

Langley Air Force Base MicroPAVER Pavement Management System Update



Applied Pavement Technology, Inc. (APTech) was contracted through the Air Force Civil Engineer Support Agency to update the MicroPAVER pavement management system at the Langley Air Force Base (AFB) in Virginia. The pavement management system at Lagnely AFB, which hosts one of the largest fighter bases in Air Combat Command and an Air National Guard component of the Virginia National Guard, includes roadway, parking lot pavements, and airside pavements.

As a subconsultant to Northrop Grumman, APTech conducted a thorough systems inventory to determine the cross section and construction history of the different pavement areas. This information was used to divide the pavement network into management units, and detailed pavement surveys were conducted. The collected systems inventory and pavement condition data were entered into a MicroPAVER database.

APTech then customized the MicroPAVER software by determining unit costs for pavement maintenance and rehabilitation (M&R) activities and developing pavement performance prediction models specific for Langley AFB pavements. Once this task was completed, APTech evaluated several budget scenarios to assess the impact of each on the overall pavement condition over time. APTech provided Specific maintenance M&R guidelines to help the Department of Defense maintain each pavement section above a specified acceptable condition over a 5-year period and summarized the key results from the project, such as the Pavement Condition Index data, on color-coded maps in accordance with Air Force standards.