

# A CENTURY OF SOLUTIONS

T. BAKER SMITH



Many hours of hard work and effort went into the compilation of this project. What started off as a centennial anniversary token, quickly turned into a living story captured through a team of dedicated and driven people who all had one interest in mind – to share the T. Baker Smith legacy.

We would like to thank all those involved in this passion and acknowledge the many hours that went into our final product.

Our very talented core team consisted of:

Kenneth and Sheri Smith  
Clifford and Jo-Anne Smith  
Carl Brasseaux  
Don Davis

Lorre B. Autin  
Katie R. Cortez  
Heidi T. Landry  
Martha Lynn Lewis  
Paula Riche'  
Angelle C. Smith  
Christina Positerry Tucker

As well as the many associates and friends who contributed to the stories told, the projects explained, and the pride of TBS.



TBS

er Smith family  
TBS

Rachel Comeaux  
C. Baker Smith Family Fun Day  
TBS

Matthew Comeaux

Mike Ray

Grant

NATIONAL CHAMPIONSHIP  
NORCA  
LSU  
SOONERS LIGUE  
MARCH 4, 8:00 PM - NEW ORLEANS

NASSAU BAHAMAS

Charles

Charles

Charles

# HISTORICAL SNAPSHOT

## The Awards



1986 Louisiana Engineering Society Medal for Engineer-in-Management (Clifford)

1998 Who's Who Among American Builders, Contractors, and Design

2001 Lake Ponchartrain Award



2001 Corporate Mark of Honor by Nicholls State University Alumni Federation

2002 PIE – State of Louisiana Partners in Education Award



2002 LSU Civil Environmental Engineering Dept. Hall of Distinction (Clifford)

2002 Volunteer Activist Award (Kenny)

2003 SCIA President's Award (Clifford)



2003 Coalition to Restore Coastal Louisiana Stewardship Award (Clifford)

2003 Houma Courier's Most Useful Citizen (Clifford)



2004 BP Award – Endymion Pipeline Safety Award

2005 Houma Terrebonne Chamber of Commerce Large Business Citizenship Award



2005 Louisiana Legends Award (Clifford)

2006 ACEC College of Fellows, Community Service Award

2006 Shell Safety Award



2007 ENR Top 500 #435

2007 BP HSE Award



2007 Bunkhouse Award

2008 ENR Top 500 #467

2009 ENR Top 500 #323



2010 Bayou Industrial Group BIG Achiever Award

2011 ENR Top 500 #293

2011 Chevron HSE Award



2012 Distinguished Louisiana Tech Alumnus Award (Kenny)

2012 LSU Top 100: LSU Fastest Growing Tiger Business Award

2012 PSMJ Best AEC Employer Award



2012 ENR Top 500 #270

2012 Employee Engagement Award



2012 America's Wetlands Award (Clifford)

2012 T.F.A.E. – The James J. Buquet, Jr. Award of Distinction (Clifford)

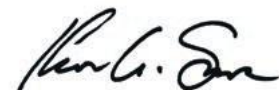
## PROLOGUE

*One hundred years ago, in 1913, my grandfather founded our firm. I use the words “our firm” to accurately recognize the generations of people who have been included in the T. Baker Smith (TBS) family. My grandfather’s commitment to precision has enabled thousands of lives to be directly influenced through the work and projects that TBS has been so fortunate to be a part of.*

*In celebrating our centennial anniversary, I decided to embark on a legacy project that would capture the drive and passion of both my grandfather and father. This book was written not only to honor my grandfather and his ambition to bring his community, Terrebonne Parish, into the Industrial Age with premier engineering and surveying services, but also to tell the story of my father and his hard work and efforts, first to develop and then to save his community while building TBS into a professional dynasty. The business culture and work ethic that I learned from both of them have also empowered me to continue building the firm they both so passionately dedicated their lives to.*

*Three generations of leadership and 100 years later, the quest of providing Superior Integrated Professional Solutions is engrained in our culture. I take great pride and pleasure in sharing our story and opening our history book to both educate and entertain you with our vivid recollections of where we have been, where we are going, and what TBS stands for.*

*I hope you enjoy reading and learning about the T. Baker Smith family. We have taken great pride in being a part of the Gulf Coast Region over the last 100 years and participating in so many exciting ventures. Built to last, through enduring, engaged associates who are anchored in tradition and leveraging technology, TBS is proud to celebrate A Century of Solutions.*





**FORMULA FOR SUCCESS**

*“The ability to survive is the ability to adapt.” Wm. Clifford Smith*

Very few businesses are fortunate enough to experience a centennial celebration. Indeed, fifty percent of all ventures fail in their first year, ninety-five percent within five years of their establishment. The percentage of companies reaching the 100 year milestone is infinitesimally small. Those that do survive are usually family corporations. Numerous studies of companies that achieve the century mark suggest these establishments endure because the founding family members infused certain beneficial core principles into the corporate DNA. Scholarly investigators have determined that these values share a number of remarkable characteristics, including:

- the ability to find and exploit an economic niche;
- a strong fundamental ideology, corporate culture, and substantive principles;

Central to this credo is a foundation based on the core values of uncompromising integrity, an unwavering commitment to superior service, and consistent quality.

- the ability to adapt to change while protecting that ideology, culture, and values;

Adaptation, as exemplified by the historical experience of T. Baker Smith (TBS), usually entails diversification across a wide variety of disciplines.

- the ability to preserve the firm’s original business model, despite expansion through diversification;
- effective and efficient integration and coordination of all business disciplines;
- a focused business strategy; and
- the realization that the firm’s associates are its greatest asset.

Businesses that retain loyal, long term associates consistently succeed. This is particularly true at TBS, where people and family genuinely matter and the firm’s associates demonstrate their gratitude with a sterling work ethic that promotes superior client relationships. The superlative work ethic of TBS’ associates consequently remains one of the firm’s greatest strengths.



David Martinez, P.L.S., Vice President of Surveying with 30 years of experience at TBS expresses, “Every company can say ‘we have a great work ethic,’ but we at TBS really are willing to do whatever it takes to get the job done. We always have been. I think surveyors, especially, carry that pride. I think one reason the firm has survived is that we are always there for our clients. They call at 8:00 in the evening; we’ve got a crew out the next morning. We get it done. We try to do it at a reasonable price and turn the product around quickly. That’s the only way you can make it. And I think that’s why we’ve survived. After Hurricanes Katrina and Rita, associate Todd Briley, Senior Project Manager in the Houma Survey group, worked fifteen hours a day for seven straight months, seven days a week. He never saw the sun. He came to work in the morning and did not leave until that night. And nobody told him he had to do that. He did it because he knew he had to get it done. Todd’s a 20 year veteran whose personal work ethic demanded he get the work done. That goes a long way with a client. We’ve made some great clients over the years because of that work ethic.”



*Three generations of Smiths - Thomas Baker, William Clifford, and Kenneth William*

Three generations of the Smith family have scrupulously followed this formula for success. Each generation has faced and overcome challenges and unforeseen hardships associated with changing times and circumstances. In addition to sharing the characteristics researchers identified as necessary for business survival, TBS’ leaders have shared various inherent family traits. These unspoken, but nevertheless vital, leadership and management principles have successfully guided the firm through alternating periods of prosperity and recession. The trait most fundamental to the firm’s success is the Smith family’s enduring entrepreneurial spirit. Through the effective use of local and regional resources, both human and natural, three generations of the Smith family have recognized and seized upon a diverse array of regional business opportunities.

Kenneth Wm. Smith, P.E., P.L.S., “Kenny”, President and CEO of the firm boasts, “Many landowners have admitted that when an oil and gas company comes to them and says, ‘Hey, we have a problem, but we’ve got T. Baker Smith working on it,’ they automatically feel much better knowing that it’s going to get fixed. And, get fixed right.”

The family's notable success in capitalizing upon opportunities has been dependent on individual associates understanding the big picture and anticipating long-term and short-term trends. During the mid to late twentieth century, this keen perception by TBS' leadership and associates positioned the firm at the very center of South Louisiana's rapid industrialization. Corporate development during the industrial boom of this era required TBS' leadership to take calculated risks, particularly as the firm successfully diversified, to take advantage of emerging niche markets and new computer-based technologies.

The resulting growth transformed TBS from a primarily surveying and civil engineering firm to a complex business enterprise that presently boasts eight professional practice areas: Urban Planning, Environmental, Surveying, Geophysical, Marine Positioning, Engineering, Construction Management, and Mapping/Geographic Information Systems. These professional practice areas are designed to provide a client with multi-functional solutions for a wide variety of challenges.

The Urban Planning group is the umbrella group that allows the firm to coordinate numerous tasks that help clients solve problems across a number of disciplines. Planning coordinates the big picture and focuses on how each practice area can best serve a client's overall needs. Urban, city, and town planning are technical and political processes concerned with the control of the use of land and design of the urban environment, including transportation networks, to guide and ensure the orderly development of communities. The discipline includes research and analysis, strategic thinking, architecture, urban design, public consultation, policy recommendations, implementation, and management.



*Urban Planning - Jimmy Ledet presenting plan at a public outreach meeting*

To meet this challenge, the Environmental group is often the first practice area to become engaged in a specific project. They provide key compliance, regulation, and permit expertise that allow a project to proceed in compliance with local, state, and federal regulations. Consequently, the Environmental group's support functions include: archaeological surveys, wetland delineations, wetland permitting, environmental mitigation,



*Environmental - Soil hydrology sampling*



*Environmental - Kenny King performing an oyster sampling*

species surveys, oyster biological assessments, discharge and air permitting, and environmental monitoring. The Environmental group is charged with helping clients meet environmental standards established by the National Environmental Policy Act (NEPA), American Antiquities Act, Clean Water Act, and other pertinent regulatory legislation.

Like the Environmental group, the Surveying group has kept pace with the rapidly evolving demands of the marketplace, driven in part by the blistering pace of technological change. To retain its leadership role in its traditional areas of strength, civil/centerline, pipeline integrity/depth of cover, 3D laser scanning, boundary/ALTA, right of way, and lease nominations and unit projects of any scale, the TBS Survey group fully utilizes the firm's integrated solutions business model to its advantage. Surveyors now collaborate with associates in the Environmental group and other field-oriented professional service groups to undertake jobs of any scale utilizing Global Positioning Systems (GPS) with centimeter accuracy; conventional topographic mapping; control and monumentation of physical points that define property boundaries to confirm a land survey's accuracy, construction control,



*Surveying - GPS survey of an exploration well*



*Surveying - Land based GPS survey*

engineering design, and planning; and hydrographic surveys using multi-beam sonar to chart water bottoms.

The Geophysical group (established in coastal waters in 1999 and offshore in 2004) and Marine Positioning group (established in 2004) augment the capabilities of the Surveying group. This is done with geophysical surveys; Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) archaeological and hazard surveys; pipeline investigation services; BOEMRE pre-lay surveys for the construction of offshore pipelines; BOEMRE offshore block “shoots” used to depict mapping and boundary information in the Gulf of Mexico; multibeam and Echo Scope 3D radar; and other underwater surveys necessary in the exploration, development, and movement of hydrocarbons from aquatic locations.



*Geophysical - TBS multibeam vessel and crew*

TBS has been in lock-step with the pioneers of offshore drilling since the inception of offshore drilling in October 1947. The firm has systematically moved from inshore environments to near-shore locations to offshore. Marine Positioning associates often work in tandem with a client’s marine construction professionals because the science involved in these disciplines is always challenging. Accuracy in positioning a dive



*Marine Positioning - Dive vessel being positioned next to a platform in the Gulf of Mexico*

vessel, pipe lay barge, rig, or performing a cable installation can be compromised by anything from water depth to adverse weather conditions. In open water, the marine unit must therefore continuously account for environmental variables while engaged in underwater acoustic positioning, remote operated vehicle (ROV) and dive support, rig positioning, 3D scanning sonar, site clearance requiring dynamically and non-dynamically positioned vessels, gyrocompass calibration surveys, and other support services.

Back on land, TBS professionals provide civil, environmental, structural, and coastal engineering services in-house and geotechnical, mechanical, and electrical engineering services through professional sub-consultants. TBS' Engineering group undertakes feasibility studies, generates terrain modeling, produces preliminary and final project designs, draws bid specifications and drawings, and values engineering.



*Engineering - Bayou Terrebonne Floodgate*

Earl J. Hicks, Former Terrebonne Airport Director explains, “I always looked for four qualifications during the engineering selection process: (1) experience within the project; (2) availability of the project engineer; (3) professionalism within the company; and (4) quality of project representation. TBS met those qualifications. In summary, quality of engineering, representation, and a high degree of service are reasons to choose TBS.”

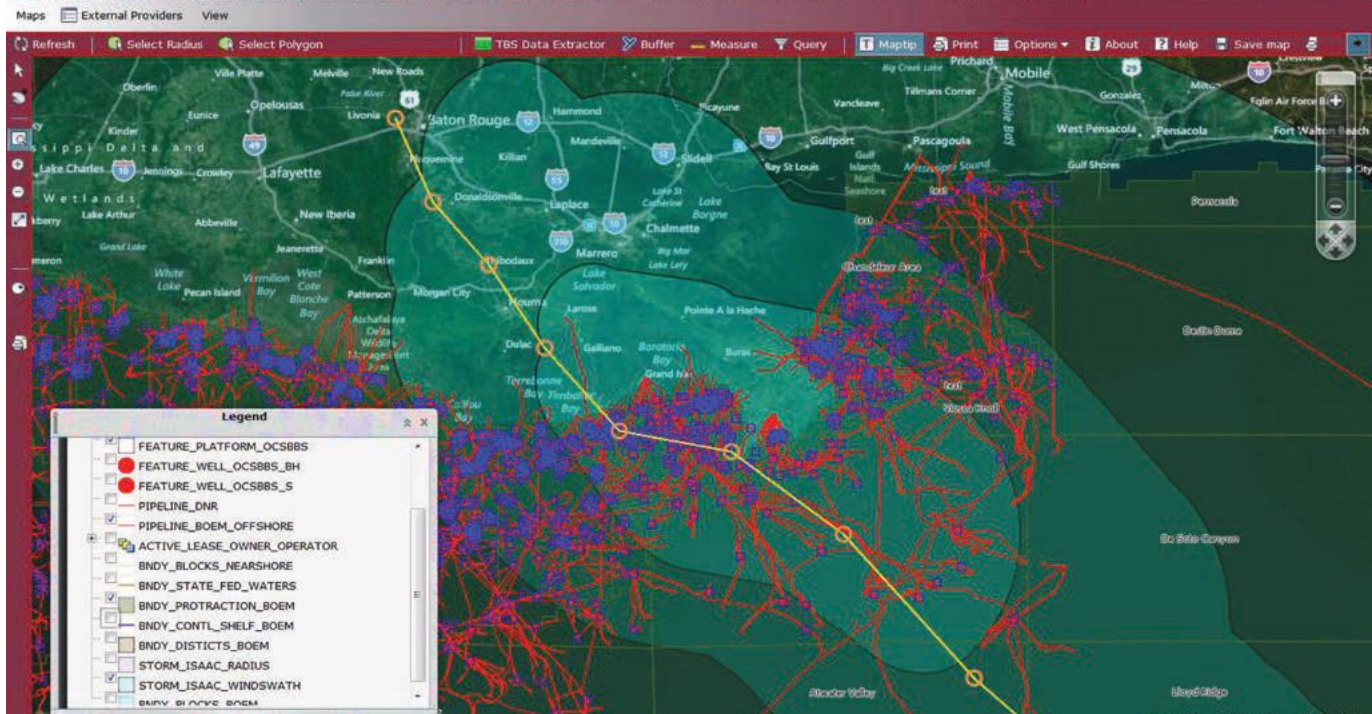


*Construction Management - Steel sheetpile bulkhead along the Intracoastal Waterway*



*Construction Management - Project representation of drainage improvements in the city of Thibodaux*

While many of these engineering services consist of planning and pre-construction activities, the Construction Management group (created in 2003) offers a host of services ranging from bid development to project and construction management, construction inspections, record drawings, and project closeouts. All of this output is stored physically in the firm's manuscript archives and digitally in the Houston office. The stored



*Mapping/GIS - Hurricane Isac track within the TBS/GIS system*

information is maintained by the firm’s Mapping/GIS, Information Technology, and Records group. The data and professional services provided by this unit constitute crucial building blocks in the initial stages of project design and development. Current and historical data is always relevant, and the firm’s vast storehouse of this type of material puts TBS at the forefront of maximizing a client’s time by minimizing the need to repeat old surveys.

The firm’s broad palette of complementary professional services facilitates cooperative interaction among the eight TBS professional practice areas. Though individually distinct, these groups are fully integrated through the firm’s proprietary digital software and corporate philosophy, which demand the application of all necessary and relevant TBS resources, both human and physical, to provide uniquely tailored solutions from integrated project teams. This approach, best articulated in the firm’s mission statement, “Superior Integrated Professional Solutions,” permits TBS to most effectively, creatively, and efficiently meet the unique needs of each project. The TBS process begins with identification of the client’s needs and expectations and ends with delivery of products and services exceeding the client’s expectations that not only build a project, but a strategic relationship with the client.



# INTEGRATED BUSINESS MODEL



At the center of the TBS integrated approach to solutions, the firm continues to revolve around its original core practice areas, civil engineering and surveying. Surveying activities constituted TBS' original economic lifeblood and remains at the very heart of the civil engineering and surveying practices.

The foundation of the firm's surveying and mapping practice areas is built around an appreciation of boundaries and the preservation of property rights. Surveys provide order to the landscape. Without them, there would be endless boundary claims and counterclaims. Everything from small cemetery plots to the geometric street patterns of new subdivisions to highway and pipeline rights-of-way require detailed surveys to define and mark boundaries that become permanent features by force of law. The amount of attention commonly paid to man-made boundaries is directly proportional to the value of the surface rights and, since the dawn of the Age of Petroleum, the subsurface rights as well.

William Clifford Smith, P.E., P.L.S., "Clifford", Chairman of the Board, explains "As the value of the surface of the land increased, whether it was from oil and gas, fur (fur had become profitable and people wanted to know where their fur leases were), or, every now and then, somebody got concerned about where their oyster lease was, survey work was done. Generally, as the value of the surface of the land went up, more survey work was done."



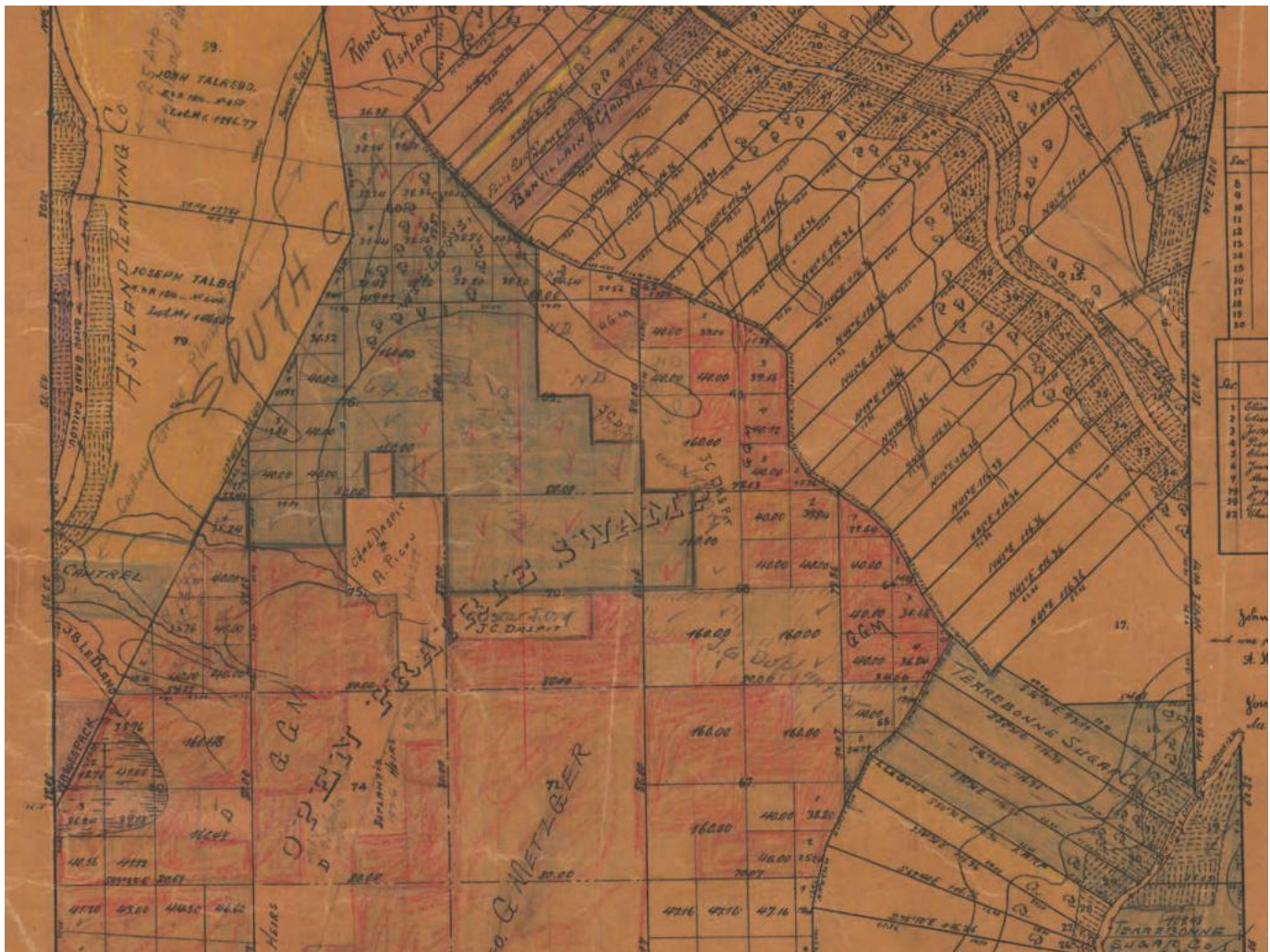
*Surveying - Traditional survey*

As existing surveys came under more exacting scrutiny, particularly as mineral royalties became increasingly commonplace, numerous problems were unearthed by TBS field crews. For centuries, land surveys, the technique and science of accurately determining the terrestrial position of points and the distances and angles between them, have contributed to our fundamental understanding of the meaning of "place." Land surveys have defined humankind's use

and understanding of property titles. In South Louisiana, the determination of these original boundaries remains critically important to sorting out conflicting individual surveys that often predate statehood. In many instances, a certified survey has been the deciding factor in establishing modern land titles in the often contentious courtroom cases contesting a deed or claim to determine long-term possession.



# T. 18 S. R. 18 E. *South Eastern District, Co. West of Mississippi River.*



Original township plot depicting long-lots and sections - 1855

Certifying surveys in Louisiana is quite problematic because portions of the present state were under the control of France, Spain, and Great Britain and their respective land-tenure systems at various times. Each successive colonial regime established its own idiosyncratic scheme for providing land patents and defining land-grant boundaries. Because of the existence of myriad pre-existing land titles, the United States government was compelled to establish a system for certifying existing land ownership and identifying unclaimed lands, formerly held by The Crown, that reverted to the public domain after the Louisiana Purchase in 1803.

Once the unclaimed property included in the Louisiana Purchase became part of the public domain, the United States government needed to survey and sell these lands to recover the cost of acquiring the territory. When the public survey was initiated, there were numerous technical problems, most resulting from the federal government's decision to honor property titles registered with the French and Spanish authorities. In Louisiana, the long-lot property configurations of colonial settlers, ribbons of land running from waterway banks back across natural levees to swamplands, were particularly problematic.

Each long-lot or section typically measured four to eight arpents of waterway frontage by forty arpents depth (768 to 1,536 feet by 7,800 feet) with boundary lines perpendicular to the center of the region's rivers, bayous, and creeks. In the Louisiana Territory's oldest settlements, long-lot farmsteads were so numerous and so deeply entrenched that the American government was compelled to modify the standard township, range, and section square grid system established as the national benchmark with the Land Ordinance of 1785 and the Northwest Ordinance of 1787 to accommodate Louisiana's non-standard property configurations. In addition to the long-lots, there were other problems. Most distressing to American authorities were disputed claims to some of the best lands resulting from fraud or inaccurate surveys.

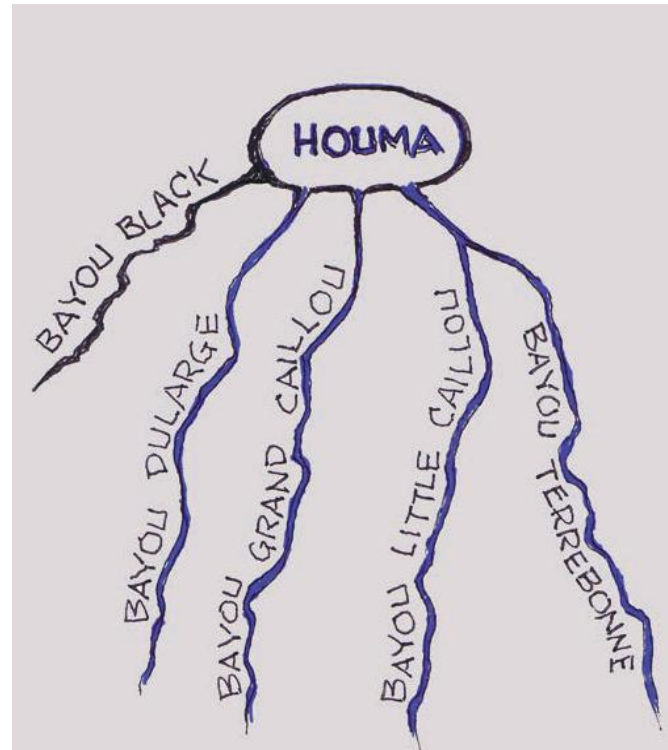
Beginning in 1805, Congress responded to this situation by adopting legislation establishing a series of regulations to bring order out of the chaos. These regulations required claimants to present proof of ownership to land commissioners assigned the task of determining their authenticity. Claimants whose titles were deemed valid were required to have their properties surveyed by a sanctioned professional before an American title would be issued. Disputed claims were often resolved by protracted litigation and, in some instances, by private acts of Congress decades after the Louisiana Purchase. But even these measures did not stop boundary disputes; many early American surveys were ultimately found to be faulty, due in no small part to the horrible working conditions faced by pioneer surveyors. Many South Louisiana boundaries were still the subject of contention 101 years after Louisiana's admission to the Union, when Clifford's father and Kenny's grandfather, Thomas Baker Smith "Baker", began his professional career after graduating from Tulane University in 1913.

In retrospect, Baker's business enterprise began at a time when South Louisiana's landscape was changing and property issues were starting to gain unprecedented importance because of the region's ongoing nascent industrialization. Land surveys were needed to define real estate boundaries authoritatively, based on historical evidence, plats, maps, and other material that proved ownership of a parcel of land. In many instances, the original, deficient government surveys had to be overhauled and remapped by Baker, who improved accuracy

by means of his remarkable professional skills, exacting standards, and innovative techniques in reconstructing the monuments and markers that defined the original boundaries. Despite using the traditional tools utilized by all of his predecessors, Baker systematically reconstructed boundaries that typically had been inaccurately recorded by one, two, or even three previous surveyors. His dogged persistence was his key to success; Baker refused to leave the field until he determined his triangulations were accurate.

Baker's precision, ingenuity, and integrity endured in the corporate administrations of his son and grandson. Through the unceasing efforts of his grandson Kenny, the current CEO, they remain hallmarks of the firm's corporate culture today. In this respect, TBS is very much like the physical landscape of the Houma area where it originated. Radiating south of Houma like the fingers of a hand are five bayous: Bayou Black, Grand Caillou, Dularge, Little Caillou, and Terrebonne. While individually taking on independent existences, the bayous remain joined to the root stream and dependent upon the source for vital resources.

In the corporate reflection of this local phenomenon, the engineering and surveying practices continue to channel Smith family leadership, influence, values, and corporate resources into the firm's now highly diversified business model. Perhaps even more importantly, this internal conduit funnels the hard-earned wisdom of a century's experience in the region's notoriously volatile physical and economic environments into projects that have real meaning to the people who work for TBS and will be individually and collectively impacted by unpredictable hurricanes, sea level rise, and regional subsidence. These physical processes have been reported extensively in popular and scholarly literature, and TBS is right in the middle of the environmental maelstrom with the will, determination, and expertise to help resolve the impacts of these ongoing natural processes.



*Five Bayous of Terrebonne - Bayou Black, Dularge, Grand Caillou, Little Caillou, and Terrebonne*

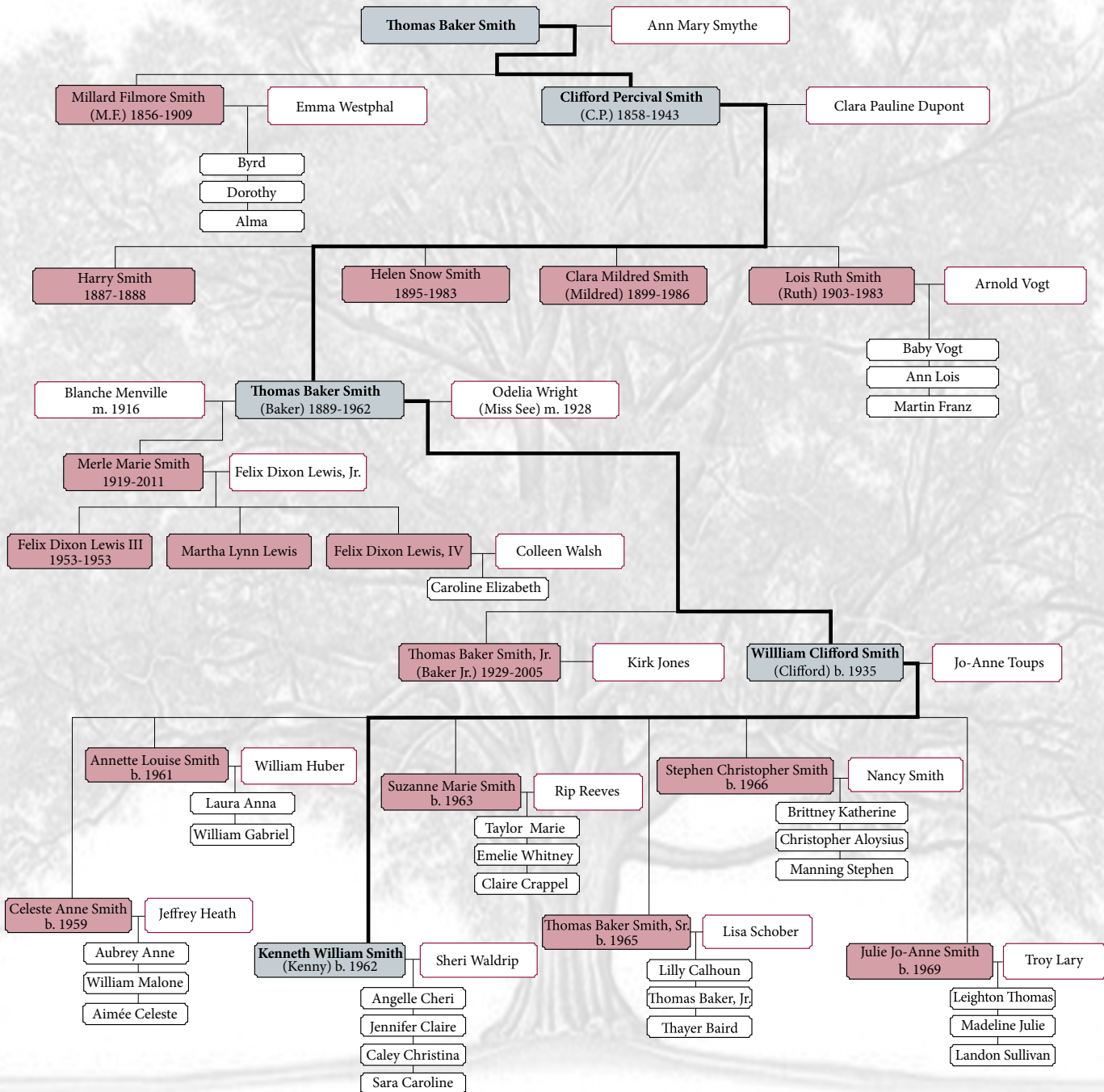
## HISTORICAL SNAPSHOT

### The Times



- 1908 Model T Ford is the first automobile produced.
- 1913 **The firm T. Baker Smith, C.E. is founded.**
- 1936 First street is paved in Terrebonne Parish.
- 1940s Oil and gas boom thrives in southeastern Louisiana.
- 1945** World War II ends.
- 1947** The first offshore well is drilled.
- 1953 The Korean War ends.
- 1957 Hurricane Audrey devastates Cameron, Louisiana.
- 1961 John F. Kennedy is elected President of the United States.
- 1965** Hurricane Betsy makes landfall in Grand Isle, Louisiana.
- 1969** U.S. astronauts land on the moon.
- 1969 Hurricane Camille wreaks havoc on the Gulf of Mexico coastline.
- 1975** The Vietnam War ends.
- 1980 Ronald Reagan is elected President of the United States.
- 1989 Oil tanker *Exxon Valdez* runs aground and causes major oil spill.
- 1991 The Gulf War is waged.
- 1992** Hurricane Andrew makes landfall near Morgan City, Louisiana.
- 1993 Wm. "Bill" Clinton is elected President of the United States.
- 2001** Terrorists attack U.S. World Trade Center and Pentagon.
- 2005** Hurricanes Katrina and Rita pass through South Louisiana.
- 2005 **TBS expands, opening offices in Lafayette, LA and Houston, TX.**
- 2008 Hurricanes Gustav and Ike cause major flooding in South Louisiana.
- 2009 Barack Obama is elected President of the United States.
- 2009 **TBS opens offices in Thibodaux, Baton Rouge, and Shreveport, LA.**
- 2010** New Orleans Saints win Super Bowl XLIV.
- 2010** Deepwater Horizon explodes causing oil spill disaster in the Gulf of Mexico.
- 2012 Hurricane Isaac causes severe damage among the northern Gulf Coast.
- 2013 **TBS expands to south Texas with a new location in San Antonio.**

# SMITH FAMILY



## CHAPTER 2

### A FAMILY AFFAIR

*“Obviously, some entrepreneurial genes were inherited from C.P. Smith and Clara Dupont.” Wm. Clifford Smith*

**T**. Baker Smith’s (TBS) long-term survival and its successful diversification are testaments to the business acumen and leadership abilities of the Smith family members who have helmed the firm for three generations. These generations, who have successfully led the family business over the course of a century, owe a great deal to their ancestors. This pioneering family endowed its progeny, individually and collectively, with values and traits that continue to serve them.

Clifford Percival “C.P.” Smith and his wife Clara Pauline Dupont, parents of T. Baker Smith’s founder, Baker Smith, were products of very different, but complementary, backgrounds. Both were the children of self-made men who obviously instilled their offspring with the commonly identified traits of successful people: ambition, creativity, intelligence, compassion, self-reliance, risk tolerance, initiative, sound judgment (particularly in stressful situations), vision, and the ability to command the absolute best from themselves and others.



