The Galileo spacecraft has been in orbit around Jupiter since December, 1995. During that time it has greatly expanded our knowledge of the entire Jupiter system and raised fascinating new questions about planetary formation, evolution and processes. Among the major discoveries from the mission are: 1. The first detailed analysis of the composition of Jupiter's atmosphere, revealing strong meteorologically controlled variations in clouds and water abundance, 2. The first planetary satellite with an intrinsic magnetic field, Ganymede, 3. Io's ubiquitous volcanic eruptions are primarily controlled by silicate volcanism and high temperatures indicate extreme ultra-maffic compositions, 4. Geological and geophysical evidence for a global liquid water ocean kilometers to tens of kilometers beneath Europa's icy crust, and 4. Magnetic field induction signatures from each of the icy satellites suggesting a global electrically conducting layer, probably salty liquid, at reasonably shallow depths. Galileo is now preparing for its final two orbits of the giant planet, one an extremely close pass within the outer edges of the gossamer ring and within about 500 kilometers of the moon Amalthea and then the final orbit destined to impact Jupiter in the fall of 2003.