Previous investigations of exploding radial foils have shown the formation of a dense highly-collimated hypersonic axial plasma jet in the early stages of the foil explosion. In this case a thin load foil is pressed at an outer annulus held at ground, and contacted in the center by a small straight rod cathode driven by a 1MA-in-100ns pulse from COBRA. Recent experiments focus on the initial jet development when an externally produced B-field is applied. A field perpendicular to the direction of jet propagation is provided by permanent magnets. Initial observations indicate that an asymmetric propagation or apparent splitting of the jet is due to the presence of the imposed magnetic field. New results are presented from experiments involving novel hardware geometries and methods for field production such as pulsed iron-core electromagnets. These changes isolate magnetic field effects from other factors, allowing us to better understand the mechanisms behind the observed asymmetry in jet propagation.