*Clifford Percival Smith - one of the two children born to Thomas Baker Smith and Ann Mary Smythe*



*Clara Pauline Dupont - one of the five children born to Jean-Marie and Marie Lydie Tasset*

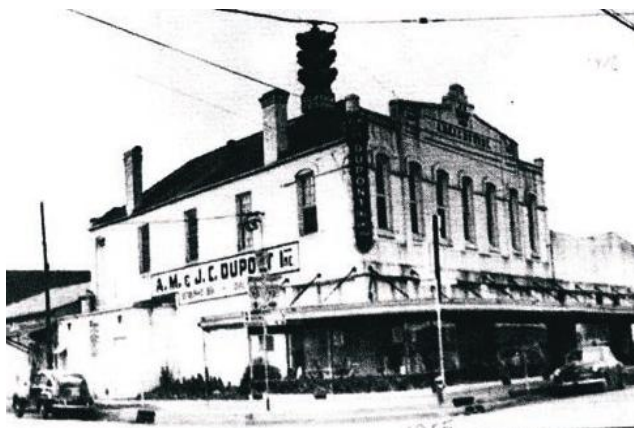


#### *The Dupont Family*

Clara was the youngest daughter of Jean-Marie Dupont (b. 1835), an immigrant from France’s Département des Hautes Pyrénées (Gascony). A native of Soulies, Bénac, in the Basque country, Jean-Marie faced two looming challenges: limited local economic opportunities and the prospect of imminent compulsory service in the French army. In 1853, he decided to immigrate to New Orleans

in search of a better life. In the mid-nineteenth century, the Crescent City was a flourishing boomtown and a magnet for impoverished Europeans in search of economic opportunities and social mobility. Because economic refugees like Jean-Marie were typically compelled to take up residence in the Big Easy's blighted, often violent immigrant slums, Jean-Marie relocated to Houma two years after his arrival in Louisiana. At the time of his relocation, Houma was, according to the local priest, a hamlet of approximately forty homes. The community subsequently became a haven for many natives of France's Gascony region.

Jean-Marie soon established a general merchandise store. His timing was fortuitous; the local economy was soaring to record heights thanks to the booming regional sugar industry. Like more recent economic expansions, this boom did not last and Jean-Marie and his general merchandise business were soon compelled to face extraordinary challenges. Although Terrebonne Parish was spared, the physical devastation that Northern invaders inflicted on much of the South, the Civil War and Reconstruction eras (1861-1877) nevertheless ushered in a prolonged regional economic depression, whose repercussions were still felt as late as the early twentieth century.



*Duponts - Houma's oldest retail store was located downtown and operated from 1856 to 2003*

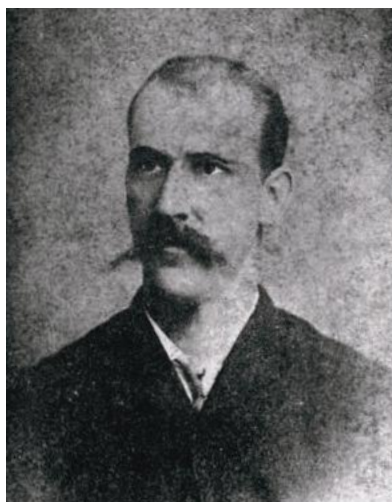
This economic upheaval devastated Terrebonne's plantation system and many of Jean-Marie's best customers were ruined financially. Yet, Jean-Marie and his store survived, and eventually prospered, thanks to the immigrant's ability to recognize opportunity in the midst of adversity. For example, the enterprising Frenchman profited from his neighbors' acute financial difficulties by acquiring numerous choice properties in the area's chronically depressed post-bellum real estate market. He appears to have been one of the most successful land speculators in late nineteenth-century Terrebonne Parish.

The economic distress experienced by the regional sugar industry facilitated local economic diversification based on exploitation of local natural resources. Shortly after the Civil War, local and outside entrepreneurs, who previously would have risked their capital on sugar plantations, established large-scale cypress logging operations and mills in and near Terrebonne Parish's swamps. As the availability of once-abundant cypress began to decline around the turn of the twentieth century, the local introduction of canning technology ushered in the parish's commercial oyster, shrimping, and seafood canning industries.

Jean-Marie's rising economic fortunes, however, suffered a significant economic jolt in the twilight days of 1887. Around 2:00 p.m. on December 30, 1887, a fire, reportedly emanating from a defective coal heater flue, broke out in the upper floor of the parish tax collector's office. The building, as inflammable as tinder, erupted in flames and despite the rapid response of Houma's three volunteer fire departments, the blaze was fanned by a brisk northeast wind. The fire soon consumed a seven-block area, which was literally half of Houma at this time. The fire damages were estimated by municipal officials at \$150,000 (more than \$3.5 million in 2013 dollars). In terms of property losses, Jean-Marie was one of the blaze's three most notable victims. His two-story brick store, appraised by local eyewitnesses at \$7,000 (nearly \$170,000 in 2013 dollars), was the single most valuable piece of real estate destroyed by the flames.

The 1887 fire proved only a temporary setback. By the turn of the twentieth century, the French immigrant was again a local economic bellwether. By the first decade of the twentieth century, Jean-Marie's rebuilt store was the single most important landmark in Houma, one that is mentioned more often in memoirs of the era than the parish courthouse and the local Catholic church.

Jean-Marie's great economic success masked his equally rewarding family life. Jean-Marie married Marie Lydie Tasset (b. 1829), a native of St. Père, Département d'Ille et Vilaine in Brittany, France, on February 7, 1859. From that union, six children were born: Albert Marie, Joseph Marie Francois, Lydie Marie, Clara Pauline, Ernest Anatole, and Jules Paul.



*Clifford Percival Smith*



*Clara Pauline Dupont*

#### *Une Alliance Anglo-Française*

The Dupont's success brought them into the circle of other notable newcomers whose prosperity was derived from decades of "sweat equity." Among the families in this social constellation was the Smith family. On September 28, 1886, the fortunes of the Smith and Dupont families were inextricably bound together by the marriage of Clifford Percival "C.P." Smith and Clara Pauline Dupont, Jean-Marie's youngest daughter.





Plat of Houma - 1855

Clara shared her father's entrepreneurial spirit. Like Clara's father, C.P. was an outsider, albeit of English-Scottish ancestry rather than French, who made his way to Terrebonne Parish in search of opportunity. In keeping with his family's tradition, Jean-Marie provided Clara and her husband with property and a dwelling. In this case, it was a town lot and residence at the corner of Lafayette and School Streets as an advance on his succession.

### *The Smith Family*

Jean-Marie's son-in-law, C.P., was the product of a very different background. His father, Thomas Baker Smith, was a steamboat agent who followed his business connections from Jeffersontown, Kentucky, a bustling steamboat port outside of Louisville, to New Orleans, the booming commercial hub for the nation's western river traffic. From 1849 to 1861, Thomas Baker maintained business offices in the Crescent City's current Warehouse District while residing at various locations, including the French Quarter's Lower Pontalba Building (facing Jackson Square along St. Ann Street) and the lower Garden District (along Calliope near Prytania). Thomas Baker's wife, Ann Mary Smythe, already the mother of two daughters (Meck and Carrie), accompanied him to New Orleans, where, according to family lore, she gave birth to Thomas Baker's two sons, Millard Fillmore "M.F." (b. July 26, 1856) and Clifford Percival "C.P." (b. November 20, 1858).



*Baker Smith's daughter, Merle, visiting the old Kentucky home of her grandfather*

Little is known about M.F. and C.P.'s early years; however, C.P.'s daughter Mildred Smith maintained "they spent part of their youthful years in Kentucky." Mildred also indicated "the Smith brothers were well-educated."

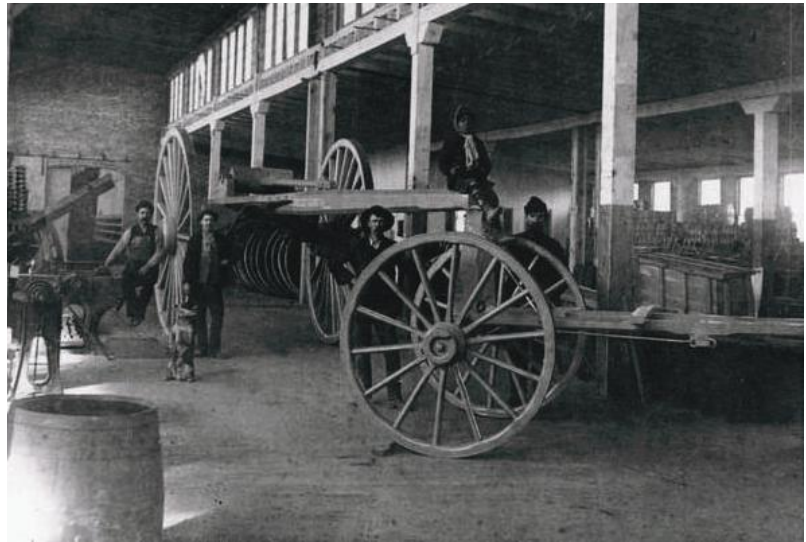
M.F. migrated to Houma around 1880, and C.P. and his mother joined him there in 1884. The Smith brothers quickly found their respective niches in the local economy, initially in partnership, later individually. M.F. and his associate Frederick Bogardus purchased a livery stable and a stagecoach company with all of the operation's "harnesses, saddles, drummer and lumber wagons and livestock" from brothers Milton and Peter Berger. The New Orleans, Opelousas, and Great Western railroad, the area's first railway, bypassed Houma during the first phase of its construction in the late 1850s. Until 1870, Houma residents utilized stagecoaches to access the railroad at the nearest rail stop, Terrebonne Station (present-day Schriever). According to Randolph A. Bazet, former Terrebonne Parish Clerk of Court and local historian, the

stagecoaches made daily runs to Terrebonne Station, departing downtown Houma at 9:00 a.m. and returning in the afternoon. A spur line connected Terrebonne Station to Houma in 1870, but the competing stagecoach line endured for a number of years. While under the Berger Brothers' ownership, the stagecoaches transported passengers, freight, and mail.



*Early model stagecoach - late 1800s*

Later that year, C.P. joined his brother in purchasing Bogardus' interest in the livery stable located along Main Street, parallel to Bayou Terrebonne. The shared enterprise, called Smith Brothers, was short-lived. C.P. soon acquired his brother's portion of the firm and expanded the operation by purchasing additional livestock and gear. He obtained the local franchise for the Bodley Wagon Company. Joshua Bodley founded the Bodley Wagon Company in Wheeling City, West Virginia (then Virginia) in 1832. In the business' early years, Bodley operated in partnership with David Richards, who was eventually replaced by Thomas M. Galley. Following Galley's death, Bodley continued the business in partnership with his sons, James W. and John. In the late nineteenth century, the siblings manufactured wagons under the Bodley Brothers label. In 1891, John Bodley retired, and his brother James moved the factory to Staunton, Virginia and operated the business, then called the Bodley Wagon Company, into the early twentieth century. In 1908, the *Louisiana Planter and Sugar Manufacturer* magazine noted that Bodley carts and wagons were "famous throughout the [Louisiana] sugar district," having been used "for a generation" by sugar growers because of their quality and durability. The publication, however, also noted that the company "passed through hard times lately" and it was considered "best to place the concern in the hands of a receiver."



*Bodley Wagon Company, founded by Joshua Bodley in Wheeling City, West Virginia - 1832*

In addition to these activities, C.P. managed a hotel in a building owned by the Berger Brothers on Main Street between Goode and Roussel Streets. Smith also invested in sugar planter and canal operator Robert R. Barrow's Barataria and Lafourche Canal Company No. 2 and launched a career in real estate speculation, a profession that has served the Smith family well to the present.

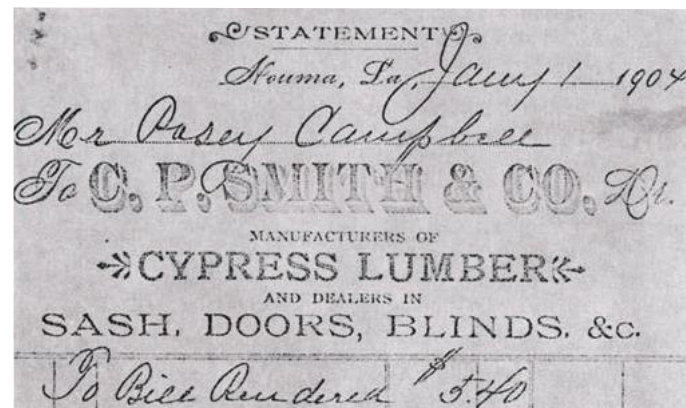
C.P.'s real estate experience proved invaluable in the 1890s, when his business career turned in a dramatic new direction. In August 1893, Smith sold his hotel operation to William H. Wills, and the following year, he sold the livery stable to Emile O. Weber. (However, he retained the Bodley franchise and re-acquired the livery stable in 1895.) After divesting himself of these



*The Smith Family home, now occupied by Kenny and Sheri Smith, was across from C.P Smith & Company - 1903*

interests, C.P. immersed himself in land speculation endeavors, often buying property in partnership with Louis F. Carrane, though other individuals were occasionally involved. Some of these acquisitions were clearly for resale in new or expanding subdivisions, but many of these purchases, his daughter later maintained, were made with an eye toward his next business venture, a cypress sawmill and ancillary operations. The most important acquisition occurred in 1894, when C.P. purchased a swathe of land along Bayou Terrebonne, opposite downtown Houma, from Jules Burguières. Smith subsequently enlarged that parcel through the acquisition of various adjacent properties to create a business site large enough to accommodate a sawmill and mill yard.

Having acquired the necessary property, C.P. launched C.P. Smith & Co. in partnership with Mrs. Rosa Carrane to conduct and own a general lumber business in the town of Houma for the purpose of buying and selling lumber of all kinds. In the company's charter, Mrs. Carrane designated her husband and C.P.'s longtime real estate associate, Louis F. Carrane, as her official representative. Five years after the company was established, Mr. Carrane replaced his wife as C.P.'s official partner.



Business documents from C.P. Smith & Co. lumber and sawmill - one of the first sawmills in Houma, established in 1895 and sold in 1903

Within six months of the firm's establishment, C.P. embarked upon an aggressive campaign to acquire stands of cypress timber and rights-of-way for proposed transportation canals. A representative agreement with A.M. Viguerie in 1896 granted C.P. Smith & Co. a "right of way . . . of sufficient width to cut a canal to float timber, logs, etc. . . . from the swamps in the rear of [Viguerie's] swamp to a mill to be erected at an early day by the C.P. Smith & Co., on land . . . opposite the town of Houma." Viguerie granted the right of way for a fifteen-year period.



Typical cypress logging canal used to float cypress logs to the cypress mill

Another important addition to the C.P. Smith & Co. real estate portfolio was a 331-acre (slightly more than a half-section) expanse of cypress swampland along Bayou Coteau that Jean-Marie, C.P.'s father-in-law, mentor, and benefactor, sold to him around 1894. These tracts of standing woodland were critical to the survival of the mill, which depended on easy accessibility to new timber sources in order to meet expanding market demands.

Because the field operations on the cypress tracts necessitated the absence of his partner, Mr. Carrane, C.P. was obliged to establish a supervisory office in the mill yard. He and Clara moved their domicile to the old Burguières family home on the industrial site where their children lived during their youth.



*Dr. H.P. St. Martin home*



*C.P. Smith standing on the front steps of his home in the 1930s*



*Clara, Merle, C.P., and a family friend, standing in front of their home - 1927*

The Smith's had the Burguières house rolled and set in place onto the track closest to Ruth Street to allow for the construction of their new family home. Perched along the banks of Bayou Terrebonne behind three majestic live oak trees, the gracious southern style neo-colonial residence was built from local cypress. It was completed in 1903 and quickly became known as "The Home Under the Oaks." Soon thereafter, the Burguières house and track was sold to Dr. H.P. St. Martin.

From its high ground, raised six feet on red brick pillars to avoid the spring floods of the Mississippi River, the home under the majestic live oaks faces the town. The Smiths could sit on the large front porch with the majestic rotunda and watch the happenings of the growing community.

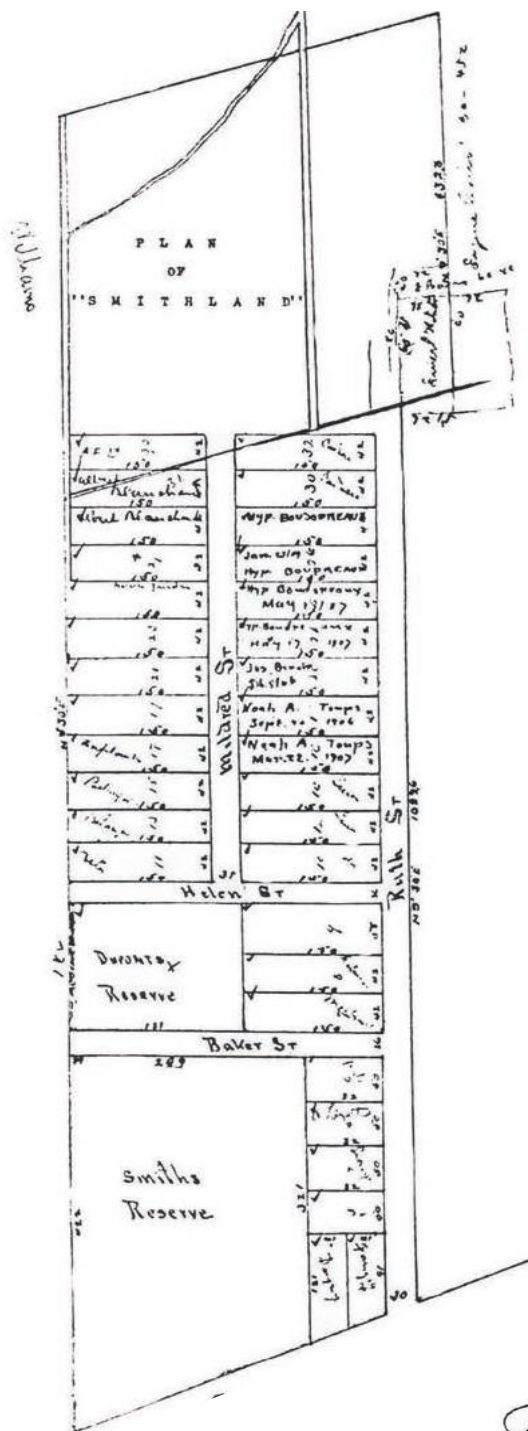
With the breeze from the south fanning the porch in the shade of the oaks, Clara would sit on the front rotunda paring vegetables for her dinner. The rotunda was well-known for its card playing days. Clara and her friends would play bridge, later giving way to a robust poker game for the men.



*The St. Louis Cypress Company was amongst a number of cypress logging operations in Terrebonne Parish*

The Smith family's residence on the business property posed a problem when C.P. decided to sell the mill in 1903 to the St. Louis Cypress Company, Ltd., a company whose canals continue to serve the community. The sale was undoubtedly prompted by intensifying competition from the parish's much larger mills that were aggressively gaining market share, the rapidly declining availability of easily accessible virgin cypress stands resulting in increasing overhead and production costs, the untimely death of his business partner Mr. Carrane, and—perhaps most importantly—the attractive offer extended by the purchasers for the mill. The offer included the machinery and existing right-of-way agreements. In accepting the offer, C.P. reserved ownership of his office and residential properties. Although the St. Louis Cypress Company subsequently removed the milling equipment from the site and transported it to a location near railroad facilities in the northern portion of the parish, the Smith home site was still vulnerable to future industrial development, which diminished its desirability as a family home.

To neutralize this threat, Clara sold the residence at the corner of Lafayette and School Streets that was given to her by her father. Acting in concert with her brother, J. Cyrille Dupont, Clara used the proceeds to purchase a “tract of bayou frontage 374.5 feet wide by nine arpents of depth.” This real estate was alongside and behind C.P. and Clara's existing home on the former mill site. The same day, C.P. purchased a tract, in front of his home site from Alfred T. Gerrans, an Iberville Parish banker and real estate investor. The Smiths then secured the services of Julius Dupont to survey the Dupont siblings' newly acquired property, which was systematically subdivided to form Houma's Smithland. The subdivision, which was developed primarily between 1905 and 1907, excluded the Smith's existing home site and the former Gerrans property. The subdivision's streets bore the names of the Smith's four surviving children: Baker, Helen, Mildred, and Ruth.



Smithland subdivision plat - 1905



The C.P. and Clara Smith family -  
Bottom row: Clara, Ruth, and C.P., Top row: Baker, Mildred, and Helen

Five children were born to C.P. and Clara. They had two boys, Harry Smith, who lived to the age of nine months, and Thomas Baker Smith "Baker," and three girls, Helen Snow Smith, Clara Mildred Smith "Mildred," and Lois Ruth Smith "Ruth." The four surviving children of C.P. and Clara were all well-educated and leaders in their community.

SMITHLAND

Recorded December 9<sup>th</sup>, 1905





*Baker*



*Helen*



*Mildred*



*Ruth*

Baker graduated from Tulane University with a degree in engineering. He, along with his sisters, loved spending time with family and friends outdoors.

Helen was named Helen Snow because a blizzard blanketed Houma with eighteen inches of snow on the day she was born. She was physically disabled at age two due to polio, yet she was musically talented and a gifted artist. Helen attended Newcomb College, Tulane's Women's College, and was a long time educator in Terrebonne Parish. Helen was a founding member of the first Terrebonne Parish Library.

Mildred was a professor at Northwestern University. She wrote several excerpts on the Smith family and co-authored the book *Natchitoches*. Mildred was the third postmaster in Houma. Her hobbies included tending to her flowers and gardening. After the passing of her parents, she took ownership of the Smith family home on Park Avenue.

Ruth, an entrepreneur, married Arnold Adolph Martin Vogt "Noldi," with whom she had two children: Ann and Martin "Franz" Vogt. Ruth was the tom-boy of the Smith family. As a youngster, she loved hunting with her brother Baker and his pals (including Sen. Allen J. Ellender) and fishing, which was a life-long passion. Ruth was also a founding member of the first Terrebonne Parish Library.



*Baker Smith*



*Blanche Menville*

Baker first married Blanche Menville on May 20, 1916. One daughter, Merle Marie Smith, was born of this union. Blanche was musically gifted and became a member of the St. Francis de Sales choir, where she also became the group's organist.



*Merle and her mother, Blanche*



*Dick, Dixon, Merle, and Martha Lynn*

Blanche passed away July 25, 1922. Their daughter Merle married Felix Dixon Lewis, Jr. “Dick,” with whom she had three children: Martha Lynn; Felix Dixon, III, who died one day after his birth; and Felix Dixon, IV “Dixon.” Merle was educated at Lorton Preparatory School and Newcomb College. She was very civic minded and involved in St. Matthews Episcopal Church, the Houma

Garden Club, and was a charter member of Southdown Museum. In her spare time, she enjoyed traveling. Merle particularly enjoyed life. With her great big smile and laugh, she was often regarded as the life of the party.

After Blanche’s passing, Baker later married Odelia Wright, “Miss See,” on December 8, 1928. They had two sons: Thomas Baker, Jr., “Baker Jr.,” and William Clifford Smith. Miss See was an English teacher in Terrebonne, Lafourche, and St. Mary Parishes. Clifford stated that when she began her teaching career, many of her students were her age. She taught many years until her son Baker Jr. was born. Miss See insisted that her children go to school. In the Smith family, education was paramount.



*Baker Jr., Miss See, Baker, and Clifford*



*Baker Jr. and Baker holding Clifford on his lap*



*Baker and Miss See*



*Baker and Miss See's School Street home, known as the "Little Green Cottage,"  
Baker Jr. eventually settled here*

Baker and Miss See lived in a little green cottage on School Street in Houma. The house, which is still in the same location today, was originally purchased by C.P. and Clara after the sale of the Berger hotel. When their house on Park Avenue was finished being built, C.P. gave the School Street home to Baker as a wedding gift for him and Blanche. The house stayed in the family years later when Baker Jr. moved back from New Orleans and settled into the third generation home known as the "Little Green Cottage."



*C.P. and Clara on the steps of the  
"Little Green Cottage" with Baker Jr.  
and Clifford*

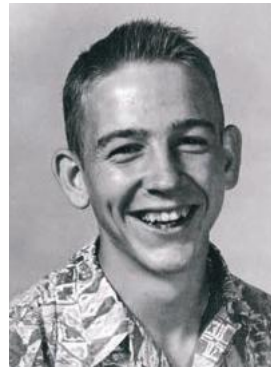


*Baker Jr.*

Baker Jr. attended Tulane and later graduated from Auburn University in Alabama with a degree in architecture. He came back and worked in New Orleans for Nolan, Norman, and Nolan Architects and then later opened his own firm, T. Baker Smith, Jr., Architects. He did not return to Houma until he retired from the business. He was also a member of the Air Force.

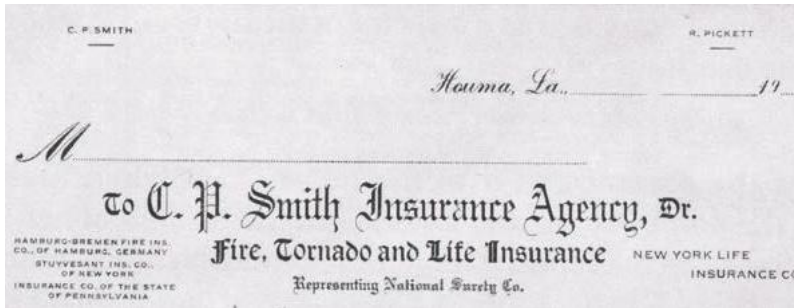


*Clifford, Merle, and Baker Jr.*



*Clifford*

Following his mother's wishes on education, Clifford attended and graduated from Louisiana State University with a degree in civil engineering. He joined his father in his engineering and survey firm. He is a successful businessman and passionate civic leader.



*Letterhead used for C.P. Smith Insurance Agency*



*C.P. Smith working at his insurance company in the late 1930s*



*Houma City Council in the late 1800s, C.P. Smith seated second from the right*

When Smithland subdivision was completed, C.P. opened a new chapter in his life. For many years following the sale of his lumber enterprise, C.P. remained a consultant and real estate broker for the St. Louis Cypress Company in Terrebonne Parish. Clifford Smith, his grandson, recently recalled that C.P. bought land at tax sales, an interest in a Colorado coal mine, and stock in numerous other business endeavors.

In 1910, C.P. also became a founding stockholder of the Terrebonne Bank and Trust Company. Despite being a passive investor, C.P. held the post of vice president. In addition, he became the Houma area representative for the New York Life Insurance Company, a position he maintained for most of his remaining years. Much of his energy, however, was channeled into a blossoming political career. His brother M.F. served as Houma's mayor from 1886 to 1888. C.P. followed his brother's lead and served as a City Councilman in 1888, 1900, and from 1904 to 1920. In 1921, C.P. was elected Terrebonne Parish Registrar of Voters, a post he held until 1940, three years before his death at the age of eighty-four.

C.P.'s passing on May 17, 1943, marked the end of an era. The entrepreneur and his wife, Clara, had assumed leadership positions in the local and regional communities. They contributed both directly and indirectly to the development of Terrebonne's modern economic infrastructure. But perhaps their most enduring legacy consisted of the principles, standards, and moral character they bequeathed to their children. For more than 100 years, family members have faced the future with the will and ability to succeed in their respective business pursuits. Perhaps this legacy is seen most clearly today in TBS' diversification efforts and aggressive movement into new markets and ventures.



*Clifford Percival Smith married Clara Pauline Dupont - parents of Thomas Baker Smith, founder of the firm T. Baker Smith*

## HISTORICAL SNAPSHOT

### The Three Generations



1889 Thomas Baker Smith is born in Houma, Louisiana.



1913 Baker graduates from Tulane University and founds the firm, T. Baker Smith, C.E.



1914 Baker becomes board certified in civil engineering.

1935 Wm. Clifford Smith is born in New Orleans, Louisiana.

1958 Clifford graduates from L.S.U. and joins his father's firm.



1958 Clifford becomes board certified in civil engineering and land surveying.

1958 Baker changes the name of the firm to T. Baker Smith & Son.

1962 Kenneth Wm. Smith is born in Houma, LA.



1962 Baker passes away at age 72.

1962 Clifford becomes President and sole owner of the firm.



1965 Clifford incorporates the firm to T. Baker Smith & Son, Inc.

1986 Kenny graduates from Louisiana Tech University and joins the firm.

1992 Kenny becomes board certified in civil engineering.

1995 Kenny becomes board certified in land surveying.



2000 Kenny becomes President and C.E.O. & Clifford is named Chairman of the Board.

2005 Kenny changes the name of the firm to T. Baker Smith, Inc.

2009 Kenny becomes sole owner of the firm.



2013 Clifford and Kenny celebrate "A Century of Solutions" at T. Baker Smith, LLC.



## CHAPTER 3

### SETTING THE CORNERSTONE

#### T. Baker Smith

*“I never got to know my grandfather. He died two weeks after I was born. But, every day I stand proud in the firm that he built on a solid foundation, created with a commitment to precision, integrity, and ingenuity.” Kenneth Wm. Smith*



*Baker Smith as a young boy - 1895*

Thomas Baker Smith “Baker” (born July 31, 1889), the eldest surviving child of C.P. and Clara Dupont Smith, personified the initiative, business acumen, and determination that characterized both the Dupont and Smith families. Baker infused his personal strengths into every aspect of his professional career, which began in 1913. Between 1913 and 2013, T. Baker Smith (TBS) developed and grew from a one man surveying and civil engineering operation into one of the top 500 engineering, architectural, and environmental design firms in the United States in 2007, 2008, 2009, 2010, 2011, and 2012, according to *Engineering News Record (ENR)*.

Adaptability, tenacity, and foresight were keys to this quintessential American success story. The Smith family set down roots in Terrebonne Parish during an era when plantation agriculture dominated the regional economic landscape, but the area was on the cusp of fundamental economic, demographic, and social change by 1900. By the start of World War II (WWII), emerging industrialization evidenced by a short-lived, but nationally important, canning industry and the birth of the local oil and gas business radically transformed the regional economy. Simply put, the coastal plain was evolving from the Plantation Era to the Industrial Age. To survive, the Smiths had to adapt to continuously changing realities. Through this adaptation, the Smiths were instrumental in facilitating the region’s passage into America’s economic mainstream.





This epic journey occurred in two phases, conveniently coinciding with the tenures of the firm's first two owners, Baker and Wm. Clifford Smith "Clifford," who led TBS on a successful journey across two generations. Early on, the firm was instrumental in sorting through South Louisiana's complicated land ownership issues, often resurveying parcels repeatedly because some locals regularly moved survey monuments in surreptitious attempts to illicitly expand their landholdings. As the area's population increasingly shifted from its rural origins to more urban environments, TBS played an instrumental role as pioneer self-sufficiency was replaced by an interlocking network of public services. TBS' expertise was important in revolutionizing daily life with new amenities, such as natural gas, sewerage, water systems, electrical power grids, and later with bridges, pumps, levees, canals, surface roads, subdivisions, and strip malls.



*Baker - 1913*

After graduating from Tulane University in the spring of 1913, Baker started his professional career and the first leg of "A Century of Solutions." For 45 years, he ran the firm with the help of employees until his son, Clifford (the "son" in T. Baker Smith & Son), joined the firm at the age of 22 in 1958 and began the second leg of "A Century of Solutions." T. Baker Smith & Son's original location, a modest building on Park Avenue that encompassed less than 900 square feet (about the size of a modern volleyball court) with no bathroom or running water, luxuries available only at a nearby service station, is an enduring symbol of the firm's humble origins.



*Original T. Baker Smith & Son sign made in 1958*



*Baker's surveying transit*

It was a bare business based on the principle that new equipment was nice, but the old and reliable transit, theodolite, level, and chains (sixty-six feet long and composed of one-hundred links) were still working and built to last. The firm's entire inventory of surveying equipment could easily fit into a small closet. According to Clifford, Baker waited until the late 1950s, approximately forty-five years after the firm's establishment, to purchase a second transit. Cutting edge technology was not a part of TBS' initial business model because the firm concentrated primarily on surveying due to sustained local demand. At this time, engineering projects constituted approximately half of the workload.

Baker's financial conservatism was the product of the engineer's challenging early professional existence, an experience shared by virtually all early twentieth-century entrepreneurs in coastal Louisiana. Born in Houma, Baker spent much of his childhood outdoors, partly as a result of his involvement with his father's sawmill operation. His love of the outdoors was a defining characteristic of his life and one of the legacies he would pass on to his son, Clifford who passed it onto Baker's grandchildren and great grandchildren. His outdoor pursuits profoundly shaped his professional life. His professional life also depended on his education, which was strongly influenced by his mother, Clara. Despite having had only rudimentary classroom training, Clara valued education. As Clifford recalls, she "was the driving force to make my father go to school."

Records show Baker attended Rugby Academy and Jesuit High School in New Orleans before graduating from Chamberlain Hunt Academy in Port Gibson, Mississippi. Later, at his

mother's insistence, Baker enrolled at Tulane University, where he majored in civil engineering. According to family lore, he studied civil engineering to avoid a desk-bound occupation.



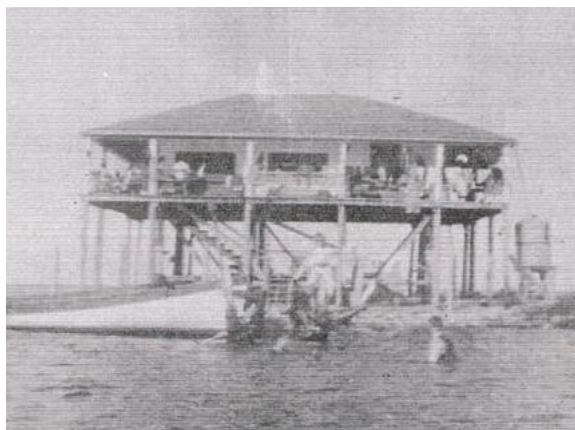
*Baker, seated far right, was a member of the Rugby Academy baseball team - 1905*



*Baker as a student at Chamberlain Hunt Academy, Port Gibson, Mississippi - 1907*

Clifford remembers, "My father looked at civil engineering as a way that he could make a living and not necessarily be in the office all the time, but in the field, particularly surveying. My grandmother, Clara Dupont, obviously insisted that my father go to college and, I guess, Tulane was the only place that was within reason."

Baker's college career nearly ended as soon as it began. He enrolled at Tulane University in New Orleans in 1908. In late September of 1909, he left his classes to join his father, C.P., and his uncle, M.F., and a young man only identified in surviving news reports as Hubert for a weekend fishing trip at Albert Dupont's camp at Seabreeze, a popular boating, fishing, and camping venue thirty-five miles from Houma on the southeastern coast of Terrebonne Parish, due east of modern-day Cocodrie. Upon arrival at Dupont's camp on Sunday, September 19, after a long boat ride, the men encountered "a pretty stiff breeze," but they "thought nothing of it." The ferocity of the winds, however, increased steadily throughout the night. C.P. was roused at 2:00 a.m., awakened his companions, and advised them to get "prepared for eventualities" because there was no longer any hope of escape by boat.



*A photo of one of the many camps at Seabreeze - 1908*



*Millard Filmore "M.F." Smith  
- 1905*

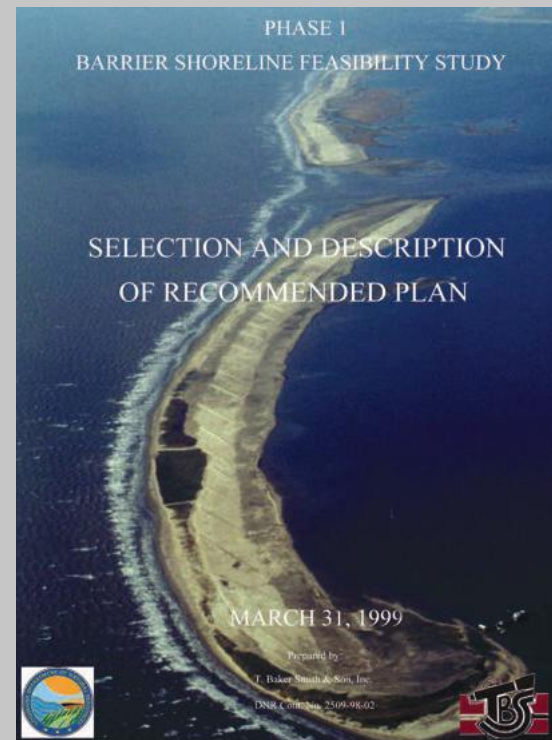
By noon on Monday, "mountainous hurricane-induced waves" began to overtop the Dupont camp, which was elevated on wooden pilings. C.P. subsequently recalled these winds "came with terrific force, smashing the windows and flooding the room and finally smash[ing] in the sides." The camp's occupants managed, with great difficulty, to reach the roof shortly before the gale tore it from the doomed structure's disintegrating frame and cast it upon the waves. Once adrift, the survivors were completely exposed to the elements. C.P. reported that "they clung desperately to their frail craft, holding to each other and tossing about like a cork" until a huge wave turned the roof "over completely," displacing its occupants and "engulfing" M.F. Smith. Family tradition maintains that M.F. told his brother and nephew that he was too exhausted to continue clinging to the roof before slipping beneath the waves.

