

## **Former CME Officer as Senior Engineer for Renovation of the UN Buildings in New York City**

Major Marian J. Miszkief, CD, APEGBC, PEO, MBA, PMP (Retd) retired from the CF in 1999 after a 22-year career as a Canadian Military Engineer officer. After a position as Director of Physical Resources at Camosun College, Victoria, BC, in January 2011 he was selected as the Senior Engineer for the United Nations Capital Master Plan. The immense magnitude and scope of this multi-year, \$1.87 billion dollar renovation project is difficult for most of us to appreciate but the following LINKS give some detail:

- <http://www.un.org/cmp/uncmp/english/index.asp>
- [http://archrecord.construction.com/news/daily/archives/2010/09/100920UN\\_Campus.asp](http://archrecord.construction.com/news/daily/archives/2010/09/100920UN_Campus.asp)
- <http://www.theglobeandmail.com/news/arts/at-the-united-nations-updating-a-modernist-icon/article2418411/>

It would be an understatement to say that this is an once-in-a-lifetime project. Situated on First Avenue in New York City, the UN covers nearly 8 city blocks (17 acres). Built in 1950, it comprises four major buildings with a floor area of more than 2,500,000 square feet.



On the right is the General Assembly Hall with its recognizable Le Corbusier dome; in the foreground, the Conference Building, which is at a right-angle to it and is a low, flat building, partially hidden by the Secretariat; the Secretariat tower comprises 38 floors; finally, on the left, the Dag Hammarskjöld Library/South annex building intersects with the conference building behind the Secretariat tower. Immediately underneath the entire complex is a three to five storey underground basement complex (equal in size to the Secretariat tower) that houses all the services, loading dock, technologies, utilities, power/chiller plant and parking.

The scope of the endeavour crosses almost every known engineering and architectural discipline in vertical construction. The scale includes gutting the infrastructure to achieve building/fire code requirements, security/environmental upgrades, asbestos abatement throughout, refitting all spaces, and technology upgrades. Furthermore, renovating over 2,500,000 square feet of infrastructure is a daunting task given that the complex remains operational to support the daily work of the United Nations.

Below ground, The Project is rebuilding a 9000-ton steam-electric chiller/river water plant, completing the construction of two new electrical vaults totalling 30 MegaWatts with 18 MW of diesel back-up, and converting the entire complex from 208 Volt to 480V.



The Project is also introducing digital technology for all office and conference/broadcast/interpretation/media/television studio functions, constructing a data centre, building management/energy monitoring, and preserving/restoring iconic finishes and architectural treasures.

A phased approach initially moved almost 5000 staff into temporary 'swing space' within New York but over one-third of the complex remains active as the team "guts", "upgrades", and "restores" this global jewel. In addition, a temporary 200,000 square foot conference facility was built on the North Lawn of the UN site two years ago to permit continuation of the daily business of the United Nations.

Some of the 5000 staff that were moved out into temporary accommodations are scheduled to return in the summer/fall of 2012 when the Secretariat Tower and Conference Buildings are completed. At that point, interim moves and renovations will also take place in order to vacate the General Assembly building to allow completion of the renovations of that facility in 2014. Handover and commissioning of various phases of the project will occur concurrently with other construction and the final project close-out is scheduled for late 2014.

Marian Miszkiel comments on his preparedness for this task...

*... "You may wonder what preparation I had, throughout life, which has led me here. Other than operational deployment and technical/project management knowledge, Staff College taught me the breadth of political science and global geo-political issues that are pervasive in this project and that help me apply these tenets in a project of this magnitude and complexity, which is funded and looked at by all our clients: the 193 member states of the United Nations. Knowing what you are doing, integrating, watching the Executive Director/ASG apply the first principle of war in the successful stewardship of this project – "Selection and Maintenance of the Aim", planning, leadership, direction, championing, and letting the stress and operational tempo, although challenging, make you proud of what you, and your team, accomplish. While there are many different factors and experiences within my life that have contributed greatly to where I am today, I want to remind you of two very important facts: you are more than what you did and are doing, and you always do more with others than by yourself...." **CHIMO!***

