

the most important thing we put in our museums is people



Canada Agriculture Museum Canada Aviation Museum Canada Science and Technology Museum



Web site visitors increased by 28%, with close to 1,300,000 user sessions. The average time of the sessions also increased by 10.5%.

A **sod-turning ceremony** at the **Canada Aviation Museum** officially recognized the new aviation storage hangar construction project.

Mr. Mauril Bélanger, Member of Parliament for Ottawa Vanier; **Dr. Virender Handa**, Chairman of the Canada Science and Technology Museum Corporation; **Mr. Robert Morton**, President of the National Air Museum Society; **Mr. Christopher Terry**, President and CEO of the Canada Science and Technology Museum Corporation; and **Mr. Anthony Smyth**, Director General of the Canada Aviation Museum, at the official ground-breaking ceremony for the new storage wing at the Canada Aviation Museum, on November 7, 2002.



The Corporation completed its feasibility study for a new Canada Science and Technology Museum building and, in the upcoming year, will be seeking approval from the federal government for the project.

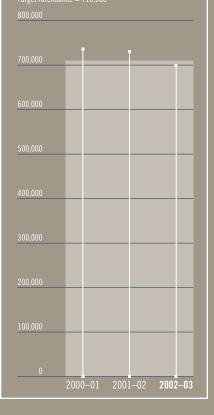
The CSTM's collections of railway photographs were enriched by the donation of 10,000 images of rolling stock from CN

 including passenger, freight and flat cars. Approximately **1.4 million visitors viewed** the **473 artifacts** loaned to institutions in eight provinces and two territories in Canada and three countries internationally.

Nortel Networks donated an example of one of the **most significant milestones in the digitization of telephone networks** around the world. Designed and produced in Canada, the **DMS-100 digital central office switch** was introduced to the market by Northern Telecom in 1976. The DMS-100 positioned the company as the first telecommunications equipment manufacturer in the world to offer a complete line of digital telephone switches. Attendance results fell short of the corporate target by 3%. A decline in tourism within the National Capital Region was felt to be one of the main factors contributing to reduced attendance at the Corporation's three museums.

Visitor satisfaction levels were consistently at 90–95%, significantly exceeding established targets of 80%.

OVERALL CSTMC ATTENDANCE





A number of significant artifacts were acquired over the past year at the Canada Science and Technology Museum. The Toyota "Prius" is considered the world's first massproduced hybrid vehicle (electric/gas). It is seen as a major solution to air pollution from the burning of fossil fuels and **the prototype was introduced to the Canadian market on October 6, 1998 at the Museum**.

Total revenues for the year were **\$4.36 million**, exceeding the revenue target of \$4.02 million by 8.5%.

2002–2003 Performance Highlights

At the Canada Aviation Museum, this year's **most important acquisition** was undoubtedly a **Borel Morane dating from 1912**. This is the earliest extant aircraft known to have flown in Canada. Another remarkable acquisition this year was **Air Canada's generous donation of a DC-9 jetliner**: an aircraft which represents a truly unique chapter in Canada's aviation history.

Act



School programs at each of the Corporation's three museums continued to be popular with students and teachers alike. **Close to 166,000 schoolchildren visited the three museum sites, exceeding the overall target by 14%.**

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Performance Highlights4 Chairman's Message



The 2002-2003 fiscal year was very challenging and invigorating, as the Corporation's staff and Board of Trustees initiated processes designed to address the Corporation's longstanding accommodation issues on two fronts. A selection process was completed to put in place a team of professionals for the construction of a collection storage hangar at the Canada Aviation Museum at Rockcliffe. A purpose-built storage facility will permit the Museum to properly store and meet the preservation needs of the existing aviation collection, as well as those of future acquisitions over the next ten years. The Board of Trustees and staff are very excited about the preliminary design concept for the storage hangar, and feel it will be a significant addition to the existing Canada Aviation Museum and the architectural landscape of the National Capital Region.



Secondly, the federal government's announcement in 2001, regarding the requirement for a feasibility study to define the needs and costs for a new Canada Science and Technology Museum building, recognized the need for a facility to properly house and represent Canada's scientific and technological achievements. This decision was enthusiastically received by the Board of Trustees, which feels strongly that Canada's innovations and achievements in science and technology must be properly showcased in a more appropriate facility. Two separate consulting teams were engaged to assist the Corporation in conducting visioning and feasibility/functionality studies, which are intended to help define how and where the Museum should be built in order to meet the needs of its audiences and stakeholders across the country. The results of these studies will be used to determine the requirements for a new building, and to approach the federal government for approval of the project.

On behalf of the Board of Trustees, I would like to express our thanks to staff for their efforts on these two major projects. Their involvement and input was undertaken in addition to their ongoing responsibilities, and the Trustees are deeply appreciative of their dedication and professionalism.

It is with pleasure that I submit the Annual Report of the Canada Science and Technology Museum Corporation for the year ending March 31, 2003, for tabling in Parliament, as required by Section 150 of the *Financial Administration Act*.

t Handa

Virender K. Handa Chairman, Board of Trustees



The past twelve months have been noteworthy for the vast amount of work that has been accomplished on the Corporation's two major facilities development projects. In achieving these results, we have benefitted from the generous sharing of advice from our Board of Trustees — in particular, the Board's Major Facilities Committee.

Building on existing documentation and studies, the Corporation worked through a grueling but exhilarating process, developing a vision for a new Canada Science and Technology Museum, while also finalizing an imaginative design for the new hangar and a separate administration and library area to be built in 2003–2004 for the Canada Aviation Museum.

The process followed for the visioning study was comprehensive and far-reaching. It involved large numbers of staff, the Board of Trustees, and other stakeholders, in rethinking the values that should be inherent in a new museum and facility. Participants articulated a forward-looking, engaged, experience-based perspective, placing significant emphasis on the exposure of visitors to the Museum's fabulous collection. They also insisted that we must encourage use of the institution as a forum for the presentation and discussion of the science and technology issues which concern contemporary people in everyday life. In the process of going through this exercise, many opportunities to incorporate these new ideas into the present work of the Museum were identified as an added benefit.

Following on from this work, we undertook an examination of the spatial needs of the renewed institution. We also looked at the relationship between the various components, as well as a feasibility study of the different locational possibilities. The result is inspiring, and should serve as a strong foundation for more specific work in 2003–2004, as we refine our ideas and receive guidance and direction on the way in which we should proceed.

Report from the President and CEO

Simultaneously, we engaged in an exhaustive review of requirements for our new building at the Canada Aviation Museum. We also selected the architects and all other professionals, and agreed on an imaginative and striking overall design and landscaping plan for the entire facility, as it will be built in this and future stages. This design, and its phasing-in, received planning approval from the National Capital Commission as the fiscal year ended. Construction will be largely complete during 2003–2004. The result — which incorporates a public-private partnership component which will guarantee a privately owned vintage aircraft activity at Rockcliffe — will keep the Museum at the forefront of aviation museum facilities and capabilities around the world. We now also have a firm blueprint to guide the future development of the site in an orderly and cost-effective way.

Both of these undertakings are significant to an organization of our size, and the fact that they have come so far is evidence of the enthusiasm and dedication with which both tasks were addressed by all concerned.

In addition to these major projects, the Corporation made good headway with its efforts to develop a Corporate Web-based presence. Coupled with a new corporate identity, which is distinct from those of its three operating museums, the Corporation can now provide its clients with a seamless experience - from browsing our online image collections, to downloading specialized curatorial essays on significant topics, and electronic commerce. As was the case in the previous year, our electronic traffic continues to grow at a healthy pace. Future plans include the provision of online access to our collection records, and thousands more photographs and technical drawings.

Quite apart from this, we entered into a Memorandum of Understanding with the National Research Council on mutually supporting activities and protocols. We also worked with a host of partner institutions on joint projects and undertakings, and have attempted to broaden our reach through the power of working with others. The Canada Agriculture Museum has also been an active partner in comprehensive discussions of the future management of the Central Experimental Farm, on which it is located.

While the previous year was largely one of preparation, reorganizing and planning, this one has taken us into more concrete activity, and has set the stage for concentrated efforts in 2003–2004 which are designed to bring many of our plans to fruition.

hristopher J. Terry

President and Chief Executive Officer

(as of March 2003)



Board Members and Committees

Board Members

Chairman	Virender K. Handa (KITCHENER, ONTARIO)
Vice-Chairman	Eric Lemieux (SILLERY, QUEBEC)
Members	Olga Barrat (VANCOUVER, BRITISH COLUMBIA)
	Gail Beck <i>(OTTAWA, ONTARIO)</i>
	Jacques F. Brunelle (ST-JEAN-SUR-RICHELIEU, QUEBEC)
	Faye Dawson-Flynn (MISSISSAUGA, ONTARIO)
	Ron Foxcroft (HAMILTON, ONTARIO)
	Costanzo Gabriele (CALGARY, ALBERTA)
	Patti Pacholek (REGINA, SASKATCHEWAN)
	Joachim Simard (VILLE DE LA BAIE, QUEBEC)
	Roger Soloman

(SOURIS, PRINCE EDWARD ISLAND)

Front row, from left: Eric Lemieux, Ron Foxcroft, Faye Dawson-Flynn, Joachim Simard. Back row, from left: Roger Soloman, Olga Barrat, Virender K. Handa, (Christopher Terry), Patti Pacholek, Costanzo Gabriele. Absent: Gail Beck, Jacques F. Brunelle.

Executive Committee

Chairman	Virender K. Handa
Members	Eric Lemieux Joachim Simard Christopher Terry

Audit Committee

Fric Lemieux
Gail Beck Patti Pacholek Roger Soloman

Major Facilities Committee

Chairman	Jacques F. Brunelle
Members	Costanzo Gabriele Virender K. Handa
	Joachim Simard

Christopher Terry

Development and Marketing Committee

Chairperson	Gail Beck
Members	Olga Barrat Faye Dawson-Flynn Ron Foxcroft

Canadian Science and Engineering Hall of Fame Committee

Chairperson	Olga Barrat
Members	Costanzo Gabriele Patti Pacholek Roger Soloman



technological heritage, in order to increase an understanding and appreciation of the role that science and technology have played and continue to play in the transformation of Canada.

To discover and share knowledge

about Canada's scientific and

Corporate Profile



Mission of the Ranada Science and Technology Museum Corporation



Legislative Authority and Mandate

The National Museum of Science and Technology, now operating as the Canada Science and Technology Museum Corporation (CSTMC), was established as an autonomous Crown corporation on July 1, 1990, with the passage of the *Museums Act*. The mandate of the Corporation as stated in the *Act* is:

> To foster scientific and technological literacy throughout Canada by establishing, maintaining and developing a collection of scientific and technological objects, with special but not exclusive reference to Canada, and by demonstrating the products and processes of science and technology and their economic, social and cultural relationships with society.

The mandate, powers and objectives of the Corporation are set out, in broad terms, in its enabling legislation. It is subject to Part X of the *Financial Administration Act*, which outlines the control and accountability framework for Crown corporations. The Corporation is ultimately accountable to Parliament, through the Minister of Canadian Heritage, and is part of the federal government's Canadian Heritage Portfolio.

Organizational Structure

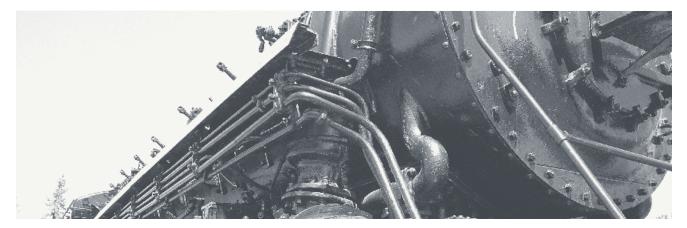
A Board of Trustees, whose members come from all regions of the country and are appointed by the Governor-in-Council, oversees the management of the business, activities and affairs of the Corporation. The Board has up to eleven members, including the Chair and Vice-Chair, and is supported by five committees: an Executive Committee, an Audit Committee, a Development and Marketing Committee, a Canadian Science and Engineering Hall of Fame Committee, and a Major Facilities Committee. The Corporation's daily operations are managed by the President and Chief Executive Officer, with support from a management team which includes the three museum Directors General, and Executive Directors of Museum Services, Finance, Administration and Facilities, Human Resources, Corporate Development, Corporate Planning and Major Capital Projects. The Corporation receives an annual appropriation which it supplements through revenue generating activities.

The Corporation is responsible for the development and management of a representative collection of scientific and technological artifacts and materials. The collection focusses on seven major subject areas: aviation, communications, manufacturing, natural resources, renewable resources including agriculture, scientific instrumentation, and transportation. The Corporation manages three museums: the Canada Science and Technology Museum (CSTM), the Canada Aviation Museum (CAvM), and the Canada Agriculture Museum (CAgM). Each museum undertakes curatorial work and sets its own public programming activities and strategies in recognition of the different markets and clientele it serves. The museums operate under a common set of corporate policies. Support services such as human resources, finance and facilities management are provided centrally.

Corporate Governance

Over the past year, the Board of Trustees of the Corporation continued its efforts to strengthen its governance structures and practices. In September, the Chairman of the Board attended a forum on Public Enterprise Governance, hosted by the Conference Board of Canada. The forum provided an excellent opportunity to stay abreast of current developments in governance issues.

To assist in the fulfillment of its governance responsibilities, the Board reviewed its committee structure and, as a result of those discussions, a decision was made to merge its existing Marketing Committee



and Development Committees into a single Development and Marketing Committee. The Board felt that, because of the interrelationship of these subject areas, a single committee would be better able to deal with various issues as they arise. The committee structure is a key element of the Corporation's governance practices, and the five Board Committees were very active during the year:

- EXECUTIVE COMMITTEE exercising the duties of the Board in the interval between Board meetings, the Committee held one teleconference.
- AUDIT COMMITTEE overseeing the Corporation's financial and management controls, practices and information systems, the Committee held four meetings.
- MAJOR FACILITIES COMMITTEE ensuring that best practices are followed with regards to the Corporation's major building projects, and providing general guidance to Management, the Committee held eight meetings and seven teleconferences.
- CANADIAN SCIENCE AND ENGINEERING HALL OF FAME COMMITTEE — providing advice on the Hall of Fame program, the Committee held three meetings and two teleconferences.
- DEVELOPMENT AND MARKETING
 COMMITTEE providing advice on development and marketing matters, the Committee held one meeting.

The Board of Trustees continued the practice it introduced last year of holding one meeting outside Ottawa. In August, the Board met in Calgary, Alberta and hosted a dinner with directors of local museums and attractions. The Board of Trustees also visited a number of museums in and around the Calgary area.

Based upon the results of the previous year, the Board of Trustees and management of the Corporation reviewed the strategic planning process used in the preparation of the Corporation's five-year corporate plan. It was agreed that the first two steps in May/June overlapped somewhat with the previous fiscal year, and that it would be more practical to have management review issues in the first quarter of the year, and to present the results of these discussions to the Board at its August meeting. This would provide for a more detailed analysis by management, which could take into account any progress which would have occurred in the first half of the fiscal year. The corporate plan was discussed at the Board's August and November meetings, and was approved at its January 2003 meeting.

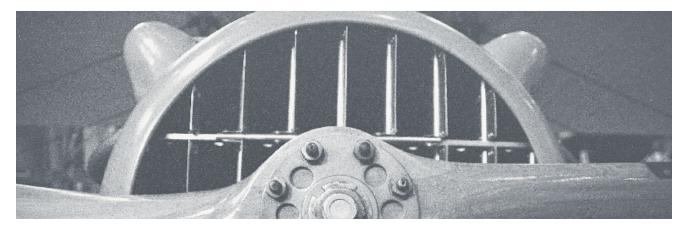
The Board also completed its evaluation of the performance of the President and Chief Executive Officer for the fiscal year.

Historical Background

The Corporation manages three museums, which have evolved under individual circumstances.

CANADA SCIENCE AND Technology museum

The Canada Science and Technology Museum (formerly the National Museum of Science and Technology) opened in November 1967 at its present location: a former bakery distribution warehouse on a 12.2-hectare site at 1867 St Laurent Boulevard. An addition designed to house the locomotives on display was constructed prior to the Museum's opening in 1967. It was recognized at the time that this accommodation was temporary, and that it could not provide appropriate long-term museum facilities. The property was leased until 1993, when the site was purchased by the federal government. Over the years, the building was gradually adapted to meet the needs of museum use, as well as to address health and safety concerns. In 2001, the Government announced that a feasibility study would be undertaken to examine the needs and costs for a new museum facility.



The Museum is unique in several ways. It is the only comprehensive science and technology museum in Canada. It also was the first national museum to focus a large proportion of its resources on exhibitions and programs, and to use demonstrations and interactive methods to engage the public's attention. Despite its suburban location and less-thanideal accommodation, it quickly became the most popular of the national museums, and has remained very popular to this day.

The Museum boasts the largest and finest collection of scientific and technological artifacts in Canada. Since its inception in 1967, the CSTM collection has grown particularly strong in the general areas of communication, transportation, and physical science. It also contains a number of exceptional assemblages, including the Ontario Hydro, Shields and Marconi collections. In support of the collection's ongoing growth and evolution, the Museum has also developed an exceptional library and photographic archive, which includes remarkable trade literature holdings and the outstanding Canadian National photo collection.

CANADA AVIATION MUSEUM

The aviation collection was first displayed at Ottawa's Uplands Airport in 1960, as a component of the National Museum of Man. Its focus was on bush-flying, and on early attempts to manufacture aircraft in Canada. In 1964, the collection was brought together at Ottawa's historic Rockcliffe Airport, combining the Canadian War Museum's collection of military aircraft from several countries --- dating from the First World War to the 1950s — with a second collection of aircraft owned by the Royal Canadian Air Force, illustrating the history of the RCAF. This new, amalgamated and jointly-managed collection, then named the National Aeronautical Collection, provided a comprehensive perspective on the history and development of aviation, with a focus on Canada.

