

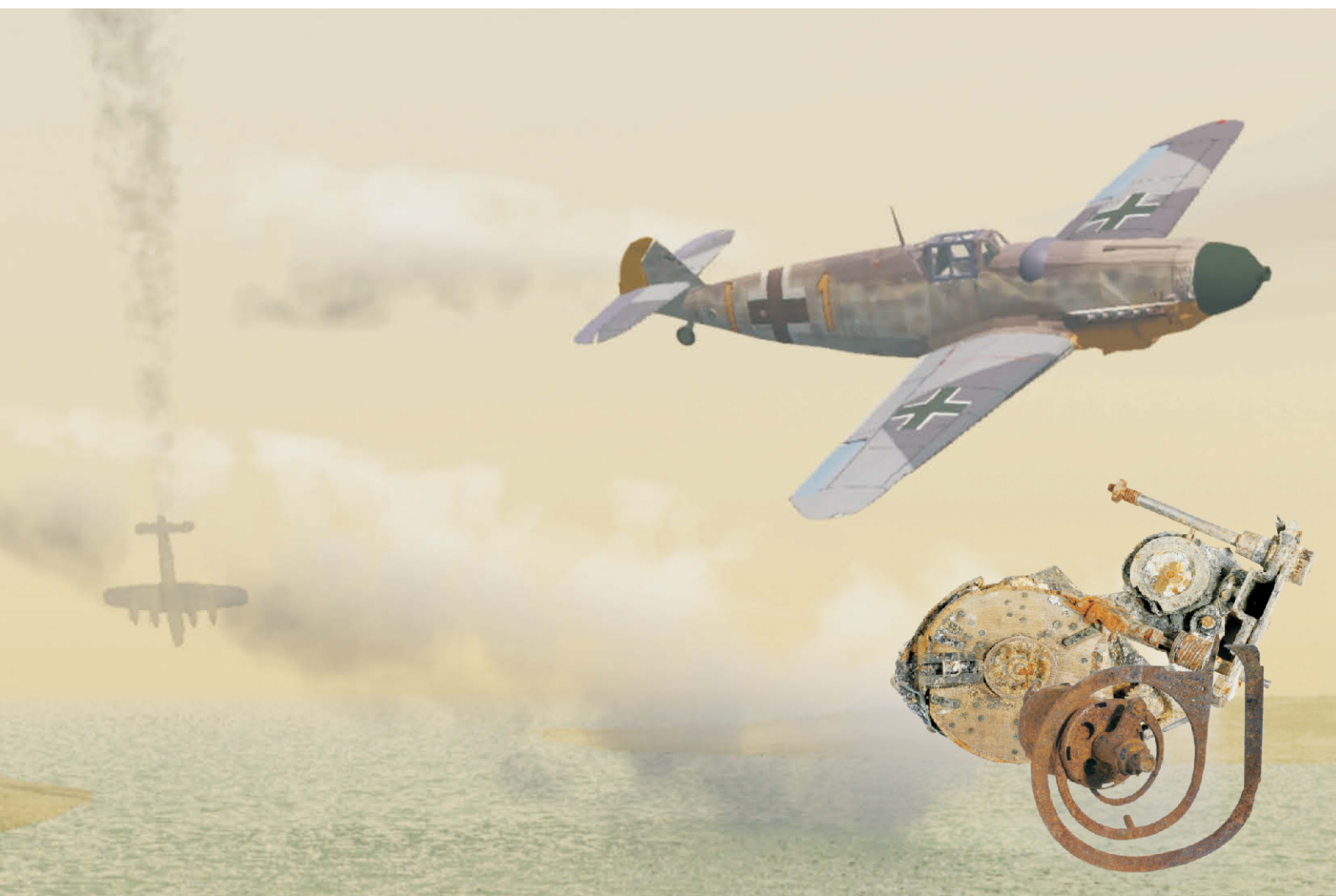


Draft Interim Guidance on the use of the Protocol

for Reporting Finds of Archaeological Interest
in Relation to Aircraft Crash Sites at Sea



ENGLISH HERITAGE



February 2008

Prepared by

Wessex Archaeology 

British Marine Aggregate Producers Association and English Heritage

Draft Interim Guidance on the use of the Protocol for Reporting Finds of Archaeological Interest in Relation to Aircraft Crash Sites at Sea

February 2008

prepared by
Wessex Archaeology

Purpose

In 2005, the British Marine Aggregate Producers Association (BMAPA) and English Heritage (EH) jointly published The Protocol for Reporting Finds of Archaeological Interest. The Protocol sets out best practice in dealing with archaeological finds made in the course of marine aggregate dredging.

Rather than have many different protocols, each designed for different dredging areas and potentially with varying provisions, BMAPA and English Heritage decided it would be preferable to have a single unifying protocol applicable to all dredging areas, vessels and wharves. The existence of a single protocol would ensure consistency and therefore encourage participation by everybody involved in the marine aggregate dredging industry. Consistency would also make it easier for archaeologists and other relevant parties to provide appropriate advice.

The aim of the Protocol is to reduce any adverse effects of marine aggregate dredging on the historic environment by enabling people working in the industry to report their finds in a manner that is convenient and effective.

