



Charles F.H. von Blucher and his surveying crew
 Photo courtesy Blucher Family Papers, Special Collections & Archives,
 Texas A&M University-Corpus Christi Bell Library.

This article is a two part article telling the story of the land surveying family of the von Bluchers and showing how for three generations the family was dedicated to the profession of surveying and land measurement as has been so typical of land survey professionals in American land development history. The story begins with Hans Helmuth Anton Felix von Blucher (1819-1879) and ends with a description of the modern scientific disciplines of the Geographic Information Science at Texas A & M University - Corpus Christi, which was endowed by the family of Conrad von Blucher, as a legacy of the family to their profession of land surveying.

The importance and necessity, yet enormity, of proper land survey in past American land development is well known to professional surveyors today and it was also recognized by the professionals of the von Blucher era. It required extreme personal dedication to produce high standards of accuracy in such times with the telescopic instruments and steel chains utilized. Triangulation and use of wheeled measuring devices also enabled surveyors to span the long distances across Texas to tie in the grants and townships. To visualize the task, consider that San Antonio and Laredo two of the earliest towns granted in the wilderness, were marked with official recorded survey monuments in the eighteenth century and, subsequently, the entire state has been required to be measured into tens of thousands of parcels of ownership that fit together supposedly without overlap or vacancy.

The von Blucher family surveyors are a unique example of such task being handed down from generation to generation. (Lange, 1961). Another highly important but lesser known accomplishment of the dedicated surveyors of the land title development era was their observation and accumulation of geographic measurement data taken during surveys though not necessarily related to land title boundaries. Such data included river and stream locations and water levels, coastal shorelines and tide levels, and miscellaneous topographic data, elevations, etc. (Intracoastal, 1956) (Morton, 1984) The use of this type of data today is a significant part of the Geographic Information Science, the institutional purpose of the Conrad Blucher Institute for Surveying and Science at Texas A & M -Corpus Christi.

The von Blucher family of Corpus Christi were land surveyors in South Texas for three family generations and held the position of Nueces County Surveyor substantially continuous from 1852 to 1954. Their legacy continues today in the Blucher Institute for Surveying and Science and the recently introduced Bachelor of Science in Geographic Information Science at Texas A & M University - Corpus Christi, all founded by an endowment from the von Blucher Family.

Felix von Blucher

Felix von Blucher arrived in New Orleans from Berlin at the age of 25 in 1845. He was a nobleman with Master of Arts Degrees in Civil Engineering, Law and Languages, and spoke 7 languages. Felix had received military training in the Prussian army, and was related to Field Marshall Gebhard Leberecht von Blucher, who has been given joint credit for the defeat of Napoleon at Waterloo. The Blucher family records date back to 1214. (Dodson, 1991) (DeGarmo, 1936)

Soon after arriving in America, Felix became a surveyor for a land development that is now New Braunfels. After a brief interlude with the U.S. Army in the war with Mexico he returned to New Braunfels, but stayed only a short time and again rejoined the Army as a linguistic interpreter for General Winfield Scott. In one of his interesting assignments, Felix interpreted for a Treaty with Comanches in which he drew pictures on the document as picture writing representing the Chief's signatures. During this army service Felix met H.L. Kinney, a land developer of

home describing Corpus as a pleasant surprise of attractive homes and stating that Felix was already called away by Kinney on a surveying project. (DeGarmo, 1936)(Dodson, 1991)

Maria was not eclipsed by the education and nobleman status of her husband. She was known as "The Beauty of Berlin" and she, like Felix, was a linguist. She had studied music under Franz Liszt and brought a fine rosewood piano to her new home. Over the years she taught music and languages to her children and to many local citizens. (DeGarmo, 1936) (Dodson, 1991)

Kinney was in the process of developing land, surveying and selling small tracts to immigrants. On November 15, 1849, Felix and Maria purchased a tract of about 8 acres from Kinney at a high point on the bluff overlooking Corpus Christi proper. It became their permanent homesite as well as that of their children and other descendants. (Dodson, 1991)