In 1967, the National Aeronautical Collection was brought under the auspices of the National Museum of Science and Technology and, in 1982, its Rockcliffe site was officially named the National Aviation Museum. In June 1988, a new building for the Museum was opened at Rockcliffe Airport, providing a significantly improved environment in which to display and preserve most of the world-renowned collection. Although the facility did not address all of the Museum's requirements, it was the most that could be accomplished with the funds available at the time. The need for additional space and amenities was recognized, and an acknowledgment made of the need for additional funding to house the collection properly. In 2000, the Museum changed its operating name to the Canada Aviation Museum and, in 2001, funds for the construction of a new collection storage hangar were approved.

CANADA AGRICULTURE MUSEUM

The Canada Agriculture Museum is located at Ottawa's Central Experimental Farm (CEF). The agricultural collection, previously maintained by the federal Department of Agriculture at the CEF, was transferred to the National Museum of Science and Technology in 1979. In 1983, discussions with Agriculture Canada resulted in a co-operative project, which established the Agriculture Museum in a refurbished historic barn at the CEF. In 1995, a new agreement leased additional buildings to the Museum, and transferred equipment as well as ownership of the showcase herds. Unfortunately, a tragic fire at the farm at the end of August 1996 resulted in the loss of two historic buildings and 57 animals. Approval of government funding was obtained for construction of a replacement barn, and this project was completed in November 1999.



In 1998, the CEF was designated a National Historic Site by the Historic Sites and Monuments Board of Canada for its distinctiveness as a cultural landscape; for its ongoing research, with significant scientific contributions to agriculture, and for the fact that it is a rare example of a farm within a city. Agriculture and Agri-Food Canada also undertook a public review of the future of the Central Experimental Farm, and the Museum's master site plan, completed in March 2000, is being considered within the context of the management plan for the CEF.

In November, 2002, the Board of Trustees of the Canada Science and Technology Museum Corporation passed a bylaw establishing the Museum as an affiliate museum of the Corporation. The by-law was approved by the Governor-in-Council in January 2003.

The Museum offers programs and exhibitions on Canada's agricultural heritage, and on the benefits of agricultural science and technology to Canadians' everyday lives. It provides visitors with a unique opportunity to see diverse breeds of dairy and beef cattle, pigs, sheep, horses, poultry, goats and rabbits. Public programming activities include special weekend theme events, such as Easter on the Farm, the Ice Cream and Fall Harvest festivals, school programs, interpretive tours, demonstrations and joint efforts with community groups and associations.

Environmental Scan

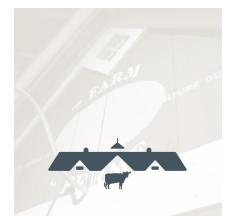
The Corporation enhanced its environmental scanning process this year by inviting input from staff across the organization. Such scanning tries to systematically review changes in the economy, and in society, competition, and government, which could have an impact on the Corporation's museums. The scan's timeframe looks three to five years into the future, although sometimes a more distant horizon is needed, in order to identify more gradual trends. Although staff opinions varied on the details, a surprising level of agreement arose on the major issues to be considered in the Corporation's strategic planning.

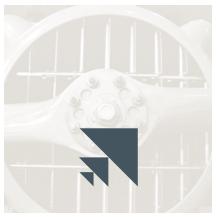
These issues ranged from the basic conditions that underlie any organization's planning concerns, such as demographic change, to more particular aspects of museum operation in the National Capital Region. Rapidly changing trends were warranted to deserve the most immediate attention, while the interaction between issues supplied the most compelling concerns.

As with all predictions, the more specific one gets, the less confident one can be. The cultural policies implicit in the Speech from the Throne, and those made explicit by the Department of Canadian Heritage, are the most significant factors in the Corporation's future. Most of the major environmental issues the Corporation faces are addressed in recent federal government policy. However, the Corporation does require additional funding to respond appropriately to these policy initiatives. If resources are made available, then the Corporation can play a greater part in the future envisioned by the Speech from the Throne. It is key that the Corporation communicate to government the role it can play in achieving this vision.

Economic change is certain. Although the Corporation may seem to be insulated from this somewhat, the Corporation's clients are not. Consumers, sponsors and partners, and government budgets are all affected. The Corporation needs to be aware of their individual situations and needs.

Competitive factors will increase, perhaps eliciting short-term responses; however, the best way to address them is through long-term plans that match new, on-brand products with promising target segments. Larger returns may be possible if the Corporation lends its strengths to cooperative efforts with Canadian Heritage Portfolio organizations to expand the market.

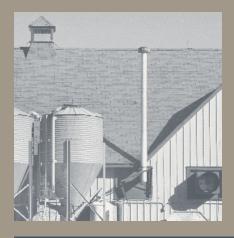






Demographic change continues to affect attendance, and the pace of this will speed up due to lifestyle changes related to the Baby Boom. Similarly, social change from immigration will require an adjustment in museum programming in the very near future, and new historical and museological research to develop a more encompassing view of Canadian material history. The long lead-time for this means it must start soon.

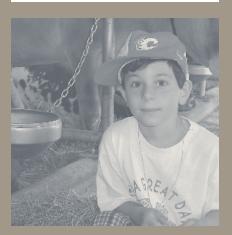
As the world of science and technology changes, the Corporation's museums can respond to public interest in new developments and play a role as objective observers on scientific and technological issues. New technologies also provide the Corporation with opportunities for new content and new dissemination tools.



While the previous year was largely one of preparation, reorganizing and planning, this one has taken us into more concrete activity, and has set the stage for concentrated efforts in 2003–2004 which are designed to bring many of our plans to fruition.



Corporate Performance



Christopher J. Jerry President and CEO



Strategic Issues

The Board of Trustees of the Canada Science and Technology Museum Corporation had identified three strategic issues as priorities for the past year:

- construction of a collection storage hangar at the Canada Aviation Museum;
- defining the needs for a new Canada Science and Technology Museum building; and
- reaching all Canadians and increasing accessibility to Canada's scientific and technological heritage.

ACCOMMODATION

Canada Aviation Museum Hangar In 2001, funding was provided to construct a collection storage hangar at the Museum's Rockcliffe site. The new hangar will be situated to the south of the current structure, and will accommodate the seven aircraft stored outdoors, most of those held in open storage, and all the aircraft that the Museum anticipates acquiring over the next 10 to 15 years. This storage building is part of a second phase of construction, as foreseen in the 1992 site development plan for the Museum. At the same time, an addition is being constructed on the north side of the Museum building to accommodate administration, library and archives services.

During the past year, the project architect completed a concept design for the long-term expansion and development of the Canada CMSTC Trustees and CSTMC Staff attend the CAvM exhibition opening of SEEKING SAFER SKIES developed in co-operation with the Transportation Safety Board of Canada.

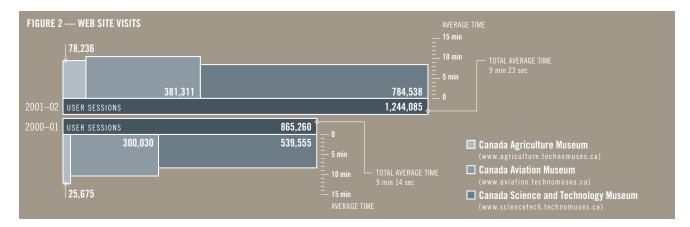
Aviation Museum's facilities and site, and sought to obtain the required approval for this design from the National Capital Commission (NCC). The architect also completed a concept design for a first-phase expansion which included a 9,240 m² collection storage hangar and a 1,835 m² library/archive/administration facility. Four presentations, at bimonthly intervals, were necessary to obtain final concept design approval from the NCC. The NCC review process resulted in a more elegant and refined design, which introduced new requirements in the design, and some increases in construction costs for the hangar. The design review process did, however, cause a six-month delay in the project's schedule. In addition, the price of construction materials — especially steel, which is the main material used for the project - increased significantly from earlier estimates. These factors resulted in a reduction of the size of the hangar building to 8,000 m², in order to remain within the project budget. The Corporation is pursuing the possibility of additional funding with the Department of Canadian Heritage to build a hangar at the originally planned size. The development of detailed design and construction documents are nearing completion, and construction will start in July 2003.

New Canada Science and Technology Museum Building

The CSTM has been situated at its present location — a site on St Laurent Boulevard in an industrial park — since 1967. The original building was constructed in 1964 as a warehouse-grade structure, for use as a bakery distribution centre. It is now almost 40 years old, and close to the end of its originally anticipated life. The site and building have been gradually adapted to museum use over the years, but as the situation was meant to be temporary, any investments made have tended to deal more with the safety and the structural integrity of the building, rather than with the development of museum amenities or programming. In 1998-1999, a Property Condition Assessment study, commissioned by the Corporation, identified a potential seismic hazard to the building, in the event of a more serious earthquake within the range to be expected in the National Capital Region. The study recommended a variety of capital improvements totalling \$1.7 million over a five-year period, in order to raise the building to a reasonable standard of safety and environmental control. In May 2001, the Government of Canada recognized the necessity of dealing with the Canada Science and Technology Museum's inadequate building, and announced that a feasibility study would be undertaken by the Corporation to define the needs and costs of a new facility.

The feasibility project, initiated in October 2001, was completed by February 2003. The study provided in-depth information, and generated a host of ideas for the vision and implementation of a new Canada Science and

PAGE 16 Canada Science and Technology Museum Corporation



Technology Museum, and the demographic segments it will be serving in the future. The project was initiated by a Visioning Study contracted to Lundholm Associates Architects, N.L. Hushion and Associates, and Leger Marketing. The consultants' approach was to divide the study into three phases. Phase One looked at Vision Options by identifying the key issues and broad options which would give direction to the study and define areas requiring further research. Phase Two, Research and Concept Development, incorporated in-house study groups to develop the conceptual thinking for collections, exhibitions and programs. This was followed by a market analysis, stakeholder consultations and case study research, leading to the final phase of the study. Phase Three, Synthesis of the Vision, applied the results of the first stages in articulating the Museum's future direction. Key to this vision is a proposed new vision statement for the Museum: We explore, with all Canadians, the rich connections between science, technology, society and culture: an essential step in our understanding of ourselves and the world.

The study took the following into consideration: demographics and programming variables, questions of current size and projected growth, range and emphases of programs — e.g., broad thematic exhibitions as well as technology-specific ones, children's areas, increased interactive exhibitions directed at

understanding science, current issue-oriented exhibitions and, as far as possible, full access to the collection. Collection facilities and opportunities to demonstrate elements of the collection such as rail, land and marine objects were a major aspect of the studies, especially since they can have such a profound effect on visitor attendance. It also addressed the types of spaces required. Commercial opportunities, rental facilities, evening access for conferences, facility rentals, dining, entertainment and a multimedia experience were considered as well. Also included was the concept of developing a centre which will become a site of first contact for Canadians wishing to access or discuss issues related to science and technology.

The feasibility study, undertaken by Provencher Roy + Associés Architects and the ARCOP Group, required the generation of a great amount of basic information, as well as an assessment of the current facilities, which noted that a substantial investment would be needed simply to make the buildings safer and to create a stable environment for the collection. This expenditure would not improve the building in meeting the needs of visitors or improving upon the exhibition and program space. It included development of a weighted evaluation grid for such aspects as live rail, proximity of the collection, commercial operations, total floor space, adjacencies, sustainable design, exhibition space, theatre space, and a "Big Ticket" attraction. Some of these criteria, such as access to live rail and

the ability to attract visitors, had an obvious impact on site selection. The studies defined the needs of the Museum and of its collection, as well as public programs and the image of a national museum designed to meet the needs of all Canadians. Finally, the studies looked at the optimal size and location. The final functional program will be a key document for the selected architect.

While not part of the studies proper, a Summer Design Studio organized by Carleton University's Department of Architecture used a new CSTM building as a case study for architecture students. A number of scale and electronic models were an outgrowth of this challenge, and resulted in a number of interesting concepts and approaches. The models were on display in the museum lobby for a number of months, and generated both public and media interest.

A major consideration is ensuring that the design reflects the type of building which would best suit Canada's national science and technology museum. A signature or landmark building should be unique, state-of-the-art, and groundbreaking, as opposed to a basic structure, built to a standard template using standard materials. Sustainable technology used in any building of this sort sets an example for Canadians and a new international standard for the future. The Museum would thus lead by example and be an emblem of sustainable technology which, while initially more expensive, will become a serious reflec-

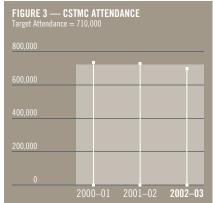


tion of Canada's intent to be environmentally responsible, while also costing less to operate in the long run. With an architecturally significant building, the return on investment (ROI) is faster through tourism: building and content would become an international attraction (e.g., the Guggenheim in Bilbao, Spain repaid its initial investment through tourism within three years). Such a building would, like the Guggenheim Museum did for Bilbao, Spain, enhance Ottawa's position as a "must-see" on the world map.

REACHING ALL CANADIANS

As a national institution, the Corporation plays an important role in fulfilling the federal government's objectives of strengthening the bonds of shared citizenship and creating an environment that allows for a greater understanding of Canadian society. The Corporation endeavours to foster on the part of all Canadians an understanding of their scientific and technological heritage, its place in their culture, and a sense of pride in Canada. Through its museums' exhibitions, innovative programming, Web sites and publications, the Corporation strives to increase awareness by Canadians and accessibility to this knowledge base.

Over the past year, activities aimed at increasing accessibility to the national collection and programs included the following: **INTERNET** — The number of visitors to the Corporation's Web sites continued to increase significantly, with user sessions up 28% over last year. The length of user sessions also increased by about 10.5%. In March, the Corporation launched a new corporate Web site and a new domain name. The corporate Web Site will enhance recognition of the Corporation amongst a greater audience, by promoting our corporate identity and facilitating access to corporate information. The site also provides e-commerce services, including online shopping, donations, and membership. The new site and services were launched under the new domain name of "technomuses.ca". **PUBLIC FACILITIES** — The Corporation's physical museum sites continue to be a primary way of making its collection and programs accessible to Canadians. Total attendance was about 700,000 visits, down about 4% in comparison with the previous fiscal year. Against the target identified in the corporate plan, results were down about 1.5%. Individually, the Canada Aviation Museum and the Canada Agriculture Museum exceeded their attendance targets for the year, but saw a drop of about 5% from last year's results. The Canada Science and Technology Museum was down 6% against its target of 400,000, and down about 3.5% when compared to last year's results. Visitor feedback suggests that the CSTM building and its 'tired' and



'old' image have had a negative impact on visitation levels. The overall drop of about 10% in tourism within the National Capital Region was felt to be a factor in the slight declines in attendance at the Corporation's three museums.

AFFILIATE MUSEUMS — As a means of extending its outreach program, the Corporation continued to develop an innovative program which would see the Corporation partner (affiliate) with other museums across the country. By establishing mutually beneficial affiliations (partnerships) with museums and cultural institutions across Canada, the Corporation will be able to further address its national mandate and more broadly share its national collection, its exhibitions, its demonstrations, its educational programs and its expertise.

NATIONAL REGISTRY — The Corporation continued its efforts on the development of a National Registry of Significant Artifacts in Science and Technology, in conjunction with its collection development process. This registry will serve to increase the recognition and profile of the nation's scientific and technological heritage, while greatly enhancing and facilitating its preservation, interpretation and access. Preliminary discussions were held with the Corporation's Portfolio partners, which included Parks Canada, the Canadian Conservation Institute, the National Archives, the Canadian Heritage Information Network,



the Department of Canadian Heritage, and the other national museums, designed to examine possible subject areas which could be considered in testing the selection process and in refining an overall approach.

ARTIFACT LOANS — The richness of the Corporation's collection is one of its significant strengths. In order to increase access to its artifacts, the Corporation maintains an active loan program — including individual artifacts as well as portions of collections — to institutions throughout Canada, the United States and abroad. The Corporation's loan program helps to ensure that Canadians can experience firsthand what has been preserved on their behalf. Last year, approximately 1.4 million visitors saw artifacts on loan in the various borrowing institutions.

COLLABORATION AND PARTNERSHIP — The Corporation initiated a number of collaborative initiatives and partnerships with organizations within the Canadian Heritage Portfolio, as well as with similar subject-based institutions, and anticipates these developing into effective working relationships on behalf of the public and the partners.

- NATIONAL MUSEUMS The Corporation collaborated with the other national museums on a number of initiatives, two of which are highlighted below.
 - NATIONAL CAPITAL REGION VISITOR SURVEY CONSORTIUM — Representatives from the marketing, evaluation, audit and visitor



Mr. Christopher Terry, President and CEO, CSTMC and Dr. Arthur Carty, President, NRC, shaking hands after signing an MOU fostering closer ties between the CSTMC and the NRC.

research functions of the Canada Science and Technology Museum Corporation, the Canadian Museum of **Civilization Corporation**, the National Gallery of Canada, the Canadian Museum of Nature, the National Capital Commission, the Library of Parliament, Rideau Hall, and the Royal Canadian Mint, pursued a framework for cooperation in information-sharing, which focussed on visitor satisfaction and market audience characteristics. Key concerns included standards for demographic variables and satisfaction questionnaires, confidentiality, reporting, and cost-effectiveness. An agreement had not been finalized by the end of the fiscal year, but it is hoped that an arrangement can be worked out early in the new fiscal year.

- MUSEUM PASSPORT The Corporation worked with the other national museums and the National Capital Commission on a concept for a museum passport, which would provide discounted admission to participating institutions. An agreement-in-principle was reached, and the passport was scheduled to be launched in May 2003.
- CANADIAN HERITAGE PORTFOLIO As part of the Canadian Heritage Portfolio, the Corporation participated with agen-

cies and Crown corporations such as the CBC, the National Film Board, the National Archives, the Canadian Heritage Information Network, the Canadian Conservation Institute and the National Capital Commission in a variety of exhibition and programming endeavours. The Corporation was also a member of the History/Heritage and Outreach policy clusters created by the Department of Canadian Heritage, aimed at providing an integrated Portfolio approach to policy issues.

