Behind the Wall: Historic Inscriptions at the Fort Meade Firing Range

Sturgis, South Dakota

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TRU Technologies LLC 503 Calhoun Lane Billings, MT 59101 406-259-6595 turbaniak@bresnan.net Funded by a 2021 grant from the Bear Butte Creek Historical Preservation Council, during the third week of September, 2021, a survey team assembled by Timothy Urbaniak of TRU Technologies LLC performed a historic inscription inventory of a historical target range located on property that was once part of Fort Meade, South Dakota. The intent of the project is to record and catalog historic inscriptions dating primarily from after the end of the First World War through, and after, the Second World War. The inscriptions are located on a masonry wall that extends over 500' across the firing range meadow, with the heaviest inscribing done at the area used for mechanically raising and lowering targets.

To record the location and individual inscriptions, digital photography and 360-degree navigable images of the site were obtained, in addition to a physical survey and recordation. From the image documentation, photogrammetry was used to create 3D models that include the sandstone blocks with carved station numbers, where inscription concentrations occur. A searchable digital record was created that documents the many historic inscriptions at the site. Once created, histories can now be explored that document some of the men that served behind the wall.

Introduction

Fort Meade was originally established by the United States Army in 1878, east of what is now Sturgis, South Dakota. Troops were withdrawn in 1944 and the Veterans Administration (VA) took over the grounds and buildings.¹ The Bureau of Land Management (BLM) received management of the old military reservation in 1956 with the exception of 700 acres retained by the VA. The firing range where the project is located is currently managed by the local school district. In 1974, Fort Meade was listed as a National Register District. The firing range is mentioned in the nomination, but was not described. The complete firing range layout was last documented in 2017 in an *Updated Site Form for 39MD3002.103*² by Quality Services, Inc. of Rapid City, South Dakota. This project documents the several hundred historic inscriptions carved onto the wall that protected the target personnel from range fire.

Field Processes

On a sunny Monday, September 13, 2021, the field team of documentarians were guided to the structure (Figure 1) by local historic resources representatives. In preparation for the project, the Bureau of Land Management (BLM) had cleared all bushes, trees, and associated brush from the wall. This greatly assisted in the inventory of the historic inscriptions and their documentation. The accessibility of the project and was very much appreciated by the field team.

¹ Patrick Walker-Kuntz, *Fort Meade 270 Shovel Test Investigations, South Dakota*, Field Research Services, November 28, 2005, p. 1.

² *Ft. Meade Firing Range*, 39MD3002.103, South Dakota Archeological Research Site Form, Quality Services, Inc., Rapid City, South Dakota, 2017.

For the project, TRU Technologies LLC owner and project lead Tim Urbaniak utilized a GPS located Canon³ EOS 6D Mark II camera for photogrammetry and detail images and a GoPro Max⁴ for 360-degree photography; James Busse used a Canon EOS Rebel T6i for details and scale documentation and interpreted inscription content; Robin Mutchler interpreted and transcribed inscription content; and Garry Worthington used a Canon EOS Rebel T3i for detail and photogrammetry images and measured and sketched the masonry structure. The site was revisited by the team on September 14th for additional detail images and documentation checks (Figure 2).

Resulting Material and Office Processes

The resulting field data is in the form of two field sketches of the structure (Figure 3), 30 pages of hand-written inscription records (Figure 4), over 2500 digital photos, and 360-degree images. The dimensions are typically noted in a "running dimension" style. The field sketches have been converted to general plan and elevation view CAD drawings (Figure 5).

Over sixteen photogrammetry models have been created including one of each of the sandstone reference number stones (Figure 6), and a small incised head. Many of these models have enough three-dimensional relief of the number and associated inscriptions that they could be 3D printed for display (Figure 7 and Figure 8). These models have been stored as Agisoft Metashape .psx files,⁵ 3d printing .stl files, and navigable 3D .pdf files. Following an initial review of collected field data, it was determined that the site has been successfully documented as per the methods described. Results from photogrammetry and panoramic image sets (Figure 9) have been added to the digital image and database record. The field transcribed inscription reference sheets served as an excellent primary source for establishing a dataset. All project files are stored in an appropriate data folder structure.

A spreadsheet for the project was created from the field notes of the inscriptions recorded during the field session. The completed database was then reviewed, compared to detail images from the site, and updated as file *Fort Meade Inscriptions* 1-16-2022 – *Revisions Complete.xlsx*. These linked images can be viewed from within the spreadsheet if it is in a folder with the appropriate images, such as the copy that can be found in the *Fort Meade Inscriptions Field Visit* 9-13-2021 *Tim* folder. Additional images of the immediate area can be viewed my navigating forward or backward within the folder. With the advantage of enhancement technology

³ Canon Cameras, Viewed online on 9-20-2021 at <u>https://www.canon.com.cy/cameras/dslr-cameras/</u>.

⁴ GoPro Max, Viewed online on 9-20-2021 at <u>https://gopro.com/en/us/shop/cameras/max/CHDHZ-202-master.html</u>.

