From: First Officer Chad Van Someren, Alaska Airlines
To: Investigator, National Transportation Safety Board

SUBJ: Landing on Taxiway Tango: Pilot Monitoring Perspective

At 8:30 AM on December 19, 2015, we landed on Taxiway Tango instead of Runway 16C at SEA. The early morning sun, only thirty minutes or so after official sunrise, was relatively low on the southeastern horizon, shining beneath a partial overcast sky and reflecting off wet pavement on Taxiway Tango (as if to say, "come, land on me"). Runway 16C had just re-opened. Seatac airport was unusually quiet. We were inbound from the final flight of an otherwise uneventful four-day trip. We flew the GLASR-9 arrival and were cleared for the ILS approach to 16R; as expected, and as briefed. Inside the FAF for 16R, the Tower asked if we would like 16C. We agreed and the Captain (Pilot Flying) side-stepped over to align with Runway 16C.

During the sidestep we aligned with Taxiway Tango, thinking it was 16C. We both mistakenly focused on Taxiway Tango. In our mistaken view of reality, 16C appeared to be 16L, and Taxiway Tango appeared to be 16C. 16L did not catch our attention at all. In retrospect, it seemed dark and shadowed beneath the partial overcast and it blended with the ramp area. The Captain (pilot flying) said to not worry about changing anything in the box for the visual approach. He flipped up his HUD and aligned with what he thought was Runway 16C. Since I did not want to look at bad guidance from flight directors, I turned off my flight director (since 16R was tuned).

In an attempt to be helpful—since the Captain's flight directors were still on, I retuned the Captain's ILS for 16C, and incorporated his flight directors into my scan. After re-tuning his ILS, it puzzled me that his glidepath indicator showed onglideslope while his localizer showed off-course. I double-checked the frequency and casually mentioned something, but, since we were visually aligned with what we thought to be 16C, I did not give this discrepancy the attention it deserved. The Captain was focused on his visual approach. I looked out and saw what I expected to see (expectation bias, I suppose). Since runway 16C had only just opened, I expected an unusual sight picture and thought that perhaps the ILS was not yet operational, (even though I did not remember any NOTAMs to that effect). The 500foot call was another opportunity to correct the situation, but we had already convinced ourselves that what we were seeing was, in fact, 16C. In the moment we forgot about Taxiway Tango. Just prior to the flare, we both noticed and mentioned an unusually close ground antenna off our right side. Very strange. This strangeness, too, was attributed to the newly opened runway. Shortly after touchdown the mistake was evident to all. Tower calmly mentioned that we were on Taxiway Tango and cleared us to cross 16C. Once clear of the active runways we were given the dreaded ATC phone number to call.

SUBJ: Landing on Taxiway Tango: Pilot Monitoring Perspective

Thinking back on this, as the Pilot Monitoring, I was focused too much on secondary tasks. I neglected the big picture of visually making sure that we were lined up on the proper runway. I allowed expectation bias to warp my visual scan and perception of reality. I would have been better off touching nothing inside the aircraft and simply looking outside to verify the correct runway. Instead of merely looking directly in front of us, I should have visually scanned to the left and the right, across the entire airfield—this wider scan could very well have saved the day for us. Another way to save the day would have been to be more assertive in calling the Captain's attention to the 16C localizer showing us off course. The localizer provided accurate information and should not have been dismissed.

This statement has been submitted for anonymous publication for the Alaska Airlines pilot group in order to serve as a warning to those who find themselves going heads down for too long inside of the Final Approach fix; and as a call to speak assertively or call a go-around when things are not as they should be.

Respectfully Submitted,

Chad Van Someren

First Officer, Alaska Airlines