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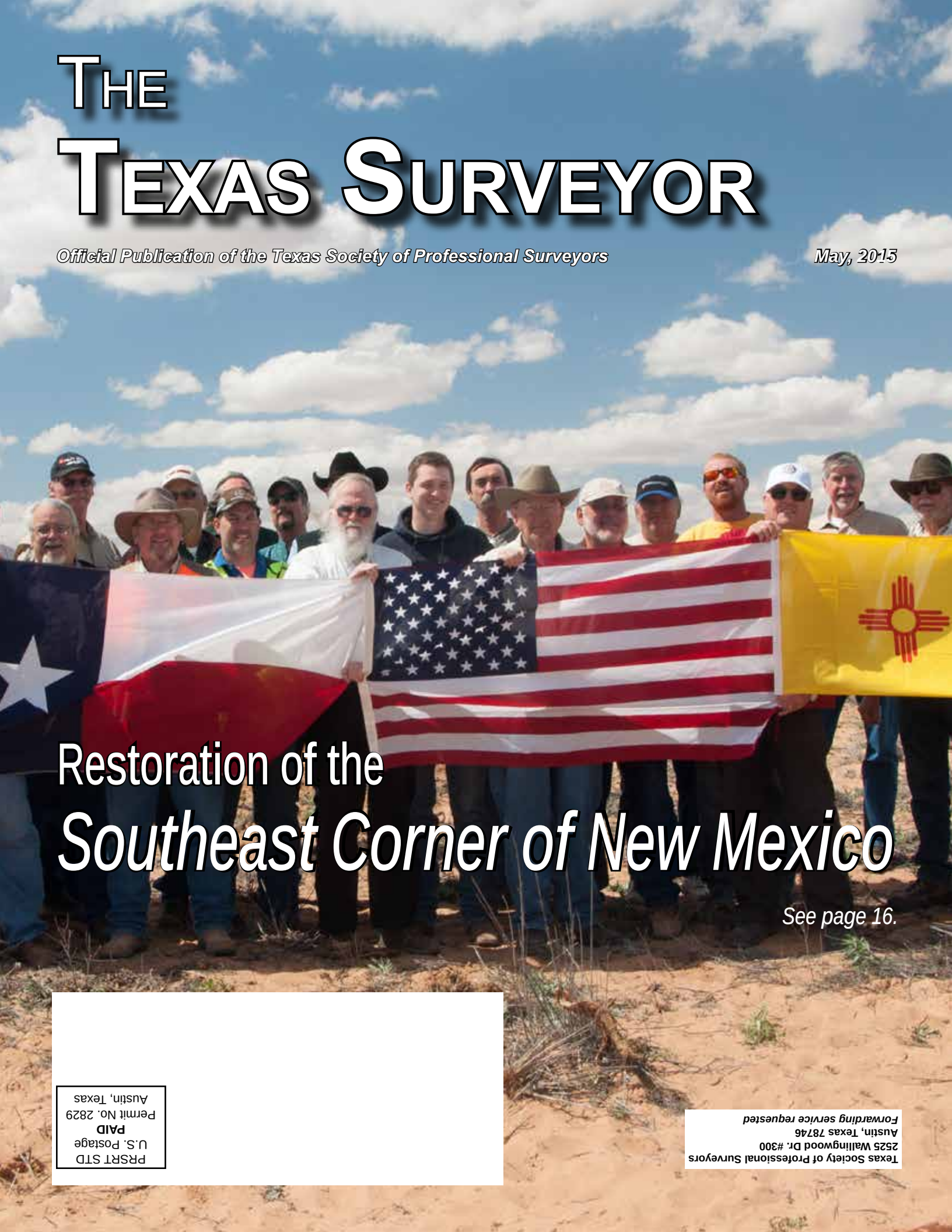

Restoration of the *Southeast Corner of New Mexico*

See page 16.

