CANADAS

WINTER 1987-88

he 1988 Winter Olympic lames

t's All Coming Together in Car

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The XV Olympic Winter Games, to be held in Calgary, Alberta, February 13 to 28, 1988, will be the most important winter sports competition ever held in Canada and one of the most exciting international sports spectacles ever staged. During this event, the world will once again share in Canada's special Olympic spirit.

This spirit was kindled in September 1981 when the International Olympic Committee endorsed Calgary's fourth bid to host a Winter Olympics.

Determination to succeed marked Calgary's attempts to host the first Winter Games ever to be held in Canada. It also took imagination and teamwork. Calgary not only demonstrated an assured ability to organize, finance, manage and accommodate the Games, but also showed how it would manage Olympic facilities for future generations of Canadians.

Calgary has already proven its abilities to the extent that most of the facilities constructed have been tested and declared "first-class." During the winter of 1986-87, Canada staged Preview '88 - a series of pre-Olympic events that took place at the XV Olympic Winter Games sport venues. First-rate athletes invited to test the facilities declared them to be among the finest in the world. Sweden's Torqny Mogren, ranked third in the world in the 50-km free technique cross-country skiing category, called the Canmore Nordic facilities "the toughest I've ever competed on."

Made-to-Measure Facilities

Canada Olympic Park is the site of spectacular 70-m and 90-m ski jumps and Canada's first bobsleigh and luge track that is completely refrigerated, thanks to innovative Canadian technology. This venue has a ski hill in the centre of the park that will be the site for demonstration events in freestyle skiing (aerials and ballet) and an exhibition of disabled skiing. As well as providing athletes with a world-class training facility, Canada Olympic Park offers the public a variety of recreational activities.

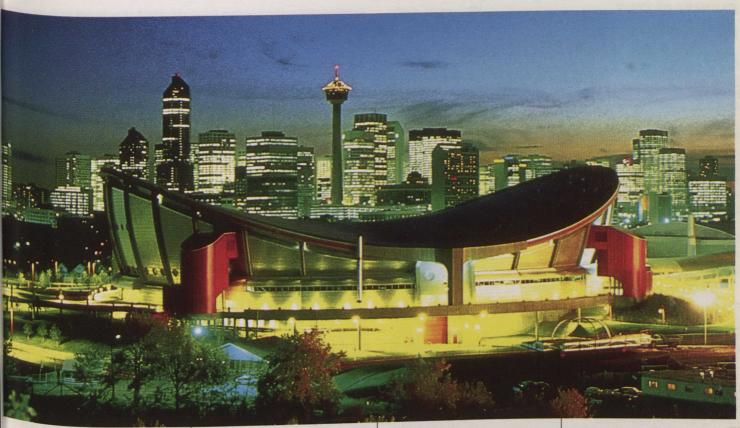
The XV Olympic Winter Games will give athletes of the world an opportunity to strive for excellence in an atmosphere of international friendship and good will.

In the Olympic Oval, for the first time in the Olympics, speed skating will be held in a fully enclosed facility. The length of two football fields, the oval will be used after the Games for figure skating, hockey,

The speed-skating oval houses two international-size rinks and seats 4 000.



ary for the 1988 Olympic Winter Games



speed skating, tennis and track events — a valuable legacy for Canadians.

As active partners in the Games, the Government of Canada, the province of Alberta, the city of Calgary and the XV Olympic Winter Games Organizing Committee (OCO '88) have developed the multi-use Olympic Saddledome as the venue for figure skating and hockey.

The Canmore Nordic Centre will host the cross-country skiing, nordic combined and biathlon events during the Games and remain an excellent training and recreational facility for the future.

The all-new ski development, Nakiska, is the Olympic site for the alpine skiing competitions and

freestyle moguls event. With 30 ski runs — all serviced by snow-making machines — Nakiska will remain a permanent training site and an appealing recreational ski resort.

Other facilities for the Games include the McMahon Stadium, for opening and closing ceremonies, the Stampede Corral, as a second venue for figure skating and hockey, and the Father David Bauer Arena, as official home for Canada's national hockey team. Curling and short-track skating events will be held in the Max Bell Arena.

As befits Olympic-calibre facilities, development has been a herculean task and the results provide something Canada has never had

before: training facilities for Canadian athletes at home. Until now, Canadian athletes have had to go to Europe to train for the bobsleigh, luge and ski jump events. Skiers as well had to travel outside Canada to train on world championship runs.

According to the Games' organizers, the presence or absence of snow as well as the possibility of a warm winter will not affect their success. All the Nakiska and Canmore trails have snow-making capacity, and arrangements have been made for snow to be trucked in to the ski jump bowl at Canada Olympic Park if necessary. In addition, the refrigerated bobsleigh and luge track keeps frozen in temperatures up to 20°C.

The Saddledome, site of hockey and speedskating competitions, against Calgary skyline.

Canada's first Olympic Winter Games, its first enclosed speed skating oval and its first combined bobsleigh and luge track add up to a series of 'firsts'' that will be 'medal winners' for a long and proud legacy.

The XV Olympic Winter Games will give athletes of the world an opportunity to strive for excellence in an atmosphere of international friendship and good will. Having dedicated years to its success, Canada looks forward to hosting this prestigious event.

he Birth of the Spirit

CITIUS, ALTIUS, **FORTIUS** (The Olympic motto: Swifter, Higher, Stronger)

he ancient Greeks were a very religious and idealistic people. They believed that their gods cherished physical beauty, moral character, noble conduct and intelligence so the Greeks sought to attain these characteristics.

Through the contribution of competitive sport towards physical excellence, the Greeks were able to pay homage to their gods by participating in their Games. Thus was born the Olympic spirit.

The Kindling of the Spirit

The ancient Olympics began in Olympia, Greece, where archaeologists have uncovered a stadium complete with a starting line and

From ancient Olympia . . . grassy banks that could seat 40 000 spectators.

Evidence indicates that the Games originated around 1379 BC and, in the earliest recorded celebration of the Games at Olympia, it is known that a cook named Coreobus, from the city of Elis, won the 200-m footrace in 776 BC. From this year through to AD 393, the Greeks began to keep their calendar by Olympiads the four-year spans between the Games.

As a religious site, Olympia was held sacred in honour of Zeus, the leading god of Greek mythology. Indeed, the ancient Games had such powerful religious overtones that Greek states at war would observe an Olympic truce that provided safe conduct to athletes and spectators.

Initially, Olympic competitions were restricted to footraces of various lengths but, given that war seemed to be the national pastime, it's not surprising that other warrior skills were gradually added. These included competitions of

wrestling, jumping, discus and javelin throwing, and chariot races. Religious festivals remained an important part of the Olympics, and cultural and artistic displays were added. Greek intellectuals, like Plato and Socrates, attended the Olympics and treated the public to philosophical debates.

In the beginning, only Greek citizens could participate in the Games, in which glory was the main reward. Victors returned to a hero's welcome — Triumphs, they were called - in their home towns. Their laurels of wild olive and palm wreaths assured them of special privileges and recognition.

As the Olympics matured, they grew in stature and attracted participants from all the countries which then made up the Roman Empire. But in AD 393, the ruler of the day, Theodosius, cancelled the Olympics and instructed his soldiers to destroy the facilities.

The site at Olympia lay buried for 1 500 years but the Olympic spirit lived on.

In 1896, the Spirit Is Reborn

Baron Pierre de Coubertin was a determined, idealistic Frenchman who was as appalled by the poor physical condition of his compatriots as he was impressed by the athletic programs in British boys' schools.

Baron de Coubertin believed that sport was vital for a healthy life and found inspiration in the history of the Greeks. Their ancient Olympic philosophy and lifestyle gave him the idea of re-establishing the Olympic Games as an international sports festival. Bitten by that ancient Greek idealism, he carried the Olympic spirit to the rest of the world and organized the first modern Olympic Games. They were held in Athens, Greece, in April 1896. Since then, with the exception of interruptions during the two World Wars, the Olympic Games have been held every four years.

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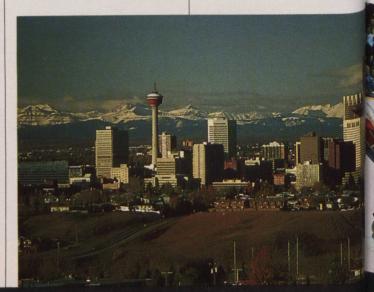
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... to modern-day Calgary.





THE TWENTIETH CENTURY: CANADA JOINS THE GAMES



Speed skating, alpine skiing, hockey and bobsledding: sports in which Canada has won Olympic gold.







history of involvement in the Olympic movement. In 1844, Montreal staged a sporting event that was unofficially named the "Olympic Games" and set some precedents in size, organization and diversity.

By 1904, the Amateur Athletic Union of Canada had organized a National Olympic Committee and was able to participate in the Olympic Games of that year. Since then, Canadian athletes have participated in most Olympic Games.

Since the Winter Games began in 1924, Canadians have been participants and medal winners setting standards for international hockey, speed skating and figure skating. In addition, Canada has won gold with its bobsleigh team and has led the world in alpine skiing.

Gold medal winners such as figure skater Barbara Ann Scott, skier Nancy Greene and speed skater Gaétan Boucher are not just known to Canadians alone: their names and their achievements are recognized in many countries throughout the world.