OTHER GOVERNMENT DEPARTMENTS
 AND AGENCIES — A Memorandum of
 Understanding (MOU) with the National
 Research Council of Canada (NRC) was
 finalized this past year, and similar MOUs
 with the Canadian Space Agency (CSA)
 and the Canadian Conservation Institute
 (CCI) should be completed by the end of
 the new fiscal year. These agreements will
 result in further preservation of artifacts
 associated with each of the agencies,
 programming benefits for the public, and
 a greater focus on the great scientific and
 technological contributions being made by
 Canadians and Canada.

TRAVELLING EXHIBITIONS — two travelling exhibitions — Canadarm and Bikes: The Wheel Story were presented this past year at three different venues. A total of 1,028,780 visitors visited the exhibitions while they were on display.

Major Subject	Topic	Status
Aviation	Comprehensive Floor Review	Ongoing
	Seeking Safer Skies (Exhibition)	Completed
	Ballooning in Canada	Rescheduled
Agriculture	Bee-keeping Technology (Exhibition)	Completed
Communications	Digital Communications	Completed
	Connexions (Exhibition)	Completed
Natural Resources	Water Power	Completed
	Petroleum	Reviewed/Deferred
	Power Generation (Exhibition)	Completed
Scientific Instrumentation	Metrology	Completed
	Log On (Exhibition)	Completed
Transportation	Automotive Engineering	Deferred ¹
	Commercial Vehicles	On schedule ²
Multi-disciplinary	CSTM/CN Photo Collection	On schedule
	(CSTM History)	On schedule ²

Note 1: Deferred due to staff departure

Note 2: Project planned over two fiscal years for completion in 2003–2004

Primary Activities

HERITAGE PRESERVATION

RESEARCH

Research comprises those activities which contribute to the building of a knowledge base on the scientific and technological heritage of Canada. The Corporation has identified seven major subject areas on which to focus its research activities: aviation, communications, manufacturing, natural resources, renewable resources including agriculture, scientific instrumentation, and transportation.

Research generates the knowledge required to help the Corporation make informed decisions regarding the content of the collection, as well as providing a knowledge base which is shared through exhibitions, Web sites and publications.

Research activities are carried out in support of the following objective:

> To identify concepts and ideas key to the understanding and appreciation of the scientific and technological heritage of Canada.

Central to the research program is the identification and analysis of important concepts, ideas and issues key to the historical development of each main subject area. The Corporation has adopted a conceptual theme — the *Transformation of Canada* — to provide a framework for its research program.

> The transformation of Canada, from the period of early exploration and settlement to the present, has been marked by achievements in science and technology. There is an ongoing relationship between science, technology and Canadian society which has changed Canada, influenced its people, and will continue to do so.

Historical research directed at the theme and sub-themes of the *Transformation of Canada* forms a body of knowledge which covers the most important aspects of each major subject area. Major subject areas are subdivided as required to break the research into manageable parts. Most projects listed in the Historical Research Plan for 2002–2003 were completed or are on schedule. (See Figure 4.) The historical assessment on Automotive Engineering was deferred due to the departure of the curator of that subject area. In addition, the two reports on Petroleum, which had been completed in 1992, were reviewed by the curator. It was concluded that an update at this time would be premature.

The process of creating a vision for a new Canada Science and Technology Museum included the need to consider its administrative and operational past. The lack of a formal synthesis of the Museum's progress since its establishment in 1967 was recognized as an impediment to this process. A research project was thus initiated to document this unique history.

THE COLLECTION

A major challenge for any museum is to determine what items it will collect, how the collection will be organized, and how these items will be preserved for future generations. The Corporation, as the only comprehensive national science- and technology-collecting institution in Canada, has a special

Major Subject	Торіс	Status
Agriculture	Maple Sap Harvesting/Processing	Completed
Communications	Telegraphy	Deferred ¹
Manufacturing	Machine Tools, Tool & Die	Deferred ²
Natural Resources	Electric Transmission (Replaced Kitchen Appliances)	Completed
Scientific Instrumentation	Chemistry	Completed
Renewable Resources	Forest Harvesting	Deferred ²

Note 2: Resources redirected to CSTM Visioning Study

responsibility for the development of a Canadian national collection. In view of the breadth of the potential subject matter to be covered, critical choices must be made in determining collection content and priorities.

Collection development and management activities are carried out in support of the following objective:

> To develop and manage a national collection of objects representative of science and technology in Canada.

DEVELOPMENT

The primary purpose of the collection is to help people understand the transformation in Canadian life which has resulted from science and technology. A focused collection is achieved by identifying and acquiring the objects and supporting documentation which best reflect a historical framework, and by removing or deaccessioning materials that are not consistent with this framework. It is also essential that all documentation be managed in a professional manner, permitting retrieval and adaptation to a variety of media. Adherence to strict environmental standards and professional conservation activities are also required, in order to ensure the long-term preservation of the collection.

Collection development activities utilize historical research to assist the Corporation in making informed decisions on collection content. Following completion of historical assessments, collection assessments are prepared in three sections: the ideal collection, a profile of the existing collection, and the needs of the collection. The latter is obtained by comparing the ideal collection to the collection profile, which identifies artifacts or classes of artifacts to be acquired.

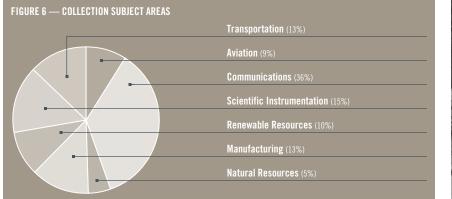
Increasingly, collection assessments are being used to establish a rationale for artifact acquisitions. The introduction of new initiatives such as the CSTM Visioning Study, partnership exhibitions, and the new storage hangar at the Canada Aviation Museum have, however, seriously affected the projected rate of completion for collection assessments. Some of these projects will be carried over for the next few years. (See Figure 5.)

The collection now consists of well over one million items, including: 34,568 artifacts (averaging 2.2 items per artifact record); 28,797 pieces of catalogued trade literature; 83,420 catalogued photographs; and over 36,459 catalogued engineering drawings. The balance is made up largely of uncatalogued photographs and engineering drawings.

The diverse nature of the Corporation's collection, its profile of Canadian innovation, and its national representation, continued to be the focus of acquisition activity during the past fiscal year.

During the 1990s, major automobile manufacturers undertook research on, and development of, new technologies designed to reduce or eradicate exhaust emissions, while also increasing fuel efficiency. The Toyota "Prius" is considered the world's first massproduced hybrid vehicle (electric/gas). It is seen as a major solution to air pollution from the burning of fossil fuels, and the prototype was introduced to the Canadian market on October 6, 1998 at the Canada Science and Technology Museum. One of the prototypes from this product launch was donated to the Museum by Toyota Canada.

Two significant collections of trade literature were donated to the Museum during the past fiscal year. The first is a collection of 10,000 sourced automotive advertisements. Generally covering the years from 1930 to 1960, and representing both Canadian and U.S. producers, this valuable research archive was developed by the late John DeBondt, author of Canada on Wheels. The second donation consists of 600 automotive shop manuals (1960–1980) from a cross-section of North American car and truck manufacturers. It represents a period and type of material which few institutions collect, and offers current and future researchers valuable insight into automobile production during the second half of the twentieth century.



The railway photography collections of the Canada Science and Technology Museum were enriched during the past year by the donation of 10,000 rolling stock images from CN, including passenger, freight and flat cars.

A donation of studio cameras, video recording and editing equipment by the CBC has provided the Museum with a representative collection of all the important analogue videotape formats used from 1970 to 1990, while also responding to collection needs for broadcast cameras, consumer camcorders and other key pieces of studio equipment. The donation included examples of Canadian production equipment such as a Ross video switcher (ca 1975) made in Iroquois, Ontario, and a Ward-Beck audio mixer (ca 1980), which was manufactured in Toronto.

Nortel Networks donated an example of one of the most significant milestones in the digitization of telephone networks around the world. Designed and produced in Canada, the DMS-100 digital central office switch was introduced to the market by Northern Telecom in 1976. The DMS-100 positioned the company as the first telecommunications equipment manufacturer in the world to offer a complete line of digital telephone switches.

An early form of electronic keyboard instrument, a Solovox "K" was added to the Museum's collection of electronic musical instruments. Designed to be attached to the front of any piano, this Canadian-made instrument was acquired by the donor, Ken Baer, around 1948. The portability of the keyboard allowed Mr. Baer to travel with the instrument to religious gatherings, where he would perform, often with his sons, as the "Three Baers". The donation also includes a CD copy of a 78-rpm recording of Mr. Baer playing the Solovox and the piano.

Surveying and drafting instruments used by surveyor and engineer Marcus Smith (1831–1901) were donated to the Museum's surveying instrument collection. Mr. Smith emigrated to Canada from Britain in 1849, and worked for much of his career with the Intercolonial Railway in New Brunswick, as well as with the Canadian Pacific Railway in Manitoba, and in the Rockies of Alberta and British Columbia. He also served as a consulting engineer for the Canadian government. The tools donated included an Abney level, a pocket sextant, a beam compass, a circumferentor, drawing sets and a travelling box.

Development of the Museum's national resource collection of bicycles continued in 2002–2003 with the addition of two products designed and built by the Canada Cycle and Motor Co. (CCM) of Toronto. A 1940s CCM "Flyte" bicycle in original condition was acquired with its original bill of sale, along with two photos of its first and only owner



Mr. Fernand Lupien, Laval, QC in 1994 with the CCM "Flyte" which he purchased in 1940.

— Mr. Fernand Lupien — and the bicycle. One of these was taken near the time of purchase, during Mr. Lupien's adolescence in the 1940s; the other was taken in 1994, when Mr. Lupien was 72 years of age. Patented in 1935, the Flyte embodied the characteristic "streamline" design of the period.

The second acquisition was a CCM Model 32 tricycle produced in 1937. The introduction of this model reflected an attempt by the company to reduce production costs and produce a "budget" model tricycle for the market needs of the Depression. It remained in production until 1950.

Acquisitions from the University Health Network filled in the CSTM medical collection with a number of significant artifacts - including older artifacts that were not yet represented in the collection: e.g., a very early ECG machine. Many of the artifacts chosen were developed and made in Canada. Among these items were the desk, microscope and hundreds of specimen slides used by William Osler when he was at school in Toronto. The microscope was made by Potter in Toronto (1861). Among the Canadian-developed artifacts are a nineteenth-century Canadian pill-making machine, Hopps serial no. 1 defibrillator, Murray's prototype artificial kidney (1946), Mann birthing forceps (1940s) and samples of early formulations of drugs (e.g., insulin and Heparin).



Mr. Anthony Smyth, Director General, CAvM and Mr. Hank Volker, admire the interactive synchronization gear display based on Mr. Volker's research to be shared with future generations.

At the Canada Aviation Museum, this year's most important acquisition was undoubtedly that of a Borel Morane dating from 1912. This aircraft is the earliest extant aircraft known to have flown in this country. Another remarkable acquisition this year was Air Canada's generous donation of a DC-9 jetliner: an aircraft which represents a truly unique chapter in Canada's aviation history. In 1966, the DC-9 marked the beginning of short-haul jet service for Air Canada, and the first experience of jet travel for many Canadians. For Canadians, the DC-9 was the beginning of an era which promised faster, quieter and more reliable air transportation than ever before.

Other newcomers to the collection included a Pitts Special: a small aerobatic type of biplane used by civilian aerobatic teams in Canada for almost 30 years. The Museum also acquired a Bowers Fly Baby, built at home in the Ottawa area by an enthusiast; a hang-glider built by Canadian gliding pioneer Muller Kites of Calgary, and a Mitchell Wing: a rigid-wing American hang-glider that was very advanced for its time. Not all of the new acquisitions were aircraft; one of the largest, and certainly heaviest acquisitions, was a Rolls-Royce RB-211-22 high-bypass turbofan donated by Air Transat through the



good offices of Rolls-Royce. This is an important addition to the collection, as it is our first example of a technology which powers virtually all large commercial aircraft flying today. Finally, from Robert W. Bradford, our former Director General and one of Canada's leading aviation artists, the Museum received a group of sketches which form a significant addition to its collection of aviation art.

The Canada Agriculture Museum attempted to acquire a 12-20 J.I. Case Crossmotor tractor this year at auction. This model of tractor exhibits technological features which make it very important in any interpretation of the development of tractors. Although the Museum went to the sale prepared to pay fair market value, it was unsuccessful in acquiring the tractor; it went instead to a private collection in the United States. This problem is not unique to the development of the historical agricultural technology collection. Unfortunately, it is common to all collection areas, and can be attributed to a combination of exchange rate and determined American collectors taking advantage of that rate.

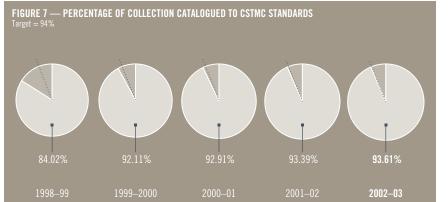
MANAGEMENT

Collection management encompasses the activities required to manage objects accessioned into the collection. These fall into two categories: record-keeping and conservation.

Record-Keeping

The Corporation maintains records for each item in the collection from three perspectives: location and current museum use, history of the item, and condition. The Corporation maintains rigorous inventory control of all collection items, to ensure that each one can be located at all times. A computerized inventory control system is updated regularly, and tracks whether an item is on loan, on display in an exhibition, or in storage. Documentation for each item includes all original records pertaining to the identity, provenance, and legal title of the item. The item is accurately identified, and information regarding significance, function, operability, history of owners, and use is prepared in a standard format for computerized storage and retrieval.

Cataloguing activity for the year saw 1,232 artifacts catalogued, 68 documented, 11 re-catalogued and/or enriched, and the cataloguing of 589 pieces of trade literature. A total of 4,904 artifact records were modified, as collection services staff worked diligently to ensure the accuracy of the database prior to its transfer into the new KE Software Collection Management system. Although we missed the Corporation's artifact cataloguing target of 94%, we were very close — despite the emphasis on database cleanup — with 93.6%. (See Figure 7.) Work also continued on the implementation of the new KE Emu collection management software.



Conservation

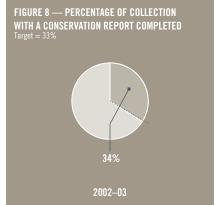
Conservation reports are required for each object, in order to evaluate the physical condition of artifacts, and to define long-term conservation requirements. Conservation reports are intended to be a state-of-the-collection health checklist which will identify any type of threat to an artifact, in time for remedial action to be taken. This reporting provides a benchmark for the condition of an object, both when it was initially evaluated, and following each subsequent use — whether in an exhibition, a program, or for loan purposes. This year, 345 artifacts were examined for the first time.

The Corporation has introduced environmental standards for collection storage in the areas of lighting, heating, humidity, security and maintenance — all of which help to determine how the collection should be housed and exhibited. Many of the buildings which the Corporation must use to house artifacts are not readily adaptable to established international museum standards — particularly in the area of relative humidity (RH) due to their age and construction. This is a common problem in many Canadian museums. Recognizing this, the Canadian Conservation Institute (CCI) designed a stand-alone module that conditions the air in a room to a user-specified RH, which can also be pumped into numerous showcases located elsewhere throughout the building. In 2001–2002, the Corporation's Conservation Division, working in partnership with the CCI,

fabricated and installed the first working module in the room which houses Canada Science and Technology's (CSTM) photographs, technical drawings, and archival collections. During this past fiscal year, a second relative humidity control module was fabricated and installed, along with a distribution system in the CSTM to supply RH-conditioned air to the showcases on the exhibition floor. The new exhibition, **Innovation Canada**, was designed from the beginning to accommodate the new system, which uses small-diameter pipes to supply conditioned air to display cases housing RH-sensitive artifacts. A smaller display

— Electrifying an Ideal: Health and Beauty in the Home — was also connected to the RH module. Other cases will be connected as new exhibitions are installed, as well as during exhibition updates. The RH units have run smoothly and reliably since their installation.

Conservation efforts during the year also supported new exhibitions and interpretive programs at all three museums. When the major new exhibition **Innovation Canada** opened at the CSTM, the Conservation Division prepared over 100 artifacts, including a 1939 Bombardier B-7, early NRC prototype pacemakers, and a Ballard Fuel Cell. Several smaller exhibitions — **Electrifying an Ideal: Health and Beauty in the Home, Measuring Gravity: 100 Years, Before the Junos — The Early Years of Canada's Recording History,**



and two small displays in memory of Yousuf Karsh and the Queen Mother also required various types of conservation activity. Artifact preparation also began on a new exhibition on forest firefighting technology at the CSTM and on bee-keeping at the Canada Agriculture Museum. At the Canada Aviation Museum, the replacement of the fabric on the wings, ailerons, stabilizers, elevators and rudder of the Curtiss HS-2L was completed. Work also continued on the restoration of the Travel Air 2000, and the Conservation Division was involved with the exhibitions **Seeking Safer Skies, Looping the Loop** and **Artflight 2002**.

Artifacts were also prepared for over 20 interpretive programs for the three museums. These programs are designed to illustrate various technologies through the use of artifacts from the collection. Some of the artifacts are operated by interpretive or conservation staff. Artifacts operated this past year included demonstrations of a 1926 Ford Model T, a 1960 de Havilland single Otter, and a 1937 Packard 1501 coupe.

A major project was undertaken at the Canada Aviation Museum in preparation for construction and occupancy of the new storage hangar. All the aircraft stored outside were examined, cleaned, tires were replaced where necessary, and the aircraft were moved to make way for the construction of the hangar. In addition, aircraft slated for display in the Museum, once all the stored aircraft are



Anthony Smyth, CAvM Director General greets senior pilots after an impressive landing of the Air Canada DC-9 at CAvM.



