



**MEMORANDUM**

**To:** Donna E. Shalala, President

**From:** Richard L. Williamson  
Chair, Faculty Senate

A handwritten signature in blue ink, appearing to read 'Richard L. Williamson'.

**Date:** September 26, 2011

**Subject:** Faculty Senate Legislation #2011-08(B) – Disestablish the Miami Wind Center within the College of Engineering

\*\*\*\*\*

At its September 21, 2011 meeting, the Faculty Senate unanimously approved the proposal to disestablish the Miami Wind Center within the College of Engineering due to the closure of the wind tunnel test facility in 2010. This Center was initially established with Legislation #2007-21(B).

The supporting materials are enclosed for your reference.

This legislation is now forwarded to you for your action.

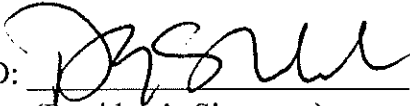
RW/rh

Enclosure

cc: Thomas LeBlanc, Executive Vice President and Provost  
James Tien, Dean, College of Engineering  
Antonio Nanni, Presenter, College of Engineering

CAPSULE: Faculty Senate #2011-08(B) – Disestablish the Miami Wind Center within the College of Engineering

PRESIDENT'S RESPONSE

APPROVED:  DATE: 10/3/11  
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: DEAN TIEN

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY  
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: \_\_\_\_\_

REMARKS (IF NOT APPROVED): \_\_\_\_\_

UNIVERSITY OF MIAMI  
COLLEGE of ENGINEERING

---



James M. Tien, Ph.D., DEng, NAE  
Distinguished Professor and Dean

1251 Memorial Drive  
MEB Room 255  
Coral Gables, FL 33146

Ph: 305-284-6035  
Fax: 305-284-2885  
jmtien@miami.edu

Date: August 26, 2011  
To: Faculty Senate  
From: J. M. Tien  
Re: Disestablishment of UM Center MIAMI WIND

Please accept this letter as notification that the named center (University of Miami – International Center for Dynamic Loads, also known as MIAMI WIND) is no longer active, at least as defined in the attached charter that established its existence. Accordingly, its disestablishment is requested.

MIAMI WIND was created in 2007 to generate external research funding and conduct research on safety and economics of structures subject to dynamic loads by synergizing the faculty and students in different disciplines across the University of Miami. The main focal point of the MIAMI WIND Center was its ability to utilize a state-of-the-art experimental wind tunnel established by RWDI in Miramar, Florida. RWDI is the Canadian engineering company with worldwide leadership in consultation and testing relative to wind engineering. The collaboration with RWDI would have given the University of Miami a distinct advantage in competing for wind-related research funding. Important caveats of the Charter for MIAMI WIND were the exclusive rights of the University of Miami for use of the RWDI facility and the exclusive rights of RWDI to provide wind related consulting and testing services to the University of Miami.

Budget information redacted from on-line version of this legislation.

## CHARTER

### UNIVERSITY OF MIAMI – INTERNATIONAL CENTER FOR DYNAMIC LOADS

#### (MIAMI WIND)

#### Table of Contents

<b><u>PREFACE</u></b> .....	3
<u>Excerpts from UM-RWDI Agreement</u> .....	3
<u>Objectives</u> .....	3
<u>Test Facility</u> .....	4
<b><u>MISSION</u></b> .....	4
<b><u>FUNDING SOURCES</u></b> .....	4
<u>Milestones</u> .....	4
<u>Research Personnel</u> .....	5
<u>Space Requirements</u> .....	5
<b><u>ORGANIZATION AND ADMINISTRATION</u></b> .....	5
<b><u>CENTER EVALUATION</u></b> .....	6
<b><u>MISCELLANEOUS ITEMS</u></b> .....	6
<u>Faculty Affiliation</u> .....	6
<u>Charter Amendments</u> .....	6
<u>Director Appointment and Review</u> .....	7
<b><u>APPENDIX 1: PROPOSED FIELDS OF INVESTIGATION</u></b> .....	ERROR! BOOKMARK NOT DEFINED.