In 1976, Canada showed the world what it could do when it hosted the Olympic Games in Montreal. In 1988, Canada is once again looking forward to hosting Olympic Games — this time the XV Olympic Winter Games in Calgary.

ine Bottom Line: Canada Won't See Red

The cost of staging the Calgary Winter Olympics is put at \$868 million, of which only 5 per cent is likely to be recouped by ticket sales. Does this mean that the event is heading for the biggest loss in sporting history? Not according to the Games organizers who are confident that they can more than break even.

The 1984 Los Angeles Olympic Games were perhaps a financial watershed, in that for the first time the host city did not have to pick up a tab. The lessons of 1984 have been noted and acted on in Calgary, and now much of the expenditure will be met from sponsorship, licensing and TV rights sales.

Sponsorship and Rights: One Part of the Equation

One of the organizers' biggest coups was the sale of U.S. television rights to the ABC network for \$347 million (Cdn). More income will be derived from deals with other broadcasting organizations throughout the world, with whom negotiations are now under way.

One idea taken from the Los Angeles Olympics is to vest marketing rights in a single body which then sells a limited number of highquality promotion vehicles. This strategy has already led to the signing up of Coca Cola and Canadian Kodak Ltd., and more deals are in the offing. Olympic Games licensing manager David Shanks reckons that total revenue from sponsors, suppliers and licensees will be around \$65 million.

Altogether, the grand total expected from sponsorship, television and ticket sales is in excess of \$542 million.

Public Sector Completes the Equation

Another \$217 million will come from the Government of Canada — financed in part by proceeds from national lotteries and the sale of Olympic coins and stamps. Apart from investment in facilities and provision of a full range of services, the Canadian government has established a \$33 million Olympic Endowment Fund and set aside up to \$48 million in operational funding.

The Government of Alberta has invested \$130 million in the facilities for the games. It is financing the alpine skiing site at Nakiska, the Canmore Nordic Centre and a third of the cost of the \$110-million Olympic Saddledome.

Calgary's contribution will be the provision of public services (particularly transport and security), emergency medical services, as well as snow and ice control. Besides this, the city is providing part of the funding for the Saddledome, the Calgary Centre for the Performing Arts, the Olympic Plaza and the Father David Bauer Arena.

The 90-m jump at Canada Olympic Park, built with Canadian government funds.



A Positive Outcome

The economic return generated by the Games promises to be substantial. More than 250 000 people are expected to attend the event, and \$65 million is likely to be spent on accommodation, food, and recreation by spectators, participants, the media and operational personnel.

A study conducted by Canada's Federal Bureau of Management Consulting predicts that the long-term impact of the Games on the economy would be in the order of \$1.3 billion to the end of the decade. Alberta will be the chief beneficiary with 70 per cent of the stimulus. Also, some 28 000 person years of employment

will have been created over the period of the Games.

Once the Olympics are over, Canada will have world-class sporting venues worth \$456 million in place. And thanks to the establishment of the endowment fund, no financial burdens will be placed on taxpayers.

Chairman of the Organizing Committee Frank King believes Calgary's Olympics will be the best Winter Games that the world has seen. "Not only does the event hold the promise of plenty of spectacular thrills and spills, it also seems to be on course for financial success."

Calgary 198	8 Oly	mpic	Winte	er Ga	mes	Sche	dule*							*February	1987 Subjec	t to chang
February	13 Sat	14 Sun	15 Mon	16 Tue	17 Wed	18 Thur	19 Fri	20 Sat	21 Sun	22 Mon	23 Tue	24 Wed	25 Thur	26 Fri	27 Sat	28 Sun
Opening/Closing Ceremonies MCMahon Stadium	1.15pm		Γ													7.30pm
Ice Hockey	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 3 games	Round Robin 2 games.	÷/	Semi-finals 3 garnes	Semi-finals 1 games	Semi-finals 3 games	Semi-finals 1 game	Finals 2 garnes
Figure Skating		Pairs Short	1	Pairs Free Skat	Mens Compulsory	Mens Short		Mens Free Skate	Dance Computsory	Dance	Dance Free Skate	Ladies Compulsory	Ladies Short		Ladies Free Skate	Exhibitio
Speed Skating		Mens 500m			Mens socom	Mens 1000m		Mens 1500m	Mens 10,000m	Ladies 500m	Ladies 3000m			Ladies 1000m	Ladies 1500m	Ladies 5000m
Alpine Skiing		Mens Downhill	Mens Comb.	Mens Comb.		Ladies Downhill	Ladies Comb.	Ladies Comb	Mens 10,000m Mens Super G	Ladies Soom Ladies Super G		Ladies Giant Statom	Mens Giant Statom	Ladies Slalom	Mens Sialom	
Ski Jumping		70m	Downhill	Sialom	90m Team			90m								
Bobsleigh	SA.						-	2 man	2 man						4 man	4 man
Luge		1	Mens	Ladies 182 Run	Ladies 384 Run	1	Doubles 182 Run							_		
Nordic Combined		Mens 182 Run	Mens 384 Run	182 Run	384 Hun	Γ					70m Team	3 x 10km Team			70m	15km
Cross Country		·	3	Г	Ladies	Γ	Mens		Ladies 4 × 5km	Mens 4 x 10km			Ladies 20km		Mens solum	
Biathlon		10km	30km	Γ	5km		ТЫКТ	Mens 20km			Mens 10km			4 × 7.5km Relay		
Demonstrati	ion E	vents								7.	_	_		_		
Freestyle									Aerials	Moguls			Ballet			
Disabled Skiing				Giant Slalom	Cross Countr	y	Γ									
Short Track			Г	Statom	5km	Γ				Mens 1500m adies 500m	Mens 500m Ladies 1500m	Mens 1000m Ladies 3000m Relay Heats	Mens 3000m Ladies 1000m Relay Finals			
Curling			- K Round Robin	Round Robin	- Kr.	-K Round Robin		Semi Finals	Finals					_		
Venue		Olympic Saddle- dome	Robin	Stampede Corral	\$500000000000	Father David Bauer Olympic Arena Univ of C	Sar I	Olympic Oval Univ of Cal		Nakiska at Mount Allan		Canada Olympic Park		Canmore Nordic Centre		Max Bell Arena

G oing for the Gold

any of the stars to watch at the XV Olympic Winter Games are Canadian. Here are profiles of some of Canada's athletes in the running for medals in Calgary.

LAURIE GRAHAM

Alpine Skiing

In 1987, Canadian Laurie Graham established her mark on the European-dominated world of ski racing by completing the season with a third-place ranking in women's downhill for the second consecutive year.

As leader of the Canadian Women's Alpine Ski Team, Laurie Graham is the host nation's strongest hope for a medal at the 1988 Olympic Winter Games in Calgary. Already a veteran of two Olympics, she has set a high standard for herself on Canadian snow and is determined not to disappoint

Veteran downhill ace and three-time Olympian, Laurie Graham.



the fans who cheered her to four top-three finishes on Canadian slopes during the 1986-87 season.

After 10 years on the World Cup circuit, Graham has become a favourite with the international media. Her gregarious, charismatic nature lends ease to the demands placed on her by the media and in her role as team leader, and has greatly contributed to her celebrity status in the sporting world.

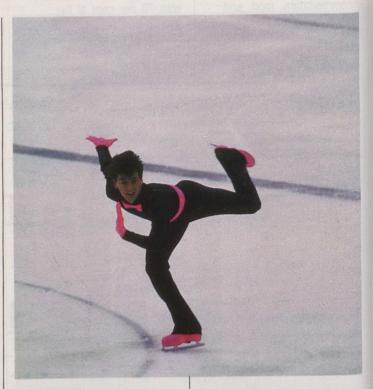
Born in 1960, in Inglewood, Ontario, far from the menacing slopes of the western Rockies, Graham began her competitive career at age 10. Since capturing her first national downhill championship in 1980, she has made Canadian skiing history by winning the Super Giant Slalom World Cup event in 1984 and by dominating the women's downhill at Val d'Isère since 1985.

Graham's outstanding accomplishments have led to her being named Canada's Female Athlete of the Year for 1986, and have made her a recipient of the Canadian government's sport excellence award each year since 1982. With great courage and skill Laurie Graham has overcome injuries and moments of self-doubt to reign now among the top five women skiers in the world.

BRIAN ORSER

Figure Skating

In March 1987, Canadian Brian Orser added another exclusive chapter to the book of figure skating history, the one written only about world champions. By capturing the gold medal in



Cincinnati, he finally won the title that had eluded him since 1984.

At age 25, Orser has won seven national championships, one world championship (he had placed in the top three in four others), and a silver medal at the 1984 Olympic Games in Sarajevo. His seven-year reign as Canadian champion has provided him with the confidence he needed to make a consistent rise through the international ranks, which have been strongly dominated by Soviet and American skaters.

Previously regarded as a strong technical skater, but lacking in finesse, Orser has discovered the right combination of coaching and environment needed to develop a level of elegance and masculine grace that has finally set him apart from his competitors.

World champion Brian Orser: Canada's hope for Olympic gold.

After winning the Canadian Junior Championship in 1979, Orser ignored the lure of big-city clubs, stayed in small-town Orillia, Ontario, and placed increased faith in his coach Doug Leigh, who had first taught him figures at age nine. With the addition of West German choreographer Uschi Keszler in 1981, Orser gained the support of a coaching team dedicated to his success, without the distractions of a metropolitan area.