⁵ Agisoft Metashape Standard, Viewed online at 1-24-2022 at <u>https://www.agisoft.com/</u>.

and image software to double-check the inscriptions, approximately 30% additional inscription entries were added to the database in the lab setting through the application of graphics software enhancements that include clarifying (Figure 10), contrast, and spectrum enhancement tools in addition to the ability to magnify the high resolution images for detailed inspection and the ability to 'highlight' images digitally in order to more accurately track the recording of images (Figure 11). Further inspection could occur by applying digital shadowcasting techniques to the three-dimensional models that have been constructed of the number areas. The conclusion that additional inscriptions can be observed and therefore added to the record in a lab setting does not cast aspersions on the field recording process or personnel who are subject to elements of time, lighting, and brief observation; but rather serves to illuminate the value of digital processes continuing to be integrated into historical research.

The Structure

A brief historic inventory site form for the Ft. Meade Rifle Range states that "this rifle range was constructed in the late 19th century according to U.S. Army regulations and use for training activities at Ft. Meade until the post was closed in 1944."⁶ Although a *Report of the Surgeon General of the Army*,⁷ 1910, mentions that many construction improvements were made to the fort beginning in 1896 and continuing through 1910, the firing range is not specifically mentioned. While the construction appears to have taken place in stages, the general layout of the firing range follows the recommendations of Captain Stanhope E. Blunt who in 1885 published construction guidance in *Instructions in Rifle and Carbine firing for the United States Army*.⁸ The entire range encompasses an area 850 meters north to south and 200 meters east to west.

The structure upon which the inscriptions can be found is comprised of stone masonry, primarily limestone, with some sandstone mixed in. The overall structure is approximately 16" in thickness and is 532'-6" in length from east to west, punctuated by a 21'-6" x 58'-6" building with 14" walls located 141' from the east end and 533' from the west end (Figure 12). The 21'-6" x 58'-6" structure is also of masonry construction with wooden doors and a shed type roof, currently collapsed. Double doors 8' wide with an arched top were constructed on each (east and west) end. The north face of the building has two windows, also with arched headers. Where the south wall of the building is composed of a section of the long wall, the top has been extended 3' above the elevations of the west wall section. Along the remainder of the wall, a soil berm on the south side spreads to the

⁶ D. B. Miller, File *39 MD 41 (Ft Meade Rifle Range).pdf*, South Dakota Historic Inventory.

⁷ *Report of the Surgeon General of the Army*, 1910, Pp. 64-69.

⁸ Stanhope E. Blunt, *Instruction in Rifle and Carbine Firing for the United States Army*, New York, Charles Scribner's Sons, 1885.

top of the western wall (Figure 13). The eastern wall extends one foot vertical above the soil berm, and has been capped with concrete. A 7'-3" x 10'-5" room, also with a shed roof, was constructed at the far east end of the complex to serve as a latrine, with approximately four 'seating stations' along the south wall and a urine trough mounted on the east wall. The complex appears to have been built in multiple stages of construction, noting by the addition to the height, vertical seams at horizontal intervals, and length extension on the west section. Along the western portion of the wall, electrical wires enclosed in flexible conduit extend to the west from the blockhouse, with occasional vertical drops.

Shooting from the south to the north (Figure 14), the moveable targets were stationed along the western section of the wall, with carved sandstone blocks averaging 18" x 18" positioned at 18' intervals from near the western wall of the building to the west. The sandstone blocks have been carved with numbers beginning with "14" and ending with "1," toward the western end of the wall. Each number stone has a sandstone sill. Tool marks similar to those found on the number inscriptions can be found occasionally on stones along the wall. At the base of the wall, a concrete footing\bench extends 1'-6" out from the base of the wall and 1'-2" in thickness. A 3" thick concrete walkway along this footing\bench extends the length of the western section of wall that is 2'-6" wide. Centered on the station marker blocks are pits measuring 2'-6" x 9', presumably holders for the targets that were raised and lowered from behind the wall. Dimensional lumber and metal brackets can still be found in these pits. On the hillside behind (to the north) of the wall, grooves have been worn into the hillside, engraved by bullets fired at the targets (Figure 15). It is notable that the evenly distributed lines on the hillside(s) cover the full extent of the wall (Figure 16), not just the portion with embedded numbers.

The extreme majority of the inscriptions occur to the west of the blockhouse structure, located proximal to the incised numbers on the sandstone blocks that marked target locations. Few inscriptions occur in the blockhouse or along the eastern part of the wall. Notably absent of inscriptions is the latrine area, probably due to the limestone stones used and the absence of sandstone blocks. The inscription density rapidly drops off to the west once past the incised sandstone number "1." All photographers and recorders began at the incised sandstone number "14" (Figure 3) and proceeded to work to the west. The flow of all panoramic, recording, detail images, and inscriptions transcribed onsite follow this pattern. Images of the entire primary inscription wall, suitable for panorama stitching; along with image sets suitable for photogrammetric modeling were obtained by photographers Garry Worthington (approximately 900 images) and Tim Urbaniak (Approximately 1200 images). Approximately 370 images with a scale present were obtained by James Busse.