His Royal Highness, Duke of Edinburgh tours the CAvM accompanied by Dr. Virender K. Handa, Chairman, Board of Trustees, Mr. Christopher Terry, President and CEO and Mr. Anthony Smyth, Director General CAvM during the Jubilee Visit to Canada.

moved to the new hangar, were examined and time and cost estimates were prepared. These estimates will be used to assist in the planning and implementation of new exhibitions and/or upgrades to existing exhibitions.

The Baddeck, a prototype hydrofoil, was acquired in 1990 when it was shipped up to Ottawa from Dartmouth, Nova Scotia. It has been sitting outside on its original cradle behind the Museum ever since. This year, a new smaller cradle was designed and fabricated by conservation staff, with the generous support and help of volunteers. The Baddeck will be moved onto its new cradle in the summer of 2003, then placed into a storage warehouse to prevent any further deterioration of this significant artifact.

The Canada Science and Technology Museum operated a steam-powered Shay locomotive, manufactured in 1923 by the Lima Locomotive Works, on its grounds between 1996 and 2001. Due to several severe accidents in the United States, the province of Ontario reviewed and updated the regulations governing the certification and registration of antique boilers. To comply with these new stringent regulations, the conservation division has been working closely with the Technical Standards and Safety Authority (TSSA), which administers the regulations, in order to certify and register the Shay boiler. The Shay boiler is currently undergoing a complete analysis, using non-destructive testing procedures which required stripping the locomotive back to the boiler shell. It is hoped, barring any unforeseen circumstances, that the Shay boiler will pass all of the inspections, and that it will be reassembled in time for the 2003 summer season. This will be one of the first antique boilers to undergo the new rigorous certification and registration process.

SHARING KNOWLEDGE

The primary reason for interpreting Canada's scientific and technological heritage is to provide Canadians with meaningful information about themselves and Canada. Just as the *Transformation of Canada* theme directs research and collection activities, it likewise guides the Corporation in its knowledge-dissemination activities. These typically depict the historical development of science and technology, provide information on objects in the collection, and review relationships between science, technology and Canadian society.

The Corporation seeks to engage Canadians in discovering, considering, and questioning past and present developments in science and technology, and their impact on society and individuals. The Corporation fosters a sense of identity and belonging for all Canadians, as well as pride in Canada's scientific and technological history and achievements. It also encourages active and informed participation by Canadians in the future development of our technological society. The Corporation disseminates knowledge to its audiences in three primary ways: through its museums, its Web sites, and its publications.

PUBLIC FACILITIES

The Corporation manages three museums for the visiting public. The ultimate purpose of a museum is to provide its visitors with learning experiences, and the Corporation builds on the unique characteristics of its three museums to shape this experience. Museums are places of informal, self-directed learning, imparting knowledge and encouraging curiosity, and they contribute to learning at every stage of life.

Activities at each of the three museums are carried out in support of the following objective:

> To provide an enriching museum experience to a broad public audience.

CANADIAN SCIENCE AND ENGINEERING HALL OF FAME

The Canadian Science and Engineering Hall of Fame moved to its new location in the INNOVATION CANADA exhibition, which opened on July 1, 2002. The Canadian Science and Engineering Hall of Fame recognizes and celebrates the discoveries and inventions of outstanding Canadians. The Hall of Fame honours Canadians who have made outstanding contributions in the fields of science and engineering, and presents role models who will attract young Canadians to careers in science, engineering and technology. Public and VIP events were linked with this year's Canadian Science and Engineering Hall of Fame induction ceremony. This past year saw the induction of three new members: Dr. J. Tuzo Wilson, Dr. James Hillier and Mrs. Harriet Brooks Pitcher. The Canadian Science and Engineering Hall of Fame received Canada-wide exposure congratulating the inductees in the *National Post* and *La Presse*.



Dr. J. Tuzo Wilson

Dr. Wilson contributed to the advancement of the sciences of geology and geophysics through the study of transform faults, hot spots, plate tectonics and continental drift. His passion for practical and applied science extended throughout his life as an academic and administrator at the University of Toronto, and as Director of the Ontario Science Centre from 1974 to 1984.

Museums traditionally offer exhibitions, complemented by interpretive programming, to visiting audiences. In selecting exhibition and program ideas, preference is given to those that afford the best opportunity to utilize curatorial expertise and display artifacts from the collection, while also appealing to existing and/or potential visitors. Exhibition topics are



Dr. James Hillier

Dr. Hillier is recognized worldwide for the development of the first practical electron microscope to be used in medical and scientific research, and holds over 40 patents developed during his career at RCA Laboratories. The James Hillier Foundation, established in 1992, awards scholarships to promising science students from Brant County, Ontario.

selected, based on the range of experiences they afford, and must be thought-provoking, invite discovery, and allow for the acquisition of the widest possible range of knowledge.

A broad range of interpretive programming is offered to complement exhibitions and to broaden and enhance the visitor experience. These include school programs, demonstrations, workshops, tours, theatrical presentations and special events. All are aimed at



Mrs. Harriet Brooks Pitcher Harriet Brooks Pitcher worked alongside great scientists of the early twentieth century, including Ernest Rutherford and Marie Curie. She is credited for work on the transmutation of elements, and demonstrated that radioactive elements decay into new elements. Her research laid the foundation for understanding the structure of the atom.

increasing the public's understanding of its scientific and technological heritage, while also illustrating the theories and principles of science and technology.



FIGURE 11 — EXHIBITION PLAN 2002–2003

Exhibition	Schedule	Budget
Innovation Canada*	Yes	Yes
Power Generation (concept)*	Yes	Yes
Forest Fire Management (Production)*	Yes	Yes
Nortel Networks Connexions/Interconnexions (Update)**	Yes	Yes
Nortel Networks Connexions/Broadcasting (Update)***	Yes	Yes
Log On (Update)***		
Also completed but not on the exhibition plan for 2002–2003 were: Leonardo's Machines, Measuring Gravity, Yousef Karsh <i>and</i> Electrifying an Ideal: Health and Beauty in the Home		

* Based upon the revised schedules

** Please note the official name change of the exhibition, based on revised schedules

*** Has been postponed until further notice

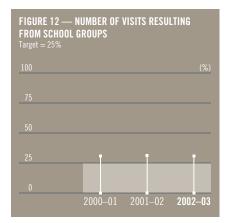
CANADA SCIENCE AND TECHNOLOGY MUSEUM

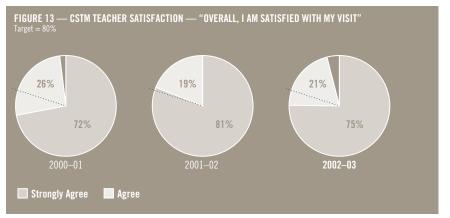
As Canada's only national museum of science and technology, the Museum is uniquely suited to the promotion of scientific and technological developments throughout the country. With this in mind, all divisions within the Museum have sought out partnerships and collaborations with outside organizations in the private and public sectors. The Museum has successfully completed and initiated a number of partnerships in the past year. A Memorandum of Understanding (MOU) was signed with the National Research Council (NRC) in late January 2003. This MOU states that the CSTM is the official repository for NRC objects worthy of preservation; it covers the involvement of the NRC in the development of the "leading edge" component of exhibitions developed by

the CSTMC; and states that the CSTMC will advise the NRC on ways in which the NRC's awareness programs — particularly those targeting youth — can be most efficiently presented or distributed to its various audiences. Partnerships with the Canadian Museum of Civilization (Gatineau), Ontario Science Centre (Toronto), Science World (Vancouver), Centre des sciences de Montréal (Montreal), La Cité (Paris) and the Department of Foreign Affairs and International Trade are still underway. All partners are actively working together to develop exhibitions at each institution. **Exhibitions, Interpretive and School Programs**

Innovation Canada opened in July 2002. This major new exhibition celebrates Canadian invention and innovation, and also houses the Canadian Science and Engineering Hall of Fame. Instruments of Discovery — a collaboration with the International Committee of Museums of Science and Technology — did not materialize, due to a lack of commitment from some of the other institutions involved. **Nortel Networks Connexions**, presented in partnership with Nortel Networks, which explores how digital networks help us share more information over greater distances, faster than ever before, is in the final stages of development. This exhibition will be ready to open in July 2003.

Several new small displays were incorporated into the exhibition plan in 2002–2003. These displays responded to the news of the day, and were used to highlight special events. They also allowed the Museum to take advantage of partnership opportunities with Heritage Portfolio members. These initiatives included the CBC's 50th Anniversary Train, which was at the Museum on September 25, 2002, and welcomed some 4,500 visitors. This event gave





the Museum visibility on a number of CBC and Radio-Canada radio and television programs. Radio programs included *Ontario Today* and *All in a Day*; television coverage included *Canada Now* (local and national broadcasts), *lci Midi* and *Ce Soir*.

To commemorate the passing of the great Canadian photographer Yousef Karsh, the Museum mounted an exhibition to coincide with the public memorial service. The exhibition was cross-promoted with the National Archives of Canada, which displayed many of his famous photographs.

Leonardo's Machines was a short-term exhibition borrowed from the Vinci Museum in Vinci, Italy, and allowed the Museum to partner with the Italian Embassy, the Italian Trade Commission, and the Economic Development Corporation of Tuscany. The exhibition was brought to Canada in support of an Italian fashion promotion at Holt Renfrew. The Museum took two models from a previous Leonardo da Vinci exhibition to Holt Renfrew in Ottawa for display purposes, and Holt Renfrew clients who purchased items from the promotion received complimentary admission to the Museum. This partnership brought national exposure in the Globe and Mail and House and Home Magazine. Ottawa was the only North American stop for this travelling exhibition.

Carleton University's School of Architecture used the prospect of a new CSTM building for its Summer Studio project. The students developed models of a possible new structure for the CSTM, using three different possible locations. These models were so impressive that Museum staff displayed some of the projects in the front lobby of the Museum to help build awareness of the project. This project resulted in an additional collaboration with Carleton's School of Industrial Design. This project will come to fruition in the 2003–2004 fiscal year. The CSTM celebrated its 35th anniversary by highlighting artifacts acquired in each of its 35 years. The exhibition Electrifying an Ideal: Health and Beauty in the Home drew considerable media interest. and the Museum took advantage of Valentine's Day to open the small display. Considerable programming was also involved during the exhibition's opening weekend and 30 artifacts related to the pursuit of health and beauty in the home were prominently displayed.

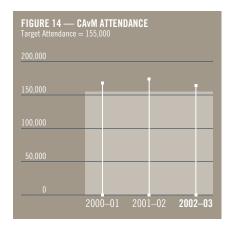
Tours of the Museum's collection storage facilities were introduced to visitors during the summer of 2002. These tours were offered during the "Jaguar Concours d'Élégance", "The Evolution of Wheels" and "Railway Fun". In all, 790 visitors took part in 35 tours.

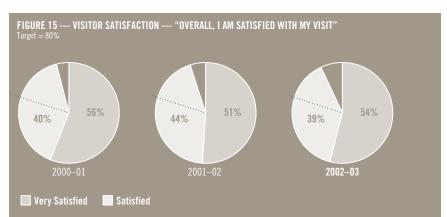
New programming partnerships were established, and existing ones were further refined. These partnerships are with local community groups such as the Bytown Railway Society, the Capital Area MOPARs, the Ottawa-Carleton Fire Department, the Ottawa Valley Mobile Radio Club, the Ottawa Robotics Enthusiasts, the Canada First Robotic Games, the Ottawa-Carleton Regional Police Bomb Squad; and EOD Performance Inc. of Ottawa. "A Song for the Season" focussed on music, with multicultural musical performances by local artists. A selection of artifacts related to the 125th anniversary of Edison's invention of the phonograph were also displayed.

March Break programming focussed on robotics. Demonstrations of "Robo-Hockey" by local high school students; demonstrations of tactical robots by EOD Performance Inc. and the Ottawa-Carleton Regional Bomb Squad, and homemade hobby robots by local hobbyists were highlighted.

Demonstrations offered to the public were evaluated during the summer of 2002. Two surveys were completed to discover what types of demonstration visitors would prefer. Choices included interactive demonstrations, sciencebased demonstrations, and non-participatory demonstrations, and visitors were also asked what types of topics they would like to see covered. The results of these surveys will assist Interpretation and Visitor Services in the planning and development of new demonstrations. "Collection Cruise" is one new demonstration added in 2002. Guides drove a 1926 Ford Model T on the grounds of the Museum, allowing visitors to experience a ride in the vehicle while learning about the technology.

The CSTM has undertaken a thorough review of the content of its Web site. This review has resulted in a complete updating of





the information, as well as removal of duplicated and outdated information. This process will continue into 2003–2004.

The Museum's collaboration with the International Academy of Design and Technology was extended into the 2002– 2003 fiscal year. This year, the Academy's students gained valuable experience by developing new educational games for the Museum's Web site.

The Atlantic Canada Opportunities Agency (ACOA) visited small museums in Kingston, as well as the Canadian Children's Museum and the CSTM. The ACOA looks at museums' best practices missions and recognizes the best museums. The ACOA came to the CSTM to learn more about the interactive programs developed by the Museum.

A new initiative in 2002–2003 was the establishment of the Parent-Child Advisory Group. This group will meet three or four times a year to review programming and interactive components under development. It will allow the CSTM to get a better sense of what kids and their parents think. It will also allow the CSTM to evaluate the accessibility and accommodation of various new ideas.

The Communications Research Centre partnered with the CSTM in 2002–2003 to present a small display in the Museum in January 2003. In return, the Centre is assisting with the updating of the **Changing Perspectives** exhibition. A partnership was entered into with the Canadian Conservation Institute, which will culminate in a small display in September 2003. The Museum's collaboration with the Royal Society of Canada continues, and will result in a small display at the Museum in November 2003, when the RSC will host a conference entitled "Energy, Environment and Society: Making Choices."

School programs enjoyed increased popularity, with over 61,000 students and teachers participating in a curriculum-linked, dynamic experience. New programs included Exciting Physics!, Materials, Structures, Heat and Light, as well as an adaptation of its extremely popular Winterlude 2002 show, entitled "Toving with Science and Technology" for school audiences. Engineering Challenge 2003, an event offered in collaboration with the National Research Council of Canada and the Professional Engineers of Ontario, was a huge success, with over 600 in attendance. Summer Camps were expanded to include an offsite camp, in collaboration with the City of Ottawa, at Stephen Leacock Public School in Kanata. Almost 1,000 young campers discovered the delights of astronomy, technology, engineering and science, including 106 in our offsite camp.

CANADA AVIATION MUSEUM

Positioning itself as the best museum of its kind in Canada, and one of the best of its kind in the world, the Canada Aviation Museum directed its marketing efforts to a judiciously selected group of audiences. During the past year, in addition to a regular and active slate of outreach and marketing initiatives, the Museum highlighted many important milestones and significant events in its institutional history. Important acquisitions such as the DC-9 and the Pitts Special aircraft helped to strengthen established relationships in the airline industry, while also facilitating the creation of new partnerships in other sectors of the aviation community. Moreover, these significant acquisitions — along with the Borel Morane — generated substantial and highly positive media coverage for the Museum. The Canada Aviation Museum was particularly honoured to be included on the Golden Jubilee Tour program this year, with a visit by H.R.H. The Duke of Edinburgh. His Royal Highness, an aviator himself, toured the collection and enjoyed a flypast of vintage aircraft which had been arranged by the Museum in conjunction with its partners at the Canadian Warplane Heritage Museum in Hamilton, Ontario. In addition, the stature and respect which the Museum commands within the aviation and museum communities was clearly apparent as a large group of supporters joined in a sod-turning event for the Museum's new wing.

As communications efforts continued to carry messages showcasing the social impact and importance of aviation to Canada's history, we also entered the centenary of the Wright Brothers' first powered and controlled flights. As partners with the organization Altitude Is Everything, the Museum launched its own centennial celebrations among luminaries of the Canadian aviation community.

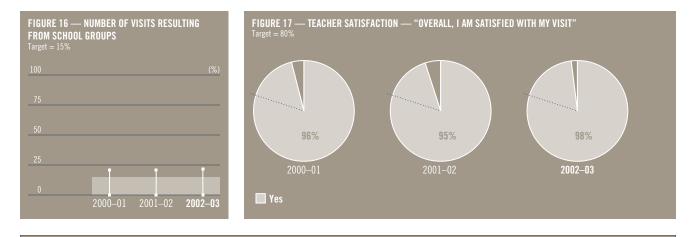


FIGURE 18 — EXHIBITION PLAN 2002–2003		
Exhibition	Schedule	Budget
Artflight 2002	Yes	Yes
Seeking Safer Skies	April 2002	Yes
Looping the Loop: Posters of Early Flight	Yes	Yes

The Canada Aviation Museum is enjoying increased recognition as a unique and impressive venue for events, receptions and presentation ceremonies. During the past year, nearly 10,000 people attended special events which used rented facilities at the Museum. Clients of our Facilities Rental Program included hightech firms, aviation industry associations, federal government departments, foreign embassies and community groups. The events included formal dinner receptions, book launches and even weddings. Five filming engagements took place this year, ranging from training films to documentary footage. This program provides substantial revenues and often introduces the Museum to visitors who have not yet enjoyed our collection. Interpretive and Educational **Programs**

Welcoming a wide range of visitors and providing these visitors with a quality museum experience is our goal, and it is a goal that was clearly achieved this year. Special guided tours of our collection were arranged for delegates from several foreign embassies, students from NavCan, members of the Canadian Aeronautics and Space Institute, the Canadian Owners and Pilots Association, and the RCMP. The Canadian Forces Language School has incorporated our tours into their language training programs. Approximately 400 high school students from across Canada have taken part in our programs through the organization Encounters Canada, and several Aboriginal community groups booked visits to the Museum as well. Over the year, Nortel Networks offered several "Full Flight" courses, introducing aviation to its employees. The Museum also substantially strengthened its relationship with the Air Cadets, both within the region and at the national level. In addition to welcoming many cadet squadrons from across the country, we hosted a regional Air Cadet Open House in September 2002, showcasing their diverse range of activities, and we provided programming consultation for their national association. Also of note are visits from the Victoria Order of Nurses, veterans groups, the Canadian Association for Girls in Science, and a variety of special education and special needs groups. For family groups in particular, our "I Spy" kits were applauded for offering an interesting and fun way to introduce our aviation collection to youngsters.