March 22, 2007

## **PREFACE**

Consistent with the proposed CoE research thrust area of "Energy and Environment," it is proposed to create a new university Center titled: University of Miami – International Center for Dynamic Loads. The Center will be known as MIAMI WIND. The proposed Center may offer research opportunities to faculty members in units other than CoE such as: RSMAS, School of Architecture, and some of the Departments in the College of Arts and Sciences (Mathematics, Computer Science, Marine & Atmospheric Science and Biology).

This is a unique opportunity for UM to enter a field of research and development (R&D) relevant to Florida and the nation from a position of dominance by virtue of its relationship and partnership with RWDI. RWDI is the Canadian engineering company with worldwide unchallenged leadership in consultation and testing relative to wind engineering. We see this Center as a stepping stone for more ambitious R&D plans that include a bid for a NSF ERC and, later, an experimental water tunnel facility at the Panama Canal.

### **Excerpts from UM-RWDI Agreement**

WHEREAS, UM wishes to establish a Center (defined below) of excellence for research and development (R&D), technology transfer, and teaching wind engineering and dynamic loads that will become internationally recognized;

WHEREAS, Rowan Williams Davies & Irwin Inc., Guelph, Ontario, Canada, is a leading consulting and wind tunnel testing company, with an international reputation, that wishes to advance the state of the art of its wind engineering services and wind engineering in general, and is affiliated with RWDI;

WHEREAS, RWDI is constructing a wind tunnel facility and offices in Miramar, Florida for commercial wind engineering testing that will also be available for use in R&D activities;

WHEREAS, RWDI's affiliate company Virtualwind Inc. is developing advanced computational fluid dynamic (CFD) software to address wind engineering problems and could benefit from collaborative R&D with university researchers and computing infrastructure; and

NOW, THEREFORE, in consideration of the promises and of the mutual covenants, conditions, and agreements contained herein, the parties agree to form a Center which would undertake R&D, technology transfer, and teaching in wind engineering and related fields.

### **Objectives**

- Create and operate MIAMI WIND with world class research staff and facilities.
- MIAMI WIND to be a partnership between academia and private sector aimed at conducting research and development (R&D) projects (see Appendix 1). RWDI to provide the commercial testing and consultation services; MIAMI WIND to provide research services. Jointly pursue contracts for consultation, commercial testing and R&D.
- MIAMI WIND to operate as a university entity.

- Primary focus area of MIAMI WIND to be wind loading and engineering research for a host of clients from civilian to military with applications ranging from the built infrastructure to aerospace.

### **Test Facility**

RWDI is building a Wind Tunnel at Miramar, a 10,000 sq.ft. facility leased for 5-years, for commercial and R&D purposes to become operational in April 2007. The cross-section of the tunnel is 8 ft wide, with variable height in the range of 6 ft to 7 ft. The length of the working section is on the order of 50 ft. Speed range is initially planned as 0 to 60 ft/s but could be upgraded in the future. This range covers 95% of typical needs for wind engineering studies. Instrumentation will include a 512-channel high speed electronic pressure scanning system, force balances, etc. with high speed digital data acquisition system run by RWDI's proprietary software.

### **MISSION**

The mission of the center is the generation and transfer of knowledge relative to safety and economics of structures subject to dynamic loads.

### **FUNDING SOURCES**

MIAMI WIND will seek grants from government agencies such as NSF, DoE, DoD, NASA, as well as industry such as the Boeing Company and Rockwell.

MIAMI WIND will seek partnership for R&D from its commercial customers, keeping commercial testing and consultation in the domain of RWDI and research in the domain of MIAMI WIND, but with cross contracting as demanded by the location of the necessary skill sets and knowledge.

### **Milestones**

MIAMI WIND milestones for the next three years of operation starting with fiscal year 2008 are simply stated as "the ability of the Center personnel to generate external funding as a result of the evolving research, tech transfer, and consulting activities." The objective of the Center is to demonstrate its ability to become self supporting. The following milestones are based on the projections and assumptions elaborated by UM faculty in conjunction with RWDI personnel.

Budget information redacted from on-line version of this legislation.

