The Search For The Crash Site of Avro Lancaster MK I R 5694 EM-F Plane Field SK 793 279

Near Eaton, Leicestershire

Field Survey Report

September 2020

Every Field Tells a Story

IN MEMORY OF

Flight Lieutenant Raymund Joseph Hannan DFC aged 25
Sergeant Peter John Thompson aged 21
Flight Sergeant John Kennerleigh (Ken) Barnett Lee aged 29
Sergeant Bryant Leonard McKenzie Jenkin aged 24
Sergeant Albert Roberts aged 21
Sergeant John (Jack) Bernard Burton aged 21
Sergeant Ernest Raymond Donald (Roy) Piper aged 19
Sergeant John (Jack) Sanders aged 20

The Crew of Avro Lancaster MK I R5694 EM-F

Sergeant Bernard Leo Litolff a regular member of the crew, was not with them on this mission

Contents

Every Field Tells a Story

Preface

Team work and collaboration proved to be the key ingredients that unlocked a seventy-seven year uncertainty.

On Wednesday 25th November 1942, Flight Lieutenant Raymund Joseph Hannan DFC and his crew flew out of Langar airfield in their Avro Lancaster MK I bomber bound for Bad Zwischenahn.

Their target would most certainly have been the Luftwaffe's largest air base in northern Germany, which amongst other things, was the base for Condor long-range weather flights that also monitored shipping movements.

We know from the 207 Squadron records that the sortie was not completed, and that they turned back somewhere around the Dutch coastal area.

On their return to RAF Langar the aircraft crashed and burst into flames killing eight of the crew, seven that afternoon and one the following day. Eye witness accounts suggest a 'most probable' crash site, but the exact location has never been recorded.

An operation to recover the wreckage, human remains and munitions was carried out in November 1942.

What became very clear at the outset of this investigation, was the need to put the record straight, to find the exact location of the crash site, to inform the crew's families and to officially commemorate the site.

This would not have been possible if not for the tireless energy of the Goadby Marwood History Group, permission to access the field from the Hubbard family, and the exemplary pre-survey field preparation conducted by Eric, James and the team at Wright's agriculture.

This report presents our findings.

The Field Detectives
September 2020

View of Plane Field from the Waltham Road, looking west down into the stream lined valley below on the first day of the field survey.

A minute of silence was observed on the field before the survey commenced.

Field Survey Methodology

The Field Detectives are a group of enthusiasts who share a common interest in local history. Over the past twenty years the group has sought the permission of local farmers and landowners to explore their fields for evidence of past historic activity using field-walking, metal detecting and where feasible, limited geophysical survey methods.

An introductory visit to the site with members of the Goadby Marwood History Group was carried out on Friday 19th June 2020, to walk through an eye witness account informed flight trajectory. Based on the 'possible' line of flight, an initial field survey search grid area was identified. A field survey map was created by downloading an aerial image of the field from Google Earth Pro, and superimposing graph paper over the field image. One copy of this was taken into the field on the field survey clipboard. In the field, grid areas were marked out in advance of each field survey visit (20x20 metre grid sections, marked with canes featuring coloured tape), utilising both the online Google Earth metric measure resource and the physical on-site tape and stride method. The grid areas were transposed onto the field survey map, and the location of the finds recorded on the map as they were found. The finds were bagged and their locations noted on site; the finds were later cleaned and identified, the identification and location being attributed to the grid section they were found in. Photographs of the grid area and the finds recovered were taken on site, with further photographs taken after cleaning if necessary.

Field Survey Overview Map

The image featured above shows the pre-survey plan that was disseminated amongst the Field Detectives survey team inclusive of the recommended Covid-19 social distancing measures. The Grid sketched out in Plane Field SK 793 279 is the targeted area of study based on eye witness accounts. It is worth noting at this early stage of the survey that the hypothesised trajectory places the crash site very close to the south side of the footbridge, and possibly extending into Plane Field at the foot of the valley slope.

Wednesday 25th November 1942

Piecing together the day from the remaining fragments of written materials, eye witness accounts and the results of a targeted field survey relies heavily on teamwork, collaboration, tireless enthusiasm and a never waning determination to succeed. This crash site location search brought together a valuable set of insights, that has allowed us to shed light on the shadows of a day from almost seventy-eight years ago.