School group attendance was up this year, with a consistently high teacher satisfaction rating of 95%. Twelve different school programs are offered at the Canada Aviation Museum, addressing the needs of various regional school curricula. Properties of Air, Characteristics of Flight, and a dynamic historical presentation of Canadian aviation highlights are particularly popular among our student visitors.

Aerotech, our weekly summer camp program, enjoyed a significant increase of 15%, reaching 550 young people and satisfying an increasing need among parents for meaningful summertime activities for their children. Our sleepover program, Night Flight, continues to be popular for groups such as Guides, Scouts, Brownies and Cubs, and this year hosted approximately 4,300 children. Four sessions per week of the Sky Stuff program for preschoolers were well attended, while Round the Pole enthralled the 8-12 age group. In addition, the popularity of having a high-flying birthday party at the Canada Aviation Museum continues to grow, and all of these highquality programming activities contribute significantly to our revenue stream.

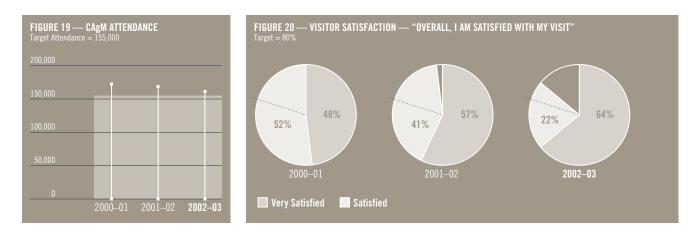


FIGURE 21 — CANADA AGRICULTURE MUSEUM EXHIBITION PLAN 2002-2003		
Exhibition	Schedule	Budget
Tractors (Production)	Yes	Yes
Bee-keeping Technology (Concept)	Yes	Yes

Special Events

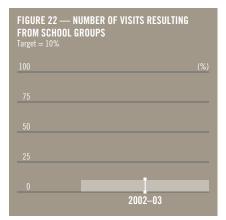
Colorful special events added great interest and depth to our museum schedule. In May 2002, we held our first Fly-in Breakfast, in which guests enjoyed an outdoor meal in full view of the action on our runways. This promises to become an exciting annual event. On September 15, 2002 we hosted a colourful, but more solemn event, as the Battle of Britain Commemoration Ceremony unfolded and honoured these special veterans. Also in September, the Indonesian Embassy graciously partnered with us, as two Indonesian kitemasters demonstrated their kite-making and kite-flying skills. Volunteers from Ottawa's Indonesian community helped the Museum offer kite workshops to several hundred pleased museum visitors. Our special events calendar was rounded out by exciting activities on Canada Day, Halloween, and the Silver Dart Anniversary of February 23, along with special days for area seniors and Museum Members. **Exhibitions**

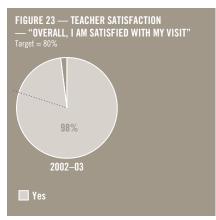
Providing variety in the Museum's public areas — despite the challenges posed by a focused collection and a lack of exhibition space — remains a primary goal of the Museum's exhibition program. These constraints continue to demand creative approaches — and a willingness to try new materials and techniques for improving displays and interpretation — all aimed at providing a memorable experience for each visitor.

Three important exhibitions were presented during the course of the year. The first, Seeking Safer Skies, explored the work of the Transportation Safety Board of Canada and revealed how the Board ensures safety in the air through a presentation of fascinating investigative tools such as black-box technology, fieldwork techniques, laboratory analysis and more. This year's Artflight exhibition, on the theme "Aviation: Lives and Locations", presented the winners of the Museum's annual competition in aviation art. For the third time in the competition's history, the designated medium was photography. Another major exhibition, Looping the Loop, was a travelling exhibition from the Smithsonian Institution in Washington, D.C. This exhibition featured vintage aviation posters, mostly from Europe. Created originally to entice spectators to air meets, and instill a sense of wonder and adventure in advertising, these rare posters document the colossal social impact of early flight, from its infancy to the outbreak of the First World War.

CANADA AGRICULTURE MUSEUM

The Canada Agriculture Museum continues to achieve considerable success as the only museum in Canada that is devoted to interpreting agriculture from a national perspective. Its unique collection of heritage and pure-bred livestock, and its collection of agricultural technology, form the basis for a range of interactive exhibitions and engaging school and public programs. A staff member from the Canada Agriculture Museum staff co-chaired the Program Committee for the Association for Living History, Farm and Agriculture Museums' (ALHFAM) very successful conference at Louisbourg on Cape Breton Island in June 2002. The Museum's Director General and its Manager of Programs and Visitor Services gave a presentation at ALHFAM entitled "Rare Breeds, Eh?" on how best to protect rare breeds. The Director General also served on a panel discussing the use of rare breeds for programming at the Museum. The Director General is on the Presidium of the International Association of Agriculture Museums (AIMA) and also represents the Museum on the Central Experimental Farm Advisory Committee and an Agriculture and Agri-Food Canada (AAFC) committee which is currently working on a management plan for the Central Experimental Farm National Historical Site.





The Canada Agriculture Museum continues to undertake historical and material culture research which will aid it in the development of various parts of the collection. This year's focus was the history of maple sap processing in Canada, and the identification of those key artifacts required to interpret that area of agricultural technology.

At the Royal Winter Fair, the Museum once again took part in the AAFC display. A museum interpreter demonstrated butter-churning to hundreds of visitors, and served tastings on crackers, along with information on the history of butter.

Exhibitions

In early 2003, work began on a proposal to find partners for a travelling exhibition with the working title **Food for Health**. The exhibition's aim is to educate Canadians about the central importance of food in their everyday lives, and their personal responsibility to choose their food wisely and to handle it safely. As of the end of March 2003 several organizations had indicated their intent to become partners.

Work on a new travelling exhibition on bee-keeping technology continues, although the opening date is still to be determined, given other concurrent exhibition projects. This exhibition will highlight the development of bee-keeping technology in Canada, and the essential role that bees play in agriculture. The majority of artifacts for this exhibition came from the Perrine collection that was acquired several years ago. The Museum's other two exhibitions — **Bread: The Inside Story** and **Tractors** — are still on display.

Interpretive and School Programs This past year, the Museum built upon its established successful programs and presented several original programs which targeted new audiences and involved new partners. Major special events, which have become well-known seasonal outings for visitors, such as Easter on the Farm, the Sheep Shearing Festival and the Ice Cream Festival, were well-attended and involved local farmers, Rare Breeds Canada, the 4-H Club, and other organizations. Regular daily interpretation involved visitors in real agricultural activities and food production, as did the Day Camp program, which operated at almost maximum capacity for the four camps over eight weeks - enabling 720 children ages 4 to 14 to participate in the workings of a farm. The Day Camp program continued to be a source of fun for the children who attended. As a testament to the day camps' popularity, many children who attended the very first Fun at the Farm camp eight years ago graduated this past summer from the Junior Farmer camp. The Museum is confident that the time children spend in the Museum's camps will create memories that will last a lifetime.

In its school programming, the Museum continues to sharpen its focus on teachers' specific curriculum needs. This year, programs targeted preschool and kindergarten groups with such programs as Say Cheese!, Here



Comes Peter Cottontail, and Talking Turkey. The Chinese New Year and A Pioneer Winter school programs were created and offered for the first time this year. Their success surpassed expectations, with 17 Pioneer Winter and 11 Chinese New Year sessions delivered.

The Museum maintained its partnership with the Ottawa-Carleton Agriculture Awareness Committee, once again hosting "A Slice of Farming", a one-day event that connects children to the farming community, by teaching them all it takes to make a pizza. Farm Operations

A farmer needs to constantly assess his or her operation in order to improve it. The Canada Agriculture Museum is a working farm, and follows the same review and evaluation process. The main dairy barn was built in 1914, and its interior layout was modernized in the early 1960s to house the Dairy Showcase. Last year, guided by the recommendations of our veterinarian, the Museum embarked on a major renovation project to increase cow comfort and to provide an area for dry cows (cows in the last two months of their pregnancies). The concrete and rubber mats on which the cows were lying were changed to sand and chopped straw. In addition, some of the hardware in front of each cow was removed to allow them to stretch out when lying down. The old water bowls were replaced with highflow water bowls which permit each cow a faster intake of water. Comfortable cows have fewer injuries, increased milk production and decreased veterinary costs, thereby making



our dairy operation more efficient and profitable. The extreme heat in Ottawa during the summer of 2002 made it a challenging year, and positive results from our investment in cow comfort were not immediately apparent. Since January 2003, however, the Museum has seen an increase in milk production as well as a reduction in leg injuries.

A new, permanent sheep paddock was created west of Building 91. This grassed, fenced-in area will allow school groups and visitors to better see the outdoor activities of our Sheep Shearing Festival, such as sheepherding demonstrations with Border Collies and dog agility demonstrations.

Museum Operations

Due to insufficient heated indoor public space, the Canada Agriculture Museum continues to offer its high quality interpretive and school programs for only an eight-month March to October period each year. In addition, the Museum's unheated exhibitions are also closed during the same four winter months. These restrictions severely impact attendance and limit the Museum's ability to reach more Canadians and it is the Museum's intention to work towards acquiring appropriate facilities to permit a move to year round operations.

A decision was made in late 2002 to permanently close one of the Museum's two public entrances: namely the one in Building 88 at the north end of the Museum. This was done for safety and security and operational reasons. Building 88 is beside a very busy east-west road through the Central Experimental Farm, and it was deemed potentially unsafe to have families with young children entering and leaving the Museum along this road. In addition, there is no public parking near Building 88. The sole entrance is now at the south end of the property, adjacent to the Museum's parking lot. As a result, visitor orientation and flow through the Museum have been improved by having a single point of entry and exit.

WEB SITES

Electronic information technologies in general, and the World Wide Web in particular, have evolved as major dissemination tools for museums. These technologies provide unprecedented opportunities for museums to reach greater audiences than could ever be welcomed to their physical sites. The Web also provides a new way for museums to facilitate public access to their collections and research.

The Corporation's use of the Web is carried out in support of the following objective:

> To make the Corporation's knowledge base available to a national and international audience.

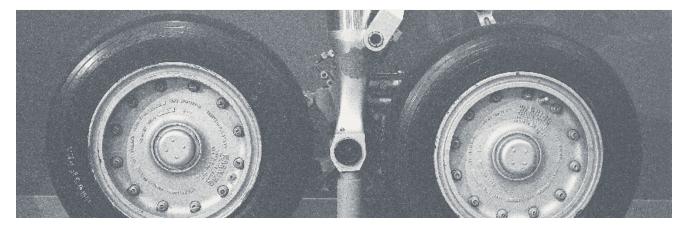
In pursuing this objective, the Corporation has focused on three principal goals:

- provide the public with direct access to the collection and research results;
- offer new products which take advantage of the unique properties of the Internet as a communications medium; and

 promote the Corporation's museums and services to a wider and more clearly defined audience.

A newly created corporate Web site was launched during the reporting period, representing a major step toward reaching specific audiences and offering new services via the Internet. This new site features activities operating under the corporate umbrella, and facilitates visitor access to news and information about the Corporation and to programs such as membership, sponsorship, donations, and employment opportunities. The site allows visitors to make a donation, buy a membership, and shop online at all three Museum boutiques, using a secure e-commerce engine. The site also presents a "Business With Us" section, with features such as a "Buying Practices" guide that offers information about purchasing procedures, practices, and policies - hence building a business-to-business relationship model with suppliers via the Web. This new Web site and its online services have been integrated into the Museums' Web sites, reinforcing the relationship between the Canada Agriculture Museum, the Canada Aviation Museum, and the Canada Science and Technology Museum sites, and providing pathways for visitors to travel between all three.

The Corporation also adopted a new Internet domain name — **technomuses.ca** — to coincide with the launch of the new site. Technomuses.ca combines the words "techno",



short for technology, and "muses", which references the Corporation's three Museums. The "dot ca" (.ca) clearly identifies the Corporation as a Canadian institution. In addition, the new domain name is bilingual, reflecting the fact that the institution operates in both of Canada's official languages. The Corporation is now using this new domain name for its online presence, including e-mail addresses and the corporate and Museum Web sites. Together with the corporate Web site, these initiatives are fundamental to the establishment of the Corporation's online identity.

On the Canada Aviation Museum Web site, there has been substantial progress with the digitization of archival photographs, with some 14,000 aviation images now mounted on the site. Web site visitors search and retrieve lower-resolution images for non-commercial use, while high-resolution scans or prints of these images can be ordered for a fee.

The Canada Aviation Museum has also focussed on developing Web essays on collection topics, and these have proven increasingly popular. This past year saw the addition of the essay 1909: An Illustrious Year, based on a popular exhibition held at the Museum. Upcoming Web essays showcase the British Commonwealth Air Training Plan, the history of the HS-2L, and the Wright Brothers. In the latter example, the Aviation Museum is drawing further connections between the content on the Web and on the Museum floor, with the exhibition Let There Be Flight: The Wright Brothers Centenary. This exhibition employes wireless technology and will open at the Museum in May 2003.

A fundamental re-design of the Aviation Museum Web site was begun during the past fiscal year. The aim of this project is to create a more seamless site, with increased content displayed in new and creative ways. In addition, universal accessibility will be emphasized on this Web site, so that those with disabilities will have equal access to our online collection. The new site is expected to be launched by July 2003.

The other Museum Web sites also continue to be enhanced. The Canada Agriculture Museum site now offers more robust search capabilities within the site. The "What's New" section now provides a "Featured Animal" component, and interactive "quiz" elements were developed for the **Tractors** exhibition. Information concerning programs and events changes almost weekly, and is one of the most visited parts of the Web site.

On the Canada Science and Technology Museum Web site, a selection of approximately 5,000 images from the CN Photograph Collection are available in the CN Images of Canada Gallery, and a photo essay entitled *Railways in Canada: A Brief History* has also been added. The Canada Science and Technology Museum Web site also includes a new photo essay, *The Arctic Diary*, documenting a scientific expedition to Alert, Nunavut, on the Arctic Ocean. Other online interactive features target different Web site audiences: the Web site's Kids Zone features several new interactive games, and the Invention Gallery showcases children's inventions.

These and other online publishing initiatives contribute to the Corporation's goal of enhancing access to the Corporation's collection and research results. Also towards this end, the Corporation continues to make good progress on the digitization of its assets: 95% of the artifact collection has digitized images, in addition to the progress made with the Museums' archival collections. Excellent progress has also been made in the digitization of the railway photograph collection.

The Corporation also makes summary information on artifact holdings — including artifact images — available via its ongoing collaboration with the Canadian Heritage Information Network's *Artefacts Canada* online database. The Corporation values such collaborations; both the Canada Aviation Museum and the Canada Science and Technology Museum are members of the Images Canada partnership (imagescanada.ca), and the Corporation has contributed to the Virtual Museum of Canada (virtualmuseum.ca).

Progress towards making Web-enabled views of the library and collection databases was slower than planned, as the limited corporate resources were focussed on other projects. The Corporation's online library catalogue (OPAC) is available for the public visiting the Museums, but is not yet available via the Internet. And implementation of the online



database for the Corporation's collections and advanced searching mechanisms — expected to span all Corporate holdings — have also been delayed.

The Corporation remains committed to produce and distribute, to a vast audience, specialized intellectual products which provide context and meaning to Canada's scientific and technological heritage. To this end, the Corporation has begun researching possible technologies to use in interpreting the "Transformation of Canada" theme, in order to feature applications which demonstrate how all aspects of science and technology have changed Canada. However, progress on this project has been limited, as the Corporation's limited resources for Web development were focussed on successfully launching other new interactive services such as e-commerce. Funding for a project of such breadth remains a challenge.

PUBLICATIONS

The accumulated knowledge resulting from research, collection and preservation activities must be shared with the world at large, in order to promote understanding of Canada's scientific and technological heritage. This knowledge is of value to museums, researchers, and interested members of the public, both in Canada and abroad. Publications remain an effective method of sharing this information.



Publication activities are carried out in support of the following objective:

> To make the Corporation's knowledge base available to a national and international audience.

Les véhicules d'incendie sur commande : nécessité technologique ou construction sociale by Suzanne J. Beauvais was published in the Museum's research report series as Transformation 12. Research for this title was completed in cooperation with the University of Ottawa, which awarded it Le Prix de la Commission des études supérieures en humanités. Extensive use of the Museum's archival collections was made in the preparation of this publication.

The corporate commitment to the fostering of an enlivening interdisciplinary view of our heritage is expressed through the Museum's journal Material History Review (MHR). The first of two numbers published during the year (#55) included staff submissions related to the CSTM's unique collection of industrial decals and a review of the Carnegie Museum exhibition on aluminum. *Clothing* was the title of a theme issue (#56) guest-edited by Élise Dubuc of the Université de Montréal. Two of the articles approach the subject of clothing with a specific interest in the techniques and tools of fabrication. The first addresses the quintessentially Canadian subject of the beaver hat; the second concerns itself with the cultural technology of clothing manufacture among the Inuit. The ongoing issue of museums and the

people represented through their collections is addressed in the context of First Nations clothing in the collection of the Canadian Museum of Anthropology (Vancouver).

New titles for 2002–2003 in the "Collection Profile" and "Curator's Choice" series were deferred for the year, due to the unprecedented demands of the CSTM Visioning Study. However, a new module: *Railways in Canada* — *A Brief History*, was added to the CSTM/CN Images of Canada Web site during the past year.

