

As the responsible project manager, how would you approach the process of introducing a specified new piece of equipment (such as a survey unit or microscope) or change in working practice (such as revised recording form) for use by your team, and what measures you would take to ensure that it was being used correctly and safely (documentation, training and monitoring)? (40%, 3000 words or equivalent)

### **The Introduction of a new Heritage at Risk recording process within the Aerial Reconnaissance team**

The Heritage at Risk (HAR) programme (Historic England, n.d.) is currently undergoing an internal refresh at Historic England. Through meetings held between those involved in the refresh and the Aerial Survey Investigations team, it has become apparent that the reconnaissance side of the Aerial Survey Investigations team will play an important role in the new refresh programme. It is unclear as of yet what the total extent of the reconnaissance teams' involvement will be, but currently it is understood that the Aerial Reconnaissance team will be required to provide a more formal assessment of any scheduled monuments, parks and gardens, and listed buildings that have been surveyed. This assessment will help monitor sites both on and off the Heritage at Risk register and provide evidence to aid the HAR team in managing these sites.

Currently, when the Aerial Reconnaissance team has completed a survey, any protected heritage assets that appear to be at risk are assessed, and details and photos are forwarded through email to the teams directly involved in the management of the relevant scheduled monuments, registered parks and gardens, or listed buildings. For the purpose of the new HAR refresh, there will be a new HAR recording spreadsheet, which will require the condition of all scheduled monuments, registered parks and gardens, and listed buildings to be recorded after a flight has been conducted, including those that do not appear to be under threat. To ensure this new process is completed by the Aerial Reconnaissance team properly and in a timely way, it will be integrated into the reconnaissance recording workflow process and included within an updated reconnaissance recording project design.

Although the final details of the HAR process are not yet in place, it is important to introduce this new process to the team and get them used to completing the required

documentation. This document will assess the requirements needed to ensure condition issues are recorded properly, but also that the Aerial Reconnaissance team has the necessary training to identify the likely issues they need to record. Once implemented, it will be important to monitor how this process works and reflect with the team on any feedback that could improve or streamline the process further.

### **Contextualising the new process and identifying training needs**

The first step in this process is to introduce the context of the documentation and give the Aerial Reconnaissance team an overview of the expected responsibilities; this will be done through an online meeting, as the team is split between two offices nationally. The meeting agenda will be outlined by me, as the project manager, and I will present why the new process is being introduced to the reconnaissance recording workflow. An informal discussion will be held with the Aerial Reconnaissance team members during this meeting to further understand how I can support the team during this transition, including any further training they may need to be able to complete this process; it may be necessary for the Aerial Reconnaissance team to receive further training on using excel to improve the usage of a spreadsheet document as well as review the teams' knowledge base regarding condition monitoring for scheduled monuments, registered parks and gardens and listed buildings. Once I have identified the knowledge base and where the Aerial team may require further training through the informal discussion, I can pass this on to the HAR team to organise an online training session for the Aerial Reconnaissance team. I plan on chairing this session, where I will include an informal discussion after the initial training, which will also be a good way to introduce the HAR team to the Aerial Reconnaissance team and allow them to begin to form a collaborative relationship through knowledge sharing and open discussions; this will be important to ensure a smooth workflow between teams is created. Ensuring the correct training is offered will also ensure that members of the Aerial Reconnaissance team have the skills necessary to complete the new recording process.

The training session held by the HAR team will aim to provide a basic overview of the common issues identified at the different types of sites, including both earthwork and cropmark form scheduled monuments, registered parks and gardens and

externally visible issues with listed buildings. The session should also include a selection of both on-site and aerial photo examples to clearly demonstrate what the different types of issues look like from both the ground and the air. I would also like the training session to include an interactive element where the HAR team encourages the Aerial Reconnaissance team members to provide an interpretation of the issues shown in a few more examples. It would be useful to include a few unusual condition issues that have been encountered in the past as well. The interactive element of the training will both demonstrate to the HAR team the current level of understanding from the Aerial team, but also encourage all team members to build professional relationships, which will ultimately benefit the communication and collaboration between the teams throughout the project.

### **The creation of new documentation**

As the new recording spreadsheet has not yet been formalised, a second meeting will be organised between the HAR team and the Aerial Reconnaissance team to discuss the spreadsheet template. This will need to be a collaborative process to ensure the new template is both easy to input data into by the Aerial Reconnaissance team, but also includes enough information and the right information to be useful for the HAR team in the data processing stages, especially if data needs to be extracted for other purposes. I will also chair this meeting and set out questions to both teams, including which condition issues should be recorded, and should this be limited to a pre-created list of options in the spreadsheet, how many details are needed about the monuments/sites such as name, location, type etc, which details about the flight should be recorded, and set out discussions about the format of the spreadsheet as well as how each detail should be recorded. It may also be useful to include an 'other' option for the list of condition issues, which will be useful for sites with exceptional issues that are out of the ordinary; this could be explained in a notes section. The more input sections that have limited lists for the data will speed up data processing for the HAR team, but these may inhibit the freedom to add extra useful information. I will suggest an extra notes section for comments that the Aerial team may want to pass on to the HAR team about particular sites. It is hoped that this will reduce the number of emails about individual sites in the long run, although there will no doubt be the need for discussions between the two teams regarding particular sites.