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Restoration and Abbreviated History of

The Southeast Corner of New Mexico

By Mike Hoover
RPLS, LSLS, CFM

On March 14, 2015, a small group of Texas and New Mexico Surveyors, headed up by Craig Alderman of Midland, gathered at the location of John H. Clark's monument marking the intersection (as located by Clark) of the 32nd parallel and the 103rd Meridian. This point marks the southeast corner of New Mexico and an interior corner of Texas. Sounds simple enough, right? Clark's report, entitled ***Boundary between Texas and New Mexico - Report of Commissioner - relative to the 32° of latitude and the 103rd Meridian between the 32nd and 33rd degree of latitude - Survey commenced September 1858 - Report made September 1861***, is not terribly lengthy, but I could not help but be drawn to these two paragraphs:

"By the 15th of April the 32nd parallel was run and marked from the Rio Grande to the Pecos, and in 3 days thereafter a flag was set on the "Llano Estacado" in the further prolongation of the line. By establishing a depot of water, it was continued out on the Plain for 35 miles & marked by monuments where it had again to be broken in consequence of the entire absence of water, and the presence of deep sand. The nearest water after leaving the Pecos was in the white sand hills, distant, in a direct line, 65 miles, & its discovery costs no little time, risk & exposure. By making a considerable detour to the South, however, I managed to get supplies to these sand hills where I had the gratification to be able to determine the parallel for the 5th and last time and 22nd of May erected the monument marking its intersection with the 103rd Meridian,

Photo by Trigg Lupher.

Having completed the 32nd parallel I turned Northward on the 103rd Meridian using pack mules exclusively as heavy sand precluded the possibility of taking wagons along. The Meridian was traced up to the 33rd parallel although every drop of water used had to be transported from the white sand hills."

Not a lot has changed from Clark's 1861 description of the land (reporting on 1859 field work). In the 156 years that have passed since Clark and his crew were on the ground, the sands have shifted, but little else has changed. A kind of lonely two-lane asphalt road (Texas North FM 2118) runs north/south along the Texas-New Mexico border just to the east of the corner, and of course well sites that weren't there in 1861 litter the landscape in all directions when viewed from an aerial perspective. Other than that it is a brutal landscape of sand and scrub that somehow begets a rare beauty. The kind of beauty you come to appreciate only after you have left the place and begin seeing it in your mind's eye.

The corner itself is situated on private property, land belonging to D. K. Boyd and his wife T. J. They call it the *"Frying Pan Ranch" (use your imagination!)* and it is said to contain 137,372 acres. When approached, the Boyd's were happy to let Craig and his group of surveyors restore the corner. As reported in the Spring 2011 Magazine "The Land Report" they like to look at the big picture: *"We need to leave something for future generations that's better than what we have…You have to look at the long term, because the land's going to be there forever."* Indeed it is.

Standing near the corner and looking from west to north it is easy to imagine being part of Clark's original field party. And that's what it's all about, right? Judge George Washington Smith, author of the classic 1867 Texas Supreme Court decision on Stafford v. King 30 Texas 257 (1867) said it first and best: "… *The actual identification of the survey, the footsteps of the surveyor on the ground, should always be followed, by whatever rule they may be traced."* Many times as surveyors we are stymied in following those footsteps, particularly when they are ancient footsteps, vanishing footsteps. But not so in this case. Here we *know* we are standing where Clark stood. We can read about it (in his field notes); we can see it; we can touch it; we can feel it. And that is gratifying and worth perpetuating, not only because this is a significant corner, but because we are doing what it is that surveyors do.

But it is not just Clark's footsteps that we are following. We are following in a virtual trail of footsteps left by an incredible array of pioneer surveyors, mappers, scientists and adventurers. The history of this corner and these boundary lines is fascinating. Remarkably well-documented, it is a story of politics, of disagreement and compromise, of blood, sweat and tears, of unquenched thirst, of men working together and of men in discord. Boundaries, particularly on a grand scale, can sometimes be nebulous things (contrary to our inner survey sanctum). So here this crew gathered on a crisp April day in 2015, standing in the same spot on earth that a similar crew stood in May of 1859 and again in April of 1911. Cool beans.

