

## History of the Original Government Surveys and Retracements in Arkansas, 1815 - 1883: Bringing Order to the Wilderness.

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A general discussion of the history of the original government surveys in Arkansas and their perpetuation and retracement in the 19<sup>th</sup> century. This discussion will *not* be a recapitulation of the techniques and evolution of the instructions, but rather a look at the men who organized the survey of the public domain in Arkansas and those who actually did the work.

We will consider the land speculation, fraud, political corruption, shortcuts, errors, and challenges that underlay the field work done by the deputy surveyors and their successors, the county surveyors.

Attendees are encouraged to share their favorite GLO and County Surveyor stories and the adventures they have had trying to follow in the footsteps described, with highly variable accuracy, by the early surveyors in Arkansas.

CONUNDRUM: "It is far more important to have faulty measurements on the place where the line truly exists, than an accurate measurement where the line does not exist at all." A. C. Mulford, **Boundaries and Landmarks**, 1912.

Boundary Surveying is the art of applying correct measurement informed by historical knowledge to identifying the correct corners and lines that define the boundary.

### **THE IMPORTANCE OF THE PUBLIC DOMAIN SURVEYS**

"Real estate is the biggest asset market in the world." *The Economist* magazine  
02/15/2020

**THE GENIUS OF THE SYSTEM:** "A modern government and a market economy are unviable without an integrated formal property system... In the West every parcel of land, every building, every piece of equipment, or store of inventory is represented by a property document. They all can be used as collateral."

1803 –The new American republic had lots of land, but needed revenue. Selling patents to undeveloped wilderness was the answer. The public domain surveys enabled the U.S. to create tangible wealth out of inert wilderness that would enrich both the government and its citizens.

### **THE SURVEYORS**

The surveys of the public domain were not a dispassionate process of imposing a flawless grid on the chaotic wilderness – it was a very human enterprise. Human nature infected and infected everything.

**THE INSIDERS:** The peak of GLO surveying activity and settlement in Arkansas occurred during the period 1829 through 1841... This coincided with the presidencies of Democrats Andrew Jackson and Martin Van Buren... The Spoils System. Government work was something any American man could do... “The reality of American government in the 19<sup>th</sup> century was massive corruption and incompetence.” Francis Fukuyama, historian.

Pervasive intrigue, nepotism, and corruption... patronage appointments...

“The Family” – Rectors and Conways: surveyor general William Rector and his 10 sons, Rector’s nephew James Conway became surveyor general in 1832 and Arkansas’ first governor in 1836. William Pelham, husband to Conway’s sister was surveyor general from 1841-49. Charles Pelham was his older brother. Henry Rector, nephew to William was Arkansas’ last surveyor general and governor from 1855 to 1859.

Money was scarce on the frontier... some of the first fortunes were amassed by deputy surveyors. How were they funded?

**THE SUBCONTRACTORS:** The deputy surveyor’s profits were limited by the amount of ground they could cover in a season (March to November).

Subcontractors did much of the GLO surveying in the Missouri Territory during the period 1815 – 1824. [Arkansas Territory was created in 1819. Missouri statehood 1821]

Deputy Surveyors often acted as brokers recruiting and deploying gangs of subcontracted crews to do the field work with minimal oversight from the responsible Deputy Surveyor.

James Campbell... a journey from Virginia and back again...Howard County Missouri. Subdivided 13 townships along the White River in north Arkansas from May to September 1821 for James Conway...Bear meat and bacon. “Surveyed by Jas. B. Campbell for Wm. Shields and Jas. S. Conway”...Election Day...Ague and a quart of whisky.

Rector got results: 8,000 miles of GLO boundaries between 1818 and 1822 more than any other territory... He also got fired in 1824... Politics and a duel on Blood Island.

**MONUMENTS OVER MEASUREMENTS:** Treasury Secretary Gallatin’s 1805 letter to surveyor generals:”...the principal object which Congress has in view, that the corners and boundaries of the sections should be definitely fixed, and that the ascertainment of the precise contents [bearings and distances along the boundaries] of each is not considered as equally important.”

In this early period, the federal government was inclined to accept “crude and inaccurate” surveys. A History of the Rectangular Survey System, C.A. White.

## GARRISONING THE FRONTIER

### SETTLERS AND SQUATTERS:

The speed of settlement far exceeded the progress of the government surveys.  
Arkansas population: 1820 = 14,000. 1830 = 30,000. 1840 = 97,574.