English Heritage recognises the importance of sites in terms of their survival, rarity or historic importance and would wish to minimise unnecessary disturbance. Of particular interest would be sites which include components of an aircraft of which very few or no known complete examples exist. However, the commonplace where they survive well; include key components (such as undercarriage, engines or turrets); were associated with significant raids, campaigns or notable individuals or where the identity of the airframe can be established are also of interest (EH, 2002).

Following introduction of the Protocol, BMAPA instituted the Implementation Service, through which Wessex Archaeology (WA) fulfils some elements of the role of EH set out in the Protocol. WA therefore acts as the first point of contact for

Nominated Contacts in relation to providing archaeological support to BMAPA companies in relation to finds made at wharves and on vessels during the course of aggregate dredging. The Implementation Service began in September 2005 and since then the remains of several aircraft crash sites at sea have been reported. The number of discoveries appears to be increasing, though the apparent increase may also reflect better communication between those discovering sites and archaeologists. Aircraft crash sites reported under the BMAPA/English Heritage Protocol for Reporting Finds of Archaeological Interest include the following:

- A Supermarine Attacker off Worthing (pre-Protocol).
- A possible American bomber off Lowestoft (pre-Protocol);
- Aircraft remains from Area 254 (UMD_0059);
- Aircraft remains from Area 430 (UMD_0061);
- Rudder pedal and lamp from Area 430 (UMD_0062);
- The site of a German aircraft, including human remains, from Area 430 (UMD_0080-83).

Aircraft remains are of particular concern to the aggregate dredging companies as they are difficult to identify through geophysical survey, their location is often unreported, and aluminium contaminates loads and cannot be removed by magnetic methods. Also they are frequently associated with ordnance and human remains. In addition, unlike shipwreck sites military aircraft sites receive automatic protection under the *Protection of Military Remains Act (1983)* and it is an offence to disturb a site once the presence of a crash site is known. As such, it was thought appropriate that further guidance be prepared which relates specifically to the treatment of aircraft remains through the Protocol. The aim of this guidance is to ensure that both industry personnel and regulators are aware of the way to address such finds through the Protocol in the most appropriate manner.

Existing geophysical and desk based data provided by the client should also be reviewed where aircraft remains are suspected. The assessment of this information should highlight the presence of recorded aircraft crash sites in the area but the information is incomplete and, particularly for aggregate licences on the south and east coasts of England, the chances of unreported aircraft remains being in the vicinity is moderate to high.

Further information about aircraft crash sites at sea, their legislative framework, archaeological context and importance both archaeologically and socially is set out in *Aircraft Crash Sites at Sea: A Scoping Study* (Wessex Archaeology 2008).

Ownership of Aircraft Wreckage

Statutory law relating to 'wreck' is set out principally in the Merchant Shipping Act 1995. The common law relating to wreck is to be found in legal cases and commentaries.

All wreck, **which includes aircraft remains**, is presumed to have an owner, and ownership is not lost through the passage of time. It is a legal requirement under Section 236 of the Merchant Shipping Act 1995 that wreck material be reported to the Receiver of Wreck, in order to establish ownership and settle salvage claims. If ownership cannot be established by the Receiver within one year of receipt of the report, the wreck becomes 'unclaimed wreck'.

Original owners

Owners of civilian aircraft who are able to prove their ownership to the satisfaction of the Receiver of Wreck are entitled to have their property returned to them on payment of a salvage award.

In the case of military aircraft belonging to UK (Royal Flying Corps, Royal Air Force, Fleet Air Arm), they are also automatically the property of the Crown until such time as the MoD decides to dispose of them. In the case of military aircraft belonging to defeated enemy combatants (i.e. Luftwaffe aircraft) then they are regarded as captured enemy property deemed surrendered to the Crown and are automatically the property of the Crown. In the case of military aircraft belonging to an allied power, principally American aircraft from World War II, then United States naval aircraft remain the property of the United States Navy but the United States Air Force does not assert ownership of air force or army air corps aircraft from prior to 1961, such aircraft are considered abandoned.

Unclaimed wreck in Territorial Waters

Under the Merchant Shipping Act 1995, wreck, including civilian aircraft that is found in Territorial Waters and is not claimed within a year automatically becomes the property of the Crown. In some areas - usually close to the shore - the Crown's right to unclaimed wreck has been granted to another beneficiary.

Unclaimed wreck on the UK Continental Shelf beyond Territorial Waters

The stipulations of the Merchant Shipping Act 1995 apply to all wreck, including civilian aircraft, which is brought within UK territorial waters, irrespective of where it was recovered. However, the provisions in respect of Crown ownership apply only to civilian aircraft recovered from territorial waters.

Civilian aircraft recovered from outside UK territorial waters that remains unclaimed after one year of reporting is not claimed by the Crown, and in most circumstances will be returned to the finder once any expenses incurred have been settled.

The Crown asserts its ownership of UK military aircraft on the seabed, as does the US Navy, irrespective of their position and age and the US Air Force does so in the case of those aircraft lost since 1961. The US authorities do, however, assert their rights irrespective of location and age where human remains are present.

