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The CN Tower, Toronto, Canada

Introduction

The construction of the CN tower started in 1973 and ended in 1976. The Canadian National Railway constructed the tower to enhance the reception of TV and radio for Toronto, Canada. The construction cost 63 million CAD. In 1995, the tower's ownership was transferred to a lands company in Canada. Today, the construction is no longer called the Canadian National Tower, but Canada's National Tower (CN Tower). Its height is 1,815 ft (Moskal 20). At the center there is concrete pillar, which is hollow and hexagonally shaped. It has electrical lines, six elevators, and stairwells. The peak has a tall antenna of 102 meters, which broadcasts TV and radio signals. The major supporting pillar was built through hydraulic rising of a large metal dais from the base. The antenna was in erected in 36 sections by a helicopter. The tower has been for years ranked the tallest in the world. Nevertheless, the tallest tower today is the Tokyo Sky Tree, which is 634 meters tall (McClelland and Stewart 204). Since construction, the building has been socially significant for the people residing in Toronto because it was used for communication, observation, and as a restaurant.

Architectural Description and Details

The architectural style used to construct the tower is futurism. The materials used include concrete, steel, and glass. The CN Tower has many structures. The main one is a hexagonal hollow pillar and escalators. It also has a metal antenna for transmitting signals for radio and TV (McClelland and Stewart 205). The tower's hexagonal shape is visible amid the two regions for visitors. The main platform is supported by three so-called legs, which make the tower appear like a large tripod. A large white and ring-shaped Donet lies under the public areas. It is covered with long-lasting foam structures, which contain the radar receivers. Notably, the tower has 147 floors with the internal staircases having numerous levels from the ground up to the SkyPod; this

is a public watching deck. Concrete was used to construct the SkyPod through pouring it in a wood's formwork, which was later affixed to steel bars reinforced by the lower deck. Afterwards, a steel compression band was used to support the SkyPod around the outside. Numerous tests have revealed that the tower can stand lightning, the impacts of snow, earthquakes, and hurricane winds.

Technical Data

The CN tower sways 1.07 meters towards the antenna height with winds of about 190 km/h. Additionally, it sways 0.46 meters height, as well as 22.9 cm SkyPod up-to the main floor with the same amount of winds (McClelland and Stewart 206). The tower's design can enable it to endure an earthquake of about 8.5 degrees. The shaft pierces just six meters in the sum base of 15 meters, regardless of tower's 553 m-high.

Discussion of the Social History of the Building

The CN Tower is the most celebrated and recognizable icon in Canada. It is a globally celebrated architectural success, excellent entertainment, an engineering Wonder of the Modern Globe, dining destination, and a must visit for individuals visiting Toronto. Every year, more than 1.5 million individuals visit the tower to enjoy views and other things the building has to offer. In a 40 months period since it had been built, on June 26, 1976, the tower was opened to the public and was on the way to becoming the nation's most renowned landmark. It is Toronto's telecommunications center serving more than 16 Canadian TV and FM radio stations. The tower is a workplace for more than 500 individuals and a globally famous tourism destination (Grant 148).

The origins of the tower are rooted in practicality, although it inspires a sense of pride and inspiration for Canada residents and a sense of admiration for overseas tourists. The 1960s

introduced an exceptional construction bang in Toronto, changing a skyline differentiated by low buildings into one-dotted with skyscrapers. The buildings led to severe communications issues for existing broadcast towers that were not adequately high to transmit signals over the upcoming buildings. Signals rebound the buildings causing poor TV and radio reception for inhabitants. The tower was a solution to the communication issue with its microwave receptors at the 553.33m and 338m antennas (Baldwin 29). Consequently, individuals living in Toronto currently enjoy clear reception.

The Canadian National built the tower to display the capability of Canadian industry to build the tallest tower in the globe. This was an ambitious project, which involved many employees. Since the opening of the tower, Canadians and tourists across the globe have toured Toronto to commemorate this spectacle of engineering. The tower offers many distinct attractions, displays, food and beverage venues besides being a telecommunication hub. Down the years, much money has been put into the expansion and revitalization of the tower to continue providing guests an excellent experience.

