## SURVEY RESULTS

## 98 / 63 Reedham Marshes, Norfolk

## Survey Area

1.

- 1.1 The location of the survey area is shown on Figure 1 at a scale of 1:2500. The different areas covered by the two techniques are indicated on the diagram.
- 1.2 The survey grids were set out by *GSB Prospection* and tied in by *RCHME*, who retain the location information.

## 2. Display

2.1 The data from the gradiometer survey are displayed as a grey-scale image in Figure 2 with an accompanying interpretation in Figure 3. Figures 4 and 5 are a colour-scale and interpretation diagram of the EM61 data. All are produced at a scale of 1:500.

## 3. Results of Gradiometer Survey

- 3.1 The gradiometer data show a collection of ferrous type responses in the southern half of the survey area and a clear concentration of responses immediately to the north of the drainage ditch.
- 3.2 It is likely that these areas of magnetic disturbance relate to debris associated with the plane crash. The results suggest that the majority of the wreckage lies just to the north of the drain and possibly extending into it.

## 4. Results of EM61 Survey

- 4.1 As gradiometry will only detect ferrous metal, an EM61 survey was also undertaken to locate all other types of metal. On the interpretation diagrams the anomalies have been broadly divided into ferrous and non-ferrous responses by comparing the gradiometer and EM61 data. This is a simplified division as much of the debris may contain both ferrous and non-ferrous components.
- 4.2 The EM61 data shows the same distribution of responses as the gradiometry, with a clear concentration of anomalies to the north of the drain. However, the data does suggest that this core area extends further south than suggested by the gradiometer data. In addition, it is possible that a high proportion of the aircraft debris lies within the drainage ditch, where survey work could not be carried out.
- 4.3 In addition to the core area of response, other isolated anomalies were selected for excavation. One of these was found to be part of an aileron buried some 2m below the surface. This was about 0.5m long and composed primarily of lead.

5.	Conclusions					
----	-------------	--	--	--	--	--

- 5.1 Gradiometer survey successfully identified a concentration of ferrous type responses either side of the drain. Further survey using an EM61 confirmed this and also identified several non-ferrous responses, which are almost certainly debris associated with the plane crash.
- 5.2 Although excavation did not recover large sections of the aircraft, a concentration of debris was found in the drainage ditch and immediately to the north.

Project Co-ordinator:	J Gater			
Project Assistants:	Dr A Aspinall, Dr S Ovenden-Wilson, A Shields and C Stephens			
Date of Survey:	29 <sup>th</sup> June – 1 <sup>st</sup> July 1998			
v				
Date of Report:	29 <sup>th</sup> March 1999			

## SITE SUMMARY SHEET

## 98 / 63 Reedham Marshes, Norfolk

NGR: TM 442 039

## Location, topography and geology

The area of investigation lies immediately to the east of a plantation of trees known as Decoy Carr in a flat pasture field on the western edge of Reedham Marshes, approximately 1.5km northeast of Reedham, Norfolk. The survey area lies either side of a field drain aligned east-west known as Mill Dyke. The geology consists of waterlogged topsoil over layers peat and marine alluvium.

## Archaeology

The area of interest is the known crash site of a B17 bomber that was part of the 385<sup>th</sup> bombardment group based at Great Ashfield, Suffolk. The plane was involved in a mid-air collision on 21 February 1944 returning from a mission. The other plane involved in the accident crashed some 800yrds away and has been excavated in 1976.

## Aims of Survey

Gradiometry and EM61 survey were undertaken with the aim of locating a concentration of metal responses indicative of the remains of the B17 bomber. Gradiometry will locate only ferrous type remains while the EM61 will detect a variety of metallic remains.

## Summary of Results \*

Gradiometer survey successfully identified a concentration of ferrous type responses either side of a drain. Survey using an EM61 confirmed this distribution and also identified several non-ferrous responses, which are almost certainly debris associated with the plane crash.

Although excavation did not recover large sections of the aircraft a concentration of plane debris was found in the drainage ditch and immediately to the north.

\* It is essential that this summary is read in conjunction with the detailed results of the survey.

# List of Figures

Figure 1	Location Diagram	1:2500
Figure 2	Gradiometry: Grey-scale	1:500
Figure 3	Gradiometry: Interpretation	1:500
Figure 4	EM61: Colour-scale	1:500
Figure 5	EM61: Interpretation	1:500