Protection of Aircraft Wreckage

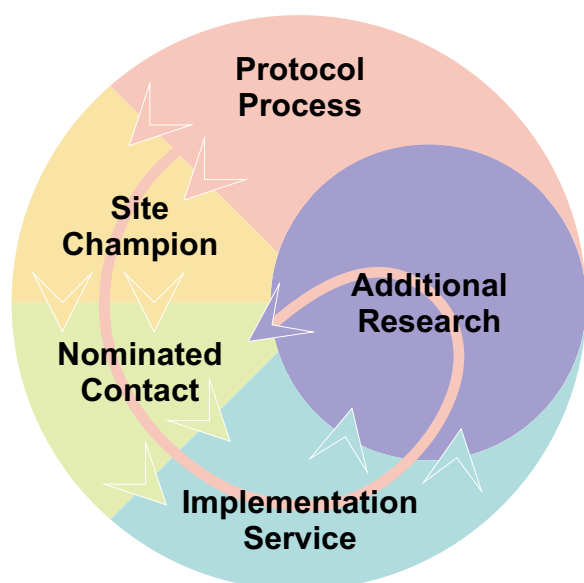
In the case of aircraft additional legal provisions apply, specifically those of the Protection of Military Remains Act 1986. The remains of all aircraft which crashed whilst in military service, whether on land or at sea, are protected to the extent laid down by the Act. It is an offence under this Act to tamper with, damage, move or unearth any remains which come within the scope of the Act unless the Secretary of State has issued a Licence authorising such things to be done, and they are done in accordance with the conditions of the Licence. Aircraft remains covered by the Act comprise:

- The remains of aircraft which have been in the military service of any country and which lie in UK territorial waters; and
- The remains of all aircraft which have been in UK military service lying in international waters.

All military aircraft should be reported to the Ministry of Defence through the Historic casework Section of the Joint Casualty and Compassionate Centre (JC&CC) at RAF Innsworth in Gloucestershire. They will then liaise with the parent country, particularly in relation to the repatriation/internment of human remains. The primary concern of the JC&CC is the protection and respectful treatment of human remains. For this reason there is a presumption with a military crash site that human remains are likely to be present.

The JC&CC Guidance states that “In many cases crews will have escaped from aircraft before they crashed but there is still a possibility of human remains being found. On receipt of an application to recover a crashed aircraft, the Ministry of Defence will endeavour to determine if there is a possibility of human remains being found in the wreckage. **If it is known or suspected that there might be human remains at the site, a licence will not be issued**” (JC&CC, 2007, emphasis in original).

The identification of individual aircraft is unlikely from finds from aggregate areas, though it should be possible in many cases to determine the aircraft’s nationality and type. The difficulty in identifying individual aircraft may impede research by JC&CC into the likely presence of human remains and/or ordnance, and may therefore inhibit the issuing of a licence to remove the aircraft’s remains. However, a licence may be granted if there is a demonstrable pressing need, and the landowner (the Crown Estate in the case of marine aggregates) insists.



What to do if Aircraft Finds are Suspected

In the case of finds suspected to be from an aircraft crash site, the rest of this document will attempt to guide the reader through the actions required through the Protocol by the Site Champion, Nominated Contact and Implementation Service. It will also indicate specific issues relating to aircraft material and additional actions and research that may be required beyond the scope of the Protocol that will feed into an assessment of the importance of the site and how it should be managed.

Discoveries on the Seabed

As per normal practice with the Protocol, if an anomaly such as resistance on the draghead or interruption in the flow of aggregate indicates that an object or structure has been encountered on the seabed, the Officer on Watch shall inform the Master, who will normally be the Site Champion.

Where it is possible to identify the position of the anomaly, the Officer on Watch shall avoid making additional dredging passes in the vicinity of the seabed location until archaeological advice has been obtained.

The Officer on Watch will arrange for dredging gear to be examined as soon as possible to see if any archaeological material is trapped within it, and will inform the Master (Site Champion accordingly).

Discoveries on Board

As per normal Protocol practice if a find is found lodged in the draghead or seen in the aggregate on the vessel, the Officer on Watch shall inform the Master, who will normally be the Site Champion.

As above, where it is possible to identify the approximate position of origin off the find on the seabed based on the last dredging run, the Officer on Watch shall avoid making additional dredging passes in the vicinity of the seabed location until archaeological advice has been obtained.

Discoveries at a Wharf

In the event that a find of archaeological interest is made on the screens used for processing aggregate, on reject stone piles, or on debris magnets, the wharf staff shall inform the Site Champion.

Actions by the Site Champion

If on a vessel, the Master (Site Champion) shall note the occurrence as soon as possible in the vessel's log, together with the time and exact vessel position. Where possible, the log entry should include a close approximation of the original position of the anomaly on the seabed. Additionally, the area shall be marked on navigational software.

Further, whether on a vessel or at a wharf, the Site Champion shall compile a preliminary record of the occurrence, inform the Nominated Contact of the occurrence as soon as possible, and pass on all available information, including a copy of the Preliminary Record and copies of any photographs, drawings or other records that have been made.

An urgent response is particularly important where aircraft wreckage is suspected given the possibility of human remains and ordnance being present.