Legal authority for land development was being established by the relatively new Texas government. In April 1846, the Texas Legislature created the Nueces District extending from the Nueces River to the Rio Grande. On January 11, 1847, Jacob Snively, a Mexican-American War veteran, was appointed District Surveyor. The same day the first county public work was authorized, surveying a road along a reef dividing Corpus Christi Bay from Nueces Bay. In 1848 the local newspaper, the *Corpus Christi Star*, editorialized promotion of a road to be surveyed and built to connect Corpus Christi with Eagle Pass. On September 19, 1848, the *Star* reported that Col. Kinney had bought a steam dredging machine to deepen the channel at the bay entrance. That year a 170 foot long wharf was located and built. Projects requiring engineering and surveying were in demand. Felix Blucher was appointed Nueces County District Engineer and Surveyor in 1852. The district at that time extended to the Rio Grande and included what has since been separated into several counties. (Caller, 1952) (Deviney, 1933) In 1852 Corpus Christi incorporated.

Richard King became interested in the area and purchased a tract of about 15,000 acres some 30-40 miles southwest of Corpus Christi. He originally named it the Santa Gertrudis ranch. The ranch eventually expanded to well over 200,000 acres and is known today as the King Ranch. Blucher did the survey for the original King Ranch making two original maps, one of which is in the A & M University archives. Surveying ranch boundaries in South Texas became highly important. (Blucher, Texas A & M University-Corpus Christi Archives) (Caller, 1952) (Deviney, 1933)

By 1853 Felix was recognized to have talents of survey engineering as well as land measurement. He was engaged by General Smith to survey a road from Ft. Ewell (on the Nueces) to Ft. Duncan (on the Rio Grande at Eagle Pass)

and to establish water wells enroute. The purpose of the road and wells was to serve the U.S. Army in the event of war with Mexico. (DeGarmo, 1936) (Dodson, 1991) Felix also responded to surveying demands from other sources. In 1858 he took the additional position of Cameron District Surveyor in Brownsville and in 1860 he took also the position of County Surveyor of Live Oak County.

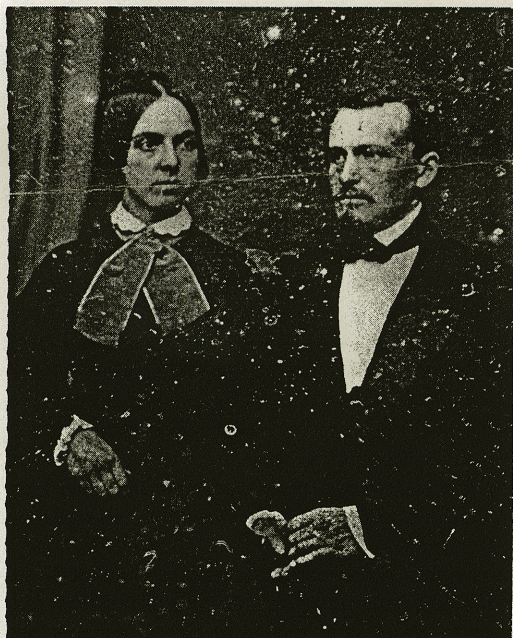
In 1859 Felix wrote his father that he was considerably involved in numerous *official* duties. He specifically listed; (1) District Surveyor, (2) Deputy Recorder of Land Titles, (3) Deputy Tax Collector, (4) An Alderman of Corpus Christi (City council member), (5) General Interpreter for the Court and (6) Bookkeeper for Belden & Co. Deputy Recorder and Deputy Tax Collector were related directly to his knowledge of land measure and title law. His exceptional linguistic ability well qualified him for the reading of land documents which at one time had been required to be written in Spanish. (DeGarmo, 1936) (Dodson, 1991)