The annual Material History Review board meeting was attended by representatives of Queen's, Laval and Memorial Universities. More formal partnership links between the journal and Université Laval were discussed, as was the potential for integrating planning for future theme issues into a Memorial/Laval SSHRC-funded series of three workshops on material culture, to be held in Quebec City ("objets mobiliers" the changing contextual meaning of objects in space and time), St. John's (issues surrounding objects and museum practices) and Ottawa. Discussion of the Ottawa workshop focussed on the CSTM as a venue, and the incorporation of CSTM collections and research in the program.



Support Activities

A number of activities are carried out in support of the Corporation's museological activities. These include facilities management, revenue generation, informatics and administration.

FACILITIES

Facilities are an integral part of museum operations. They do more than house staff; they also provide a venue for the public, and housing for the collection.

Facilities have a profound effect on museum visitation. Appropriate museum architecture attracts visitors, contributes to the actual museum experience, and becomes part of an institution's public image, as a symbol of its mandate. A large number of comments by visitors allude to satisfaction or dissatisfaction with the quality of our facilities and related services. Providing services for museum visitors requires special efforts not associated with office space.

Similarly, the provision of appropriate collection storage is essential for the long-term safeguarding of the collection. This requires control over all environmental factors which can become agents of deterioration. The size of some artifacts in the collection also raises specific needs in terms of access, and the ability to move these artifacts when required. Facility activities are carried out in support of the following objective:

To provide quality venues for public programming activities and protection of the collection, and to promote operational effectiveness.

Facility projects during the past year included renovation to the cafeteria and rebuilding the foundation infrastructure, allowing the construction of a new twotiered exhibition at the Canada Science and Technology Museum. Environmentallycontrolled showcases, developed in conjunction with the Canadian Conservation Institute, were installed in both exhibitions and storage spaces, and served to compensate for the general environmental conditions inside the Museum.

Due to the age of the CSTM building, limited work was carried out on the building, which is nearing the end of its lifecycle. A modification to the heating and cooling systems at the Canada Aviation Museum was completed, and the reduction in electricity consumption will provide for a three-year payback on the investment, while also providing a better environment.

A thorough review of the lease market was completed, in preparation for the renegotiation of two existing leases which expire within the next twelve months. The leases are being reworked, taking into account the feasibility study for a new building for the Canada



Science and Technology Museum, to ensure that a cohesive long-term strategy remains in place.

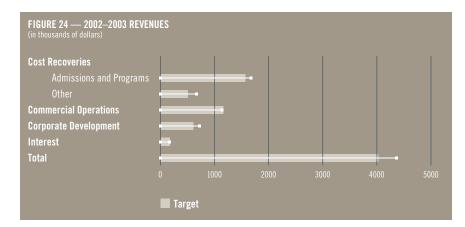
At the Canada Agriculture Museum, work was completed in the Dairy Barn to improve conditions for the dairy herd. These should result in increased milk production.

The Corporation occupies a total of 61,530 square metres, at a cost of \$105 per square metre, which met the established target for the year. Increased utility costs continued to put pressure on the overall facility budget.

REVENUE GENERATION

Revenue generation provides a means by which the Corporation can supplement its government appropriation, thereby contributing to the fulfilment of its mandate. The success of revenue-generating initiatives depends on a sound knowledge of markets, and the development of attractive and saleable products.

Revenue-generating activities can also help the Corporation to establish links with its supporters and with various communities. The Corporation and its museums can benefit from strengthening these alliances, whether to individuals, through activities such as its membership program, or to the corporate sector through sponsorship initiatives.



Revenue-generating activities are carried out in support of the following objective: *To increase the financial resources available to the Corporation for the fulfilment of its mandate.*

The Corporation continues to supplement its operating budget from admissions, the sale of its products and services, and sponsorships and donations. The Corporation also generates resources (services and money) through the active solicitation of volunteers and members. It will continue to charge appropriate admission fees in light of factors such as increasing costs, product improvement and market tolerance. Figure 24 identifies areas of revenue generation, and performance achieved against established targets.

Total revenues for the year were \$4.359 million, exceeding the revenue target of \$4.020 million. This total was 8.5% higher than the target, and 4% more than the previous year, thanks to continued strong demand for the Corporation's educational and group programs.

Other revenue includes revenues from the sale of farm products (mainly milk) at the Canada Agriculture Museum, and from programs such as the Air Experience at the Canada Aviation Museum, and travelling exhibitions. The development of sales through the Corporation's Web sites was launched in March. In addition, revenue from the Simex^{™M} simulator have stabilized at a lower price point. Sales of other products such as the Akman repeaters are gaining acceptance, but at a slow growth.

Total revenues for Corporate Development, which includes membership, sponsorship and philanthropic fundraising, were \$719,000. This figure does not include the additional \$49,000 of in-kind sponsorship fees paid to the Corporation. As a result of fundraising efforts, the annual campaigns have generated a net \$71,271 in cash contributions. The Corporation has recognized \$292,263 of its trust funds in support of restoration and educational programs. In addition, the Corporation continues to service sponsors that have contractually committed to paying \$690,000 in cash rights fees, which will be realized by the Corporation over the next four years. In addition, a pilot program referred to as the Corporation's Partnership Program, which is aimed at supporting outreach objectives, was successfully launched. Decisions to undertake future initiatives under the umbrella of this program will be dependent upon the Corporation receiving increased financial resources.

In fundraising, the Corporation successfully completed its sixth annual appeal for the Canada Aviation Museum, and conducted donations efforts for both the Canada Science and Technology Museum and the Canada Agriculture Museum. In addition, the fundraising program continued to secure future gift commitments through its planned giving program.



The Membership Program continued to grow during this fiscal year, enjoying increases in both its membership base and its revenues. The Program surpassed its \$190,000 revenue target, generating \$216,000, and exceeded its forecasted profit margin as operating expenses were less than expected. This growth continues to be the result of increased membership promotions and effective renewal campaigns. In the category of paid visits by the local general public, members continue to account for a large percentage of the Corporation's local visits. The Membership Office continues to generate revenue, encourage attendance, support public programming and cultivate continued support and patronage for each of the three museums by coordinating Members' Only events, promoting all museum activities through mass mailings, encouraging public program and workshop registrations with electronic communications, and supporting local community goodwill and public relations initiatives.

During the past fiscal year, the Corporation's fundraising and membership programs incorporated online giving and membership sales options, in order to capitalize on increased visitation to the Corporation's three Web sites. Corporate Development will continue to work with various areas of the Corporation for the purpose of further developing these strategies.



INFORMATICS

Informatics activities include the provision of advice, support services and the management of services related to computers and information technology, such as market trends, the e-commerce environment, technology assessment, evaluation and selection. The Corporation endeavours to optimize the investments it makes in computer technologies, software and staff by striking an appropriate balance between needs, expectations and desires of the public and staff.

Informatics activities are carried out in support of the following objective:

To enable the fulfilment of the Corporation's public role in providing national and international audiences secure access to corporate information resources as well as to facilitate internal business practices.

In achieving this end, several activities were identified as priorities for 2002–2003:

- reviewing the capital replacement plan for computer hardware and associated linkages;
- updating the Information Technology Strategy and Plan document to develop a secure, scalable, and reliable IT infrastructure, and assess and deliver an appropriate document control solution for the Corporation;

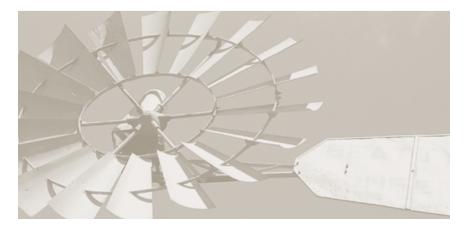
- developing and implementing a corporate staff training plan; and
- creating and implementing a security and data protection plan.

The corporate information technology strategy was reviewed this past year. From this review, several strategic IT infrastructure investments were identified, including a network infrastructure upgrade (both hardware and operating software); improved data storage management and enhanced data protection; improved telecommunication connectivity (data and voice) between campuses and to the Internet; a server upgrade strategy; and upgrading the Corporate workstation environment (hardware, operating systems, and software). These capital investments will be made over a three-year period.

Network and data communication upgrades were also planned and procured. The new telecommunications infrastructure will increase data communication speeds between campuses by two to three orders of magnitude (to a capacity between 100 Mbps and 1 Gbps), and to the Internet by seven times (from 1.5 Mbps "T1" to 10 Mbps). Performance and reliability within campuses will also be dramatically improved. The new inter-campus and Internet services offer flexibility for capacity management, and come at a much lower cost than current services. These improvements will offer immediate improvements for members of the public visiting the Corporation's Web sites, and will improve general network reliability, allowing the Corporation to employ state-of-the-art applications. These improvements will allow the Corporation to manage network qualityof-service, enabling future measures such as disaster recovery, data management, and voice-over-IP. This new infrastructure is also very scalable and adaptable for future needs. Implementation of these improvements is ongoing into 2003–2004.

A new corporate computer workstation environment was designed, tested, and deployed during the reporting period; this new environment is based on the latest operating system technologies, and provides enhanced features for security, user productivity, and user support. To deploy this new environment, the Corporation invested significantly in the replacement of aging workstation hardware.

Corporate information security needs were also reviewed, including a comprehensive threat and risk assessment. Key information security investments in 2002–2003 included a new secure Internet firewall gateway, and enhanced protection from "malware" such as computer viruses. The Informatics Division also assessed data storage management practices and technologies, with the aim of improving availability and protection of data. The Corporation's IT Strategy will be updated to reflect the future directions identified by this study.



Informatics is active in projects related to the delivery of museum and corporate information. The division continues to develop, coordinate and support corporate initiatives on the Web, in collaboration with partners within the museums and external to the Corporation. Many of these initiatives are outlined further in the report on Web sites.

The Division also made enhancements to internal operations, such as information technology standards, management of technical support, and an information technology training plan.

ADMINISTRATION

Administrative activities include the provision of advice, support services and control of resources. The Corporation endeavours to optimize its investment in administrative activities by striking a balance between cost and quality-of-service.

Administrative activities are carried out in support of the following objective:

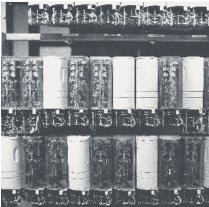
> To provide effective and efficient services within a framework of appropriate management control.

As a federal Crown corporation, the CSTMC is subject to numerous pieces of legislation and many regulations and government policies. The Corporation's strategy may be summarized as good corporate citizenship; that is, the Corporation strives to ensure that it operates effectively, efficiently and economically in accordance with legislative requirements, sound business practices and ethical management standards. The Corporation recognizes the importance of its workforce, and its contribution to the accomplishment of its mandate and objectives.

Progress continued on the development of a new classification system for the Corporation. Elements concluded this year included the design and testing of the classification standard, the development of a position questionnaire, and the completion by staff of the questionnaire. The workload was very demanding on staff involved in the first phase of the process, but it is anticipated that the system will be completed by the end of the next fiscal year.

The Corporation underwent an audit by the Canadian Human Rights Commission (CHRC) of its employment equity program and practices. Measures taken as a result of the audit included completion of a workforce survey and analysis, and a review of the Corporation's employment systems. An action plan to achieve full compliance with the CHRC requirements has also been completed.

Human Resources made good progress in implementing a new Human Resources Information System. The System was selected through a Request For Proposal process, and the payroll module was fully implemented. The remainder of the modules are expected to be implemented by the end of December 2003. A threat and risk analysis of information technology was also completed as part of a



review and update of the Corporation's data network and data security systems.

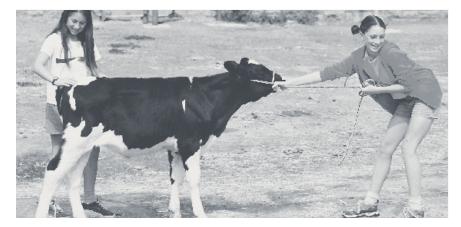
Other accomplishments in Human Resources included the successful negotiation of a one-year collective agreement, and the development and implementation of a new employee service awards program.

The Corporation had set an objective of limiting its administrative overhead to 18%, (including the core administrative functions of Finance, Human Resources, and Administrative Services, as well as the Directorate and Board of Trustees, and those Facilities, Protection and Common Services costs which cannot be attributed to any operational activity). This year's actual result was 21%, which was higher than the target, due to the inclusion of one-time costs associated with the CSTM visioning study. If these costs are excluded, the administrative overhead was 18.2%.

Internal Audit and Evaluation

INTERNAL AUDIT

The Canada Science and Technology Museum Corporation, in accordance with Section 131(1) of the *Financial Administration Act*, has an annual internal audit program which is carried out by contract auditors. This program is supplemented by an annual audit of the Corporation's financial statements by the Auditor General of Canada.



As part of its annual internal audit program, the Corporation completed an audit on the management of its records. The Corporation recognizes that effective recordkeeping is a sound business practice and a requirement under the law. To ensure that effective record-keeping is sustained, it must be supported and fostered by a framework of good records management practices. The objective of this audit was to identify areas of risk, and to provide recommendations to assist the CSTMC in continuing to develop its records management program, with a focus on compliance with federal government legislative, regulatory and policy requirements and the management of electronic records.

Consulting and Audit Canada was engaged to perform the audit, which took place over a period of three months beginning in November 2002. The consultants found that the corporate culture of the CSTMC recognizes the importance of information to the work of the Corporation, and that it has an intrinsic understanding of the value of information collection, organization and preservation. The information environment at the CSTMC, however, is progressively more electronic, and there are major gaps in the way that electronic information is captured, organized, accessed, shared, stored and disposed of — which point to risks in complying with the Management of Government Information Holdings policy and other government policies.

In addition to addressing deficiencies in the records management practices of the Corporation, the recommendations provided in the audit report will assist staff in the selection and implementation of an electronic system for the management of its electronic records.

EVALUATION

The Corporation continues to study and monitor its public programming performance, using a range of evaluation techniques. **Keeping Current Visitors**

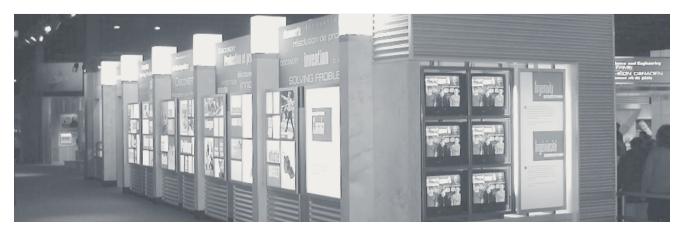
Current visitors at the three museum sites are maintained by "churn management" techniques which identify the museum experiences that lead to repeat visits and word-of-mouth recommendations, as well as the experiences that lead to dissatisfaction and reduced visits. Visitor surveys, comments, and mystery visits provided feedback for museum programmers. Visitor surveys are handled by computer kiosks that can give questionnaire data without interviewer bias or data-entry errors.

Over the last decade, overall visit satisfaction has been measured more or less regularly. When reported as total satisfaction,



including all responses above a neutral midpoint, the index is insensitive to all but the most significant changes in visitor experience. Typically, it hovers near the 90% mark. Viewed as "top box": i.e., only those visitors who report being "very satisfied", the index is much more sensitive to changes in exhibition offerings, competition, and visitor services, and can vary yearly from 33% to 65%. Although evolving collection methods and seasonal changes cloud the trends somewhat, investments in visitor services, family programming and exhibition development at the CSTM and CAvM seem to have enjoyed increased satisfaction in the mid-1990s, followed by a slight decline in recent years as exhibitions age, demographics change, and competing museums improve. The CAgM is more variable, perhaps reflecting its novelty.

Total attendance is generally linked to satisfaction scores, but the heterogeneity of visitor segments and time-lag between most museum visits obscures this relationship. For example, a Summer 2002 survey at the CSTM gave a top box score of 80%, but results from winter season visitors using our computer kiosk suggest that 40% was more likely. When particular segments are considered, clearer links appear. At the CSTM, the drop in family visitation revealed during a brand audit was foreseen by a trend analysis of satisfaction that found a drop in satisfaction within this group.



In hindsight, more forecasting is needed, so that programmers can understand the dynamics of the museum experience and can manipulate the details of their programming to forestall attendance declines. More in-depth analysis of previous survey results reveals strong relationships between overall satisfaction and contributing variables:

	CSTM	CAvM
l had fun	.77	.63
Museum has something for everyone	.49	.39
Enough to see and do	.63	.49
Inviting atmosphere	.53	.51
Learned something new	.40	.38
Admission price acceptable	.46	.37
l got lost during visit	.01	01

Such information can help determine what decisions will make a difference to visitors, although the connection is not selfevident. Satisfaction reflects performance of the Museum against the expectations visitors bring. For example, atmosphere seems to be as important in both museums, even though the CAvM has a more attractive building. Closer examination with cross-tabulations reveals that this leads to much higher overall satisfaction figures at the CAvM, but predictably generally lower figures at the CSTM: a pattern not clear from simple correlation values. The implication is that building atmosphere does matter, and that the CAvM should strive to avoid impairing its existing atmosphere, while the CSTM would benefit from building improvements.

The survey kiosks also function as comment card boxes. They appear to give the same kind of information as the paper cards, but the comments, ratings, and visitor information are already in a computer file, enabling analysis, reporting, and follow-up. Comments are e-mailed to museum contacts and the Evaluation Division twice a week.

Mystery visits were carried out at all three museums, identifying some improved areas at the CAvM. This was the fourth year such visits occurred, and there now is enough information to begin looking for patterns and trends, and to assess how well staff use such information to improve their practices.

Public programs and special events are a major tool in all museums for increasing repeat visits. CSTM staff carried out a large front-end study of what special programs visitors would like to see. A considerable amount of data was gathered, and extensive analysis carried out, to better understand what appeals to visitors.

Major new exhibitions are also an important draw for visitors. To ensure that the **Nortel Networks Connexions** exhibition would be well-received, the CSTM set up a Parent-Child Advisory Group to investigate some of the issues around large-scale, immersive interactives and differently-abled children. As is standard for this museum, intensive formative evaluation was carried out on interactive display prototypes, greatly increasing their likelihood of success when the exhibition opens.

