

### 3 Suggested workflow for Photographers and Compilers

These notes describe a practical workflow for digital photography for a Church Record, from taking photographs to storing them on a computer, incorporating them into the Record, preparing the printed and digital copies and delivering the Record.

The **essential IT requirements** are *either* a) a PC Windows computer (XP or later) with Word 2007 (or later) for document processing, *or* (b) an Apple Mac with the equivalent Word for Mac; *plus* c) a digital camera of 5 megapixels or more, with a good quality lens, d) a program for converting JPEG photographs to TIFF format and back again (e.g. IrfanView or Photoshop), e) A program for adjusting the file size of TIFF photographs (e.g. IrfanView or Photoshop or, for Macs, Lightroom), f) a home printer and g) a scanner (probably a function of the home printer) capable of saving scanned images in JPEG format onto the computer.

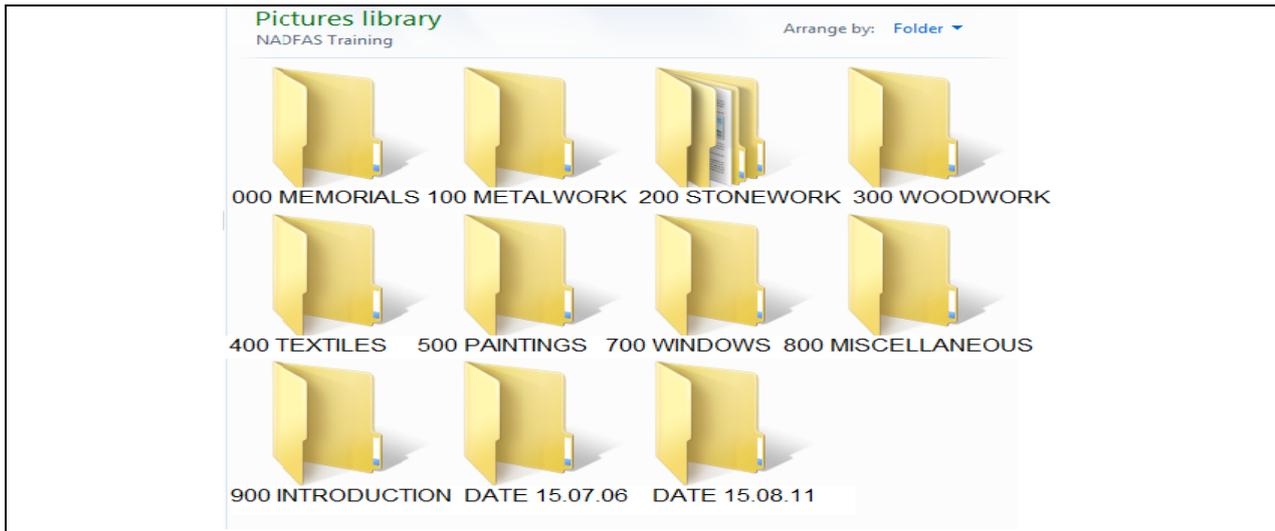
The photographer will not necessarily carry out all the steps – some stages may more easily be done by the person compiling the Record.

Photographers and compilers will vary in their expertise and experience. The workflow described in this Supplement should work well for all levels of ability. Things which everyone must do are described **essential**. There are other things which are **strongly advised**. **Experienced** photographers and compilers may use other methods provided they comply with the **essential** and take due account of the **strongly advised**.

STEP 1	Notes	Further Guidance
Take pictures on site	<p><b>Essential:</b> Must be taken in JPEG of 5 megapixels or more, or TIFF or RAW.</p> <p><b>Strongly advised:</b> Ascertain the requirements from the Group Leader.</p>	<p><b>PS1 Taking Good Photographs in a Church;</b> and</p> <p><b>PS4 The Technology of a Digital Camera</b></p>

