

**Arkansas History Commission
Stage One Digitization Grant Project**

Test and Calibration Summary

The contract between JJT, Inc. of Austin, TX, and the Arkansas History Commission (AHC) Stage One Digitization Project is for the digitization of approximately 10,600 negatives and 2300 prints including:

1. Approx. 2300 assorted size prints from the Arkansas Inactive Barber Photographs
2. Approx. 1,100 (4 x 5) negatives, 600 being copy negatives made from prints for the Persistence of the Spirit Project and
3. Approx. 9500 (2 1/4 x 2 1/4 and 35mm) original negatives made by Ernie Deane.

The following lists the project names and abbreviation:

Barbers	BA
Shrader	SH
Persistence of the Spirit	PS
Ernie Dean	ED

The AHC will furnish JJT databases for each collection in MSAccess97. To avoid confusion, only the fields to be transferred to JJT's database will be sent. The database will be sent on disk with each shipment of photographic materials.

Digitization Schedule:

At least ten (10) business days prior to the beginning of the month scheduled for production, AHC will ship to the vendor all of photographic materials to be processed scheduled for the upcoming month. JJT will report any discrepancy in shipment.

During the month scheduled for production, the vendor will scan the photographic materials, create derivative files, and record them to compact discs. The vendor will inspect all image files and recorded CD-Rs. The image files will be delivered to AHC five (5) business days after the close of the scheduled month of production. The vendor will return the photographic materials via FedEx using the AHC account number to the AHC at that time.

Within ten (10) business days of receipt of the image files from the vendor, AHC will examine and accept or reject any or all digital files and CD-RS. At the end of that period, AHC will notify the vendor of necessary rework. The appropriate photo materials will be shipped to the vendor to perform the rework within twenty-five business days of request. Upon receipt, AHC will re-inspect rework.

The vendor should expect to process approximately 1660 photographs per month for a period of six (6) months beginning June 1, 2000. All rework requested by AHC must be accommodated by the vendor in addition to the regularly scheduled production.

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The AHC has purchased sturdy, lockable shipping boxes from Hardigg that will be packed with project materials, then shipped by FedEx. Each shipment will include a packing list or inventory of the project materials included in that particular shipment in print as well as on disk in database format. Once scanning is completed, JJT, Inc. will return the AHC original project materials repacked and locked in the AHC Hardigg cases via FedEx using the AHC's FedEx account number: 1223-4761-3 (For AHC SOD project expense tracking purposes, JJT will write *AHC SOD Project* on Line 2 - *Your Internal Billing Reference.*)

Rules for Cropping and Deskewing:

The digital images should represent 100% of the usable image on the photographs or negatives. The edges of the digital image should be congruent with the edges of the photographic image on the negative or print. Within the digital image, there should be no border from the *empty* portions of the negative. Likewise, a strip of band no more than a pixel or two wide from each edge of the image should be cropped away. The following guidelines will be used for cropping and deskewing:

1. Deskew based on photo print paper, not cardboard mounts.
2. Deskew based on content of photo if edges of print paper have “no content”
3. Crop away all “empty” portions of negative artifacts.
4. Crop away all “empty” portions of cardboard mounts and frames, unless writing, printing, stamps, etc. appear in border. Crop remaining edges to match width of border containing information.
5. Lost areas such as broken corners are left as they appear on the print or negative.
6. Totally blank areas in digital image created by deskewing should be filled with black.

Tonal Distribution

In regard to tonal distribution, the AHC aims are to:

1. capture all of the historical photographic content depicted in the photo materials.
2. present the digital images with tonal scales most useful to researchers
3. given 1 and 2, present the images in an attractive manner and
4. preserve a master image in which the tonal scales can be manipulated as required for digital printing.

JJT will capture AHC photographic materials in 12bit grayscale. JJT will adjust the raw tonal scale and position it so that pixels fall on almost every shade of gray including pure black and pure white when image is reduced to 8bit grayscale.

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Digital Delivery

The AHC has determined that a tape and a CDR is a good combo for archival storage. Mitsui high quality CD-Rs and Exabyte Mammoth tapes will be used. Each month the AHC will receive 1 tape and 1 set of CDs with all of the archive files on them. In addition, the AHC will receive two sets of the derivative files on CD with the display files on one set of CDs and the access on one disk and the thumbnails on another.

Our choice for CD-Rs are Mitsui CD-Rs are Mitsui Archive Blank Gold Surface Jewel Case-AK707GAOE (AK707GAOG in bulk). The disks specified have a blank top surface--no place for writing or printing. SOD estimates approximately 6-700 disks will be produced. Information on Mitsui CD-Rs can be obtained from Joe Weisenbach, Mitsui Advanced Media, Inc., 10045 Federal Drive, Colorado Springs, CO 80908, phone:(719) 262-2453, fax:(719) 592-0057 <www.mitsuicdr.com>.

Labeling

Labeling will be done by adhesive labels applied to the jewel cases. No labels will be attached directly to the disks themselves. No marking of any kind will be done directly on the disks.

The following information will be used for the Labels:

Arkansas History Commission
Collection (10 char.)
Batch #1
Volume
Date
Serial # (written in ink)
List of file names

Each delivery for a given collection will constitute a batch. The Volume name will be BAU001, etc., where BA is collection identifier, U is format, and 001 is sequential number.

Labels should indicate any gaps in sequence (i.e., ba00001u.tif - ba00023u.tif, ba00025u.tif).

File naming structure

The format of the file name will be as follows (all lower case) as conforms to ISO 9660 compliant:

1. Archive – uncompressed TIFF file, 5K in the long dimension (for the Deane negatives) and 4K in the long dimension (for the Barbers). Use lower case:

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- aannnnnu.tif (two alpha characters for collection, five characters for sequential number, and u to indicate file format.)
2. Display – aannnnns.jpg: Scale to 4K. The compression quality factor will be selected to produce an average ratio close to 12:1.
 3. Access – aannnnnr.jpg: 640 pixels in long direction, no sharpening, and compressed as close to 12:1. Correct for moiré patterns as needed.
 4. Thumbnail – aannnnnt.jpg: 160 pixels in long direction, no sharpening, and compressed as close to 12:1 as possible. Correct for moiré patterns as needed.

The AHC has requested that each file type be recorded on separate CDs. JJT will oblige at no extra cost. Each CD of archive files have an equal number of images.

Quality factors for use in compression

Quality factors to be used in compression will be:

Service files:	Quality factor = 85
Reference files:	Quality factor = 70
Thumbnail files:	Quality factor = 70

TIFF Headers

The fields to be used will follow those used for LC except that a copyright notice be substituted for the DocumentName. Copyright will read *Arkansas History Commission 2000*.

Directory naming structure

The directory naming structure will be as follows:

- By collection name (i.e., Barbers or BA)
- By file type