

## PROJECT DESCRIPTION:

- McNeil Engineering provided topographic and utility information for Jviation for the purposes of designing new taxiways and service road. The project consisted of approximately 130 acres.
- Vertical tolerances for this project were 0.01 feet. In order to meet these requirements McNeil Engineering used laser scanning and digital level techniques to achieve the desired results. Initial control points were established at a 200 foot grid using VRS GPS and then all control points had elevations established using digital levels, where tolerances of under 0.01 feet were achieved. After horizontal and vertical control were established and verified to meet minimum requirements, McNeil Engineering used their Leica C10 scanner, which collects 50,000 survey grade points per second, to survey the entire site. McNeil Engineering used targets on the existing control points and with compensated level scans as constraints, they were able to meet the desired deliverable for the client.
- McNeil Engineering was able to provide more accurate data in a shorter amount of time as compared to using traditional survey methods, thus providing a lower cost to the clients.