As Alderman, Felix became involved with two significant engineering events, both requiring survey ability as well as special engineering talent. One was to recommend and examine all specifications for the ship channel between the docks in Corpus Christi and Aransas Pass. The specifications proposed by him were adopted by the official body and remained the basic guide for the project until its final completion in 1926. (DeGarmo, 1936) (Intracoastal, 1956) (Morton, 1984)

The other engineering event involved pure water storage for the City of Corpus Christi and was highly significant because of the era in which it was done. In the late 1850s Felix engineered the storage facilities, prepared ordinances to prevent contamination, and served as a health officer. Louis Pasteur (1822-1895) had initiated and established the *germ theory* of disease during this era, but the first U.S. engineered filtration systems were not developed until the 1870s. Felix had kept up with scientific developments of his era and was obviously *ahead of his times* in using the latest thinking in which to utilize his survey and engineering talents. (DeGarmo, 1936) (Dodson, 1991) (Freese, 1993)

Another interesting event demonstrating the versatile skill and ability of land surveyors took place during the Civil War. Felix was an artillery major in the Confederacy and designed and built coastal defense fortifications in the Gulf Coast area. On October 5, 1862, from about 2 miles out in Corpus Christi Bay, seven U.S. gunboats bombarded Corpus Christi. Using the only two artillery pieces available to him, Felix engaged the U.S. Navy in battle. He had surveyed in many reference

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aria and Felix A. von Blucher Photo courtesy Blucher family Papers, Special Collections & Archives, A&M University-Corpus Christi Bell Library.

Corpus Christi, purchased a small ranch (near Corpus Christi) from him and apparently decided to be involved in South Texas development as a land surveyor. Felix then returned to Germany for his bride to be. (DeGarmo, 1936)(Dodson, 1991)

Felix's bride, Maria Augusta Imme, was the daughter of a family friend engaged in manufacturing. Felix and Maria returned forthwith to America and stepped ashore in Corpus Christi to make their home on July 12, 1849. On July 14, 1849, Maria wrote a letter

points around the bay and with such prearranged precision and firing only about 30 shots, he hit gunboats with deadly accuracy, disabling one, and drove them off. A surveyor makes a good artilleryman.

(DeGarmo, 1936) (Dodson, 1991)

Felix was later in charge of designing defenses at various other points along the Gulf of Mexico, including Saluria, Pass Caballo, St. Joseph's Island, and Mustang Island, all a utilization of his survey expertise. (DeGarmo, 1936) The survey data he obtained on these projects was used by him later to make maps which became of much interest and value. Though he was not later personally involved in Gulf Coast shoreline maps, in the late 1800s his data and information was invaluable. (DeGarmo, 1936) Special large scale coastal mapping was done in the late 1800s, in 1930, and again in 1982. (Morton, 1984)

Such mapping data and data from Felix's other activities, as the channel dredging, were also of interest for shoreline development and control as related to wave action and erosion. One of the results of such type data accumulated by Gulf Coast area land surveyors was formation of an association in 1905 for the purpose of constructing 700 miles of intra-coastal canal, visualized by Engineer C.S.E. Holland. (Intracoastal, 1956) (Morton, 1984) The existing canal closely follows the location proposed by Felix.

After the war, Felix returned to Corpus Christi and resumed his old position of County Surveyor. He also resumed practice of engineering, land law, and translating. He became part of a firm named Lovenskfold, O'Dougherty and Blucher. During this era his survey practice took him as far northwest as Bee County and extended south to the Rio Grande. Though economics of the time were not the best, Blucher seemed to have plenty of work, mostly land surveys all over South Texas. (Blucher Bus. Records)

The importance of surveying during the Felix von Blucher era and following years cannot be overemphasized. One only needs to casually read the history of land titles in Texas to realize the enormous complications of the different types of grants that had been given by Spain, by Mexico, by the Republic of Texas, by the State of Texas and finally legitimized ultimately by treaty between the United States and Mexico. Various legislative acts were made specifically to implement recognition of land titles thusly made. A specific object of the legislation was to ascertain which lands justly belonged to whom, and to have the lands surveyed, mapped, and patented to such



Felix A. von Blucher during the war with Mexico. Photo courtesy Blucher Family Papers, Special Collections & Archives, A&M University-Corpus Christi Bell Library.

