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## IMPLEMENTATION AND DISTRIBUTION OF BIRD DETECTION RADAR AND BIRD HAZARD ADVISORY INFORMATION FOR MILITARY AND COMMERCIAL AVIATION

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## (7) IMPLEMENTATION AND DISTRIBUTION OF BIRD DETECTION RADAR AND BIRD HAZARD ADVISORY INFORMATION FOR MILITARY AND COMMERCIAL AVIATION

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Over the past five years, development of mobile bird detection radars for use as real-time aircraft bird strike avoidance systems has moved from research and development into active deployment as an operational technology. The MERLIN<sup>™</sup> bird detection radar, with an update rate as frequent as once per second, is currently deployed as production-model technology with 15 systems operating in the U.S., Canada, Scotland, England and The Netherlands. Deployment challenges over the past two years have included "how" and "in what forms" to deliver the real-time and near real-time information to controllers, wildlife control units, pilots and decision makers so that bird hazards can be more reliably detected, strike risk reduced, bird control efficiency increased, and to develop detailed historical resource databases to support long-term management actions. MERLIN systems are currently being used in civil, military and landfill environments using widearea wireless distribution of data displays and products in real-time direct to airfield operations, planners and bird control units. On-going operating experience is helping to define specific concepts-of-operations (CONOPS) for each type of environment as to how the technology can be used and how and in what form bird radar information is integrated into current operational risk management and flight safety programs.