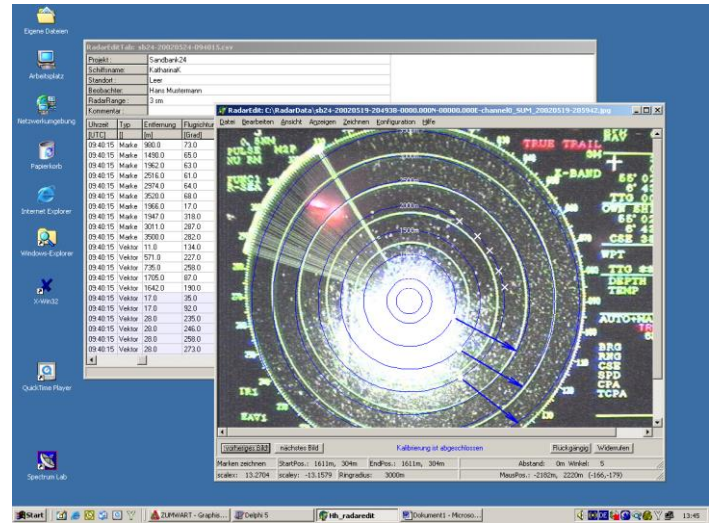


- Radar ornithology
- Image data logger
- Recording, integration and storage of radar images
- Horizontal- und vertical radar images
- Interrogation of bird path records
- Editor for recording of individual birds, flocks and tracking their direction
- Image formation
- Direct adoption of data into databases or excel

**RadarCam**  
a configurable image data logger used for recording, integration and storage of radar images.

**RadarEdit**  
a specialized editor for the interrogation of bird path records, generating tables supporting databases. The editor is running under MS-Windows (XP/WIN7).



**RadarCam** allows image recording, integration and the comfortable configuration of these features. The recording software runs under the operation system Windows.

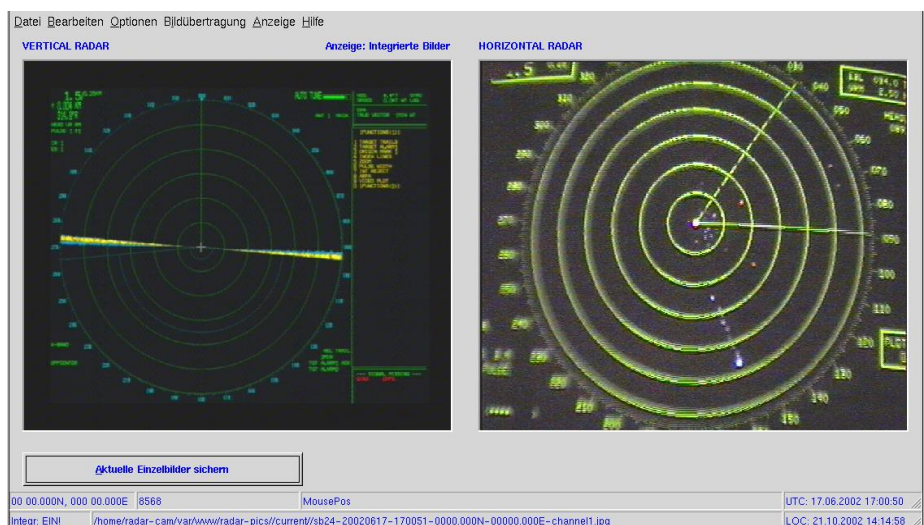
- Recording of horizontal and vertical radar images
- Single image capture in an arbitrary time periods (1 up to x seconds)
- Online integration of the single images (e.g. 10 minutes)
- Calibration capabilities
- Parallel recording of GPS coordinates
- Archiving of all data with date and exact time stamps, GPS coordinates, etc.

### Contact Person

Thomas Pahlke  
+49 441 939400-00  
t.pahlke@overspeed.de

Overspeed GmbH & Co. KG  
Im Technologiepark 4  
26129 Oldenburg  
Germany  
info@overspeed.de

overspeed.de



For recording bird paths, there is the possibility of using two radar devices at the same time, one for the horizontal and one for the vertical direction. This is often predetermined by the public authorities in the process of approval for offshore wind farms.

**RadarEdit** supports the comfortable analysis of recorded radar images under MS-Windows via an interactive editor. The editor runs independently of RadarCam and is available separately.

- Setting markers for individuals and flocks
- Recording of positions, quantity, tracking direction, etc.
- Automatic estimation of tracking speeds
- Direct adoption of automatically generated tables into MS-Excel
- Overlay of freely definable grids of heights or rings of constant distance
- Calibration procedure to get rid of typically image deformations (using photo or video cameras for recording radar signals often causes strong geometry deformations in the resulting images)

The Radar-Software can be installed on any Windows-PC, or be delivered completely configured if requested. The video-grabber-boxes to be connected to the radar device are specified for different ports (VGA, HDMI, DVI). Alternatively, the radar screens can be recorded by video cameras.



Fig.: Two professional video-grabber for horizontal and vertical radar used for image recording.

The system can be installed for mobile use on a ship as well as for stationary use in a wind farm. In mobile maritime operation the current position given by a GPS can be recorded in parallel with the radar images.

Ra	Datum	Uhrzeit	Typ	Entfernung	Flugrichtung	Flugdistanz	Flughöhe	Geschwindigkeit	Anzahl	Vogelart	Kommentar
		[UTC]		[m]	[Grad]	[m]	[m]	[km/h]			
V	24.05.2002	09:40:15	Marke	990.0	73.0		274		1	Möwe	Emma
V	24.05.2002	09:40:15	Marke	1490.0	65.0		627		11	Graugans	identifiziert mit Zeiss Spectiv 33-8
V	24.05.2002	09:40:15	Marke	1962.0	63.0						
V	24.05.2002	09:40:15	Marke	2516.0	61.0						
V	24.05.2002	09:40:15	Marke	2974.0	64.0						
V	24.05.2002	09:40:15	Marke	3520.0	68.0						
V	24.05.2002	09:40:15	Marke	1966.0	17.0						
V	24.05.2002	09:40:15	Marke	1947.0	318.0						
V	24.05.2002	09:40:15	Marke	3011.0	287.0						
V	24.05.2002	09:40:15	Marke	3500.0	282.0						
V	24.05.2002	09:40:15	Vektor	11.0	134.0	223					
V	24.05.2002	09:40:15	Vektor	571.0	227.0	207					
V	24.05.2002	09:40:15	Vektor	735.0	258.0	238					
V	24.05.2002	09:40:15	Vektor	1705.0	87.0	204					
V	24.05.2002	09:40:15	Vektor	1642.0	190.0	201					
V	14.04.2002	11:59:02	Vektor	1657.0	92.0	165					

Calibration ist abgeschlossen

Marken zeichnen StartPos.: 2303m, -1256m EndPos.: 555m, -946m Abstand: 1775m Winkel: 280  
 scalex: 9.6794 scaley: -10.1695 Ringradius: 3000m MausPos.: 1164m, -430m (114,40)