



HANGAR #14 11410 - KINGSWAY AVENUE

Description of Historic Place

Hangar #14 is a tall, one-storey rectangular plan structure, with lean-to additions on the east and west sides. The interior consists of an exposed heavy timber truss system stayed with tension cables, allowing for a clear span width of 34 metres. It is located on the southwest side of Edmonton's Municipal Airport on one large lot, located north of Kingsway Avenue. It backs onto the airport on its north and east, and faces a parking lot to the south.



Heritage Value

Hangar #14 has heritage value as a rare surviving Canadian example of hangar design from the WWII period and as a symbol of Canada's wartime experience. It has additional significance for its association with Wilfred R. May, one of Edmonton's most significant aviation figures and the 418 City of Edmonton Squadron.

Built in 1942, Hangar #14 is significant as the only remaining 'double wide, double long' hangar in Canada. The hangar is a good example of standard British Commonwealth Air Training Plan (BCATP) design, which could be doubled in width or depth depending on the size of the school or facility required. Its most notable architectural feature is the roof structure that spans a width of 34 metres without intermediate supports, employing a modified Warren truss system. First developed in 1848, a Warren truss consists of

parallel upper and lower chords with diagonal connecting members forming a series of equilateral triangles. These trusses are built of Douglas Fir, as are the rigidly braced wood columns on which they rest. Hangar #14 also used a Canadian patented system of connection with steel bolted joints and split-ring connectors, making the joints stronger than in traditional Warren truss systems. The roof and superstructure were constructed of heavy timbers, specified because of the shortage of steel during wartime. Integral to the wide-span design is the operation of the steel section doors on the end wall, which are top-hung and slide horizontally.

Furthermore, Hangar #14 symbolizes Canada's wartime aviation experiences and Edmonton's important role in the BCATP during WWII. Hangar #14 was one of a number of facilities built across the country to house the BCATP, an

agreement between Canada, Great Britain, Australia and New Zealand to train aircrews for duty during the war. This training took place in Canada due to ideal conditions on the prairies and a low population density. Hangar #14 served several different training schools, but was utilized primarily by the Air Observers School.

Hangar #14 is additionally valued for its associations with Wilfred R. May (1896-1952), one of the most famous figures in Edmonton aviation, who was best known for escaping the 'Red Baron' during WWI. In 1919, May and his brother started May Airplanes Limited and built their first hangar in 1920. As a result of his contributions to Canadian aviation, May was appointed as an Officer of the British Empire in 1935. During WWII, Hangar #14 and other structures were built adjacent to these original hangars, and May was instrumental in running the





Air Observers School from these hangars. May's involvement with the growth of this airfield entrenched the development of Edmonton's first municipal airport in this location.

There is also historical value associated with the use of Hangar #14 by the 418 City of Edmonton Squadron between 1946 and 1957. The Squadron is remembered for its triumphant performance in the battles at Dieppe and Normandy during WWII.

Character Defining Elements

Key elements that define the heritage character of the Hangar #14 include its:

- landmark location adjacent to the runway of the City Municipal Airport;
- form, scale and massing expressing its functional industrial design;
- rectangular plan with lean-to additions to the east and west;
- one-storey height with an internal clear span width of 34 metres;
- four quadrant subdivided roof that slopes from the centre to the outer walls;
- exterior elements such as its: cedar shingle siding; top-hung, sliding steel section doors with glazing; off-centre two-storey vehicle entrance with rolling door; and central timber column with shingle siding on the end elevations;
- lean-to additions on the east and west elevations, consisting of wood-frame construction with cedar shingle siding;
- four doors on the east façade and five doors on the west façade;

- off-centre two-storey entrance with rolling door on the east façade;
- central one and one-half storey addition with smaller garage doors on the west façade;
- regular fenestration with large, industrial rectangular 36-pane wooden windows on the east and west elevations;
- 6-over-6 double-hung wooden windows and 12-pane wooden storm windows on the lean-to addition; and
- interior elements such as its exposed interior framing and truss structure, with Douglas Fir vertical wood posts supporting long Warren trusses.