The other members of the Smith party managed to reestablish their tenuous hold on the floating debris. They remained afloat until approximately 4:00 p.m. Monday afternoon, when they reached shallow water adjacent to a small live oak tree along Rabbit Bayou, about five miles northwest of Seabreeze. C.P. managed to grab the oak's branches, but he lacked the strength to pull himself to safety. Convinced that his "end had come," C.P. told his son Baker, "kiss mother and the children for me," as he was drowning.

The situation was not quite as hopeless as C.P. imagined. Baker managed to hoist his father into the “fork of the tree” where the three survivors sat from 4:00 p.m. Monday until 7:00 a.m. on Tuesday, when they hailed a black man paddling a “bateau.” This good samaritan came to their aid, assessing their needs before paddling “off to get a larger boat, which by some strange miracle had escaped destruction.” The survivors were eventually transferred to a boat owned by a Mr. Bush, which transported them to Houma, where C.P. remained in serious condition for some time.

Many residents of Houma and its surroundings built recreational dwellings and commercial factories, including a shrimp-drying platform and oyster shucking and packing sheds, in the Seabreeze community. The 1909 hurricane devastated this site, but by 1915 it was a thriving community again with an annual July Fourth regatta, which attracted more than seventy boats. Modern maps indicate the Seabreeze site is now open water, one of innumerable examples of land loss in coastal Louisiana. Persistent land loss resulting from coastal erosion has drawn the attention and concern of all levels of government.

In the late 1990s, Marc Rogers, Sr., P.E., Senior Project Manager, former Vice President of Engineering and veteran associate with almost 40 years of professional experience, managed a comprehensive study of the region’s barrier islands. Marc’s concern about this linear strip of land is a reflection of TBS’ corporate philosophy and mainstay of survival. For more than half a century, coastal issues from hurricanes to land loss to pumps, levees, and drainage have been at the top of the firm’s engineering agenda. These issues may decide the continued existence of our area’s communities. Like the firm itself, these issues are part of our basic survival of coastal Louisiana. Many of the conclusions and suggestions outlined in this report have still not been implemented. The lack of attention given to the constant land loss of coastal Louisiana will decide whether the coastal communities such as Grand Isle, Fourchon, Leeville, Cocodrie, and Montegut will continue to exist.



In May 2012, Clifford received a Lifetime Achievement Award from the America's Wetland Foundation. When receiving this award, Clifford said, "I am honored and humbled to receive this. All of my coastal efforts through the years have been for preservation for my life, my family, and my community. We can add this and other awards along with all the coastal studies and use them as fill in a levee to protect my community. Simply, I am motivated by the human survival instinct and have been fighting for years for the survival of our communities in Terrebonne and Lafourche parishes." In this regard, the Smith family outings to the extinct community of Seabreeze are a vivid reminder of how fast this landscape has and continues to change; it is a mental reference point for Clifford's real-time observations of coastal change.



*Jay Dardenne, Lieutenant Governor; Wm. Clifford Smith, TBS Chairman of the Board; and R. King Milling, Chairman of the Board, America's Wetland Foundation - 2012*

From all accounts, Baker seemed to have returned immediately to Tulane, where the sophomore was already an established football star. News reports suggest he competed on the gridiron throughout the remainder of the 1909 season. His exemplary courage, on and off the field, did not go unnoticed by his classmates, who elected him president of the 1911 sophomore class. The fact that he was still a sophomore three years after enrolling at Tulane appears to corroborate family lore that Baker was not a model student. The myriad demands imposed by extracurricular activities on his time and energy took a toll on his grades and Baker was placed on academic probation at least twice, requiring him to interrupt his stellar football and track careers.



*Baker playing football for Tulane University - 1910*

Baker was a natural athlete who excelled on the football field, baseball diamond, cinder track, and, much later, golf course. From 1908 through 1912, Smith starred at end for the Tulane Green Wave in an era when starters played both offense and defense. Acknowledged as the fastest member of the football team, Baker utilized his speed on both sides of the line of scrimmage. On offense, he consistently provided a spark, lifting his team at critical moments, usually with pass receptions or end-

around runs for long yardage. On defense, Baker utilized his physical gifts to wreak havoc on offenses. In September 1910, a New Orleans sportswriter recalled that, “he was the lightest man on the team two years ago, but nevertheless was responsible for more catastrophes to the other side than probably anybody else on the squad.”

He remained a “mainstay” of the Green Wave eleven for the duration of his collegiate career. Though his performances remained consistently laudable, those of the squad were not. According to an independent sports reference source, the Green Wave’s record was 7-1 in 1908, 4-3-2 in 1909, 0-7 in 1910, and 5-3-1 in 1911.

In baseball, Baker was a “star third baseman,” but his exploits on the diamond paled by comparison to those on the track. New Orleans sportswriters maintained that Smith, during his Tulane career, was the fastest collegiate and AAU sprinter in the South. According to legendary Tulane trainer Frank “Tad” Gormley, Baker consistently placed in the 100-yard dash, despite the fact he lacked proper conditioning and training. Despite this, and the fact that he ran on surfaces that would now be considered absolutely substandard, he still managed to post times in the range of 10.2 seconds, which was outstanding for that era. In 1913, his track teammates thought highly enough of Baker to elect him captain on the first ballot.



*Baker, a “star third baseman” at Tulane - 1909*



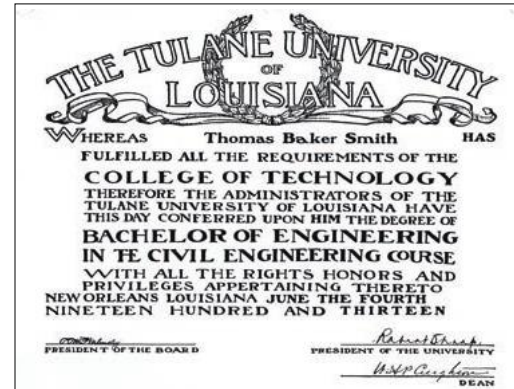
*Baker - 1909*



*A picture of Tulane's football team and Baker's track medals*

Baker’s stellar athletic achievements contrasted sharply with his lackluster academic career. These academic difficulties played an important role in framing Baker’s senior year. In his final semester, Baker was offered employment as a civil engineer with the Cuyamel Fruit Company, which was United Fruit Company’s chief

Central American competitor, through a work-for-academic-credit program in lieu of remaining at the university and taking final exams. Given the choice of working outdoors for the world's second largest banana and tropical fruit seller or remaining in the classroom, Baker eagerly took the job. Because he was working in Honduras, Baker graduated in absentia at Tulane's annual commencement exercise on June 4, 1913, at the New Orleans French Opera House.



*Thomas Baker Smith's Tulane diploma - 1913*

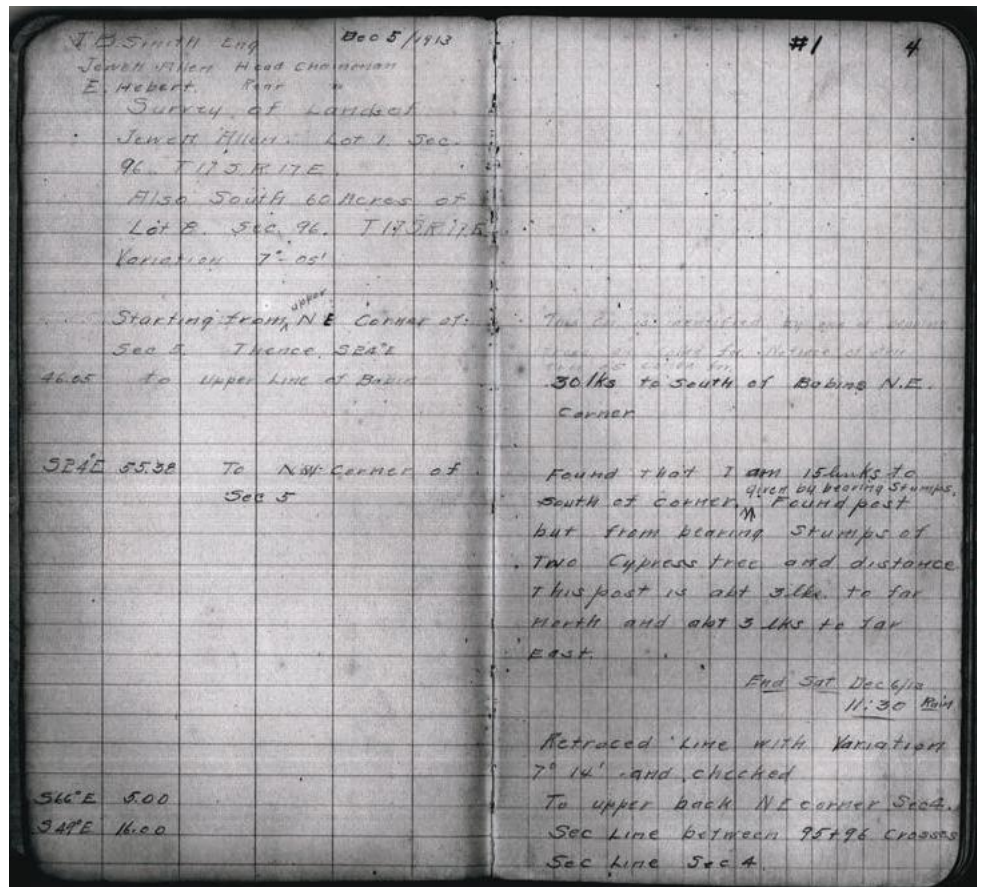
The Cuyamel Fruit Company was founded and owned by New Orleans businessman Samuel Zemurray, whose banana plantations occupied thousands of acres along the Cuyamel River in Honduras. Zemurray sold his company to United Fruit in 1930 for \$31.5 million (\$410 million in 2013 dollars) in stock and retired. In 1933, he returned to the business and took control of United Fruit, which eventually became the iconic Chiquita™ brand.



Before his departure for Central America, Baker purchased a handgun in anticipation of the labor violence and general lawlessness he had been told to expect. However, his tenure with the Cuyamel Fruit Company was evidently uneventful and a family emergency interrupted his sojourn at Cuyamel. Approximately six months after his arrival, Baker's family sent him a cable that simply read, "Your father is dying. You need to come home." Baker immediately packed his bags and boarded the first available New Orleans-bound steamship, part of what was known as the banana industry's "Great White Fleet." Quickly making his way to Houma in the late fall or winter of 1913, he discovered that his father was on the road to recovery.

With the resolution of his father's health crisis, Baker decided to remain permanently in his hometown and embarked upon a long and successful professional career in his native Terrebonne Parish, a move that naysayers openly declared to be professional suicide. But Baker proved them wrong by successfully utilizing his skills in both the engineering and surveying disciplines. On January 24, 1914, Baker became a board certified civil engineer.

As a novice civil engineer, Baker sporadically worked with John A. Lovell, an established civil engineer and surveyor based in Thibodaux. Lovell played a pivotal role in Baker's early training and development to acquire the necessary skills to become a certified surveyor. Not only did Lovell evidently teach Baker his distinctive field notes system, but he also demonstrated the importance of historical documentation in preparing to accept and complete a survey. Clifford recalls, "Mr. Lovell, among other things, taught my father that when you're making a survey down one of these bayous, not only do you need to



Baker's field notes, dated December 5, 1913

know where the sections and the townships are, and not only do you need to know something about possessions, but you need to know something about the chain of title. Chain of title. An abstract. And Mr. Lovell would not make a survey of a two-arpent tract by forty arpents deep below Golden Meadow unless he knew something about the titles within that grant or section. He taught my father how to abstract and develop what my father used to call a title map, so that not only did you determine how many sales had been made out of a section or a township, but also when they came out, because that was important. If Joe Blow bought one arpent, and then somebody else bought what was left, you had to know the chain of title."

In the late nineteenth century, Lovell was a railroad man who took a job in the cypress lumber industry in Lafourche Parish. By the second decade of the twentieth century, he was an acknowledged expert on cypress timber and coastal Louisiana's distinctive topography and a surveyor of considerable local repute. Lovell's field notes specifically identify Baker working with him on two different projects: a property survey (January 12 – 14,



1914) and a timber estimate effort (June 27 – 29, 1914). Archival evidence shows these projects were associated with the production of the Bowie Lumber Company’s 1914 “Working Map.” For both surveying jobs, Baker received \$9.00 in wages, \$12.60 for lodging, and \$9.75 for board at an unidentified Thibodaux hotel. Lovell’s records also specify that he hired an “assistant from Houma,” almost certainly Smith, on two occasions in March and April of 1914.

The first job involved a late March/early April survey of an unidentified parcel of property owned by the Lefort family. For four days of work, the “assistant” earned \$12.00 in wages and was reimbursed \$1.95 for railroad fares and \$2.00 for livery stable costs, likely for the cost of transportation by horseback or jitney from Houma to Terrebonne Station (present-day Schriever). On the second project, an estimate of the cypress timber on Lauvé Ridge for C.S. Mathews, *et al.*, Lovell’s Houma “assistant” again received modest wages and reimbursement for “livery to Thibodaux” and rail fares from Schriever to Thibodaux.

Lovell clearly exerted considerable influence on his young apprentice, Baker, who meticulously emulated his mentor’s fieldwork records system and property title methodologies. Baker set off full time on his own in the spring of 1914, but he and Lovell continued to collaborate periodically on jobs as late as 1943. Lovell died in Thibodaux in mid-August 1955.

Because Lovell worked almost exclusively in Lafourche Parish, Baker was free to exploit his newly acquired skill set in Terrebonne Parish, where he began to develop what the firm internally calls “title charts.” Development of these property abstract catalogs was complex in Terrebonne because of the parish’s unusual topography. Houma sits at the junction of five bayous (Bayou Black, Dularge, Grand Caillou, Little Caillou, and Terrebonne), each with a habitable natural levee. Thus, for every mile of territory along a north-south axis, there were potentially five times as many local land grants as there were in the corresponding section of Lafourche Parish, where there is only one habitable natural levee along Bayou Lafourche.

A property abstract chronologically catalogues all legal documents pertaining to a parcel of land. The investigative process results in a condensed history of all deeds, mortgages, wills, probate records, court litigations, and tax sales. An abstract shows the names of all property owners, how long individuals owned the property and the value of the parcel when it changed hands. Under Louisiana’s forced heirship laws, ownership issues can become quite convoluted.

Baker derived great personal satisfaction from his survey work. Clifford recalls that, “My father prided himself on being a surveyor and the details of being a surveyor. An abstractor. Reading government notes. Reading government



*Some of Baker's survey tools: Compass, jacob staff and drawing instruments*

plats. Reconstructing U. S. government surveys. He bought instruments that related to the surveys. He went out and bought a compass, which we still have, and he bought chains. My father said, ‘I can’t retrace a survey with modern instruments. I’ve got to have the instruments that the surveyor was using to do that.’”

Future hires have followed in Baker’s footsteps as they have labored in the swamps and marshes. Field books in the firm’s archives are filled with longhand notes and calculations. Before a survey crew left the office, the firm’s field notes were a party chief’s indispensable first reference tool. C.E. “Ed” Bridges, who worked for TBS and later for Texaco, recalled that, “TBS would always dig up the original township notes or section notes, and they would look and see what they had, how far it was, and they would start looking for those witness trees if they could.”

Following in the footsteps of Baker, company field crews have been monitoring and recording regional elevations for more than half a century and using the thousands of archived field books to research past surveys. TBS Project Inspector, Thad Lovell, who joined the firm in 1962, has diligently maintained a record of these changing contours. Thad explains, “I did some perfect field notes, and the drafting technicians always liked me because they could understand my notes.” His notes between 1962 and 2012 demonstrate that some benchmarks are two feet lower than they were in the 1960s. He has personally measured Terrebonne Parish’s 458 benchmarks. (Land surveyors measure horizontal positions in geographic or plane coordinate systems relative to previously surveyed positions called “control points.” Benchmarks are used to mark vertical control points.) His first-hand documentation is a resource tool of almost inestimable value. These records are reference documents; the books from his 50 years of service are a chronicle of his work and the firm.

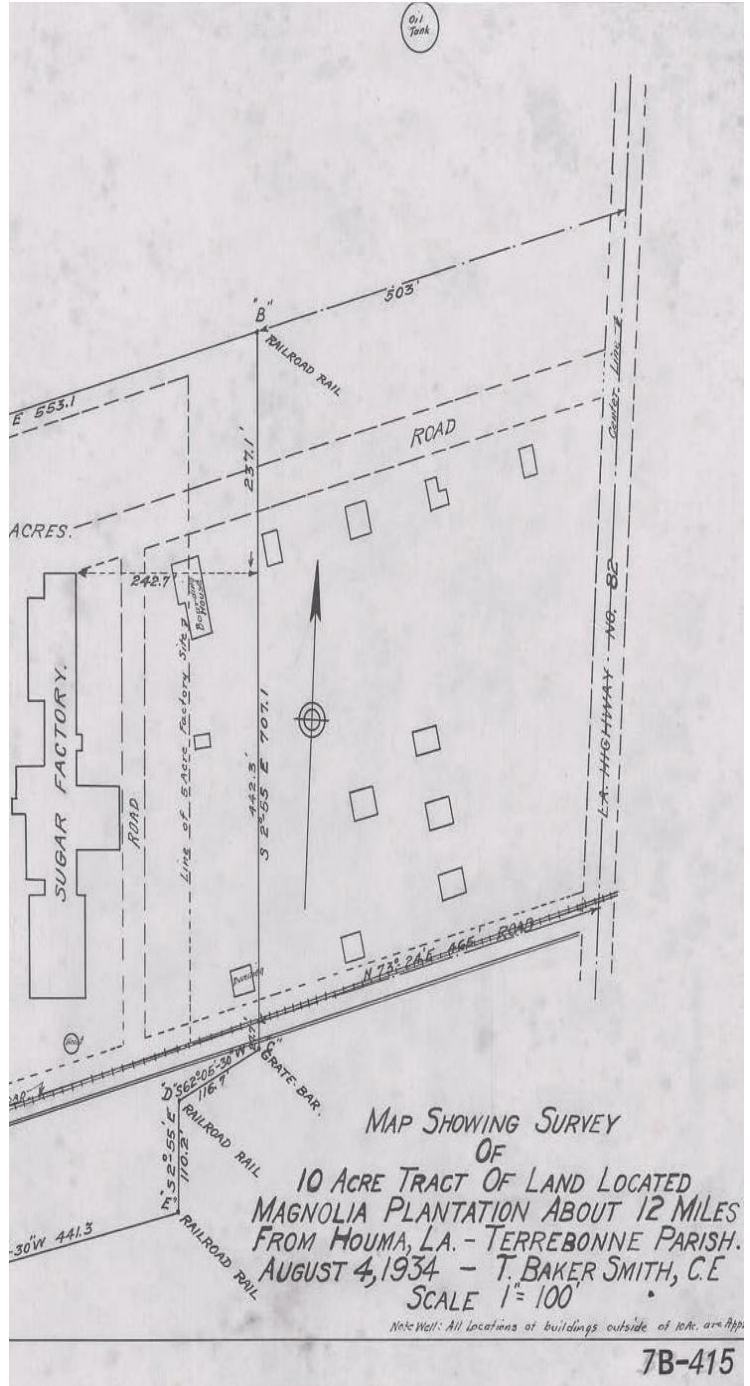
These field notes were the traditional backbone of the firm's surveying efforts, and even after the introduction of twenty-first century technology, they continue to serve the firm well. Ken Babin, a former TBS client who worked for Texaco and Hunt Petroleum from 1972 to 2009, highlighted the critical significance of the TBS archives when he echoed Ed Bridges' comments, reporting that TBS could perform much of the preliminary work in the office from TBS' old field notes, many compiled by Baker. "I have actually seen the field notes, and they go back forever," Babin said. He further explained that TBS' historical experience and notes continue to add value to client projects: "TBS' field notes were invaluable because those notes saved us money." The notes were an integral part of Babin's overall satisfaction working with TBS. He stated, "I'd just come here and could meet with all the people and do it all in one office, which was fun. TBS arranged for everything I needed. I would give them the go-ahead. They would run with it and come back with a finished product. I didn't have to ride herd over anybody or anything else. When working with TBS, they were just like an arm of our company and it was easy to do business with them."

The survey field notes bear silent testimony to Baker's obsessive attention to detail. The precision of his work allowed him not only to produce definitive boundary surveys, but also to reconstruct and correct government surveys done in earlier times with crude instruments under adverse environmental conditions. In doing these reconstructions, Baker was a national pioneer who developed techniques, grounded on irrefutable empirical evidence, that have become professional benchmarks. His original and reconstructive surveys have withstood the test of time for accuracy, impartiality, and legal viability.

Baker's surveys generally fit into four broad categories: 1) land surveys, 2) trapping leases, 3) oyster leases, and 4) oilfield leases and pipeline right-of-ways. The oil and gas land surveys involved techniques that have been used for centuries. Baker was an expert in reconstructive surveys, a type of land survey. Reconstructive surveys on high land sometimes required surveyors to locate and positively identify witness trees. Because of the absence of permanent landmarks, such as stone outcroppings, colonial and early American surveyors were compelled to use prominent trees as boundary markers. The surveyors stamped these "witness trees" with identifying marks. Over time, the forces of nature, particularly floods, hurricanes, and the corrosive effects of aging, took their toll on these markers. Even among the surviving trees, tree-ring growth obscured surveyors' marks. To confirm the original survey boundaries, TBS "excavated" the stamped information from surviving witness trees that had aged more than a century, sometimes more than 150 years, since their original imprinting.



Government witness tree "stamp" found by Baker - 1914



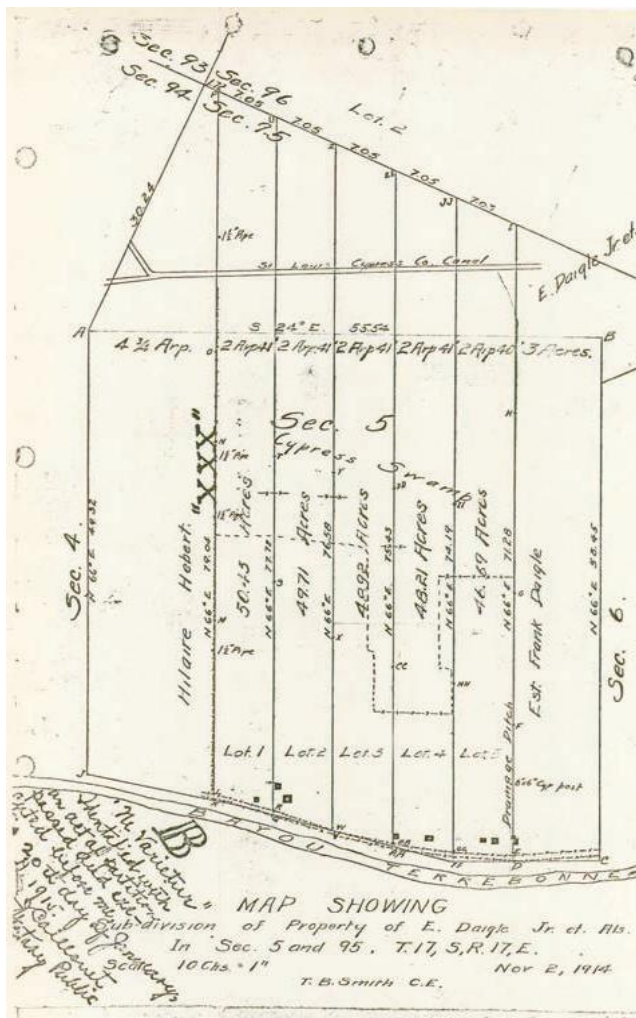
Early survey of Magnolia Plantation performed by Baker - 1934

The second category, trapping lease surveys, presented a different set of challenges. The same basic techniques were employed in these surveys, but the working conditions were far worse.

When reminiscing about his days surveying in the marsh, Clifford recalls, “I’ll never forget. One day, we were walking south of Montegut when I was in high school and we were running a township line from the Point Farm Ridge to Bayou Terrebonne, which was probably about four miles. It was pure marsh, freshwater marsh at the time, but it’s a lake now. And, it got to be about 11:30, so we said we’re going to have lunch. You carried your lunch in a bag, in a pack, or something. You had a canteen with some water in it. You carried as little as possible because you didn’t want to carry it. And so I said, ‘Where are we going to eat?’ My father, Baker, said, ‘We’re eating right here.’ I said, ‘Well, where are we going to sit down?’ He said, ‘We aren’t going to sit down. You can’t sit down in the marsh. There aren’t any trees or anything out here.’ And it had to be 100 degrees. Then you ate a sandwich or a can of Vienna sausage. Drank a little water. Then, hit it, partner! You were cutting through the roseau cane. You hopefully got to the bridge; somebody was going to pick you up and take you back to your car, so you didn’t have to walk back the other way. And that’s how it was.”

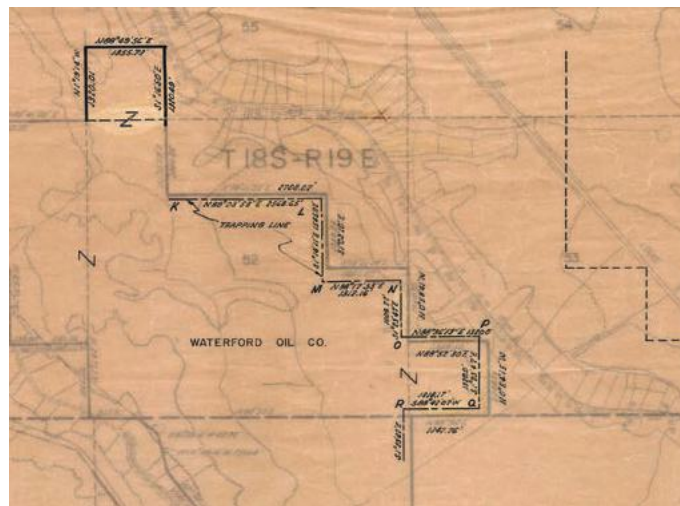
As Clifford clearly recalls, working in the coastal marshes was dicey under the best of circumstances and certainly no place for novices. The marsh was a sea of grass that was difficult for a surveying party to navigate on foot. Despite this, when a client required immediate help, the survey crews would “stop, drop, and roll” because, regardless of the surveying job, a group of trusted employees always knew how to do a proper job. This philosophy was engrained in Clifford and passed on to Kenny.

Clifford remembers, “My father used to always ask me, ‘Where are you going?’ I’d say, ‘Well, I’m going to do a small survey job.’ Who’re you taking with you?’ I’d say, ‘I got a map. I went to school to read a map. I ought to be able to figure out how to get my butt back.’ He’d say, ‘You better bring somebody who knows where they’re going.’ And we did that sometimes. It was survival of the fittest, believe me.”



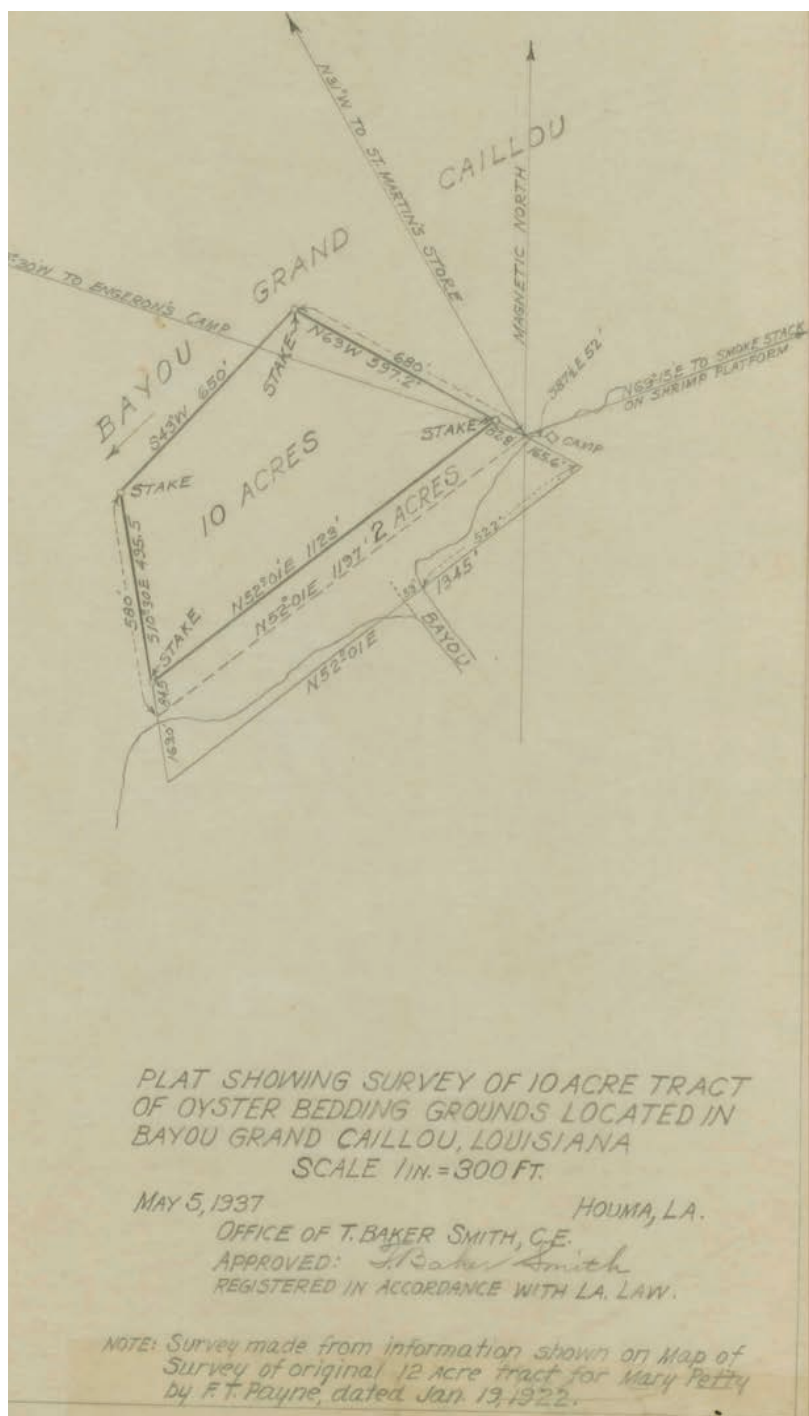
A land boundary survey performed by Baker - 1914

The demand for oyster-lease, trapping-lease, and high ground land surveys was driven by the value of the property being surveyed. In the early twentieth century, the appraised value of each class of property was hugely impacted by the discovery of marketable hydrocarbons and the onset of petroleum exploration and developmental activities throughout Louisiana's coastal plain. By WWII, the precise location of boundaries became an overriding concern for landowners, lessors, and lessees preoccupied with verification of their rights to subsurface mineral royalties and other resource income. The demand was augmented by the need for oil companies to survey canals, drilling locations, tank-batteries, pipeline rights-of-way, and, in some cases, property boundaries,



A trapping lease survey performed by Baker - 1957

The third category, oyster lease surveying, was different yet again. Here too, Baker pioneered techniques for plotting the boundaries of these entirely submerged aquatic tracts. Because of the limitations of existing technology, there were routine difficulties, which were compounded by the forces of nature that took a toll on impermanent markers, similar to the witness trees on high ground. The loss of markers occasionally led to boundary disputes and charges of theft, which led to surveys in which Baker reconstructed boundary lines by triangulation.



An oyster lease survey performed by Baker - 1937

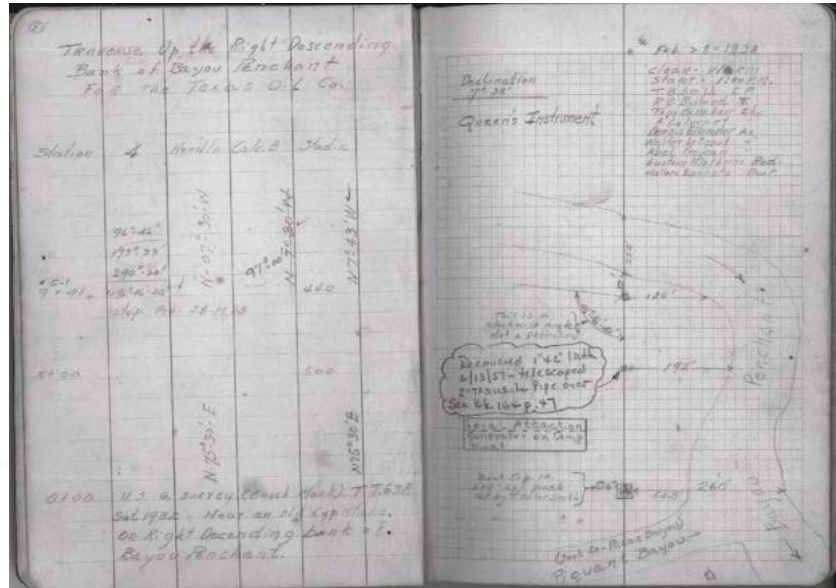
which were still a vital and essential part of the firm's annual revenues when Clifford became CEO.

Baker's involvement with the fourth category, oilfield and pipeline survey work, appears to have started with the Lirette Field in southeastern Terrebonne Parish. Developed by J.H. Thatcher, the Lirette Field began producing in the late 1920s and Baker staked out the first location around 1927, which was fourteen years after Baker's mapping of cypress resources. Baker's work in both the cypress logging and petroleum industries mirrors the surveying demands of the region's early twentieth-century economic drivers.

Describing the process of staking an oil and gas location, Clifford explains, "You set a transit up on a control point, and then you measure from that control point to where you were going to stake a location. You'd chain it out. We didn't have any electronic devices. You got somebody to walk along there. If he was in the woods, you'd cut a path through the woods. You had to cut everything with sweepers and set a point, turn an angle, stake the location, then stake the canal around it. It was difficult work, very difficult work."



Baker setting up his transit in the marsh for a pipeline survey - 1945



Bayou Penchant survey notes - 1938

Entrepreneurs quickly established a pipeline to transport natural gas from the field to Houma, where it supplied the municipal gas system. Baker likely was involved in the initial surveys for the Lirette Field pipeline. This construction initiative was part of a national trend in pipeline construction that was driven by the explosive growth of the automobile industry and the desire to move into the Age of Industrialization, a period in Louisiana's economic history wedged between the Antebellum years and the eve of WWII.

Although company files are silent about Baker's participation in this benchmark project, he was, according to the family, the surveyor of record for this early pipeline's successor. A second line was necessary because operators abandoned the Lirette Field after it mysteriously ceased to be productive in the early 1930s. New developers brought the field back into production around the beginning of WWII, after the original rights-of-way had lapsed. To move the field's output to market, United Gas Pipeline Company (originally a division of the Gulf Pipeline Company, now Boardwalk Pipeline Partners) built numerous pipelines to New Orleans (and, ultimately, to Mobile) and a secondary branch line to Houma after surveys were completed by T. Baker Smith.

Seventy years after the Lirette Field was brought back into production, TBS continues to provide professional services to a large variety of pipeline interests, not only because of TBS' expertise, but also because TBS has the experience and long-term knowledge to meet the client's immediate needs. Randy Landry, Vice President of Human Resources and Strategic Development, who has sixteen years with TBS, notes: "When I first started, I



worked on a couple of projects that really kind of set the tone for what I've done. One of them is the Koch pipeline project, stretching from Louisiana into Alabama, nearly 300 miles of pipeline and dealing with several Corps districts [and] multiple agencies. I got a lot of fieldwork experience. That was a big project, and we're still working on it today, you know, maintenance and re-routes and so forth. As the owners of the pipeline changed hands, they wanted to keep us involved because we had the long-term data and the long-term knowledge of the area."

Baker also did most of the surveying work for the Lake Long Field in Lafourche Parish, which was initially explored and developed by the Fohs Oil Company. The first well in the Lake Long field was completed on April 28, 1945. By 1960, fifteen wells dotted the landscape.