After a 12-year competitive career, an Olympic gold medal is all that remains unclaimed. In 1988, Orser hopes to cap off his amateur credentials with just such a finish.

JEAN-MARC ROZON

Freestyle Skiing — Aerials

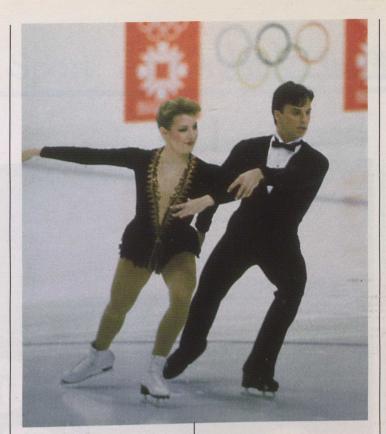
Jean-Marc Rozon, one of Canada's top men's freestyle skiers, returned to freestyle competition this past season (1987) after a three-year absence. During his competitive sabbatical, he performed in shows across Europe, attracting new followers to freestyle skiing while honing his skills for a return to the World Cup circuit. Considered to be one of the best aerialists in the world, Rozon proved his worth to Canada's 1987 freestyle team by placing first in the World Cup Grand Prix circuit.

The native of the province of Quebec won his first aerials competition at a World Cup event in 1982, achieved two second-place results in World Cup action in 1983, and earned a silver at the 1983 National Championships before retiring at the end of that season.

After returning to competitive skiing in the 1986-87 season, Rozon continued to show his athletic prowess by placing first in aerials in World Cup action at Calgary, Canada; at Lake Placid, U.S.A.; and once again at Mariazell, Austria. Adding to his World

Freestyle skier Jean-Marc Rozon placed first in the 1987 World Cup Grand Prix circuit.





Cup successes, he took home the gold medal in aerials at the 1987 Canadian National Championships.

In the overall Combined World Cup standings, which take into account results in aerials, ballet and moguls, Rozon is currently placed in the top 10 while competing in aerials only. The 1988 Winter Olympics in Calgary, where he is expected to win gold, will be the site of the first-ever freestyle skiing event in Olympic history.

During the off-season,
Rozon keeps active with
water skiing and diving
activities in the beautiful
Eastern Townships, a
popular tourist centre located
south of Montreal. His ability
to converse in both English
and French has been of
benefit to him when
travelling on the World Cup
circuit in Europe.

ROB McCALL AND TRACY WILSON

Ice Dancing

Rob McCall and Tracy Wilson, Canada's sizzling ice dancing team, have skated Two-time world bronze-medal winners, Rob McCall and Tracy Wilson.

their way to the apex of their sport. Ranked first in Canada and third in the international standings, Wilson and McCall have one ambition: to be the best in the world.

McCall and Wilson paired up in 1981 and immediately rocketed to the summit, winning every Canadian championship title since then. When they dance together, artistry and technical proficiency are perfectly blended. In ice dancing, couples must remain in complete union and execute precision footwork. When McCall and Wilson perform, their energy is infectious and every time they appear on ice, crowds become intoxicated. Thanks to their dedication and commitment to excellence. they have been offering audiences around the world some of the most beautiful moments in ice dancing today.

Their dancing talent is certainly exceptional and lies

especially in their drive to be innovative. Using persistence and courage, they break new ground with every season so that now they have an established reputation as the world's most original dance team.

Since their partnership began, their world standing has steadfastly improved. From a very respectable 10th place finish the first year they competed together, they soared to 3rd place in 1986, becoming the first Canadians in 22 years to win an ice dancing medal. They repeated their superb performance in 1987 during the World Championships in Cincinnati where they were able to preserve their standing behind two tenacious Soviet couples. Although the Soviets have won 13 World Championships in the last 18 years, Wilson and McCall have an enthusiasm and a confidence that may well propel them to a gold medal during the 1988 Winter Olympics. There is no question that they are approaching the Olympics with tremendous momentum.

As a team, McCall and Wilson have yet to peak. Their creativity and strength appear to have no bounds. Their contribution to the sport of ice dancing and to Canada has been recognized formally in 1986 and 1987 as they have been awarded the Government of Canada's sport excellence award.

These two very different though complementary individuals come from two extreme points in Canada: Rob McCall hails from Dartmouth, Nova Scotia. which borders the Atlantic Ocean, and Tracy Wilson's hometown is Port Moody. British Columbia, which is situated along the Pacific Ocean. During training season, they leave their picturesque coastal provinces and meet in Toronto, located in the heart of Canada.

rt in Precious Metal

To pay tribute to Canada in hosting its first Winter Olympic Games, the Royal Canadian Mint is issuing a series of 10 sterling silver coins and one gold coin.

Canada's Olympic coins are true works of art. Top Canadian artists competed to produce 11 winning designs — each of which captures the "Pursuit of Excellence" theme in legal-tender sterling silver and gold.

The 10-coin series in sterling silver depicts the sports of downhill skiing, speed skating, hockey, biathlon, cross-country skiing, freestyle skiing, figure skating, curling, ski jumping, and bobsleigh. The combined mintage for all 10 coins has been limited to 5 million worldwide. An independent selection committee chose the designs on the basis of their artistic merit, from hundreds of





submissions received by the Royal Canadian Mint. And while the series was never intended to be geographically representative of Canada, the artists come from British Columbia, Newfoundland and Ontario.

Canada launched its
Olympic Coin Program in
September 1985 on four
continents: North America,
Europe, Asia and Australia.
Orders received from more
than 24 countries have
surpassed 2 million pieces,
making it the most successful of any commemorative

Olympic Winter Coin Program to date.

Market research indicates that buyers of Olympic coins not only seek a memento to cherish for many years, but also want to support amateur athletes in Canada and around the world. To date, more than \$1.5 million of the revenues generated by the program has been donated to the Olympic committees worldwide to help athletes. The Mint expects to raise approximately \$30 million as part of the \$200-million financial commitment from

the Government of Canada to the Olympic Winter Games.

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In fall 1987, Canada issued its first gold Olympic coin — it depicts a hand carrying the Olympic torch. The stylized flame forms an image of the Rocky Mountains, evoking the spirit of the Olympic Games in Canada. Its mintage is restricted to 350 000 worldwide. Released as the annual issue of Canada's \$100 gold coin, it was designed to celebrate Canada's Olympic achievement in the highest of honours: gold.

Art and Sport: An Olympic Union

hough many people are surprised to learn that there will be an Olympic Arts Festival associated with the 1988 Olympic Winter Games in Calgary, such a linking of art and sport is hardly new. The juxtaposition of art and the Olympics began in 1906 when Baron Pierre de Coubertin, the founder of modern Olympic Games, organized a conference in Paris to study the extent to which art and literature could be incorporated into the celebration. Baron de Coubertin felt strongly that the Olympic ideal was a philosophy to celebrate the complete individual, not just athletic ability.

Out of the conference came a proposal to create five competitions architecture, sculpting, painting, music and literature with prizes to be awarded in each category for new works of art directly inspired by sport.

From their beginning at the 1912 Stockholm Games, the arts competitions suffered not only from their own problems but also in comparison to the athletic competition. There were difficulties in mustering large orchestras to play new works, troubles with transporting exhibits, and problems even with getting first-class competitors prospective artists who already enjoyed prominence in their fields preferred to judge rather than to be judged.

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In spite of de Coubertin's efforts, the quality of competition declined as the number of categories increased. By 1948, the original 5 categories had grown to 13, including town planning, medals, songs and reliefs. Frequently, prizes were not awarded because judges felt that the entries were not worthy of Olympic-class recognition.

In spite of the difficulties, the arts competitions were often staged in grand style. At the 1932 Olympics in Los Angeles, for example, there were 1 100 works of art submitted by artists from 32 countries. Thornton Wilder, an eminent American playwright and novelist, was a judge in the literary contest. Winners were announced in the same way as athletes in their categories, including an awards ceremony complete with the playing of the winner's national anthem.

The International Olympic Committee (IOC) eliminated the arts competition after the 1948 Games. Since then, the Olympic arts program has consisted of an exhibition or festival.

The IOC added a section to its charter which directed the organizing committee for each Olympic Games session to arrange exhibitions and demonstrations of the host country's art, which the charter defines as "architecture, literature, music, painting, sculpture, photography and sports philately." The charter allows "theatrical, ballet, [and] opera performance or symphony concerts" and

specifies that the art section of the Olympics "shall be on an equal standard . . . as the sports events."

Each committee has had the option of choosing the type of arts festival it would offer. Montreal in 1976 and Moscow in 1980 presented artists from their respective countries. Munich in 1972 and Los Angeles in 1984 had international festivals.

Typically, the Olympic Winter Games are held in locations that offer magnificent facilities for the sports events, but little in

the way of venues for arts and cultural activities. But Calgary's superb theatres, concert halls, galleries and museums will make possible the most comprehensive and longest-running arts festival ever held as part of a Winter Olympics. Encompassing classical and contemporary music, dance and theatre. top-flight exhibitions, and, for the first time in 40 years, a major literary component, the 1988 Olympic Arts Festival will showcase the full spectrum of the arts in Canada, with enhancement by major international events.