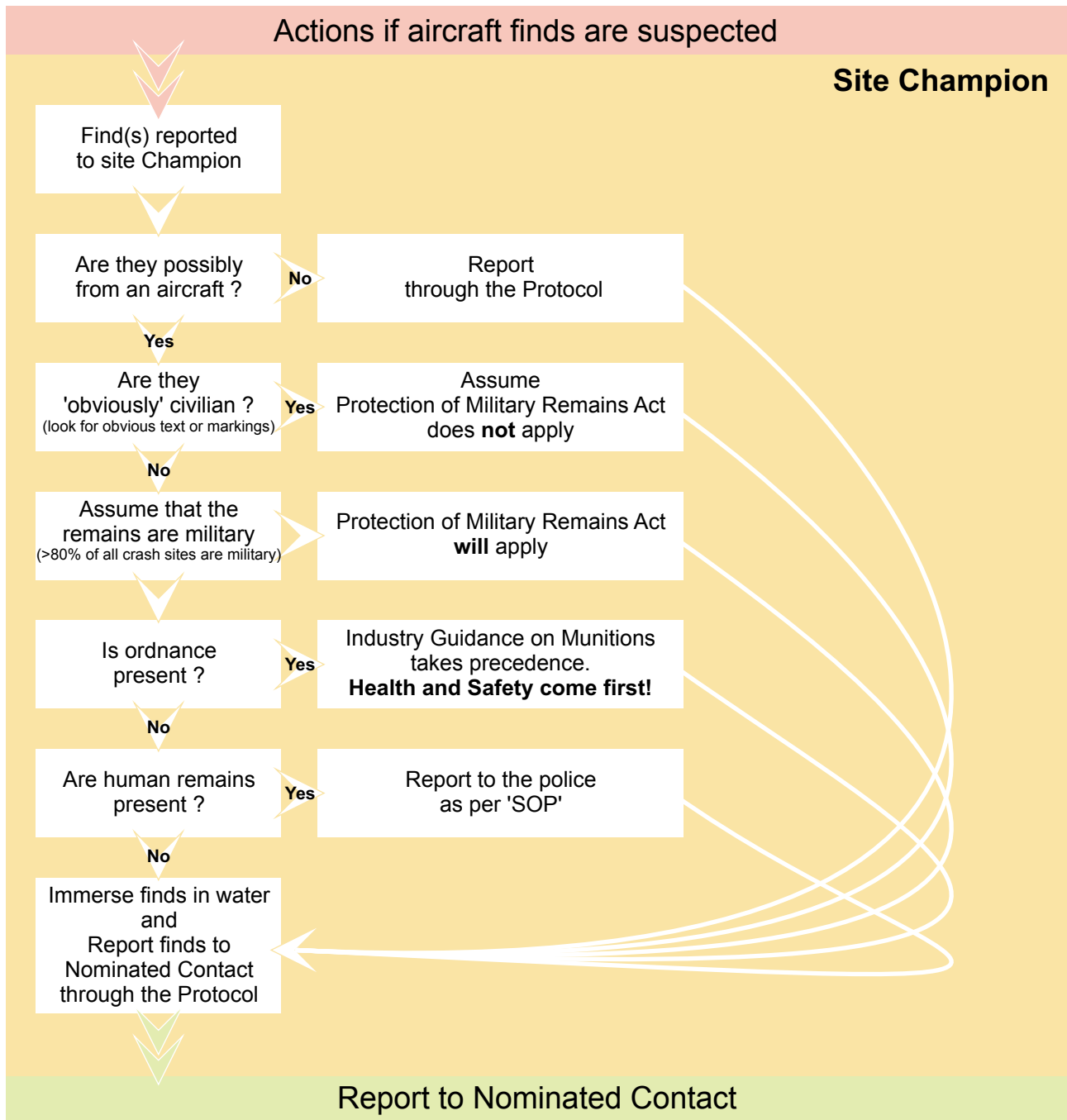
If any finds have been recovered, the Site Champion shall arrange for them to be immersed in seawater in a suitable, clean container, which should be covered. Any rust, concretion or marine growth should not be removed.

In the case of ordnance being recovered Health and Safety is paramount and the appropriate industry guidelines will take precedence.

If human remains are present a report should be filed with the police and a Crime Reference Number Obtained. It will be the responsibility of the Police, in conjunction with the Coroner, to assess if the remains are from a possible crime scene or are of archaeological interest.

A summary of actions to be taken by the Site Champion are included in the flow chart below.

These actions are particularly important where military aircraft are suspected as the Protection of Military Remains Act 1986 will apply and the crash site will automatically be designated as a "Protected Place" and as such it is an offence to tamper with the site. Whilst it is not an offence to unwittingly disturb an aircraft crash site, it is an offence to further disturb the site once its location has been established. A licence obtainable from the MoD is required to disturb a military aircraft crash site and will not normally be granted if ordnance or human remains are suspected. If a licence is granted and human remains or ordnance are discovered then the provisions of the licence are immediately suspended prior to further investigations (ref. JC&CC 2007).



Actions by the Nominated Contact

Once informed of a find by a Site Champion, the Nominated Contact shall inform the Protocol Implementation Service as soon as possible.

The Nominated Contact will confirm with the Site Champion that all the details set out in the Preliminary Record are comprehensive and correct. The Nominated Contact shall pass on to the Implementation Service all available information relating to the circumstances of the occurrence, and copies of any photographs, drawings or other records that have been made, through the database.

The actions by the Nominated Contact in relation to suspected aircraft finds are set out in the flow chart below. Previous experience has indicated that where a single find or just a few items of aircraft wreckage are found it is often not possible to locate the crash site and therefore institute a Temporary Exclusion Zone (TEZ). The aircraft may have exploded in the air, or on impact with the sea, and debris may have been widely scattered. Debris may also have been moved or spread by wave and tidal action over the years. However, the presence of even a single piece of aircraft debris may be indicative of a crash site in the area, and as such, increased vigilance is warranted by wharf and vessel staff dealing with aggregate from the licence. It may be appropriate to advise the dredging vessels to operate a scheme of “Managed Dredging” whereby tight dredging lanes are used as far as possible in the affected portion of the licence to assist in defining the crash site, should further debris come to light.

