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Radio Remnants Of Nearby Off-AXIS GAMMA-RAY Bursts - PART I: Observational Results CONNOR GRANDORF, HEATHER HARBIN, PRIYADARSHINI RAJKUMAR, ALESSANDRA CORSI¹, Texas Tech University — The remarkable multi-messenger discovery of the binary neutron star merger GW170817 by the LIGO/Virgo gravitational-wave (GW) detector networks has marked the start of a new era in astrophysics. In addition to confirming the predictions of Einstein’s general theory of relativity, the joint EM/GW discovery of GW170817 has given us new insight into the angular structure of gamma-ray burst (GRB) jets, and into the possible existence of a nearby population of bursts hidden within those with unknown distances. Building upon the new information gained from GW170817/GRB170817A, we present here late-time radio observations of a sample of 8 short GRBs with unknown distances in the NASA/Swift sample aimed at searching for potential radio emission from nearby GW170817-like ejecta. While definitive results require further observations, we have found several promising candidates for radio counterparts to these GRBs that may unveil, for the very first time, a missing population of nearby short GRBs.

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