

FHBRO Number 88-161

Québec, Quebec

**Former Observatory and Ball House**

Building No. 20

The Citadel, Québec

The Former Observatory and Ball House was constructed in 1850 by the Royal Engineers. It is not known, however, if the Royal Engineers also designed the building. From 1908 to 1939-1940, Building No. 20 was under the jurisdiction of the Department of the Navy and Fisheries. In 1952, the Royal Canadian Mounted Police set up radio communication equipment and an antenna in the building which they used until 1957. From 1953 to 1983, the building also housed the Citadel's electrical transformer. In 1987-1988, the military police at CFB Valcartier installed an antenna at the site to communicate with the Citadel. Today, the building is vacant. Building No. 20 is located in Mann's Bastion behind the Administration Building of the Royal 22<sup>e</sup> Régiment (the former Hospital). It is part of the Citadel of Québec, a National Historic Site. The building is owned by the Department of National Defence. See FHBRO Report 88-161.

**Reasons for Designation**

The Former Observatory and Ball House has been designated "Classified" because of its great historical significance, fine design with very interesting features, and environmental significance.

Primarily associated with the development of astronomy in Canada, the field of time measurement in particular, Building No. 20 is the oldest building in Canada designed for use as an observatory. It probably also housed one of the first devices used in a Canadian harbour to measure time and to signal the time using a ball.

Building No. 20 is also associated with Edward David Ashe, who served as the first director of the Québec Observatory from 1850 to 1883 and is credited for laying the groundwork for the next half-century of practical astronomy in Canada. Because of his solar research, he is considered to be Canada's first astrophysicist.

Although it is located in the Citadel, Building No. 20 had no military function. Rather, it is associated with the history of Québec as a port city, given that it signaled the time to mariners.

The Former Observatory and Ball House is an attractive and harmonious arrangement of architectural forms. It is probably the only masonry observatory still standing in Canada. Its unique shape is attributable to its dual function of housing an astronomical observatory and supporting a facility that could be used to communicate the exact time to mariners using a ball. It was probably the first time such a process has been used in Canada, and it was a service that proved vital to ships.

Building No. 20 accentuates the historical character of Mann's Bastion, where it is

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located. It blends well with the other buildings in the Citadel in terms of materials, height and design.

### **Character Defining Elements**

The heritage character of Building No. 20 resides in its unique architectural form, the building materials and construction techniques, and the siting and orientation, which are closely related to its specific functions.

It is a compact, two-storey masonry building, irregular in shape (the plan is roughly L-shaped). The rectangular section was the former observatory, while the square section formerly housed the ball installation (it is currently topped by an antenna). The two parts of the building are connected by a small porch whose primary function was to absorb the vibrations produced when moving the ball. The rooflines reflect the complexity of the structure.

The simple lines of the building, which offset the complexity of the design, should be respected.

Owing to its regularly-coursed stone masonry, Building No. 20 blends well with its surroundings at the Citadel. Like many of the nearby structures, it has only one decorative element: the band course marking the line between the ground and first floors of the observatory. The building is still entered from the porch. Many of the original works, their placement determined by functional requirements, have been walled in. There are still signs, however, that they exist. The vertical openings (similar to loopholes) have for the most part been spared, but are blocked up on the inside. The roof of the porch still has a old wooden turret pierced by twelve small windows.

An ongoing maintenance program should be established to preserve the integrity of the building and its masonry, which is weak in many areas. It is recommended that new mortar joints and replacement stones be similar to the old materials already in place. Restoration of Building No. 20 should make it possible to reintegrate, as much as possible, the significant elements of the building, such as the windows and the observation openings. The style and manufacture of the windows, doors and roofs should respect the original design so as to preserve the historical consistency of the building. Particular care should be taken to preserve the wooden turret and the mechanism that allowed the roof to turn.

With regard to the interior of the building, the tangible traces of elements related to its primary use should be identified and preserved. Good ventilation is desirable in order

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to preserve the existing materials. Should the building be converted to interpretive use, consideration could be given to reintegrating the elements that have disappeared. The installation of electrical and mechanical systems should respect the historical character and texture of the site.

The functional considerations that came into play in choosing the location of the Former Observatory and Ball House are still in evidence. The building was aligned on the meridian for observation purposes, and parts of the building extend higher than the walls of the bastion so that they could be clearly seen from the harbour. These siting factors are an integral part of the heritage character of the building; it is therefore recommended that the immediate setting of Building No. 20 not be altered.

For further guidance, please refer to the *FHBRO Code of Practice*.

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Translation