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Findings

There are approximately 660 inscriptions documented, depending on the selection of associative clustering. This count includes letters, names, and figures that could be deciphered enough for reasonably accurate documentation. Each recorded inscription can be referenced with the line number in the spreadsheet or Database Record Number (DRN). With rare exception, the inscriptions range in size from ½" to 12" tall, the majority being between 1-2" tall, and are done in a block lettering style. Of rare exception to this are two inscriptions performed in cursive. Cursive being used rarely, as compared to block lettering, is a ratio common among historic inscription sites across the Northern Plains⁹ and beyond.

There are 141 inscriptions that identify a year as all or part of date information. In addition to the years noted, there are multiple occurrences that identify specific months and days. The earliest identified inscription is a faint number 22, presumably 1922, between Block 3 and Block 2. As this is the earliest date found, and the inscription is of a quality that could contribute to misinterpretation, it can also be considered that this is someone's age, or abbreviated year of their birth. There is no potential misinterpretation of the inscription "Tenn JR 24" however, verifying the wall's presence in presumably 1924 (Figure 18). An inscription of "CHR 25" is of reasonable quality, and a concluding inscription of "Cameron Oct, 1929" (Figure 19) verifies the construction of the wall during the 1920s.

The density of inscriptions with years included grew slightly in 1933 (3), 1934 (3), and 1935 (4), but increased dramatically in 1936 (16) and 1937 (19). With the period of greatest density between 1935 and 1944, the peak inscription year was 1943, with a count of 35 (Figure 17).

Of the inscriptions recorded, 350 are single, two-, or three-characters initials. Initials are occasionally punctuated, both when occurring as an isolate, in a set, or preceding a last name. Initials are occasionally conjoined, and several examples occur at this site. There are approximately 40 inscriptions that are either enclosed by a box, triangle, circle, parallelogram, banner, or keg. Assuredly, there are innumerable faint scratches and eroded messages lost to the natural forces of time. Initials, even when occurring as a set, can be difficult to associate with a specific individual, but some sets of initials present include additional information such as rank, geographical reference, date, or are associated with a drawing. Samples of inscriptions that are primarily initial-based include¹⁰:

⁹ *Historic Inscriptions of the Northern Plains: Identity and Influence in the Residual Communication Record,* Timothy R. Urbaniak, University of Montana Anthropology PhD Dissertation, 2014.

¹⁰ Tables 1-6 are extractions from the full database file *Fort Meade Inscriptions*1-16-2022 – *revisions Complete.xlsx*.

Table 1 – Select Initial-based Inscriptions

| Inscription | Database | Notes |
|-----------------------------|-------------|---|
| | Record | |
| | Number | |
| J. D. | 39 | Initials are associated with profile drawings of female |
| | | and male heads |
| D. R. L. 5 1943 | 130 | Presumably May of 1943 |
| JG | 147 | Conjoined letters, several sets at this site |
| M N J July 8 1937 | 149 | Initials with specific date |
| 42 O T | 165 | Year and initials |
| J. K. 42 | 166 | Initials and year |
| C H R 25 | 172 | Is it 1925? Appears early for the construction of the |
| | | range wall. Could it be their birth year? Or their age? |
| A C U 1942 | 179 | Initials and year |
| HOR | 180 and 181 | H O R was the original inscription of initials, someone |
| | | added letters to spell "WHORE" |
| Н Ѕ 1933-36 | 182 | Presumably inscribed in 1936, reflects all or parts of four |
| | | years there |
| С Ү 2-17-32 | 210 | February of 1932, verifying an early date for existence of |
| | | the wall or a misread 37 |
| H B W May 39 | 215 | Clear inscription representing 1939 |
| J B 38 | 216 | Initials and year of 1938 |
| V. L. G. 1939 | 217 | Initials and year of 1939, not the cluster of 1938 and |
| | | 1939-year references |
| H B W 39 | 232 | Initials and presumably 1939 |
| R. W. L. T. A. 1938 to 1942 | 235 | Two sets of initials with a range of years |
| СК43 | 247 | Initials and year |
| W. C. 43 | 252 | Initials and year |
| W G 1941-44 | 275 | Initials and a range of years |
| L H H 1937 | 284 | Initials and year |
| H. Q. 1939 | 344 | Initials and year |
| ССЈ 1943 | 345 | Initials and year |

| L. B. H. M. G. 6/27 40 | 366 | Two sets of initials, June 27 of 1940 |
|-----------------------------|-----|--|
| В. Т. 1935 | 372 | Initials and year |
| R H 36 | 374 | Initials and year |
| M B 37 | 384 | Initials and year |
| R H 1937 | 406 | Initials and year |
| G B T 6/21/43 | 476 | Initials and June 21, 1943 |
| W A G 1937 | 506 | Initials and year |
| W E 79 | 552 | Initials and the year of 1979, which in the case of this |
| | | contemporary inscription could commemorate a |
| | | graduation year |
| A S Z July 11 1937 | 566 | Initials and a specific early date |
| A J S 43 | 576 | Initials and year |
| L S U 42 | 598 | Initials and year |
| C H M 43 | 607 | Initials and year |
| F L A 1943 | 672 | Initials and year |
| G P A 22 | 680 | 1922? Birth year? 22 years old? |
| L M April 27 1943 | 683 | Initials, date, hometown |
| Oakland Calif | | |
| TH AH 1937 | 685 | Two initial sets and year |
| G. R. R. 6/2/38 | 720 | Initials and date of June 2, 1938 |
| F D S 43 | 732 | Initials and year |
| V D N 43 | 744 | Initials and year |
| F B 43 | 746 | Initials and year |
| F E 43 | 754 | Initials and year |
| НВ 35 | 756 | Initials and year |
| LCA | 780 | Pigment – not incised |
| East Greenwich Rhode Island | | |

