The purpose of this project was to determine which type and shape of material best cloaks itself from simulated RADAR. An understanding and usage by the military of materials and designs that are efficiently disguised from RADAR and simulated RADAR in equipment would lead to soldiers not being detected as easily, which in turn would lead to less lives being lost. The objects tested were: a tan coated cylinder, a tan coated w-shaped object, an aluminum foil coated cylinder, and an aluminum foil coated w-shape. The objects were tested in a totally dark environment by placing them in a pitch black box exactly 25 cm away from the simulated RADAR unit, which was composed of a LED headlight and a light sensor called a lux meter. Out of the four objects, the wooden w-shaped object reflected the least amount of light, followed by the wooden cylinder, which was followed by the aluminum foil w-shaped object, with the aluminum foil cylinder reflecting the most amount of light. As indicated by the results of the experiment, usages of the design and materials of the tan w-shaped object by the military for equipment would possibly result in soldiers being better camouflaged, which would put them at less risk to be wounded or killed during missions.