Clerk). Development of Texas was in progress and land was a keynote. Everybody needed a surveyor. Blucher was involved.

Felix had the ability of being a skilled linguist which set him apart as uniquely advantageous to South Texas land surveys. As Mexico invited Anglo-American colonists after 1821, however, the surveyors who came with such colonists were substantially Anglo. The field notes for these central and north east Texas colonies began to be written in English, which differed from the original requirement that records be written in Spanish, which was true of the South Texas grants below the Nueces River. Lange's excellent history of surveying of this era specifically lists 24 Anglo-American surveyors who were prominent in the early Mexican Grant colony surveys. The records of the County Clerks of Calhoun County, Jackson County and Victoria County show 30 other surveyors who prepared surveys up to 1900. There were skill

requirements from an early date, later becoming specific legislated requirements. (Lange, 1961) (Spry, 1980) (County Clerks Records) Blucher's ability both as a surveyor and as a linguist, however, had accounted for his special demand in the South Texas area.

Von Blucher sons and grandsons

Just after the Civil War in 1875, a Charter was issued for a railroad from Corpus Christi to Laredo and on into Mexico, to stimulate trade by connecting the Corpus Christi seaport to central Mexico. Felix Blucher was engaged as a consulting engineer and commenced surveying work, now employing two sons, Charles and Richard, as surveyor assistants.

Initial field surveying was completed and field notes were brought back to Corpus Christi for calculations and design planning. After about 90 miles of track were laid, the effort apparently was deemed beyond the resources of the enterprise and the venture was sold to another company which at that time was also building the Mexican National Railroad system. Felix turned to other surveying work but his son Charles stayed and worked for some time with the Mexican Railroad System. The Texas Mexican Railway commenced service in 1881. (DeGarmo, 1936) (Dodson, 1991) (Shanks, 1985)

Shortly after the railroad survey project Felix became a Special Deputy Surveyor for Zapata County, just down the Rio Grande from Laredo, in the area where the original *porciones* had been designated. He had worked on *porciones* before. During this work period, in 1878, Felix suffered a severe hemorrhage

rightful owners. Deadlines were set within which claimants must perfect claims, requiring surveys. (Lange, 1961) The geographic area of concern of Blucher's interest was substantially all the area south of the Nueces River to the Rio Grande. (Blucher Bus. Records)

In early Texas history there had been a substantial variety of grants. There had been grants to Indians and to townships, made by Spain, which included Laredo and San Antonio. There also had been grants to missions. (Lange, 1961) The Republic and State of Texas later also made many special grants, including those to veterans, to railroads, and to providers of *internal improvements*. The *internal improvement* grants were essentially subsidies paid in land to those who would provide needed matters, such as: building of ships, boring of artesian wells between the Nueces and the Rio Grande, construction of the state capitol building, and roads. (Lange, 1961) (Spry, 1980) All of these grants eventually required land title surveys of high accuracy.

In the smaller county areas local surveys and plats began to appear. For various reasons many were lost, but such originals that were delivered to the General Land office according to the law at the time are available. (Spry, 1980) As examples, the Calhoun County Clerk's records show only 17 maps or sketches filed from 1833 to 1900. Records of the Jackson County Clerk show township filings from 1877 of North Ganado, Edna, Lolita, Vanderbilt, Francitas, La Ward and Benview, mostly promoted by railroad development. Locations were selected, surveyed, and maps filed. It was part of the era. (Calhoun County Clerk) (Jackson County

while in Laredo. Immediately afterwards he went to King's Santa Gertrudis Ranch apparently both to convalesce further and to prepare to testify regarding boundary line surveys of the ranch. On February 4, 1879, a sudden norther caught him riding without a coat. He developed pneumonia and died 6th February 1879, to the last working at his profession of land titles and surveying. (DeGarmo, 1936) (Dodson, 1991) The personal dedication of Felix had ended, but the family tradition of surveying service was now able to be carried on by his sons.