There are 244 names or name fragments recorded. These consist of identifiable single first names, last names, complete names, partial names, name fragments, and initials with a last name. Select names shown here have a stronger probability of being able to verify the individuals that they represent than inscriptions with initials alone. Many of these names potentially identify ethnicity. Many of these inscriptions and inscription sets also

contain additional information that may include referencing geographic locations, dates, and/or military rank. As the vast majority of the documented inscriptions represent identity, it is notable that they follow standard distributive patterning of historic inscriptions by first representing the inscribers name, followed by when they were there, then identifying their hometown or place of origin, then – as is common for inscriptions that are made by those in military service – their rank and/or outfit. Inscriptions containing such military inscriptions can be found as Table 3.

| Inscription | Database Record | Notes |
|-------------------|-----------------|---|
| | Number | |
| Joe Freen | 49 | |
| Wm Falk 1934 | 58 | William |
| E. S. Ridenour | 101 | Presumably incised in 1939, this inscription |
| 36-37-38-39 | | reflects an extended stay |
| H Cervantes | 107 | |
| B. Poqski 1940 | 110 | |
| 1937 Tom | 114 | No last name, but dated |
| Ratcliff 6/28/40 | 134 | Identifies a specific day |
| S. Koronkiew | 144 | Name, year, and hometown |
| Feb 43 | | |
| Norwalk Conn | | |
| Vic R Sinclair 42 | 146 | |
| G D Rice | 154 | Initials, last name, and hometown |
| Syracuse New York | | |
| Ed 1941 | 160 | First name and year |
| Rand Kaus | 163 | Brothers? Cousins? |
| T H Kaus | 193 | |
| Harry F. Payne | 192 | |
| Cunningham 37-40 | 201 | Presumably done in 1940, Cunningham was there |
| | | for three years |
| Stuffy | 206 | Nickname? Last name? |
| Henn N April 35 | 234 | April of 1935, an early date for the wall |

Table 2 – Select inscriptions containing partial or complete names

| Pat Gillis 36 | 254 | 1936 |
|---|-------------|--|
| COBURN 8-13-38 | 280 | Last name and specific day in August |
| Ayala 6-43 | 281 | Single name, month, and year |
| Husted 8-15-39 | 282 | Last name and specific day in August |
| Locuss Klomp | 285 | |
| Herney 33 35 | 303 | Last name and two years – is 1934 implied? |
| L. L. Benson 1936 | 312 | Initials, last name, and year |
| Burch 1936 | 319 | Last name and year |
| E. Ridenour H Q 1938 | 342 | First name initial, last name and H Q association? |
| | | With year |
| L. E. Wood 3 rd Div Inf 10/26/51 | 343 | Initials, last name, identity as outfit, and specific |
| | | date in 1951, late for use of the wall |
| ZIG 43 | 353 | Nickname? And year |
| Art 41 | 354 | First name and year |
| Florindo Fregonas | 360 | |
| Powell 1937 | 368 | Last name and year |
| G B Hazeldahl | 388 | Initials with last name, potentially identifiable |
| L C Canuck 6/1/193? | 393 | Initials, last name, June 1 of a day in the 30s – last |
| | | number indecipherable |
| Neil H 68 | 394 | Historically late in the use of the range, but still |
| | | beyond the 50-year threshold |
| Tex | 395 and 396 | Two instances of "Tex" – same person or common |
| | | nickname? |
| Francis Allerd | 431 | |
| Cleve D. Creeper 9/23/43 | 433 | |
| W. H. Wilson 11-28-39 H. Q. | 447 | Initials, last name, November 28 of 1939 and a |
| | | reference to 'headquarters' |
| Bill Stetson | 448 | |
| A M + S K 98 | 451 | An example of contemporary communication |
| | | expressing a romantic bond, rare at this site |
| Tenn J R L 24 | 452 | Number 24 is quite plain, Tennessee? |
| McCracken 9/23/36 | 466 | Last name and September 23, 1936 |

