This Airport Has an ASDE-X Ground Surveillance System
Operate Transponder while on all Taxiways and Runways

The Airport Surface Detection Equipment—Model X (ASDE-X) is a surface surveillance system the FAA is acquiring for 34 airports in the United States. Fusing information from a ground radar and aircraft or vehicle transponders, ASDE-X provides controllers with a tower display that depicts aircraft identification and location information overlaid on a color map of the airport surface. As a pilot, you will be directly affected by ASDE-X deployment when you fly to airports equipped with this new technology.

You are requested to operate your transponder on the airport runways and taxiways. In order to automatically obtain the flight identification of your aircraft, the system needs to gather data from your avionics. ASDE-X receives your transponder code and looks up your flight plan information. The flight ID is then shown to controllers with your aircraft’s position on the color display. The signals transmitted by your avionics are combined with ASDE-X radar to accurately determine your location.

ASDE-X works with all transponders. The ASDE-X system works with all current Mode A/C and Mode S transponders. It also works with Mode S Automatic Dependent Surveillance - Broadcast (ADS-B) transceivers envisioned for capitalizing on GPS technology.

Weight-on-Wheels Switches do not usually affect ASDE-X. “Weight-on-wheels” switches do inhibit some functionality of Mode S transponders, but do not normally interfere with the avionics capability to provide the aircraft’s squawk code when it is interrogated.

SNA is an ASDE-X airport. A message on the ATIS at SNA requests you leave your transponder on with Mode C while operating on runways and taxiways. Changes and notations have been made in the AIM, SNA airport diagram chart, and Green Book. Additionally, the ASDE-X program is communicating this information to airlines and various pilot organizations.

Contact ASDE-X Public/Customer Relations for answers to any additional questions.

Don Gunderson: donald.gunderson@saic.com