The world's number one touring machine was first plunged at the CN Tower in 1986. Over the years following the tremendous launch, maintenance has been going on, as well as advanced programming of the simulator in a bid to ensure the experience continues to be as interesting as the initial launch. To make the launch tower more attractive, an expansion project was implemented in 1998 (Baldwin 31). It included a gift shop and a theatre that housed a cinema hall where visitors could view 3D films. For more than 3 decades, the CN Tower has been a significant telecommunication centre in the provision of wireless, radio, television, and data transmissions. Following a broad remodeling and restructuring of the CN Tower in 1995, a spectacular *360* restaurant was opened. After opening the hotel, a chef team was appointed to

ensure high quality of the cuisine. Over years, the restaurant has been upgraded to meet highly competitive international standards. For example, a wine cellar with a capacity of over 9000 bottles was introduced in 1997. The cellar was situated at 351 m, and in 2006, it was listed in the Guinness book of records as the highest and prominent wine cellar. The restaurant has been an important terminus site for many celebrities, Torontonians, tourists, and other dignitaries.

The restaurant has won several honors for its excellent services in ambiance, wine, and cuisine. Following the increased number of visitors touring the tower every year, two extra elevators were built in 1996 to meet the increased demand. The two elevators plus the previously constructed four made six elevators. The CN Tower experienced one of the most striking and significant remodeling in 2002 (Grant 148). This time, the Radome was substituted with donut-shaped, white fiberglass that was erected at the main pod base. In a bid to increase security at the site, the tower's security systems are always upgraded through proper advanced security equipments. A state of the art security archway was placed at the tower's entrance in 2002 at an estimated cost of 1 million dollars (McClelland and Stewart 207).

Since its inception, the CN Tower has maintained its world rank as one of the highly boosted sites in terms of advanced security equipments that ensure visitors' safety. The site guarantees both external and internal unlimited security throughout the week. A unique exclusive event and meeting place was added to the tower in 2006 to meet the rising demand of the event venue in Toronto. The event and meeting place station covered approximate 1,100 sq. ft along the CN tower cinema hall (Baldwin 34). The meeting rooms in the station were fully furnished with audio and video presentation equipments suitable for conferencing. The equipments were installed in Cedar, Aspen, and Birch meeting rooms. Quality meals are also served during meetings upon request from the restaurant.

An amazing CN Tower lighting system was added on June 28, 2007, when advanced programmable exterior LED lighting systems were installed. The lighting system illuminates the tower at night, giving a classical conspicuous appeal that catches the attention of several people living around the tower. The LED light system is affordable and efficient to use, having lit the tower for approximately 10 years. April 9, 2008, marked the introduction of the most high glass floor wainscoted elevator. The elevator was to enhance visibility and tremendous look for the visitors exploring the tower. A section of the floor in the elevator was further restructured to allow two more glass panels that covered an area of 6ft. The elevators speed of about 22km/h kept the tower's world record of having the most prestigious elevators in the world. In 2007, both *360* Restaurant and the CN Tower won the 12 most prestigious awards. In 2010, a 3D high definition postmodern state of art theatre was added to the CN Tower to maintain the wonderful touring locations in existence (Baldwin 37).

The maple leaf Cinema was also upgraded with modern advanced equipment, thereby enhancing attraction from both the private and public sectors. The equipment was used in presentations and screening. A high technology cinema programming was introduced in the theatre, giving visitors a marvelous 3D high definition feature to enjoy quality lineaments in films. In 2011, an EdgeWalk in a complete circle featuring free hands walk was established at the CN Tower's major pod. The EdgeWalk provided one of the most amazing experiences for visitors who were thrilled by the tower's wonderful man-made scenery (McClelland and Stewart 207). Up to date, many visitors enjoy exhilarating experiences that remain in their memories forever.

Conclusion

The CN Tower was constructed between 1973 and 1976 by the Canadian National Railway to offer transmission signal for TV and radio in Toronto, Canada. The tower has been the tallest (1,815 ft) for years and enjoyed the fame of being a landmark. Its architectural style is futurism, and it has been socially relevant to individuals residing in Toronto, as well as visitors. Clearly, the social history of the CN Tower goes far much in attracting not only the attention of the locals but also the world's attention at large.

Works Cited

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