English Common Law versus Squatter Rights: Green v. Biddle versus Preemption Act and Occupancy Laws.

Land offices were opened in Poke Bayou (Batesville) and Little Rock in 1822.

Squatters who attested to their occupation and improvement of land had “priority” – first claim to the tract.

Successful claimants to priority and other government entitlements were issued warrants. Frequently syndicates of speculators bought up warrants or even created fraudulent claims to obtain warrants.

In the Arkansas territory the singular interest of both the common citizen and the ruling elite was to shake the federal money tree and harvest the resulting shower of wealth that fell in the form of land warrants and patents.

Military bounty land warrants were issued to veterans of the war of 1812. Land speculators snapped these up – few veterans actually immigrated to Arkansas.

In consequence of the New Madrid earthquakes of 1811 and 1812, Congress authorized grants of land to compensate citizens in the tiny hamlet. These warrants were sought after because they “floated” and could be located almost any place in the territory. Howard County, Missouri and the settlement at Little Rock were popular locales.

A Town on the Move: In 1821 surveyor/speculator William Russell alleged in federal court that a footloose bear hunter, William Lewis, had erected a hut and planted a pumpkin patch at the “little rock” on the Arkansas River in 1812 and thus founded Arkansas’ future capital and also earned a preemption grant of 160 acres which Russell had purchased. Judge Benjamin Johnson certified Russell’s claim and thus barred a claim to the same land by holders of New Madrid warrants. The decision sparked a serious disturbance of the peace...

The Bowie Claims: In 1827 Judge Russell confirmed 124 Spanish land grants totally 50,000 acres in Arkansas known as the Bowie Claims because of John Bowie’s involvement with the syndicate that owned the Spanish grants. The GLO intervened.

Prominent Arkansan lawyers and office holders were members of the Bowie syndicate.

## **INDIAN REMOVAL 1808 – 1839**

With the Louisiana Purchase in 1803, the U.S. acquired a vast territory west of the Mississippi. Indian tribes were pressured to abandon their lands east of the river and move west across the river where there were few white settlers.

Many Native Americans saw Arkansas as a refuge from the encroachment of settlers.

By 1830 all the Cessions to the relocated tribes in present day Arkansas had been extinguished and “Indian Territory” established in Oklahoma.

1838 – 1839 Trail of Tears relocation of remaining eastern tribes through Arkansas into to Oklahoma.

## **ORIGINAL SURVEYS 1817 – 1845**

The deputy surveyors completed plats of Arkansas 1547 full and fractional townships.

In 1815 Commissioner Edward Tiffin issued his instructions for the government surveys in the Missouri Territory. These instructions required closing corners on the township exterior (usually the north and west) boundary and that meridional lines within the township were to be parallel with each other from east to west.

Ironically James Conway issued instructions in 1833 that contained the injunction “Subcontracts are illegal”. He also enjoined that all deputy surveyors and crew were to be “free white persons.” All subsequent Arkansas instructions contained that statement.

Edward Cross’ instructions of 1837 explicitly authorized the use of dressed stones for corners and the setting of witness corners.

William Pelham’s instructions of 1843 for the first time specified limits of closure for all lines. Regarding field notes, “No memorandum or writing of any description should be made in the field book except as relates exclusively to the surveys”... adding that in bad weather “... you can, in that case, take notes on a detached piece of paper, which however you must write off into your regular field book in the proper place as soon as the weather will permit.” My research indicates this was a common practice.

## **RESURVEYS (1845 – 1859)**

Many settlers attempting to locate the bounds of their patent found them impossible to locate them on the ground. In 1849, Izard County Surveyor, Cyrus Crosby, wrote surveyor general Lorenzo Gibson of the need to “bring to light the long hidden things of dishonesty....but one conclusion is forced upon the mind of the observer; which is, that these notes were never taken upon the field work.”

In the period 1821 to 1845 Deputy Surveyor **Charles Pelham** performed the original surveys of 188 Arkansas townships. Beginning in 1845 the Arkansas GLO resurveyed a total of 185 townships due to “fraud and error” in the original surveys. Charles Pelham (CHP) was a major offender, but not the only one. One of the resurveying deputies, Granville McPherson, described CHP’s work as **“False as the Black Prince of Hades.”**

When the GLO office in Little Rock closed in 1859, 64 of Pelham’s suspect surveys remained to be resurveyed. With the closure of the GLO office, county surveyors, property owners, and the courts were left on their own to unravel the skein of flawed surveys. Many requests for guidance landed on the desk of the commissioner of the GLO. Sometimes suggestions for dealing with specific cases were offered, but no general principles were published by the Department of Interior until 1883 – 24 years later!

