

## KSA Question: Ability to influence, persuade, and collaborate with internal and external sources to achieve results.

<p><b>Context/ Situation</b></p>	<p>As a front-line manager for AJW-XXX, I am responsible for all modifications to Airport Surface Detection Equipment – Model X (ASDE-X). ASDE-X is an Air Traffic Control Tower system that enhances Air Traffic Control (ATC) situational awareness by providing detailed coverage of runways, taxiways, and potential collision warnings. ATC uses the ASDE-X display to determine the exact location of aircraft and vehicles in the movement area and to formulate clearances and control instructions. ASDE-X provides an increased level of safety at thirty-five airports nationwide, especially during decreased visibility and high volume.</p>	<p><b>Tips</b></p> <ul style="list-style-type: none"> <li>• Write your narratives using STAR or CCAR format (<i>situation/context, task/challenge, action, results</i>).</li> <li>• Craft each KSA narrative with one or two compelling accomplishment examples.</li> <li>• Include KSA examples that support your self-rating.</li> <li>• Link KSA narratives to the accomplishments in your resume.</li> <li>• Use recent examples from the last 1-3 years unless using a significant older example.</li> <li>• Focus on actions you took vs. your philosophy.</li> <li>• Do not name-drop in your narratives. Use position titles instead.</li> <li>• Include awards and recognition.</li> </ul>
<p><b>Challenge/ Task</b></p>	<p>When ASDE-X generates a collision alert, ATC might order a departing aircraft to abort or an arriving aircraft to go around. I learned that ASDE-X facilities were experiencing False Alerts due to construction near active runways. False Alerts increase ATC workload, disrupt operations, and cost airlines an average of \$12,000 when an aircraft must go around. Air Traffic must provide my team with a 30-day notice of airport construction activities so we can determine if ASDE-X will be impacted and develop mitigations. However, Air Traffic does not always have advanced knowledge of construction, and plans are sometimes altered at the last minute.</p> <p>Even when construction was coordinated in advance, mitigating the impact on Air Traffic operations required my team to develop and test multiple site adaptations, one for each construction phase. My team released forty-three site adaptations to mitigate construction during FY15, with a labor impact of \$140,000. Installing each site adaptation required the Airways Transportation Systems Specialist (ATSS) to coordinate a system outage and re-certify the system. I concluded the existing process was labor intensive, difficult to plan, and undermined the performance of an essential service used by Air Traffic Control.</p>	
<p><b>Action</b></p>	<p>I reviewed my team’s data and discovered that ASDE-X facilities had reported thirty-seven false alerts due to construction in FY18. Of the thirty-seven false alerts, nine resulted in unnecessary go arounds, costing the airlines an estimated \$96,000. As a result, I assembled a work group of ATC subject matter experts (SMEs) that included management, policy, procedures, training, and NATCA to develop a solution to help reduce the impact of construction-related false alerts.</p> <p>I led this group of non-technical subject matter experts (SMEs) through a yearlong effort to develop technical requirements, a Safety Risk Management (SRM) document, budget estimates, and Air Traffic training updates. I held regularly scheduled telecons and in-person meetings as necessary. In accordance with the Lean Maintenance and Revalidation Program (LMRP) initiative, I created a Cost and Benefits Estimate (CBE) forecasting long-term savings to the FAA. I requested and received authorization to use \$300,000 of OPS funding from the AJW-14 Surveillance Budget Line Item (BLI) to fund this significant modification.</p>	

## Results

Within two years of assembling the Air Traffic SME workgroup, I provided all ASDE-X facilities with the ability to mitigate construction-related false alerts locally and eliminate a process that was not working.

During FY 2018, facilities reported only four false alerts due to construction. My team developed fourteen site adaptations of low complexity with an associated labor impact of \$12,000. Of the four False Alerts in FY18, one resulted in an unnecessary go around, costing the airlines an estimated \$12,000.

The modification's annually recurring national impact is an estimated 89% reduction in ASDE-X false alerts due to construction, \$128,000 savings in labor impact, and an \$84,000 reduction in unnecessary costs to airlines. According to feedback from Air Traffic Control at several facilities, this change was the most significant ASDE-X improvement in the program's history.

The success of this experience has encouraged me to stay in tune with customer needs and remain in contact with the Air Traffic SMEs. We meet regularly to discuss new challenges facing Air Traffic Control and discuss opportunities to enhance the effectiveness of ASDE-X.

- Limit each KSA narrative to 1/2 to 1½ pages.
- Use plain language as if communicating to a non-technical audience.
- Spell out acronyms the first time they are used.
- Proofread your narratives thoroughly for grammar and typos.