| Wright 7-7-37 | 468 | Last name and July 7, 1937 |
|-----------------------------|-----|---|
| J. R. Guiterrez | 480 | Initials and last name |
| Ray Martis 1940 | 486 | |
| W F White 36-37 | 505 | Initials, last name, and range of years |
| Pvt L. D. Squier Tr A | 515 | Rank, initials, last name, troop, location, and a |
| Ft Meade So Dak | | date of September 23, 1936 |
| 9/23/36 | | |
| L W Paddock | 516 | Initials, last name, location, and date |
| Ft. Meade, So Dak | | |
| July 10, 1937 | | |
| C Schmitz | 520 | Initial, last name, headquarters, Troop W, |
| HQ Tr W G Omaha | | Company G, Omaha, Nebraska hometown |
| Larsen H. Q. T. 1933 May 24 | 530 | Last name and initials? Includes date of May 24, |
| | | 1933 |
| J. Kuchera | 575 | Initial and last name |
| Pavelich | 579 | Last name only |
| Joe Bowman | 599 | Full name |
| Harvey Tindall 1940 | 602 | Full name and year |
| A Cast?? 36 | 604 | Initial, partial last name, year |
| Miller 43 RO | 636 | Last name, year, initials? |
| 43 Cokinoe | 638 | Last name and year |
| Puci Sept. 13 | 644 | Name and date without year |
| FLAMM??? March 4 43 | 649 | Partial last name and date |
| Kitti 43 | 652 | Name and year |
| L Queen W. Va. 6 1943 | 673 | Initial, last name, home state, June of 1943 |
| J G Macreil Oct 2 | 688 | Initials, last name, month and day |
| Harry Whsey 1941 | 727 | Full name and year |
| A F Neiley | 740 | Initials and last name |
| H. A. Larson | 743 | Initials and last name |
| C F Hauge 39 | 749 | Initials, last name, year |
| Keller "37" | 750 | Last name and year |
| V/N Larson | 752 | Initials, name, and year |

| September 23 36 | | |
|-------------------------------|-----|-------------------------------------|
| F R Myles 19 th 43 | 774 | Initials, last name, unit, and year |
| Frank Maresh | 783 | |

Table 3 – All inscriptions with military reference as part of identity

| Inscription | Database Record | Notes |
|------------------------------------|-----------------|--------------------------------------|
| | Number | |
| PVT Morris | 14 | Private |
| PvT Mark | 22 | Private |
| PVT Cameron | 26 | Private |
| Oct 1929 | | |
| PVT D OS?EN 1936 | 28 | Private |
| PVT Mike Rohod | 36 | Private |
| MA Allison Troop B | 43 | |
| Hal Cuff BRIG. HQ 1943 | 233 | |
| H. C. PVT | 274 | Private |
| L. E. Wood 3 rd Div Inf | 343 | |
| 10/26/51 | | |
| W D Troop 23 | 385 | |
| Paul Furlong 43 | 442 | |
| Pampa Texas 88 th INF | | |
| Wilson W. H. | 447 | |
| 11-28-39 H.Q. | | |
| Pvt L. D. Squier | 515 | Private |
| Tr A 9/23/36 | | |
| C Schmitz 5/27/39 | 520 | |
| HQ Tr W G Omaha | | |
| MESS Heilmein Stolley 34 | 623 | Worked in the Mess? 1934 |
| SNAFU 1948 | 770 | Interesting military saying, postwar |

There are 28 inscriptions that reference geographic locations. Two are cross-listed with Table 3.

Table 4 – All inscriptions that reference geographic locations

| Inscription | Database Record | Notes |
|----------------------------------|-----------------|--------------------------------------|
| | Number | |
| Beau CA | 18 | California |
| Utah | 46 | Not associated with initials or name |
| OBJ Rule, Texas | 86 | Texas |
| Rocky Rhoades 1936 | 90 | California |
| San Francisco | | |
| S. Koronkiew Feb 43 | 144 | Connecticut |
| Norwalk Conn | | |
| G. D. Rice 36-39 | 154 | New York |
| Syracuse New York | | |
| USA | 178 | By an immigrant? |
| Paul E Heenan 1943 | 194 | New York |
| Buffalo N.Y. | | |
| E.F.N. PA | 255 | Pennsylvania |
| Pat V. Lamey | 265 | Rhode Island |
| Pawtucket RI | | |
| A. J. P. USA 8 | 305 | |
| Marion Harkn 4/22/41 | 432 | Harkin? Iowa |
| Akron Iowa | | |
| Paul Furlong 43 | 442 | Texas |
| Pampa Texas 88 th Inf | | |
| J. R. 24 TENN | 452 | Tennessee |
| Pvt L. D. Squier TR A | 515 | South Dakota |
| 9/23/36 | | |
| Ft Meade So Dak | | |
| L W Paddock | 516 | South Dakota |
| July 10, 1937 | | |
| Ft. Meade, So Dak | | |
| C Schmitz 5/27/39 | 520 | Nebraska |
| Omaha | | |

| El Paso | 524 | Texas |
|--------------------|-----|---------------|
| M. Elias N.Y.C. | 578 | New York |
| Earl Samson "43" | 581 | California |
| SAN DIEGO | | |
| W. E. D. | 628 | Michigan |
| Decatur Mich | | |
| Alliance Ohio | 631 | Ohio |
| G H A DEER RIVER | 651 | Minnesota |
| L Queen 6 1943 | 673 | West Virginia |
| W. VA. | | |
| L M April 27 1943 | 683 | California |
| Oakland Calif | | |
| R B Maine | 686 | Maine |
| Mass | 707 | Massachusetts |
| LCA East Greenwich | 780 | Rhode Island |
| Rhode Island | | |

Table 5 represents text found among the inscriptions that are outside of formal identity, perhaps identifying themselves or others by nickname. One is potentially a racial slur, interesting given the racial history of the fort and general region. No complete phrase was found to be inscribed, nor is any profanity present, save one image noted in Table 6.