I will delegate that the HAR recording spreadsheet template be created by a less senior Aerial Reconnaissance team member, as this will also be a good opportunity to improve their Excel skills. If they feel they need more Excel training to do this, I will set up a training session to accommodate this. They will also be responsible for creating a guidance document page within the spreadsheet template to support the input of data into the spreadsheet. The guidance document will outline the purpose of the spreadsheet and its intended use, as well as the file format, save locations, and naming conventions that should be followed upon its completion.

The more senior Aerial team member will be required to amend the current reconnaissance recording project design document. This will be a fluid document throughout the project, and it will not be finalised until both teams are satisfied with the HAR recording process and spreadsheet documentation, which will be set out and discussed at the first six-month review, which will be discussed further in this document.

### **Testing the usability of the spreadsheet**

Once an initial version of the spreadsheet template has been created, a trial session using photographs from one flight will commence to test out the usability of the spreadsheet. I will ask the team member who didn't create the spreadsheet to use it first and make a record of how long it takes and how many sites have been assessed, providing any comments on how easy the document is to use and if there are any ways it can be improved. Once the flight has been recorded using the new spreadsheet, the spreadsheet will be saved in both a shared folder that the HAR team can access and a folder that is on our local drive, which will act as a backup in case anything is accidentally altered or deleted in the shared drive.

Once initial testing has been completed by the Aerial Reconnaissance team, the spreadsheet will need to be tested by the HAR team in their data processing stages. The same process of recording how easy the data is to use and any further information they may need, or improvements to the spreadsheet, should be recorded. Once both teams have recorded their user experience and feedback, a further meeting will be organised to discuss the spreadsheet usability from both ends of the HAR recording process. I will again chair the meeting and make a record of all of the feedback, and this will be recorded for both teams to see for use after the

meeting has ended. The Aerial team member who made the spreadsheet will need to consider the feedback from all parties and ensure any changes required are made. This testing process will be replicated again for another flight, perhaps surveying a range of different site types from the first flight tested. Following this testing, another meeting will be held to discuss the user experience of the spreadsheet from both teams. Any final changes will be made if necessary, and this will then become the final template to be used for the HAR recording process.

### **Monitoring the HAR recording process through quality assurance**

Not only is it essential to ensure that the documentation is used properly, but it is also of equal importance to monitor what data is entered and how each site is assessed. To ensure the process is done accurately and no condition issues are missed or incorrectly identified, there will be a continual quality assurance process implemented into the HAR recording process. For each member of the Aerial team, the first five flights they record using the spreadsheet template will be cross-analysed by another member of the team to ensure there are no site issues that have been incorrectly identified or missed out, a record will be kept of each quality assurance session to identify the number and type of errors which are occurring, if any. Once the first five sites have been completed and quality assurance has been conducted, I will analyse the results from the quality assurance, and if there are any recurring issues, these can be discussed on a one-to-one basis to try and diagnose the cause. This may identify further training that specific team members must complete to ensure they are all working to the same standard. It may be that a particular type of issue has been missed out on more than one occasion and if so, another training session which delves deeper into that specific issue will be provided, for example, understanding how to identify different types of agricultural ploughing which are more likely to damage protected sites located within arable fields. This type of in-depth training could be provided by another member of the Aerial team or, if more appropriate, a member of the HAR team; it may be necessary to receive guidance from other specialist teams, such as those who work with registered parks and gardens or listed building conservationists.

Alongside the quality assurance conducted within the Aerial team, quality assurance will also be conducted by the HAR team. This will also be done for the first five flights

for each Aerial team member, to assess the data that is input. This will identify any mistakes as well as check the interpretation of issues reported by the Aerial team. This will require the HAR team to have access to the images for these flights; these flights will have already been accessioned to the archive by the Aerial team and will be available via the internal Historic England organisation photo viewer called Portfolio. Again, if any recurring issues are identified, these should be flagged to me, and I will provide feedback to the Aerial team.

After the first five flights have been thoroughly assessed by both the Aerial and HAR teams, the quality assurance stages will be reduced to check one in every five flights, which will be randomly selected by me and delegated to another team member. Any major issues should be reported back to me, and any minor issues should be fed back to the team member responsible for that particular flight; this may include spelling mistakes, etc. The quality assurance conducted by the HAR team will be reduced further, and after this, they will only be required to report any major recurring issues to me. It is hoped that by this point in the development stages that any problems will have been identified and rectified.