In March 1852, the Commissioner of the GLO advised the Surveyor General of Michigan about how to classify resurveys and the proper methods for the two classifications of defective surveys: “Incomplete Surveys” were to be treated much as Dependent resurveys are handled today. “Fraudulent Surveys” called for an approach very similar to current Independent Surveys. “The true independent resurvey as it is now known was not instituted until 1897.” History of the Rectangular Survey System.

#### GLO Survey Shortcuts:

- Inadequate or omitted blazes of line or witness trees,
- Interior lines stubbed out instead of being closed on senior lines,
- Witness trees omitted and the reference information falsified.

#### The Face of the Plat: often reveals problems such as:

- The field work was done by a subcontractor
- The field work was done decades before the plat was prepared and certified and the patent issued for sale.
- The plat lacks topographic detail or differs from the actual topography.
- The presence of large lakes on the plat which do not in fact exist – omitted lands.

The 1845 Report of the Surveyor General of Arkansas to the GLO Commissioner stated the results of an investigation by a D.S. King that found “a book on file in this office containing 382 plats, besides some loose ones, which bear no mark of authentication, all of which were received in this condition.” [in 1832 when the general’s office was moved from Saint Louis to Little Rock].

### **OMITTED LANDS IN N.E. ARKANSAS:**

Subsequent to the 1917 Supreme Court decision in the Moon Lake case (Lee Wilson v. the U.S.), BLM completed many extension surveys of omitted lands in N.E. Arkansas which added over 104, 000 acres to the public domain. Riparian tracts became non-riparian with their boundaries terminating at the record meander line. The original surveys were done in the late fall and winter when shallow flood waters spread for miles across the lowlands from the St. Francis River.

### **SWAMP AND OVERFLOWED LANDS:**

In September 1847, the survey generals were ordered to submit estimates of the amount of swamp lands that had been surveyed. The Swamp Lands Act of 1850 granted these lands to the state in which they were located. Arkansas was the third largest recipient – 7.6 million acres. Under the Arkansas Compromise Act of 1897, the state relinquished its claim to a great deal of unclaimed land that had fraudulently been identified as submerged swamp land.

### **THE ROLE OF ARKANSAS COUNTY SURVEYORS**

2009 BLM Manual: “The work of the local surveyor usually includes the subdivision of sections into the legal subdivisions shown on the approved plat. In this capacity, the local surveyor is performing a function contemplated by law.”

The office of county surveyor was first listed as an elective office in Arkansas’ 1836 constitution enacted when the state was admitted to the Union.

The original role envisioned by the constitution was to retrace the original boundaries laid out by the GLO and then “break down” and monument the interior aliquot subdivisions of the GLO sections for entering patentees.

The County Court could direct him to survey any tract whose boundary was in dispute – his findings were *prima facie* evidence. The statutory intention was that all disputed lines would be reconciled by the county surveyor.

In keeping with Jacksonian populism, no demonstrable competence in surveying was required to hold the office.

Present Arkansas Code provides:

- County Surveyor must be a licensed P.S.
  - His surveys must conform to the original survey.
  - No act or record by any county surveyor shall be conclusive.
- (19)

Excerpts from **RESTORATION OF LOST AND OBLITERATED CORNERS**, March 13, 1883, Department of Interior:

“The increasing number of letters of inquiry from county and local surveyors received at this office, making inquiry as to the proper method of restoring to their original position lost or obliterated corners marking the survey of the public lands...The general rules here given must be considered merely an expression of the opinion of this office...Relocation of such corner [moved from its original location] must be made in accordance with the orders of a court of competent jurisdiction. The United States having no longer any authority to order any changes where the lands affected by such corner have been disposed of.”

### SURVEY RECORD INDEPENDENCE COUNTY COURT HOUSE – 1866 - 1960

The surveys from the 19<sup>th</sup> century seldom indicated original GLO corners.