*Baker shown sitting on the Merle, the boat named after his only daughter - 1930*

The flurry of surveying activity brought by oil exploration and the concentration of associated endeavors in remote areas of Terrebonne Parish prompted Baker to build a quarter boat to sustain fieldwork over the course of several days. In 1926, he began construction of the *Merle* at Madison Canal, south of Montegut on the east side of Bayou Terrebonne.

Named for his only daughter and built of virgin cypress, Baker's boat was thirty-six feet long, six-feet wide, and capable of sleeping eight. The vessel featured a full galley, a bathroom, stainless-steel gas tanks, and a rear-mounted icebox capable of holding 300 pounds of ice. Clifford remembers that the *Merle*, powered by a massive eighty-horsepower Wisconsin engine, was "built like a bullet because you wanted it to go through the water fast." However, when stationary, the vessel had remarkable stability because it had anchors at the bow, stern, and amidships.



*Merle docked at Sea Breeze - 1945*

Though Baker built the *Merle* as a survey quarter boat, he and his family used the vessel extensively for recreational purposes. The Smiths have always loved the outdoors, and Baker instilled his family with an appreciation for outdoor recreation. Clifford spent half of his young life aboard the *Merle*. During a devastating 1926 storm, often called the Great Miami Hurricane, a storm surge was pushed far into Terrebonne Parish. As the winds and waters approached, the Smith family faced the challenge of safeguarding the *Merle*, which was under construction by the Boyne brothers, from certain destruction. To protect her, they sank the unfinished *Merle* in Madison Canal, south of Point Barre on the east side of Bayou Terrebonne. The cypress hull and superstructure survived intact. After the storm passed, the shipwrights returned, pumped the *Merle* dry, and finished the boat.



Young Clifford on the *Merle* - 1939



Baker and Miss See enjoying an outing on the *Merle* - 1954

This survival instinct shown when protecting the *Merle* illustrates the ingenuity that has always been a hallmark of Baker and his descendants. Eighty-seven years after this event, hurricanes continue to act as benchmarks in delineating how natural disasters can wreak havoc across Louisiana's coastal lowlands.

The *Merle* served as the firm's base of operations for numerous major surveying endeavors. Perhaps the most notable of these surveys was the Bayou Chêne to Bayou Penchant Project, a benchmark mapping effort for oil and gas exploration in Louisiana's wetlands undertaken in early 1939. The field work, extending more than thirty miles, required the vessel's crew to negotiate waterways choked with water hyacinths, free-floating perennial water lilies whose intertwined root system can easily obstruct passage through a waterway. According to Clifford, Baker's field notes maintain that on one of the traverses down the 300-foot-wide Bayou Penchant, one "could walk across the bayou on the water lilies and not get wet." Even without the challenge of combating such intractable navigational hazards, life aboard the *Merle* could be difficult. Clifford remembers, "You were on your own. You did all the calculations you could possibly do in the office and took them with you. And you would bring slide rules or calculators because sophisticated adding machines would not work on a battery.

I mean you had to do this. The *Merle* didn't have a generator. You brought ice. You brought food. If you wanted light at night, you had a Coleman™ lamp. That was your light at night. You better bring some mosquito screen because they were going to carry you off, out in the middle of nowhere. You brought enough food. My daddy, if he went for five days, he brought enough food for ten after surviving the 1909 hurricane. Again, you brought everything you could anchor the boat up with, and you brought enough fuel, hopefully enough to get back home.”



*Baker's slide rule*

Without electronic communications, the *Merle's* crew never took a return trip for granted. Clifford recalls that his father, who was an avid fisherman and duck hunter, would not take *Merle* on a fishing expedition unless A.V. Picone, a good friend and the parish's best gasoline mechanic, was aboard because he “could fix the motor.”



*Senator Allen Ellender and Baker on Bayou Terrebonne after a duck hunt -1940*



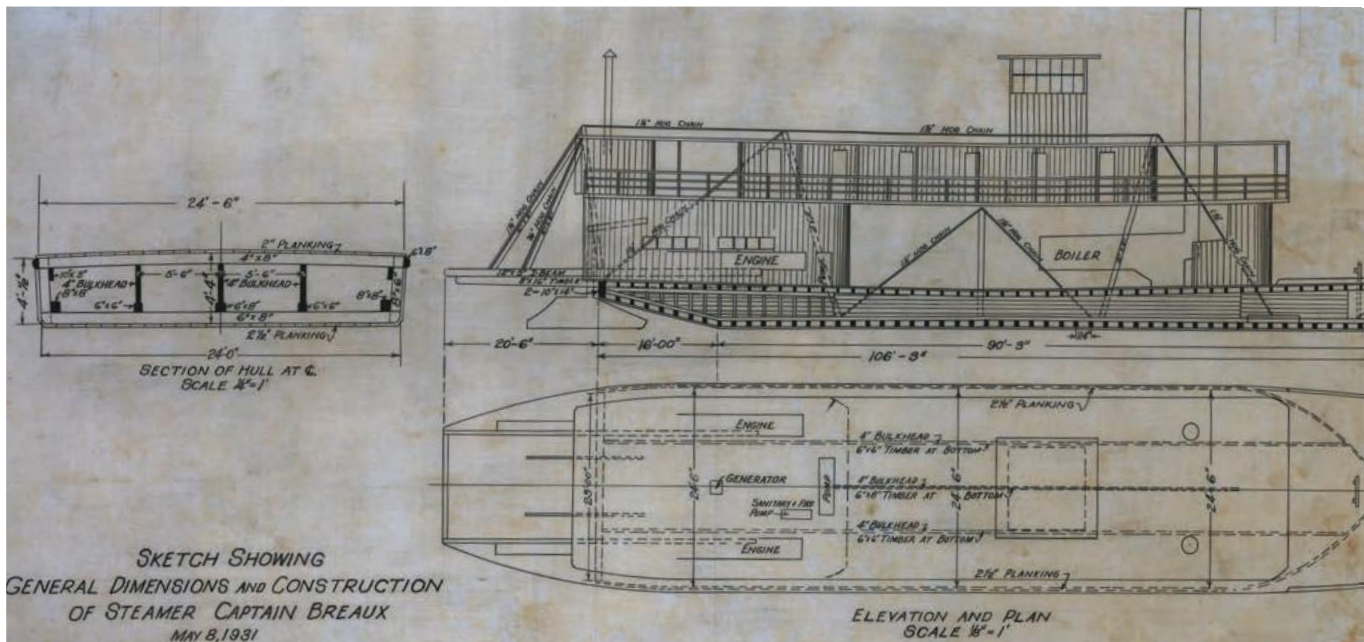
*Baker and friends catching tarpon at Wine Island - 1926*

The difficulties involved in surveying were compounded by the nature of the business itself. The demand for surveying services was sporadic, particularly during the Great Depression. The irregular work schedule was especially problematic for large jobs requiring work crews of two to several individuals. Survey crew members often found themselves unemployed

for a month or more at a time. Consequently, Baker was routinely obliged to reconstitute field teams with new workers who required rudimentary training before deployment into the field.

During the prolonged surveying hiatuses, Baker focused on civil engineering projects. Whether by design or happenstance, he maintained a remarkably balanced workload. Clifford recalls, “There was probably an even split of surveying and engineering work at that time.” Although some of his earliest design activities involved steamboat drawings, Baker's engineering career was profoundly shaped by the onset of the automobile era.

The railroad, which had been the nation's transportation mainstay for more than two generations, was quickly eclipsed by affordable gasoline-powered cars and trucks during the Roaring Twenties, the Great Depression, the Age of Industrialization, and the Golden Era of the Automobile. The increasingly dominant automobile provided the impetus for change, and although America's love affair with the car was still in its infancy, the transportation revolution it stimulated was already leaving its mark on the nation's geography.

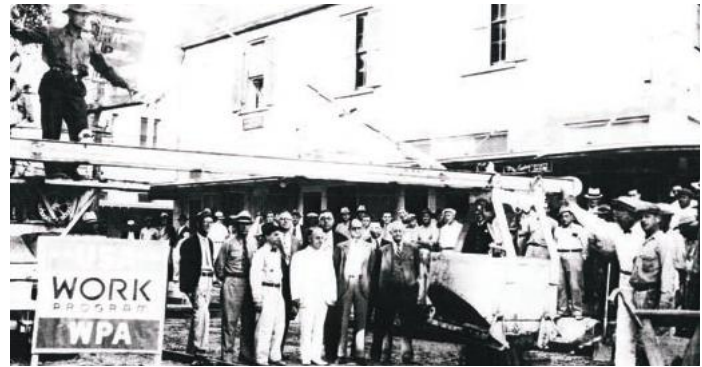


Baker's steamboat design - 1931

On the local and regional levels, the dawn of this era brought aggressive lobbying efforts to persuade Congress to establish a national road system. Ambitious communities lobbied to be included on those highway systems to secure economic benefits. Houma developed a linkage with the Old Spanish Trail, the predecessor of U.S. Hwy 90, stretching from San Diego, California to St. Augustine, Florida.

Once the "auto trail" was finalized by the mid-1920s, state highway departments, parish police juries, and municipal governments began scrambling for funding to improve the burgeoning transportation arteries upon which their economies were growing increasingly dependent. In the Roaring Twenties, these improvements usually consisted of gravelling road surfaces. In South Louisiana, since gravel was not readily available, clam shells (*rangia cuneata*) were used. During the following decade, many miles of gravel/clam shell roadways

were paved. This was frequently done through an infusion of federal dollars into national, regional, and local make-work programs supervised by the Works Progress Administration (WPA), an integral part of President Franklin D. Roosevelt's New Deal. These federal highway upgrades prompted local motorists to demand better state, parish, and municipal roads.



*Baker was the civil engineer for the first paved street in Houma, Church Street - 1936*

Baker was a beneficiary of this chain of events. Terrebonne Parish hired the civil engineer to calculate the amount of gravel, or clam shells, required for the base of local roadbeds. New and better bridges were also needed because the region's increasingly car-dependent population required greater access to cross the region's bayous. New bayou spans were particularly critical during this time because of the sudden paradigm shift in the distribution of goods.

Because of the emerging "modern" roadway system, trucks overtook steamboats and other vessels as the leading local transporters of bulk merchandise. Bridges suddenly had to accommodate far greater load capacities. Replacement bridges, constructed as the last of



*Bronze name plates from the original Lafayette Street Bridge and Church Street Bridge - 1940*

lower Louisiana's old-growth forests and consumed by local sawmills, were usually one lane, movable spans built of massive cypress beams, measuring up to twelve-by-twelve inches.

By the post-WWII era, such exceptional construction materials were no longer available and Baker took the lead regionally in designing steel bridges to replace the wooden predecessors. It is estimated that Baker had

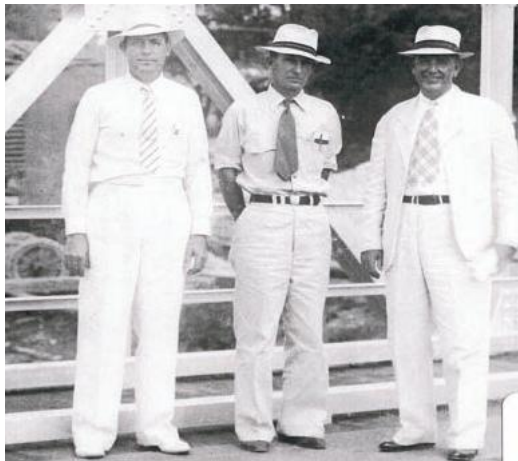


*St. Anthony Bridge over Bayou Black, designed by Baker*



*Baker, far left, and other members of the Navigational Canal Task Force - 1958*

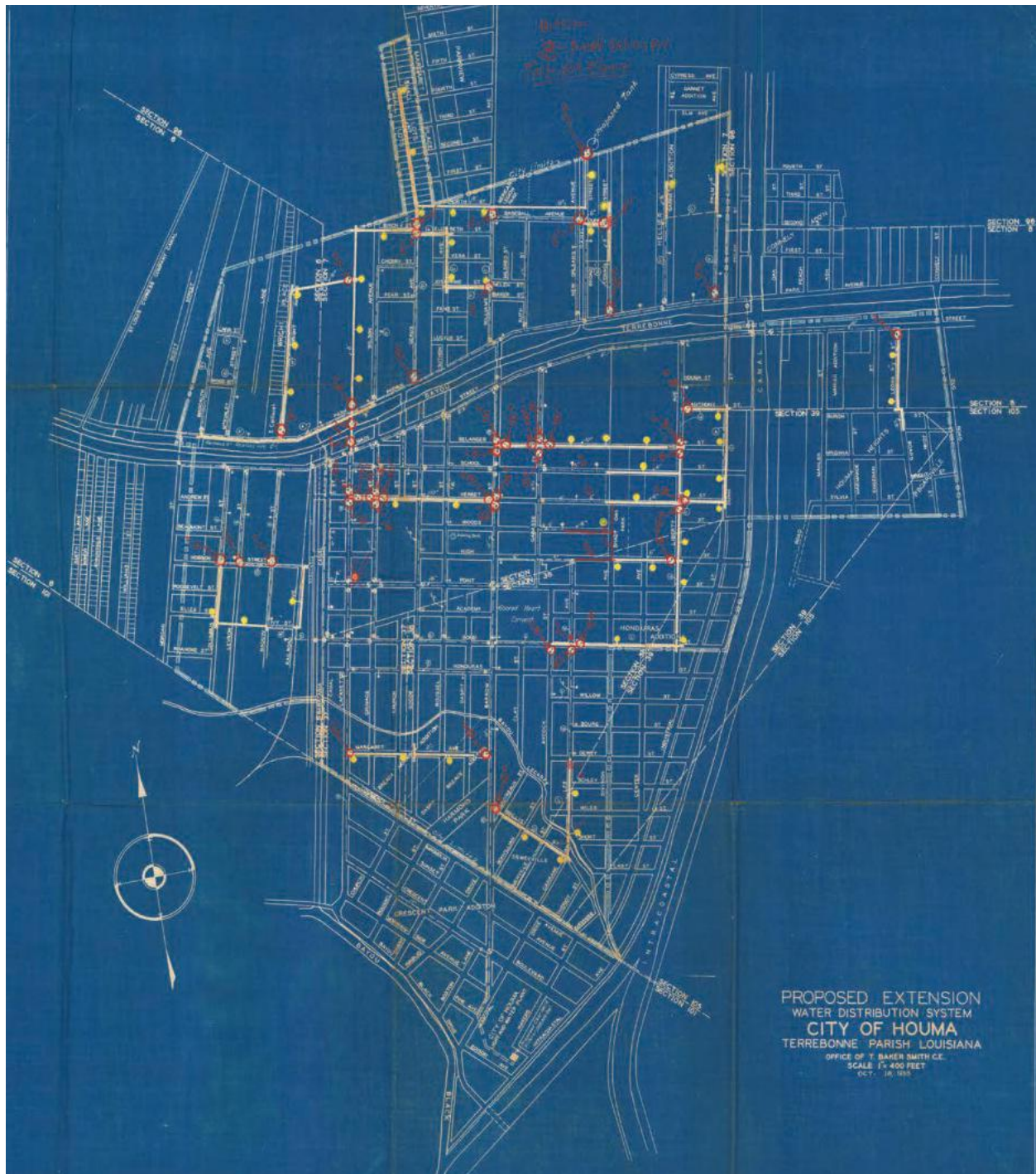
drawn the plans for at least half of Terrebonne Parish's existing bridges at the time of his death in the early 1960s. In some cases, these jobs were joint ventures that maximized the skill sets of several engineering firms.



*Baker, as the city engineer on the new Church Street Bridge - 1940*

In addition to road and bridge work, Baker was heavily involved with miscellaneous civil engineering projects in his hometown. Municipal and corporate records make it clear that Baker was Houma's *de facto* city engineer during Elward Wright's mayoral administration, extending from approximately 1930 until 1945. Wright, an attorney and protégé of future United States Senator Allen Ellender, had complete confidence in Baker's professional competence and personal integrity. According to Clifford, "Wright would not do anything from a public improvements standpoint, sewerage, water, recreation, roads, or bridges, without my father being involved."

Consequently, Baker played a pivotal role in Houma's physical development during the Great Depression and WWII eras. The city hired him as engineer for the paving of Church Street, Houma's first hard-surfaced roadway, and for the community's American Legion swimming pool. Both of these projects were financed with federal WPA funds. Additionally, Baker designed a new municipal gas system for Houma on the eve of WWII, as natural gas from the Lirette Field again became available. Baker also served as engineer for the city's municipal utilities operations; he managed development of the existing electrical system and designed Houma's water and sewerage systems.

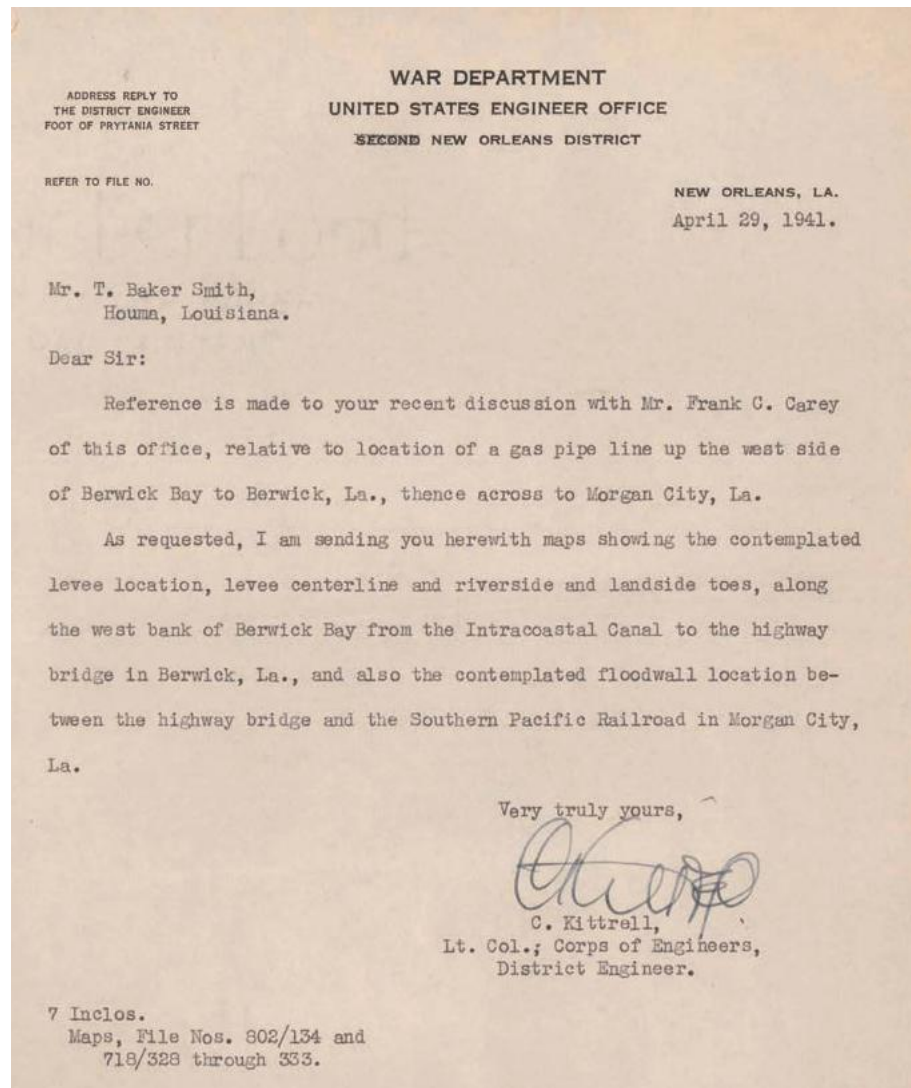


A map showing the water distribution system of the city of Houma - 1933

Because of wartime shortages of labor, supplies, and discretionary funds, local engineering and surveying contracts both public and private were few and far between. Baker, who was beyond conscription age, accepted the prestigious position of Terrebonne Parish Draft Board Chairman during the conflict to supplement his meager professional income.

When not involved with government-sponsored work, Baker provided engineering services to private interests. These projects took many forms. For example, Baker designed and constructed an intricate drainage and pumping system on a 150-acre tract close to Bourg. It was the first in a long series of engineering enhancements that have served the firm and Terrebonne Parish well.

The connection between TBS and Terrebonne Parish is perhaps best illustrated by the work of Mitch Marmande, Senior Project Manager with eleven years of service at TBS, who reports, “I am almost more like a Terrebonne Levee and Conservation District employee than I am like a TBS associate because all my time is spent over there” working on the Morganza to the Gulf project, which is “a risk-reduction, flood protection project to protect the citizens of Terrebonne and Lafourche Parishes.”



*Letter to Baker from the War Department regarding the location of the gas pipeline and levee maps - 1941*



This type of dedication was Baker's hallmark and continues with other TBS associates who were born and reared in Terrebonne Parish and completely understand the importance of a wide variety of engineering endeavors. Baker's legacy consists, in part, of the associates who understand the noble nature of their work and the infrastructure and business elements touched by Baker's engineering and surveying skills.



Baker at the Houma Golf Course putting green

In his twilight years, Baker was an avid golfer. On April 24, 1955, he shot a hole-in-one on the fifth hole at a distance of 150 yards at the Houma Golf Club. Baker remained a human dynamo until his health declined in the 1950s. He suffered a heart attack in 1955 and subsequently began to curtail his professional activities. In 1956, Baker sold the *Merle* to a Texas buyer. After Clifford's graduation from Louisiana State University in 1958, Baker started shifting responsibility for the firm's day-to-day operations to his son.



Baker's Hole-in-One trophy - 1955

Jo-Anne Smith, Clifford's wife, recalls, "When Clifford started, his dad was just keeping the business open for him. At that time, the firm had one other employee at its Park Avenue office, located next to the little Esso service station. We lived in the duplex next to the service station."

Clifford was just twenty-two when he came into the business. Clifford's elderly, exhausted father quickly relinquished the helm, and, by the time of Baker's death in 1962, Clifford functioned as both a partner and the firm's *de-facto* chief executive officer. Through his will, Baker transferred all interest in the business to Clifford in compliance with wishes he had made known to the family before his death. Clifford was twenty-seven when his father died of a cerebral hemorrhage at Terrebonne General Hospital on the morning of July 1, 1962, just shy of his seventy-third birthday and two weeks after the birth of his grandson, Kenny, who would later become CEO during the third leg of TBS' "A Century of Solutions."

Clifford reminisces with pride, "What I learned the most from my father is good values, things he taught me through his strong examples of efficiency, his conservative and prudent nature, and his ability to stay well-disciplined."

## HISTORICAL SNAPSHOT

### The Field Equipment



1890 Gunter's chains for measuring distances



1913 Survey compass and transit for measuring angles



1969 Terminal with modem to send off data for remote processing of calculations

1970 Auto tape offshore survey instrument (measured long distances)



1972 Transit for measuring angles and HP 3800 distance meter for measuring distances

1976 HP 3810 total station measures angles and distances

1977 HP 9815 computer used to perform office calculations/no need to send off data

1978 Installation of two way radio system between office and field crews



1979 Basic calculators implemented at TBS



1979 VHF mobile phone used at TBS

1980 HP 3820 total station measures angles and distances but saves data for download

1982 Motorola mini-rangers and del Norte range systems



1986 HP Vectra is first PC type computer



1991 First field computer (data collector) purchased

1993 Sokkia SDR 24 data collector with total station decreasing need to take field notes

1993 Established first network of computers at TBS



1994 Disconnect two way radio systems and begin cell phone use for all field crews

1995 Move to GPS (satellite) based surveying

1997 Digital hydrographic surveying begins at TBS

2009 First 3D scanner purchased



2009 Every field crew outfitted with PC

2011 Every party chief issued iPhone



## COMING OF AGE IN THE INDUSTRIAL ERA

### William Clifford Smith

*“I feel so fortunate and downright lucky to have Clifford not only as my father, but as a mentor and friend. He has such vast experience and a wealth of practical knowledge, he has taught me the importance of having passion for what I believe and a strong work ethic.” Kenneth Wm. Smith*

### Part 1

### Strong Backs and Weak Minds

After graduating from LSU in December of 1957, Clifford immediately returned to Houma, a decision many of his peers questioned. In fact, his peers derided him for foolishly ignoring “more promising” markets and he wanted to prove them wrong. Yet, Clifford’s attachment to Houma and Terrebonne Parish was unbreakable, so he returned to work with his father. This move ultimately allowed him to expand the local firm into a regional surveying and civil engineering enterprise, beginning the second leg of a “Century of Solutions.” On April 12, 1958, he married his classmate and high school sweetheart, Jo-Anne Toups, from Schriever, and started their life together in their family-rooted hometown community. Their first home was a duplex located on the banks of Bayou Terrebonne on Park Avenue, next to the original T. Baker Smith (TBS) office and directly across the street from Clifford’s grandparents, C.P. and Clara Smith’s home.



*Clifford and Jo-Anne as a young couple - 1953*

Clifford and his father were very close. Like his father, Clifford has a love for the outdoors and naturally liked to do many of the things his father enjoyed, such as fishing, hunting, sports, and playing golf. Clifford's interest in golf and the Houma Golf Course began at an extremely early age, when he would go to the course with his father. Clifford remembers "Until the week that he died, my father would play golf every day that the weather would allow. He actually shot his age, 72, during that week." Because there was no golf course in Houma or Terrebonne Parish, Baker became immersed in the development of the Houma Golf Course, now known as Southern Oaks Golf Club. Because of Baker's engineering and surveying background, he was especially involved in the layout and drainage of this nine-hole golf course. The growing of the grass and trees was very important to him. Not only did he develop an interest in playing the game, Baker became very interested in the physical development of the course.



*Clifford and Jo-Anne with their parents, Baker and Odelia Smith and Aloysius and Julie Toups - 1958*



*Clifford and his father on the Merle - 1950*



*Clifford at the Houma Golf Club - 1965*

Clifford's parents gave him many things, but the greatest was discipline. Of course, he did not appreciate it in his early years. During Clifford's high school and college years, if he wanted something special from his father, he would play golf with him and try to talk him into approving. It worked most of the time. Baker was a perfectionist at golf, and he taught Clifford much about the game in those early years. Sometime after Baker's death, Clifford became the President of the Houma Golf Club and assisted in its growth.

The Houma Golf Club was formed, dissolved, and reorganized several times in the late 1920s and early 1930s. Golfers would form a club with members, assess themselves with dues, buy the property from a bank, and mortgage the property for money for improvements with the hope that the dues and profits from the facilities would pay the mortgage and operational expenses. Invariably interest in membership would wane, dues would not get paid, and the note at the bank would default. This was at a time in the 1930s when the United States economy was in the

pits. After two or three reorganizations by some of the same people, they finally decided to put the property in one corporation's name and the club in another in an attempt to protect the property and improvements from foreclosure and loss. The property became owned by the Intracoastal Realty Company, which Baker invested in, and it was leased to the Houma Golf Club. The Intracoastal Realty Company later became The Intracoastal Company, and still owns the land where Southern Oaks Golf Club is located today. This arrangement somehow survived until after WWII.

The expansion of TBS after 1958 was a direct result of Clifford's effort to adapt the business to the evolving service needs of the firm's existing client base. At the time Clifford joined his father as a partner, South Louisiana's oil and gas industry, as discussed elsewhere in this chapter, was on the cusp of an era of rapid regional industrial change and unprecedented economic expansion. To capitalize upon the opportunities afforded by the unfolding oil boom, TBS required bold, aggressive, and imaginative leadership. Because Baker was in his late sixties and in declining health, the everyday administrative responsibilities quickly fell to the firm's junior partner, Clifford. At just twenty-two, Clifford immediately recognized that the firm, which had only one employee, could provide clients only minimal services. Growth was necessary.

To enlarge the firm's service offerings, Clifford had to expand the TBS workforce at a most inopportune time. He recalls, "To develop field people, office people who provide services, and also expand those services to the different clients that my father had were big chores. I mean, it was a difficult problem to hire people, particularly in those days. This was 1958, and South Louisiana was in one of those oil and gas boom periods, and there were not a lot of people available."

Marshall Faulk, Vice President of Administration and TBS associate for nearly 40 years, recalls that prior to the oil bust in the early 1980s, TBS needed field hands to help with the burgeoning number of new survey jobs being awarded to the firm. The firm's hiring mantra at that time was: 'I don't care if they can read or write, we just need people who can get the job done.' The problem was many of these hires could not read a tape, so project managers enlisted anyone in the firm from mechanics to technicians to "tromp through the marsh up to their necks in that stuff" to complete a job. The firm "needed some tough people back in the old days when every job was done conventionally."



*Survey rodman walking through the swamp to get the next shot*

Some of the personnel hires in the late 1960s and early 1970s have vivid memories of the early days of the firm. Harry Scott Jr. joined TBS in 1968 and worked at TBS for 28 years. Growing up in Dularge, where his father was a boat carpenter who built oyster luggers, Harry's love for the outdoors made working at TBS a good fit. Harry states, "I enjoyed working with the field crews because they were good people." Kenny Matherne joined TBS in 1967 and has been with the firm for 46 years, which is almost half of the firm's existence. He recalls "having to cut right-of-ways by hand before the use of marsh buggies and four-wheelers. There were no manuals for working in the marsh, you had to learn by just doing. When working in Lake Fields, the crews used pirogues to 'walk' through the water."

Not only did Clifford face major challenges in locating and hiring skilled workers, but he also confronted the problem of recruiting projects to sustain the firm's expanding workforce. Clifford was constantly trying to expand and to do more and more business, primarily in the oil and gas industry, but also in municipal works for the city and parish. At first, it was a challenge to try to convince clients he was serious about wanting to expand more into the oil and gas industry. Clifford can remember meeting with some of the local police jurors and trying to convince them and administrators that he was competent to do the work. He was local and frankly they had bad experiences with some local people in engineering. He was trying to convince them he had the competence, the education, and the intelligence to do things like design swimming pools as well as levees and pump stations, etc. for the City of Houma, and road and bridge work for Terrebonne Parish.



*Clifford, 550 South Van - 1967*

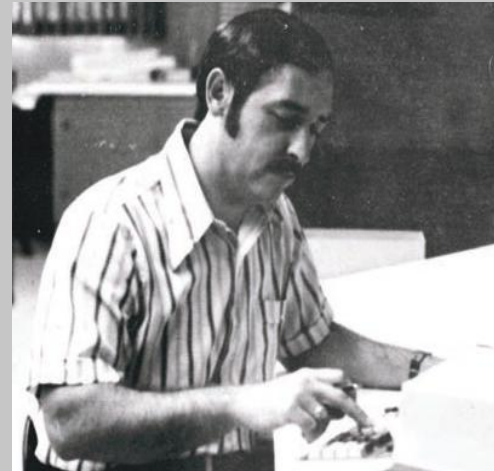


*Legion Pool, built by Baker Smith - 1937*

Clifford's father's sterling reputation proved of great benefit in overcoming the skepticism some clients may have had initially, but, as with any contract bidder, Clifford had to demonstrate that as the new CEO of TBS, he was genuinely capable of delivering promised services on the strength of a competent workforce. To ensure that his employees met the grade, he assumed the duties of personnel manager. His personal intervention was crucial because the local vocational schools and institutions of higher learning lacked the curricula necessary to produce a trained workforce and the firm lacked an advertising budget to attract qualified workers from

elsewhere. Clifford ultimately recruited, and often personally trained, seasoned professional employees from the Louisiana Highway Department and enlisted laborers locally. By the time of Baker's death in 1962, Clifford had grown the firm's workforce from one to fifteen.

By establishing an in-house training program that evolved into a mentoring effort, Clifford emulated his father. A generation earlier, Baker had taught people to assist him to do surveys. Some of these employees worked for TBS for some time, although only on an as-needed basis. One associate, Mike Hebert, former Project Manager, who retired in 2005 after 42 years at TBS, recalled that this training allowed many individuals to advance in the firm. In his case, he notes, "If there is any road that you drive down in Houma, I helped build it." He was particularly pleased with his work on the couplet where the east side of Bayou Terrebonne is designated for northbound traffic and the west side is designed for southbound flow. To Mike, "that was kind of far thinking." In addition, he is delighted to tell his grandchildren he provided the names for many streets in Houma. With a slight smile he recalls some of those names are for family members, a legacy that will live on for hundreds of years.



*Mike Hebert performing calculations*

As part of the TBS growing workforce, Mike worked primarily on the firm's subdivision contracts. He and others were responsible for the design and layout of the property to meet the developer's needs, a task that could take months to accurately complete. These drawings, based on detailed surveys, included elevations that aided in the accurate design of the subdivision's drainage and roadway systems. In addition, all utilities and other infrastructure elements required by the developer, and occasionally street names, were also incorporated into the sketches. As a result, Mike estimates at least fifty percent of the area's subdivisions were part of the TBS workload and long-term regional legacy. Among those subdivisions are Ashland South, Bayou Estates, Bayou Gardens, Clark Estates, Crescent Plantation, Ellendale, Highland Village, Magnolia Park, Manchester, Mystic Subdivision, Sugar Mill Manor, Sugar Mill Place, Sugar Mill Pointe Estates, Sugarland Estates, Sugarwood Estates, Summerfield, and Village East.



One of the many developments designed by TBS due to Clifford's knowledge and passion was Ellendale Country Club and Ellendale Subdivision. During the 1960s, Fidel Castro controlled Cuba and the United States began to be concerned about sugar imports into the country. About this time, the McCollam family owned Ellendale Plantation on Little Bayou Black, which had been inherited by the families of Andrew and William McCollam.



*Artist rendition of Ellendale golf course and subdivision - 1972*

The younger generation, through the Soil Conservation Service, began to investigate the possibility of adding additional sugar cane acreage to their plantation. Agricultural expert Cecil Pesnell, who was originally from Iowa, worked for Soil Conservation Service in the Houma and Terrebonne Parish area for many years. He recommended to the McCollams that 200 to 300 acres of wooded area east of the railroad track on the east side of Little Bayou Black on Ellendale could possibly be cleared and gravity drainage could be used for sugar cane acreage.

By the late 1960s, the Houma area was booming, the Houma Golf Club was thriving, and there seemed to be a need for additional golf facilities in the area. Andrew, John, and Edmund McCollam approached Clifford and Mr. R. W. "Red" Wimbish with the idea of establishing another golf course or country club in the Houma area. The McCollams said that if there was enough interest in development, they would consider making some of their acreage available for development. Clifford got involved with the McCollams as an engineer and surveyor and someone who knew a little about golf and golf courses.

Mr. Wimbish and the Ellendale Country Club group hired a golf course architect from Houston who had designed The Champions Course and many others in the Houston area. TBS furnished maps, aerial photographs, and Mr. Pesnell's report. The architect did a number of layouts of courses on the site and the "H Figure" course layout was developed. With the original money, the area was cleared and developed into the facility that it is today. Of course, many improvements such as drainage, irrigation, a club house, pro shop, and swimming pools have been developed over the last 40 years.

With the growth of TBS's workforce throughout the 1960s, the firm became increasingly self-sufficient. But because of the labor costs involved, the firm outsourced legal affairs and bookkeeping to local attorneys and accountants. These professional affiliates played important advisory roles following Baker's death. The firm's growth spurt raised the specter of liability, tax, and workmen's compensation issues that were best resolved by the incorporation of the family business.

Clifford and Jo-Anne Smith, signed the Articles of Incorporation on December 30, 1964. Under the Articles, which were filed with the Terrebonne Parish Clerk of Court on January 4, 1965, and registered with the Louisiana Secretary of State three days later, T. Baker Smith & Son, Inc. was established to engage "in the general surveying, engineering and consulting engineering business and in the general practice of engineering and surveying in all their branches."