(See SOUTHEAST CORNER, page 17)

The Southeast Corner of New Mexico

Photo by Quentin Garcin.


Photo by Trigg Lupher.

(Continued from page 16)

There is a whirlwind of United States history from 1803 to 1850. Manifest Destiny was leading the young country westward, and boundaries were changing at a rate we can hardly imagine today. Major events were contouring the land: the Louisiana Purchase in 1803, which doubled the size of the U.S.; the Adams-Onis Treaty of 1819, which ceded Florida to the U.S. and defined a new border between the U.S. and Mexico; the 1845 annexation of Texas into the U.S., which triggered the Mexican-American war between 1846 and 1848 and ended with the Treaty of Guadalupe Hidalgo and Mexico ceding almost all of the present American southwest and upper California to the U.S.; and finally, the Compromise of 1850. These events are all significant, but the Compromise of 1850 particularly so in the context of this article.


Photo by Trigg Lupher.

In the aftermath of the Mexican-American war many questions beset the growing American nation. Foremost was the question of how best, on multiple levels, to manage the land acquired by force from Mexico as set out in the Treaty of Guadalupe Hidalgo. The Treaty set out the major consequences of the war: the Mexican Cession of the territories of Northern California and New Mexico, and the long awaited acceptance by Mexico of the loss of Texas and the establishment of the Rio Grande River as a national border. The question of slavery was at the forefront of the question – would it be allowed in the new territories? The laws created in the Compromise included:

- Admitting California as a free state
- Creating Utah and New Mexico Territories with the question of slavery in each to be determined by popular vote
- Settling a long standing Texas-New Mexico boundary dispute in favor of Texas (one of several "wins" for a young Texas)
- Ending the slave trade in Washington DC
- Making it easier for southerners to recover fugitive slaves

The results of the Mexican American War brought Texas into serious conflict with the U.S. Government over Texas boundary claims. During the spring and summer of 1850, Congress grappled with an array of claims, proposals, and lines on maps that sliced Texas up like a patchwork quilt. On August 5, Sen. James A. Pierce of Maryland introduced a bill that offered Texas $10 million in exchange for ceding to the national government all land north and west of a boundary beginning at the 100th Meridian where it intersects the parallel of 36°30', then running west along that parallel to the 103rd Meridian, south to the 32d parallel, and from that point west to the Rio Grande. Texas would cede all territory outside this line for an amount of 10 million dollars in U.S. stock bearing 5 percent interest, redeemable at the end of 14 years. After some tense negotiations, this one stuck, just barely, and on September 9, 1850, President Millard Fillmore signed the compromise into law. The Texas Legislature accepted the proposal on November 25th, and the Texas New Mexico boundary lines were finally resolved – at least on paper! The compromise line ran the Texas western boundary from El Paso east along the thirty-second parallel to the 103rd Meridian, thence north up that Meridian to 36°30' latitude, and thence east along that line to the 100th Meridian, thence down the 100th Meridian to the Red River. The 36°30' line was chosen since Texas was a slave state, and that line had been established in 1820 as the Missouri Compromise line between slave and free territory in the

(See SOUTHEAST CORNER, page 18)

The Southeast Corner of New Mexico

(Continued from page 17)

Louisiana Purchase. The 100th Meridian was chosen as the point at which the border would depart from the Red River and head north because it was approximately equidistant from the headwaters of the Arkansas River (106°) and the point where the Arkansas crosses into Louisiana.

Almost nine years passed before any effort was made to define the boundary lines. The U.S. did not authorize a survey of the lines until 1858, and included a budget not to exceed $80,000 to pay for it. U.S. Secretary of the Interior Jacob Thompson appointed John H. Clark to serve as commissioner on behalf of the United States. Texas appointed William R. Scurry, a lawyer and army officer, to serve as Texas Boundary Commissioner.

