abstract Recent observations in the 21cm line with the Green Bank Telescope have changed our view of the neutral interstellar medium (ISM) in several ways. The new data show that in the inner parts of the Milky Way the disk-halo interface is composed of many discrete HI clouds. The clouds lie in a layer more than one kpc thick and follow Galactic rotation. Their origin and evolution is unknown. In the outer Galaxy, the new data show that the high-velocity cloud Complex H is likely a satellite on a retrograde orbit interacting with some extended component of the Milky Way’s ISM. These observations place new constraints on models of the ISM and are directly related to the work of Don Cox and Ron Reynolds.