Statement of competence template (Education and Employed or Voluntary work)

The statement of competence is the most important part of your application, as it is the main way to describe to the Validation committee how your skills and experience **demonstrate** the criteria in the competence matrix (Section 2.3 of the Application Guide) for the grade you are applying for.

BEFORE you complete this or the online form, please read the application guide.

Remember the committee members do not know you or the experience you have, so please take time to write it carefully. You **MUST** include this information otherwise your application cannot be reviewed by the committee.

The boxes will expand as you type. Please copy and add more rows to list all your roles and qualifications as required. If you are using the online form you can write directly into the boxes, but cannot save the form, or you can complete this template and attach it to the online form.

Areas to provide information about are

- **higher education:** explain how your academic qualifications **demonstrate** the four areas of the competence matrix relevant to your application (If you do not hold any qualifications you are still eligible to apply).

- **employed or voluntary work experience:** for each post give the job title, the name of the organisation, start and end dates, and a description of the role and the responsibilities held and how this demonstrates the four areas of the competence matrix.

  Give detailed information about your current and most recent roles using each heading of the matrix as a guide, and ensure it includes your entire career and experience. This should cover how you **demonstrate** the four headings - knowledge, autonomy, coping with complexity and perception of context (www.archaeologists.net/Matrices).

  Start with your **most recent** role using specific examples of your work, which you can then provide as evidence to support your application. You may find it easier to give an example of a project you have done from beginning to end. Ensure you write in the first person (e.g. I carry out/I undertake).

  If you have worked on several short-term projects within one company they need not be individually itemised, but please indicate the total time you spent in that role.

- **additional information:** include any further information that may be useful for the Validation committee to take into consideration when assessing your application. A CV can be included but only as supporting information. Copies of your job description(s) may also be submitted.

If your experience has been gained outside of the UK, please provide some background information on how the profession operates in that country, how it is legislated and monitored, and how your work fits into this in order to assist the Validation committee.

There is also a space at the end for a list of publications or grey literature, if applicable. Where a piece of work is jointly authored, or the authors not defined, please indicate which part(s) you were responsible for to assist the Validation committee.

Statement of competence

Name of applicant:

Grade applied for: PCIfA X ☐   ACIfA ☐   MCIfA ☐

Education
Explain how your academic qualifications **demonstrate** the four areas of the competence matrix

Qualification & date obtained	Competence demonstrated
2:1 Archaeology BSc (Hons). Bournemouth University	My degree acted as the foundation for building a career in archaeology. The degree modules gave me an introduction to the discipline of archaeology supported by my own reading and research I was able to apply and build upon the knowledge and skills gained from the university and apply them into practice on my placement year. The degree programme gave a wide range of knowledge and skills which can be applied to the historic environment and its practices. These included theoretical modules such as Later Prehistoric Britain, Roman Barbarian Europe, Roman Britain and Ancient People and places. These modules allowed me to see how archaeological artefacts, earthworks and remains could be put into context such as understanding funerary practices of the period. Alongside the theoretical modules, I undertook a variety of practical modules over a range of topics centered around the practices undertaken relating to the Historic environment. These included Practical Skills, Archaeological Practice, Archaeological Science, Post Excavation Studies, Environmental Archaeology, Advanced Geospatial Science, and Environmental Remote Sensing. These modules gave a good understanding not only of the skills required to undertake the work but the ethics and standards that are associate with each practice. The most informative module was Archaeological Management which gave an overview of the current state of the historic environment and the works and practices undertaken to protect and enhance it. As part of this I was tasked with constructing a Desk Based Assessment of an archaeological site. This was a key piece of work as it allowed me to draw upon the knowledge and skills form all my modules and consolidate it into one piece of work. As part of my course I was required to submit an Independent Research Project. My research was an Investigation into the Iron Age – Roman Co-Axial Field systems of a valley. This project showed elements of autonomy as set I set the research questions, undertook the research, collected the data and wrote the report under the supervisor of my dissertation coordinator. This project as dealt with complex issues such as working with large Datasets, new forms of data, and a new style of work with issues having to be resolved whilst constructing the report. Ultimately the degree gave me the skills necessary for future work by teaching me subject specific skills such as GIS, Post excavation work, Lidar Analysis, excavation and understanding of chorology. I also gained transferable skills such report writing, time management, analytical skills, computing skills and presentation skills all crucial for operating at a high standard in the professional world.