Canadian Culture in Olympic Limelight



Beginning three weeks prior to the opening ceremonies of the XV Olympic Winter Games and concluding at the closing of the Games, Calgary will open its concert halls, stages, galleries, museums and theatres to the world. Through the performing, literary and visual arts, a world-class showcase of local, national and international performers will pay tribute to the legends and culture of Canada.

The Olympic Arts
Festival, the largest arts
festival ever held as the
cultural component of an
Olympic Winter Games, will
enhance the Olympic
experience for a potential
on-site audience of
1.2 million people. Millions
more, worldwide, will share
in the excitement through
international broadcasts of
some of the events.

"The policy guiding the [arts festival] programming is established in the Olympic Charter," says Michael Tabbitt, manager of the Arts Festival. "It mandates that there will be a festival of equal stature to the Games, to showcase the arts and culture of the host country. We looked on it as a

marvellous opportunity to show to the world the spectacular wealth of talent Canada has to offer.''

The Olympic Arts Festival, the largest arts festival ever held as the cultural component of an Olympic Winter Games, will enhance the Olympic experience for a potential on-site audience of 1.2 million people.

While national in focus as stipulated in the Olympic Charter, in the true international spirit of the Games the Arts Festival will also feature a variety of performers from other countries.

For 37 days, approximately 2 200 artists from 18 separate arts disciplines will be in the spotlight for more than 600 performances and exhibitions. The Festival will be held in a dozen theatres, five galleries, lobby spaces in six corporate and public buildings, the city's convention centre, two parks and the Saddledome and Corral at Stampede Park.

There are gala performances, plays and theatrical presentations, dance programs, musical events, visual arts projects and exhibitions, literary arts activities, a film festival and a series of special events encompassing an international snow-sculpting competition, a national ice-sculpting competition and, in true western tradition, a rodeo.

In addition, there is Wintershow '88, a showcase of 200 local performers and visual artists which will take the Arts Festival to the street corners, sports venues, indoor and outdoor malls and the Calgary International Airport.

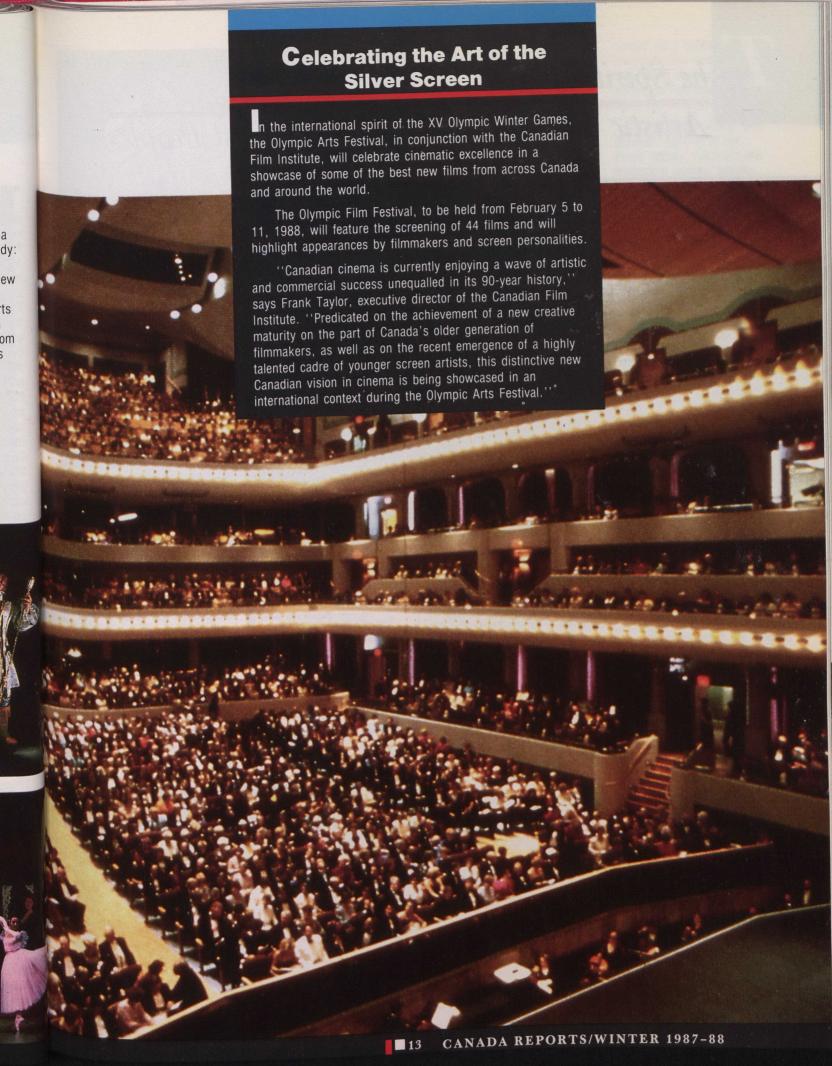
The resulting program covers a spectrum of productions within each discipline. The dance program features everything from re-creations of nineteenth-century masterpieces to world premières by Canada's leading contemporary choreographers. The music program presents choral and symphonic classics as well as commissioned works by the

country's most innovative composers. In theatre, audiences can experience a gamut of drama and comedy: Shaw's classic *You Never Can Tell*, a showcase of new Canadian plays and a theatrical circus. Visual arts exhibitions cover works in virtually every medium, from paintings and photographs from the last century to video installations and contemporary Canadian architecture.

From January 23 to February 28, Calgary will open its concert halls, stages, galleries, museums and theatres to the world.







The Spirit Sings:

Artistic Traditions of Canada's First Peoples



or the first time in centuries, more than 600 cultural objects created by early North American native peoples are being returned to Canada for a historic exhibition organized by the Glenbow Museum in Calgary.

The exhibit, called The Spirit Sings: Artistic Traditions of Canada's First Peoples, will be on view at Glenbow from January 15 to May 1, 1988, and is an official presentation of the Arts Festival of the 1988 Winter Olympics in Calgary. As part of Canada Day celebrations the exhibition will also be shown in Ottawa from July 1 to November 6, 1988.

The Spirit Sings, which is the largest and most complex project ever undertaken by Glenbow, assembles in Canada rare Indian and Inuit cultural

objects that were taken to Europe by early visitors to North America. These visitors came for a variety of reasons. Explorers were sent to map the uncharted new land, and traders came attracted by the rich fur resources. Fishermen sought the harvest of fish and whales, while missionaries brought Christianity to native groups.

On their arrival in North America, the Europeans were often welcomed by native groups who presented them with special gifts. Excited by their travels in the new land and by their encounters with native peoples, many visitors also acquired "souvenirs," through purchase, trade, gift, and, at times, plunder. They took back with them to Europe baskets, amulets, drums, clothing, jewellery, ceremonial objects, and other native material as prized

mementoes of their journeys in the new country.

The effect of European contact on native peoples was immediate and lasting. Disease, the decimation of traditional food sources such as buffalo, the introduction of guns, and the encroachment of settlements forced many groups to adapt in order to survive. For some,

This amulet cluster probably arrived in the Mackenzie River area via the Siberian-Alaskan trade network, ca. 1864. (Collection: The Trustees, National Museums of Scotland.)

adaptation was difficult or impossible. The Beothuk Indians of Newfoundland disappeared entirely in the mid-nineteenth century, leaving only a handful of objects to document their once-thriving culture. Other groups such as the Micmac and Maliseet of the East Coast acted as middlemen in the fur trade, making use of their extensive tribal trading networks.

The many objects on view in The Spirit Sings reflect the strength, endurance, and resiliency of native cultural traditions. Native peoples quickly saw the commercial value of their cultural goods and demanded

This stone buffalo figure is thought to be the finest example of such carvings, which predate the Europeans' arrival in North America, ca. 1200. (Collection: Glenbow Museum, Calgary.)





high prices for the objects for sale or barter. Trade with Europeans also introduced materials such as glass beads, ribbons, and floral and lace-like patterns which were incorporated into native designs. Special objects such as model canoes or tiny beaded moccasins were created specifically for European visitors who delighted in such whimsical souvenirs.

eir

Over two-thirds of the material on view in The Spirit Sings has never been exhibited before in Canada, and comes to Glenbow from over 90 private and public institutions in Canada and around the world. The material held in European collections is particularly significant for it usually reflects more closely the traditional cultures at the

This beaded parka from the Arctic region displays bold and colourful beadwork incorporating geometric designs and abstract motifs. (Collection: Royal Ontario Museum, Toronto, Canada.)

time of first contact, before they were overwhelmed by foreign influences. Viewed as a whole, the exhibition presents a common world view held by native groups across Canada, in which the spiritual and physical worlds are closely interwoven.

The entire second floor of Glenbow — over 1 850 m² of gallery space — is devoted to The Spirit Sings, and is designed to lead visitors through six distinct geographical areas.

The exhibition begins in the rocky, marine environ-

ment of the East Coast of Canada where the Beothuk, Micmac and Maliseet fished the ocean and rivers. They developed a strong trading network using the light, sturdy, birchbark canoe for travel and transportation.

Over two-thirds of the material on view in The Spirit Sings has never been exhibited before in Canada, and comes to Glenbow from over 90 private and public institutions in Canada and around the world.

The visitor then passes into the gallery of the Northern Woodlands region, which stretches from New York to Labrador and James Bay. Here, the Iroquoian, Great Lakes, and Eastern Subarctic peoples followed a variety of lifestyles, from semi-permanent farming groups to nomadic hunters of migrating animal herds.

