

Owen Sound Stamp Club

Chapter 191

Royal Philatelic Society of Canada

Next meeting; Wed. July 20th 2011 @ 7:00

From the President...



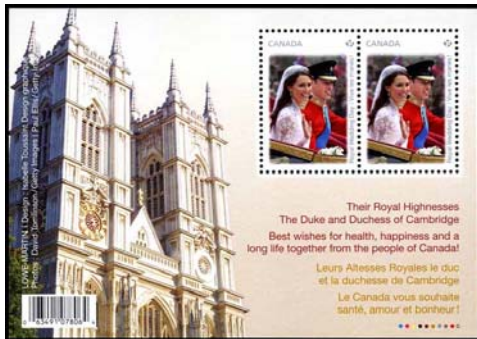
A hearty welcome is extended to all the members of the Owen Sound Stamp Club as well as any guests that may come along. It is time again to extend well wishes and an invitation to come to the regular monthly meeting at the St George's church. The meeting begins at 7 PM and will occur on Wednesday, July 20th. If it is warm, just remember that the meeting place is usually cooler than outside.

Thank you to **John Cortan** for bringing some of his wares to the June meeting, This month we will have a "Club Auction" where those members attending will be able to bring extra philatelic material to find a new home in someone else's collection. Please don't forget to bring along items that may be of interest in the show and tell portion of the meeting. Perhaps an interesting item may have come to your attention which you may wish to show the other club members, so bring it along as well.

This concludes my space of the newsletter and I turn this over to our trusty and faithful editor. I hope you will be able to attend on the 20th and I'm looking forward to seeing everyone there.

Phil Visser
President OSSC

On the Cover...Royal Wedding Day...Again!



I was very surprised when I visited my local Post Office recently to find more Royal Wedding stamps. The new 'P' rate stamp has an image of Kate and William in their Landau carriage on their way to Westminster Abbey to be wed. Ten self-adhesive stamps are available in booklet form and surprisingly the stamps have also been issued in pairs in two different souvenir sheets. One of the

sheets depicts the frontal view of the towers of Westminster Abbey that can be found on the OFDCover of the previous stamps, while the interior view of the abbey that is on the previous souvenir sheet is now found on the newly released OFDCover. The

same pair of stamps is on a second souvenir sheet that features a view of the Canadian Parliament buildings with a dynamic focus on the Peace Tower. A foil maple leaf is encircled with the words Royal Tour 2011 along with the dates of the tour in English and French. The symbol has the look of a cancellation but is not. The cancellation on the first day cover for this sheet is a Canadian flag and the cancellation for the other sheet is the Westminster Abbey towers. Both OFDCs are cancelled in Ottawa on June 22, 2011.

Many Canadians are thrilled that the young royal couple chose to come to Canada for their first official international tour. The tour began in Ottawa where the couple were cheered by more than 300,000 people, the largest crowd on parliament hill ever. The Duchess pleased the Canada Day celebrants by wearing a white dress topped with a red hat with red maple leaves. The Duke and Duchess won hearts wherever they went. Even their visit to Quebec went fairly well. They greeted people and participated in all sorts of events. The Prince used French on more than one occasion and used the Dene language in a speech in Yellowknife. They had a cooking lesson at a chef's school in Quebec. Prince William performed a helicopter sea rescue demonstration in P.E.I. and they both canoed at a ranger camp at Blachford Lake. There was much debate about whether the royal couple would don the handmade white cowboy hats to be presented to them for the (more about Will and Kate on the next page)

(On the Cover continued from page one)

opening of the Calgary Stampede; they did not fail to please and even wore cowboy boots, jeans and plaid shirts. The Prince took a few shots on the net in a road hockey game in Yellowknife. On the one day that William and Kate were expected to have a little quiet time in a Rocky Mountain resort the couple elected to visit the fire ravaged town of Slave Lake in Alberta. Their presence obviously lifted the spirits of the 7,000 citizens who cheered and chanted 'Will and Kate' upon their arrival. The tour finished off with a trip to California where they dazzled some Hollywood stars and Prince William joined in on a polo match.