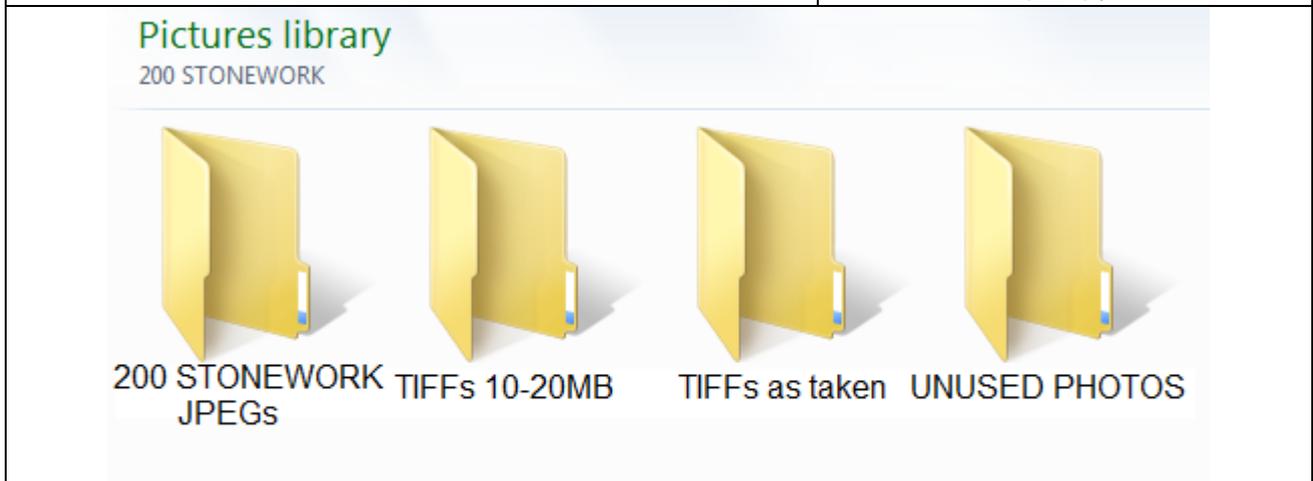
STEPS 2 & 3	Notes
<p>2. Create a project folder with sub-folders for the new Church on a computer.</p> <p>3. Download pictures taken.</p>	<p>The following sub-folders are recommended. One for each Section (“Section Folder”) and one for each day of photography (“Date Folder”).</p> <p>Initially, download each day’s pictures into a DATE Folder. YY.MM.DD naming keeps the folders in date order.</p>

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STEP 4	Notes
<p><b>Essential:</b> Make a back-up copy of the pictures as taken, independent of the computer.</p>	<p>Recommended - an external hard drive, memory stick or CD</p>

STEP 5	Further guidance
<p><b>Essential:</b> Copies of JPEG pictures must be saved in TIFF format before any adjustment or processing.</p>	<p><b>PS5 Changing File Formats and File Sizes</b></p>
<p><b>Essential:</b> RAW pictures must be saved in TIFF format, but basic adjustments (e.g. to exposure and colour temperature) may be made before saving.</p>	<p><b>Strongly advised:</b> The naming of the JPEGs file anticipates its being copied onto memory sticks and CDs</p>
<p><b>Strongly advised:</b> In each Section Folder create the sub-folders shown below. Save the TIFFs, including those saved from JPEG and RAW originals, into the "TIFFs as taken" folder.</p>	<p><b>Essential:</b> "TIFFs as taken" are source files which must be kept for 5 years. <b>Essential:</b> Make a back-up copy.</p>



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STEP 6A	Notes	Further guidance
Section by Section, select the pictures to be included in the Record and copy or save them into "TIFFs 10-20MB".	<b>Essential:</b> Must be agreed with the Group Leader	
<b>BUT:</b> <b>Essential:</b> Any pictures greater than 20MB should be resized to be within the 10-20MB range. <b>Essential:</b> Saving the resized pictures into "TIFFs 10-20MB" will avoid overwriting the original in "TIFFs as taken".	<b>Strongly advised:</b> reduce to about 15MB (long side – 2700 pixels)  <b>Note:</b> Use of LZW compression is permitted when saving a TIFF file. The file size will be reduced by about 20-30%, which is satisfactory.	<b>PS4 The Technology of a Digital Camera</b>  Suppl. <b>5 Changing File Formats and File Sizes</b>
Adjust and crop each image if necessary, liaising with the Group Leader.	The aim of cropping is to show the item to best effect without excessive waste space. Cropped photos might be less than 10MB, but 300ppi is <b>essential</b> . <b>Strongly advised:</b> Adjustments should be minimal. The aim is to produce a clear and honest representation of the object. <b>Essential:</b> Always "save as" in TIFF format	<b>PS4 The Technology of a Digital Camera Part C</b> for notes on cropping
<b>Essential:</b> The objective of <b>Step 6A</b> is to have for each Section a set of TIFF pictures ready for use in a separate folder from that containing the "TIFFs as taken"	<b>Essential:</b> Make a back-up copy <b>Strongly advised:</b> Keep in an "Unused photos" folder those not selected for use. They can become useful for another view of an object or a missing detail.	

