

## **Capital Project Resolution to Replace the Turbo Research Laboratory**

### **JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**September 22, 2018**

Propulsion-focused research at Virginia Tech began in the early 1970's and has grown to one of the largest propulsion-related research activities in the United States. It is known as the Turbomachinery and Propulsion Research Laboratory and resides within the Department of Mechanical Engineering. It has two research facilities: the Turbo Lab, which opened in 1942 at the Virginia Tech Airport, and the Advanced Propulsion and Power Laboratory (APPL) which opened in 2015 on 1670 Innovation Drive in the Virginia Tech Corporate Research Center (CRC).

The existing Turbo Lab building will be demolished as part of the airport runway improvement project. The university evaluated multiple options to acquire permanent replacement space including constructing a new building on campus, constructing a new building in the CRC, or constructing new space at the airport. The most effective and economical solution is the construction of an addition to the existing APPL facility in the CRC. The envisioned replacement facility includes 7,500 gross square feet with a control room, office space, and engine test cells. The university has worked with the CRC and has determined that a facility that meets the programmatic needs with certifications can be completed for total project costs not to exceed \$2 million.

Because the property is owned by the CRC, the plan to implement this solution calls for the Virginia Tech Foundation (Foundation) to deliver the project with financing from the Foundation. The university will enter a lease with the Foundation for the entire facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses. The university and CRC have a plan to exchange land, which includes swapping the land that holds the APPL and the proposed Turbo Lab with university-owned land. The land exchange activities will not impact the APPL and/or Turbo Lab operations.

The university and CRC are ready to proceed with the Turbo Lab project. The university has developed an entirely nongeneral fund resource plan sufficient to cover the \$2 million of project costs. Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, and funding of nongeneral fund capital outlay projects, including capital leases. This request is for authorization to move forward with a capital lease for the Turbo Laboratory Building.

## **RESOLUTION OF A CAPITAL LEASE TO REPLACE THE TURBO RESEARCH LABORATORY**

**WHEREAS**, propulsion-focused research at Virginia Tech began in the early 1970's and has grown to one of the largest propulsion-related research activities in the United States; and,

**WHEREAS**, an existing turbo laboratory (Circa 1942) located at the Virginia Tech Montgomery Executive Airport is scheduled to be demolished as part of the airport runway improvement project; and,

**WHEREAS**, the plan to implement a replacement laboratory facility calls for the Virginia Tech Foundation (Foundation) to deliver a 7,500 gross square foot building addition to the Advanced Propulsion and Power Laboratory facility located at 1670 Innovation Drive in the Corporate Research Center; and,

**WHEREAS**, the university will enter a long-term lease with the Foundation for the entire facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses; and,

**WHEREAS**, the lease rates will be based on a break-even arrangement with the rates reverting to usual and customary property carrying costs after the facility costs are retired; and,

**WHEREAS**, Virginia Tech has developed a nongeneral fund resource plan sufficient to support the full costs of the lease; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and Virginia Tech, the Board of Visitors has authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral funded major capital outlay projects, including capital leases.

**NOW, THEREFORE, BE IT RESOLVED**, that Virginia Tech be authorized to enter into a capital lease with the Virginia Tech Foundation for the construction of approximately 7,500 gross square feet of office and laboratory space inclusive of upfits and certifications at 1670 Innovation Drive in the Corporate Research Center.

### **RECOMMENDATION:**

That the above resolution authorizing Virginia Tech to enter into a capital lease with the Virginia Tech Foundation for the Turbo Laboratory be approved.