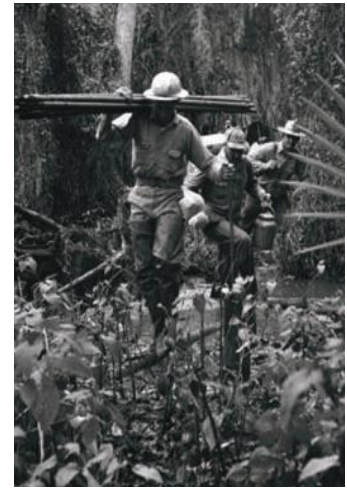
In transitioning from a small family business to an up-and-coming professional corporation, T. Baker Smith & Son, under Clifford's leadership, never strayed from the time-honored standards that had always distinguished the original enterprise's exemplary professional work, done on time and within the prescribed budgetary limits. The firm's unwavering commitment to this lofty benchmark proved an infallible formula for success. This formula initially allowed the firm to not only retain its critically important existing client base, but also service new customers. Clifford observed that once he had proven himself and the firm to potential customers, "the projects flowed."



*Clifford at the South Van office - 1977*

During this initial growth spurt, Clifford carried a heavy administrative burden. Because his father was no longer directly engaged in "working in the field or office," although he did provide invaluable moral support, a terrific administrative burden fell on the young CEO. Clifford tried to do as much as he could in the field and in the office. In the office, he monitored invoicing and collections, as well as other administrative and clerical activities, while he designed construction projects and supervised the professional staff, primarily engineers and draftsmen. In the field, he coordinated and managed field crews, oversaw most projects, and was a hands-on manager. Often, Clifford would work in the office in the morning, meet a field crew for lunch, and, if necessary, join the team in whatever capacity was needed, including rodman.

Despite the passage of a half-century since Baker established the firm, life in the field for TBS survey crews had changed remarkably little. In the 1960s and 1970s, the firm's survey crews typically consisted of four-man teams, a party chief, an instrument man, and two survey aids or rodmen, who traveled to work sites in equipment-packed station wagons or sedans, always with a boat in tow. Crews had to have ample complements of brains and brawn "because they needed horsepower to cut the line." Since all surveys during this period were based on ocular observations, field crews were obliged to cut lines of sight, often through roseau cane or cypress swamps. Rodmen consequently had to be adept in the use of both sweepers and *passé-partouts* (two-man cross-cut saws). The limits of existing technology and the continuing need for manual labor influenced all aspects of a crew's work experience from the length of the work day to tool maintenance to working conditions to meals.



*Early survey crew walking through the swamp*



*Jo-Anne with her seven children  
- 1970*



*Clifford enjoying a boat ride  
- 1956*

When not in the field and managing the firm's affairs, Clifford went to every public hearing and police jury meeting, developed contacts at the Louisiana Highway Department, supported a wide assortment of politicians, and became the face of a number of local charities. These activities came naturally to Clifford. It was necessary for the growth of the business, but quickly grew into a passion much like his father had for the development of his beloved community, region, and state.

Between running and growing the firm and participating in community services, Clifford and Jo-Anne had seven children: Celeste, Annette, Kenneth, Suzanne, Thomas Baker, Stephen, and Julie. Jo-Anne recalls, "In ten years, we had seven children. Celeste was born in 1959, and six kids later, Julie was born in 1969. I felt like the Pied Piper."

Like his father, Clifford grew up loving boats. As soon as the kids were old enough, Clifford took the boys and girls out for boat rides. From a relative, Clifford and Jo-Anne leased two lots on the beach in Grand Isle, where they moved a double-wide trailer in early 1966. The double-wide trailer, a camp known as Smith's Ridge, remained there for 27 years.

In 1991, Clifford built the present camp next to the old trailer. Smith's Ridge is where Clifford, Jo-Anne, and their seven children, and their spouses, twenty-one grandchildren, and numerous friends still greatly enjoy Grand Isle. In the late 1990s, they purchased the camp next door, Johnson Ridge, and connected a porch to porch walkway, giving everyone more room as the family grew.



Clifford and Jo-Anne enjoying Grand Isle beach - 1954



The Blue Dolphin - 1965

Jo-Anne fondly reflects, “We have always loved the beach and liked to fish.” In the early years, Clifford had a boat named *The Blue Dolphin*. Clifford and Jo-Anne took all the kids fishing, no matter what age. Then, they got a larger boat, *The Real Thing*. They fished every weekend with the kids and friends all summer long. They also loved crabbing, water skiing, and sailing. Several years later, they bought another boat, *Even Keel*. Clifford has always loved just riding in the boat. When he takes guests out on the water, he wants everyone to catch fish, but he does not really care if he catches any. He loves his boats and always enjoys taking anyone and everyone fishing. The Smiths all have great memories on Grand Isle. During the summer, Clifford and Jo-Anne can be found on the beach at Grand Isle with their 21 grandchildren, extended family, friends, and numerous beach acquaintances riding through the surf in their latest boat, the *Ma Jo*, which is named after Jo-Anne.

The Grand Isle camp provided a relaxing outlet for Clifford and Jo-Anne from their everyday routine as he was busy at TBS and Jo-Anne was working to raise their family. They both worked hard to instill values in their children and the importance of a good future. Jo-Anne states, “There never was any doubt that all seven of our kids would go to college. This opportunity was given to Clifford and I by our parents, so we never gave any of our seven kids a chance to think differently. Somehow, through the grace of God and through some pretty tough economic times, five children have six degrees from LSU, one from Nicholls State University, and one from Louisiana Tech University. We survived, and so did they.”



Clifford and Jo-Anne in Grand Isle with many of their grandchildren - 1993

As a result of the growth and expansion of the firm, TBS' development between 1958 and the firm's incorporation in 1964 provided a clear view of the firm's evolutionary course over the following two decades. Under Clifford's capable leadership, the firm pursued every available project. He recently observed that he "always wanted to do more work, always wanted to do the work that went to the competitors." Clifford's ability to secure contracts was entirely dependent upon "reputation and performance," as the firm had no traditional sales people. Because the firm consistently completed professional work, the demand for the corporation's services grew with the burgeoning local economy, driven in the 1960s and 1970s by the booming coastal oil and gas industry. In an era when the petroleum industry generated approximately sixty percent of the firm's gross revenues, Clifford remembers that "as the price of oil and gas continued to go up, the business expanded and profits rose."



*Clifford and Jo-Anne with their children and grandchildren - 2008*

As business exposure grew, so did the needs and means to get work done. In the early 1960s, the biggest expenditure for the business was an automobile, either a station wagon or a four-door sedan. Clifford remembers having some crews working up and down the bayou, and he recalls, "They called me one afternoon, probably stopped somewhere to call, because we didn't have cell phones. We didn't have radios. We didn't have anything. There was no communication. They said, 'Clifford, we got a little problem.' Well, one of the cars got in a wreck. I said, 'Oh, my! Anybody got hurt?' 'No, nobody got hurt.' You know, I had a four-man survey crew in a four-door sedan. Now, you can imagine what the trunk of the car looked like. I said, 'Where did it happen?' 'It happened on Bayou Black, on the the shell road side.' I said, 'Well, who'd they hit?' Well, the problem is, they hit another car. 'Your other car.'"

While the services and clientele of TBS were expanding, so was the need for physical expansion. Back in 1913 when Baker returned from Tulane, he started his professional practice in a 24' x 35' shotgun building next to his father's office along the banks of Bayou Terrebonne in downtown Houma. Clifford distinctly remembers the office did not have a bathroom and that when necessary they had to go next door. Upon Clifford's return

to Houma and successful expansion of the business, a new, modern and enlarged facility was a necessity. In 1967, Clifford built a 3,500 ft<sup>2</sup> new office facility on an acre size lot the family owned at 550 Van Avenue on the east side of Houma. This new facility offered room for the firm's continued development. It had 12 offices, a conference room, a field crew storage area, and two bathrooms. For more than 30 years (1967—1997) this was the home and only office of TBS. As the firm continued to grow, this facility was expanded at least four separate times and presently encompasses over 12,300 ft<sup>2</sup>. The original office at Park Avenue and one additional small building were moved to a tract of property owned by the Smith family in east Houma along Glynn Avenue. This property and these buildings are now part of the TBS' Houma Field Operations Center.

Also housed at the 550 South Van office was Houma Reproduction & Map Co. (HRM), a subsidiary corporation established to guarantee timely reproductions of maps, prints, and copies to many TBS clients. Frequently, the staff would have “folding parties” whenever the request for hundreds of folded maps and plans required overtime work. This was also a time when the staff would work five and a half days a week. Owning HRM made this job easier and insured every client got the deliverable required quickly, without waiting in line for a job to be processed off site.



*TBS at 550 South Van Avenue - 1977*

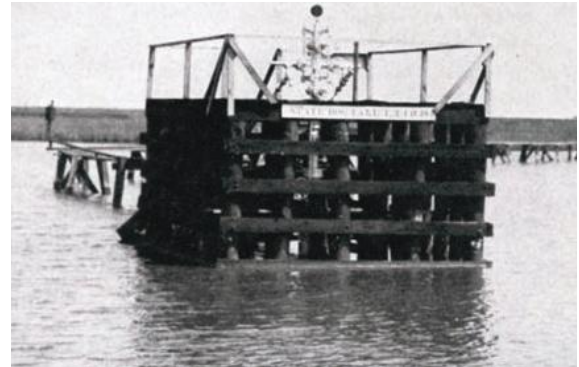
As his father and grandfather before him, Clifford has a keen interest and successful knack for real estate. The current office at 412 South Van Avenue is a 17,000 ft<sup>2</sup> office building on a four acre tract that was purchased in 1994. It was originally built by The Texaco Co. in the 1950s and used to run their southeast Louisiana drilling operations for fields such as Lake Barre, Caillou Island, Dog Lake, and Bay St. Elaine. With the oil bust exodus in the 1980s, Texaco left town and donated this facility to the local YMCA. Soon after, the facility, like many in the region, ended up in the hands of the banks in foreclosure. Clifford “aggressively” negotiated a purchase in a depressed economy, which was a testament to his intellect and vision.

As Clifford recounts, the former Texaco building was a casualty of the rapidly changing regional economic landscape of the oil bust era. “In 1929, The Texas Co. began to drill all these wells on state leases around here, and so ended up with an office in Houma, Louisiana. Claude Ellender, a lawyer, and my father, who was an engineer and surveyor, had been doing a lot of work for The Texas Co. over the years. Somewhere along the line, The Texas Co. decided, after the second World War, that they wanted to build a series of buildings around

coastal Louisiana in New Iberia, Harvey, and Houma. And so they came to Houma, and they got my father and Ellender to buy this piece of property for The Texas Co. because they didn't want them coming down here and have the real estate price go up."

"So my father and Ellender actually bought the property and turned around and conveyed it to The Texas Co., who built this building, and, at one time, probably had fifty to sixty drilling rigs running out of this office, probably spending \$200—\$300 million a year in the area around Houma and Terrebonne. Of course, the production began to play out and they began to move offshore, so they didn't need this office. They wanted to give the office to the parish. The parish didn't want it because they've got a radio tower out there. So they gave the building to the YMCA. The YMCA mortgaged it to the local banks to build the YMCA facility in Houma. The YMCA went bankrupt and couldn't pay the note. So, the banks foreclosed on it. The building was vacant for about eleven years and they put it on one of those property auctions in the late 1980s. We began to look at it and bought it eighteen years ago (in 1994) off the banks and began to re-build it."

Kenny remembers telling his father, "What are you thinking? That's a huge building needing more work than we have the time or money to do! We will never fill that building up with professional staff." Nevertheless, for three years under the direction of Clifford, the facility was remodeled and brought back to life. In February 1997, the firm officially moved operations to its present day corporate facility at 412 South Van Avenue. Recently, Kenny was quoted as saying, "Thank goodness my father had the foresight and vision to buy and renovate this building. Where would TBS be today without it? Again, he proves to me that he's the smartest 'crazy guy' I know!" To keep up with the growth demand for its field survey services, in 1998 TBS moved its field operations to its Glynn Avenue storage facility. Today, the Houma Field Operations Center is housed in the original Park Avenue office of T. Baker Smith, which was moved to Glynn Avenue.



*The cribbing placed to protect the well head and connections in case of a hurricane - Dog Lake Field, The Texas Company, State No. 1*

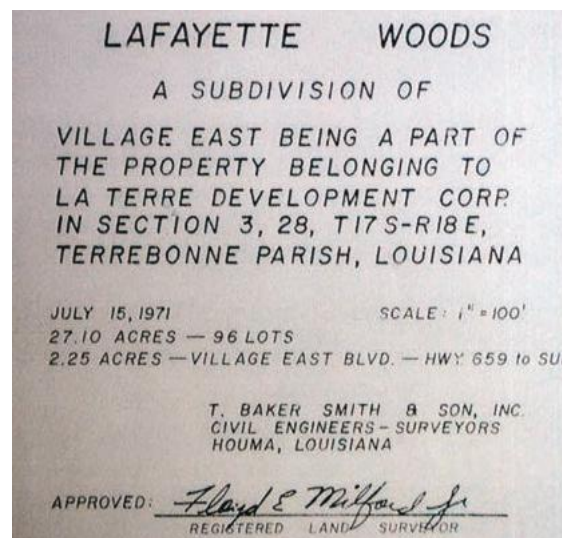


*Original TBS office, now Building "B" at the Houma Field Operations Center on Glynn Avenue*

As in the earlier transitional period to corporate status, TBS adapted itself to a rapidly evolving regional economic landscape. During the oil boom, this meant making accommodations to the changing demands of two separate and very distinct markets, infrastructure enhancement and energy exploration and development. Private sector work in the energy business has traditionally afforded the greatest profit potential, but infrastructure enhancement by the public sector has proven to be the firm's most dependable source of income. Since its admission to the Union, Louisiana has consistently lagged behind the rest of the country in internal infrastructure-related improvements. As industrialization of the coastal parishes gathered momentum during and after the WWII boom, the state was forced to improve the region's transportation and communications systems at an excessive pace to the benefit of firms with the experience, expertise, and ability to meet the surging demand for engineering services.

For one hundred years, TBS has provided the surveying and civil engineering expertise essential for Houma and Terrebonne Parish to build the infrastructure needed to sustain growth. For example, TBS played a pivotal role in enlarging the Parish's potable water system by obtaining the necessary right-of-ways and drafting the technical specifications for pipes, fittings, valves, fire hydrants, elevations, and the required outlets associated with the treatment, distribution, and production of the required clean water. This was a crucial part of the regional growth that took place from the late 1950s into the twenty-first century, as subdivisions were developed throughout the Parish. During this fifty year timeframe, the number of metered customers expanded from 1,700 to nearly 50,000, and TBS was right in the middle of all this development. Marc Rogers recalled that the firm was "always working on a subdivision. Every month they had at least one development on the agenda for the Parish Planning Commission's review and approval. We couldn't crank them out fast enough."

Additionally, by providing aerial surveys, the TBS staff aided the parish in updating its constantly expanding waterline maps. Beginning with Baker, continuing with Clifford and then Kenny, the Smith family is conservatively accountable for at least fifty percent of Houma's network of above and below ground sewer, water, natural gas and electrical services, along with an estimated fifty percent or more of the region's paved streets.



*Title Block from subdivision survey - 1971*



The firm's surveys were utilized by local and parish governments in a vast array of construction endeavors and the comprehensive drawings furnished by the firm's veteran engineers and technicians were key components in the city and parish's completion, evaluation, and contract administration processes. These field surveys allow second, third, and fourth generation city engineers to determine the original location of residential, commercial, and government property boundaries, right-of-ways for utilities that predate modern Geographic Information System (GIS) based mapping techniques, and other engineered landscape features.



*TBS performed civil site design for the Houma / Terrebonne Civic Center - 1998*

One of the jobs that kept the firm “hopping” in the 1970s was the GST Joint Venture. According to Marc Rogers, this was “a parish-wide sewerage program that successfully took advantage of millions of dollars of available federal money. The letters in the name stand for Gulf South Engineers, TBS, and Doug Talbot. The venture split the work on a 40/40/20 basis. There was so much work that it made it much easier, from a political standpoint, to form the joint venture and split the effort.” The master plan resulted in upgrading two area sewage treatment plants. In addition, the team designed essential upgrades for many of the existing sewage pump stations and constructed new sewerage facilities to serve communities that were not part of a regional sewage treatment service. This type of work, fifty years after Baker became the region's *de facto* city and parish engineer, still constituted a significant part of the firm's balance sheet.

Records and files that document the Parish's long-term growth and development are archived at TBS and allow the firm to anticipate issues before they become engineering challenges. Consequently, the firm's internal library is a valuable asset that is now archived physically in Houma and digitally offsite. If a natural disaster were to destroy the data, an increasingly likely possibility in Houma and other municipalities in the hurricane-battered coastal plain, communities within the region could not reconstruct vital surface and subsurface infrastructure. This data is critical in repairing the interconnected



*TBS Records Center*

utility grid that is crucial for a complete economic recovery, in a timely and efficient manner. The internal archiving process at TBS was started by Baker and continued by his son and grandson. While the archived files

are a virtually invisible resource to most clients, and the data they contain constitute invaluable tools for the firm's engineers, surveyors, environmental associates, accountants, administrative assistants, and technicians.

One of the early utility clients of the firm was Louisiana Power and Light (LP&L). TBS began working for LP&L doing right-of-ways and construction surveys for its ever expanding electrical grid throughout South Louisiana early in Clifford's career. Under Clifford's leadership and knowledge, the relationship blossomed to include engineering and became more prudent in the 1970s environmental compliance tasks. LP&L asked Clifford to join their Board of Directors in 1981. Clifford recently stated, "I was on the LP&L board and the Middle South Utility Board, which then became the Entergy Board of Middle South Utilities for over 20 years. All of those boards interested me because of my lack of exposure to business and the fact that I had an engineering education and didn't have much of a formal business education. Being involved in a utility firm, a savings and loan board (Community Homestead), and a banking board (American Bank) was a great education for me. Being on those boards, learning about loans, learning about collateral, learning about the ability to repay loans, interest rates, etc. was extremely educational." Clifford always felt he had something to do with the development of the community. He felt that if the community developed and built buildings, built homes, and built improvements, would benefit him and benefit the business, whether directly or not.



*Clifford and Board of the American Bank - 1972*



*Entergy Board of Directors - 1965*

Similarly, with the LP&L and Entergy Boards, Clifford never could have imagined the value of providing a reasonable priced utility to the area, particularly electrical. It also gave him an insight into a huge business. When Clifford was involved, Entergy was over a twenty billion dollar business with nuclear and all kinds of other assets around the World. He considered it an absolute wonderful experience. When Clifford retired from the Entergy Board in 2005, he was the longest serving member of the board.

To meet the civil engineering and surveying needs associated with the expansion of the area's subdivisions, utilities, bridges, roads, drainage, oyster and fur industries, airport, and oil and gas infrastructure, along with the firm's more than fifty years of experience with specific and general land surveys, TBS had to adapt, adjust, and ultimately reinvent its business model. To expand its market share, the small business needed a new vision; Clifford began to widen the corporation's horizons while still leveraging the firm's extensive archive of field books, plats, maps, and line drawings. In addition, the TBS archives put the firm in an enviable position, as Clifford's father, Baker, had walked the marsh and swamps documenting boundary lines. Baker detailed each survey with surgical precision and, through his effective use of witness trees, cloaked them with legal invulnerability.

Jimmy Ledet, P.E., Vice President of Engineering, a veteran associate with 35 years of TBS experience, reported "Work at the airport originally known as the Naval Air Station Houma, has been significant for this firm over the years because we've been such a big part of it in many, many ways, not only doing the design work. Clifford and I would go to Washington to lobby the Federal Aviation Administration for the money to help the airport expand the runway because Clifford knew who to go see, and he could get in the door. That was exciting to me, to be along with Clifford. We walked down the hall of Congress and people knew Clifford. We've always been involved with the airport. The airport is continuing to grow, and, hopefully, TBS will still be there."



*Clifford in DC with Major General Michael Walsh - Mississippi River Commission - 2010*

Clifford's avid involvement in politics stemmed from his motivation to do engineering work for the city of Houma and Terrebonne Parish. Engineers from other cities were providing the engineering services in Terrebonne Parish during that time, and when Clifford moved back to Houma after graduating from college, he began actively pursuing the opportunity to break into the local engineering market. He recalls, "My father was never directly involved in political things, but I was because I thought that was a way to promote the business. It just so happens there was a mayor of the city of Houma by the name of Leon Gary, who actually lived next door to my mother and father's house. He ran against a man by the name of Elward Wright, who was my mother's first cousin and my father's close friend and lawyer. Mr. Gary won the mayor's race and my father was not very happy. He had very little to do with Mr. Gary while he was the mayor of Houma, even though they were living next door to each other."

Shortly after graduation, Clifford remembers going to visit Mayor Gary and soliciting work for the city of Houma as a civil engineer. Mr. Gary encouraged him to work on that goal and as Clifford recalls, “the first thing I know, I’m going to city council meetings and police jury meetings, and before my daddy died, I even had him coming to some of the city council meetings with me and Mr. Gary, the mayor.” A few years later, around the same time Leon Gary was defeated as mayor, John J. McKeithen was elected Governor of Louisiana. McKeithen hired Gary to be his Administrative Director, so he moved to Baton Rouge. Clifford maintained his association with Mr. Gary through his years as Administrative Director to Governor McKeithen and later as Secretary for the Department of Highways, through which Clifford received engineering projects for the Department through Terrebonne Parish, but also through Leon Gary.



*Clifford with Senator Chabert and Governor Edwards around 1983*

After the McKeithen years, Edwin Edwards ran for governor. Clifford found it easy to support him because he was from South Louisiana, unlike most other governors who were from towns north of Alexandria. Clifford supported Edwards’ campaign both financially and by hosting many campaign events in Terrebonne Parish. “Edwin Edwards always carried Terrebonne Parish by over fifty percent of the vote in all of his elections, and I was always involved,” Clifford says. During Edwards’ term, Billy Tauzin, a native of Chackbay and Lafourche Parish, ran for the House of Representatives of Louisiana. Leonard Chabert, a local politician, suggested Clifford get to know Billy Tauzin, especially because Tauzin was from Lafourche. When Tauzin ran for Congress, Clifford’s association with Tauzin evolved and he served as Tauzin’s Finance Chairman. Clifford’s association with Edwards led to many connections, including a friendship with Senator John Breaux. All of these associations allowed Clifford to gain a great deal of experience and knowledge of what goes on in the political scene, both locally in Louisiana and in Washington, DC.

Clifford explains, “If you ask me why I even thought about being involved in politics, I guess my motive was I wanted it to be of benefit to the business, to know the politicians and to give them advice, both from an election standpoint and also from a physical improvement standpoint for our communities. In my humble opinion, our communities have always been neglected from capital improvements, and I was hoping to have



*US Senator John Breaux, State Representative Hunt Downer, Clifford, and Congressman Billy Tauzin - 2003*

some influence with elected officials and appointed officials to improve the physical facilities and capital improvements in our areas because of my engineering background.” Clifford felt like he had something to add to the political scene, both as a professional and as a citizen in regards to what improvements needed to be made to continue the growth and development of South Louisiana communities. He reflects, “It seemed like in South Louisiana, Terrebonne Parish, we were 20 years behind time in our capital improvements, and we still are. We are a rich community, but we need to build improvements, to protect ourselves, for the convenience of our citizens, and for the continuous development of our community.”

Clifford acknowledges that Kenny running and owning this business has followed a similar trajectory in formulating his own leadership style, implementing fresh new ideas tailored to the demands of a very different marketplace. He adds, “We live in a different world now than I did 30 or 40 years ago when we had 15 to 20 people working for us; that was a lot of people. Now, we’re doing things all over the place and doing things for old and new clients. So, it was an evolution, to tell you the truth. The business was an evolution. All the things that I was in, both the political scene and developments in the community, sometimes planning and in some cases owning some interest in them, it all fit together for me. I was motivated by the expansion of the business, the expansion of the community, and, frankly, the expansion of my family. It was all an evolution, and I guess I’m extremely blessed with how things fell into place.”

Clifford still remains very concerned about coastal erosion, and, even at his age, he still wants to be involved in it as much as he possibly can. There is some significance to being able to converse with elected officials and them relying on you for intelligent professional advice.

## Part 2

### The Oil Industry and the Development of T. Baker Smith

Throughout the generations, the TBS culture of determination and tenacity was particularly crucial to survival in the area's burgeoning oil patch. Oil was discovered in South Louisiana in 1901, and when Baker started providing services in 1913, hydrocarbon exploration was gradually expanding into the unfamiliar geography of the marshes and swamps. By 2000, there were seventy named oil and gas fields in Terrebonne Parish, populated by slightly more than 10,000 wells. With each field, well, and system of collection, gathering, and distribution pipelines, a surveyor familiar with the geography of the region was essential. TBS was in the enviable position of knowing how to do this work in a suitable and competent manner, as all of the interest in wetland drilling was being performed by wildcatters and others in an environment completely alien to them.



*Lake Barre Field owned by The Texas Company - 1950*

As noted on page 68 in the 1915 Report of Conservation Commission of Louisiana in the publication *Mines and Minerals*, Louisiana is quoted as becoming “one of the great oil producing states of the Union, a center of great natural gas activities, and is now recognized as probably the best place for the manufacture of chemicals on a very large scale. This era was the beginning of a strong developing oil and gas industry in the southern region.

The firm has maintained a symbiotic relationship with the oil and gas industry for most of its existence. On his watch, Baker forged ties to the oil industry that have sustained the firm to the present. Twelve years after the discovery of marketable hydrocarbons in Louisiana, Baker started his career as a surveyor and civil engineer in Terrebonne Parish, which was becoming a focal point of exploration by wildcatters, mud slingers, pebble pickers, and doodlebuggers. From the beginning, TBS clients were among the industry's largest and most

successful pioneers, including Fohs Oil, The Texas Company, Union Producing Co., Union Oil of California, and United Gas Pipeline Co. As a result, from the industry's infancy, these exploration companies and the large landholders that allowed drilling on their property developed an enduring partnership with TBS that now spans more than eighty years.

The first well in the Parish, completed in 1919, was a dry hole. For ten years thereafter, the oil industry was not interested in drilling in Terrebonne. However, between 1929 and 1940, The Texas Company, Freeport Sulphur, Sun Exploration and Production Firm (SUNOCO), Humble Oil (ExxonMobil), Union Producing Company (Pennzoil), Shell Oil, LaTerre Inc. (Apache), and Louisiana Land and Exploration Company (ConocoPhillips) found, explored, and developed new oil and gas fields in Terrebonne Parish. In this eleven-year period, 261 wells were completed on land that had to be surveyed.



Baker's stock certificate - 1946



Lirette gas well, Terrebonne Parish - 1928

By the end of the twentieth century, at least 10,300 wells collectively constituted part of the petroleum industry's parish-wide footprint. All exploration activity, whether or not successful, required some form of survey, and TBS was in the right place, at the right time, with the right skill set. The pioneers in Terrebonne Parish's oil patch relied heavily on the firm's surveying expertise. For more than eighty years, TBS has been actively involved in staking out leases, mapping pipeline right-of-ways, managing permits, and resolving numerous other regulatory issues. These activities have provided TBS with a continuous income stream crucial to sustaining the firm through robust and lean years.

Some early accounts suggest the Parish's first well was completed in the 1920s, well before the state began to keep accurate records. Although two dates are listed in the historic records, it is clear from the family that Baker was involved in this first field from its inception, and his son and grandson continue the tradition of working for a large number of oil and gas companies.

Oil and gas pioneers quickly recognized that exploration and production techniques used in Pennsylvania, California, Oklahoma, and Texas were ineffective in South Louisiana's vast wetlands. They had to modify their fundamental exploration and development model because they were entirely dependent upon locals to resolve the monumental logistical and environmental challenges posed by the wetlands. As a result, a large and diverse assemblage of new businesses and entrepreneurs came into being. As the industry expanded throughout South Louisiana's Cajun Coast, these home-grown businesses evolved, expanded, and matured. The service industry's reciprocal relationship with the major oil and gas companies has remained vital to the petroleum industry's continuing presence in the region.



*South Louisiana workers in marsh - 1954*



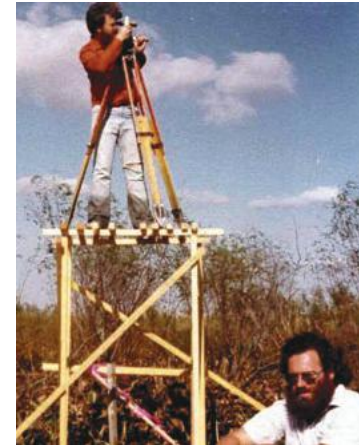
*Dredge boat working in marsh - 1954*

Exploration and development of the oil and gas reserves in Louisiana's coastal lowlands was so rapid that, by 1930, investment in the state's pipelines, oil and gas wells, carbon black plants, oil refineries, and additional support services exceeded \$250 million (more than \$3 billion in 2013 dollars). Oil companies were happy to commit such significant financial resources because they had already pumped 750,000,000 barrels of oil from the state's shallow fields. By 1933, an estimated two million acres of land were leased in South Louisiana. In addition, numerous pipelines were being laid or contemplated as the focus of production shifted from North Louisiana to the state's coastal lowlands. By 1939, drillers discovered two new Louisiana fields every month and from fifteen to twenty new wells were drilled every week. The industry was booming and TBS was part of the required infrastructure necessary for the industry to prosper.

Without local and regional suppliers and contractors, like TBS, drilling companies would be hard pressed to function in Louisiana's wetlands and offshore fields, where highly specialized goods, instruments, and professional skills are critical to success. TBS is consequently a vital element in this system and has been for one hundred years. With over a century of operation, the firm has pioneered, refined, and established surveying techniques that are templates for others following in their footsteps.



To remain relevant and engaged, TBS has had to stay one step ahead of changes in the ever-evolving oil industry. In South Louisiana, this evolutionary trajectory took the industry, over the course of a half-century, from land to sea. Oil was readily available in the wetlands, but access was difficult, a logistical nightmare in most instances. There were no railroads or highways and the land was so wet and soft that construction of an overland route was impracticable. Water transportation was the only feasible means of accessing many wetland drilling sites. When natural waterways were not available, operating engineers excavated canals with powerful suction or bucket dredges, a time-consuming, expensive process that followed a route often marked by TBS survey crews.



*TBS survey tower made from survey lumber and duct-tape*



*Dredge and oil rig in a coastal marsh oil canal*

Associates with more than thirty years of experience can gaze upon aerial views of the marsh and pick out all of the canals, locations, bullheads, tank batteries, and pipelines they surveyed and staked out. In any objective overview of the region's infrastructure, the firm's list of accomplishments is extremely impressive. Nearly every field or pipeline in the Terrebonne Parish has been touched by someone employed by TBS. This impressive laundry list of projects is a dividend of the firm's unfaltering surveying accuracy, which is particularly critical when involving pipelines and the associated infrastructure.

On one job in 2011, a client hired TBS to stake out twelve pipeline-related sites in the swamp and every site was on the money. Boo Cantrelle with Plains All American Pipeline said, "In this business, each site would be about \$30,000 a pop. You need to drive sheet pilings and do repairs. And then, being in the right spot, I mean, \$30,000 sounds like a lot of money, but if you're in the right spot, it's not a lot of money. You get your spot done and save the firm money."

Because of TBS' amazing productivity, petroleum companies were able to maintain vigorous dredging schedules, establish new and enlarge existing canals, build arrow-straight pipeline routes, and ultimately create watery networks that are inevitably linked to traversable waterways. The Intracoastal Waterway and the region's navigable bayous consequently became important transportation, communication, and logistical support corridors connecting many South Louisiana oil and gas fields with mainland facilities.



*Thad Lovell on TBS' first air boat*

In many ways, the history of oil and gas activity in the wetlands mirrors the rise of TBS from a small surveying and engineering firm to a one hundred year-old business with a large client base of oil and gas pioneers. After WWII, Baker surveyed in open waters, particularly The Texaco Company Caillou Island field, using techniques that were not in any textbooks but were developed in the field by innovative crews determined to succeed. This “can do” approach put TBS at the forefront of open-water surveying using crews that understood the meaning of hard work and completing a job on time, or sooner, and performing every job with individual pride.



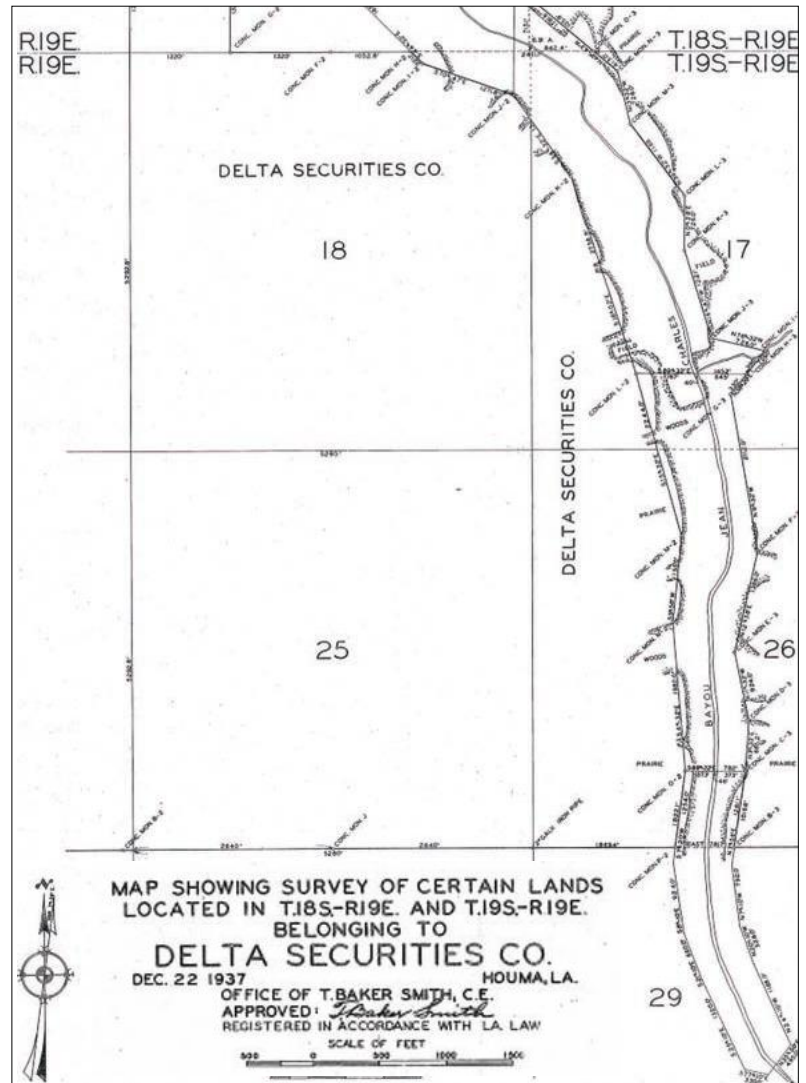
*TBS Surveyor setting up his instrument on top of a battery tank at Caillou Island*

Before canals could be dredged, TBS had to survey right-of-ways using two to three man field crews staffed with local, often French-speaking Cajuns familiar with the terrain. Many of the firm's earliest employees could not read or write, but they knew how to read the landscape and walk the swamps and marshes better than city-born engineers and surveyors. They became the face of the firm and were easily identified by their client's drillers, roughnecks, and subcontractors, many of whom also spoke French.

The employees' relentless drive to succeed, coupled with their intimate knowledge of the region's forbidding swamps and marshes, resulted in consistent success by survey crews, despite inhospitable conditions that forced both TBS and petroleum companies to adapt survey operations and rethink drilling procedures to accommodate



*Two man crew carrying a jet pump through a swamp area*  
 a rapidly evolving environment. Because their clients needed surveys in Louisiana's near sea-level marshes quickly in order to plan their drilling schedules, TBS had to devise a means of assuring accuracy, while accommodating their client's ever more aggressive timetables. The most imposing initial challenge, from the firm's perspective, was the absence of accurate cartographic documentation. Few maps were available, and most were inaccurate or otherwise inadequate because of constantly shifting land lines due to fluctuating water levels, subsidence, and continuously eroding barrier islands. Consequently early survey crews often developed the first precise surveys of wetlands properties.



*Oil and gas field survey - 1937*

Petroleum companies contracted established surveyors like TBS to find key boundaries, to correct often inaccurate early government surveys, and to produce surveys of potential oil properties and logistic arteries, particularly canals. These surveys were worth the investment, as the detailed plots improved the ground team's understanding of the landscape and helped define right-of-ways and all of the required infrastructure needs of developing an oil and gas field and its associated extensions in an environment unlike any being developed at that time.