The exhibition then opens into the spaciousness of the Northern Plains where Blackfoot and Assiniboin pursued the great herds of buffalo on which they based their sustenance. Colourful quillwork and painted robes and clothing speak of a rich artistic tradition.

The Western Subarctic was home to the Athapaskan groups who hunted and gathered in terrain which

ranged from boreal forest to lakelands and river systems. Elaborately decorated clothing allowed a rich expression for these nomadic peoples.

Clear glass cases, and dramatic lighting in the Arctic gallery, highlight the distinctive parkas, kayaks, and hunting tools of the northern Inuit who relied on the caribou and ring seal for survival.

The journey through
The Spirit Sings ends in the
Northwest Coast gallery.
Soaring display cases
suggest the rain forest
environment of the highly
developed coastal peoples.
Carvings, boxes, hunting and
ceremonial objects, blankets
and a large Haida canoe
illustrate the blending of form
and function among the
Northwest Coast peoples.

The Spirit Sings is a historic exhibition for Glenbow, for Canada, and for the world. It offers perhaps the only opportunity to study material which documents the transition period when native cultures first came into contact with outside influence. By examining these intriguing objects assembled from the past. one may come to a better understanding of the rich and lasting legacy of native artistic traditions in Canada.

Beautifully carved Iroquois-type club with a human-effigy head, ca. 1850. (Collection: Earl of Elgin and Kincardine, Scotland.)



Nation's Flip from Flab to Fit



eventeen years ago, a study commissioned by the Government of Canada concluded that Canadians were in terrible physical shape — among the least-fit people in the world. The future health and well-being of the country were in ieopardy, and to all appearances, Canadians could not have cared less.

Thus in 1971. Participaction was founded and developed the idea of a fitness and sport-for-all promotion agency. Created as a private, independent, non-profit, national communications company, Participaction had a single goal: to encourage Canadians to become more physically active.

By 1972, it persuaded the Canadian government

to provide "seed money" to test the feasibility of an independent company, involving both government and the private sector.

The initial catalyst for the emergence of the idea of a fit Canada was Participaction's 1972 declaration that the average 30-year-old Canadian was less fit than the average 60-year-old Swede. It was a cause for embarrassment and an indictment of Canadian lifestyles. Moreover, it was a call to personal action.

Since 1972, Canadians have moved from a position of almost universal inactivity to the point where, as a nation, they are now more physically active and more fitness-conscious than ever before. And Participaction the proverbial mouse that

roars - has been widely acknowledged as the single most important force in bringing about this revolutionary change.

"Our mandate is to promote increased physical activity and improved fitness among Canadians," says Russ Kisby, President of Participaction and a man who has been with the organization virtually since its inception.

Indeed, Mr. Kisby's people have been successful in generating a major national campaign for the fitness message. And the Canadian public has responded with genuine enthusiasm. In numerous cities and towns, individual Canadians do not just run, bike or swim, but "participact," a term coined by people who feel a part of the fitness movement.

In May 1983, some 600 000 Canadians joined in the Great Canadian Participaction Challenge making it the biggest oneday mass participation event in Canada's history. In 1984, this grew to 1.7 million participants and in each of 1985 and 1986, more than 2.6 million (one out of every ten) Canadians, in over 200 cities, were involved. In 1987, the trend continued with 257 cities joining this popular sport-for-all event and over 3.5 million Canadians registering their participation.

Since 1972, Canadians have moved from a position of almost universal inactivity to the point where, as a nation, they are now more physically active and more fitness-conscious than ever before.

Today, a number of communities across Canada have made fitness a local campaign through special fitness promotion and events. Saskatoon, Saskatchewan, for instance, is now recognized internationally as "The Fit City" and has conducted several mass participation fitness events with "sister" communities from Sweden to Japan.

There is no question that fitness has now come to play an important role in the collective life of this country. Not only has it had a major impact on the way Canadians think and act, but the shock

S port Diplomacy

waves from the speeded-up national heartbeat have also penetrated far into the inner sanctums of business, government, advertising and education.

For instance, special fitness programs have been developed and successfully carried out in Canadian schools from coast to coast. In addition, fitness education and motivation programs have been designed and implemented for Canadian government personnel. And more and more. Canadian corporate managements are subscribing to employee fitness plans because they have learned that fit employees stay on the job with less absenteeism and greater productivity.

Today, the land is rich with joggers, swimmers, cyclists, walkers, skiers, lifters, benders, and swingers of racquets and clubs. And these . . . of all ages. It is not an oddity in Canada to see people ice- or roller-skating to work, 65-year-olds cycling, or women in business dress and running shoes heading for the office

Canada has changed and the Canadian lifestyle has been redefined. What is emerging is a conscious sense of national life into which the fitness idea has been incorporated. A fire has been lit under the seat of one of the least-fit nations in the world and Canadians are not sitting around to savour the warmth.



Sport has universal appeal. It attracts all ages and all strata of society. It cuts across political, cultural and religious boundaries. It's an obvious way to bridge nations.

Recognizing this opportunity, the Canadian government recently reviewed the role of sport in Canadian foreign policy, which led to an International Sports Relations Program. Sports is now recognized as an integral part of Canadian diplomacy.

The time is right.
Canadians are the best in the world in a variety of sports.
Ben Johnson proved to 300 million viewers the world over that he is the ''fastest man alive.'' Brian Orser has captured the World Figure Skating crown. Gail Greenough stunned European audiences when she won the coveted Equestrian World

Cup. The extraordinary efforts of disabled athletes like Rick Hansen and Steve Fonyo greatly enhanced the international image of Canada. In addition to the upcoming Olympic Winter Games, Canada has recently hosted the World University Games, the Commonwealth Games and the Summer Olympics, as well as a number of world championships.

The new sports program will begin by building on what already exists: a steady stream of top Canadian sporting talent going about the regular business of competition in all parts of the world. As far as their training and competition schedules permit, Canadian athletes will be engaged as good-will ambassadors at trade fairs and similar events throughout the world.

Secretary of State for External Affairs Joe Clark and Fitness and Amateur Sports Minister Otto Jelinek. Sport's universal appeal makes it an ideal tool for bridging nations.

The intended result is that sport can help to promote international co-operation and mutual understanding. Sport can also serve as a vehicle for increased contacts and respect between East and West.

Sport diplomacy has the potential to give added substance to Canada's commitment to the Third World and to multilateral institutions such as the Commonwealth and la Francophonie. At a time when Canadian athletic endeavours are capturing the world's attention, the potential to reach out to other nations through sport has never been greater.

ine Tuning Athletes: The Science of Sport



wenty years ago, science and sport shared a relationship somewhat like awkward distant relatives — each knowing the other existed, yet both preferring to keep a safe distance apart. But in today's hightech world, it is obvious that science and sport are moving closer and closer together.

One place in particular where sport and science can be seen working in concert is in the laboratory, where the physiological testing of high-performance athletes is an everyday activity.

Physiological testing of Canada's national athletes has been going on sporadically for close to two decades. But in recent years, an effort to standardize procedures and accreditation of 25 research laboratories across the country have helped establish Canada as a world leader in sport science.

The move to a more systematic testing dates back to 1983, when the Canadian government's Sport Canada funded the Canadian Association of Sport Sciences (CASS) to develop an appropriate accreditation process for test facilities. Eighteen months later, CASS had produced a written guide to the physiological testing of élite athletes, and had accredited 25 centres.

Since then, athletes from about 45 sports have undergone a range of standardized physical tests, covering everything from height, weight and fat, to aerobic power and flexibility. In each case, the tests are designed to reflect the physical demands of the particular sport, with scientists working alongside coaches and athletes to develop appropriate procedures. The Ottawa laboratory has developed specific tests for water polo, speed skating, downhill skiing, fencing, hockey and volleyball, and recently conducted measurements with Canadian canoeists, cyclists, cross-country skiers, and figure skaters.

According to Sport Canada's Director General, Abby Hoffman, the demand for physiological testing is at an all-time high. "Coaches are getting better at using sport science information, she says, "and sport scientists are getting better at deciding what will be useful for coaches and their athletes." Dr. James Thoden, director of the athlete test centre at the University of Ottawa agrees, noting that, "We're using modern technology to get at types of measurements of athletes that were never done before.'

While physiological monitoring is expensive for many sports, some national teams include it as just

Physical tests such as this one conducted by Dr. James Thoden on Pierre Harvey help coaches and athletes develop better training programs.

one part of a wider testing program. Marty Hall, chief coach of the national cross-country ski team, attributes a share of his team's improvement over the past three years to a complete sport science program, which includes testing, physiology, psychology, medicine, and biomechanics. "It's a big puzzle," he says, "but testing is one of the major pieces."

"'This is just the beginning of a wave across Canada," says Dr. Thoden. "We're right at the birth of a real boom in the research of amateur sport."

Canadian Dolphin Swim
Club Head Coach, Tom
Johnson, who tests his
athletes at the University of
British Columbia with Dr. Ted
Rhodes, recommends at least
some form of testing to all
his athletes, even to those
who are not eligible for
funding and must cover the
costs themselves.

Considering today's interaction between the centres and the national sport organizations, the amount of progress made over the past few years is clearly impressive. "This is just the beginning of a wave across Canada," says Dr. Thoden. "We're right at the birth of a real boom in the research of amateur sport."