### THE CIVIL WAR IN ARKANSAS, 1862 -1865

Court houses and grist mills were demolished all over the state. Batesville, county seat of Independence County was plundered twice during the war.

April 1862 “The court hereby authorizes said clerk to remove the records.”...Lost.

Over the years many reams of survey records have exited the court house with retiring county surveyors only to molder away in barns and garages.

### TOBE CHASTAIN, RANDOLPH COUNTY SURVEYOR, 1906, SURVEY BOOK 3, P.93

“... You will never see the evidence of lines and corners as I have saw and found it... It is a deplorable fact that so many government corners were not set where theory would have placed them, but law and justice demand that surveyors locate gov. corners where they were originally set (and not where they should have been set) by the deputy surveyors who sectionalized our country.”

Tobe was working from evidence of the original surveys that was a mere 60 years old. He was in a much better position to retrace the work of the GLO surveyors than we are 175 years removed...

“Where public lands have been sold to private parties, through the medium of subdivision of sections, such subdivision lines have become for the purpose of private property rights as sacred as township or section lines.” Clark on Surveys and Boundaries.

“A decision to set aside previously fixed local survey subdivision corners must be supported by evidence that goes beyond mere demonstration of technical error... the law gives these activities repose.” 2009 BLM Manual, 3-137

(20)

## **ACCEPT OR RESURVEY?**

Most surveyors share Jeffery Lucas' despair and anger when they find fresh pins on the interior of a section set a few feet from venerable stones honored for decades.

## **THE GUIDE?**

Section 3.1.B of the current Arkansas Standards of Practice for Property Boundary Surveys and Plats reads: "The **current** BUREAU OF LAND MANAGEMENT (BLM) MANUAL OF SURVEYING INSTRUCTIONS shall be used as **the** guide for the restoration of lost or obliterated corners and subdivision of sections."

Doctors Knowles and Elgin's manual for Arkansas surveying practice, states in section 4-1: "...the current BLM manual is not particularly applicable to our system..."

**1973** Manual, "A lost corner is a point of a survey whose position cannot be determined **beyond a reasonable doubt**..." page 133

**2009** Manual "A lost corner is one whose original position cannot be determined by **substantial evidence**, either from traces of the original marks or acceptable evidence or reliable testimony..." page 165

A 21<sup>st</sup> century professional surveyor using the current BLM manual as his or her sole guide to retrace a 19<sup>th</sup> century original survey which conformed to Tiffin's 1815 instructions is unlikely to follow in the footsteps of the GLO surveyor.

Unlike Missouri, there is no black letter law in Arkansas dealing with retracement and subdivision of PLSS sections...

The 1883 restoration pamphlet issued by the Department of Interior explains that *original surveys must be retraced with reference to the instructions applicable at the time they were done*. Between 1856 and 1883 there were no controlling federal instructions beyond Tiffin's and the other surveyor generals. However, county surveyors in Arkansas had statutory authority to carry out such surveys. And they did...

If a corner can be identified from the record as having been set by a county surveyor acting under the authority of the Arkansas constitution when no other authority existed, how can we say they were wrong and abolish their work? If the corner is not of record, but in the search area, its location would join the list of found collateral evidence...

**Original Survey** – the surveyor's mission is an exercise in mathematics and careful measurement.

**Retracement Survey** – the surveyors first task is researching the record and recovering evidence, followed by careful measurement.

## CHARLES HENRY PELHAM (CHP) 1790 – 1855

Settled in Poke Bayou (Batesville), Arkansas around 1821.

CHP received his first GLO contract in 1821 to lay out 2 townships in Randolph County.

Over the next 28 years he completed 78 surveys of township exteriors and subdivided 117 townships in Arkansas.

In Missouri his notes are on record for surveys of 11 townships.

Plats of 3 townships bear his name of record in 1821... surveyed at least 6 township exteriors. An unknown number of his plats were “annulled” for discrepancies.

Questions about his work started early. In response to questions from surveyor general Wm. Rector, Pelham sent a letter: “It was impossible for me to do better than I have in consequence of cane and other undergrowth... Should the work not close exactly I hope you will make for me the necessary allowances.”

CHP violated the prudent measures dictated by the GLO. His work on 8 townships along the White River near Batesville are illustrative (6 were resurveyed in 1850s).

The rivers twisting meanders and limestone bluffs fractionalized the townships that abutted it. Townships split by the river were usually surveyed on each side by different deputy surveyors. There are 67 duplicate sections on this stretch of river.