Table 5 - Interesting text

| Inscription | Database Record | Notes |
|---------------------|-----------------|--|
| | Number | |
| WARHOOP VS BOYNEMAN | 317 | |
| NIGER | 321 | Racial slur? |
| WINE | 434 | Wishful thinking? |
| Wild Bill Woo | 511 | "Wild Bill" and "Killer" in same incised box |
| Killer Malano | 512 | "Wild Bill" and "Killer" in same incised box |

There are twenty inscriptions that are drawings. They include drawings of a dog, lips, male and female heads, a heart, multiple representations of skull and crossbones, and a singular occurrence of male and female genitalia. Five representations of human faces or heads may be statements of identity, in contrast to five representations of the skull-and-crossbones insignia, which generally represents danger. Portions of anatomy can be found in inscriptions of lips, an eye, a vulva, and a penis pointing toward it. It is notable that a single heart inscription was found, far fewer in density than at other historic inscription sites across the Northern Plains.¹¹

Table 6 – All inscribed drawings

| Inscription | Database | Notes |
|--|---------------|-------------|
| | Record Number | |
| Side view of a dog, facing right | 27 | (Figure 20) |
| (west) | | |
| Female and male head profiles - | 39 | (Figure 21) |
| woman's hair style and men's hat | | |
| Face profile looking left (east) - Has | 150 | |
| an interesting hair style for the | | |
| period | | |
| 3D human head carved deep into | 196 | (Figure 22) |
| stone | | |
| Nazi Swastika | 249 | (Figure 23) |
| Incised ghostly face – potential skull | 262 | |
| and crossbones | | |
| Skull and crossbones | 352 | |
| Three boxes with the two end ones | 514 | |
| x'd to the corners & center one with | | |
| horizontal and vertical divisions | | |
| Barrel or keg (has El Paso inscribed) | 524 | |
| Skull and crossbones | 556 | |
| Skull and crossbones | 564 | |
| Skull and crossbones | 616 | |

¹¹ *Historic Inscriptions of the Northern Plains: Identity and Influence in the Residual Communication Record*, Timothy R. Urbaniak, University of Montana Anthropology PhD Dissertation, 2014, P. 105.

| Banner with date number box and | 623 | (Figure 24) This inscription cluster may be |
|---------------------------------------|-----|---|
| potential compass | | Masonic, as per a capital "G" and compass |
| A hole in the stone has been | 671 | (Figure 25) |
| exploited to represent a vulva form. | | |
| Pointing towards it from the right is | | |
| a penis figure. | | |
| | | |
| Woman's face in profile | 677 | |
| Heart shape | 678 | |
| Inscription with parallel lines that | 679 | |
| form a crossed figure | | |
| Bas relief mouth and tongue looking | 708 | |
| out of the rock | | |
| Bas relief of an eye is inscribed | 712 | (Figure 26) |
| looking out | | |
| Swastika with one leg wrong | 722 | |

Historical Framework

Fort Meade was originally established by the United States Army in 1878, east of what is now Sturgis, South Dakota.¹² During the latter part of the 1800s, Fort Meade is associated notable events that include being the home of the Seventh Cavalry, following the elimination of Custer at Little Big Horn (1878-1888)¹³; the court martial of Major Reno (1880); the Wounded Knee Massacre (1890), where soldiers from the Fort participated; the first playing of the "The Star-Spangled Banner" (1892), and the confinement of the Utes (1906-1907), considered to be the last military campaign on the Northern Plains.

Throughout its existence, Fort Meade ebbed and flowed with troops, functions, and the local community. Since 1917, America had been involved in World War I in Europe, and in 1918, the Fort was "virtually abandoned,"¹⁴ although it did serve as a recruiting station. The Fort continued to be unstaffed, with the exception of caretakers, into 1922. In 1922, field training for the National Guard's state militiamen was held there. During the summer of 1922, three groups of the 147th Field Artillery Regiment came for training.¹⁵ National Guard training

¹² Robert Lee, *Fort Meade and the Black Hills*, University of Nebraska Press, P. 42.

¹³ Ibid, P. 89.

¹⁴ Ibid, P. 197.