We know from the RAF records, that the weather at Langar (Nottinghamshire) was not very inviting for operational missions on Tuesday 24th, Wednesday 25th, Thursday 26th and Friday 27th November 1942. Tuesday was described as rain and misty (no operations), Wednesday as cloudy and showery, Thursday rain and misty (no operations) and Friday as fair and cloudy (operations cancelled due to unfavourable weather).

On 25th November 1942, five aircraft of 207 Squadron flew out of RAF Langar, each tasked with separate missions. The Avro Lancaster MK I R5694 EM-F piloted by Flight Lieutenant Raymund Joseph Hannan DFC (New Zealand), took off at 15:00 bound for Bad Zwischenhan in northern Germany, which among other things, was the base for Condor long-range weather flights that also monitored shipping movements.

Flight-Lieutenant R.J. Hannan DFC

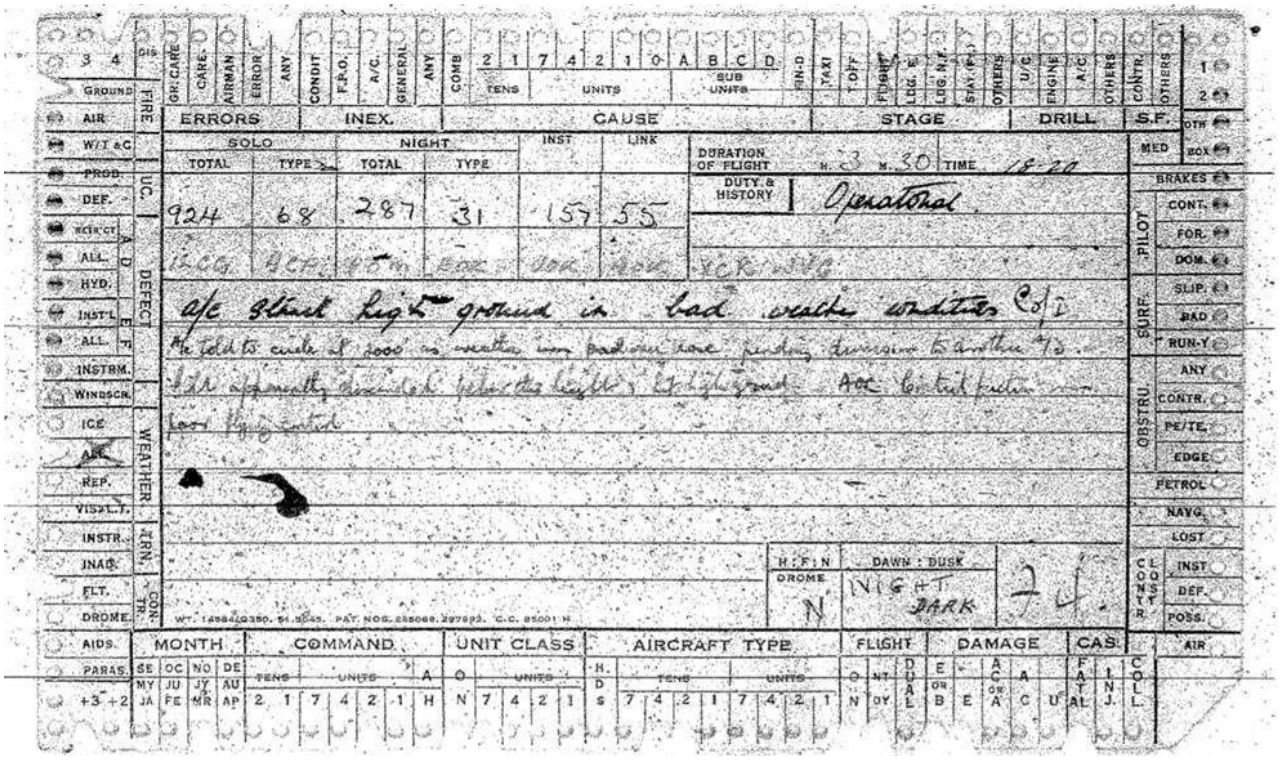
It was at this point of the investigation that our RAF consultant Peter Baker immediately noticed that the flight time (3 Hours) was actually, 'no time at all'.