STEP 6B	Notes	Further guidance
During <b>6A</b> , make available any working copies required by Recorders to help with research or transcription	These could be prints made on a home inkjet or laser printer on any type of paper. Alternatively, the pictures <b>may</b> be put on a CD or memory stick, or uploaded to a website such as Flickr or DropBox and made accessible to the Recorders.	<b>Essential:</b> <i>NB: Ensure any access to photos on a website is limited to the recording team, to avoid breaching the Church's security for valuable objects.</i>
It is better to save 1-3MB JPEG versions to use for this purpose	<b>Suggest:</b> Using the "JPEGs" folder temporarily for this.	<b>PS5 Changing File Formats and File Sizes</b>

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<b>STEP 7</b>	
Go through the pictures with the Group Leader. Do any additional takes or retakes.	

<b>STEP 8</b>	<b>Notes</b>	<b>Further guidance</b>
<p><b>Essential:</b> Group Leader, the Compiler and the Photographer go through the final draft text of the Record with the photographs</p>	<p>To agree where each picture will be and to ensure <b>Phs</b> and <b>Ph</b> is in the text.</p>	<p>Transfer any unused pictures into the “Unused photos” folder</p>
<p><b>Essential:</b> Agree whether or not any embedding of photographs in the text is to be tried.</p> <p><b>Strongly advised:</b> Embedding needs great care. Clarity of pictures for readers and researchers is the highest priority.</p>	<p><b>Essential:</b> In the Introduction the Church external photograph will be embedded.</p> <p><b>Strongly advised:</b> that the external photograph and the internal W-E and E-W pictures are each approximately 6” x 4”.</p>	<p>Each, with its label, will occupy about half a page at this size</p>
<p><b>Essential:</b> Change the file name of each TIFF 10-20MB photograph according to the unique number assigned to the object in the draft Record.</p> <p>Use “Rename”. No full stops.</p>	<p><b>Essential:</b> The assigned number must include any leading zeros – thus Memorial number 9 is 009.</p> <p>If any sub-headings are used to identify an object, e.g. a) b) c), A B C, or i) ii) iii), ensure that they are consistent with those used in the written Record.</p>	<p><b>PS6 Supplying the TIFF Photographs</b> <i>Historic England has said it welcomes the addition of a simple informative title <u>after</u> the number. Typically this might be “700 maker’s mark”, “103 hallmarks”, “314 detail” or “226 exterior”.</i></p>

<b>STEP 9</b>	<b>Notes</b>	<b>Further guidance</b>
<p><b>Essential:</b> From each Section’s “TIFF 10-20MB” sub-folder save copies of all the pictures, in JPEG format, into the “JPEGs” sub-folder.</p>	<p><b>Strongly advised:</b> Delete any JPEG pictures already in the sub-folder for temporary use. Start clean.</p> <p>Save into the “JPEGs” sub-folder as shown in <b>STEP 5 above</b>.</p> <p><b>Strongly advised:</b> The reduced file size will normally be in the range 1-3MB. Long side 1,800 pixels which equates to 6” @ 300ppi.</p>	<p><b>PS4 The Technology of a Digital Camera</b></p> <p><b>PS5 Changing File Formats and File Sizes</b></p>

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STEP 10A	Notes
<b>This applies when the photographs are to be inserted into photo pages</b>	Recommended for most Groups. "Photo pages" as described in <b>PS7 Part B</b>
<b>Essential:</b> Offer to make images available for quality check by the CR Area Representative	The CRAR might wish to carry out a quality check of the images whilst inspecting the draft Record. Photographer and Group Leader to agree the best way to make images available to the CRAR e.g. a CD or a memory stick.