Photo by Quentin Garcin.

TEXAS – NEW MEXICO BOUNDARY LINE SURVEYS *(perhaps not 100% complete, but substantially the footsteps we are following):*

- Jacob Thompson, U.S. Secretary of the Interior, appointed John H. Clark to serve as Commissioner on the part of the United States. Clark appointed J. E. Weyss assistant surveyor and Hugh Campbell assistant astronomer. Gov. Runnels of Texas appointed William R. Scurry as the Commissioner on the part of Texas. He also appointed Charles A. Snowden as surveyor and John H. Pleasants as clerk or secretary. Pleasants later resigned and Scurry appointed Anson Mills as his secretary pro tem. Mills was a surveyor who had attended West Point. According to Clark, *"the surveying was actually done in this manner: Mr. Weyss did all the work, and Mr. Mills looked on and took a copy his notes."* Ultimately Scurry and the rest of the Texas Commission resigned; Clark carried on. According to Clark the party traveled a total of 1,248 miles to survey 211.4246 miles along the 32nd parallel. Thirty-two monuments were established along the way. When he turned north along the 103rd Meridian he traversed as far as the 33rd parallel and erected three monuments along the way before suspending the work due to lack of water. He then attempted, as instructed, to run a Meridian near the Pecos River and establish the 103rd Meridian by offset. This effort he also abandoned due to the sandy terrain and lack of water. He ultimately started again from the northwest corner of Texas at the intersection of the intended 103rd Meridian and the 36°30' parallel and headed south to approximately the 34th Meridian where he again stopped the survey. With this final effort Clark concluded his survey, leaving a hiatus of some 56 miles between his two endpoints. Including the NW corner, a total of 23 monuments were set along this line. (1858-1861)
- In 1872, prior to the Clark line confirmation by the State of Texas by the Act of March 25, 1891, R. B. Willison, U.S. Deputy Surveyor found and identified Clark Monuments 9, 10, 11, 13, 15 and 17.
- John J. Major, a U.S. Surveyor, attempted to locate Clark's NW corner monument in 1874, but could not find it.
- J. T. Munson surveyed the 5,000,000 acre Capital Reservation in 1880, from which 3,050,000 acres was used to finance the new (and current) Texas state capitol.

Photo by Trigg Lupher.

- W. S. Mabry retraced the Clark and Munson surveys between 1882 and 1885.
- In 1882, A. C. Babcock of the Taylor, Babcock and Company of Chicago for the first time inspected the land it received in the state capitol transaction. He sought out W. S. Mabry, District Surveyor of Oldham County as his guide.
- In 1883 U.S. Deputy Surveyors Taylor and Fuss found and identified Clark Monuments 15 & 17.
- In 1892 W. D. Twichell (Texas) and Mark Howell (New Mexico) surveyed the 56 mile 296 vara hiatus between the two endpoints of Clark's lines.
- In 1900 Levi S. Preston retraced Clark's survey and determined that the northwest corner of the famous XIT Ranch fence line was at or near Clark's original corner

(See SOUTHEAST CORNER, page 19)

The Southeast Corner of New Mexico

Photo by Ed Trujillo.

(Continued from page 18)

- In 1903 Arthur D. Kidder, Examiner of Surveys for the U.S. General Land Office, again retraced Clark's survey of both the 32nd parallel and the 103rd Meridian. Kidder determined that Clark's error on the northwest corner was 2.29 miles west of the Meridian on the north, running south for a distance of about 172 miles. Clarks' survey of the 103rd Meridian left a hiatus between the 33rd and the 34th parallels and the two lines, if projected, would not meet. Kidder ultimately proclaimed that *"the longitude is perhaps the most incorrect of any land line in the United States."*
- In 1911 Congress authorized a commission to re-establish and re-monument the boundary line along the 103rd Meridian. Francis M. Cockrell, Commissioner on Part of the United States and Sam R. Scott, Commissioner on the Part of Texas (The Scott--Cockrell Commission) assisted by G. D. D. Kirkpatrick, Lee S. Miller and Robert S. Hunnicutt, started at Clark's southeast corner of New Mexico – the very corner that is the subject of this article. The commission surveyed south to north, and for the first time formally spanned the hiatus left by Clark.