Attracting New Visitors

Attracting new types of visitors is an extremely difficult task for museums, as it involves developing truly different exhibitions, programs, advertising, and target markets. Familiar and safe practices create ruts that museum staff can all too easily fall into again, as they struggle to create innovative products and services, and address constituencies hitherto considered unimportant.

A major initiative in this area arose from the CSTM, as it explored the range of possibilities for a new and larger museum. This visioning exercise drew on expertise from in-house and external museum experts, and a very significant suite of research studies. Included were focus groups, a visitor exit survey, an innovative segmentation study, and even a national poll on what Canadians expect from a truly national science and technology museum. One key proposal from the visioning study was to greatly expand collection tours into an open collection concept. Feedback from existing collection tours was used to identify the major issues surrounding public programming in the collections.



Perhaps the largest potential for new "visitors" exists in the online world. The Corporation's museums have had active Web sites for a decade, but an increasing emphasis on outreach has spurred the development of enhanced computer infrastructure. New server software enables the CAvM to know where visitors come from. Regular reporting of Web site statistics tells museum staff what pages are most popular.

Building Evaluation Capacity The Evaluation and Research Division trains and consults with museum staff to develop their marketing research and evaluation skills, as well as their strategic approach to product development. This year, program managers at the CSTM worked with the division on ideas for new programs, research design, SPSS (Statistical analysis software) use, comment card design, and brand audit implementation.

The CAvM used the latest visitor profile information in a strategic planning retreat. For the first time, comparative visitor satisfaction figures were used as well. Based on an earlier phone survey covering all the national museums in the National Capital Region, these figures showed that the CAvM was the category leader on a number of facility variables, such



as parking, lighting and washroom location. It was ranked second in the important "something for all", and "lots to see" categories, as well as in seating, food services, proactive staff and admission fees. However, it was at the bottom of the standings in fun, learning, and interactive function. Paradoxically, this room to grow is good news. The CAvM is already a very successful museum, with high visitor satisfaction and steadily growing attendance. Increasing performance in these museum learning areas with new exhibitions will likely produce even greater success for this popular museum.

On a corporate level, improvements were made in the environmental scanning process by providing a conceptual framework and bringing together a work group to prepare an outlook for use in the Corporation's strategic plan. Demographic change, political priorities, and new technologies were identified as important issues. To disseminate evaluation information beyond the immediate clients for particular projects, new, targeted and proactive channels were developed. An e-mail newsletter of current research and happenings inside and outside the Corporation was circulated to 50 interested staff. A lively video presentation, *The Ironing Display* — A Video Evaluation, on visitor reactions in the Love, Leisure and Laundry exhibition was produced and made available to all staff over the corporate computer network.

Networking with other museums helps bring in information on museum performances and practices. The Evaluation and Research Director participated in a critical appraisal of the new First Peoples Hall at the Canadian Museum of Civilization. A more formal arrangement of sharing visitor survey results among all the museums in the region was initiated by the CSTMC. Considerable interest was evinced by the parties during the initial meetings, but formal commitment was not achieved as of year-end. Informal exchanges will still occur among the museums that do carry out visitor research and want to improve their practices through benchmarking.

The Year in Statistics

The following is a statistical profile of some of the Corporation's activities during the year.

CANADA SCIENCE AND TECHNOLOGY MUSEUM CORPORATION

	2002–2003	2001-2002
Collection Development and Management		
Number of artifact collection records	34,568	33,491
Number of artifacts acquired	682	671
Percentage of artifacts acquired by donation	79.4%	77.5%
Number of artifacts on loan	473	422

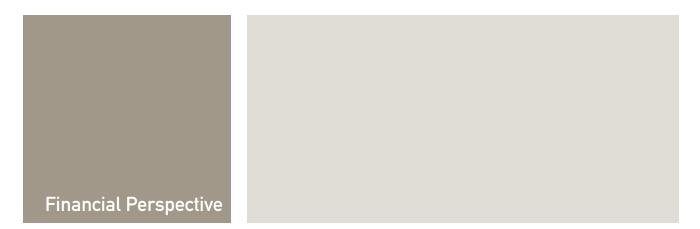
CANADA SCIENCE AND TECHNOLOGY MUSEUM

	2002–2003	2001-2002
Museum Access and Use		
Number of school group visits	2,536	3,271
Number of participants in school group visits	112,244	118,576
Number of school program modules offered	46	43
Number of demonstrations, tours and workshops given	7,708	6,909
Number of people participating in demonstrations, tours and workshops	259,738	257,548
Number of special events held	19	20
Number of participants in special events	95,346	82,804
Number of travelling exhibitions on tour	2	4
Number of venues receiving travelling exhibitions	3	6
Number of visitors to travelling exhibitions (estimated)	1,028,780	62,000
Number of offsite demonstrations or events	10	1
Number of visitors to offsite demonstrations or events	4,871	8,742
Other use of facilities (number of participants)	6,759	6,309
Number of Web site user sessions	975,800	784,000

CANADA AVIATION MUSEUM		
	2002–2003	2001-2002
Museum Access and Use		
Number of school group visits	1,095	1,133
Number of participants in school group visits	35,465	36,733
Number of school program modules offered	15	12
Number of demonstrations, tours and workshops given	2,595	3,163
Number of people participating in demonstrations, tours and workshops	44,960	72,000
Number of offsite demonstrations or events	10	10
Number of visitors to offsite demonstrations or events	45,390	22,000
Other use of facilities (number of participants)	16,660	4,250
Number of Web site user sessions	472,265	381,311

CANADA AGRICULTURE MUSEUM

	2002–2003	2001-2002
Museum Access and Use		
Number of school group visits	603	440
Number of participants in school group visits	18,275	14,402
Number of school program modules offered	52	34
Number of demonstrations, tours and workshops given	3,732	3,764
Number of people participating in demonstrations, tours and workshops	86,513	83,260
Number of offsite demonstrations or events	2	8
Number of visitors to offsite demonstrations or events	200,300	225,000
Other use of facilities (number of participants)	4,500	688
Number of Web site user sessions	141,710	78,236



The appropriation originally voted by Parliament was \$24.833 million, which included \$2.450 million for the construction of a new collection storage and archives wing at the Canada Aviation Museum. This amount has been deferred and will be recognized during the construction. During the year, funding was supplemented by \$1.2 million to help in stabilizing capital structures, \$1 million to establish the requirements for a new Canada Science and Technology Museum and \$687,000 for personnel cost adjustments.

FIGURE 25 — COMPARISION OF FINANCIAL RESULTS <i>(in thousands of dollars)</i>				
	2003 Plan	2003 Actual	2002	2001
REVENUES				
Parliamentary Appropriation	\$ 24,009	\$ 26,196	\$ 22,416	\$ 22,594
Generated Revenues	4,020	4,359	4,251	3,765
Total Revenues	\$ 28,029	\$ 30,555	\$ 26,667	\$ 26,359
EXPENSES				
Personnel	\$ 14,467	\$ 15,035	\$ 13,883	\$ 12,975
Accommodation	6,620	6,460	6,802	5,622
Depreciation	2,382	1,206	1,235	1,245
Operations	5,098	7,757	6,316	5,476
Total Expenses	\$ 28,567	\$ 30,458	\$ 28,236	\$ 25,318
Net Income (Loss)	\$ (538)	\$ 97	\$ (1,569)	\$ 1,041
EQUITY OF CANADA	\$ 652	\$ 51	\$ (46)	\$ 1,523

This past year, revenues increased by \$108,000 as a result of a continued growth in educational programs and a recognition of trust income offsetting the cost of acquiring artifacts.

Overall costs increased by \$2.2 million with the new Science and Technology study of \$1 million — a one-time expense — along with additional personnel costs of \$1.1 million, accounting for much of the increase. Building repairs and upkeep have decreased from the previous fiscal year, when emergency repair work to the brick envelope of the Canada Science and Technology Museum building was completed. The Corporation has had to delay some repairs in order to offset increases in taxes and utilities and overall funding pressures. No major work was undertaken at the Canada Aviation Museum, as we are waiting until the collection has been moved to the new hangar. There was also a limited amount of work undertaken at the Canada Science and Technology Museum. The timing of a possible new museum building will have an impact on work planned at this site, in order to ensure a proper return on investment in the current facilities.

The Corporation regained a positive equity position, due mainly to delaying some projects. Increased labour costs, the maintenance of aging buildings, and increased utility costs are eroding the Corporation's ability to meet its mandate. The Treasury Board has recognized these pressures, and is leading a review of facility costs in cultural institutions in order to address funding anomalies between Departments and Crown corporations. In addition, managing three museum sites with current resource levels is becoming increasingly difficult, and opportunities for growth and innovation are compromised due to the strain in funding. A stronger reliance on sponsors and partners is an option which will assist the Corporation in the fulfillment of its objectives. Museum management continued its efforts to balance collection needs and public expectations of a national institution within available resources.

Financial Statements







Management's Responsibility for Financial Statements

The financial statements contained in this annual report have been prepared by Management in accordance with Canadian generally accepted accounting principles, and the integrity and objectivity of the data in these financial statements are Management's responsibility. Management is also responsible for all other information in the annual report and for ensuring that this information is consistent, where appropriate, with the information and data contained in the financial statements.

In support of its responsibility, Management has developed and maintains books of account, records, financial and management controls, information systems and management practices. These are designed to provide reasonable assurance as to the reliability of financial information, that assets are safeguarded and controlled, and that transactions are in accordance with the *Financial Administration Act* and regulations, as well as the *Museums Act* and the by-law of the Corporation.

The Board of Trustees is responsible for ensuring that Management fulfils its responsibilities for financial reporting and internal control. The Board exercises its responsibilities through the Audit Committee, which includes a majority of members who are not officers of the Corporation. The Committee meets with Management and the independent external auditor to review the manner in which these groups are performing their responsibilities and to discuss auditing, internal controls, and other relevant financial matters. The Audit Committee has reviewed the financial statements with the external auditor and has submitted its report to the Board of Trustees. The Board of Trustees has reviewed and approved the financial statements.

The Corporation's external auditor, the Auditor General of Canada, audits the financial statements and reports to the Minister responsible for the Corporation.

Christopher J. Terry

Christopher J. Terry Chief Executive Officer

May 30, 2003

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Fernand Proulx Executive Director Finance, Administration and Facilities



AUDITOR'S REPORT

To the Minister of Canadian Heritage

I have audited the balance sheet of the National Museum of Science and Technology as at March 31, 2003 and the statements of operations and equity of Canada and cash flows for the year then ended. These financial statements are the responsibility of the Corporation's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 2003 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles. As required by the *Financial Administration Act*, I report that, in my opinion, these principles have been applied on a basis consistent with that of the preceding year.

Further, in my opinion, the transactions of the Corporation that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with Part X of the *Financial Administration Act* and regulations, the *Museums Act* and the by-laws of the Corporation.

Flescole

Richard Flageole, FCA Assistant Auditor General for the Auditor General of Canada

Ottawa, Canada May 30, 2003

as at March 31		
(in thousands of dollars)	2003	200
	2003	 200
ASSETS		
Current		
Cash and short-term investments (NOTE 3)	\$ 6,495	\$ 3,57
Accounts receivable		
Government departments	1,404	1,45
Others	364	35
Inventories	442	41
Prepaid expenses	398	40
	9,103	6,21
Restricted cash and investments	209	34
Collection (NOTE 4)	1	
Property and equipment (NOTE 5)	10,472	9,95
	\$ 19,785	\$ 16,51
LIABILITIES AND EQUITY OF CANADA		
Current		
Accounts payable and accrued liabilities		
Accounts payable and accrued liabilities Government departments	\$ 276	\$ 13
	\$ 276 2,949	\$
Government departments Others		\$ 2,13
Government departments Others Current portion of employee future benefits	2,949	\$ 2,13 9
Government departments	2,949 245	\$ 2,13 9 9
Government departments Others Current portion of employee future benefits	2,949 245 539	\$ 2,13 9 9 2,45
Government departments Others Current portion of employee future benefits Deferred revenues	2,949 245 539 4,009	\$ 2,13 g 2,45 1,39
Government departments Others Current portion of employee future benefits Deferred revenues Employee future benefits <i>(NOTE 6)</i>	2,949 245 539 4,009 1,470	\$ 2,13 9 9 2,45 1,39 34
Government departments Others Current portion of employee future benefits Deferred revenues Employee future benefits (NOTE 6) Deferred contributions (NOTE 7)	2,949 245 539 4,009 1,470 209	\$ 13 2,13 9 9 2,45 1,39 34 12,37 (4

Commitments (NOTE 9)

The accompanying notes and schedule form an integral part of the financial statements.

Approved by the Board of Trustees

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Chairman

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Chairman, Audit Committee

STATEMENT OF OPERATIONS AND EQUITY OF CANADA

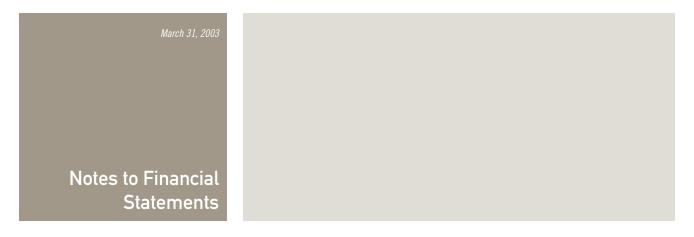
for the year ended March 31

(in thousands of dollars)	2003	2002
REVENUES		
Admission		
Science and Technology	\$ 920	\$ 861
Aviation	459	484
Agriculture	293	308
Other	666	701
Commercial Operations	1,135	1,111
Corporate Development	719	598
Interest	167	188
Total Revenues	4,359	4,251
EXPENSES (SCHEDULE) Collection Management	5,106	4,885
Public Facilities		
Science and Technology	9,891	9,432
Aviation	5,302	5,361
Agriculture	2,580	2,467
Support Activities	6,373	4,856
Amortization of property and equipment	1,206	1,235
Total Expenses	30,458	28,236
Excess of Expenses over Revenues	(26,099)	(23,985)
Parliamentary Appropriations (NOTE 11)	26,196	22,416
Net Income (loss)	97	(1,569)
Equity (deficit) of Canada at the beginning of the year	(46)	1,523
Equity (deficit) of Canada at the end of the year	\$ 51	\$ (46)

The accompanying notes and schedule form an integral part of the financial statements.

STATEMENT OF CASH FLOWS		
for the year ended March 31		
(in thousands of dollars)	2003	200
CASH FLOWS FROM OPERATIONS		
Cash received (clients)	\$ 4,030	\$ 3,658
Parliamentary Appropriations received	24,020	22,78
Cash paid (employees and suppliers)	(28 081)	(26,60)
Interest received	167	188
Total cash flows used in operating activities	136	27
Acquisition of property and equipment Decrease (increase) in restricted cash and investments Total cash flows used in investing activities	(1,723) 135 (1,588)	(2,305 (103 (2,408
CASH FLOWS FROM FINANCING ACTIVITIES	(1,000)	(2,400
Funding for the acquisition of property and equipment	4,173	4,095
Restricted contributions and related investments income	197	185
Total cash flows provided by financing activities	4,370	4,280
NCREASE (DECREASE) IN CASH	2,918	1,899
INCREASE (DECREASE) IN CASH Cash and short-term investments, beginning of the year	2,918 3,577	1,899 1,678

The accompanying notes and schedule form an integral part of the financial statements.



1. AUTHORITY, MANDATE AND OPERATIONS

The National Museum of Science and Technology was established by the *Museums Act* on July 1st, 1990, and is a Crown Corporation named in Part 1 of Schedule III to the *Financial Administration Act*.

The mandate of the Corporation, as stated in the *Museums Act*, is to foster scientific and technological literacy throughout Canada by establishing, maintaining and developing a collection of scientific and technical objects, with special but not exclusive reference to Canada, and by demonstrating the products and processes of science and technology and their economic, social and cultural relationships with society.

The Corporation is operating as the Canada Science and Technology Museum Corporation. It manages three museum sites: the Canada Science and Technology Museum, the Canada Aviation Museum and the Canada Agriculture Museum. The museums operate under a common set of corporate policies. Support services such as human resources, finance and facilities management are provided centrally. The Corporation's operations are divided into two complementary activities:

Management of the collection

This includes documentation, cataloguing and conservation.

Management of public facilities and programs

This includes the development and maintenance of exhibitions, interpretive and educational activities, communication and promotion, historical research, the library and related services, gift shops, food services and other services to visitors.

2. ACCOUNTING POLICIES

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles. The significant accounting policies are:

(A) INVENTORIES

Inventories are valued at the lower of cost and net realizable value.

(B) COLLECTION

The collection constitutes the major portion of the Corporation's assets but is shown at a nominal value of \$1,000 on the balance sheet because of the practical difficulties in reflecting it at a meaningful value. Items purchased for the collection are recorded as expenses in the year of acquisition. Items donated to the Corporation are not recorded in the books of account.

(C) PROPERTY AND EQUIPMENT

Property and equipment are recorded at cost and are amortized using the straight-line method over their estimated useful lives as follows:

Building renovations	10 to 25 years
Equipment	5 to 12 years
Office furniture	5 to 10 years

Amounts included in uncompleted capital projects are transferred to the appropriate capital asset classification upon completion and are amortized according to the Corporation's policy.

(D) EMPLOYEES FUTURE BENEFITS

i) Pension benefits

Employees participate in the Public Service Superannuation Plan administered by the Government of Canada. The Corporation's contribution to the plan reflects the full cost of the employer's contributions. This amount is currently based on multiple of the employee's required contributions, and may change over time depending on the experience of the Plan. These contributions represent the total pension obligations of the Corporation and are charged to operations on a current basis. The Corporation is not currently required to make contributions with respect to actuarial deficiencies of the Public Service Superannuation Account.

ii) Severance benefits

Employees are entitled to severance benefits, as provided for under labour contracts and conditions of employment. The cost of these benefits is accrued as the employees render the services necessary to earn them. Management determined the accrued benefit obligation using a method based upon assumptions and its best estimates. These benefits represent the only obligation of the Corporation that entails settlement by future payment.