Where the position of an anomaly or find is reasonably certain, the Nominated Contact shall implement a TEZ to ensure all dredging operations by the Company are excluded until archaeological advice has been obtained. This will normally be based on the extent of the dredging track for the load from which the finds have come to light. It may be based on a number of tracks if more than one load is involved and can be extensive. To keep the TEZ to a minimum it is important that action to report possible aircraft finds is taken quickly.

Advise other dredgers

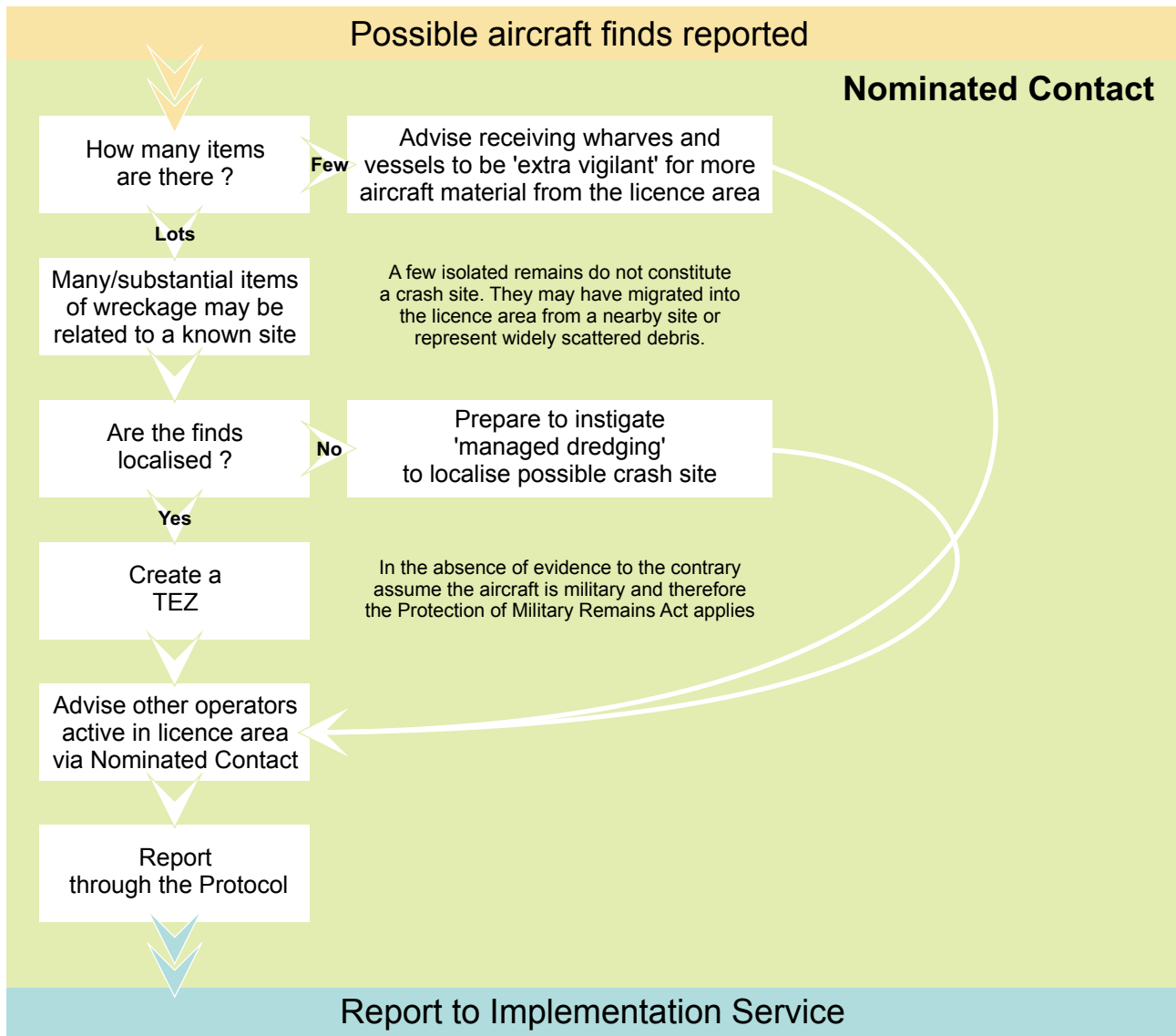
Where other Companies are dredging in the same licence area, the Nominated Contact of the Company making the find will inform the Nominated Contacts in the other Companies that a Temporary Exclusion Zone has been introduced.

Where relevant, even if no TEZ is in operation the Nominated Contact shall inform other vessels dredging in the area from which the find is thought to have been dredged, and wharves likely to receive aggregate from the licence (including those operated by other operators active in the licence through their Nominated Contact). Such other vessels and wharves shall be advised by the Nominated Contact to keep a particular watch for anomalies and finds.

If any finds have been recovered...

Aircraft debris is ‘wreck’, so a droit for the Receiver of Wreck will be prepared through the Implementation Service, but will still require signature and submission by the Nominated Contact who shall, as soon as possible, give notice that a find has been recovered to the Receiver of Wreck in accordance with Section 236(1) of the Merchant Shipping Act 1995.