New Mexico became a State in January of 1912. The boundary lines should have been copacetic by then, right? Not so much, at least not in the eyes of the people of New Mexico. As you've probably now surmised, the line originally located by Clark is situated approximately 2.29 miles west of the true 103rd Meridian at the northwest corner and 3.84 miles west of the true 103rd Meridian at the southeast corner. The common boundary line between Texas and New Mexico along the panhandle is approximately 310 miles long. When you do the math you will find something north of 600,000 acres which technically should have been located in New Mexico. In 2003 and again in 2005 New Mexico sued the State of Texas for the return of or compensation for 603,485 acres, and it wasn't the first time. After all, the 103rd Meridian was the boundary line between New Mexico and Texas as set out in the Compromise of 1850. At least that is the argument made by New Mexico. But it is not to be. As surveyors we are taught that boundaries reside where the original surveyor placed them. A found and called for monument is golden, and it is true here as well. A Senate Judiciary Committee reporting on a joint resolution affirming the Clark line stated: *"it is reasonably clear that Clark did not establish the true astronomical one hundred and third meridian, yet it is no longer an open question that ancient errors in the*

(See SOUTHEAST CORNER, page 22)

The Southeast Corner of New Mexico

(Continued from page 19)

running and marking of a boundary line, which have been accepted and acted upon and acquiesced in by both parties, can not (sic) be corrected." In reaching that conclusion the Committee held two principles of boundary law:

(1) *Once a boundary line has been run and established and "adhered to from (sic) years, neither party can be absolved from them upon showing errors, mistakes or misapprehensions of their terms, or in the line established."*
(2) *When a new state comes into the Union, she is bound by the acts of her predecessor."*

The Clark line, then, as established on the ground, *"both by formal legislative adoption in 1891 by both governments and by long exercise of sovereignty by the State and acquiescence by the United States, constitutes the true boundary and can not (sic) be changed."*

MONUMENTAL HISTORY:

Forgetting for the moment that the location of the southeast corner of New Mexico is not where it was intended to be, but is where it was actually placed by Clark, here is a description of what both Clark and Cockrell set as evidenced by their field notes:

Photo by Craig Alderman.

Clark's Monument 32 (as described by Clark in his report of 1861): *"At the intersection of the 32nd Parallel & the 103rd Meridian. This is a mound of very sandy soil. It has a bottle buried in it which contains the Latitude & Longitude of the point, a list of names of the members of the Commission and the date of its erection."* Clark described his earthen monuments as being *"…of large dimensions and of the most substantial material possible. I believe they will endure the wear of time, wild animals, and wild Indians as well as any monument ever constructed in the United States to mark boundary lines."*

The Scott-Cockrell Commission in its 1911 re-survey of the Clark boundary found, for the southeast corner of New Mexico, an iron pipe 6 inches in diameter (a self-described well casing) 52 inches long, set 16 inches in the ground. As described by Cockrell in his report of April 18, 1911: *"At the point occupied by said iron pipe I construct a concrete monument having a cubical base 30 ins. square, set 30 ins. into the ground, and a superstructure in the form of a frustum of a cone, incased in galvanized iron, with a lower diameter of 24 ins., an upper diameter of 18 ins., and projecting 30 ins. above ground; in the top of which there is embedded a brass plate, 6 ins. dia., marked,*

"CLARK BOUNDARY 1859", in the north half,
"GENERAL LAND OFFICE RESESTABLISHMENT 1911
UNITED STATES BOUNDARY COMMISSION", in the south half and in the center (an east/west – north/south right angle line with the words NEW MEXICO on the upper left and TEXAS on the lower right).