A very quick calculation – bombing target c.611 miles as the crow flies; there and back should take around six hours if flying at a steady 200 miles an hour. That's a straight as the crow flies calculation. They took off from Langar airfield at 15:00 hours and crashed at Eaton c.18:10-20pm, which means that they were only up for three hours in total. Rough reckoning puts them at or around the Dutch coastal area. Further research into the flight records of the other four operational aircraft on the day revealed:

Date	Aircraft	Up	Down	Details of Sortie
25.11.1942	Lancaster R.5756. EM-D	14:51	17:30 *(landed?)*	Primary target FRIESOYTHE not attacked - had to turn back because of lack of cloud cover, Furthest point reached Dutch Coast. 5247 N 044 E. at 16:15 hours 2,200 feet. Abortive sortie because of cloud cover
25.11.1942	Lancaster W.4171. EM-J	14:52	19:32 Rufforth, North Yorkshire	Primary VECHTA not attacked owing to lack of cloud cover. Bombs jettisoned safe at position 52.42N 0330 E. at 17:35 at height of 1,000 feet. Farthest point reached 52.44 n. 0536 E. Abortive sortie. Cloud insufficient to cross open country.
25.11.1942	Lancaster R.5694. EM-F	15:00	18:10 crashed near Eaton	BAD ZWISCHENAHN sortie not completed. Aircraft crashed and all crew were killed
25.11.1942	Lancaster R.5695. EM-C	15:04	Missing	HASELUNNE sortie not completed. Crew missing.
25.11.1942	Lancaster W.4120. EM-L	15:05	19:30 Linton-On-Ouse, North Yorkshire	Primary QUAKENBRUCK not attacked owing to lack of cloud cover. Furthest point reached Dutch coast. Jettisoned 1x1000 lb G.P. to lighten aircraft. Brought back 7x1000 GP. Abortive sortie. Cloud cover insufficient to complete operation.

As Malcolm Barrass (RAF Historical Society) noted; *The diversions to Rufforth and Linton would suggest that conditions at Langar were unsuitable to land and this could have been a contributary factor in the crash of R5694.*

Our research colleague Graham Doyle, was able to provide an image of a document (AM Form 1180) that offered an additional set of information relating to the instructions that Ray received from Langar airfield later that afternoon.



Our best attempt at deciphering the faded hand writing reads: A/C Struck high ground in bad weather conditions. Co/I A/C told to circle at 2000' as weather was bad [? ?] pending diversion to another [?]. A/C apparently descended below this height & hit high ground. AOC [?] Critical factor was poor flying control.

The weather conditions, and perhaps some navigational confusion over the circle height instruction, alongside some other unexplained mechanical problem, could arguably have been contributing factors that led to the crash. If we take into account the height of the Belvoir Ridge (where the aircraft came down) in regard to where Langar airfield is positioned below the ridge, we might then be able to factor in some confusion in regard to the instruction to circle at 2,000 feet.

Our research colleague and RAF consultant Rusty Russell (author of Mast High Over Rotterdam) added: *If he was recovering in IMC (Instrument Meteorological Conditions) and under IFR (Instrument Flight Rules). The radar controller would have told the pilot to fly at 2000 feet on the QFE for Langar Airfield, giving 2,000 feet above the airfield, or runway threshold. This was probably below the Safety Altitude – height above Sea Level (highest point within 30 miles, or less, plus 10%, plus 1,500 feet). But this is/was normal procedure when under radar control or a sound Procedural Service from ATC. IF the aircraft descended without instruction by the Air Traffic Controller, then something serious must have happened. A catastrophic engine failure or incapacitation of the pilot (if just one pilot). The pilot would NOT have descended without permission!*

Malcolm Barrass (RAF Historical Society) added: *Belvoir Castle sits at about 450 ft ASL so a holding height of 2,000 ft should have given them a good 1,500 ft clearance of the ridge, if they had followed instructions. They appear to have been waiting to be sent to another airfield as a diversion but attempted to land at Langer despite this. They should have had the QFE (Airfield pressure setting) set on the altimeter but if QNH (Regional pressure setting) was set, their actual height above the ground may have been considerably different to what was registered on the altimeter and would certainly be poor practice. However, I'm not sure whether 'poor flying control' refers to the pilot or the ground control, which was then know as 'Flying Control' rather the modern 'Air Traffic Control'. What you really need, if it is still in existence is the report of the Court of Inquiry, which would give details of the evidence on which the conclusions were made.*

We have no way of knowing what actually happened on that terrible evening, but we do know for certain that the weather, the 2,000 feet discrepancy, the instructions to circle while another airfield location was being arranged, and perhaps a mechanical problem of some kind could have been contributing factors.

Eye Witness Accounts

The image featured on page 9 shows the pre-survey hypothesised crash trajectory of Avro Lancaster MK I R5694 EM-F based on the following eye witness accounts.