B en Johnson's Flying Feat

While Canadian athletes have always excelled at winter sports, they have also established a rather **900d track record** in summer events ...

On September 29, some 15 000 people lined the streets of Toronto, Canada, for his triumphant homecoming parade. In Ottawa, the next day, politicians queued for his autograph. In the House of Commons, members of Parliament gave him a Standing ovation. The star attraction: Ben Johnson, whose record 9.83-second 100-m sprint in Rome last August made him the "World's fastest human."

In the annals of athletic achievement, Johnson's coup will undoubtedly be ranked among the greatest ever. The list includes Roger Bannister of England who ran the first under-four-minute mile in Vancouver in 1954, and Bob Beamon of the United States who, in Mexico City in 1968, became the first person to long-jump more than 8.8 m. Now the list includes Ben Johnson of Canada, running the 100-m dash in a stupendous 9.83 seconds.

Prior to Johnson's historic sprint, the world record for the 100-m dash was held by American Calvin Smith who, in 1983, ran the race in 9.93 seconds. Smith's successful run took place in the relatively light atmosphere of Colorado Springs situated more than 1 830 m above sea level.

Johnson had already matched the sea-level world record of 9.95 seconds, but few save perhaps Johnson and his coach, Charlie Francis, considered a new

world record within reach, particularly in the heavy Rome air, just 14 m above sea level.

"If you had asked me before the race, 'Could anybody run that fast?', I would have said, 'No','' explains Carl Lewis of the United States, quadruple Olympic gold medalist and Johnson's main rival.

In the annals of athletic achievement, Johnson's coup will undoubtedly be ranked among the greatest ever.

For Johnson and coach Francis, the victory was the result of a fine-tuned body and running technique refined to a level previously unknown. Said the 25-yearold Jamaican-born Johnson, "Everything in my training was geared to this race.'

Canada's Ben Johnson making history: 100 m in 9.83 seconds.

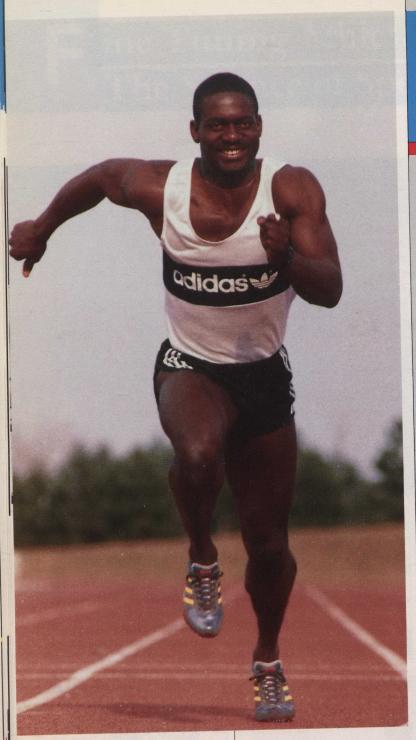
The key to Johnson's success, according to Gordon Robertson, professor of kinanthropology and a biomechanics expert at the University of Ottawa in Canada's capital, is that his flying feet "land more quickly, softly and with a different motion than many of his competitors." By running high on his toes, with the ankle fully extended, Johnson makes better use of his leg muscles and improves his speed.

While one expects powerful legs on a sprinter, many observers have commented on Johnson's superb upper-body development. Both Johnson and coach Francis believe that sprinting requires more than lower-body strength. Watch Johnson train off-track and he is seen effortlessly bench-pressing more than double his body weight.

Ben Johnson first emerged as a Canadian sport hero in 1984, when he won a gold medal in the 100-m event at the Canadian National Outdoor Championships - a feat he has repeated every year since. At the 1984 Los Angeles Olympics, he captured bronze medals in the 100-m dash and the 4 × 100-m relay. In January 1986, at an international track meet in Japan, he set a world record of 6.50 seconds for the 60-m

On July 8, 1986, Johnson reached new heights at the Goodwill Games in Moscow, winning the 100-m event in 9.95 seconds, and established a new record for the fastest





run at sea level. Later in the year, his performance in the 100-m, 4×100-m relay, and 200-m events earned Canada two gold medals and one bronze at the Commonwealth Games.

In early January 1986, at the same meet in Japan where he set the world best for the 60-m, Johnson broke his own mark with a time of 6.44 seconds. Later that month in Ottawa, he broke

Even training is enjoyable when you're on top.

the world record for 50-m indoors with a time of 5.55 seconds.

Gold is definitely Ben Johnson's colour. To date, his athletic career has been crowned with success and there is every reason to believe that the track star with the flying feet has much more to offer the world of sports.

eeping Sport Clean: Towards a DrugFree Olympics

hile athletes the world over continue to push the limits of speed and endurance in the final warm-up for the 1988 Winter Olympic Games, toxicologists at Foothills Hospital in Calgary, Alberta, are joyfully playing with state-of-the-art technology in their new, \$2-million drug-testing facility.

Funded by the Olympic Organizing Committee, (OCO), the labs will be the testing site for all medalists and for random spot checks of the Games' competitors.

Drug testing at the Calgary Games will be the most comprehensive in Olympic history, reflecting a worldwide campaign to clean up amateur sport.

Currently awaiting accreditation as the second sports drug-testing laboratory in Canada (the other is in Montreal), the facility will be used after the Games for clinical research, pharmacokinetics (the study of the bodily absorption, distribution, metabolism and excretion of drugs), services and sports medicine.

Drug testing was first ordered in 1967 by the International Olympic Medical Commission (IOMC), after some athletes died from drug overdoses. Today, testing checks for drugs that give unfair advantage or that

threaten the overall health of the athlete.

Five broad groups of drugs are banned: stimulants, narcotics, beta blockers, diuretics and steroids, as well as "related compounds," a category that covers anything similar that has not yet turned up in testing.

Siu C. Chan, PhD, is the clinical toxicologist in charge of the drug-testing facility at Foothills Hospital. Having set up the lab from scratch, Dr. Chan was thrilled with the opportunity to build a world-class facility. "The profile of drug-testing labs is very high right now," he says. "What we do is being scrutinized internationally, which makes it very challenging." Dr. Chan explains that a network for international co-operation is being established and that Canada is one of the lead actors. "Someone from Auckland, New Zealand, is coming to work with us for a month because they will be hosting the 1990 Commonwealth Games and they want to see how it's done."

Drug testing at the Calgary Games will be the most comprehensive in Olympic history, reflecting a worldwide campaign to clean up amateur sport. When asked how he feels about being an "Olympics police officer," Dr. Chan laughs, "I guess it's my contribution to the spirit of fair play."

ROTECTING THE OZONE

n September 15 in Montreal, Canada, diplomats from around the world agreed on a treaty that will protect the earth's ozone laver.

More than 200 scientists, technical experts and politicians from more than 60 countries met to hammer out the agreement that calls for a major reduction of chemical pollutants that have been eroding the protective ring around the globe. Scientists have warned that if unchecked this pollution could result in an environmental catastrophe.

"We have time to anticipate and prevent disaster. But we do not have years or even months to waste. A planetary time bomb is ticking away and the pace is accelerating.'

The draft treaty, negotiated under the auspices of the United Nations Environment Program, would cut down on ozone-depleting chemicals by up to 50 per cent by the turn of the century.

"It is a historic first," Said Canadian Environment Minister Thomas McMillan who was a member of the negotiating team. "On a global basis we will now have a law of the atmosphere that deals with extremely important planetary problems."

The stratospheric ozone layer is a fragile blanket of gases that lies above the

on

clouds. Without it, life on earth could not survive, as it shields both humans and the environment from the sun's dangerous ultraviolet rays.

In recent years, scientists have proven that the ozone layer is getting thinner, and environmentalists the world over fear that this could have disastrous consequences.

A few years ago, satellite pictures revealed a hole in the ozone layer that had been growing for some time above the South Pole. The issue became more urgent when last year a second hole was found above the Arctic.

The black area denotes the growing ozone hole over the Antarctic.

Ozone is being destroyed by chemicals called chlorofluorocarbons or CFCs. They are used in refrigeration and air conditioning, in foam and plastic manufacturing, and in aerosols.

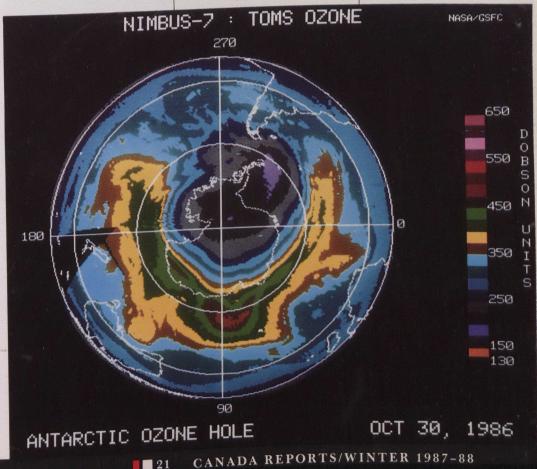
As CFC molecules move towards the ozone layer, they eat at it until the ozone is so thin that it can no longer bend back ultraviolet rays. This could lead to the "greenhouse effect" without the ozone's protective shield, the earth's atmosphere would warm up drastically, changing the planet's climate.