¹⁵ Ibid, P. 201.

was also held there in 1924. Regular troops finally returned in May of 1924, and it was restored as a regimental post in 1927. The army reorganized its cavalry regiments early in 1928. It included a machine-gun troop, band, headquarters, and two troop squadrons. The first squadron was formed by Troops A and B and the second by Troops A and F of the Fourth Cavalry, still using horses at the time. The Civilian Conservation Corps of South Dakota was headquartered out of Fort Meade in 1933.¹⁶ By the mid-summer of 1933, over 1700 men had been processed at the fort for service in the Black Hills. Men from a Soil Conservation Unit, Company 2765, engaged in work that included "timber stand improvement, road construction, dam building, and soil erosion control work."¹⁷

In the summer of 1934, troops of the Fourth Cavalry traveled to a site 12 miles southwest of Rapid City, South Dakota to assist in the launching of a balloon attempting to established the world's record for the highest balloon flight into the stratosphere. The flight was a joint venture between the National Geographic Society and the U. S. Army Air Corps. On the morning of July 28, 1934, the balloon reached an altitude of 60,613 feet – 624 feet short of the record – before developing a tear that sent it back to earth near Holdrege, Nebraska. Troops from Fort Meade also supported a second attempt that was made on November 11, 1935 when the balloon rose to an altitude of 72,395, setting a new record which stood for 22 years. Through the latter part of the 1930s, the presence of troops at Fort Meade continued to be meager. In 1940, Works Projects Administration (WPA) workers from the Sturgis area worked on construction projects at the fort that included "constructing a hay storage shed and retaining walls, renovating twenty-five officers' quarters, *veneering many of the building with cut stone*, hard-surfacing the roads on the post, laying sidewalks, *enlarging the water system and target ranges*, and erecting fourteen miles of fencing."¹⁸ In 1940, the army continued its shift to a mechanized infantry, with a Troop containing "405 .30 and .50 caliber machine guns, 259 .45 caliber submachine guns, 88 scout cars and 171 motorcycles."¹⁹ For the mechanized troops, a large area of land was procured approximately twentyfive miles northeast of the fort was leased for target practice.

In January of 1941, drafted conscripts under the new Selective Service Act from the region began arriving at Fort Meade. Inductees were given training by both the horse and mechanized units of the Fourth while developing a new "snow troop" composed of officers and men selected from several troops. Equipped for winter conditions, they would undergo further training in the nearby Black Hills. Following the events of December 7, 1941,

¹⁶ Ibid, P. 207.

¹⁷ Ibid, P. 209.

¹⁸ Ibid, P. 214.

¹⁹ Ibid, P. 216.

security was upgraded at the fort. Guards were posted at the water pumps and water reservoir and the public was warned to "stay away from the reservoir and firing ranges."²⁰ Work at Fort Meade was shifted from conservation work to national defense, including fencing the military reservation and *enlarging the firing ranges*. Members of the Fourth Cavalry left Fort Meade in January of 1943 for war service, but were replaced by the Eighty-Eight Glider Infantry Regiment. The number of men being trained in infantry tactics at Fort Meade varied between twelve and fifteen hundred. The Eighty-eighth left Fort Meade in November and travelled overseas to take part in the Normandy Invasion. Following their departure, the only companies remaining at Fort Meade were the 1744th Service Command Unit, which consisted of caretakers, a Signal Corps detachment, the Woman's Army Corps (WAC) detachment, and 620th Engineer General Service Company.

The 620th was created in 1942 as all non-officers consisted of men that were suspected of disloyalty to the United States or of subversive activity. With a staff of five officers and 127 enlisted men, many of the men were draftees, some of them non-citizens. These men were issued no arms and performed primarily non-sensitive tasks across the base. They were "primarily of German or Italian origin, although there was also a smattering of Danes, Finns, Hungarians, Yugoslavians, and White Russians in the company."²¹ They were the last company-sized army unit stationed at Fort Meade prior to its end as a military installation.

The last of the troops were withdrawn in 1944 and the fort grounds and buildings were turned over to the Veterans Administration (VA) to convert the fort to a medical facility.²² The Bureau of Land Management (BLM) received management of the old military reservation in 1956 with the exception of 700 acres retained by the VA.

Conclusions

These historic inscriptions document the presence of military men that primarily served from 1932 to 1945, with evidence linking to construction and presence of the wall the early 1920s, if not earlier. During that time, men left identity information that includes initials, names, dates, hometown locations, their rank, and incised images that included a dog, lips, male and female heads, a heart, multiple skull and crossbones symbols, a probable masonic inscription, and a singular occurrence of male and female genitalia. No written profanity was found. No religious text or iconography was found. Beyond 1945, single inscriptions dating to 1946, 1951, 1960, 1967,

²⁰ Ibid, P. 219.

²¹ Ibid, P. 225.

²² Patrick Walker-Kuntz, *Fort Meade 270 Shovel Test Investigations, South Dakota*, Field Research Services, November 28, 2005, p. 1.

1979, 1998 and 2008 extend the communication into contemporary times and document the continuing presence of visitors at the site.

These historic inscriptions generally follow the behaviors of those found elsewhere across the Northern Plains and beyond. Identity in a new landscape is foundational, with representation originating with initials, names, and dates prior to expanding into the addition of additional information. Historic inscriptions often place specific people on the landscape at a specific time as defined by date, further defined by hometowns, and - as has been common since the times of Roman soldiers in Europe through military detachments on the Northern Plains in the 19th century - their military rank and unit.