STEP 10B	Notes
<b>This applies when the photographs are embedded into the text pages</b>	As a guide, standard sizes are 6" x 4" or 5.33" x 4" or 6" x 4.5". Cropped images might be smaller. It is <b>essential</b> that detail of heraldry, inscriptions, ornament and other images must be clearly and easily legible. This is a reference archive.
<b>Essential:</b> Embed the images into the text and send the text, with the images embedded, to the CR Area Representative for checking.	<b>Essential:</b> The CRAR can decide whether or not the embedded presentation is of sufficient quality. It could, also, be rejected by NADFAS when sent to NADFAS House. <b>Strongly advised:</b> If in doubt, or trying for a first time, a Group should submit a sample Section to the CRAR for an opinion.

STEP 10C	Notes	Further guidance
<b>This applies when photographic prints on photographic paper are fixed to pages</b>	<b>Essential:</b> Only the Church's printed copy of the Record may be presented in this way (at the option of the Group). This copy can be photocopied and scanned to produce colour laser printed prints of the Record and to "save" the Record, in PDF/A format, for digital copies.	<b>PS9 The Church's copy of the Record</b>

STEP 11	Notes	Further guidance
<b>Essential:</b> <b><i>Once the draft Record has been approved</i></b> , amend the "TIFF 10-20MB" pictures and their file numbering as necessary.	Do this Section by Section	
<b>Essential:</b> Then make the same changes to the "JPEGs", so that the pictures and their numbering are identical to the TIFFs.	<b>Strongly advised:</b> If there has been any change to a Section's TIFF 10-20MB images or numbering, delete that Section's JPEGs and repeat <b>STEP 9</b> for that Section.	<i>The safest way to guarantee that the TIFF 10-20MB changes are all made to the JPEGs.</i>



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After printing, if the pictures are not already embedded in the text, interleave the printed photo pages between the text pages, adjacent to the text description of the object.		
STEP 13	Notes	Further guidance
<b>Preparing to record the TIFF photographs onto memory sticks for Historic England, the ChurchCare Library and any equivalent body in Isle of Man, Northern Ireland, Scotland or Wales requiring this</b>	<b>Essential:</b> follow the specifications given in <b>PS6 and PS7 Part F</b> ; use the TIFF 10-20MB images; memory sticks are now the standard method of delivery in England, but archival CDs will be acceptable for Records in progress in 2015 and might be necessary for churches outside England (refer to CRAR)	<b>PS6 Supplying the TIFF photographs</b> <b>PS7 Compiling the complete Church Record and delivery in printed and digital forms Part F</b> <b>PS8 Software and Help for Burning CDs</b>

STEP14	Notes	Further guidance
<b><u>V &amp; A standard.</u></b> <b>Recording the whole Record onto a Gold Archival CD.</b>	<b>Essential:</b> The whole of the text and photographs of the Record in PDF/A format <i>or</i> the text in PDF/A format and all the “JPEGs” section folders of photograph files. In either case on a single Gold archival CD.	<b>PS7 Compiling the complete Church Record and delivery in printed and digital forms Part F</b> In the Isle of Man, Northern Ireland, Scotland and Wales, check with the CRAR which bodies require what form of copy.
<b><u>Heritage England &amp; ChurchCare Library standard.</u></b> <b>Recording the whole Record and TIFFs onto a memory stick</b>	<b>Essential:</b> The whole of the text and photographs of the Record in PDF/A format <i>plus</i> all the “JPEGs” section folders of photograph files <i>plus</i> all the TIFFs Make a printed list of the memory stick contents.	
<b>Essential:</b> Should be burned onto the CD or copied onto the memory stick in logical order readily useable by readers and researchers	Folders and prefix numbering are permitted to ensure logical order and easy use. Do not use full stops, use underscore_ where necessary.	

**FINALLY, pass all CDs and memory sticks and lists to the Group Leader for onward delivery. Keep the photograph source files for 5 years and all Record files and folders until successful download by Historic England and ChurchCare Library has been confirmed.**