

## Pavement Management Updates for the Port Authority of New York and New Jersey at LaGuardia International Airport, Newark Liberty International Airport, and Teterboro Airfield



In 2007, Applied Pavement Technology, Inc. (APTech) provided the Port Authority of New York and New Jersey (PANYNJ) with airside and landside pavement condition analyses outlining the current and predicted condition of pavements at Newark Liberty International Airport and LaGuardia International Airport. APTech, in conjunction with Mandli Communications, updated the airport pavement management system (APMS) to allow PANYNJ officials to appropriately plan for maintenance, repair, and rehabilitation work through 2014.

APTech conducted a records review focused on maintenance and rehabilitation work, performed pavement condition index inspections, collected pavement condition data using automated video equipment, and interpreted the data through digital images on a computer. After converting the existing PANYNJ pavement management database to MicroPAVER, the information from the records review and pavement condition surveys were used to update the APMS database. Using MicroPAVER allows PANYNJ to use the same nonproprietary database at all of the airports that it operates.

In addition to evaluating the foreign object damage potential of shoulder and erosion pavements adjacent to specific airside pavement sections, APTech collected pavement distress and smoothness data for the APMS. The APMS helps provide advance notice for any required repairs to the pavements. During this project, APTech made certain that the database and pavement management software were properly installed and provided the necessary technical training to use the program. The final reports for the APMS updates were based on evaluation of the existing pavement and field inspection data collected.

APTech completed similar APMS work for PANYNJ at Teterboro Airfield in 2005 and 2006. Due to the significant detriment of prolonged runway closures there, APTech employed automated data collection techniques through video imaging surveys to minimize the impact to aircraft operations. APTech was again selected in 2010 to update the APMS at Newark Liberty International Airport and Teterboro Airfield.