Graham Doyle (Eastwell History Group) - *Denis Hubbard tells me that the aircraft clipped the trees on the lane from White Lodge before crashing, and that most of the wreckage was in the ditch.*

Via the Goadby Marwood History Group - *Gordon Spence remembers it well! He says the plane came over the village low at about 5 minutes to 6 in the evening, then it passed over his grandparent's bungalow (where he was living at that time) before crashing in the dyke at the edge of field known as Ivy Close on the Goadby / Eaton parish boundary. According to Gordon, his grandad and uncle went up to the crash site with Ted Pizer (Geoff Pizer's dad) so Geoff may be able to add some details. As far as we are aware everything was removed from the site but we don't know this for sure.*

Via the Goadby Marwood History Group - *Geoff Pizer, from the village says his father showed him where the plane went through the trees, which may still be there.*

Alan Hewson - *I remember dad and my uncle said that they biked to the crash before anyone else got there, all he said about it was that it wasn't good.*

Via the Eaton Facebook page 'Eaton Chatter' - from Sally Ann Bettley: *I've just spoken with my dad he remembers one coming down near to white city and can tell you where, this could be the one as it's not far from green lane, he's just told me how he remembers seeing them take the bodies away. I spoke with my dad he said.... if I followed the stream from the bottom corner of white city for a roughly 1/4 of a mile this is where he watched them take a body out or the wreckage.*

Via a Facebook post on Memories of Melton Mowbray from Mark Haynes - *My grandfather lived in Goadby Marwood during the war years and had told me that the Lancaster flew right over their cottage damaging the chimney.* Mark's grandfather, Stewart Bernard Haynes, lived at The Lodge, the now derelict farmstead on the outskirts of Goadby Marwood.

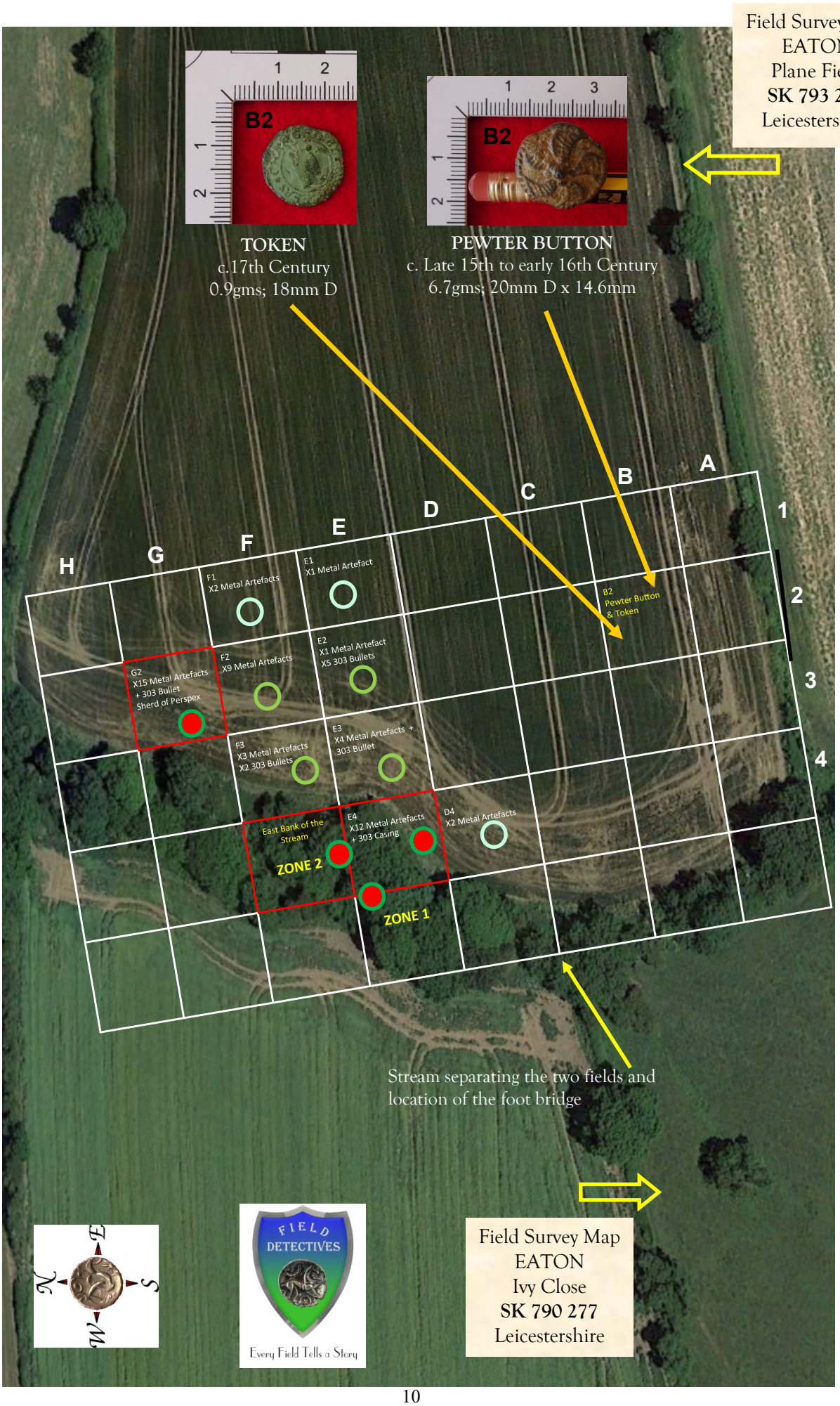
An introductory visit to the site with members of the Goadby Marwood History Group was carried out on Friday 19 June 2020, so that we could walk through the eye witness accounts to inform a suggested flight trajectory. Based on this line of flight, we would then be able to identify and install an initial field survey search grid area, which would then hopefully, once surveyed, be able to provide the necessary aircraft related evidence to establish the exact location of the crash site.