This is a legal requirement.



Actions by the Implementation Service

In the case of aircraft remains the Implementation Service will assume the remains are military in origin, unless there is strong evidence to the contrary. This is a precautionary approach given that the vast majority of crash sites are of military aircraft, and given that the Protection of Military Remains Act 1986 would therefore apply.

A flow chart indicating the actions to be undertaken in addition to those normally associated with the operation of the Protocol, in the case of aircraft finds, is shown below.

The Implementation Service will seek advice from experts in the field (the RAF Museum, Hendon, in the first instance) to confirm that the find is from an aircraft, and obtain any further information as to type or nationality that may be immediately apparent from the finds.

The Implementation Service will assess the dredging track together with any Archaeological Assessment carried out for the licence, and sidescan sonar data in the immediate vicinity (if available) to attempt to define the crash site.

In the case of only a few finds being present, the Implementation Service will advise the Nominated Contact on the requirement for increased vigilance by wharf and vessel staff, and if necessary, the introduction of some form of managed dredging strategy to help define the crash site. If there are multiple finds it is likely that a TEZ will be required covering the dredging track from which the load/loads containing the finds originated. This will be set up by the Nominated Contact. If the finds cannot be tied to a particular load then a managed dredging strategy will be needed to further define the site, and this will be agreed and disseminated through the Nominated Contact.

Where human remains are present, confirmation will be sought that these have been treated appropriately and have been reported to the Police and the Coroner. The Police are likely to remove the items in the first instance and a Crime Reference number and contact details should be obtained. The Implementation Service will liaise with the Site Champion and Nominated Contact so that once the Coroner has deemed that the remains are not the subject of a criminal investigation and are archaeological they can be released to the Implementation Service. There they will be assessed as to age and sex and stored appropriately until they can be released to the MoD.

The Implementation Service shall advise the Nominated Contact of any such further actions as they might be required, including:

- immediate actions to be taken in respect of the find;
- the identification of finds and the character of their seabed locations;
- proposals to further evaluate any finds;
- proposals to mitigate the effects of dredging on any finds.

The Implementation Service shall liaise, as appropriate, with:

- the English Heritage Maritime Team;
- the relevant regional office of English Heritage;
- the relevant local government archaeological officer(s);
- the relevant Portable Antiquity Officer;
- the Receiver of Wreck;
- the Ministry of Defence, JC&CC and JPAC (if appropriate);
- The Crown Estate;
- other individuals/institutions having previously declared an interest to the Company.

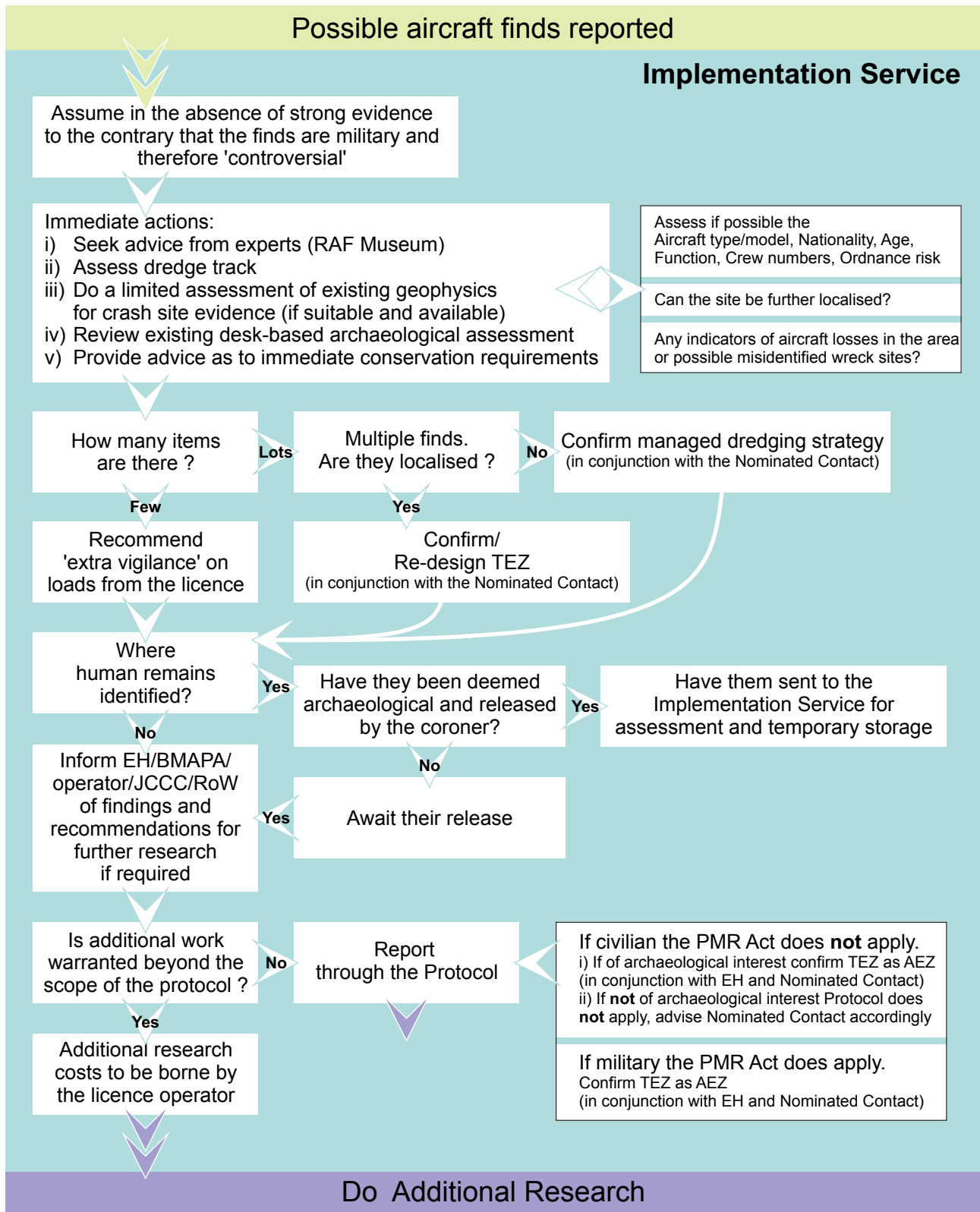
The Implementation Service shall take account of the views of the above, and inform them of subsequent actions as per the Protocol, and summarised below.

