



# Policy Statement

Effective August 7, 2009

Rates, conditions, and scheduling policy for research and commercial testing in the Walter H. Beech Wind Tunnel (Beech Wind Tunnel) of the National Institute for Aviation Research (NIAR) at Wichita State University (WSU) are covered in this document. This policy statement supersedes all previous rates, conditions and scheduling policies. This policy statement is to be used in conjunction with a formal quote from the Beech Wind Tunnel.

## Basic Occupancy Rates

### Walter H. Beech Wind Tunnel

Description	Rate
Basic Occupancy (setup, installation, wind-on operations, all standard instruments and equipment, uninstallation)	\$450 per occupancy hour
Off-Line Processing (Reports, Extra Data Reduction, etc.)	\$75 per hour
Overtime Surcharge	\$115 per occupancy hour
Minimum Occupancy	Four (4) hours

### Flow Visualization Water Tunnel - WSU Aerospace Engineering

Description	Rate
Basic Occupancy (setup, installation, operation, all standard instruments and equipment, uninstallation)	\$125 per occupancy hour
Off-Line Processing (Reports, Extra Data Reduction, etc.)	\$75 per hour
Minimum Occupancy	Eight (8) Hours (one testing day)

## Super Sonic Wind Tunnels – WSU Aerospace Engineering

Description	Rate
Basic Occupancy (setup, installation, operation, all standard instruments and equipment, uninstallation)	\$250 per occupancy hour
Off-Line Processing (Reports, Extra Data Reduction, etc.)	\$75 per hour
Minimum Occupancy	Eight (8) hours (one testing day)

## 3 x 4 Open Return Wind Tunnel – WSU Aerospace Engineering

Description	Rate
Basic Occupancy (setup, installation, operation, all standard instruments and equipment, uninstallation)	\$125 per occupancy hour
Off-Line Processing (Reports, Extra Data Reduction, etc.)	\$75 per hour
Minimum Occupancy	Eight (8) hours (one testing day)

### Occupancy Charges

Occupancy rate is based on an (8) hour work day and (5) day work week Monday through Friday. Occupancy starts with preparation of the test section for model installation and ends with model removal and test section restoration. If the tunnel is not operating due to scheduled or unscheduled maintenance, the Client is not charged tunnel occupancy.

### Overtime

Hours in excess the (8) hour work day and (5) day work week define overtime for AL. Overtime shall not be scheduled without approval from the Aerodynamic Laboratories Director (ALD). Scheduled overtime must be agreed upon in advance and documented on the Client's Purchase Order (PO).

### Minimum Occupancy

Minimum occupancy for each laboratory is outlined above.

### Normal Working Hours

Normal working hours are 0730 to 1630 with a one hour lunch break from approximately 1130 to 1230 hours.

## **Deliverable Product**

Included in the occupancy charges, the Client will receive upon completion of the test the following:

### **Walter H. Beech Wind Tunnel**

- Raw Engineering Unit Data
- Reduced Data using Client's desired standard method
- Visual data recorded during the test

### **Flow Visualization Water Tunnel - WSU Aerospace Engineering**

- Visual data recorded during the test

### **Super Sonic Wind Tunnels - WSU Aerospace Engineering**

- Raw Engineering Unit Data
- Reduced Data
- Visual data recorded during the test

### **3 x 4 Open Return Wind Tunnel - WSU Aerospace Engineering**

- Raw Engineering Unit Data
- Reduced Data using Client's desired standard method
- Visual data recorded during the test

## **Scheduling**

### **Tentative Scheduling**

Tentative scheduling of tunnel test time should be made as far in advance as possible. These reservations may be made by letter, telephone, email, or facsimile. The Beech Wind Tunnel reserves the right to adjust tentative schedules to accommodate priority schedules.

### **Priority Scheduling**

Priority schedules are those confirmed by a PO before start date. Once a PO is received and signed by WSU, the tentative schedule is changed to a priority schedule. A priority schedule takes precedence over a tentative schedule.

### **Postponement**

If a Client must postpone a priority scheduled test, arrangements must be made with the Beech Wind Tunnel to reschedule the test to recover the lost testing time. The Beech Wind Tunnel is only responsible for providing testing services on the agreed upon dates listed in the quote and/or PO.

### **Cancellation**

If a client must cancel a priority scheduled test, the Beech Wind Tunnel reserves the right to charge the Client against the PO for any charges that may have been occurred and for lost revenue due to the reserved testing slot. Cancelled tentative schedules will not be charged to the Client.

## **Maintenance and Repairs**

The Beech Wind Tunnel reserves the right to adjust schedules to allow for maintenance and/or repairs that may be necessary.

## **Pre-Test Coordination**

A minimum of two meetings may be necessary between the Client and the Beech Wind Tunnel Staff to adequately prepare the wind tunnel test schedule. The purpose of the first meeting is to establish a basic outline of the test and prepare a valid quotation of the number of hours needed for the test. These meetings, either in person, telephone, or email exchange shall occur early to expedite planning. At the second meeting, the Client shall have a plan-of-test ready to finalize model installation, data reduction constants, software requirements, and a run schedule. This meeting should be held at least seven (7) days prior to the test start. Any additional meetings to clarify the wind tunnel schedule or model installation may be called by either the Client or Beech Wind Tunnel personnel.