November 5, 2018

# Resolution for a Capital Lease to Replace the Turbo Research Lab

November 5, 2018

**DWIGHT SHELTON**

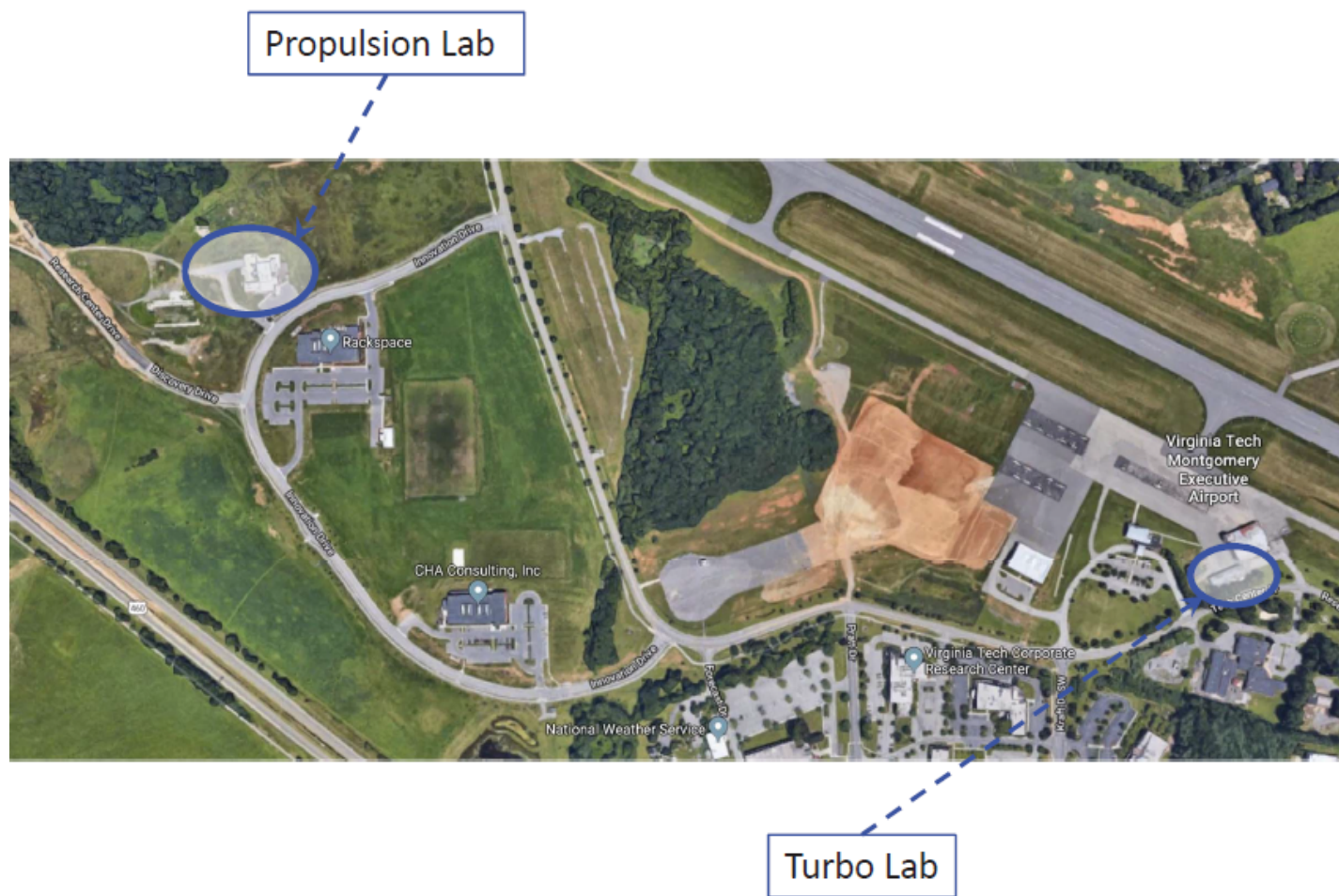
**VICE PRESIDENT FOR FINANCE AND CHIEF FINANCIAL OFFICER**

**BOB BROYDEN,  
ASSOCIATE VICE PRESIDENT FOR CAPITAL ASSETS AND  
FINANCIAL MANAGEMENT**



## Resolution for a Capital Lease to Replace the Turbo Research Lab

- The existing Turbo Lab located at the Virginia Tech Airport is scheduled to be demolished as part of the airport runway improvement project.
- The plan to implement a replacement facility calls for the Foundation to deliver a 7,500 gross square foot building addition to the Advanced Propulsion and Power Laboratory.
- The project budget is \$2 million
- The university will enter a long-term lease with the Foundation for the entire facility on a break-even arrangement.
- The College of Engineering will cover all lease costs with indirect cost recoveries from grants and contracts.



## Resolution of a Capital Lease to Replace the Turbo Research Lab

**NOW, THEREFORE, BE IT RESOLVED**, that Virginia Tech be authorized to enter into a capital lease with the Virginia Tech Foundation for the construction of approximately 7,500 gross square feet of office and laboratory space inclusive of upfits and certifications at 1670 Innovation Drive in the Corporate Research Center.

### **RECOMMENDATION:**

That the above resolution authorizing Virginia Tech to enter into a capital lease with the Virginia Tech Foundation for the Turbo Laboratory be approved.

November 5, 2018