The Implementation Service shall pass details of the find, and subsequent data, to the National Monuments Record (NMR) and to the appropriate local Historic Environment Record(s).

The Implementation Service shall make arrangements for the Company to hold in possession any recovered finds, and provide the Implementation Service with such items as may be needed to further the assessment, subject to agreement with the Receiver of Wreck or MoD.

The Implementation Service will advise the Company on any additional work required to stabilise, conserve or record recovered finds. The Company may regard any such additional work as a service and seek to recover any costs from the owner of the find. In addition, the Implementation Service will inform the Company through the Nominated Contact of any additional research that may be required.

As per the Protocol, the Implementation Service shall advise the Company on the implementation of procedures for resolving ownership, and for disposing of any finds.



Additional Research

Any additional work required beyond the scope of the Implementation Service will normally be at the cost of the licence Operator, in line with the “developer pays” principle enshrined in PPG16. Investigations should be carried out in a staged approach in conjunction with discussion with EH, JC&CC and the Crown Estate. The financial cost of these investigations will inevitably form part of these discussions. The additional research is likely to focus on two key factors and the resulting actions. These are highlighted in the flow chart below. These two key factors are the aircraft type and its location.

An assessment of the type/model of the aircraft can address a number of questions:

- the age of the aircraft and therefore its association with particular historic events or personalities (i.e. early aircraft developments or historic flights, World War II, the Battle of Britain, etc.) of archaeological interest;
- the nationality of the aircraft, and therefore the ownership and legislation that may apply;
- the function of the aircraft (i.e. is it military or civilian?). This is indicative of the potential for the presence of unexploded ordnance and the number of people likely to have been on board and whether they were military personnel or civilian.
- the linking of finds to a particular, individual aircraft and its history.
- whether the aircraft is of a rare or extinct type.

Answers to the above questions are linked to an assessment of the significance of the finds and the view likely to be taken by the regulators on the appropriate mitigation required.

Determining the location of the crash site is important to the Operator as a wide TEZ is likely to incorporate a significant portion of the licence, and a more precise location could release much of that aggregate for dredging. An initial review of existing geophysical data may be undertaken by the implementation service but it is likely that