Employed or voluntary work experience

For each post or major project give the job title, the name of the organisation, start and end dates and a description of the role and the responsibilities held and how these **demonstrate** the four areas of the competence matrix.

Position held:	Aerial Imagery Analyst
Organisation name:	
Dates position held:	January 2017 – Present
Length of time in role:	6 months

Please note when writing this application I have made reference to the CIfA competence matrix and Information Management Specialist competence matrix.

Description of role and responsibilities:

Aerial imagery analyst. Interpretation of historic and modern air photos, satellite imagery and LiDAR data for a range of projects in the UK and European infrastructure, planning, legal, training and research sectors. Responsibility for GIS design, management and mapping, research in archives, geo referencing and assistance with provision of training and presentation.

Experience and Competence demonstrated.

I have contributed to a wide range of projects. I have undertaken air photo and lidar analysis, rectification work, interpretation and mapping for large linear cable routes, parks and garden research and assessment of land ahead of potential development.

As part of my aerial imagery analyst role I have been mainly responsible for the following elements of projects. These include
  - o   Setting up the project GIS
  - o   Bringing in data such as base maps and site outlines
  - o   Creating shapefiles such as site outlines, feature mapping shapefiles
  - o   Assisting with queries from colleagues
  - o   Identifying Lidar data
  - o   Locating lidar data for the site
  - o   Downloading and filing in a sensible location and making sure that they are correctly labelled.
  - o   Processing the data and visualising the Lidar data.
  - o   Creating and mosaicing the data for ease of use in the GIS.
  - o   Loading into the GIS.
  - o   Mapping and interpreting the data
  - o   Creating Meta data tables and filing the processes logs
  - o   Air Photo interpretation and analysis
  - o   Commissioning cover searches from the archive
  - o   Georectifiying air photos to the base maps
  - o   Making initial decisions and interpretations about in the archive
  - o   Viewing the APs using a stereoscope
  - o   Mapping and interpreting the images in the GIS
  - o   Completing the attributes in the in the mapping shapefiles and detailing the source of the mapping data.
  - o   Exporting mapping shapefiles and associated maps

Within this role I have undertaken training from the CIfA accredited courses Making the Most of Lidar and An introduction to Quantum GIS. The Making the most of Lidar course provided training in the theory of the uses, acquisition, available datasets and sources of Lidar. Moreover this course also provided essential practical skills, knowledge of best practice and interpretation of the data for uses in relation to the Historic Environment. The introduction to GIS course detailed data types and working with the datasets, how to export maps, georectifying, grid references and Ordnance Survey base maps within a GIS environment. These courses allowed me to build on the knowledge and experience of university and former positions and bring my skill level up to a benchmark standard ready to be improved upon and to apply to the work undertaken by my company.

These courses followed a bespoke two week training in January 2017 provided by my company, which introduced me to the theory behind the work I would be undertaking with them as well as practical elements including mapping and taking air photos.

Finally I have also

- Contributed to the development of mapping products such as attributes tables and LiDAR meta data tables.
- Contributed to development of IT matters and filling of data.
- Contributed to the development of a new training course.
- Assisted with a plan and work undertaken by a placement student

The following details how my experience and competence form this position

Knowledge
The broad range of work undertaken in this position has given me a good working knowledge of the Historic Environment. Projects such as the …which covered a wide range of periods and monuments which has built upon my knowledge and understanding of British archaeological periods and their monuments. As well as this as a large proportion of the work undertaken is ahead of large scale infrastructure which has given me a good working knowledge of the key planning legislation and policy's relating to the historic environment such as the NPPF. Also these projects have given we a good working knowledge of where the work we undertake as specialists comes in the chain of the archaeological work that needs to be undertaken ahead of development and where are work fits into a Desk Based Assessment.

