Boeing 737-400

164

AGM-86 cruise missile

Electromagnetic Wave Scattering by Aerial and Ground Radar Objects

RCS (m²)

330

45

270

285

270

255

240

225

180

FIGURE 3.62 (See color insert.) Circular diagrams of instantaneous RCS given radar observation of Boeing 737-400 aircraft model at carrier frequency of 10 GHz (3 cm wavelength).

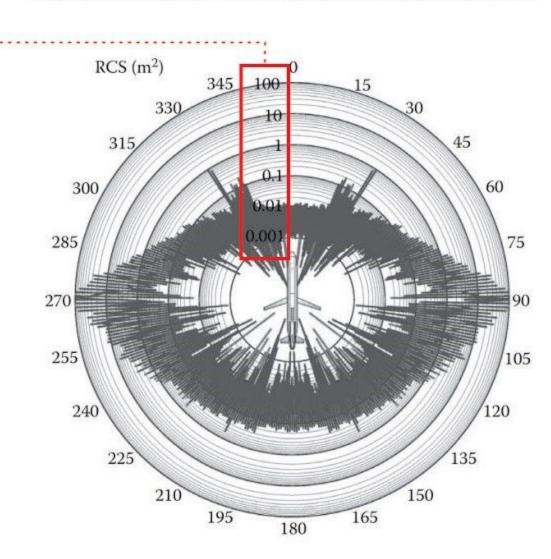


FIGURE 3.179 (See color insert.) Circular diagrams of instantaneous RCS given radar observation of AGM-86 ALCM model at carrier frequency of 10 GHz (3 cm wavelength).

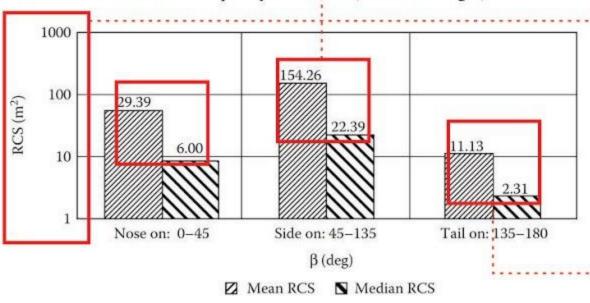


FIGURE 3.63 Diagrams of mean and median RCS of Boeing 737-400 aircraft model in three sectors of azimuth aspect given its radar observation at horizontal polarization and carrier frequency of 10 GHz (3 cm wavelength).

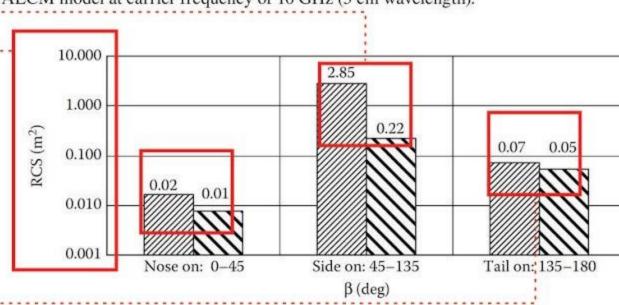


FIGURE 3.180 Diagrams of mean and median RCS of AGM-86 ALCM model in three sectors of azimuth aspect given its radar observation at horizontal polarization and carrier frequency of 10 GHz (3 cm wavelength).

☑ Mean RCS Median RCS

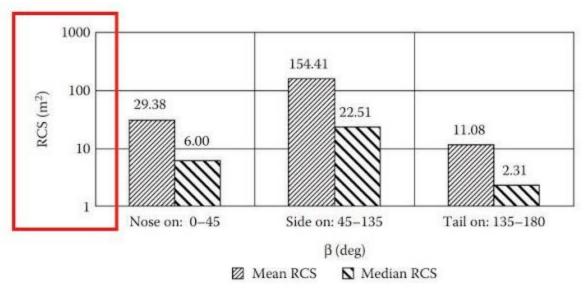


FIGURE 3.64 Diagrams of mean and median RCS of Boeing 737-400 aircraft model in three sectors of azimuth aspect given its radar observation at vertical polarization and carrier frequency of 10 GHz (3 cm wavelength)

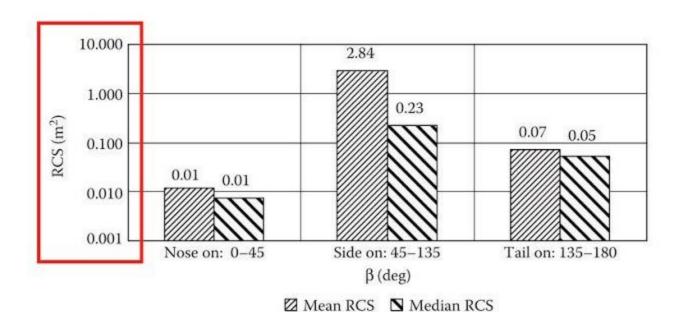


FIGURE 3.181 Diagrams of mean and median RCS of AGM-86 ALCM model in three sectors of azimuth aspect given its radar observation at vertical polarization and carrier frequency of 10 GHz (3 cm wavelength).