It could also lead to increased ultraviolet radiation. In fact, scientists predict that in 20 years, if radiation levels go unchecked, world crop

production will drop by 10 per cent, delicate ocean life will die, and there will be millions of new cases of skin cancer.

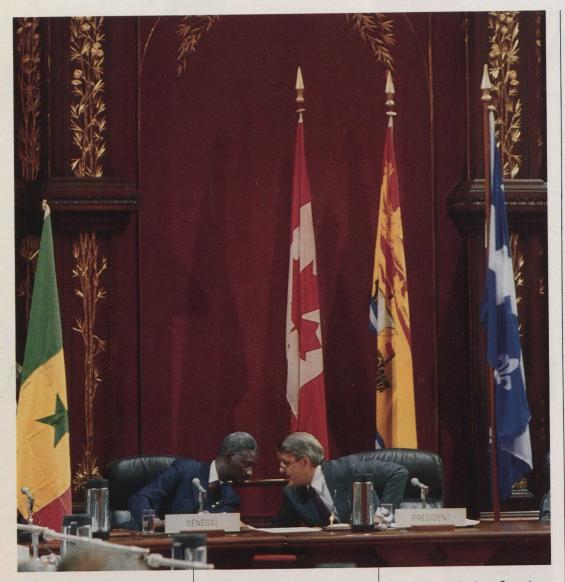
"We have time to anticipate and prevent disaster,'' said Mr. McMillan to the Montreal conference. 'But we do not have years or even months to waste. A planetary time bomb is ticking away and the pace is accelerating.'

Indeed, there is good reason to rejoice over the signing of this international treaty to protect the earth's ozone layer. The grounds for celebration lie not only in what the agreement will accomplish but also in the fact that it marks the first concerted attempt to control a global pollutant.





Tale of Two Summits



Prime Minister Brian Mulroney confers with Senegalese President Abdou Diouf at the Francophone summit in Quebec City.

n fall 1987, Canada hosted two key international summit meetings. From September 2 to 4, the second Conference of Heads of State and Heads of Government of Countries Using French as a Common Language was held in Quebec City. Five weeks later, Commonwealth Heads

of Government (CHOGM) met in Vancouver on Canada's west coast from October 13 to 17.

Both summits provided Canada with unique diplomatic forums to promote international co-operation and good will. Canada is one of the few countries in the world that combines membership in the Commonwealth and la Francophonie. This special relationship was highlighted and indeed

strengthened when Canada hosted both summits on Canadian soil.

Quebec Summit

The Francophone summit was held in Quebec City. Forty heads of state and government attended the meeting at which Prime Minister Brian Mulroney led the Canadian delegation. Two provincial premiers -Robert Bourassa of Quebec and Richard Hatfield of New Brunswick - also participated.

One of Canada's principal aims in supporting la Francophonie was to provide another forum for airing its foreign policies and for making known the bilingual character of the country.

Canada is one of the few countries in the world that combines membership in the Commonwealth and la Francophonie.

In his opening speech, Mr. Mulroney welcomed summit participants explaining that this second summit was of great importance to all Canadians but especially to "Francophones in Quebec, New Brunswick and all the other provinces." He expressed Canada's pride in hosting this second all-important meeting, "We see it not only as a glowing recognition of Canada's mission in the Francophone community and the enhanced role this gives our country in the world, but also as an affirmation of a new solidarity among countries that share the use of the French language."

The summit participants - a diverse group running the gamut from First World nations, such as France and Canada, to developing nations such as Senegal and the Ivory Coast - yielded an array of resolutions on international political and economic issues, which included southern Africa and apartheid, the Iran-Iraq conflict and the world economic situation.

Canadian Initiatives in Quebec

At the Quebec summit, Canada announced a series of new initiatives to help Third World countries:

- cancellation of \$324.9 million in development assistance debts owed to it by seven low-income countries in Sub-Saharan Africa:
- a number of projects in the fields of communications and culture to which Canada contributed \$7 million;
- the revitalization of an education centre for agricultural studies in Africa to which Canada allocated \$5 million:
- a co-operative program to promote energy conservation, energy planning and teledetection of energy resources: Canada allocated \$1 million over the next two years;
- support to projects for transferring technologies and scientific information from northern to southern coun-

tries: Canada contributed \$1 million over a two-year period;

■ the establishment in Canada of the International Francophone Centre for Distance Education.

At the summit conclusion, Canadian officials said that they were convinced of the viability of la Francophonie and were eager to see how the new group evolved in subsequent meetings. The next session will be held in Senegal in 1989.

Vancouver Summit

Commonwealth Heads of Government met in Vancouver from October 13 to 17, 1987. Of the 45 countries in attendance, 37 were represented by heads of state or prime ministers.

Prime Minister Mulroney, chairperson for the meeting, set the tone for Canada's participation by clearly signalling Canada's willingness to lead Commonwealth efforts against apartheid in South Africa. "This is a group that leads the world in its war on apartheid," Mr. Mulroney said at the press conference concluding the 28th meeting of Commonwealth leaders.

Canada has long been one of the Commonwealth's most vigorous critics of the apartheid regime in South Africa. Not surprisingly, the issue remained high on the agenda at the Vancouver summit.

Canadian Initiatives in Vancouver

In addition to Canada's commitment to bring apartheid to an end, a series of other initiatives were introduced at the October CHOGM:

- cancellation of development assistance loans to six Commonwealth countries in Sub-Saharan Africa;
- increased assistance to victims of *apartheid*. Canada made new commitments worth over \$4.4 million to

- education, community development, legal and humanitarian aid, and labour education;
- a donation of \$500 000 which will enable 10 small Commonwealth countries to have permanent representation at the United Nations;
- the "Vancouver Declaration on World Trade" indicated deep concern about trade protectionism and made a commitment at the highest political level for solid and early progress in the multilateral trade negotiations;
- a new distance education network with the central co-ordinating unit to be located in Vancouver on Canada's west coast. The Commonwealth network will promote exchange of information, training, technical assistance and research.

Informal consultation among Commonwealth heads of government.



ROSS CANADA CURRENTS

Summits Stamps

On September 2, Canada Post issued a stamp commemorating the Summit of Heads of State and Heads of Government of Countries Using French as a Common Language. Canada hosted the second Francophone summit in Quebec City, September 2 to 4, 1987.

French-speaking peoples from all five continents are represented in this international forum, established to promote cultural and technical cooperation among the nearly 200 million people of Frenchspeaking nations around the world. There are 7 million Francophone Canadians, living mostly in Quebec and New Brunswick.

The commemorative stamp developed for the summit was designed by Quebec artist Claude Gaudreau and features the symbol newly created for the Quebec summit. It depicts the spirit of mutual cooperation in the international Francophone community by using a ring of coloured elements taken from the flags of participating nations. The colours blend together

ANADA

SOMMET DE QUÉBEC 0UÉBEC SUMMIT

while still retaining their distinct nature.

Canada also paid tribute to the ninth Commonwealth Heads of Government Meeting by issuing a commemorative stamp for the summit that took place in Vancouver from October 13 to 17, 1987.

Having evolved out of the British Empire, the Commonwealth is a voluntary association of 49 independent sovereign states that consult and co-operate in the common interests of their peoples and in the promotion of international understanding and world peace.

The Commonwealth symbol is the dominant design element of this stamp. To give the symbol prominence, Vancouver designer Gus Tsetsekas used silver ink on a metallic blue background, with the typographical elements harmonizing with the overall design.

Canada Post stamps commemorate summits held in Canada in fall





Scientists Looking SHARP with Microwave Airplane

A pilotless, balsa-wood airplane made aviation history on September 17, 1987, in the world's first successful test flight of a microwave-powered craft.

Carrying no fuel, the plane flew higher than a three-storey building for 20 minutes at the Canadian government's Communications Research Centre outside Ottawa. The craft was powered by microwaves beamed from a satellite dish on the ground below.

The model plane is the first step towards the construction of a Stationary High-Altitude Relay Platform (SHARP), which would circle about 20 km above a groundbased microwave source to provide better capabilities in communications, surveillance, and atmospheric monitoring.

"It was a tremendous sensation to realize we'd

SHARP indeed: the world's first microwave-powered aircraft

done it," says project manager Ron Barrington. "This means the technology is in place that could make it possible to fly aircraft for weeks and months at a time.'

Mr. Barrington says a full-scale model of the SHARP system would fly high enough to contribute to regional radio broadcasting services, and low enough to improve surveillance of Canada's coastal waters and northern regions. For communications, the height of the platform would yield a broadcast range of about 600 km — up to 15 times the range of ground-based antennae. For surveillance, the unit would provide continuous, more precise coverage than a satellite located 35 400 km above the earth.

SHARP could also make a major contribution to the quality of environmental monitoring worldwide. "It's



rather important to an understanding of potential climate changes and the distribution of pollutants on a global scale to be able to monitor the atmosphere at this level on a continuous basis," Mr. Barrington says. "A lot of the information that's needed to really understand the processes that take place in the atmosphere has not been available."

Following demonstration of a half-scale model in two years, Barrington says the SHARP system could be in operation by 1991.

After TVFQ, TV5

For many years, the Communauté des télévisions francophones was responsible for occasionally bringing programs from the international Francophone community to Canadian TV

screens. In 1979, a Franco-Quebec agreement gave birth to TVFQ, "the television of France in Quebec" — an entire channel devoted to programs from the three French public networks.