There is no doubt that this couple is trying to shake off some the stuffiness associated with the British crown and the people seem to love them for it. While some people think that Canada should shrug off the yoke of the monarchy and many people think that we should not be footing the bill for such extravagances, you have to admit that this Royal Tour aroused a lot of excitement, patriotism and a sense of history for very many Canadians. Well done Will and Kate!

On your cover this month is one of the two new souvenir sheets. It is completely random as to which one is on your cover.

The Space Shuttle ...by Ralph Wyndham



If all goes according to plan, Space Shuttle Atlantis will lift off on the shuttle fleet's 135TH and final flight into orbit high above the earth on July 8, 2011. Ultimately, five craft were built and sent into space: Atlantis, Endeavour, Discovery and the ill-fated Challenger and Columbia. A sixth craft, the Enterprise was the first model built, but was only intended for test flights in the earth's atmosphere and was never upgraded for space service.

Plans for a reusable manned spacecraft that became the National Aeronautical and Space Administration's shuttle program, officially called the Space Transportation System, were conceived in the 1960s, even while the manned Apollo missions to the moon were ongoing. The process to create a manned reusable space shuttle was officially set in motion by President Nixon on January 5, 1972. After years of planning, design, construction, testing, retesting, redesigning and retesting again were required before the shuttle Columbia finally roared into space on April 12, 1981.

Space shuttle
Endeavour lifting
off from Kennedy
Space Center on a

Sitting on the launch pad at the Kennedy Space Center fully fuelled and ready for lift off, the whole assembly – two solid fuel rockets, a large central external fuel tank filled with liquid oxygen and liquid hydrogen, with the shuttle attached to all of this -- weighs in at around 4.5 million pounds (2 million kgs). Over 80% of this total is just to lift the shuttle into orbit. By shuttle Endeavour, fully loaded with (25,000 kgs) of cargo, weighs around 109,000 kgs.



The solid fuel rockets burn out in separating from the shuttle, fall back into the ocean on parachutes and are recovered for reuse. The main shuttle fuel tank, after feeding the shuttle's three main engines 3,900 litres of fuel per second for almost 9 minutes, is also jettisoned and falls back into the ocean but is not recovered.

Shuttle Challenger in orbit on a 1995 USA priority mail stamp. If I understand correctly, the shuttle would ordinarily orbit

the fuel needed comparison, the 55,000 pounds 240,000 lbs or

two minutes and,

Once in orbit, the craft relies on two smaller sets of engines for manoeuvring. The orbital manoeuvring system (OMS) changes the shuttle's orbit (higher or lower) while the reaction control system (RCS) engines change what direction the shuttle faces, but does not change orbital height. For example, to dock with the International Space Station (ISS), Endeavour might fire the OMS engines to match the ISS orbit, then would

deploy short bursts from the RCS engines to line up for (more about *The Space Shuttle* on the next page)

(*The Space Shuttle* continued from page two)

docking. Even when space walks are planned, most of the crew's time in orbit is spent in the confines of the shuttle work and living spaces performing their mission tasks. Crew members must also spend time exercising on the tread mill to avoid bone and muscle loss due to weightlessness.

Conditions must be managed for protection of both astronauts and their vital equipment. The cold of space is not enough to dissipate the heat given off by all of the electrical equipment and the astronauts' bodies. Excess heat is removed from the cabin area and used to keep vital systems from freezing in cold parts of the craft and the rest is radiated into space. Three on board fuel cells that make electricity for the shuttle do so by combining oxygen and hydrogen that also produces water that can be used by the crew and the craft.

Excess moisture, carbon dioxide, ammonia, leaks and spills, gases coming off of warm electrical equipment, food and dust particles floating in the weightless atmosphere of the shuttle cabin must all be filtered out. Food scraps, toilet waste and solid waste must be dehydrated. Waste water and gases can be vented into space, but solid waste must be compressed and bagged and brought back to earth for disposal lest it become 'space junk' forever orbiting the earth and possibly becoming a hazard to future space missions.

Fire is also of great concern. The smallest of fires could quickly fill the craft with noxious smoke and damage irreplaceable equipment and systems. Therefore, there is an extensive system of smoke detectors, alarms and warning lights to warn of fire and carbon dioxide fire extinguishers are readily available.

