital.

Turning 64 in May, Mrs. Munroe took her first plane ride ever to be with us at this space night gala. An avid backyard astronomer,

bird-watcher and theatre enthusiast, she also is a member of the Scottish country dancing group in Galiano, where the pace is a bit slower than in the city.

Mrs. Munroe says her inspiration for the Getaway Special competition came from her past experiences with food and beverage preparation.

William Pottie

Glendale, Nova Scotia

William Pottie's personal credo is "you're only as young as you feel." Mr. Pottie, 62, has just embarked on a three-month sea voyage to Algeria, which accounts for his absence this evening. For the last five years he has been employed as a chef with the Canadian offshore marines services. At home in Glendale, Nova Scotia, he pursues his favorite activities when not at sea: science and gardening.

Mr. Pottie's culinary skills, combined with his interest in science, helped him concoct his Getaway Special competition entry.

Annick Tremblay

La Plaine, Quebec

Twelve year old Annick Tremblay is the youngest finalist in Canada's first Getaway Special competition. She based her idea on knowledge gained in her sixth grade natural science classes. When not at school, Annick takes ballet/jazz classes and is an enthusiastic summer swimmer.