During this period, salt dome production in Terrebonne Parish was introduced at the following locations near the edge of the Gulf of Mexico: Lake Barre, Bayou Blue, Lake Pelto, Dog Lake, Caillou Island, Bay Marchand, and Timbalier Bay. Further west, Batemen Lake, West Cote Blanche Bay, Vermilion Bay, Sabine Lake, and numerous other points throughout the lower half of the state boasted a plethora of drilling platforms. These fields proved highly profitable with a “find” in Lafourche Parish’s Leeville becoming the second largest oilfield in the state by 1938; Baker was right in the middle of the exploration boom. Terrebonne’s Caillou Island, Lake Barre, Dog Lake, Four Isle Dome and Lake Pelto Fields were among the state’s largest on the basis of active wells per drilling unit. Baker and his part-time crews surveyed each of the exploration sites in Terrebonne Parish, which were bustling with activity.



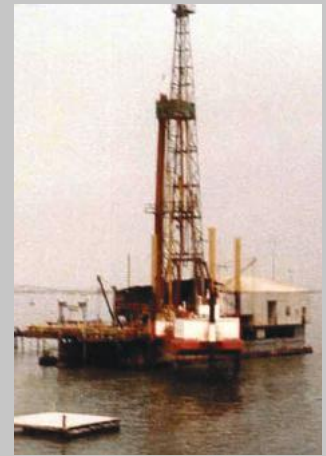
*Sign noting oil and gas field*

One landmark surveying project was the official resurvey of T21S-R19E done by TBS in 1964 for the State of Louisiana, Texaco Inc., and Tenneco Oil & Gas Company that was based on a lawsuit when a conflict developed between the mineral lease owners in Lake Barre area of Terrebonne Parish. To properly describe the actual mineral lease, both parties agreed that TBS would develop an official government approved resurvey of this township and range. It is believed that this project is one of the last official resurveys of a township and range in Louisiana.

Another unique survey assignment was the location of Section 16, T20S-R16 in Terrebonne Parish. In each township and range, the United States official government surveys adjudicated to the state a section of land known as Section 16 for the use of educational purposes. The state then allowed the school board in each local area to use the income from these properties directly for educational purposes. TBS’ client, who was a producing oil and gas company, hired TBS to locate the section that they had a lease on for the benefit of the Terrebonne Parish School Board. Once the survey was complete, they began producing oil and gas from the area, which was along Bayou Dularge. The problem was that there were families living on this area for many years, and they felt it was their property. They filed suit against the school board, the state, and the oil and gas company, claiming they owned the property by possession and title. Their title was not on Section 16, which meant they could not possess against the state. The state, school board, and producing oil company prevailed because of the TBS reconstruction of Section 16. This was accomplished using Baker’s notes of the Bayou Dularge survey taken from original 1830 and 1856 surveys.

One other large reconstruction survey of approximately 225,000 acres was done in 1952 by TBS. This survey involved the resurvey and reconstruction of twenty townships located in Terrebonne Parish from Bayou Dularge on the east, Bayou Black on the north, the Atchafalaya River on the west, and the Gulf of Mexico on the south. The purpose of this survey was to establish and monument the property lines of Louisiana Land & Exploration Company, LaTerre Company, Inc., Continental Land & Fur Company, and C. Ellis Henican, et al. The boundaries were re-established and agreed to with boundary agreements by the property owners based on the reconstruction township and range performed by TBS.

Marshall Faulk remembers when TBS had crews go to Grand Isle and as far southeast as Venice to stake well locations. All the well locations in South Pass and others in the Mississippi Delta were surveyed by TBS crews based in Houma. When a crew left the office in Houma, the project manager did not talk to the office until they returned to the office. When they were working sites in the Delta, they would stay on the water in one of the firm's small boats, which had only one engine at times, until the job was completed. They would put two instrument men on two satellite wellheads to triangulate the drilling rig's location. The party chief would be on the drilling rig heading to the location. As the drilling unit approached the drill site, the instrument men would provide the party chief with radio information about the direction they needed to travel to put the drilling rig over the correct site. Once the instrument men confirmed the rig was "on location" the rig's team would "spud down" to secure the rig. The field crew would double-check their readings to make sure the X and Y coordinates for the drill site were accurate. If everything was perfect, the rig was on location and the drilling crew could begin the drilling process.



*Drilling barge on Caillou Island*

This technique predates affordable range-range equipment and the other tools used by today's survey teams. It also predates cell phones. When this type of work was being completed, the office had to wait until the party chief returned to find out the job's status. If one of the employees became ill or hurt, the office did not know until the crew returned to Houma. That was just how it was and everyone worked accordingly.



*Early TBS survey vessel in Lake Pelto*

In addition to surveying canals, oilfield boundaries, lessee interests, and right-of-ways, TBS field crews charted the underwater pipelines traversing the wetlands. Early in his career, Baker established himself as an innovator in pipeline right-of-way work and design. For example, in 1935, The Texas Pipeline Company connected the Lafitte field to its Marrero terminal by a twenty-six mile long, six-inch pipeline. Prior to the line's completion, oil was barged to The Texas Pipeline Company's terminal facilities, which was a common method of shipping petroleum throughout coastal Louisiana. Completion of this pipeline, along with other surveying work in the Lirette Field, cemented Baker's hold on early survey work in Louisiana's wetlands.



*TBS instrument man set up on a hand made survey tower along a pipeline through a swamp*

Today, following in the footsteps of the firm's founder, TBS continues to garner praise and accolades for its pipeline efforts by pioneering some of the required cutting-edge underwater pipeline techniques to succeed in an environment where a survey team cannot "see" the bottom. While it is true TBS did not enjoy a virtual monopoly on wetlands surveying contracts, the firm's superior work record and well thought-out schedules established it as a "go-to firm" whose accuracy, integrity, and dependability insured that petroleum companies could start their drilling operations on time.

Passage of the National Environmental Policy Act (NEPA) in 1969 (Clean Water Act) established protocols that promoted the need to build with an understanding of the environmental consequences. More importantly, NEPA set up procedural requirements for writing an environmental impact statement (EIS), which were required to promote informed decision-making by federal agencies.

NEPA opened the door to work involving the environment. TBS took advantage of this new opportunity by creating the Environmental group in 1975 that was housed on the Glynn Avenue property. Peggy Bourg, Project Assistant with almost 45 years with TBS, explains, "This new enterprise was very, very different and the permits just exploded. Even so, it was interesting work because it seemed like environmental was so new and fresh. It was something different." By the late 1990s,

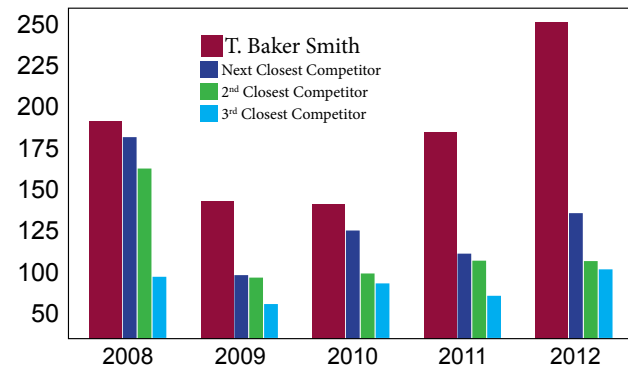


*TBS environmental professionals performing a wetland delineation*

the Environmental group was doing work for Louisiana's Oil Spill Coordinator's Office and the Department of Natural Resources. These jobs, and others, helped pull the firm through the economic turmoil leftover from the 1980s.

TBS is the professional regulatory compliance leader in Coastal Zone Louisiana. For the past five years, TBS has ranked #1 in successfully obtaining coastal zone permits in Louisiana. TBS averages 260 coastal zone management (CZM) permits per year for our clients.

*5 Year Volume of Coastal Zone Permits*



After wetlands development gained importance following WWII, Baker's foothold in the pipeline surveying market grew continuously in importance to the firm and the petroleum industry. During this era, pipeline construction projects mushroomed and TBS expanded to capitalize upon this opportunity. The new pipelines were bigger, much longer, and more difficult to build and survey. In laying the groundwork for these pipelines, rights-of-way had to be cut by hand, with field crews wading, often in waist-deep muck, through a landscape that challenged conventional surveying methods. But, they were not an overwhelming obstacle to locals, whose families grew up in the marsh and made their living from its renewable resources.

Bubby Lyons, former Terrebonne Parish President, asserts, "After the Clean Water Act, we had to change our way of doing business and the Parish was placed under federal guidelines. We started an extensive wetland permitting program. I can think of many, many projects that TBS did, but they were first and foremost at doing wetland permitting work. They always understood the system, and when no one else could, they would get it done."

When a pipeline contract was signed, these locally recruited and trained field crews were not intimidated by the task; they simply went to work with a fourteen-foot boat lashed to the top of a Chevrolet Suburban, a twenty-five-horsepower motor in the back along with a transit, theodolite, bundles and bundles of 1 x 1s, gas, water, food, sweepers or a chainsaw, and the crew members sandwiched between all of the required equipment. There were no radios, cell phones, GPS units, four-wheelers, or other "fancy" equipment. A three or four man crew

surveyed the right-of-way by pulling chains and measuring the distance with a steel-tape. As the job progressed, at a rate of about one-mile a day, the crew often had to walk three or four miles along the survey route to get to the completion of the previous day's work. In the summer, it was particularly dangerous; there were snakes coiled on every stump. "Every kind of snake was there," according to a veteran surveyor. Undeterred, the survey crews just shooed them out of the way and kept walking, pulling a chain, and setting a pipe so the instrument man could move up to that point and back sight to the previous spot. Using this leap-frog process, the team would traverse swamps or marshes until the survey was completed. This routine changed only when the crew utilized water bodies or roads to access less remote job sites.



Standard TBS survey crew and boat going to work out of Cocodrie, LA

Kenny, was a teenaged rodman during this period and his memories provide vivid insights into the life of survey crew members. He recalls, "You showed up at the office at about four o'clock in the morning because you were probably traveling somewhere, it could be Cocodrie, the swamp, or even Venice. The first thing you did was you grabbed your sweeper. You made sure it was sharp because you were going to be cutting line. Your sweeper was gold; you had to swing it all day. It was standard practice that all crews carried at least one file to insure their individual briar hooks stayed sharp. Because roseau cane within the floating marsh was frequently tall and difficult to cut, a sharp sweeper was an absolute necessity. Further, when the roseau was impassable, crews took 1 x 1s to push this giant reed down so they could 'shoot' their distances uninterrupted."



"Sweeper" or brush knife



Survey crew launching a 14' skiff with 25 - hp motor into the Mississippi River

"After gathering the tools for the day, we loaded up the boats with material. Every crew had a fourteen foot skiff and a 25-hp Evinrude in the truck. Every crew would have to put the skiff on the top of the truck, and these things were heavy. It was not the lightweight aluminum we have now. You had to carry the 25-hp Evinrude, which had to weigh at least 100 pounds. That was standard operating procedure because you're going to be launching the little boat. You made sure you had enough lumber because you were probably going



to be setting up on top of a monument out in the middle of the marsh or swamp. You used 2 x 2 lumber and then secured the legs of the instrument to it with duct-tape. Duct-tape was an important tool. We were chaining everything with 200' chains. Keeping them cleaned and oiled was of the utmost importance before technology. I can remember you didn't wear boots because you would be getting soaking wet. You were going to be getting off the boat, so you just wore Converse high-tops because they didn't come off in the mud; suction couldn't pull them off. And you duct-taped the end of your pants as tight as you could because you really didn't want mud and parasites getting inside your pants. In the morning you'd just jump over the side and get it over with, getting wet and cold. Those are the things I can remember the most and having to improvise with duct tape."



*TBS survey tower made with 2x2s and duct-tape*



*200' surveyor's chain and pins*



*TBS instrument man and rodman "cutting line" with their sweepers through the marsh*

Once in the field, Kenny recalls that the survey crew maintained a strict pecking order: "It was very much party chief, instrument man, and rodman. Absolutely, the party chief was in charge, and you did what he told you. Now an instrument man had earned his grits and he wasn't going to cut much line. You were hoping you could get to the point where you could run an instrument because that meant you didn't have to tromp through the swamp or hold the rod or the chain. Again, you had a four-man crew, so you had two rodmen and you had one guy that held the tail end of the chain, but the guy that had been there a little longer would hold the beginning of the chain. You didn't want the tail end. There definitely was a pecking order."

Regardless of one's position on the workplace totem pole, meticulousness was essential. "By the way," Kenny observes, "both rodmen were extremely important because you had to chain it on out and it had to be exact. It's kind of interesting, but if you were an instrument man, and again, these were the old Japanese built transits, you had to set it up with the plumb bob, turn the angle, have the magnifying glass, turn the angle again, then



*TBS instrument man "turning angles"*

you turned it three times, and divided by three to get the average. All of these things had to be done. It was not like it is today, where it's all electronic. You'd close it out, and if you ran a traverse and it didn't close, the rest of the crew sat there while you ran the traverse again. And, worse than that, if you turned the wrong angle and somebody cut 400, 500, 600 feet of line and it was wrong, you had to re-turn it, and you were the one going to re-cut it."

Cutting line was not only arduous, but it could also be dangerous, as well. Kenny still harbors painful memories of one such job in Lake Fields: "It was only about 3,200 feet, but it was the toughest 3,200 feet. It was a well location. L.J. Triche was the party chief. Kenny Matherne was the instrument man. There was myself and another individual. It was a well location and we had to stake it. They were going to come in and dredge 3,200 feet. It had to take us about a week to go 3,200 feet. And we weren't walking, we were swimming. And, to get that staked out, you basically would go every one hundred feet, put a stake, and then you had to pull over seventy feet, put another stake. And that seventy feet was the channel. That's where they were going to dredge. So every one hundred feet we did that, and then we got to the end, and we had to stake out the actual location and the offset for the location. And, oh my goodness, that was a miserable job. We fought for every inch. Every inch. I can remember I rolled into a little hole, and there was nothing but baby alligators everywhere; so it actually was a little nest. I can remember L.J. Triche grabbing me quickly, moving because he was scared. He told me he was scared to death that the mama gator would come. As party chief, he didn't have to be out there, and he could easily have been on the bank, but he was right out there swimming along with us."



*Aerial depicting the 3200' canal near Lake Fields*

Because survey work was so rigorous, the turnover in field personnel was always quite high, particularly among workers capable of securing less arduous jobs in the oil patch. As a result, the firm was compelled to hire less than ideal candidates whenever the petroleum industry entered a boom cycle. Some of these individuals could not read a tape, and, in some cases, they did not know their complete name. Thad Lovell, hired in 1962, estimates that in more than twenty years working as a field supervisor, he has managed more than a thousand different people.

Thad Lovell's trainees who really wanted to learn their craft soon became proficient in survey work. Over the course of four or five years, seasoned veterans advanced to positions of greater authority, frequently as survey crew party chiefs. Thad took pride in knowing the people he trained did well in the firm. These well-trained professionals were needed because by the early 1970s the firm had six field crews "blowing and going." It was a hectic, but profitable, time when the TBS workforce mushroomed to eighty. Although the average number of crews was relatively small, the volume of business required hiring some contract crews to complete the required surveys.



*Thad Lovell, TBS Party Chief - 1970s*

TBS crews "always did good quality work," Ed Bridges remembered. "I mean, from the lowest man on the survey crew all the way up, they took pride in their work. TBS always had the equipment they needed. They didn't have to go out and buy it or rent it or whatever they did. They got what we needed done. And I could call them. You know, in the oilfield, you need it done quickly, and they were always available. They'd bend themselves over backwards to get the work done for me. And that's why I hired them for a lot of our work. You know, Texaco did not allow me to hire just one survey firm. You kind of had to spread the work around a little bit. But the majority of the work, I tried to make go to TBS because I knew the quality of work they did. That's the kind of people you want to go back to. Somebody you can really count on at any time, because sometimes there were emergencies, and that's how the oilfield worked. I want it done now. My boss is telling me, 'I want it done now.' I've got to do it. So you go to the best person to get it done."

Marc Rogers expresses, "Survey party chiefs are probably one of our better marketing people because the guys are out there in the field, on the front lines with the clients, dealing with them on a daily basis. Their ability to communicate and get along and make friends has been a tremendous benefit to us as far as business development is concerned. Clients often want a particular survey crew to work on their project because they've worked with those guys for so long on so many projects, they know what they can expect. That type of client relationships is what oils this machine."

Charlie Scheffler, a TBS associate for nearly 40 years, is a great example of someone who could convince a client that they needed TBS. He has great people skills and clients trust his judgment and honesty, which is an important asset when the field crews are dealing with project managers. Field crews know the land and its associated problems, and as a result, they can talk with TBS supervisors about the realities of working in the swamps, marshes, and natural levees.



*Thad Lovell -  
50 years*



*Kenny Matherne -  
46 years*



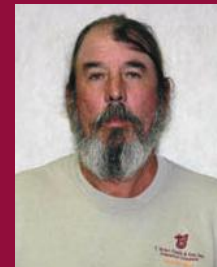
*Gary Duet -  
41 years*



*Charlie Scheffler -  
40 years*



*Harry Dupre -  
39 years*



*Harry Scott -  
29 years*

David Martinez, recalls the difficulty of working offshore. “In the late 70s, there were no GPS units. We were staking locations for oil and gas and you had to climb these platforms because the control points were way up on the heliports. You’d ride in the crew boats forever in the middle of the Gulf, arrive at a platform, and take a mini-ranger that was essentially a distance meter. You had to take two 12 V batteries to the top of an offshore platform in order to do the necessary triangulation. You walked all the way up to the top of the heliport, and, setting it up on top as a control point, leave it there. That was a lot of equipment to carry and leave. You might have to go to three platforms because you had to triangulate. You would set all that up and then stake a location in the Gulf. You couldn’t even see where your platforms were anymore. You had no sense of relativity. It was that kind of deal. You’d drop a buoy where the locations were to be drilled. You would drag a magnetometer to look for foreign pipelines near the well location. Then, you had to just sit in a crew boat and wait until the rig came into the field, which might be a day or two. Most of the time you were on a crew boat. The divers always had the supply boat, and surveyors always had the crew boat. We had no bed and we slept on a bench seat. You were always kind of second hand to divers. Divers always got treated the best.”

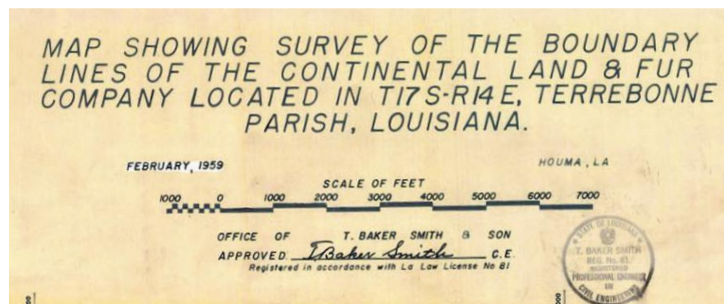


*TBS Electro-Tape - Harry Breaux*

Currently, when mapping a pipeline across open water, the entire surveying job is controlled with a GPS unit. Marshall Faulk remembers, “Back in the old days, what you would do with range-range equipment, every 500 feet, whatever, you would throw over a buoy on the position. The buoy would be tied to a piece of scrapped railroad trestle with a cane pole through the buoy to allow flagging to be attached to it so that it could be easily seen. Additionally, we would attach a six-volt lantern battery to the cane pole, which would provide power to a small Christmas light bulb so that at night the points could be seen. You would drop those every 500 feet on the pipeline construction route and they had to be lit because the construction operation worked twenty-four hours a day.”

TBS was at the epicenter of the oil industry’s response to America’s insatiable energy demands; the firm’s long-term relationship with the oil and gas industry has proven to be a good marriage. Continental Land & Fur Firm, Louisiana Land & Exploration, Shell Pipeline, El Paso Pipeline Group, Tennessee Pipeline Group, and Louisiana Intrastate Pipeline were clients that started their relationship with TBS in the post-WWII era and continue to sign contracts for a wide variety of oilfield and pipeline work.

TBS takes great pride in personal relationships. Through the years, some excellent one on one associations have developed resulting in strong bonds between TBS and strategic clients. Continental Land & Fur Co. (CL&F) is one of these clients. Clifford, with the help of a local real estate agent, helped find fifteen homes in the Houma area for CL&F employees and families who were displaced after Hurricane Katrina. CL&F purchased those homes, realizing their employees needed a place to live and do business. During these challenging times, TBS rented available offices within the Houma facility to CL&F.



*Title Block of CL&F survey by TBS - 1959*

As the TBS client list grew, the physical needs to fulfill job demands grew as well. The number of automobiles multiplied and petroleum demand intensified. As a result, the firm prospered. But to provide the services required by the larger number of clients, Clifford also needed to increase the firm's employee base.

TBS survived and ultimately prospered over the course of a century because of the pragmatism and opportunism of its corporate leadership and staff, who have repeatedly seized upon opportunities to provide professional services. As Kenny, who recognized and acted on opportunities as they presented themselves, noted, "I went off to Nicholls and then Louisiana Tech and was educated in civil engineering. I wanted to build roads and bridges because that's what engineers do. But in this period and economic environment, clients did not have roads or bridges to build, but they did have pipelines, and they wanted to drill wells. That's how this all came about. An opportunity was there, so I seized it. I did not go into civil engineering thinking I was going to be in the oil and gas business."

According to TBS associate testimonials, it is clear that Clifford, and now his son Kenny, is "always very generous with all of his associates." Cindy Spence, an associate for 38 years, fondly remembers, "Generosity, compassion, and family, those are the words that come to mind when I think of my experiences working at TBS. I became Clifford's secretary, a position that I still proudly hold today, although now my title is Executive Assistant. Clifford came up with the idea to have a Christmas party for all the employees and their children. He wanted Santa Claus to hand gifts out to all the children at the party. Making sure that each child had a gift, and no one was left out, was quite a task.

Questionnaires were sent out to each employee asking them to list their children and give gift suggestions for each child who would be in attendance, and, of course, asking them to keep this a secret from the children. When the questionnaires were



*Cindy and Clifford at a company party - 1980*



*Cindy assisting Santa with gifts for the children of TBS employees*

received and a ‘master shopping list’ was compiled, the list was then split up among the secretaries who wanted to participate in the shopping spree. Gifts were bought, lists were double and triple checked, and a few extra gifts were purchased just in case we needed them. The gifts were wrapped, labeled, and put in a hiding place until the special night. Horace Thibodaux, now retired from TBS after 34 years with the firm, graciously accepted the role as Santa. Santa, of course, had his special elves to help him hand out his gifts. Marshall Faulk’s wife, Patti, and yours truly were privileged to share in that experience. Those were wonderful Christmas parties each year filled with fun, food, and excitement for all involved. The happy, excited looks on the faces of the children as they received their special gifts from Santa was indescribable.”

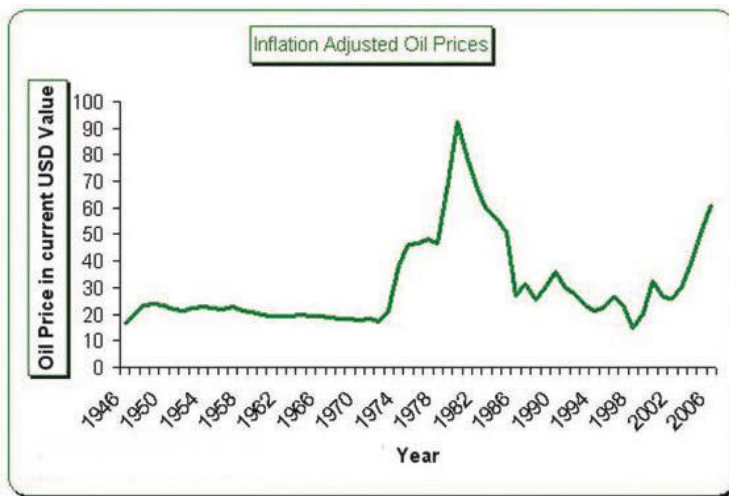


*The Bayou Dularge Overpass, a TBS project, and a Texaco drilling barge heading to Caillou Island to drill a well TBS surveyed - late 1970s*

By the late 1970s, TBS was enjoying tremendous success in all the major markets it served: public infrastructure, private development, oil and gas exploration and production, and pipeline services. TBS’ professional staff and support had grown to over 120 people. The robust oil and gas industry was driving growth and success for TBS and the entire region.

### Part 3

## The Oil Bust and T. Baker Smith's Survival



*Price of Oil from 1946—2006*

By the 1960s, when Clifford became the firm's primary spokesman, TBS was a recognized name in the corporate board rooms of many of the companies that pushed the hydrocarbon industry to record depths onshore, into offshore waters, and eventually, deeper and deeper into the Gulf of Mexico. Virtually overnight in the early 1980s, the oil industry went bust. The expanding ripples of this unfolding economic disaster, easily the worst economic crisis experienced by the area since the Great Depression, brought industries, governments, and individuals to their knees. Clifford faced almost insurmountable challenges to keeping the business solvent in the face of the grim new economic realities. His son, Kenny, who joined TBS full time in 1986 shortly after graduating from Louisiana Tech with a degree in Civil Engineering, recalls, "I came back to Houma, full of enthusiasm, ready to go. But we didn't have anything going on. Clifford had the firm in a pure 'basic survival mode.' I could not have finished college at a worse time for business."



*Clifford, South Van Avenue Office - 1978*



Kenny remembers, “I have two stories from that time period that have stuck with me for years. First, when Sheri and I moved back to Houma, things were so bad that my father actually had to let one person go from the firm to make room for me. That person was a young architect and actually a friend of mine. He and his wife, both high school classmates of ours, left Houma in search of work opportunities. Secondly, when I came to work we barely had anything going on. Well, I could not just sit around, so I grabbed a lawnmower and started cutting the grass around the office. Within ten minutes, I hit a pipe that bent the shaft on the lawnmower. Clifford said, ‘I’m not fixing anything. Let the grass grow.’ We didn’t fix the lawnmower. When I returned from Ruston, my father looked tired. The stress of keeping the firm afloat was written all over his face.” He remembers Clifford telling him “Kenny, I’ve been pulling the wagon by myself now for quite a while, and it’s loaded down with employees and family. I look forward to your help.”



*Clifford and Jo-Anne with many of their grandchildren wearing “Pulling the Wagon” t-shirts*



*Angelle pulling Pa Cliff*

Clifford’s oldest grandchild, Angelle Smith, reflects, “Pa Cliff always tells the grandkids—well, any captive audience—that he is pulling the wagon. He pulls the wagon through the mud, up the hill, around any obstacle. And, he says he pulls the wagon by himself. He is not complaining; he is leading by example. He is showing us how important it is to lead, to take action, and to get things done.”

Economic stress was pervasive. On the Cajun Coast, the once-booming construction industry was practically brought to a standstill as thriving business and residential developments were transformed into veritable forests of for sale signs. Louisiana’s coastal parishes were particularly hard hit and layoffs became painfully commonplace throughout the oil patch. Dislocated employees, facing bankruptcy, confronted the prospect of relocating to less oil-dependent areas, particularly in the southeast which was then enjoying economic expansion thanks to cheap energy, or seeking their livelihoods from renewable marine resources: shrimp, crabs, oysters, etc. The “pennies wise, pounds foolish” decision by many “majors” to cast-off committed employees had particularly catastrophic long-term consequences.

In the economic prosperity of the late 1970s, Clifford decided to invest in helicopters. In 1979 he formed Energy Helicopters and purchased a Hughes 500. By the early 1980s it had grown to a fleet of 14 aircraft serving several oil and gas companies, along with pipeline companies. A heliport facility was built at 401 Glynn Avenue adjacent to the storage area for the TBS survey vessels. It appeared to be a great fit for the expansion of the services offered by TBS. The oil bust of the 1980s proved to be too much for this side business, and it was out of operation by 1987. It took ten years for Clifford to truly recover from the venture.



With the crash of the global petroleum economy in the mid-1980s, unemployment became distressingly common throughout South Louisiana's oil field. The general media and business journals proclaimed the offshore oil industry dead and Louisiana appeared to be on the precipice of a long-term economic recession. Again, TBS was at the epicenter of an economic upheaval. The upheaval sent devastating shockwaves throughout the regional economy. The firm was directly impacted by these shockwaves and Clifford had to rethink his corporate strategy, shifting rapidly from heady expansion to retrenchment and ultimately to survival as the firm's annual revenues fell precipitously. They went from a peak to a fifty percent reduction the seven years that followed.

By the time the downturn reached its lowest point in 1986, Clifford's workforce had shrunk to thirty-five, down roughly seventy percent from 1981. Declining revenues, however, were not entirely responsible for such drastic downsizing. Clifford recalls having a very tough, personal time dealing with employees, "A lot of the extra people we had hired during the boom just kind of went away." Most of the defectors were people the firm had enticed "to come from Florida or Timbuktu to work down here. And, when things just didn't work out, they packed up their bags and went away."

In retrospect, the loss of these outlanders ultimately proved to be a blessing in disguise. Not only did they have no real ties to their adopted area or their employer, but they also lacked essential skills and a strong work ethic. Clifford remembers that, like other entrepreneurs in the booming oil patch, "We were hiring people if they could breathe." That left TBS with a nucleus of committed employees, but employees with evaporating income. The firm found it increasingly challenging to maintain even the surviving skeleton crew. Like its counterparts throughout the oil field, TBS was forced to layoff employees, but with one important difference,

the firm did not abandon its employees. Marshall Faulk recalls, “In the early 1980s, the firm was facing a series of problems. The oil industry was in a tailspin. Oil and gas has always been the firm’s strong suit. Clifford and others decided that they could get through this economic downturn by working with their employees. Their people had been very loyal, and the firm needed to find a way to keep them on payroll.” During the depths of the crisis, Clifford discovered that if one went on unemployment for a week, he or she could come back and work another week. Then, they could extend their unemployment benefits; they doubled. Clifford recalls, “By just working crews and not laying people off, but instead putting them on unemployment, you’d lay one crew off a week and then they’d come back to work the next week. This started around 1986.”

With this arrangement, the firm would work two crews one week and the other two crews were off. The next week, the crews swapped. This platoon system allowed TBS to keep these individuals on staff and the payroll. David Martinez reported, “The Smith family would loan employees money, just pull it out of the drawer and say ‘Here’s some money. Pay me back when you can.’ No official note signing.” If somebody got in financial trouble, the Smith family would do whatever they could to help. Within the firm, employees would raise money for families that needed a little help. “There’s definitely a human side to TBS, and it’s a big plus.”

Clifford adopted a “save our employees” approach. He worked with the firm’s employees to insure they could care for their families at a time when job openings were nearly impossible to find. As a result, TBS survived, unlike scores of its competitors. The oil industry lost many skilled employees and took a decade to rebuild its trained labor force.

This type of compassionate behavior was simply an extension of the Smith family’s generosity. For example, when Mike Hebert was asked how the Smith family has helped people when they needed it, he replied, “In 1973, when my daughter came down with leukemia, I had to go to M.D. Anderson with her. And the time I was over there, Clifford more or less, paid my salary. He told me not to worry about it. So, it kind of makes tears come to my eyes. In a public corporation, I can tell you that kind of help is not common. I kind of feel like a family member because regardless of the tragedies in your personal life, they never give up on their employees.” The Smith’s enduring legacy of compassion constitutes one of the firm’s most important building blocks and the fierce loyalty of impacted associates is an important contributing factor to survival, particularly in lean times.

Such corporate benevolence stood in stark contrast to the “scorched earth” personnel policies of other petroleum-dependent companies. In the early 1980s, the TBS’ Survey group bore the brunt of the economic downturn and employees were compelled to work shifts on a seven-and-seven basis. The situation became so

bleak that employees established collections for coffee. One employee recalls, “We paid for our own coffee, and I guess those are the kinds of crazy things you never forget.” All of the current associates in 2013 who went through the 1980s speak with a common voice. The period was universally difficult financially, emotionally, and professionally. Even so, senior associates unanimously remember that throughout the ordeal, they felt like members of the Smith family. They were treated fairly and knew that serious measures were necessary, but their sacrifices were rewarded with continuous employment. In many cases, grateful senior associates have reciprocated by encouraging their own family members to join the firm as second-generation hires.

Not all of TBS’ departments were impacted equally by the downturn. Even in the depths of the oil bust, TBS engineers always had work to do, particularly in the public infrastructure arena because no matter how bad or good the economy, there is always engineering work to be done. Longtime associate Jimmy Ledet notes, “Engineering has always been fairly consistent, maybe not as subject to the ups and downs of the oil business, as the survey side of our business. It seems that the survey business left something of a baseline for the firm after the downturn. It was the one thing they could count on.”

David Martinez remembers during the lean 1980s the firm had “a little miscellaneous oil and gas work, maintenance type stuff, or maybe a little boundary work. A little bit of everything you can grab. Some oil companies were just doing only what they had to do.” To some, the industry was dead or dying. The common bumper sticker in the region at this time was: “The last one out of South Louisiana, please turn out the lights.”



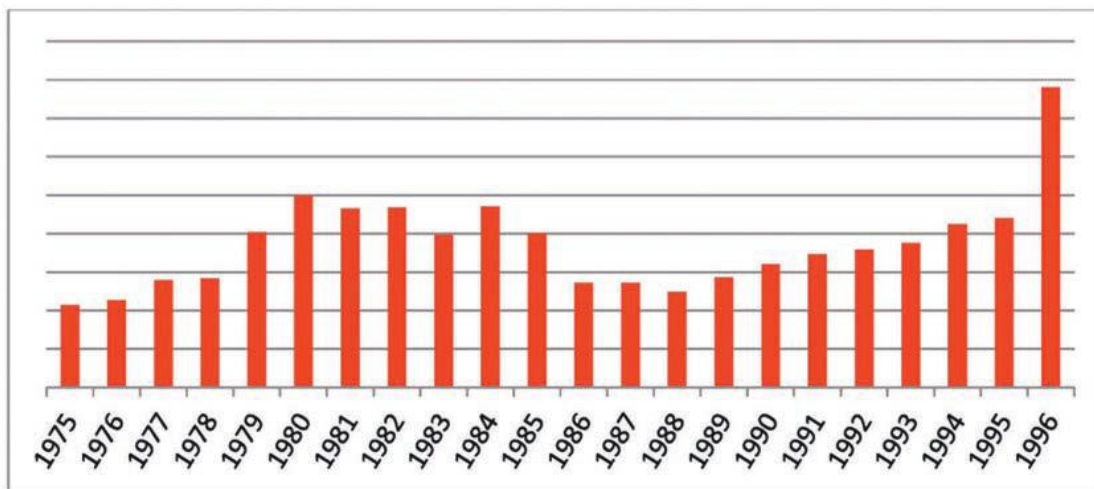
*Bruce Pellegrin with his son at the beach - 1988*

By the late 1980s, just as the economy in the area was starting to recover from some very bad economic times and things started improving financially, more extracurricular events started to occur at TBS. A 25 year associate, Bruce Pellegrin, Principal in Charge, began working at TBS in December 1988. Bruce recalls, “One of the firm’s family events that comes to my mind over the years was the ‘Day at the Beach’ hosted by Clifford and Jo-Anne at their camp, Smith Ridge, in Grand Isle on Labor Day weekend.” Clifford came up with the idea to have a firm picnic for all the employees and their families over the Labor Day weekend holiday so that everyone could enjoy the camp and the beach. Marshall, Bruce, and others did the barbecuing and there was lots of food and drinks for everyone to enjoy. The children were excited to spend a day of fun in the sun. This tradition continued for a few years and was a great, fun-filled day for all who participated. Bruce remembers, “It was my oldest son’s first time at the beach.”

A trip to Grand Isle was especially meaningful for Bruce because he grew up going to Grand Isle with his parents and siblings and spending time at his father's boss' camp. His father's boss had the 'what's mine is yours' philosophy and enjoyed sharing his good fortune with others. This same philosophy of hospitality and sharing was evident in Clifford and Jo-Anne and was appreciated.

