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Advances in Radar Technology for Bird Strike Risk Assessment

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Advances in Radar Technology for Bird Strike Risk Assessment

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Since the 2001 BSC meeting in Calgary, Geo-Marine, Inc. has made dramatic advances in the development of avian radar systems. The Mobile Avian Radar System (MARS) has undergone major revisions. New radar processor cards provide the computer workstations with higher resolution data than was previously possible. The system now incorporates both horizontal- and vertical-scanning radars. The vertical scanning radar antenna now includes a shield to reduce side-lobe interference. Significant improvements have been made in ground clutter and weather reduction algorithms. The system has been tested for use in real-time monitoring of bird hazards on airports. GMI is currently working with Transport Canada to develop a dedicated, on-airport, 3-dimensional radar for real-time bird hazard assessments. The new technology makes the real-time radar monitoring of bird hazards at civil and military airports, military ranges, and landfills possible.