Sue Haynes and Jen MacGregor of the Goadby Marwood History Group visualising the aircraft trajectory at the point where eye witness accounts say the aircraft clipped some trees on its way down into the valley, only a few hundred metres away.


N
W
E
S
Eaton
Eastwell
Eastwell
Plane Field
SK 793 279
Flight Trajectory Hypothesis
Trajectory Hypothesis suggesting that the location of the crash site is south of the foot bridge
© 2020 Google


Plungar
NORTH
Langar
LANGAR AIRFIELD
Stathern
Harby
Hose
Eaton
Eastwell
POSSIBLE CRASH SITE
Lancaster R5694 (EM-F)
Suggested Crash Trajectory

Field Survey Finds Location Map



Field Survey Findings

Over the course of two days from Thursday 10th September through to Friday 11th September 2020, the Field Detectives and two members of the Goadby Marwood History Group, worked a search grid area from south to north/west in anticipation of finding and recording a sufficient number of Avro Lancaster MK I artefacts to conclusively establish the crash site of R5694 EM-F.

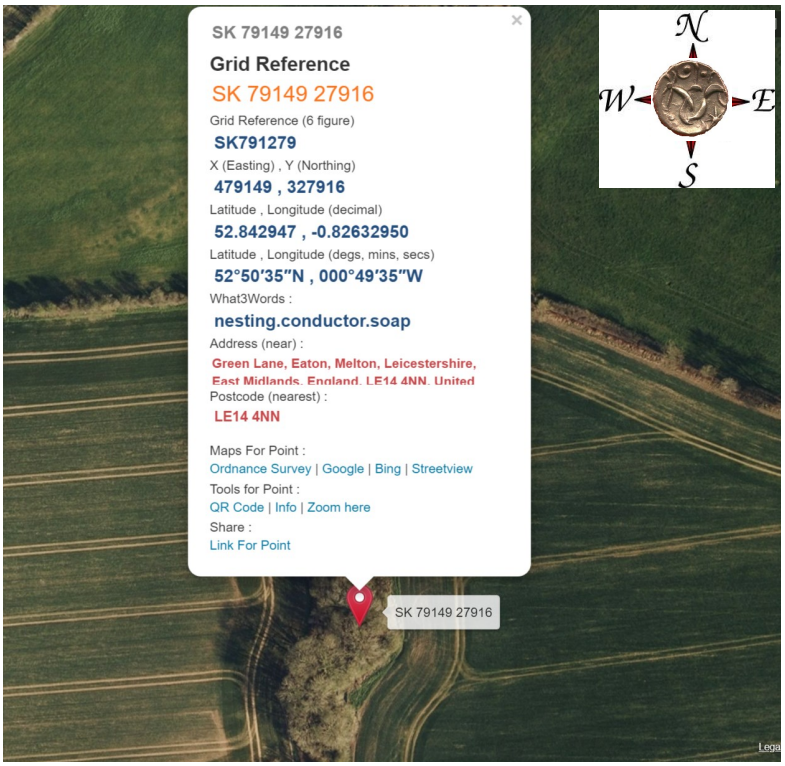
The field survey map featured on page 10 clearly shows a heavy concentration of aircraft related artefacts on and around the east bank of the stream, approximately 65metres to the north of the foot bridge.