The boom of the late 1970s and early 1980s seemed too good to be true for many in the oil and gas business. Its rippling effect into private and public works were tremendous and TBS was well placed to take full advantage of such opportunities. But as history shows, the oil bust of the mid-1980s took its toll on all businesses directly and indirectly related to the oil field throughout the country. TBS was no exception; 1988 was a low point for the firm. There were barely 30 employees, many of whom were only working half the time. But the firm, built to last by the enduring beliefs and work ethics of its founder, Baker Smith, and leadership and management capabilities of Clifford, did survive. It took eight long, tough years until 1996 and the award of the Koch Southeast Pipeline project from Bayou LaBatre, AL to Grand Bayou, LA (200 miles) for Clifford to have any belief of a full recovery. By the end of 2000, TBS projects required up to ten field crews and 85 professional staff.

### *Volume of work at T. Baker Smith from 1975 - 1996*



Graph showing the volume of work at T. Baker Smith from 1975 to 1996

**Part 4**  
**Economic to Community Survival**  
**Land Loss in Louisiana:**  
**From Denial to Reality and Clifford Smith's**  
**Determination to Make the Problem Real**

**W**ith Clifford losing his great uncle, M.F. Smith, and almost losing his grandfather, C.P. Smith, and father in the storm of 1909, the critical need for hurricane preparation was instilled in him at a very young age. As an adult, coastal erosion and its deteriorating effects on his community naturally were a strong priority for Clifford. After all, the Smith family seems to have a knack for basic survival. According to longtime associate Marc Rogers, TBS engineers are continuously working to solve problems in an area of Louisiana that has experienced large scale subsidence and the coastal erosion, which directly affects the region's population. Marc explains, "You get up in an airplane and you fly south of Houma and within a minute you're looking at more water than land. You don't get that impression when you ride down towards Cocodrie and you look off to the side. It appears that there is more land than water. But, if you get up in the air you're shocked into the reality of what you actually have out there. So, we've enjoyed working on coastal restoration projects because it helps us, helps this culture, and this way of life."

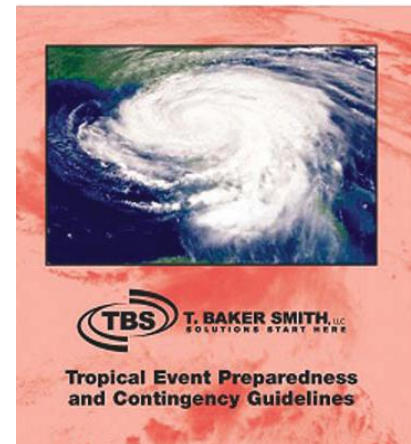


*Land loss near Wonder Lake, lower Terrebonne Parish*

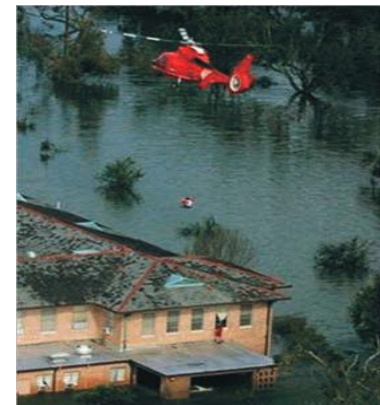
Lorre Autin, Executive Assistant with 28 years at TBS, recalls that, “Each June we have a firm-wide safety meeting. Many items are discussed, but in June, you could always be sure that Clifford was going to give his passionate speech on being ready for hurricanes. He stresses that each of us should be personally ready and be prepared for the *big one*. Year after year, TBS associates have been educated on just how vulnerable people in Terrebonne Parish are to hurricane surges due to the parish’s tremendous land loss over the years.” Clifford’s vast amount of knowledge about hurricanes, coupled with his passion for TBS employees and his community, makes him a well respected teacher. Through Clifford’s leadership and Kenny’s determination to more effectively address the challenge, TBS has taken the firm’s original one page hurricane preparedness plan and developed it into a 2" thick Tropical Event Preparedness and Contingency Guideline document that has been implemented through numerous storms. Clifford taught his family and associates to be prepared by always having a life jacket and an ax on hand in case you have to escape from your attic.

Kenny remembers, “I can’t tell you how many times I have been told or heard my father tell others to always keep an ax and a life jacket in your attic. He always tells the story of Hurricane Betsy and the people in the ninth ward of New Orleans, cutting their way out of their flooded houses. Of course, I would just roll my eyes. For my entire young life, I can remember going into our home’s attic to get things for my mom and seeing this fireman’s ax and two life jackets hanging from the rafters and thinking ‘my dad is out of his mind!’ Then came Hurricane Katrina in 2005. My family and I stayed in Houma and compared to many others, we were spared. After about a week, our electricity came back on. A day later, the cable was back on and the first thing I saw when I turned on the TV was a live news story of a man using an ax, chopping his way out of his attic onto the roof of his flooded home while wearing a life jacket. It was one of those ‘Aha’ moments in life.”

Clifford expresses, “We have been working on what is called the Morganza to the Gulf project which gives us what I consider minimal hurricane protection for Terrebonne Parish. It is not complete, not the ultimate, but at least it’s a beginning. And, we didn’t have it twenty years ago. It’s kind of frustrating.” Clifford acknowledges



*TBS' official cover of preparedness document - 2012*



*Katrina rescue - 2005*

that at times throughout his life, it has seemed like a chore to try to educate people around the country about the need for protection and resource management for this area, particularly the resources of the Mississippi River, to reverse some



*Clifford featured in local newspaper - 2003*

of the things that are happening to the Parish. Year after year, he has delivered this message across Louisiana in Washington, DC, and throughout the Mississippi River Valley. If there is a positive thing, it is that it is on people's radar probably more now than it was 20 or 30 years ago. "The disheartening thing is that we haven't been able to accomplish enough positive physical things," explains Clifford. The funding that does come seems to get spent on frivolous things such as studies, permits, etc. Clifford wants people to be optimistic that Terrebonne Parish will get some funding and also optimistic that the funding will be used to actually achieve some type of protection for the region's citizens, many of whom are his family and employees.

Clifford remembers, "It seems like all of my life I have been trying to explain to everyone that the Mississippi River does not stop at New Orleans, but there is actually another 125 miles to the Gulf of Mexico. Approximately ninety percent of the people I have met around the world think the Mississippi River stops at New Orleans. When I tell them that I live 65 miles southwest of New Orleans and approximately 30 miles north of the Gulf of Mexico (which continues to get closer), they don't believe me. They don't believe that there is any land below New Orleans. All of my life, when we have gone to functions in New Orleans, our friends inquire as to how was our trip down, and I have to explain to them that we are the only people that actually drove up to the meeting."

Unfortunately, Terrebonne Parish does not have the commitment from the Federal Treasury to do projects that could make a difference in the area. The government does not understand that the Parish is a dynamic system; it is not a one fix deal. Clifford explains, "It's not a coastal restoration program, it's not a fresh water diversion program, it's not a levee building program, it's a multitude of things that would allow us to manage our resources. I don't think that the government (local, state, or federal) is structured to be able to handle such a dynamic system. The bureaucracy, regulations, different agencies, and different interests get involved in it, and the process gets tied up in red tape. Some things, even simple things, don't get done. Also, they don't realize that time is not our ally. The more time that goes on, the more deterioration goes on. The biggest problem is to reverse it or control it."



When Clifford became knowledgeable about the Mississippi River Commission, created by Congress in 1879, the jurisdiction did not include the area between the Atchafalaya and Mississippi Rivers, though it did include the Mississippi River Basin North up to Cairo, Illinois and into Missouri. Clifford began to petition Congressman Billy Tauzin about ways to expand the geographic boundaries of the Mississippi River Commission's footprint. Clifford recalls, "I didn't know what that meant, but it seemed ridiculous that you had the entire Mississippi Valley in the Mississippi River Commission, but you didn't include the area

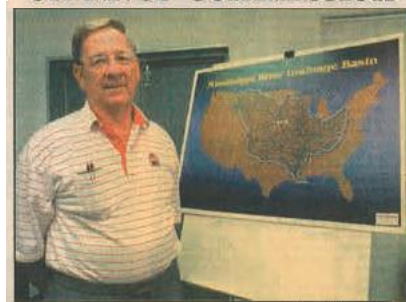
between the Atchafalaya and the mouth of the Mississippi River." Through Clifford's efforts, the boundaries were expanded. Then, Clifford explored the Commission's organizational structure, which consisted of seven appointees (four military people and three civilians, two of whom are civil engineers). He discovered there was someone on the Commission from Louisiana who was about to retire. Clifford petitioned the Congressmen and Senators from the area to be involved on the Mississippi River Commission. Senators Bennett Johnston, John Breaux and Mary Landrieu, as well as Congressman Billy Tauzin and the rest of the Louisiana Congressional delegation recommended to President Bill Clinton that Clifford be appointed to the Commission. The Commission is a presidential appointment that required Senate confirmation for a nine year term. Two of the civilians have to be civil engineers, so Clifford fit the criteria. Clifford was initially appointed by President Clinton in 2005 and subsequently renominated by President George W. Bush.

From the Commission's inception, there had always been someone on the Commission from Louisiana, primarily because the Mississippi and the Atchafalaya are in Louisiana. Of course, Clifford got very interested in the Commission's agenda and what could be done with the River to reverse some of the negative impacts of coastal erosion and began to stimulate interest within the Commission, the Corps of Engineers, and



*Clifford as a member of the Mississippi River Commission - 2004*

## Houma engineer gives south Louisiana voice on River Commission

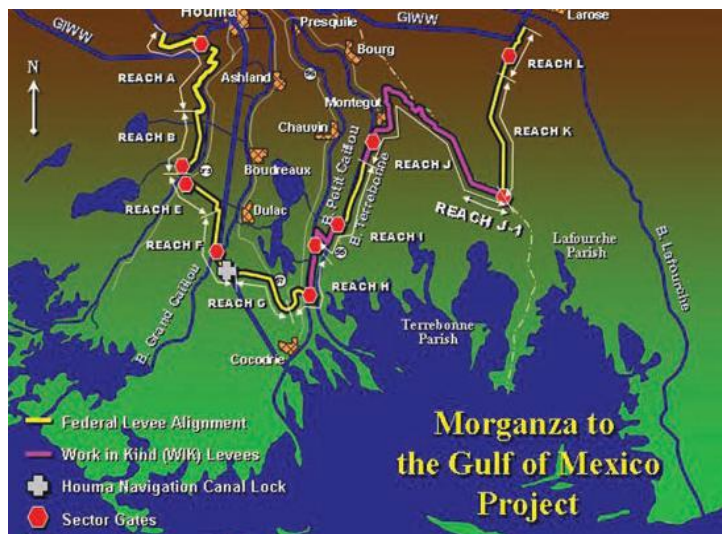


BRYAN TUCKER/THE COURIER  
Clifford Smith, president of T. Baker Smith and Son Inc. in Houma, stands in front of a poster showing the Mississippi River drainage system. Smith is a member of the Mississippi River Commission, a group of advisers to the U.S. Army Corps of Engineers.

*Clifford featured in a local newspaper*

others. Clifford proclaims, “That’s been gratifying that we’ve gotten some attention. We haven’t gotten enough solutions, but at least we are on somebody’s radar now. It’s been rather frustrating because we constantly had budget cuts and bureaucratic ramifications with the budgets and the authorizations for the appropriations, but frankly, in 2011, there was a historical flood on the Mississippi and some of the work that the Commission had been involved in over the last eighty years worked and you minimized the destruction from a major flood of the Mississippi. That was gratifying.”

Clifford maintained numerous friendships with the Corps of Engineers, both military and civilian personnel and U. S. Geological Survey employees. Clifford continues to inform them about the physical and human resources in South Central Louisiana and the need for improvements in the management of these resources. He has a keen sense of frustration, heightened by his fifteen year tenure on the Mississippi River Commission. During his appointment to the Mississippi River Commission, Clifford has re-educated a continuing stream of Commanders. In Clifford’s professional career, there have been seventeen different District Engineers that have taken command of New Orleans. Clifford has developed some friendships with others that have listened to his tales. It has been a wonderful process for him to be able to expound on some of the knowledge and some of his experiences in the area. Clifford expresses, “But the other side of the coin has been pretty frustrating because there’s really not a big radar screen as far as the rest of the nation is concerned.”



*Project Alignment for the Morganza to the gulf project - 2012*

Prosper Toups, Sr. acknowledges Clifford’s passion by stating, “Clifford’s desire to know about loss of land and coastal erosion and his association with the Mississippi River Commission and the Corps of Engineers is key. So his success comes with knowing not only the problems in Terrebonne Parish, but having a bird’s eye view, I should say an overall view, of where the Parish is going.”

Clifford is also passionate about higher education in Louisiana and the programs in place to keep it affordable. Clifford was asked to be on the Board of Regents by Dr. Donald Ayo, President of Nicholls State University and Louisiana Governor Mike Foster. He was later reappointed by Governor Kathleen Blanco. Clifford remembers, “I did not particularly believe I was too qualified, but I did feel like I wanted to contribute to higher education in Louisiana because it had, in my opinion, contributed to some of my success.” He served on the Board of Regents for about seven years. However, in later years of serving on the Board, he found it to be very frustrating because of the budget cuts that the universities had sustained. For a couple of years during the Blanco administration, there were funds available. There was recovery after Katrina, but then an austerity program was implemented, and they began to cut the budgets to higher education. Clifford resigned for that reason, stating, “It was very educational for me to be on the Board of Regents because I didn’t realize how big a business higher education was in Louisiana. I remember one time we were reviewing a three billion dollar budget for the LSU System. It was described as the LSU enterprise, which was a startling revelation for me that just LSU was considered by many as an enterprise. Of course, LSU, because of the different campuses and the different schools, particularly because of their administrative responsibilities over the Charity Hospitals, is really a huge enterprise. I’m not sure if it is good or bad, but it is fact. It’s unique in the United States. The most memorable thing while I served on the Board was Katrina. We went through all kind of rearrangements and reorganization, particularly because of the schools in New Orleans and displacement of the schools in the region. Those were very trying times. Somehow, we managed to get through.”



*Nicholls State University Award - 2001*



*TBS in support of NSU Geomatics program, making professorship donation*

Clifford believes that the education system at the high schools and technical and trade schools, such as Fletcher, which is now north of Houma, have always been an asset to the business. At one time, there was a drafting course at Fletcher that was beneficial to hundreds of people over the years who worked at TBS. At one time, there was a curriculum at Nicholls in Engineering Technology where many TBS employees and associates earned their degrees. Later, the Geomatics program started at Nicholls. Clifford was on the Board of Regents at

the time that program was approved. Clifford explains, “That was, of course, a no brainer for me, and I expounded on that at the Board. We also financially supported it from day one. It’s been an asset to our firm, but it’s been an asset to our citizens, too.”

With land loss issues and the awareness of vulnerability associated with hurricanes, particularly Katrina, Rita, Gustav, and Ike, a number of companies abandoned their Houma-based properties and moved north on Highway 311 to sites with easy access to Hwy 90 and well-defined drainage, sewage and water supplies. The Engineering group within TBS has been directly involved in much of this relocation activity, which shows the economic ripple effects of coastal land loss.

In addition, while Clifford was working on coastal restoration and calling attention to this problem at the national level, he was expanding the firm’s client base and workforce. The end result was a firm that was no longer focused exclusively on surveying and civil engineering, even though they remained the twin pillars of the firm’s success.

Before the media headlines called attention to Louisiana’s land loss problems, TBS was engaged in solving coastal issues. The pretzel-shaped track and relentless rainfall associated with Hurricane Juan in 1985 played a pivotal role in TBS defining itself as a leader in coastal land loss issues. After this October storm, TBS was involved in resurveying the region’s levees. When the job was completed, TBS discovered many levees had subsided several feet, reducing their project-design effectiveness. This was an issue that Clifford noted and TBS associates have engrained in their thought processes. Prior to this resurveying effort, levees were considered nearly invincible. This was not the case, as the storms in 2005, 2008, and 2012 have shown.



*Danny Richard, TBS Party Chief, performing a levee damage survey*

In the last half-century, Louisiana’s scientific community has investigated and reported the state’s land loss problem in detail. This is a not a new issue; a number of individuals predicted the problem well before it became

a topic of diligent investigative research. Although coastal land loss has been described in scientific literature for more than 100 years, it has become a state priority only since the late 1980s. Prior to that time, most of the policy-making community simply ignored the problem or denied its existence. Consequently, when TBS was incorporated in December 1964, land loss and coastal erosion were not being vigorously discussed by the policy-making community.

An accident of history challenged the status quo, as Lyndon Johnston wanted to know, in the late 1960s, the environmental consequences of diverting Mississippi River water to West Texas. The U.S. Army Corps of Engineers issued a contract for this work to LSU and a research team under the direction of Dr. Sherwood Gagliano. The team inadvertently discovered the state was losing about 17 mi<sup>2</sup> of land area a year and diversion of the Mississippi would dramatically exacerbate this problem. The river was not diverted, and the state learned its marshes were under stress and disappearing at an alarming rate.

Gagliano's 1970 study nevertheless went largely unread and unnoticed because the general population simply could not believe the marshes were actually decreasing in size. Yet, Terrebonne's elected officials took coastal erosion seriously. They recognized the Parish's crucial wetlands habitats were disappearing and the Parish had to take a proactive role in protecting this valuable asset. Terrebonne Parish took the lead by funding projects and working with the U. S. Geological Survey and the U. S. Army Corps of Engineers to better understand local coastal issues. These governmental entities initially directed restoration efforts of the region's barrier islands. In confronting the looming problems associated with land loss, Terrebonne Parish was nearly ten years ahead of its coastal neighbors.

In 1980, Dr. Karen Wicker, working under a contract from Terrebonne Parish, published *Environmental Characterization of Terrebonne Parish: 1955-1978*, which was one of the first comprehensive land loss assessments of a coastal parish. That study morphed into the *Atlas of Shoreline Changes in Louisiana from 1853 to 1989* that put a face on the problem and clearly demonstrated the residents of the state's coastal plain were at risk, largely because of human interference with the Mississippi's annual floods. As a result of this interference, the Mississippi was controlled, but land was lost, the environment changed, and now engineers are trying to mimic the original system. Outlets designed to function like natural crevasses are being built to divert sediment-laden water into Louisiana's wetlands. Terrebonne Parish has come full circle, and TBS engineers, many born, raised and educated locally, are committed to finding workable, sustainable solutions to land loss.

Mitch Marmande, P.E., P.L.S., the TBS Senior Project Manager for the Morganza to the Gulf storm barrier with 11 years of experience at TBS, is passionate about his job because he grew up utilizing the marsh around Marmande Ridge, an area named after his family. He became an engineer because he was aware that his surroundings were changing and he wanted to be involved in protecting the region and its distinctive communities. As a consequence, Mitch was excited to have a chance to be an integral part of the Morganza venture not only because it is an exciting endeavor, but because this type of engineering assignment gives him the opportunity to manage a strategic project close to his heart. To Mitch and other TBS associates, helping the Parish and local communities survive is personally rewarding because when they are not at work, they are often recreating in the marsh.



*Whiskey Island Back Barrier Island Creation Project*

Restoration projects, to Mitch and other TBS associates, are more than a job; they are tools essential to the preservation of a culture and associated lifestyle they hope to bequeath to their children and grandchildren. Other TBS associates have joined the struggle to protect their homes, properties, and the landscape they love. Randy Landry, Vice President of Human Resources and Strategic Development, who has worked at TBS for 16 years, values this mindset at TBS. He notes, “The work we do is noble.” He believes the work “helps people, because we protect people in vulnerable areas, which is good.” Further, “I also get to do some of the work that I grew up loving. So, if you’re doing noble work and you’re doing things that you always liked to do, and you get paid well for doing it, I think that’s enough reason to work at TBS.” This outlook, which presently pervades the firm, is a notable part of Clifford and Kenny’s legacy. Consciously or unconsciously, they have built a firm where this attitude is an unwritten part of their business model.



*Environmental Professional  
Kenny King collecting vegetative  
data*

This desire to work on solutions to seemingly impossible coastal issues was evident in Clifford’s aggressive acquisition of wetland and barrier island-related contracts. Although oil and gas contracts have been key elements in the TBS business model, Clifford was tireless in seeking solutions to land loss. As a result, the firm developed unparalleled environmental expertise, and Clifford became one of the leading regional spokesmen for restoration, a role he has played for nearly a half-century. Clifford has maintained his high public profile as

an activist, but Kenny has assumed the torch for managing the firm's daily crusade against the cumulative effects of sea-level rise, subsidence, and erosion. Like his father, Kenny understands that saving the coast is crucial not only to preservation of a way of life, but also basic survival. Saving our coast is the key to any future, especially a better economic future, in South Louisiana.

Clifford's activism, Kenny's guidance, and the determination of associates to prevail against the onslaught of environmental factors seeming to necessitate a wholesale demographic move to higher ground, repeatedly put TBS on the frontlines of these challenges. The wake of Hurricanes Katrina (2005), Rita (2005), Gustav (2008), Ike (2008), the BP oil spill (2010), the Mississippi Valley and Atchafalaya Basin floods (2011), and Hurricane Isaac (2012) refocused national attention on the importance of Louisiana's wetlands and it is here, on the frontlines, in the trenches, where the outcome of this struggle will ultimately be determined.

Clifford's continued leadership and unfailing drive through decades of rapid change have given him a prestigious legacy within Terrebonne Parish and beyond. Among the accolades bestowed to Clifford throughout the local community are two major awards that help to define the passion and ambition that he has invested. In 2003, he was honored by two major civic and industrial organizations. In August 2003, the South Central Industrial Association (SCIA) presented its President's Award to Clifford for his coastal preservation advocacy. A few months later, Clifford was named *The Courier's* "Most Useful Citizen" at the Houma-Terrebonne Chamber of Commerce's Annual Banquet which recognized his efforts to bring national attention to South Louisiana's shrinking shores and his other numerous volunteer activities in the community. These awards were given in honor and appreciation for his many contributions to the people of South Louisiana and in recognition for being a successful industrialist, entrepreneur, and community leader.



*Clifford inducted into the LSU Civil and Environmental Engineering Hall of Distinction - 2002*

Edward Paul "Bubby" Lyons, former Mayor and Terrebonne Parish President fondly describes Clifford, "In my opinion, is just an extraordinary individual, not only in performance of his engineering abilities, but in the passion for his community. He is community-minded. He thought, first and foremost, about the community in his associations. Certainly, his business derived from the community, but he was always, as I said, a community-minded individual."

# HISTORICAL SNAPSHOT

## The Projects



- 1927 First well location staked in Lirette Field
- 1934 Magnolia Plantation land survey
- 1936 First street paved in Terrebonne Parish
- 1937 Grand Caillou oyster bed surveys
- 1940 Church Street & Lafayette Street Bridge engineering
- 1950s Planning maps and surveys for Houma infrastructure
- 1959 Bayou Chene to Bayou Penchant mapping survey project
- 1963 Terrebonne Parish Levees
- 1966 Ellendale Golf Course
- 1966 Rebecca Plantation Development
- 1971 Houma Airport
- 1971 1-1B Forced Drainage Project
- 1972 Dularge Bridge
- 1974 Prospect Avenue Bridge
- 1986 Terrebonne Parish Master Drainage Plan
- 1995 Pit Study
- 1996 Koch Southeast Pipeline
- 1997 Howard Avenue Bridge and Approaches
- 1998 Isle Dernieres Restoration Projects
- 2002 Morganza to the Gulf Hurricane Protection
- 2004 Grand Isle Hurricane Protection and Beach Nourishment Projects
- 2005 Whiskey Island Back Barrier Island Restoration
- 2011 Bayou Chene Emergency Closure
- 2012 Lafourche Parish Master Drainage Plan





**INDUSTRIAL-AGE BUSINESS TO  
INFORMATION-AGE INNOVATION**

**Kenneth Wm. Smith**

*“When I look at Kenny, I see traits of hard work, entrepreneurship, and a genuine care for the betterment of people and community, all three of which I believe are deeply rooted from my father and grandfather.” Wm. Clifford Smith*

**Part 1**

**Back to the Basics**

Having survived the economic Armageddon that claimed hundreds of businesses in the Gulf Coast’s oil patch in the mid-to-late 1980s, TBS found itself at a major crossroads as the region’s petroleum economy rebounded in the 1990s. In the aftermath of the oil bust, the firm confronted a radically different business environment engendered by a seismic shift toward digital technology and its attendant workforce requirements. The economic metamorphosis required the firm to meticulously examine its business model. TBS had to adapt to a wide array of changing circumstances. In an increasingly globalized and competitive marketplace where hyper-speed change may have been the only constant, firms content with the status quo quickly found themselves swept aside by more nimble and capable competitors. Success in this brave, new digital world required innovative technological, organizational, and communication tools; a highly skilled and committed workforce; and a footprint that transcended the firm’s traditional geographic identity and boundaries. TBS quickly recognized the need to adapt and the modernization of TBS was well underway by the end of the decade.

Without a new vision and energetic leadership capable of ensuring all the gears in the humming enterprise meshed flawlessly, change for the sake of change was ineffective window dressing at best and, at worst, a waste of human and financial capital. To be successful in the twenty-first century, the firm needed a leader capable of making TBS greater than the sum of its parts. After spending nearly twenty years as a paid employee learning the intricacies of the family’s business, Kenneth “Kenny” Smith assumed that leadership role when he became

President and CEO on December 26, 2000. As Kenny proudly states, “It was my time to take the lead from my father and start pulling the wagon.” Thus began the present and third leg of the TBS “Century of Solutions.”

Kenny readily recognizes his father’s role in nurturing him: “He has been a superb mentor and has given me every opportunity I ever asked for.” One of the basic truths that he learned from his father is that anybody can run a firm in prosperous times because it has the resources necessary to overcome a mistake in judgment. However, only a capable leader can shepherd a firm through lean times.



*Kenny and Clifford at a recent community fund raising event - 2012*

Like his father, Kenny grew up at TBS. The eldest son of the seven children born to Clifford and Jo-Anne, Kenny was the self-professed “instigator of mischief” at home and his punishment routinely entailed banishment to the office. At his mother’s insistence, the young troublemaker began accompanying his father to work about the time he was eight years old. Because of his young age, Kenny initially did odd jobs around the office, but as he grew older, his workload and responsibilities increased accordingly. He quickly gravitated to the firm’s mechanic shop, where he loved swinging wrenches, sweeping up, and washing cars. Kenny fondly remembers he “always went home filthy dirty.” Kenny’s early work assignments were not merely idle pastimes, but by design they were important learning experiences intended to instill strong work ethic, as well as an appreciation for the inherent value of hard work.

The next phase of the rambunctious youngster’s real-world education began when he became a teenager and his father assigned him to L.J. Triche’s survey crew with an admonition to the party chief to “work his behind off, he needs it.” And that he did. L.J. Triche was dedicated to TBS and Clifford. He was a hard working Bayou Blue guy, one of many from this rural part of Terrebonne Parish that worked at TBS. He started with the firm in 1965 and quickly became a “go to” party chief. Triche took this directive to heart, but – more importantly – he also provided mentoring beyond his official supervisory role. Kenny candidly recalls that

Triche became a second father figure to him, first teaching him the true meaning of hard work and pride and dogged determination to get the job done and done right.

In August 1984 while traveling to a job site, L.J. Triche's crew, which included Kenny Matherne and Ronnie Pitre, was involved in a horrific automobile accident. At the age of 35, L.J.'s life was tragically taken, shaking the TBS family to its core. L.J. worked with TBS for 19 years and has been gone for 29 years, but the fond memories of him still bring laughter and tears to many of the TBS family.



L.J. Triche

Starting at the very bottom, Kenny eventually worked his way up to the second or third position on the crew. Although officially underage, Kenny could do the work of an adult, hence his employment routinely raised no eyebrows, with one exception. When his crew reported to the St. James Strategic Petroleum Reserve Terminal along the lower Mississippi River to undertake a pre-construction survey, the facility manager refused to admit Kenny to the site and Clifford was compelled to drive from Houma to St. James to take him home. Kenny's involvement with the firm continued long after his age ceased to be a concern. Again, at his father's behest, the future CEO learned all aspects of the firm's operations through hands-on experience, always working from the bottom up in each of TBS' existing disciplines. Kenny takes great pride in his corporate baptism by fire, particularly because of the nuts and bolts knowledge of the firm's internal operations that he learned. Later in life, it would allow him to judge the merits of established procedures for himself in each of the firm's practices and to prescribe policy authoritatively, from a position of vast



Kenny as a teenager and Marshall as a part of a survey crew at Kaiser Aluminum, in Gramercy, Louisiana - 1979



Kenny, 2004 Chairman of the Board, Houma-Terrebonne Chamber of Commerce - meeting on Capital Hill wearing a life jacket to emphasize the plight of coastal land loss in Southeast Louisiana

experience. Over the course of his career, he has literally done everything that the firm could expect an employee to do, from emptying the garbage cans to lobbying before Congress.

Another major influence on Kenny was T.L. “Teddy” Duhé. Kenny remembers, “Teddy was a part of our firm from 1963, when he started working part-time as a field hand while attending Nicholls, until he left in 1986 to start Vanguard Vacuum Trucks. In his 23 years with TBS, he worked his way through the ranks and was head of the Administration Department when he left. Teddy had lost his father at a young age and Clifford was a mentor to him. Personally, he was somewhere between a brother and second father for me. I learned a lot from him, as with my friend L.J. Triche. I am a better person for the time I spent with both of them.”



*Teddy and Kenny*



*Kenny enjoying a round of golf with a peer group in San Antonio*

first. Around 1990 Kenny again took up golf, playing some with clients, but mainly as a social outing with longtime friends. Kenny has enjoyed many friendly rounds at many golf courses in the country.

Strengthening his passion for the outdoors, Kenny was first introduced to “the woods” by his grandparents, Pa and Ma Toups (Jo-Anne’s parents). Kenny spent a lot of time at their house in Schriever, where he has

fond memories of rabbit and squirrel hunting in the woods, as well as fishing in their pond. Clifford exposed Kenny to duck hunting at an early age by taking him on weekend trips to the “Sapphire’s Couchette,” a camp boat along Bayou Blue Hammock, deep in the southern marshes of Terrebonne Parish. Kenny still hunts along these same marshes today with colleagues and friends.

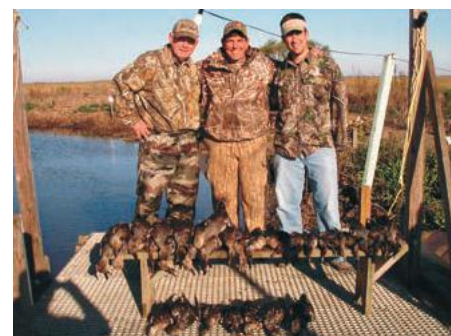


*Clifford and Kenny after a duck hunt - 1970*



*Kenny showing off his squirrels at Pa Toup's house*

Hunting with Louisiana State Representative Leonard J. Chabert and Clifford was an enjoyable event when Kenny was a teenager. They would hunt behind Chabert’s home on Upper Bayou Petit Caillou. Leonard and Kenny shared a love for the marsh. Clifford remembers, “Kenny wanted to go to Leonard’s camp every weekend and Leonard wanted him there. Before Kenny had a driver’s license, he had a 17 foot boat with a 70hp Evinrude motor. On Friday’s after school, I would pull Kenny and his boat to the landing and he would go duck hunting for the weekend. The good thing was, it was hard for him to get into trouble in that marsh!” Kenny says, “Duck hunting is in my DNA. The anticipation of running through the marsh in my mud boat, setting out a spread of decoys, and seeing a sunrise on a crisp winter morning is more than enough to get me up and moving hours before day light.”



*Marc Rogers, Kenny, and Kevin Beyer, TBS Associates after a duck hunt*



*Four C's and Miss Sheri in Cocodrie*



*Kenny and Sheri on the deck at their camp*

To this day, Kenny still has a passion for being on the water fishing and duck hunting. For several years now, he and his wife Sheri have enjoyed their fishing camp in Cocodrie, named Four C’s after the middle names of their

four daughters. Every weekend that the weather permits and the schedule allows, Kenny and Sheri can be found at the camp fishing, boat riding, relaxing, and enjoying the outdoors. Sheri fondly reflects, “Our favorite memories are the times our daughters bring down a group of friends for a weekend of fishing, jet skiing, and tubing.” The camp’s location is in the most southern reaches of Terrebonne Parish, just a few miles west of Seabreeze where Kenny’s grandfather and great grandfather narrowly escaped drowning during the 1909 hurricane.



*Kenny, Sheri, and their girls on the deck in Cocodrie - 2009*

As Kenny’s experiences from his youth kept him tied to his father and the firm, he quickly found himself graduating from high school and making plans for his future. While advancement in the firm was contingent upon hard work, assumption of a leadership position also required an appropriate formal education. The dawning realization of this fact in his teenage years ultimately helped transform a “rambunctious” high school student with a lackluster academic record into an industrious, highly motivated, college undergraduate. Kenny began his collegiate studies at Nicholls State University in Thibodaux, but, because Nicholls only offered a two-year pre-engineering curriculum, he eventually transferred to the engineering program at Louisiana Tech University in Ruston, Louisiana. Once at Tech, he dedicated himself to getting through the institution’s rigorous program as quickly as possible, graduating after only two and a half years of study.

Kenny has actively supported the Nicholls Alumni Foundation and is a member of the College of Business Executive Advisory Board. Within the Geomatics program, the Smith family has a professorship and a long standing annual scholarship. TBS has also offered numerous paid internships for students while completing the Geomatics program. In support of Tech, Kenny presently sits on the Engineering and Science Foundation Board of Directors and was named the 2012 Distinguished Alumnus for service to the Civil Engineering Program. At LSU, he is a member of the Advisory Council for the School of the Coast and Environment. The firm also has several ongoing research partnerships. One is with the LSU Center for GeoInformatics using the GULFnet system, a state-of-the-art global positioning system (GPS) that provides real-time, accurate data for surveyors to use. The second is with LSU College of Engineering in the development of a mobile storm surge and wave monitoring network to improve the prediction of hurricane impacts on coastal Louisiana.



In January 1981, Kenny married his high school sweetheart, Sheri Waldrip. Kenny proclaims that “marrying Sheri was the best move I ever made. For me, at that time I needed stability, I needed a purpose to help get me focused on the future, honestly to force me to grow up and that she did.” Once his degree requirements were met in 1986, the new graduate was eager to enter the workforce and joined the family business. With his growing family and longing to get back home Kenny, Sheri, and their young daughter, Angelle, returned to Houma. Subsequently, Kenny and Sheri had three more daughters, Jennifer, Caley, and Sara. Although Kenny has always had multiple business and professional commitments, family was of the utmost importance and his wife and daughters have always been his priority.



*Kenny and Sheri Smith on their wedding day - 1981*



*Angelle Cheri, Jennifer Claire, Caley Christina and Sara Caroline - 2012*

Following generations before them in making education a priority, Kenny and Sheri instilled a strong passion for academic success in their four daughters. “Kenny and I were both blessed with parents that made formal education a top priority in our lives. As our own children grew up we assured them they would be given the same opportunities. We promised if they worked hard they could go to any college and we would find a way to make it happen,” exclaims Sheri. Their three oldest daughters are all college graduates with advancing careers. Angelle graduated cum laude from Georgetown University and subsequently earned a law degree with high honors from The George Washington University School of Law; Jennifer, a Nicholls State University graduate, earned a degree in Mass Communications; and Caley earned an Organizational Communications degree from James Madison University. Their youngest daughter, Sara, is currently a sophomore at Vandebilt Catholic High School. All four girls have excelled not only in academic achievements, but also in many social, extra-curricular, and charitable achievements as well.

Family values are a cornerstone of the way TBS is run. At the office, associates are strongly encouraged and given support to attend family events. Kenny’s philosophy is that we do not miss our family events. “If your



kid has a play, a part in mass, a special event, you – as an associate at TBS – should not miss it. You do have to insure your work gets done, but we will give you the needed tools and help to do that. As my girls were growing up, I didn't miss any of these events, so neither should you.”