## Research Personnel

A request has been made to the University to contribute to the funds necessary to support the research personnel as listed below. Tuition waiver for the graduate students supported by UM will also be requested.

	2008	2009	2010
PhD students	6	9	11
Post Docs	2	2	2
Res. Faculty	2	2	2
RWDI Res. Faculty (part-time)	2	2	2
Adm. Aid	1	1	1

In terms of financial impact to the University, the funding requested is limited to the first two years of operation and amounts to \$580,000 and \$290,000, respectively. Other costs associated with the undertaking of R&D activities will be supported by the specific projects and RWDI up to 400 hours of use of the wind tunnel.

## Space Requirements

2008: The new space requirement at UM will be **400 sq.ft.** The total space needed for MIAMI WIND is 1,000 sq.ft. of which 200 sq.ft. already is available at UM and 400 sq.ft. is provided by RWDI.

2009: The additional space requirement at UM will be **350 sq.ft.** The total space needed for MIAMI WIND is 1,350 sq.ft. of which 600 sq.ft. already is available at UM and 400 sq.ft. is provided by RWDI.

2010: The additional space requirement at UM will be **100 sq.ft.** The total space needed for MIAMI WIND is 1,450 sq.ft. of which 950 sq.ft. already is available at UM and 400 sq.ft. is provided by RWDI.

## ORGANIZATION AND ADMINISTRATION

The Center will be organized as set forth below.

The Center will have a director employed by UM and appointed by the UM Provost to manage the activities of the Center. This position will report to the UM Provost or a UM officer as designated by the Provost. The director will provide programmatic, scientific and administrative leadership in order to coordinate research, support Center resources and enhance interdisciplinary interaction. The director will be responsible for the budget and administrative component of the Center.

Subject to UM policies and rules, a Governance Committee will be created for the Center. Such Governance Committee will have oversight over the ongoing operations of the Center including but not limited to assuring that the Center is functioning in its intended format and accomplishing its intended goals. The Governance Committee will conduct operational review of the Center for this purpose as well as review the financial operations of the Center. The Governance Committee will be comprised of (a) two UM representatives actively involved in the programs of the Center and appointed by the UM Provost; (b) two representatives selected by RWDI, and (c) a chair of the Governance Committee who will be selected by the mutual agreement of the representatives of UM and RWDI.

The Governance Committee may nominate and appoint an external Research Advisory Committee. Members of the Research Advisory Committee will be appointed and affirmed by the Governance Committee. The Governance Committee will determine the goals and directives of the Research Advisory Committee. Advice and mentoring as well as critique of ongoing projects will be the responsibility of the Research Advisory Committee.

The UM Provost will have ultimate administrative authority over the Center.

## **CENTER EVALUATION**

In accordance with UM Policies and Procedures, MIAMI WIND will be reviewed by the Provost and the Faculty Senate based on criteria and procedures established by the Faculty Senate. At a minimum, the reviews will include an assessment of the Center's progress against its defined goals and objectives within the context of the center's mission and UM Strategic Plan.

Each review will include an evaluation of performance-based outcomes. The review will also include an assessment of the return on investment of institutional funds. Issues to be addressed during the review may include the need for continuation of the Center; possible changes in its mission or organizational structure; budget reduction or expansion. At a minimum, the Faculty Senate will review the Center every five years.

One annual report will be prepared and submitted to the Provost or a UM officer as designated by the Provost by July 31 of every year.

## **MISCELLANEOUS ITEMS**

### **Faculty Affiliation**

The Director will appoint UM faculty as members of the Center. Each appointment will be renewed on an annual basis. By virtue of this appointment, a faculty member will have access to the test facility and will be able to perform R&D in partnership with Center personnel.

### **Charter Amendments**



Amendments to the Center charter or the agreement with RWDI will be proposed by the Director, after consultation with and approval of the Governance Committee, to the Provost or a UM officer as designated by the Provost.

### **Director Appointment and Review**

Provost or a UM officer as designated by the Provost will evaluate the performance of the Center Director on an annual basis and renew or terminate his/her appointment.