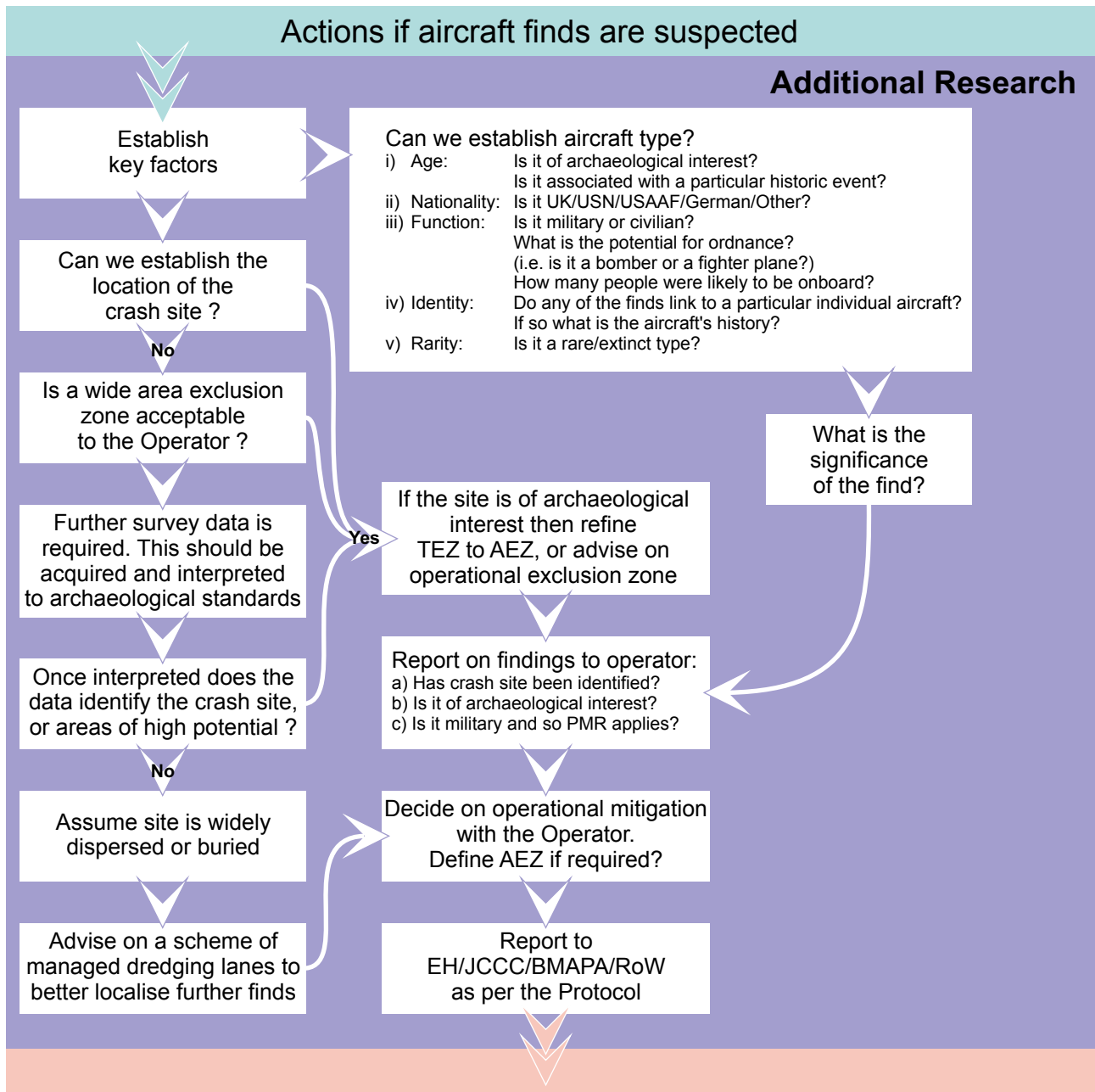
a more detailed review of the data, subject to its age and quality will be required. Further to this if the crash site cannot be identified because it is buried or the data is inappropriate (due to age, format recording parameters etc.) it is likely that further geophysical survey data may be required to narrow down the location of the site. Archaeological advice should be sought as to the specification, methods and extent of the survey, prior to commissioning. It should be acquired and interpreted to archaeological standards.

The survey may identify the crash site or areas of high potential or it may confirm a widely dispersed crash site, it may also assist with determining the condition of what remains on the seabed and whether any components which may be of particular interest (turrets, engines etc.) may remain. Based on the results, advice on appropriate mitigation taking into account the EH guidance can then be given to the operator.

Through the research the Operator should seek, at a minimum, information on whether the location of the crash site has been identified, whether it is of archaeological interest and whether the aircraft is civilian or military. This will allow decisions to be made as to the appropriate operational mitigation, be it the refining of the TEZ into a more focused Archaeological Exclusion Zone (AEZ) and/or managed dredging lanes.

The finding of the research should be reported back as appropriate to:

- the English Heritage Maritime Team;
- the relevant regional office of English Heritage;
- the relevant local government archaeological officer(s);
- the relevant Portable Antiquity Officer;
- the Receiver of Wreck;
- the Ministry of Defence, JC&CC and Joint Personnel Accounting Command (if appropriate);
- The Crown Estate;
- other individuals/institutions having previously declared an interest to the Company.



Other forms of mitigation

Subject to agreement with English Heritage, the Company may institute a form of mitigation other than an AEZ (e.g. a programme of archaeological recording and/or recovery). In the case of a military aircraft archaeological recovery will require a licence from the MoD. If the presence of human remains or unexploded ordnance has been discounted, then a licence will normally be granted.

If the presence of human remains or unexploded ordnance cannot be discounted, the MoD would not normally grant a licence unless it is at the insistence of the landowner (the Crown Estate in the case of marine aggregates). As MoD will consult English Heritage, it is advisable for Companies to obtain the views of English Heritage before pressing for a licence, as it is unlikely that MoD will grant a licence in these circumstances without positive endorsement from English Heritage as to the need for such disturbance.

Archaeological recording that is not intrusive - i.e. does not involve tampering, damaging, moving or unearthing the remains - does not require a licence.

References

English Heritage, 2002, *'Military Aircraft Crash Sites. Archaeological guidance on their significance and future management'*, English Heritage.

Joint Casualty and Compassionate Centre (S03 Historic Casualty Casework), 2007, *'Crashed Military Aircraft of Historical Interest - Licencing of Excavations in the UK, Notes for Guidance of Recovery Groups'*, Ministry of Defence Service Personnel and Veterans Agency.



British Marine Aggregate Producers Association
Gillingham House, 38-44 Gillingham Street
London SW1V 1HU
Tel: 0207 963 8000 Fax: 0207 963 8001
bmapa@qpa.org www.bmapa.org
BMAPA is one of the constituent bodies of the Quarry
Products Association, the trade association for the
aggregates, asphalt and ready-mixed concrete industries.



ENGLISH HERITAGE

1 Waterhouse Square,
138-142 Holborn,
London EC1N 2STT
Tel 020 7973 3002 Fax 020 7973 3001
customers@english-heritage.org.uk
www.english-heritage.org.uk



Wessex Archaeology

Head Office
Portway House, Old Sarum Park
Salisbury, Wiltshire SP4 6EB
Tel 01722 326867 Fax 01722 337562
info@wessexarch.co.uk
www.wessexarch.co.uk