Scattering Characteristics of Some Airborne and Ground Objects

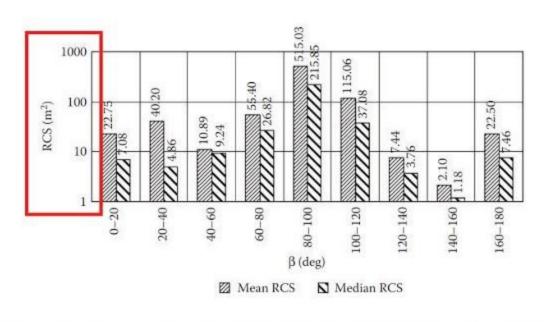


FIGURE 3.65 Diagrams of mean and median RCS of Boeing 737-400 aircraft model in 20-degree sectors of azimuth aspect given its radar observation at horizontal polarization and carrier frequency of 10 GHz (3 cm wavelength).

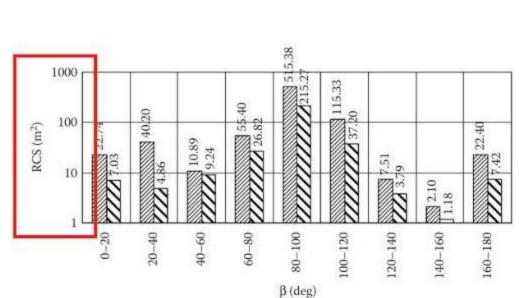


FIGURE 3.66 Diagrams of mean and median RCS of Boeing 737-400 aircraft model in 20-degree sectors of azimuth aspect given its radar observation at vertical polarization and carrier frequency of 10 GHz (3 cm wavelength).

Mean RCS Median RCS

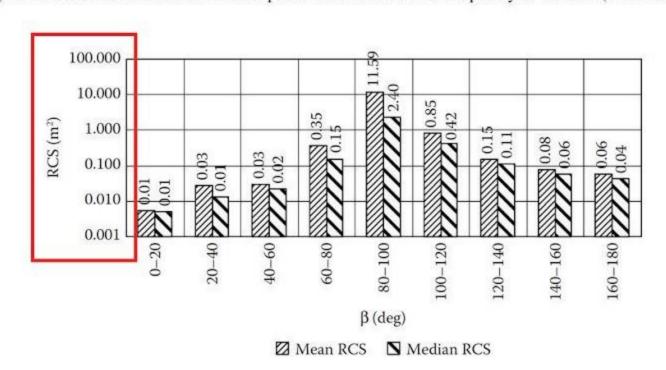


FIGURE 3.182 Diagrams of mean and median RCS of AGM-86 ALCM model in 20-degree sectors of azimuth aspect given its radar observation at horizontal polarization and carrier frequency of 10 GHz (3 cm wavelength).

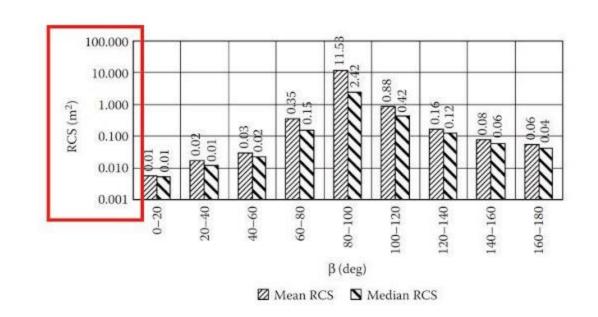


FIGURE 3.183 Diagrams of mean and median RCS of AGM-86 ALCM model in 20-degree sectors of azimuth aspect given its radar observation at vertical polarization and carrier frequency of 10 GHz (3 cm wavelength).

Source: Electromagnetic Wave Scattering by Aerial and Ground Radar Objects, Oleg I. Sukharevsky (ed), CRC Press: 2015.

165