The initial flight trajectory was a little out, and the concentrations of artefacts suggest that the aircraft came to ground at an angle more adjacent to that of the stream than first thought. This alignment of wreckage could suggest that there was a last minute manoeuvre by the pilot to avert a collision with high ground on plane field. One particular artefact brought those terrifying last moments that the crew must have lived through into view; a piece of Perspex windscreen.

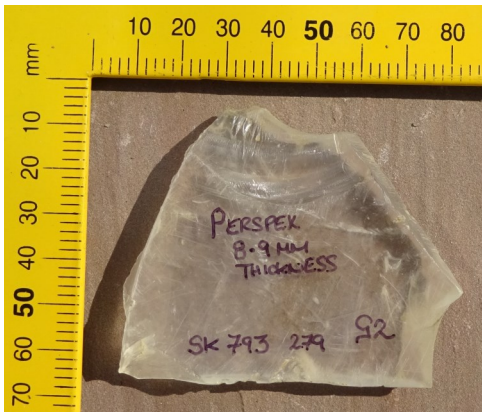
Our mission was to carry out a minimal investigation of the area to establish the crash site location. Now that we have established the location of the site we have a responsibility to safeguard the site and to protect it, as it is much more than just a collections of surface or buried artefacts. This is a place where seven men died and one sadly, the day after.

All recovered aircraft artefacts have been recorded and boxed for delivery to the Lincolnshire Aviation Museum for further study following the commemoration day of Saturday 7th August 2021. The complete 303 Bullets (heavily corroded) will be handed over to the Police as advised by the MOD. No further investigation will be carried out by the Field Detectives.

There is a heavy concentration of aircraft artefacts embedded in the east bank of the stream, with quite a few artefacts caught in the adjacent stream bed, and amongst them are many 303 rounds, of which a large number could be complete. It is our recommendation that measures are taken to deter access to the site.



SK 79149 27916 - Crash Site Location of Avro Lancaster MK I R5694 EM-F
Wednesday 25th November 1942



Piece of Perspex windscreen

The remaining concentration of aircraft artefacts inclusive of munitions, are slowly degrading in the acidic woodland soil and adjacent stream bed. Almost seventy-eight years of root growth have encased the remnants of the wreckage into the stream bank.

Search Grid Artefacts

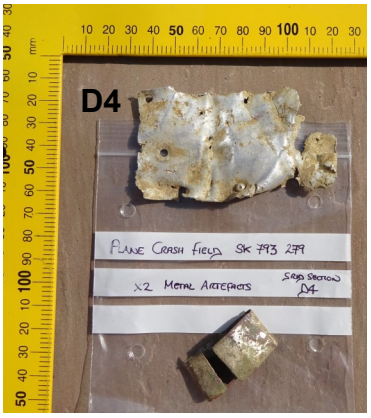
TOKEN
c.17th Century
0.9gms; 18mm D

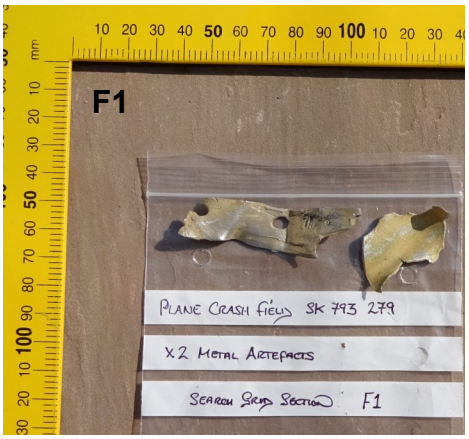
Two artefacts of historic interest recovered from grid search section B2. They will be returned to the Hubbard family via the Goadby Marwood History Group.

Interestingly, there were no further artefacts of earlier historic interest recorded during the survey.

Perhaps there was a trackway down the south side of the field?

PEWTER BUTTON
15th to early 16th Century
6.7gms; 20mm D x 14.6mm





The metallic artefacts found during the search grid survey, increased in quantity the nearer we reached the east bank of the stream.

Search Grid Artefacts

Post Field Survey Revised Aircraft Trajectory

The concentration of aircraft related artefacts on the east bank of the stream approximately 65 metres north of the footbridge, suggests that the aircraft came down almost adjacent to the line of the stream.