By the start of the surveying for the Texas Mexican Railroad project, in 1873, Carl 'Charles', (1856-1938) Friederich Harvey von Blucher, Felix's oldest son, had been a member of Felix's crew since age sixteen and was already an efficient surveyor. Both he and his brother Richard were employed in the railroad survey. Charles continued on with railroad employment for a short time after the project was sold to the Mexican National Railroad System, and then returned to Corpus Christi.

Charles' early life appears to have been one of relative hardship as the Blucher family suffered from the pangs of the civil war. At school age he had only the opportunity to attend private schools in Corpus Christi but also from an early age worked with his father in surveying. He had wanted to become a doctor, but the times and his early work turned him to surveying as a career. Fortunately the teachers of those private schools were qualified to provide a higher education in mathematics, languages and other matters, so Charles was not without a good education even in this semi rural area. Like all his brothers and sister he was tri-lingual in English, Spanish and German. Undoubtedly, Charles' highly educated and industrious father and mother were main contributing factors to Charles' discipline of education and hard work. (DeGarmo, 1936) (Dodson, 1991)

By 1876, after leaving the railroad, Charles was fully engaged in a surveying and engineering business with another former engineer-surveyor who had come to the area for the railroad project, Major Hollub. Their surveying business prospered. When Felix died, Charles and a younger brother, George, became the main financial support of the family.

In 1880 Charles married Mary Ellen Muely, one of twelve children of an early pioneer merchant in Corpus Christi. Mary had known the Bluchers all her life and had taken piano lessons from her mother-in-law to be Maria. The marriage of Charles and Mary over the next 58 years epitomizes the family dedication and industriousness of the von Bluchers. They had five children all of whom obtained degrees from The University of Texas, including advanced degrees. Three were high school

valedictorians. The four sons all became engineers with substantial positions and the daughter dedicated her education to archives and librarianship in the Corpus Christi area. (DeGarmo, 1936) (Dodson, 1990) (Green, 1995)

Charles, like his father, was away from home considerably, living out in the brush, surveying. The life of a surveyor of those times was outdoors, camp fires at night, and hard labor. Also like his father, Charles took his sons to the outdoor places of surveying work. (Green, 1995)

Charles became the County Surveyor in 1882, three years after his father's death, the only real gap in the continuous 102 years of von Bluchers as the County Surveyor other than the Civil War period. He held the position until he retired in 1934 when he was succeeded by his second son, Conrad. Charles oldest son, Carl, was a land surveyor also and did considerable mapping of Southwest Texas until eventually he held the position of Chief Engineer for the Texas General Land Office. (Green, 1995) (Harrel, 1995)

Most of Charles' career was as a land surveyor. During the era of his life South Texas began to be more inhabited by immigrants from the north and land measurement and description for legal titles became increasingly important with regard to accuracy. This required the rigorous outdoor field work plus painstaking record keeping (without the use of modern day computers). For the professionals like the von Bluchers it was long hard hours of mental concentration. One must reflect on the ethical requirements, not to relax and not to do an inaccurate sloppy job just because there were few around to review your work. The von Bluchers are known to have been meticulous in their work and even today much

of their original field note record keeping is stored in the Archives of Texas A & M at Corpus Christi for use by today's land surveyors. (Green, 1995)

Our sincere thanks to Tom Krenick, Director of Special Collections & Archives, Texas A&M-Corpus Christi Bell Library, for his generous assistance in reproducing the Blucher family photographs for this article. Many of the maps, documents and photographs pertaining to the Bluchers and their surveying legacy are available for viewing at the Archives of Texas A & M University-Corpus Christi Bell Library.

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Hardy Seay Jr., TSPS President, (l), Anne Glasgow and Gilbert Johnson, TSPS Past President (r) attended the reception held in Houston for Lee & Jeaneen Cobourn (center) in January.