### COMPLICATIONS

- Surveys proceeded from standard lines originating from the 5<sup>th</sup> Principal Meridian.
- Prospect Robbins’ long miles.
- CHP projects a standard line across the river (1827).
- “Abolished and destroyed” D.S. McPherson’s N. line of Twp.12N,Rng 6W.
- Rampant mis-measure.

The result - a crazy quilt of fragments of sections and staggered boundary lines.

From Surveyor General William Pelham’s 1842 Report to the Commissioner:

“There is a book in this office, containing 382 plats, besides some loose ones, which bear no mark of authentication, all of which were received in this condition from the surveyor’s office in Saint Louis at the time of the establishment of this office.”[in 1832]

(3- Pelham)

**William Pelham** was Charles Pelham's younger brother; appointed Arkansas Surveyor General in 1841. Over his 8 year tenure he proved to be politically savvy and took good care of his big brother.

He certified 55 township plats drawn and based upon work done in the 1820s and '30s by CHP – it is unclear from where these plats came to the surveyor general's office. William bestowed contracts on Charles up until 1848.

Four of CHP's plats plainly state that the field work was done by subcontractors.

During his 24 year surveying career, CHP stayed busy with non - GLO work: He owned a fine grist mill and other businesses, was Independence County Surveyor for 3 years, and a colonel in the militia.

After President Taylor fired Wm. Pelham in 1849 his brother lost his benefactor and protector.

For years fraud and error in Pelham's work had been blatant to settlers who bought their homesteads in reliance on his plats and notes and could not locate their lands. The new Surveyor general, Lorenzo Gibson, immediately launched a more thorough review and quickly found "strong evidence of fraud and forgery" in 30 townships returned by a number of deputy surveyors including CHP.

"Most of the work executed by Pelham ... was erroneous, and in some instances his returns are shown by examination on the ground to have been false and in others fraudulent... many without the affidavit required by act of Congress... replete with manifest errors and bearing the impress of great carelessness."

Surveyor General Milbourne's report of 1854 to Washington: The surveys in Arkansas , it will be perceived, is only prevented from closing business... by the discovery of frauds in surveying executed many years ago, which require correction or the resurvey of considerable tracts of land."

Milbourne summoned CHP to Little Rock and interrogated him – "Colonel Pelham could not safely swear that the work had been *faithfully* and *correctly* done." Nor could he swear that the work had been "executed under his immediate personal superintendence."

"Mr. Pelham reports the east boundary of township 12 north, range 4 west as a straight line. (D.S.) Garretson finds where the line crosses the White River, an offset of more than 20 chains."

In his 1856 annual report, Henry Rector produced a lengthy table of over 200 original surveys completed by CHP between 1821 and 1843 noting that 45 had been resurveyed to date. Resurveying one D.S. Granville McPherson inserted a comment into his field book, "His notes for this corner as foreign from truth as heaven is from earth."  
(Pelham – 6)

At the time, the GLO lacked a formal process for conducting retracements and resurveys for problematic original surveys... Not until the Interior Department published *Restoration of Lost and Obliterated Corners* in 1883 did Arkansas surveyors receive any guidance in these tasks.

GLO Commissioner Thomas Hendricks was looking to close long-running offices such as the one in Little Rock and erase that line from his budget allocations.

Despite Rector's efforts, the Little Rock GLO office ceased operations on March 12, 1859. Sixty-four of CHP's suspect surveys remained un-resurveyed. Rector resigned and was elected governor of Arkansas in 1860 and led the state out of the Union and into the Civil War in 1862.

Charles Pelham died in October of 1855. A history of Independence County states that he had become "poor and died a broken old man." His reputation had been wrecked by his fraudulent surveys and his fortune dissipated by litigation and land speculation.

William Pelham was appointed Surveyor General of New Mexico in July 1854 and resigned the position in August 1860. Few public land surveys were conducted during his tenure. He was overwhelmed with the chore of validating the numerous Spanish land grants and identifying Native American tribal lands.

When the Civil War broke out in 1862 he was arrested on charges of being "a rank secessionist." An invading Confederate force freed him and proclaimed him governor of a new New Mexico.

In just over a month a Federal force deposed him and he retired to his large ranch in Texas. After the war, as a supporter of the rebellion, he was barred from federal employment. He died in 1879.