Eye witness accounts provide us with a good idea in regard to the final aircraft trajectory, which perhaps indicates that Flight Lieutenant Raymund Joseph Hannan DFC took late evasive action to avoid the fast approaching high ground ahead of him in plane field.

Eaton

Plane Field
SK 793 279

Eye witness account informed line of aircraft trajectory prior to the crash of Wednesday 25 November 1942

© 2020 Google

The image featured right shows the position of the Avro Lancaster MK I R5694 EM-F aircraft, as informed by the results of the Field Detectives survey following the fateful crash of Wednesday 25th November 1942 which happened at approximately 16:10 - 16:20 hours.

Summary

On Friday 11th September 2020, the Field Detectives successfully concluded their search for the crash site of Avro Lancaster MK I R5694 EM-F. The initial search hypothesis suggested a crash site situated between 10 - 40 metres south of the footbridge and that all of the wreckage, human remains and munitions had been removed in November 1942.

The main concentration of aircraft related artefacts were eventually located on the east bank of the stream, approximately 65 metres to the north of the footbridge. In amongst the metallic debris were a number of heavily corroded 303 bullets, some of which were complete. As this was a minimal extraction survey implemented to locate a concentration of remaining aircraft artefacts following full site clearance in 1942, no further survey activities were required.

The cause of the crash remains uncertain.
The crash site was recorded as: SK 79149 27916

Over the years, many people have walked by in close proximity to the site on a public footpath, carried out stream and woodland management activities and young people have enjoyed the outdoor adventures of exploring the stream valley. Our investigation revealed a remaining concentration of aircraft artefacts inclusive of munitions, slowly degrading in the acidic woodland soil and adjacent stream bed. Almost seventy-eight years of root growth has encased the remnants of the wreckage into the stream bank. It is our recommendation that measures are taken to deter access to the site.

Today, we are navigating our own world of uncertain times, and yet as I stood on the east bank of the stream on Friday afternoon, I couldn't help but feel honoured and privileged to be standing by a place where these very real and incredibly brave people sadly passed away.

The site is to be commemorated on Saturday 7th August 2021, not only to remember the crew and their families, it is also to treasure the future lives of promise that the crew's collective sacrifice gave us.

Ray, Peter, Ken, Bryant, Albert, Jack, Ernest (Roy) and Jack, we owe you so much.

The Field Detectives
September 2020

The success of this field survey belongs to many. Collaboration, trust, teamwork and determination came together in the form of everyone working together to find, record and commemorate a place of honour.

This could not have happened without the inspirational energy of the Goadby Marwood History Group, The Eastwell History Group, the memories of local people who witnessed that dreadful afternoon, the kind and supportive permission to carry out the survey from the Hubbard family and the exemplary pre-survey ground preparation by Eric, James and the team at Wrights agriculture.

Our findings could not have been presented without the knowledge, experience and support of our research colleagues at the Lincolnshire Aviation Museum, Malcolm Barrass (RAF Historical Society), Lionel 'Rusty' Russell (Author of Mast High Over Rotterdam), Peter Baker (RAF Consultant) & Raymond Glynne-Owen (Author of 207 Squadron).

