**Slide 1** – G’day and welcome from Central Australia. My name is Bill Hanna, and I would like to discuss, briefly, two interesting observations that I made in June.

**Slide 2** – Specifically, an occultation by Deimos, the small outermost moon of Mars, and also an occultation by the Trans-Neptunian Object Ixion. I’ll then briefly describe the equipment that I used to make the observations, and my overall results as an occultation observer to date.

**Slide 3** – John Broughton informed me of the opportunity with only about four hours’ notice, although I didn’t actually read his e-mail until about two hours before the event. I quickly set up under a clear sky with no moon and collected a chord nearly across the diameter of the object.

**Slide 4** – The narrow shadow path was predicted to pass almost directly over me, but would miss the concentrations of occultation observers in Sydney and Brisbane.

**Slides 5,6** – The target star was sufficiently bright, roughly 9th magnitude, for me to be able to record at 30 frames per second and produce a definitive light curve, but Mars itself was greatly overexposed. Here is a short video of the observation.

**Slide 7** – The second object that I observed in June was Ixion. The predicted shadow path was well south of me; indeed, I was nearly at the 2‑sigma uncertainty boundary given in Occult Watcher.

**Slides 8,9** – The dim target star, at roughly 15th magnitude, required collection at three seconds per frame to obtain a sufficient signal-to-background ratio.

**Slide 10** – This produced another definitive result, but notice that the bottom of the dip in the light curve is not quite flat.

**Slide 11** – This might be explained, in part, by the fact that the target star has been determined to be a close double.

**Slide 12** – The preliminary post-observation update to the prediction has moved the shadow path to the north but has not yet been corrected for the time of the observation.

**Slide 13** – I made the observations with an 8” Schmidt-Cassegrain telescope fitted with a focal reducer, although, in hindsight, the Deimos observation would have been better served by removing the focal reducer to increase the apparent separation between the target star and Mars. The camera was a Grasshopper EX driven by the ADVS, for which I am a beta tester.

**Slide 14** – I now do most of my observing from the balcony over my garage, although this somewhat restricts my view to the east and southeast.

**Slide 15** – I relocated the pier that I had made from the hillside behind my house because the rocky path to the observing location there was just too difficult to negotiate safely in the dark.

**Slide 16** – In the last three years I have signed up for 135 events and, owing to the generally clear skies over Alice Springs, only about a quarter of them have been affected by the weather.

**Slide 17** – I have no qualms about going after challenging targets, and I am particularly looking forward to the upcoming Jovian moon mutual events and the occultation of Venus by our Moon, for which I will probably drive about seven hours south to improve the geometry of the observation. Thank you for listening.