(E) DONATIONS

The Corporation follows the deferral method of accounting for donations.

Donations received for specific purposes, and related investment income, are deferred and recognized as revenue in the year in which the related expenses are incurred. Donations without restrictions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Volunteers contribute a significant number of hours per year. Because of the difficulty of determining their fair value, contributed services are not recognized in these financial statements.

(F) PARLIAMENTARY APPROPRIATIONS

The Government of Canada provides funding to the Corporation. Parliamentary appropriations received for specific projects are recorded as deferred capital funding and recognized in the year in which the related expenditures are incurred. The portion of the parliamentary appropriation intended to be used to purchase depreciable capital assets is recorded as deferred capital funding, and is amortized on the same basis and over the same periods as the related capital assets. The remaining portion of the appropriation is recorded in the statement of operations in the year for which it is approved.

(G) MEASUREMENT UNCERTAINTY

The preparation of financial statements in accordance with Canadian generally accepted accounting principles requires Management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses for the year. Employee-related liabilities and estimated useful lives of capital assets are the most significant items in which estimates are used. Actual results could differ from those estimated.

3. CASH AND SHORT-TERM INVESTMENTS			
(in thousands of dollars)	2003	2002	
Cash	\$ 3,595	\$ 76	
Short-term investments	2,900	3,501	
	\$ 6,495	\$ 3,577	

The Corporation's investments are limited to 90 days in Schedule "A" banks, government-backed paper and commercial paper rated A++ by the Canadian Bond Rating Services. The overall portfolio yield as at March 31, 2003 was 2.64% (2002 — 3.17%) and the average term to maturity was 67 days (2002 — 44 days).

The market value of the short-term investments is approximately \$2,909,000. Accrued interest of \$8,993 is presented in accounts receivable.

4. COLLECTION

Part of the mandate of the Corporation is "to foster scientific and technological literacy throughout Canada by establishing, maintaining and developing a collection of scientific and technological objects..." This collection is the main asset of the Corporation and is composed of over 450,000 items divided into the following areas:

AVIATION: aircraft and related materials

COMMUNICATIONS: graphic arts, film, photography and related systems, broadcasting, sound recording and reproduction, electronic communications and electronic music

INDUSTRIAL TECHNOLOGY: generic industrial processes, engineering, industrial design, construction, domestic appliances, tools and systems **NATURAL RESOURCES:** energy production, processing and infrastructure, mining and extraction technology

RENEWABLE RESOURCES: agriculture, forestry and fishery technologies — harvesting and primary processing

SCIENTIFIC INSTRUMENTATION: instruments, tools and systems with direct application to mathematics, chemistry, physics, as well as astronomy, astrophysics, medicine, meteorology, surveying and mapping, and information technology

TRANSPORTATION: motorized and non-motorized wheel, track and trackless vehicles, motorized and non-motorized marine transportation, as well as the supporting infrastructure of technologies, tools and instruments

5. PROPERTY AND EQUIPMENT

(in thousands of dollars)		2003		2002	
	Cost	Accumulated amortization	Net book value	Net book value	
Building renovations	\$ 13,449	\$ 5,959	\$ 7,490	\$ 8,124	
Office furniture	5,414	4,341	1,073	703	
Equipment	5,696	4,754	942	860	
Uncompleted capital projects	967	0	967	268	
	\$ 25,526	\$ 15,054	\$ 10,472	\$ 9,955	

Capital assets do not include land and buildings occupied by the Corporation, since they are owned either by the Government of Canada or private interests.

6. EMPLOYEE FUTURE BENEFITS

i) Pension benefits

The Public Service Superannuation Plan required the Corporation to contribute at a rate of 2.14 times (2002 — 2.14). The Corporation's contribution to the Plan during the year was \$1,290,580 (2002 — \$1,103,469).

ii) Severance benefits

The Corporation provides severance benefits to its employees. This benefit plan is not pre-funded and thus has no assets, resulting in a plan deficit equal to the accrued benefit obligation. Information about the plan is as follows:

(in thousands of dollars)	2003	2002
Accrued benefit obligation, beginning of year	\$ 1,485	\$ 1,415
Expense for the year	290	221
Benefits paid during the year	(60)	(151)
Accrued benefit obligation, end of year	1,715	1,485
Short-term portion	245	91
Long-term portion	1,470	1,394
	\$ 1,715	\$ 1,485

7. DEFERRED CONTRIBUTIONS

This represents the unspent amount of donations received from individuals and corporations for specific purposes and related investment income.

(in thousands of dollars)	2003	2002	
Balance at the beginning of the year	\$ 344	\$ 241	
Gifts and bequests	189	175	
Interest	8	10	
Amount recognized as revenue in the year	(332)	(82)	
Balance at the end of the year	\$ 209	\$ 344	

The balance in cash and short-term investments at the end of the year is restricted for specific purposes and is managed in accordance with the donors' wishes and the by-law of the Corporation.

8. DEFERRED CAPITAL FUNDING

Deferred capital funding represents the unamortized portion of parliamentary appropriations used or to be used to purchase depreciable capital assets. Changes in the deferred capital funding balance are as follows:

(in thousands of dollars)	2003	2002	
Balance at the beginning of the year	\$ 12,372	\$ 10,138	
Appropriation used in the current year to purchase depreciable capital assets	1,723	2,305	
Appropriation received in the current year to purchase depreciable capital assets in future years	2,450	1,790	
Deferred appropriation used in current year to complete capital projects	(1,293)	(626)	
Amortization	(1,206)	(1,235)	
Balance at the end of the year	\$ 14,046	\$ 12,372	

9. COMMITMENTS

As at March 31, 2003, the Corporation had entered into various agreements for accommodation, protection services, facilities management services and exhibition rentals for a total of \$10,429,000. The commitments also include contracts for building construction services for the new hangar at the Canada Aviation Museum. The future minimum payments for the next five years are as follows:

(in thousands of dollars)

2003–2004	\$ 5,616
2004–2005	\$ 2,102
2005–2006	\$ 1,142
2006–2007	\$ 779
2007–2008	\$ 790

10. RELATED PARTY TRANSACTIONS

The Corporation is related to all Government of Canada departments, agencies and Crown corporations. The Corporation incurred expenses for the work and services provided by other government departments and agencies. These transactions were conducted in the normal course of operations, under the same terms and conditions that applied to outside parties.

11. PARLIAMENTARY APPROPRIATION		
(in thousands of dollars)	2003	2002
Main Estimates amount provided for operating and capital expenditures	\$ 24,833	\$ 22,884
Supplementary estimates:		
Aviation Museum	—	490
Severance adjustments and retroactive wages settlement	687	876
ncreased Security	1,200	150
Dutreach Project	150	250
/isioning Study	1,000	_
	27,870	24,650
ortion of amount deferred for capital projects	(2,450)	(1,790)
Deferred appropriation used in current year to complete capital projects	1,293	626
mounts used to purchase depreciable capital assets	(1,723)	(2,305)
mortization of deferred capital funding	1,206	1,235
Parliamentary appropriations	\$ 26,196	\$ 22,416

12. FINANCIAL INSTRUMENTS

The carrying amounts of the Corporation's accounts receivable, accounts payable and accrued liabilities approximate their fair values due to their short term to maturity.

13. COMPARATIVE FIGURES

Certain 2002 comparative figures have been reclassified to conform to the current year's presentation.

SCHEDULE OF EXPENSES

for the year ended March 31			
(in thousands of dollars)	2003	2002	
Personnel costs	\$ 15,035	\$ 13,883	
Professional and special services	2,835	1,854	
Property taxes	1,859	1,719	
Leases of buildings	1,777	1,760	
Utilities	1,381	1,162	
Amortization of capital assets	1,206	1,235	
Material and supplies	1,206	1,058	
Property management services	712	706	
Advertising	645	782	
Protection services	590	565	
Gift stores, cafeteria and product marketing	573	561	
Travel	481	269	
Repairs and upkeep of equipment	317	446	
Repairs and upkeep of buildings	315	928	
Publications	308	327	
Purchase of objects for the collection	247	56	
Design and display	241	110	
Communications	210	194	
Rentals of equipment	153	171	
Office supplies and equipment	103	149	
Miscellaneous	94	83	
Freight express and cartage	89	123	
Books	81	95	
Total expenses	\$ 30,458	\$ 28,236	



Our Supporters

VOLUNTEERS

Public programming, collection and research, and corporate services activities continued to benefit from a dedicated volunteer corps. In 2002–2003, 427 volunteers performed 31,432 hours of service on behalf of the Corporation, and we are grateful for their continuing support, service and commitment to our museums.

CANADA SCIENCE AND TECHNOLOGY MUSEUM/ CANADA AGRICULTURE MUSEUM

Hashin Absiye Mouaiad Ammar **Kvle Andrades** Lesley Annany Ullah Zabee Assadi Susanna Atkinson Osman Baban Edmund Barrick Kaily Barry Ken Barry John Bauer Josée Bédard Doreh Behzadpoor Brian Bencze Graham Bennett Melissa Ann Berry Biman Bihari Belinda Bishop Joe Blanchett Elizabeth Bonneville Fraser Boulton Edmund Bowkett, Sr. **Curt Bowles** Paul Bown John Brian Boyd

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John Braden

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Jesse Herbert

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Bill Hough Harry Hulvershorn Ron Hunt Claude Hurley Anna Ilienko Stan Jaknunas Alexandre Jodoin **Neil Johnstone** Larry Joyce Bill Kane Sam Kelly Anthony Kerr Bruce Kettles David Keyes **Charles King** James King Larry Klein Ron Lachance Louise Laflamme James Laing Jessie Laing Claude Lalande Jeremy Laliberté Roger Landry Mike Larin Gilles LaRochelle Claude Leblanc Patrick Leclair Pierre Legault Ryan Lepage Edward L'Heureux James Lyon Alex MacKinnon

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MEMBERS

The Corporation's membership program has existed for 13 years, and numbers approximately 24,000 individuals in 5,400 households. This past year, membership program revenues were at their highest level in the program's history at \$216,000. Member visits continue to account for a substantial percentage of paid local visits by the general public to the Corporation's three museums, with a combined total of 104,000 visits by members.

DONORS

The Corporation has successfully launched annual campaigns for the Canada Science and Technology Museum, the Canada Agriculture Museum and the Canada Aviation Museum. Foundation grants, major fundraising and planned giving initiatives were undertaken for each of the Museums during the year.

The Corporation would like to thank the following individuals, corporations, organizations and foundations for their financial support.

Corporations and Institutions Royal Canadian Air Force Association Trust (CANADA AVIATION MUSEUM) TDC Excavating Ltd. (CANADA AVIATION MUSEUM)

Annual Individual Gifts The following individuals have made gifts of \$200 or more during the year:

CANADA SCIENCE AND Technology Museum

Mr. David H. Bathe Mr. Robert G. Burnet Mr. Scott Darlington Mr. Robert J. Evans Mr. A. Farnsworth Mr. Chester Gregorasz Mr. Stephen Gurman W.F. Mills Mr. Ken Olsen Mr. Bill Wimperis

CANADA AVIATION MUSEUM

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Mr. and Mrs. A.R. Taylor Mr. John Trethowan and Mrs. Norma Trethowan Mr. Jack J. Verduyn Mr. David Watson Mr. Ronald L. Watts Mr. N.A. Webb Mr. J.R. Wiseman Mr. Alec C. Woodley Mr. Harold M. Wright Mr. Colin B. Wrong

CANADA AGRICULTURE MUSEUM

Mr. C.H. Jackson

Individual Major Gifts The following individuals have given over \$1,000 in cumulative financial and in-kind gifts over the years:

CANADA SCIENCE AND TECHNOLOGY MUSEUM Mr. B. Ross Giles Mr. David H. Page University Health Network

CANADA AVIATION MUSEUM

Mr. Ernst J. Anderson Mrs. A.J. Armstrong Mr. Jean P. Asselin Valorie M. Austin L/COR (Ret'd) G.W. Babbitt, R.C.N Mr. William Bain Mr Dennis A. Bar Berree Mr. Earl H. Barr Mr. Allan W. Becker Mr. M.J. Bent AC Leonard J. Birchall Mrs. Aileen Bowyer Mr. Robert Bradford Mr. Peter J. Brennan Mr. Adrian Brookes Mr. Paul J. Brunelle Mr. R. Buckland Mrs. A. Butterworth Mr. and Mrs. Ken and Fiona Cameron, in memory of Mr. Howard Fowler Gen Bill Carr Mr. Joseph D. Cheetham Mr. R.A.W. Clayton Mr. John W. Clifford **BGen John Collins** Mr. Sterling Conrad Mr. Alan R. Constant Mrs. F.T. Constant Mrs. M. Creagan Mr. Paul Dalseg Mr. H. Drover Mr. Wilfrid J. Dugas AM C.R. Dunlap Mr. Roger Durocher Mr. Terry Edward, in memory of Mr. Arthur Edwards (1918–2001) Mr. J.R. Ellis Mrs. S. Ellis Mr. D. Everett Mr. Rae R. Farrell Mr. R.W. Fassold Mr. D.J. Floyd Mr. Ed Foster Mr. George A. Fuller Mr. R. John Garrioch, C.D. Mr. Robert K. Glendinning Mr. R. Gordon Mrs. Sally Gouin, in memory of Air Commodore Wilfrid Peter Gouin, (1912-1993), M.B.E., C.D., B.Eng., F.C.A.S.I. Mr. Hans A. Graae Mr. J.H. Grand Mr. Richard Grzeslo Mr. Robert G. Halford Mr. Ronald B. Hall Mr. Hugh A. Halliday

Mr. Merv Harron Mr. Derek A. Heath Mr. John B. Higham Mr. Robert D. Holden Mr. and Mrs. Harry and Helen Hope Mr. William O. Hough Mr. Edwin Charles Hunt Mr. Reid T. Hutchinson Mr. Gerald F. Ireland J.L.S. Enterprises Mrs. M. Johnson Ms. G. Kearns Mr. Fred J. Kee Mr. James H. Kenney Mr. Jim Kowalyk Mr. Jim Laing W.C.E. (Bill) Loftus, made on his behalf by his many friends and colleagues at Eurocopter Canada Limited and the Eurocopter Canada Project Office Mr. Norbert J. Logan Mr. Robert C. MacFarlane Mr. Ralph E. McBurney Mr. James D. McKnight Mr. John E. McMeekin Mr. John McMurran Mr. William R. McRae Mr. Robert Merrick Mr. R.W. Moffatt Mr. Desmond J. Peters Mr. Joseph Pope Mr. James B. Prendergast, D.F.C. BGen R.M. Ramsbottom Mr. John F. Riley Mr. Michel Rossignol Ms. E.H. Salkeld Capt (Ret'd) Oscar Scheuneman and Mrs. Elve Scheuneman Mr. John H. Simpson Mr. George R. Skinner Mr. Christopher and Ms. Victoria Terry Mr. Fred and Mrs. Edna Terry Mr. John C. Trethowan

Mr. D. Watson, in memory of Mrs. M. Watson Mr. N.A. Webb Mr. J.R. Wiseman Mr. Alec C. Woodley Mr. W.B. Woollett Mr. P. Yull

CANADA AGRICULTURE Museum

Ms. Ann Thompson George Weston Limited

Planned Gifts (Legacy Society Charter Members) The following individuals have indicated that they have remembered the Corporation with a gift in their estate plans.

CANADA AVIATION MUSEUM

Mr. Anthony C. Baukham Mrs. Jody Houlahan Mr. J.R.G. Leach Mr. Michael C. Marta Mr. Claude Roy Mr. John H. Simpson Mr. Christopher J. Terry

Artifact Donors

CANADA SCIENCE AND TECHNOLOGY MUSEUM (CORPORATE) Advanced Rocketry Group Ltd. Canadian National Institute for the Blind Canadian Broadcasting Corporation **Communications Research Centre** Dartmouth Amateur Radio Club Heritage Silversmiths Inc. McCord Museum of Canadian History Meteorological Service of Canada Microsoft Canada Co. National Research Council Nortel Networks

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P. Attallah L. Ausman G. Boudreau D. Brisco H. Charlebois S. Cochran R. Dessaint H. Eltaher M. Ficner S. Hintz J. Jacques M. Kalin G. Kearney C. Klatt M. Kwitko H. Lavigne J. Locke W.D. Loveridge N. Lowe M. Macleod J. Masters B. Murphy J. Peterson L. Pitcher D. Richeson R. Rochon H. Schult J. Sciampacone H. Sures G. Thomson B. Upton E.E. Watson (Esate) J. Wexler M.D. Willis

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Leavens Aviation Inc.	C. Hogan	Canadian Food Inspection Agency
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	M. Johnston	
CANADA AVIATION	M. Loftus	CANADA AGRICULTURE
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B. Curtis	J.H. Ruddell	G. Skuce
G. Diller	H.J. Russell	G. Taylor
A. Dutkewych	M. Sainsbury	Н. Тоор
K. Eatherley	L. Williams	

CORPORATE SPONSORS

The Corporation continues to work with its corporate sponsors in unique ways which address their business and marketing objectives. The Corporation would like to thank the following corporations for their generous sponsorship support.

CANADA SCIENCE AND TECHNOLOGY MUSEUM

Title Sponsor: Nortel Networks — Nortel Networks Connexions exhibition

Presenting Sponsors: logen Corporation — Energy Interpretation Hall Canoe Inc. (canoe.ca) — Canoes, The Shape of Success exhibition

Major Sponsor: 3M Canada — Tiny Tots Program

Contributing Sponsor: Ignite Studios — Nortel Networks Connexions exhibition

CANADA AVIATION MUSEUM

Major Sponsors: Pratt & Whitney Canada — The Next Generation Programs BalloonView (National Hot Air Balloon Museum of Canada Inc.)

CANADA AGRICULTURE MUSEUM

Contributing Sponsor: Neilson Dairy — Dairy Demonstrations