A large part of my work also revolves around using IT. On a daily basis I'm using standard software such as Microsoft word and adobe to view and edit reports as well as Microsoft excel for viewing exports of shapefile attribute tables and creating lidar meta data tables. I also use Quantum GIS on a daily basis for viewing data supplied by clients and to create data and mapping for clients. This also involves using and recognising different file formats such as shapefiles, .dwg, .dxf, files as well as different image files such as jpeg, geotiff, PNG and lidar .asc. As part of the projects we undertake we use a wider range of information resources such as the environment agency lidar data downloader, CUCAP (Cambridge University Collection Aerial Photograph) online air photo catalogue and occasionally heritage gateway when necessary.

Autonomy
My level of autonomy has increased since starting in this role. During my first piece of work I had a large amount of supervision as I was learning new skills and the procedures undertaken. The major project of the … route allowed me to use my new skills and gain more autonomy. This included working in the archives and assessing air photos with assistance and sorting and capturing large amounts of air photos away in the HER with no supervision and remote contact with my manager if needed. I also had a level of autonomy when mapping from the air photos and creating shapefiles. I was assigned two areas of the 60km^2 route to map with assistance when asked for to help with the feature interpretation and the data reviewed at the end. I also under took the downloading, filing and visualising of the Lidar for the route with some assistance in discussing and planning how we were going to use the data.

More recently with projects such as … I have a good degree of autonomy in setting up the project, bringing in and manipulating data supplied from the client commissioning cover searches, undertaking mapping and exporting maps. I still require assistance and oversight when writing sections for reports and a final overview of the data before it is sent to the client. These are areas I would like to work on over the coming year to gain further autonomy for the future. I also oversaw aspects of GIS work undertaken by work experience student especially in georectifying air photos.

Coping with Complexity
When working with air photos there is a large amount of complexity associated with this work. For

instance locating air photos to a map in the GIS and physical maps, interpreting Meta data, rectifying air photos including choosing control points as well as identifying features on the images. A recent example of this was locating an air photo with a wrongly supplied grid reference. The problem was solved by comparing features seen on the air photo with the map features and realising that they did not match. I swapped the easting and northings around, re located the photo and saw that the photo matched the map for this new location.

Alongside this there is a large amount of complexity when dealing with GIS data. One of the key issues that is dealt with regularly is converting British National Grid references in an alpha numeric format to X and Y data for a GIS. This is done by finding the numerical equivalent to the alphabetical code and with large data sets using online conversion tools.

There is also complexity in using Lidar data for archaeological purposes. The environment agency open lidar data is primarily for flood defence management. I regularly asses this data to make sure the resolution of this data and the visualizations that I create are suited to archaeological prospection.

Perception of context
This role has given me perception of context as to where a heritage assessment for air photos sits within the chain of work undertaken ahead of infrastructure projects and how the data we creates feeds into the decision made regarding the site.
I also understand that the decision I make when interpreting data needs to be clear, labelled saved and described clearly for others to use and to make sure there is no confusion over the data.
We also work with confidential planning data so I understand that this this needs to be saved securely and follow any security polices provided.

Position held:	Volunteer Placement Student.
Organisation name:	
Dates position held:	September 2014 – July 2015
Length of time in role:	11 months

Description of role and responsibilities:
As part of my degree course I opted to undertake a 40-week placement with…. The placement was split into three main parts: the first was working with the Archaeologist and the second working with the Heritage Mapping and Data Officer. The final aspect of the placement was undertaking my own research.
I worked on one major project for each part of the placement these are outlined below:

The first project was extracting data from an English Heritage Monument Management and Protection report for … and creating a GIS layer and database of the sites detailed within the report.
This included
> Reading and extracting data from the report
> Creating GIS layers and maps
> Cleaning the data.

The second project was working alongside the Heritage Mapping and Data officer on the … Lidar surveys. This involved interpreting the Lidar data alongside other sources such as historic maps as well as leading teams of volunteers in the field when ground truthing the data.
This included
> Interpreting the lidar data
> Digitising the features
> Exporting maps
> Assisting on surveys
> Cleaning the data
> Adding the data to the database.