"A bottle was placed in the center of the monument, in which were placed the following papers:"

"A copy of the Act of Congress providing for the survey, and a paper signed by all members of the survey party, as follows:"

"Reestablishment Apr. 18, 1911, in accordance with the enclosed act:"

Then the list of the 18 names and signatures of the entire survey party. And finally, his concluding comment:

"I raise a mound of stone around this monument 7 ft. base and 1 ½ ft. high."

One hundred and four years later the mound is long gone as is the brass plate, but the concrete monument is still there with the indentions of the "feet" of the brass plate still evident in the concrete. It's probably safe to say that the bottle placed in the center of the monument is still there as well, but tempting as it was to go after it, we held off! There is a galvanized sign post making the location, but the sign is gone. I kind of wonder how it read. Alas, survey markers make such fine souvenirs! Craig and his compadres from both Texas and New Mexico deserve so much credit for taking it upon themselves to restore this monument. Both the Texas General Land Office and the United States Bureau of Land Management were contacted and endorsed this effort. Ira Hardin obtained a new brass disk from Berntsen and it has the same east/west – north/south right angle line but on its face it now it reads NM and TX in their correct relationship to the boundary lines with NMPS on the west edge and TSPS on the right edge. The year "2015" in the lower half completes all the annotation. Gary Jones of Hobbs, NM oversaw the production of the cover plate, which prior to installation was a beautiful 200 pound steel cocktail table powder coated in black with a hole situated dead center to allow access to the disk. An outline of both Texas and New Mexico state boundary lines together with both the TSPS and NMPS monikers make for a stylish cover plate – one that will, I hope, provide the disk some protection from treasure hunters. The installation and dedication was a fitting tribute to the lengthy trail, both literally and figuratively, that led to this location.

I am not the first to study and report on this interesting story. Far from it. Ralph H. Brock, a Texas Tech graduate who practices civil and criminal appellate law in Texas state and federal courts penned the definitive work on this topic, which appeared in the April 2006 issue of *The Southwestern Historical Quarterly* (published by the University of Texas Press, Journals Division, Austin, Texas). It is the last word on this topic and a must read for anyone interested in Texas boundaries. Also, I must mention Mr. Fred Roeder, LS, a Registered Land Surveyor in New Mexico, Arizona, Arkansas and Oklahoma. Mr. Roeder followed up on the same topic with articles and commentary which appeared in the winter 2007

(See SOUTHEAST CORNER, page 23)

(Continued from page 22)

and April 2009 issues of *The American Surveyor*, (a publication of Cheves Media LLC). I have relied heavily on both writers for content in this article. But foremost, at least for me, is the fantastic work done by Craig Alderman of Midland. Craig, a leader in the Permian Basin Chapter of TSPS, recruited me for the TSPS Course Development Team a couple of years ago and was the mastermind for the "Exploring Texas Boundaries" Seminar that TSPS currently sponsors. He also is heavily involved in the "High Plains Experience" boundary retracement in Channing, Texas and helps coordinate the Golf and CEU's Seminar held annually (with the Llano Estacado Chapter of the NMPS) in Ruidoso, New Mexico. Craig is a soft-spoken guy with a big appetite for surveying history in Texas and a work ethic like few I've ever come across. At Craig's suggestion the Permian Basin Chapter invited me out to Midland to witness the Restoration first hand and prepare this article. To say the trip was an honor and a privilege would be an understatement. I'm hopeful this article in some small way expresses my heartfelt appreciation, not only for the experience I had, but also for the good work Craig and his colleagues out west do for our profession.

(Mike Hoover has been surveying the lands of the greater Houston area since 1987. He is Senior Geomatics Manager of the Houston Office of McKim & Creed and is a Past President of the Gulf Coast Chapter 9 (Houston). He is currently serving the members of TSPS as a state level Director. Mike is a dedicated student of the study of the history, disposition and surveying of the public domain of the State of Texas and has been a past contributor to the Texas Surveyor.)

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