The idea of offering
Francophone viewers
productions from other
French-language countries
spread and in 1984 Belgium,
France, and Switzerland
joined to create a European
network broadcasting
programs from the public
networks of each country.
Canada and Quebec joined
TV5 officially in 1986, but
broadcasts remained limited
to Europe.

Extending TV5 to
North America, the last
step required to make the
exchange complete, is
planned for early 1988. For
TV5's Canadian première
the Anik C-3 satellite will
broadcast the five partners'

programs to Manitoba, Ontario, Quebec and the Maritime provinces. Cable companies will then be free to transmit the programs to their subscribers. TV5 will carry a variety of Canadian and world features and a weekly African presentation.

It is to be hoped that this international network will continue to expand for the greater enrichment of French-language television.

Defending the Canada Cup

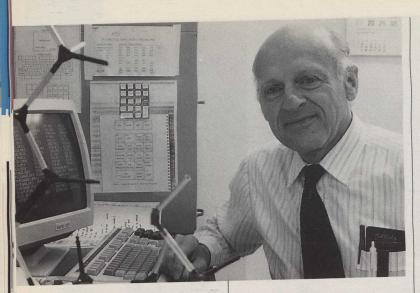
Mario Lemieux's 11th goal of the Canada Cup tournament was the margin of victory September 15, as Team Canada came from behind for a dramatic, 6–5 hockey win over the Soviet Union.

With one minute and 26 seconds remaining in the final game of the tourThe euphoria of victory as Team Canada celebrates its claim to hockey supremacy.

nament, Lemieux beat Soviet goaltender Sergei Mylnikov in a play reminiscent of Paul Henderson's historic goal in the first Canada-U.S.S.R. hockey series in 1972.

"This is a better feeling than winning the Stanley Cup, but it's sad too," commented left-winger Glenn Anderson, who plays for the Edmonton Oilers of the National Hockey League. "You don't know how good these people are until you play with them. The individuals became a team, and it will be sad to see them leave."

The entire three-game series against the Soviets was a matter of high-powered comebacks. In the



NRC scientist Dr. George Birnbaum has found a clue which may lead to a more effective drug against

first game, Team Canada recovered from a three-goal deficit, only to lose 6–5 in overtime. In Game Two, after losing the lead twice, the Canadians stormed back to win 6–5 in the second overtime period. The first two matches set the stage for Lemieux's dramatic finish, in what commentators described as one of the best hockey series in the history of the sport.

By the end of the sixnation tournament, there was no doubt that Canada and the Soviet Union were the world's two leading hockey powers. "The offence of both teams was so tremendous that the defence couldn't shut everybody down," said Oilers' Mark Messier. "Three 6-5 games, it's just unbelievable." The next series between the two countries will likely take place in 1990, and will consist of four games in North America and four in the Soviet Union.

A Lock and Key Approach to AIDS Treatment

A more effective drug treatment for acquired immune deficiency syndrome (AIDS) could be the end result of a study recently completed by Dr. George Birnbaum, a scientist with the National Research Council of Canada (NRC).

"I'm hoping the study will lead to the design of other drugs that have a higher therapeutic index, which means they will be more effective and have fewer side effects," says Dr. Birnbaum, who works at NRC's Division of Biological Sciences.

The key to Dr.
Birnbaum's findings is the unusual molecular structure of AZT, or azidothymidine, a drug that was licensed for AIDS treatment in the United States in March 1987.

"AZT is not a cure for AIDS," Dr. Birnbaum explains. "But it stops the production of additional virus, so that many people are still alive after 18 months who presumably would have been dead by now. They're not being cured; but they're being kept alive." In his study, Dr. Birnbaum used X-ray crystallography to determine the threedimensional structure of AZT, by pinpointing the relative positions of all the atoms in the molecule.

For Dr. Birnbaum, this ''tailor-made approach'' to the design of new drugs is something like fitting a key to a lock. AZT works by attacking the enzyme that promotes production of the AIDS virus. For the drug to work, its molecular shape has to be just right. "If the fit is too loose, it may also fit somewhere else and this may produce side effects," he says. "What you want is an exact fit. . . . Once you have that, you know it will block that enzyme, but it will not attach itself to anything else which could cause undesirable side effects."

Dr. Birnbaum says his effort to refine an existing AIDS treatment differs from the more standard procedure, in which research agencies are "just preparing compounds by the thousands and testing everything" for possible anti-AIDS activity. 'That's one way of doing it, but the chances of hitting something right are very small," he notes. "The other way is to start with a substance which is known to have some activity, modify it to something similar, and then test that. I think this is a more rational, more logical approach, because you're starting from something you already know about, rather than starting blind, more or less."

While Dr. Birnbaum's own work on AZT ended with the presentation of his research results this fall, he says his findings could be of use to the many research laboratories around the world that are searching for better AIDS treatments.

"GRASS" Will Put Criminals on Ice

A Canadian hightechnology firm is hoping to infiltrate the international crime prevention community with a new computer system that enables police analysts to track crime patterns on an electronic map.

ACDS Graphic Systems Inc. of Hull, Quebec, hopes to interest American, European and Asian police forces in the new Geographic Resource Allocation Software System (GRASS). Ian Rogers, ACDS product manager, demonstrated the system in Toronto this October at a conference of the International Association of Chiefs of Police — the first such meeting ever held in Canada.

While other firms have developed software that is comparable to GRASS, Mr. Rogers says he doesn't know of any other system like it. Because ACDS specializes in cartography, the maps have an especially high resolution that makes the GRASS system unique. In a recent test run, local Canadian police were able to chart municipal boundaries on computerized maps, add the dates and addresses of recent crimes and the addresses of known offenders, and use the resulting database to trace patterns of criminal activity for specific neighbourhoods.

By electronically dividing cities, this system will replace the labour-intensive process of placing coloured pins by hand on a series of wall maps. This, in turn, will make it much easier for analysts to spot local crime waves and gauge the effectiveness of neighbourhood watch programs, where people keep an eye out for unusual or criminal activities in their own neighbourhoods.

No More Babels of Bits and Bytes

Gandalf Technologies, an Ottawa-based computer company, has developed a new product which it says will revolutionize the computer industry. It can be called a 'bits and bytes translator' because it enables computers speaking different languages to work together; Gandalf Technologies calls it a huge moneymaker.



STARMASTER: a revolutionary development enabling computers to talk to one another.

The product is a modest 1.8 m tall and is approximately the size of a freezer. But the maze of computer chips and circuits inside make it, according to the experts, a revolutionary development in computer technology. It is called STARMASTER and it enables big computer users to link all their computer systems into one central network, regardless of makes or models. And that translates Into increased productivity.

Gandalf's Chairman, Desmond Cunningham, says that this type of central network has hitherto not existed. Until now it was impossible for computers of different makes, speaking different languages, to communicate with one another.

"Corporations, governments and universities have a multiplicity of applications that are running on different computers from IBM, from Digital Equipment, from Hewlett-Packard, Mr. Cunningham explains. "In general, networks associated with those individual computers do not communicate with each other, and so if you're on one of those networks you can't easily access the information that's on the other networks.'

It took Gandalf
Technologies five years to
develop STARMASTER. The
company expects its market
potential to jump dramatically
as a result. And by 1992
Gandalf expects its sales to
quadruple to \$500 million,
thanks in large part to
STARMASTER.

Where to Buy Tickets

Tickets for the 1988 Calgary Olympic Winter Games may be obtained as follows:

In U.S.A.:

California, call 1-800-421-2255 All other states, call 1-800-421-5785

All other countries:

Call 1-403-270-6088 in Calgary for ticket application forms. Tickets may also be obtained through local National Olympic Committees or from authorized ticket agents.



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Note to Readers It was erroneou

It was erroneously stated in the fall 1987 issue of Canada Reports that the "Loonie" was Canada's first one-dollar coin. Canadian one-dollar coins have been in existence for many years, but the Loonie is the first one designed for mass circulation to replace completely the one-dollar bill, which won't be printed after 1989. The bills, however, will continue to be legal tender for as long as they still remain in circulation.



irst Things Last

The XV Olympic Winter Games will be the first over hosted by a Canadian city. In the three months leading up to the opening ceremonies on February 13, the longest torch relay in the history of the Olympic Winter Games will take place covering some 18 000 km in 88 days. There are several "firsts" associated with these Games, among them the following:

For the first time in Olympic Winter Games history, all speed-skating events will take place in a fully enclosed 400-m oval. The 4 000-seat Olympic Oval, constructed for the 1988 Games on the campus of the University of Calgary, is North America's first fully enclosed speed-skating facility.



Canada Olympic
Park's bobsleigh and
luge track is the
most technologically
advanced bob/luge
facility in the world
today and the first
combined track built
in Canada. Not only
can the track remain
frozen in temperatures
up to 20°C, but
lighting also allows it
to be used for night
training.



The Olympic Saddledome is the largest ice-hockey arena ever used during Olympic Winter Games competition. The facility features the world's largest concrete-suspended roof, enabling almost 20 000 spectators an unimpeded view of the arena.



The XV Olympic Winter Games are the first in history to present demonstration events in short-track speed skating and freestyle skiing. Disabled skiing exhibitions in cross country and modified giant slalom will also be presented in Calgary.