When a shuttle mission is completed, it is time for the trip back to earth. For most of the trip, the shuttle has been flying upside down and nose first. Now, the RCS thrusters are fired to turn the craft tail first. At the right moment, the OMS engines fire, slowing the shuttle enough to take it out of orbit and start its descent. 25 minutes later, the shuttle, now turned right side up, reaches the upper atmosphere. Shuttle airspeed is still 17,000 mph (28,000 kph) and at that speed, the craft cannot push air molecules out of the way. The friction caused by air crashing into and rushing along the bottom of the machine creates heat reaching 3,000F (1650C) but materials designed to withstand this heat protect the craft.

As the shuttle descends, it is under the control of the computers. About 25 miles from the runway, the shuttle commander assumes control. 2,000 feet above ground, the



A space walk detail from 'Escaping the Gravity of Earth'



After touchdown, the shuttle's drag chute opens to help

commander pulls the nose of the craft up to slow it down for landing. The landing gear is dropped into place and, as the wheels touch the runway, the brakes are applied and a parachute is deployed to help stop the shuttle. It takes the crew about 20 minutes to shut down all on board systems during which time the skin of the craft cools down and noxious gases around the craft dissipate enough for the ground crew to assume care of the shuttle.

During the design phase, the expected life span of the space shuttle orbiter was estimated at 10 years or 100 flights. A 'disaster potential', though never defined as fatal or not, was judged to be one incident in 75 missions. As anyone who has followed the shuttle missions over the years will likely know, two fatal disasters have befallen the program in 30 years of flights resulting in the loss of 14 astronauts' lives.

In regular airline travel, take offs and landings are the most fraught with danger. This would also seem to be the case with space shuttles as Challenger was lost during liftoff on January 28, 1986 and Columbia broke apart just 16 minutes from landing on February 1, 2003. These craft were also the first two shuttles of the five completed to be put into service.

Public interest was particularly high for Challenger's ill-fated mission. President Reagan had instituted the 'Teachers in Space Project' to honour teachers and spark students' interest in science, math, and space exploration. As part of Challenger's seven member crew, school teacher Christa McAuliffe was on board to become the first teacher in space. Lift off seemed successful, but as the shuttle gained altitude, just 73 seconds later, to the horror of the millions watching, including Christa McAuliffe's own class, Challenger broke apart, crashing, in pieces, into the Atlantic Ocean.

(more about The Space Shuttle on the next page)

(The Space Shuttle continued from page two)

The Rogers Commission was convened to investigate, putting the shuttle program on a 32 month hiatus. It was determined that an o-ring seal on one of the solid fuel rockets had failed thus setting in motion a chain of events that led to the mid-flight break up. It had been known for a long time that the o-rings might be vulnerable to failure but nothing was ever done about it. NASA's launch day procedures were found lacking as well. Many changes recommended by the Commission were implemented including new guidelines around launching in cold weather.



Columbia, after completing its mission in orbit, was destroyed during re-entry on February 1, 2003, claiming the lives of the seven astronauts aboard, just 16 minutes before expected landing.

A space shuttle, after returning to earth, getting a piggy back ride back to the Kennedy Space

The ensuing enquiry concluded that, during take off, a chunk of the foam insulation covering the external fuel tank had broken free striking the left wing. The collision seriously damaged the heat shield covering. This damage allowed the searing heat created during re-entry to reach the structure of the wing causing it to weaken resulting in the destruction of the entire shuttle.

Instability of the foam insulation had been recognized as a recurring problem during lift off for all missions and was considered an 'acceptable risk'. As a precaution on subsequent missions, the Canadarm, built by Spar Aerospace, Ottawa, Canada, was equipped with a camera so that the entire heat shielding of the shuttle could be inspected for damage prior to committing to re-entry.

As a result of the investigation into this disaster, president George W. Bush decided that the shuttle orbiter fleet would be retired in 2010 in favour of the next generation of manned spacecraft planned for the Constellation Program. Constellation was envisioned to be a capsule-type vehicle similar to the one used in the earlier Apollo lunar missions that would lead to more trips to the moon and possibly on to a manned mission to Mars.

For 30 years, space shuttle missions have deployed and serviced satellites, repaired the Hubble Space Telescope, performed many scientific experiments, performed classified defence missions as well as 34 construction and supply missions to the ISS.