The final project was designing, undertaking and writing up of a geophysical survey of a….
This included
> o   Researching the site

- Writing the WSI
- Obtaining a section 42 license
  Working as part of team to collect the data
- Creating maps and plots
- Writing the report.

Alongside these projects I also:-
- Helped facilitate at public engagement events
- Aided in a survey of an area of works prior to a wetland restoration project and helped create the maps
- Assisted on service level agreement archaeological surveys
- Presented a poster at an undergraduate research conference held at Bournemouth University based on the project undertaken during the first part of the placement.
- Attended the Near Surface Geophysics Group Meeting

The following details how my experience and competence form this position
Knowledge
The knowledge provided from my time at the NFNPA was invaluable. This placement allowed me to put the theory from university into practice for the first time in a professional context.

The three stages of the placement gave good working knowledge of different areas of the historic environment. These include
- Types of monuments
- Period specific chronology
- Designations such scheduled ancient monuments and Sites Of Special Scientific Interest as well as ecological designations
- How to access data from HER and how they record archaeological monuments
- The heritage
- How archaeological surveys are undertaken

The placement also gave me a good working knowledge of their approaches to archaeology and protecting the archaeology. The placement taught me a lot about archaeology outside of a commercial archaeological context. The placement also taught me how archaeology is managed in a protected landscape and how archaeology is mitigated against for forestry works. I also had a good working knowledge about the ecology and the heritage by working with volunteers and speaking to the ecology team.

As with my current position I was using IT and GIS on a daily basis for mapping and reading reports. As well as the systems used at air photo services, I used tablets with Google Earth and bespoke recording form software for field work and used access database to import the data from the fieldwork and record the data.

Autonomy
My level of autonomy increased during my time. I had a large amount of support and supervision during the initial time on placement. However towards the end of the placement with assistance with the planning, I lead my own survey which included
- Identifying and digitising the features in the GIS
- Producing the maps
- Leading the teams of volunteers on the day
- Cleaning the data
- Transferring the survey data to the database.

I also showed autonomy with my final project to work as part of a team to conduct a geophysical survey of a possible Hunting Lodge. I had a lot of supervision when undertaking the survey. I created the maps and plots, wrote the WSI and the report with some intervention from superiors.

Coping with complexity
As with my current role I dealt with complex situations which I could solve with limited intervention. This included

o Interpreting Lidar data
o Filling in feature recording forms
o Checking grid references.
o Cleaning the survey data to make sure it was correct and accurate

Perception of context

Working on three different main projects helped me to see how different roles of the people I was working with and how this fits into the Archaeology team and how their roles were integral to the protection of Archaeology. For instance the role of the planning archaeologist in analysing how development would affect archaeology and The Heritage Mapping And Data officers role in surveying and carrying out mitigation work to protect archaeology.

Position held:	Excavator
Organisation name:	
Dates position held:	June 2013 – July 2013
Length of time in role:	1 month

Description of role and responsibilities:

Field excavation of a multi period site from the Bronze Age to the 4th century AD. This involved manual excavation, field geophysical survey, section and plan drawing, environmental remains processing and finds processing.

Experience and competence demonstrated:

This position allowed me to apply theory I had learnt in my first year of university into practice. The competence demonstrated in this position included the knowledge from university modules such as a basic and broad understanding of the periods that I was excavating which assisted me in my interpretations of the archaeological features and artefacts, applying the skills discussed in the Archaeological Practice modules such as geophysical survey and excavation techniques. I worked with a level of autonomy as I was excavating features, drawing and surveying whilst under supervision of trench supervisors.

This role meant I was dealing with a complexity including analysing stratigraphy, following excavation guidelines and providing possible interpreting of features

The role gave me great experience to take forward through the rest of my university career and for future work opportunities. It also gave me good insight to excavation and its position within the context for assessment of the historic environment.

Additional Relevant Information
None

List of publications/grey literature
Examples provided