## **Review sessions**

As the HAR recording process is new, over the coming months, there may be developments in how the data is collected, processed, and ultimately used. The way the data is being used will decide how the preceding processes are conducted, therefore, review sessions will be implemented every six months to ensure that all those involved are aware of any new developments and can adapt the methodology, documentation, and output format as necessary. This will also be a good opportunity to review how the process has been going from all aspects, which I will encourage through an open, informal discussion. I would like at this point to provide an overview of the project statistics, including how many sites have been assessed, how many sites were found to have issues, how many sites were found without issues, what the most common types of issues were and perhaps even look at any regional trends (although this may be skewed by the number of flights assessed/flown in particular areas). I want these meetings to feel convivial and light-hearted, so using these types of statistics will hopefully highlight both the success of the project to aid in

motivation, but also how much the teams have contributed towards the corporate plan, specifically priority 3C (Historic England, 2023, p.6).

### **Seasonal considerations**

One aspect of the project that may inhibit or delay progress is the seasonal workload that affects the Aerial Reconnaissance team. A large portion of their workload is consumed by conducting surveys and processing photographs, which in the summer months can lead to excessive amounts of data which will not go through the reconnaissance recording process for a few months. The backlog is usually processed in the autumn and winter months, when flying opportunities are fewer. This needs to be considered when deciding on deadlines for pieces of work to be completed and may require a seasonal focus on HAR recording outside of the peak flying months. This will need to be factored into the project to ensure realistic deadlines are set and are therefore more likely to be achieved. It is important that this is communicated to the HAR team so they have realistic expectations from the Aerial Reconnaissance team. This will be factored into the project design by the senior Aerial Reconnaissance team member.

### **Giving and receiving feedback**

For this project to be effective, a large proportion of the initial HAR recordings completed will need to be assessed and scrutinised by other colleagues. Often, it can be disheartening to receive negative feedback, and this can sometimes result in reduced confidence or perhaps even conflict between team members. As such, I will hold a session on giving and receiving feedback at the end of the first introductory training session, where both teams will be present in the meeting. These are skills which would probably not be identified by an individual as something they may need to improve, but having the ability to both receive feedback in a positive way as well as provide constructive feedback are useful skills that the teams will need in this project. I will give a small presentation on a range of feedback models that they can try to use when doing this for one another as well as thinking about specific barriers which may inhibit effective feedback to be received, including defensive behaviour, lack of confidence or lack of respect (Hardavella, et al. 2017, pp.329-330). I want to highlight that feedback throughout the project is essential in the HAR recording project to ensure it is a success for everyone involved and that, ultimately, feedback

should be welcomed. At each feedback stage, whether it be in creating the spreadsheet, testing the recording process, or analysing the recorded data, I will ask each team member to record feedback, both positive and constructive, in written format; this will keep the delivery of feedback neutral and will ensure there is a useful record for each person to keep and use moving forward. I will oversee the feedback provided before it is given to the relevant colleague to ensure all feedback is constructive rather than negative; this will also allow me to ensure the team are working effectively and highlight any team members who may require more support or training, in a discreet way.

### **Overall project management organisation**

This project will require many review and feedback documents to be passed back to me, as the project manager, and these also need to be shared between other team members. To ensure this is done seamlessly, within both the Aerial Reconnaissance and HAR teams, I have created a project team channel on Microsoft Teams. This will be where our online meetings will take place, and it is also where review and quality assurance documents will be submitted for my analysis. I will create a shared folder space so that the teams all have access to the latest version of the project documentation, including both the project design and the HAR Aerial Reconnaissance recording spreadsheet. Microsoft Teams can also assign particular tasks to different team members throughout the project, which can be given deadlines for completion. This will assist in keeping up with project demands and developments as well as ensuring specific documents are updated promptly. The use of Microsoft Teams will be an integral tool for successful project management, as both the Aerial Reconnaissance team and the HAR team are based nationally and are unable to meet regularly face-to-face.

### **Conclusions**

As this project is still in its early development phase, I expect there will be a degree of adaptation to the methodology and recording process as the project progresses. For the whole project to be successful, both teams involved will need to collaborate effectively, providing useful feedback to ensure that all stages of the project can be completed as efficiently and accurately as possible. Ultimately, the data collected and reported by the Aerial Reconnaissance team in this new format will become a

useful tool within the HAR team for monitoring protected heritage assets so they can provide the correct advice to external stakeholders, contributing directly to the organisation's corporate plan (Historic England, 2023). It is also hoped that over time, the data will benefit the HAR team's wider analysis of heritage management and protection, providing useful statistics for the organisation.

Bibliography:

Historic England (2023). Corporate plan 2023-2026. Accessible at: [Historic England Corporate Plan 2023-26](#)

Historic England (n.d.). What is Heritage at Risk? Accessible at: [What is Heritage at Risk? | Historic England](#)

Hardavella, G., Aamli-Gagnat, A., Saad, N., Rousalova, I. and Sreter, K.B., 2017. How to give and receive feedback effectively. *Breathe*, 13(4), pp.327-333. Accessible at: [How to give and receive feedback effectively | European Respiratory Society](#)