The database serves as a foundation to further explore who the men were that served their country 'behind the wall,' raising and lowering targets for the war effort. Additional military records can now be reviewed for matches, further genealogy links can be explored, and military members can be acknowledged through the data provided (Figure 29).

The physical structure of the wall is clearly continuing to deteriorate, but appears undisturbed by recent public visitation. The foliage clearing accomplished by the BLM prior to our visit was priceless and contributed positively to our ability to collect data. Regardless of the future destiny of this cultural resource, the resulting information from this project contributes to the preservation of the historic inscriptions that date primarily from soon after World War I, through the Second World War period and into contemporary times.

References

Agisoft

2022 Metashape Standard, Viewed online on 1-24-2022 at https://www.agisoft.com/.

Blunt, Stanhope E.

1885 Instruction in Rifle and Carbine Firing for the United States Army, New York, Charles Scribner's Sons.

Canon Cameras

2021 Viewed online on 9-20-2021 at https://www.canon.com.cy/cameras/dslr-cameras/.

Carpenter, Mark

2017 *Ft. Meade Firing Range*, 39MD3002.103, South Dakota Archeological Research Site Form, Quality Services, Inc., Rapid City, South Dakota.

GoPro Max

2021 Viewed online on 9-20-2021 at https://gopro.com/en/us/shop/cameras/max/CHDHZ-202-master.html.

Lee, Robert

1991 Fort Meade and the Black Hills, University of Nebraska Press.

Miller, D. B.

File 39 MD 41 (Ft Meade Rifle Range).pdf, South Dakota Historic Inventory.

Surgeon General of the Army

1910 Report of the Surgeon General of the Army.

Urbaniak, Timothy R.

2014 *Historic Inscriptions of the Northern Plains: Identity and Influence in the Residual Communication Record,* University of Montana, Anthropology PhD Dissertation, 2014.

Walker-Kuntz, Patrick

2005 Fort Meade 270 Shovel Test Investigations, South Dakota, Field Research Services, November 28.



Figure 1 – Site panorama looking east (left) to west (right).



Figure 2 – James Busse (left) and Robin Mutchler (right) interpreting and recording inscriptions.



Figure 3 – Field Sketch of Wall Structure.

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Figure 4 – Typical Inscription field notes.



Figure 5 – Firing Wall Plan and Elevation Looking South.



Figure 6 – The Station 14 marker incised into a sandstone block embedded in the masonry wall.



Figure 7 – Station 4 marker photogrammetry model in Metashape with cameras located.



Figure 8 – Station 8 marker photogrammetry model shown as surface model.



Figure 9 – Stitched panorama covering the range wall from between Stations 10 (right) and 11 (left).



Figure 10 – Station 9 marker image before and after digital clarification.



Figure 11 – Station 5 marker image showing the application of digital highlighting. In some instances, this was utilized after the application of digital clarification.



Figure 12 – Looking eastward from the west end along the back of the range wall.



Figure 13 – Looking westward from the top of the berm along the range wall.



Figure 14 – Looking southward toward the rifle placements from above the wall.



Figure 15 – Looking northwest across the lines in the soil made by bullet impacts over time.



Figure 16 – Plan view from Google Earth showing impact lines for entirety of wall. This may be indicative of early use, before the mechanical targets were installed.



Figure 17 – Inscription Distribution by Years Documented.



Figure 18 – Inscription showing 24, presumably 1924.²³



Figure 19 – Inscription showing "Cameron Oct, 1929."24

 ²³ Excerpt from image file IMG_4478.JPG.
 ²⁴ Excerpt from image file IMG_3992.JPG.



Figure 20 – Inscription showing an incised dog or poorly drawn horse with saddle and stirrup.²⁵



Figure 21 – Inscriptions of male and female heads.²⁶

 ²⁵ Excerpt from image file IMG_3992.JPG.
 ²⁶ Excerpt from image file IMG_4026.JPG.



Figure 22 – Small inscribed head carved into the wall.²⁷



Figure 23 – Swastika carved into the wall. 28

²⁷ Excerpt from image file IMG_4174.JPG.
²⁸ Excerpt from image file IMG_4252.JPG.



Figure 24 – Incised capital "G" and possible compass, potentially Masonic.²⁹



Figure 25 – Incised vulviform (left) with a penis (right).³⁰

 ²⁹ Excerpt from image file IMG_4662.JPG.
 ³⁰ Excerpt from image file IMG_4694.JPG.



Figure 26 – Incised eye.³¹



Figure 27 – 1930s era photo of the target area behind the protective berm and wall being tended by the "sand rats in the pits." 32

³¹ Excerpt from image file IMG_4793.JPG.

³² Herbert B. Cleveland, Fort Meade D.T. S.D. 1878-1978: 100 Years of Service, 1978, P. 33.



Figure 28 – 1930s era photo of the firing range being used.³³



Garry Worthington Camera James Busse Camera Tim Urbaniak Camera and Data PSX, STL, and PDF Files Ref. images and Publications Final Report and Data

Figure 29 – Fort Meade Project folder structure.

³³ Herbert B. Cleveland, Fort Meade D.T. S.D. 1878-1978: 100 Years of Service, 1978, P. 32.