## **Setup Charges**

The Beech Wind Tunnel reserves the right to charge the Client for setup charges in preparation for entry. These charges would be in addition to occupancy charges that would occur prior to the Client's arrival. The actual cost for setup is determined by the Beech Wind Tunnel and is based on the nature of the Client's request for setup.

## **Preliminary Data**

Data that is provided to the Client during the test is considered by the Beech Wind Tunnel as preliminary and not final. This includes all reduced data using the Data Reduction System (DRS). The focus of the Beech Wind Tunnel staff will be primarily on wind tunnel operations and measurements while the test is underway.

## **Final Data**

Final data will be provided to the Client within (2) two weeks after the completion of the test. This allows both the Beech Wind Tunnel and the Client sufficient time to check log entries, model constants, etc to ensure the data is properly reduced.

## **Property Damage**

Client personnel are responsible for model assembly and model changes. The Beech Wind Tunnel staff may assist at the Client's request, but the Client assumes full responsibility for the model. A safety factor of 5 on the limit loads of the model is required to ensure no model failure during the running of the test. The Beech Wind Tunnel may request a formal stress report of the wind tunnel model provided by the Client prior to installation. If damages occur to any WSU property due to faulty Client model, the Client will be held financially responsible for the repair costs. The Client

must heed any warnings given by Beech Wind Tunnel staff concerning safety around the Beech Wind Tunnel and other laboratories.

## Security

Our facilities regard security and proprietary to be the utmost of importance. The security highlights of the Beech Wind Tunnel are as follows:

- All points of entry are locked during Client occupation.
- Only authorized Beech Wind Tunnel employees have access.
- A list of authorized personnel is posted at points of entry if requested.
- Campus Police check for locked doors after hours.
- Collected data is stored in a secure folder on the NIAR network. All NIAR IT employees that may have access to data are US Citizens or Permanent Residents. Client may request to have data removed from the network at the end of each day.
- Only US Citizens or Permanent Residents are allowed to be employed in the NIAR Beech Wind Tunnel.
- The NIAR Beech Wind Tunnel is ITAR and EAR compliant.

If more formal security procedures are necessary, please contact the Beech Wind Tunnel Director and reasonable arrangements can be made accordingly.

## Data Storage

As a courtesy service to the Client, the Beech Wind Tunnel will securely store data collected during the test for a period of (10) years from the date of the test. Data to be stored may include electronic copies of collected data, original logs, program listings, and other such information. After this period is past, the Beech Wind Tunnel will attempt to contact the Client and inform them that their data will be destroyed within (90) days. Clients will have the opportunity to either ask for this data to be sent to them or simply suggest immediate disposal of data. THE NIAR BEECH WIND TUNNEL IS NOT RESPONSIBLE FOR ACCIDENTAL DATA LOSS AFTER THE TEST IS COMPLETE. Client may request that no data is stored on-site after the test.

## Data Backup

The Beech Wind Tunnel shall be responsible for backing up data collected in electronic format daily during the test. In the highly unlikely event that data loss should occur during the test, the Beech Wind Tunnel will repeat tests that were lost at the occupancy expense of the Beech Wind Tunnel. With current backup plans, the most time lost should only be one full day. More frequent backups of data can be arranged upon request. Only tunnel occupancy charges will be recovered by the Beech Wind Tunnel in the event of a loss of one full day of testing.

## **Tours**

The Beech Wind Tunnel is a public facility on the campus of WSU that is occasionally requested for touring by visiting dignitaries, politicians, industry executives, advisory board members, groups, etc. There may be an occasion when a tour is requested at the same time the Client is occupying the Beech Wind Tunnel. It is the policy of NIAR that the security and proprietary interests of the Client have the utmost regard. If a request for a tour occurs during Client occupation of the tunnel, the Beech Wind Tunnel Director will discuss this request with the lead Client contact. If and only if the Client concurs will tours be allowed during Client occupation of the Beech Wind Tunnel. During the tour, the model will be obscured and all data temporarily stored out of sight. Down time for tours will not be charged to the Client and security will be heightened during the tour. The Client may declare at their pre-test meetings, at the start of the test, or at any time that under no circumstances are tours permitted during their occupation.

## **Client Attendance**

Since the offices and work areas of the Beech Wind Tunnel are somewhat limited in space, the Beech Wind Tunnel will allow a maximum of two (2) Client test engineers in the control room at one time. A desk area is provided for the Client test engineers to setup their own laptop and receive wind tunnel data through a secure network. An additional two (2) test engineers or model technicians may be on-site during the duration of the test and have access to a client office. The Client is welcome to invite guests to observe the test from time to time, and these guests are welcome in the control room, client office, model preparation room, etc. for brief visits. The Beech Wind Tunnel staff reserves the right to ask ANYONE to leave the control room at any time should the staff become distracted by others in the control room. A separate telephone is available to Clients in the client office for use during the test.

## **Model Storage**

Unless prior arrangements are made, the Beech Wind Tunnel will not store models at the conclusion of the test. The Client is responsible for removing the model from the premises promptly after the test and securing transportation to and storage for the model.

## **Invoicing**

The Client will be invoiced at the end of the test. At this time the Client may be required to pay the invoice prior to release of final data or, with prior approval, will be extended Net 30 terms.