UNIVERSITY OF TORONTO

OFFICE OF THE ASSISTANT VICE-PRESIDENT
CAMPUS & FACILITIES PLANNING

APPENDIX "F" TO REPORT NUMBER 165 OF THE ACADEMIC BOARD – January 28, 2010

TO: Planning and Budget Committee

SPONSOR: Elizabeth Sisam, Assistant Vice-President, Campus and Facilities Planning

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DATE: December 14, 2009 for January 18, 2010

AGENDA ITEM: 6

ITEM IDENTIFICATION:

Project Planning Report for the creation of a new Microsatellite Science and Technology Centre at the Downsview campus of the University of Toronto Institute for Aerospace Studies (UTIAS)

JURISDICTIONAL INFORMATION:

Under the Policy on Capital Planning and Capital Projects, the Planning & Budget Committee reviews Project Planning Reports prepared for a capital project and recommends to the Academic Board approval in principle of the project.

BACKGROUND:

The Space Flight Laboratory (SFL) at University of Toronto Institute for Aerospace Studies (UTIAS) is a unique university lab in Canada and an international leader in nanosatellite and microsatellite development. At present, the lack of sufficient physical space combined with the absence of a dedicated Canadian program to cultivate new opportunities or provide a network hub among internationally-recognized researchers is limiting the possibility for the successful UTIAS SFL program to advance its satellite research and technology development.

In September, 2009, the Space Flight Laboratory was awarded a Canada Foundation for Innovation (CFI)/Ontario Research Fund (ORF) grant to fund the construction of a new Microsatellite Science and Technology Centre (MSTC). The research, assembly and testing facilities of the Centre will be accommodated by constructing approximately 1,115 NASM of additional assignable space (~1,450 GSM). This addition will be connected to the existing UTIAS facility at Downsview.

HIGHLIGHTS

The MSTC will provide an ideal opportunity to alleviate the current lack of infrastructure by creating a new facility at UTIAS that will accommodate and build upon the strengths of the current activities of the Space Flight Laboratory. The MSTC will encompass the existing Space Flight Laboratory work and use the new research space to aid the principal users to design, prototype, and test new nano and microsatellites devices for space.

The new addition will house research and analysis areas, laboratories, a clean room, vacuum chambers, vibration facilities, an anechoic chamber and all associated equipment and support

spaces. The Centre is expected to accommodate a complement of 5 to 10 visiting researchers at a time, up to 20 full-time staff and up to 25 graduate students.

A key positive secondary effect of the new MSTC is the space made available within the existing UTIAS facility, through relocation of existing SFL occupants. This project will free up approximately 418 NASM of area for use by UTIAS. A broader space planning study is currently underway that will help inform how to best re-use this space.

FINANCIAL AND PLANNING IMPLICATIONS

The estimated Total Project Cost for the construction portion of the project is $5,400,000.

Based upon $53.67/GSM for UTIAS, the operating cost for the MSTC would be $77,770 per annum. This would include all costs excluding utilities such as building fabric, mechanical and electrical maintenance, caretaking, fire prevention and security. Costs associated with maintenance of research components such as HEPA filter changes in the clean room are funded through the research grants.

FUNDING SOURCES

Funding sources for the entirety of the construction of the project are provided from the CFI/ORF grant award.

SCHEDULE

The architect and consultant selection process for the addition will begin immediately following project approval, with an anticipated construction start in 2010 and occupancy in March 2011. These projected dates comply with CFI schedule requirements.

- Planning and Budget approval — January 18, 2010
- Business Board Approval — February 8, 2010
- Architect selection & appointment — by end February, 2010
- Construction start — July 2010
- Occupancy — January 2011

RECOMMENDATIONS

It is recommended that the Planning and Budget Committee recommend to the Academic Board:

1. That the Project Planning Report for the Microsatellite Science and Technology Centre be approved in principle.

2. That the project scope as identified in the Project Planning Report be approved in principle at a Total Project Cost of $5,400,000 with funding as follows:

Canada Foundation for Innovation	$ 2,700,000
Ontario Research Fund	$ 2,700,000
Total	$ 5,400,000

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