In light of program delays and cost overruns, President Obama cut the Constellation program from the 2010 budget. All that remains of the program's lofty vision for space exploration is a plan for an escape pod for the International Space Station. For now, at least, American human space flight is left to rely on commercially developed private space launch vehicles.

The Atlantis took off successfully on July 8th and met with the Intl. Space Station on Sunday July 10th. The final space shuttle mission continues as this newsletter is being printed. Thanks Ralph Wyndham for bringing this bit of history into focus for us.

Coming Events...

- AUG. 6, Fenelon Falls, ON
FENPEX 27, Fenelon Seniors' Club Hall, 58 Murray St. Hours: 9.30 a.m. to 3.30 p.m. Door prizes, free stuff for kids, silent auctions, dealers, lunch available, bright new air-conditioned building, free admission, lots of free parking. Sponsor/Affiliate: Fenelon Stamp Club. For information contact Lloyd McEwan, club president, telephone 705-324-7577, email lmceewan@sympatico.ca.

- **AUG. 13, Kincardine, ON**
KINEX 2011, Davidson Centre, 601 Durham St. Seniors Room. Note this is a new location. The Davidson Centre is just off Hwy. 21 on Durham St. Hours are 10 a.m. to 4 p.m. Free admission and parking, eight to 10 dealers, youth table, door prizes, lunch booth. For more information contact John, telephone 519-395-5817, email jcortan@hurontel.on.ca.
- **AUG. 20, Bracebridge, ON**
MUSPEX 2011, Muskoka Riverside Inn, 300 Ecclestone Drive. Hours: 9:30 a.m. to 4 p.m. Free admission, free parking, exhibits, 10 dealers, door prizes, club sales table. Sponsor/Affiliate: Muskoka Stamp Club. For more information, contact Bruce Hughes telephone 705-385-2020
- **SEPT. 2 - 4, North Bay, ON**
BNAPEX 2011, Clarion Resort Pinewood Park Hotel, 201 Pinewood Park Dr. Exhibits, bourse, study group meetings, seminars, area tours, awards banquet. Sponsor/Affiliate: British North America Philatelic Society. For more information contact John Beddows, email: jlw@onlink.net, PO Box 21077, North Bay, ON P1B 9N8. Website: <http://www.bnaps.org/bnapex2011>.
- **SEPT. 17, Toronto, ON**
Fall Postage Stamp Bourse, Yorkminster Park Baptist Church, 1585 Yonge St. Free admission, club sale circuit, wheelchair access, refreshments available. Sponsor/Affiliate: North Toronto Stamp Club. Hours: 10 a.m. to 4 p.m. For more information, contact Herb, telephone 416-445-7720, email ntstampclub@yahoo.ca. Website: <http://www.NorthTorontoStampClub.tk>.
- **SEPT. 17, Owen Sound, ON**
Owen Sound 16th Annual Stamp Show and Sale, Royal Canadian Legion, 1450 2nd Ave. W. NOTE: New location. Hours: 10 a.m. to 4 p.m., eight dealers, door prizes, free parking and admission, exhibits and free stamps for kids. Sponsor/Affiliate: Owen Sound Stamp Club. For more information contact Marion Ace, telephone 519-934-1998, email marionace@bmts.com.

From the Editor...



Thanks to John Cortan for bringing a ton of stamps to our June meeting. I hope that everyone will bring lots of interesting items for the auction.

Don't forget to buy your tickets for our 2011 Stamp Show Raffle. They are 4 tickets for \$5.00 or 1 for \$2.00. If you can't make it to the meetings, send me five bucks and I'll include your tickets with your newsletter.

See you on Wednesday! The Editor

Owen Sound Stamp Club

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Royal Philatelic Society of Canada**

The Owen Sound Stamp Club meets at 7:00 pm on the third Wednesday of each month in the basement of St. George's Anglican Church (corner of 10th St. E. and 4th Ave. E.). The main business of the evening is typically to trade, buy and sell stamps and philatelic material. An Auction is often held at 8:00 pm. There are presently about 25 active members whose interests cover just about everything at all levels, from beginner to expert. Guests or new members are always most welcome. Annual membership fees: \$15; Junior- Free

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