



# University of Toronto

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Office of the Assistant Vice-President, Campus and Facilities Planning

## **FOR INFORMATION:**

**TO:** Planning and Budget Committee

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

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**DATE:** October 9, 2009 for October 28, 2009

## **AGENDA ITEM: 9**

Project Planning Committee for the Center for Microsatellite Science and Technology Development and Low-Cost Space Research

## **JURISDICTIONAL INFORMATION:**

Under the Policy on Capital Planning and Capital Projects, section 5.A. the membership and terms of reference of Project Committees shall be reported to the Planning and Budget Committee.

## **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. Currently, 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 already successful UTIAS/SFL program to advance its satellite research and technology development. The proposed Center for Microsatellite Science and Technology Development and Low-Cost Space Research provides an ideal opportunity to alleviate this problem by creating a new facility that complements and builds upon the strengths of the current activities at UTIAS/SFL.

The proposal for the Center has recently received a grant from the CFI and Ontario Research Fund (ORF) to construct a facility and supply it with all necessary equipment.

The Center will take the outputs from the existing UTIAS/SFL facilities and use the new infrastructure to aid the principal users to design, prototype, and test new nano and microsatellites devices for space.

The assembly and test facilities of the Center will be accommodated by the construction a new building of approximately 1,115 NASM (1,449 gsm) situated on the grounds of the UTIAS campus at Downsview.

## **PROPOSED COMMITTEE MEMBERSHIP:**

David Zingg (Chair), Professor, Director, UTIAS  
Robert Zee, Professor, Director of Space Flight Laboratory at UTIAS  
Steve Miszuk, Director, Planning and Infrastructure, Faculty of Applied Science & Engineering  
Julian Binks, Director, Planning & Estimating, Capital Projects Planning, Real Estate Operations  
Mark Dwyer, Graduate student, UTIAS  
Mohamed Elnabelsya 'alternate', Graduate Student, President Aerospace Student's Association  
Omer Gulder, Professor, UTIAS  
Freddy Pranajaya, Staff member, UTIAS  
Ron Swail, Assistant Vice-President, Facilities & Services  
Jeff Cook, Building Manager, UTIAS  
Alan Webb (Secretary), Planning Officer, Campus & Facilities Planning

## **TERMS OF REFERENCE:**

1. Make recommendations for a detailed space program and functional layout to accommodate the proposed new Center for Microsatellite Science and Technology Development and Low-Cost Space Research.
2. Demonstrate that the proposed space program will take into account the Council of Ontario Universities' (COU) space standards and University's own best practice guidelines for research space.
3. Determine the secondary effects of the project, including any necessary space reallocation, and the impact on the delivery of academic programs and activities at the UTIAS site during construction.
4. Review the capacity of existing site services and infrastructure at the UTIAS site and determine the extent of upgrades, if required.
5. Identify all existing equipment and moveable furnishings to be relocated and reused, and new equipment and moveable furnishings necessary to the project and their related costs.
6. Identify all data and communications requirements and their related costs.
7. Identify a phasing plan and implementation plan for the project, if required.
8. Identify all security and occupational health and safety requirements and their related costs.
9. Determine a total project cost (TPC) estimate for the capital project, including costs associated with secondary effects.
10. Identify all sources of funding for the capital project and increased operating costs once the project is complete.
11. Report by January, 2010.