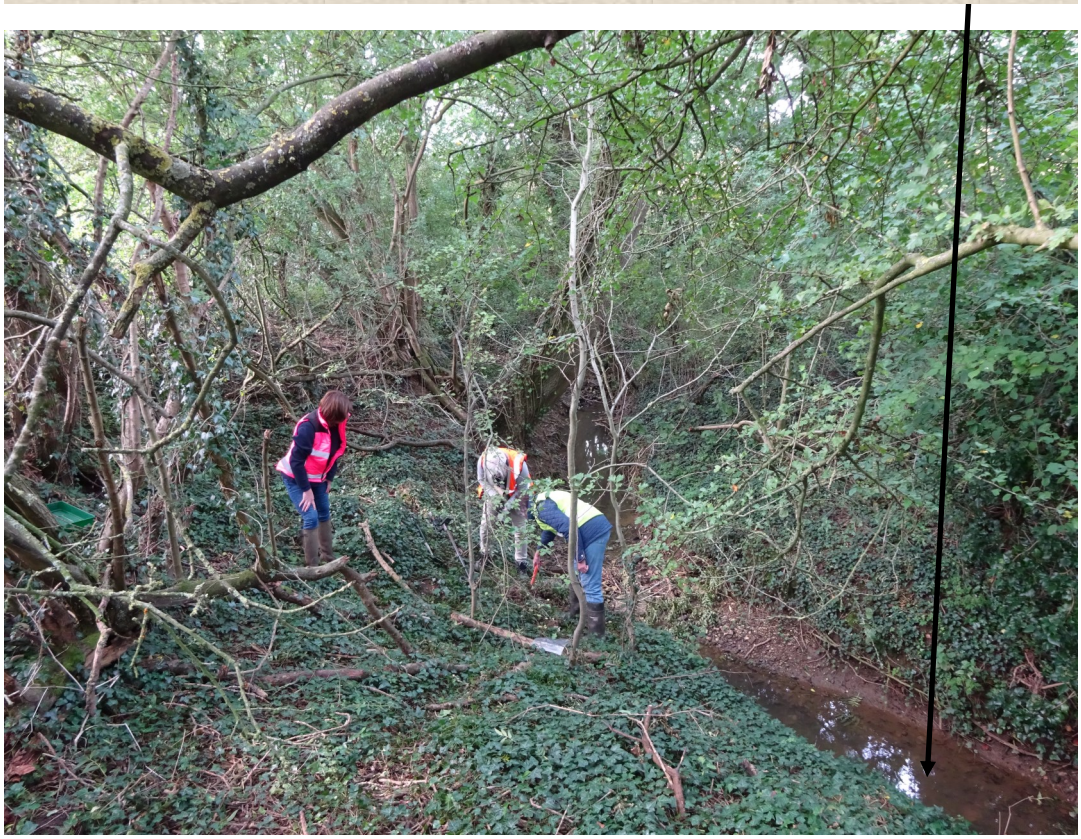
This far from an exhaustive list as there are many more people who have contributed in so many ways.

When so many people come together with a common goal; special things happen.

The crash site is now a Controlled Site under the Protection of Military Remains Act 1986 (see https://www.gov.uk/guidance/aviation-archaeology).

Found in the stream - Zone 2, close to the crash site reference SK 79149 27916

I just wanted to confirm that the plate above is from the coolant header tank on the top of one of the engines - *Louise Bush Lincolnshire Aviation Heritage Centre*



From left to right; Jen, Sophie and Sue examining the remaining aircraft wreckage material on the east bank of the stream, approximately 65 metres north of the footbridge at **SK 79149 27916**

The Field Detectives

Historic Landscape Studies

Who We Are & What We Do

The Field Detectives seek opportunities to survey fields that can tell us more about how our historic landscapes evolved - By sharing the stories that we uncover from our field survey activities, we help to inform a better understanding of how our farming landscapes evolved over the centuries.

Share the Learning and record the information for current and future historical research
On completion of the field survey activities, a field survey report is produced that precisely records all of the associated survey finds (coins, artefacts, pottery etc.). One copy is presented to the landowner, and a further copy is sent to the relevant County Historic Environment Record Office where it is allocated a unique reference number.

Once the field survey reports have been processed, the artefacts are curated as a landowner held Historic Landscape Study Collection where they are safeguarded for further research and study. A community presentation/display can then be arranged where the information is shared and an opportunity is provided for the local community to get involved in future research activities.

By submitting the completed field survey reports as an exact finds location record, and by working closely with our heritage sector colleagues, we are establishing a growing set of detailed historic collections. These context-recorded studies, are held in trust by the respective landowners who act as heritage custodians, which in turn, provides a unique set of rich historical landscape investigations for further study and collaboration.

Every field has a story to tell…

PDF copies of our reports and posters can be sent out electronically
email: **fielddetectives@talktalk.net**
Mobile: **07896 225 691** Phone: **0115 9377 318**

Richard Pincott
Social Historian & Historic Landscape Detective

Catherine Pincott-Allen
Family Historian & Historic Landscape Detective

Sean Gallagher
Ecologist & Historic Landscape Detective

Steve Wells
Finds Photographer, & Historic Landscape Detective

Dr Alan Stevens
Passed Away 10.04.19
memoratus in aeternum

Sophie Chell
Historic Landscape Detective

Martyn Brown
Historic Landscape Detective

Alan Brown
Historic Landscape Detective

Mel Steadman
Historic Landscape Detective

Brian Lovett
Farmer & Historic Landscape Detective

Jill Barlow
Historic Landscape Detective

John Barlow
Historic Landscape Detective

Alan & Sylvia Massey
Prehistory Consultants & Witch Bottle Experts

Julie Penaluna
Historic Landscape Detective