

### Canadian National's Toronto tower tops the world

*A ceremony in Toronto on February 5 marked the beginning of construction of what is expected to be the tallest self-supporting structure in the world — an 1,805-foot communications and observation spire to be known as CN Tower.*

Scheduled for completion in 1974, the concrete structure, which will cost \$21 million and create more than 1,000 jobs, is being erected by CN Tower Limited, a subsidiary of Canadian National Railways, in the Metro Centre complex. It will be one of the engineering and architectural wonders of the world, according to Norman J. MacMillan, Chairman and President, CN System, "an exciting international tourist attraction". he said.

CN Tower will be the first structure in Metro Centre, a 15-year development on 190 acres between the central business district and the waterfront. Its close neighbours will be the Canadian Broadcasting Corporation (English-language network), the proposed new Massey Hall and the proposed Convention Centre.

The tallest comparable structure in the world is the Ostankino Tower in Moscow, which is 1,748 feet high. The Eiffel Tower in Paris is 984 feet high and the Skylon in Niagara Falls, Ontario rises 520 feet above ground.

CN Tower will accommodate television antennae for the Canadian Broadcasting Corporation, commercial stations, educational television, and cable television companies. It will also accommodate all the FM radio channels allocated to the Toronto area, mobile radio systems and CN Telecommunications microwave facilities.

Glass-faced elevators on two of the tower's three sides will carry visitors to a circular six-storey "sky pod" between the 1,100- and 1,200-foot levels, where sightseeing and broadcasting facilities, a 360-seat revolving dining room, lounge, indoor and outdoor observation decks, radio studios, snack bar and display areas will be located.

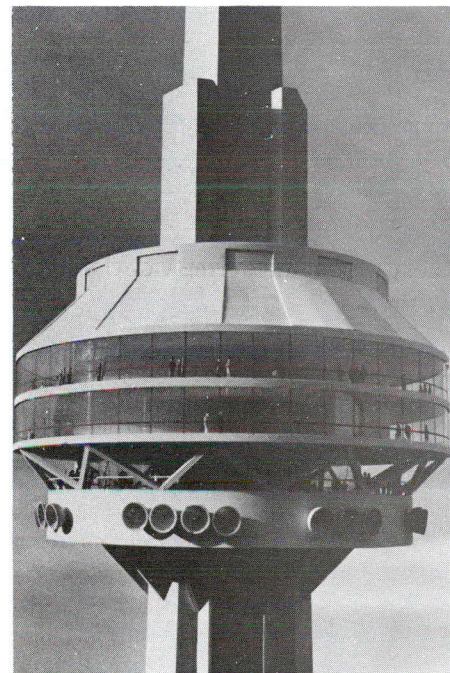
Rising to more than twice the height of Toronto's tallest existing building, Commerce Court, CN Tower will be set in parkland; landscaped terraces will slope down to a large reflecting pool surrounding its base, which will house shops and restaurants. Visitors

will be able to use a bridge over the pool to reach the glass-walled rotunda in the base of the Tower.

#### Method of construction

Construction techniques are unusual. The site will be excavated through 35 feet of overburden into some 20 feet of rock and the foundation laid. Special forms will be set up and a concrete shaft will be poured continuously, 24 hours a day, using a slip-form method. The Tower will rise at the rate of 16 feet a day.

The Tower will have stability to withstand the effects of high winds, snow, ice, lightning and earth tremors. The unique design involved consultations with experts in Canada, Switzerland and the United States. Wind-tunnel tests were conducted at the University of Western Ontario and soil tests by the University of Toronto and Queen's University.



*The sky pod, more than 1,100 feet above ground will house six storeys. Level two will have an outdoor observation deck, level three an enclosed one and level four will contain a 360-seat revolving restaurant.*