Sheri proudly states, “Kenny went hunting, fishing, and to the camp just about every weekend. As his girls began getting older, he quickly realized that weekends at the camp away from his family was no longer a priority in his life. Even with the busy schedule of running and growing the firm, he rarely missed any of the girl's events. With Sara he even went as far as to coach her soccer team. He's never played a game of soccer in his life!”



*Coach Kenny and his soccer team - 2007*

In building the TBS workforce, Kenny, a devoted family man and the father of four children, staunchly maintained a family-first policy that was hugely appreciated by the new hires. Drawn overwhelmingly from the Houma area, these new hires were products of a culture that values family above all. Because of such “family-friendly” values, the associates found a great place to work and a business model that included them in the decision-making process.

The timing of Kenny's full-time employment with TBS was hardly favorable; South Louisiana's petroleum-based economy was in shambles. The firm faced huge challenges as clients drastically curtailed their demand for engineering and surveying services. Although the economic forecast was grim and TBS was finding itself in a mushrooming forest of “closed” and “for sale” signs, the firm retained a core team of critical employees who remained committed to the firm's success. TBS would succeed, and ultimately thrive, by going back to the firm's roots - back to basics. TBS survived by approaching inevitable change with the wisdom of the past, drawing upon the Smith family traits of adaptability, resiliency, and innovation.

Kenny began to pave the way to his future by working towards registrations in Louisiana. In June of 1986, he obtained his Engineer in Training certification. Under the wings of seasoned professionals, he learned the full project cycle from field to management. Knowing the value of starting from the bottom up, Kenny worked on many different projects including sewer collection systems, tide gage monitoring, and flood control systems in the field and in the office.

Kenny earned his Professional Engineer (P.E.) license in February of 1992. As the project manager on numerous public work projects, he attended many meetings and learned the intricacies of the government. This experience was a great learning experience, as his later career allowed him to be a spokesman for coastal issues on the federal level.

Kenny began to set his sights on the surveying aspect of TBS. On June 2, 1992, he received his Louisiana Surveyor in Training license. Again, working with his peers proved to offer a world of knowledge. Although he worked in the field when he was younger, the office atmosphere was where he developed as a manager. While in the Survey Department, Kenny worked with several large pipeline and oil and gas exploration clients. Because Survey and Environmental projects intertwine, he gained experience in both fields. In 1995, Kenny became a registered Environmental Engineer on January 24th and, only six months later, on June 29th, he became a certified Professional Land Surveyor (P.L.S.) in Louisiana. Realizing the importance of expanding the firm's reach, Kenny later became a P.E. in Alabama, Arkansas, Florida, Georgia, and Mississippi in 1994; Texas in 1995; and Montana and North Dakota in 2012.

The services offered by TBS are now more diversified, though surveying and engineering remain TBS' core activities. Kenny points with justifiable pride to the numerous hurricane levees and tidal surge gates along Bayou Little Caillou and Bayou Terrebonne that he personally designed and administered the construction of during his time doing Project Management in the 1990s. These structures have prevented hundreds of millions of dollars in damage to Terrebonne Parish over the past twenty-five years from numerous storms.



*Bayou Terrebonne Levee system under construction - 1990*



*Bayou Petit Caillou floodgate structure - 1988*

In early 1997, Clifford and Jo-Anne took an extended trip around the world, leaving TBS in Kenny's capable hands. This stepping stone helped prepare him for a bigger leadership role at TBS. Very quickly, he learned how to make decisions about finances, personnel, and the everyday ins and outs of the firm. In his father's absence, the responsibility fell solely on his shoulders. Experiencing the full gamut of what it takes to run a business, Kenny began to examine himself and TBS. To succeed, change was inevitable. The foundation was laid by his grandfather and father, and now it was his time to build the next story.

The corporate philosophy and the pivotal decisions that have been instrumental in the remarkable recent growth and development at TBS are based in the deep-rooted traits of the Smith family. Kenny immediately embraced digital technology and all of its inherent efficiencies, while continuing to stay abreast of the ongoing digital revolution. In doing so, TBS has grown in less than two decades from three practice areas (Engineering, Surveying, and Environmental Services) to eight (Urban Planning, Environmental, Surveying, Geophysical, Marine Positioning, Engineering, Construction Management, and Mapping/Geographic Information Systems). The underlying catalyst for this transformation was Kenny's post-"bust" experience with TBS clients and associates.

As the business continues to grow, clients generally fall into one of five general categories: public works, oil & gas exploration and production, pipeline, industrial infrastructure, and land development. Each category manifests very different rewards and opportunity profiles. For example, working with public works clients subjects TBS to the interesting and often unpredictable political process. Ensuring government funding for a public works project can be challenging; this was particularly true after Terrebonne Parish lost a great champion in the state legislature, Senator Leonard Chabert, in September 1991. On the other hand, the behavior of private sector clients, although subject to the ebb and flow of continuously changing economic conditions, can be more predictable.



*Ground breaking for the Houma Terrebonne Airport runway strengthening project - 2006*

Kenny quickly came to realize there are two types of clients who provide TBS with very distinct revenue streams and experiential dividends. One type of client simply views TBS as a “commodities” provider, while the other views working with TBS as a strategic partnership. “Commodities” clients generally view the family business as a simple, generic service provider that secures jobs on a “low-bid,” single-project basis. These projects are constrained not only by the customer’s budget and goals, but also by the clients lack of constructive input. Such traditional jobs, that were once the firm’s lifeblood, contrast sharply with the more mature business collaborations the firm has enjoyed in recent years.



*Kenny focused on strategic planning - 2012*

The other type of client regards working with TBS as a strategic relationship. TBS prides itself on building partnerships with strategic clients, some of whom have been doing business with the firm for over half a century. Gene Lewis, District Manager with Texaco Pipeline, Inc. who retired in 1996 after 26 years of service, stated, “TBS’ long term success is due to good, knowledgeable management, employee morale, and great expertise.” In some instances, corporate clients have changed hands and have been renamed or rebranded several times, but the business is nevertheless retained.

Operating under the old maxim “If it ain’t broke, don’t fix it,” new companies typically continue to rely on TBS and its associates to maintain continuity because “the work speaks for itself.” Ken Babin, a retiree from Texaco and Hunt Petroleum, and Aaron “Boo” Cantrelle of Plains All American Pipeline summarize the importance of this long-term historical work pattern simply: “There was no need to change for the sake of change. We were confident that TBS could solve all our problems. TBS was very stable. There was always a Smith in charge and they were just steady, steady as a rock. So, there was no need to switch or look for anybody else. They are stable and dependable. They’re not going anywhere. They could do the job, and they were going to be here to do it years from now.”

Newer clients began selecting TBS for many reasons, such as monumental experience, the dependability of project managers, and cutting edge resources. The unwavering integrity and professionalism of associates, matched with a consistent precision and quality of service, allowed for an integrated and ingenious approach to meet client's needs. The TBS passion for improving life in the local community was also emphasized in interviews with public sector clients and others. As a result, many clients began to view TBS as a strategic partner.



*Senior Project Manager Chad Robichaux, PLS, reviewing a project - 2013*

Strategic partnerships, grounded in TBS' areas of expertise, have been rewarding to the firm and professionally gratifying to associates. They also assure TBS a seat at the table in discussions outlining projects. To maintain the high level of performance in these areas of expertise, and to keep all associates actively engaged, a performance evaluation plan was implemented. This provides valuable insight the firm can use to assess each associate's level of commitment, as well as the business model's effectiveness.

Kenny's passion for the development and growth of TBS' staff is evident by his use of the term "associate." He views an associate as someone who works with him, standing side-by-side working towards common objectives and goals, rather than a traditional "employee" working for him. Strategically, TBS strives to have all of the associates "engaged." An engaged associate at TBS is one who displays an above and beyond attitude with important characteristics, such as motivation, self-discipline, helpfulness, and being positive,



*Kenny on a site visit with Field Crews in Breton Sound*

constructive, respectful, and responsive to clients and fellow associates. Taking pride and ownership of work and contributing to the success of the firm as a whole, also adds to the performance of an engaged associate. The level of associate engagement is continuously monitored through individual, proprietary performance evaluation and goal setting software, known internally as "PEGS."

Within TBS' core values, clarity in understanding what TBS and associates expect from each other is critical to our success. Based on a look back and, more importantly, a forward looking goal setting component, internal programming staff developed the firm's own system, known as PEGS. PEGS uses seven critical components to calculate an associate's engagement. Kenny proclaims "PEGS is a key system for TBS. It's the tool we use to ensure our associates are given opportunities to grow and that they are taking advantage of these opportunities.



*David Martinez going over a performance evaluation with James Pellegrin - 2013*



*In-house training class in the Professional Development Center (PDC) - 2010*

By all accounts, PEGS continuously enriches the firm's level of engagement with strategic clients. Kenny is passionate about that TBS' professionals demand this type of improvement-based evaluation and path forward. Every strategic partner is directly or indirectly participating in improving the firm's level of engagement from the inside out and from the bottom up. The clients are providing critical and significant long and short term direction, with everyone in the firm knowing where TBS is heading.

Kenny recalls, "Tom Preli with Shell Pipeline really had a lot to do with my 'Aha' moment, as far as the consulting business is concerned. I did the proposal for Shell Pipeline and I can remember him calling me and saying, 'Kenny, I'm giving you this job because this is the most professional proposal I have ever seen.' Then, he took TBS under his wing and that's when we really became partners. When we had to get the right-of-way drawings done, he came and spent a week-and-a-half in Houma at our office with us, not to supervise, but to work hand-in-hand with twenty-two year associate James Pellegrin, who was the lead survey technician at that time. Tom took us along on his career. He didn't do a project in South Louisiana that didn't involve TBS. It was phenomenal. This is what a real relationship, partnership is all about. And that experience has been a huge part of molding our business model."

TBS began to build its business around strategic clients. Strategic clients are absolutely key to the firm's continued growth; this is the type of work TBS' project managers are encouraged to recruit. Strategic partnerships are more gratifying to all parties and TBS associates understand what these clients want. The clients solicit input from the associates that help create solutions to the problems at hand. Kenny is fond of saying, "We will continue to grow and develop the firm, by giving our present associates development opportunities, hiring more qualified people who buy into what we are building, adding more niche services into our integrated business model, and expanding geographically."

To meet these goals Kenny always asks, "How do we get better?" Going from a good firm to a great one is a mantra that was etched in Kenny's memory from his earliest work experience with his father. As a grunt in the TBS workforce, Kenny personally witnessed the self-interested behavior of a middle manager who aggressively held back promising younger employees, which was both a detriment to the impacted employees and the firm. As a result of the hurdles to professional advancement imposed by this middle manager's interference, TBS lost top-tier talent that left the firm to establish successful competing businesses.

By the time he assumed the reins, Kenny had come to the realization that fundamental changes needed to be made to retain the best young associates and channel their abilities and energies into the firm's continued development. To accomplish this, Kenny had to overhaul the business' organizational framework, revise its management structure, grow the firm to provide valuable associates with a path to advancement, and diversify the firm's services to take advantage of emerging opportunities.

Kenny relied on his formal and real-world educational experiences to guide him through this process. His father, Clifford, had given him every opportunity to grow and develop. Kenny was given the opportunity to go to Ruston with his family to continue his college education, work in every facet of the firm to get a real knowledge for each element of TBS' business, and to be an active part in professional societies and local civic groups. For Kenny, continuing education has been a passion. Through the American Council of Engineering Companies (ACEC), Kenny was offered the opportunity to be a part of the Senior Executive Institute (SEI) Program based in Washington, DC from 2000 through 2002. This executive MBA style program geared towards the leaders of professional services firms in the architecture and engineering industry has played a transformational part in the development of his approach to the management, vision, and leadership of the firm.

Kenny received the 2006 American Council of Engineering Companies' (ACEC) National Community Service Award. The award honors distinguished individuals that are recognized as forerunners in their community that help shape the quality of life where they live and work.



Local, state, and national leadership programs have helped associates serve as board members, professional society leaders, and speakers at conferences. Kenny sets an example by serving on the Business First Bank Board of Directors. Like his father, he feels it is valuable to be educated about the banking industry. His corporate philosophy carries over into how he views the working of the bank, “striving to exceed our clients’ expectations through personalized service.” The associates follow Kenny’s lead, but also understand the dynamics of their job.

Kenny believes in enhancing, nurturing, and continuing the efforts to make a difference in the community by participating in hurricane-relief-efforts, education partnerships, professional organizations, economic development, and leadership training programs. For example, Kenny has served as Chairman of the Houma-Terrebonne Chamber of Commerce, President of the South Central Industrial Association, and a Board Member for the Terrebonne Foundation for Academic Excellence, including chairing the Foundation’s 5K Run. Kenny’s influence and collaboration as part of these groups helped broaden the knowledge of the business and education communities.



*Clifford and Kenny accepting the Chamber Business of the Year award - 2005*

Motivated by local need, Kenny helped develop the Terrebonne Economic Development Authority (TEDA) and the Houma Downtown Development Corporation. At the state level, he participated as an active member of the Louisiana Engineering Society, Louisiana Association of Business and Industry, Leadership Louisiana, and the Council for a Better Louisiana. International associations, such as the Young Presidents’ Organization (YPO), and Engineers Without Borders (EWB), are also part of his dynamic involvement.





*TBS official logo before the name change*



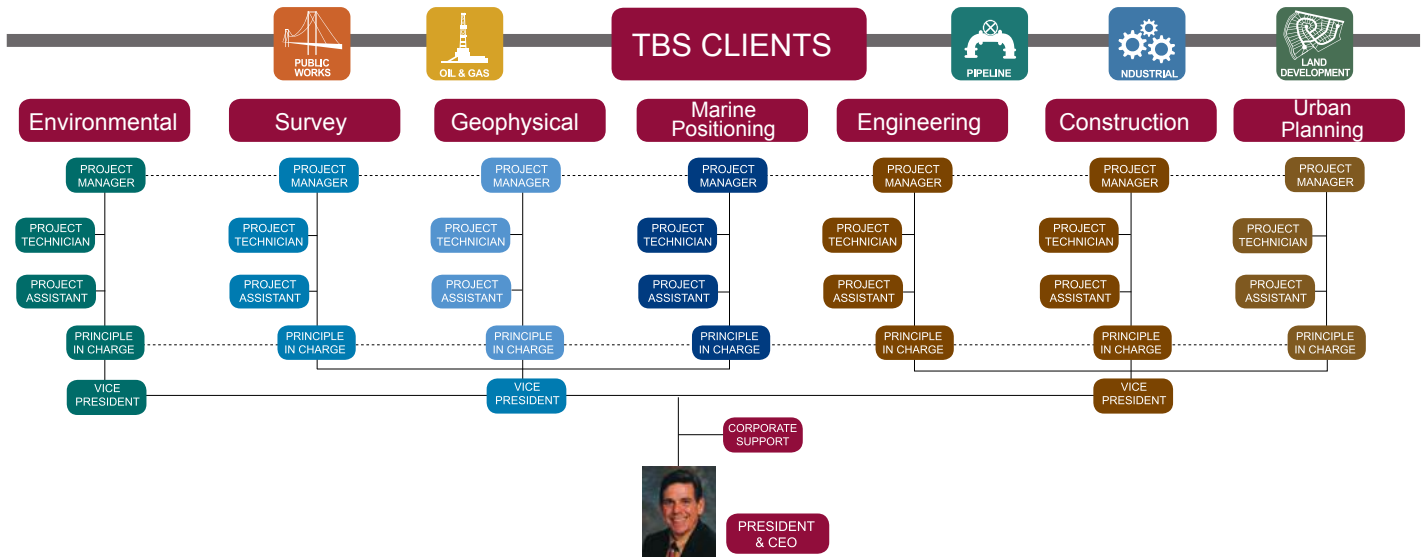
*2005 TBS name and logo change*

As changes in the firm continued, and in recognition of its metamorphosis, the firm officially changed its name from “T. Baker Smith & Son, Inc.” to “T. Baker Smith, Inc.” in 2005. The logo also changed from the older surveyor’s transit to a more modern emblem that embellished the firm’s integrated approach. This was not a move that was taken lightly by Kenny or Clifford. After all, the “Son” that was being removed was Clifford. However, Kenny and Clifford ultimately agreed that this change captured the larger overall team approach that was developing within the firm and was in line with the now entrenched corporate culture within the firm.

The reorganization process, which took approximately ten years to develop and take root, transformed the firm from a stereotypical industrial-age business to a paragon of information-age innovation. In addition to the firm’s technological makeover, the most noteworthy aspect of the reorganization is the inversion of the organizational chart. During Clifford’s tenure (1958 - 2000), the firm had a hierarchical corporate organization where power was concentrated at the top; the president personally coordinated and controlled all aspects of each operation in the three core divisions of the firm. Kenny recalls that “we had weekly meetings and we would go over every project with Clifford.” At the time, such an arrangement worked well in a firm that had few divisions and less than a hundred associates in only one location; however, it was an impediment to growth, both corporate and personal.

Kenny realized the way to grow the business, in the changing times, was to reverse the structure and put the main focus on clients and projects, empowering associates to get the job done. He initially solved these problems by literally turning the existing administrative chart on its head. Kenny declares, “the pyramid is reversed. The client is at the top, and I am the one at the bottom.” In other words, the entire firm is focused up towards the clients. The CEO is there to provide the foundation, the resources needed to execute, handle glitches, and enrich each unit’s creativity. Between the extremes sit the project managers of the firm’s eight professional practice areas — Urban Planning, Environmental, Surveying, Geophysical, Marine Positioning, Engineering, Construction Management, and Mapping/GIS.

## Organizational Chart



Kenny frequently tells new associates “At TBS, it’s hard to get bored due to the fact we do so many things for so many different clients. However, due to the nature of our inverted matrix organizational structure, I have seen many good people get swallowed up by the built in chaos. Things are always moving around here.”

The firm’s project managers effectively run these practice areas and their success is contingent upon the one-on-one relationships they maintain with clients. Jimmy Ledet notes the benefits of Kenny’s somewhat unconventional philosophy by reporting that “the project managers are empowered around here.” Jimmy says that “the project managers are empowered to develop the relationships with the clients, handle the clients, and do the work. Whereas at other places, some of those things are responsibilities of higher-ups in the firm.” This type of interaction is considered a cornerstone of the firm’s business model and has proven to be a remarkable growth engine for the one-hundred-year-old family-run business.



*Jimmy Ledet being interviewed on the details of one of his projects*



*Engineering staff doing a site plan review*

When reversing the leadership matrix, Kenny wanted to build a great firm by finding engaged people who wanted the opportunity to develop and grow professionally in the same direction and pace as TBS. Kenny always says with a deep and meaningful tone that the TBS color burgundy found on the corporate culture and organizational chart signifies blood from the associates that have lived through this transformation, not all have survived being a part of the firm. Kenny admits that this leadership style is not for everybody, but he thinks TBS has done a good job of retaining and finding associates that buy into this system.

Before the organizational chart was published, two documents were distributed internally. The first was Kenny's attempt to define his "plan and principles for the firm," which he wrote in October 2000. It was an eleven page document outlining his blurred, but passionate, vision for the firm. Next, he took on writing the firm's first "Corporate Culture" summary in December 2000. It was his attempt to define firm-wide values, what TBS stands for, and what the firm was going to build. Lorre Autin referred to this document as Kenny's heart and passion on paper. He wanted everyone to know he cares about the quality of life for TBS associates. It also documented that he would support professional growth and development, registrations, certifications, education, involvement seminars, mission trips, and family. He reassured associates of their value to TBS and to him.

Kenny and the administrative staff do not micro-manage; they work hard to provide essential support to the business' ongoing operations. They encourage all senior project managers to take care of their respective clients by enlisting the support of all of the firm's units. The ultimate objective is to show all clients how an integrated firm can provide all of the key support services they may need. For example, one group may win a contract to do work and, immediately, the project manager consults with the client to try and secure other services when appropriate. The firm wants clients to realize TBS is a professional services organization, not a simple commodity provider. Ultimately, Kenny wants good clients who are willing to work closely with TBS associates to produce a final product that each participating group can point to with pride. Such successes inevitably lead to other, equally successful collaborative projects.



*PMs at the 2012 Strategic Planning meeting*



## Corporate Culture

*(Defining the firm's sense of direction and purpose - The "greater good" that we are all working towards - Choosing a few things that we will stand for and want to make happen - it is a commitment from management and the organization to defined values, business parameters, and specific initiatives that become an unwavering stand.)*

**OUR CORE VALUE** upon which we will do business and guide our decisions:

We are dedicated to building trusted relationships with our clients, our associates, and our community.

- Clarity in understanding our value, purpose, mission, goals, and what we expect from each other is critical to our success.
- We expect professionalism, honesty, integrity, and a commitment to health, safety, and environment in everything we do.
- Work is an important part of our lives and should be fun!

### OUR PURPOSE

"We exceed our clients' expectations by building a great firm that develops engaged associates by providing opportunities to grow."

### OUR MISSION STATEMENT

*"Superior Integrated Professional Solutions"*

- **Superior** – One who surpasses another; achieves above average in excellence and merit.
- **Integrated** – To work as a team by bringing all parts together; organized in a way that different units function cooperatively; interact on the basis of commonly held values.
- **Professional** – One who has great skill, experience, assured competence and takes ownership as a leader in a particular role; one of high character and integrity.
- **Solutions** – To challenge the status quo with creativity by being a part of the team to solve a problem or take advantage of an opportunity.

### OUR 2015 STRATEGIC GOALS

*This is our vision for how we want the company to be on January 1, 2016.*

1. 60% of our revenue will be from strategic clients.
2. 90% of our 450 associates will be engaged.
3. We will grow and develop our firm by:
  - Enhancing and expanding current office resources.
  - Improving existing and cultivating new niche services.
  - Broadening our geographic footprint.
4. Improve the average project multiplier to 3.40 company wide.

Kenny proudly proclaimed, “The idea that you get the right people on the bus, and then you put them in the right seat is so important. Once you do that, then you figure out where you are going to take the bus. You’d be surprised what a good trip it can be, just having the right people in the right seat. Then, the bus is absolutely going to drive itself.” This sentiment is shared by TBS’ long-term clients. When Ed Bridges, a Texaco retiree was recently asked to identify the key to the firm’s success, he quickly answered, “The people they have and their professional ability. They take responsibility for everything they do.”

Jake Giardina, a long-term client of TBS for at least two decades, insists the Smith family’s success is related directly to the firm’s associates because all of their “associates, sooner or later, are going to be talking to your customer and every one of them is your salesman. Whether they understand it or not, they are. It’s that simple.” He added, “you can buy sophisticated equipment, but if you have somebody that is interfacing with a client and who runs afoul of the client, that client is now afoul with the firm, no matter who owns it.” Thus, the firm’s business model is considered by Mr. Giardina as “excellent, there is no question about it. As a partner and as a client, I want the right solution.”

Kenny feels this strategy fits TBS because key leaders helped shape the goals and objectives. The plan is a group effort with buy-in from all participants. It calls for the firm to grow at a rate of ten percent annually for five years. Adherence to the first five-year plan proved worthy and permitted TBS to exceed the growth goals and continues its advancement today. Indeed, TBS has experienced dramatic growth. In the last three years (2010-2013), Kenny states, “I’ve had more fun in my job, as the leader of this firm, than in my entire career. And that is

only because, not that it’s easier, oh my goodness it’s not, but I have the majority of people, by far, a big majority of the people, who are all in line with our strategic plan and the firm’s goals and objectives.”



*Bruce Pellegrin and Tony Rivera leading a breakout planning session*



*Group planning session*

The strategic plan ultimately gave rise to the firm's line-of-sight approach to planning and direction. This strategy dictates that the firm does not put money first, rather TBS realizes the profit will come from doing a good job and maintaining a strong alliance with the TBS family of strategic clients, which will grow revenue in the long-term. Thanks to the transformative effect of the strategic plans, TBS was awarded the 2012 A/E/C Best Employer Award, which is granted nationally to five firms each year. To receive this honor, each honoree must demonstrate their employees are not just satisfied, but truly engaged and willing to put in discretionary effort on behalf of their firm. Of this particular honor, Kenny said, "TBS is humbled and excited to be among the best of the best employers in our industry. This is an affirmation to all of our dedicated associates and I am honored to be associated with them."



Although dedicated to building the firm organically through good people recruited internally, there have been a few notable exceptions. In 2000, near the end of Clifford's tenure, the firm acquired G&N Services, a provider of hydrographic equipment. This purchase led to creation of the firm's Hydrographic group, which is now the Geophysical group. In 2011, TBS acquired the assets of L.J. Pole, an Urban Planning group, and added several of its professional staff to the firm; this is the foundation of the Urban Planning practice in the Baton Rouge office. Purchasing smaller companies with specialty niches that can seamlessly be folded into TBS can be good for TBS, associates, and clients.

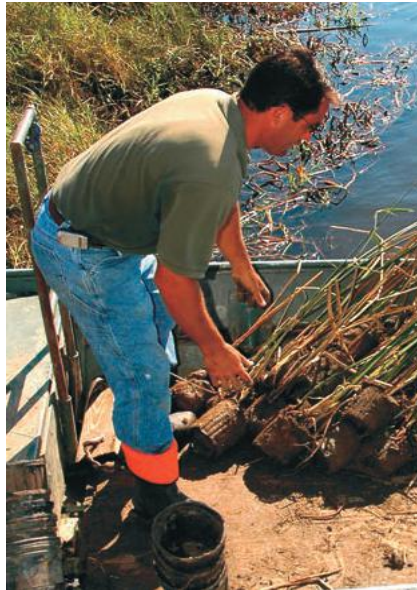


*One of the firm's Hydrographic Vessels performing a site clearance survey*



*Kenny on the back deck of the offshore survey vessel*

Other service groups were also added as TBS broadened its palette of services to address the growing diversity of opportunities in the marketplace. For example, TBS expanded its Environmental Services group in the late 1990s to include delineation service for wetlands identification. As a result, TBS became one of the region's earliest private wetlands delineation services providers. The Environmental group subsequently began to offer oyster resource assessments; local, state, and



*Environmental associate planting grass*



*Jeremy Griffith performing a wetland delineation*

federal agency coordination and permitting assistance; site assessments; habitat restoration work; and a host of additional services. Like the Environmental group, the Construction Management group, created in 2003, was an outgrowth of the TBS Engineering group's long experience in subdivision development. Similarly, by 2005, the Marine Positioning and Geophysical groups also expanded from the firm's earlier offshore surveying activities.

Kenny King, REP, Vice President of Environmental with 8 years of experience at TBS has watched the firm grow quickly in a rather short amount of time. He expresses, "I started with TBS in 2005 and brought my experience of oyster resource assessments to the Environmental group. The growth that both the firm and the group have experienced in these fast eight years has been very impressive and gives me a sense of pride that my involvement helped grow TBS as a whole."

## Part 2

### Growing the Firm's Infrastructure

TBS has embraced digital technology, utilizing the latest relevant innovations to create and maintain a competitive advantage. Digital technology made physical expansion possible by integrating TBS' human and material resources scattered across the Gulf Coast. Anecdotal information from all senior associates indicates that maintenance of TBS' hard-earned technological edge is a primary key to the firm's recent and future success. Marshall Faulk, an associate since 1975, observes, "From a technology standpoint, I don't think you can find a firm that spends more resources trying to advance than we do. We're always looking for the cutting edge and trying to be out in front instead of waiting for it to come to us." The challenge is that as technology gets faster and faster, clients want their results immediately. The intense and unrelenting pressure to get the job done on time, and on budget, forced TBS to begin seeking ways to enhance its efficiency and turn to emerging technologies, which has been a current theme throughout the hundred years of TBS' existence.



*TBS Auto-Tape being run by Charlie Camp, Vice President of Survey 1973 - 1994*

In the mid-1960s, the firm paid \$35,000 for an auto-tape that could measure up to eighty miles that was accurate within three feet – and it was only one of three in civilian hands worldwide. According to Thad Lovell, the auto-tape constituted a notable advance in surveying, but the bulky instrument required a U-Haul trailer for transportation and a car battery for power. The device was an efficient and time saving tool when surveying offshore, where a line-of-sight might extend for up to twenty miles. At that time, the auto-tape was a welcome addition to the firm's emerging arsenal of new surveying tools.

One of the most notable advances in survey technology was purchased in 1983 with Clifford's authorization; it was the newly developed, but bulky, Hewlett-Packard (HP) Electronic Distance



Meter (EDM). This massive unit could shoot a distance of nearly one mile, with some models able to shoot nearly three miles, and was accurate within hundredths of a foot. The field crews no longer had to chain the measurements, making the adoption of the EDM a major milestone that transformed surveying. During the initial stages of this technology growth, survey teams still had to use hand-held sweepers to cut rights-of-way and they still had to “turn” angles, but they no longer had to pull chain.



*TBS Instrument Man running a HP Distance Meter with the Rod Man holding the prism target in the foreground*



*TBS Theodolite Instrument*

Even in the late 1990s, the basic tools used in surveying areas with limited access were a tape measure, a level, and a theodolite set on a tripod used to triangulate. These instruments measured the distance and angles to an unknown point using a monument, a position with known location and elevation. No heavy, bulky batteries were required to use this equipment and the relatively primitive tools got the job done.

When differential GPS units were added to the firm’s equipment inventory, in the mid-1990s, the field crews and draftsmen were working with sub-meter accuracy from the new Trimble Model 4000 units. These 4000 series GPS receivers were ideal for wetland and offshore applications, but they were large, 18" x 18". Yet, along with data collecting recorders, these tools improved the firm’s ability to complete a survey in a timely manner. With this system, field data was downloaded to a computer, making the technological advantages indisputable. TBS survey crews consequently enhanced their already strong reputations for efficiency and enhanced the dependability of TBS.

A technological revolution was also underway in the office, where a draftsman no longer needed a Keuffel & Esser LeRoy Letter Set (a template and scribe-based, free-hand, lettering device), a Koh-i-noor Rapidograph pen set, and superb



*TBS Trimble 4000 GPS receiver on a subsidence survey*

penmanship. In this pre-computer era, all survey changes required erasing any revised areas and re-inking the drawing. There were no computers, no AutoCAD, no sophisticated and cutting edge computer-aided design (CAD) plotters using input from



*TBS Drafting room in the late 1960s*



*TBS Draftsmen tools including a Leroy Lettering Set*

instruments with accuracy measured in fractions of an inch. The work was all done by hand. In one case, Ed Bridges took four months to determine the number of properties in a unit, the area of a producing oil and natural gas field. This labor-intensive job is a part of every oil-field to insure all property owners receive royalties based on their land within the unit. Upon completion of the chart, which was large enough to cover a conference room floor, Ed had delineated more than 10,000 different properties with owners entitled to royalties.

By the turn of the twenty-first century, such a project would have taken a fraction of the time to complete, thanks to a variety of newly developed digital technologies that reduce the labor necessary to render a final blueprint, chart, or map. These increased efficiencies have been key to the firm's ability to remain competitive in the Information Age because TBS has steadfastly remained aggressive in expanding into digital technology.

The early adoption of digital technology stemmed directly from Kenny's experiences at Louisiana Tech, where his senior class project was the installation of the university's first personal computer lab. He recalls his amazement at the early capabilities of personal computers (PCs). Kenny remembers thinking, "Wow! What is this DOS stuff? You mean you don't have to do Fortran and punch cards? In college, you stayed until three in the morning in the computer lab so you could run your punch cards." Kenny quickly realized that the PC liberated operators not only to work on their own schedules, but also to write their own programs. Following his graduation and return to Houma, the future CEO found that circumstances were less than ideal for implementation of the groundbreaking technology that had captured his interest in Ruston. Yet, three or four months after working full-time at TBS, Kenny persuaded his father to purchase the firm's first PC, a Hewlett-Packard (HP) desktop unit.



*No longer draftsmen, now TBS has Project Technicians*

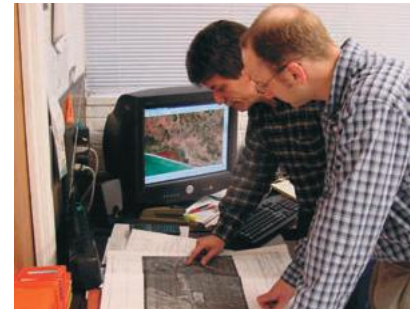
That first desktop system was primitive by today's standards and, in fact, had to run overnight to render calculations that present PCs and smartphones can formulate in micro-seconds. Jimmy Ledet remembers that "we would set them to run and come back the next day hoping that they didn't bomb." Nevertheless, the HP desktop immediately increased productivity at TBS. Until this point, calculations were done either by hand or with large mechanical calculators. As productivity increased exponentially within the firm, the number of PCs in the workplace gradually increased as well.

Peggy Bourg, who joined the firm on June 5, 1968, recalls that, "In the beginning, you had to constantly type and retype and revise using typewriters and, later, word processors. As they added computers throughout the office, work was just handled so efficiently, so quickly, that they kept getting more and more clients along with more jobs." Not only did the new technology improve the output of work, it also vastly expanded the capability of each associate.



*Peggy at an electronic typewriter - 1975*

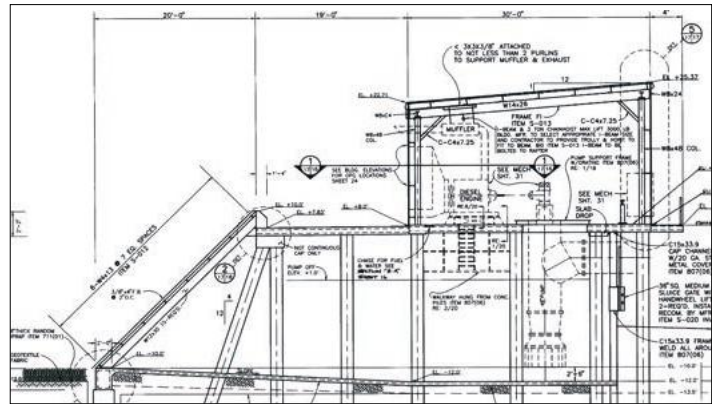
Improving productivity alone could not open the door to important new business opportunities. Professional know-how remained the critical ingredient in the formula for success. As 12 year associate Kevin Rizzo, P.E., Principal In Charge of Houma Engineering, explains, "drainage is critical around here and we've been able to simulate how the many pump stations in Terrebonne Parish function" based on in-house storm models that calculate how high the water will rise, considering the rainfall event placed in the model. With the advent of computers and some of this modeling, TBS was able to more accurately design improvements. This was a big step in improving drainage patterns in South Louisiana.



*Project Team, Todd Briley and Stuart Babin planning a field survey*

The newfound model-based, in-house capability made it much easier for TBS to secure United States Army Corps of Engineers (USACE) approval and permits for drainage projects. Among the most notable of these endeavors was the 1-1B venture, which Clifford identifies as "a monumental project in this firm and this area's history."

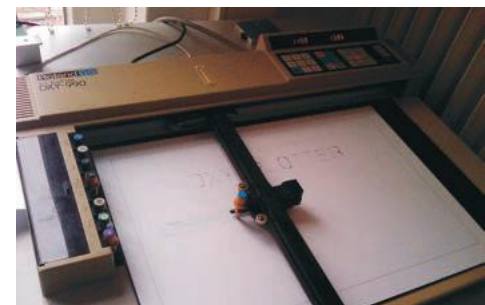
The project, which restored a fourteen-square-mile swamp to its original role as a hydrological buffer, did indeed constitute a watershed event in modern utilization of the Louisiana wetlands. Thanks to its modeling capabilities, TBS engineers were able to demonstrate the process to the Corps, which typically leveed and then ignored wetlands. Clifford explains, “they could use the wetlands as reservoirs to hold storm waters and then pump it out gradually. Simply put, their purpose was to keep the wetlands wet and the people dry.” The wide scopes and variety of projects, mixed with the constant advancement in technology, have afforded TBS the opportunity to grow throughout the years.



*1-1B pump station design drawing*

In the decade prior to the dawn of the new millennium, engineers quickly discovered that desktop computers could be put to good use for other purposes. Mike Hebert, the now retired former subdivision “guru,” recalls the PCs allowed computer users not only to do calculations, but, with the advent of AutoCAD (computer-aided design and drafting) programs, also to create, save, and recycle plans and blueprints. In addition, the efficiency of digital technology and programs allowed engineers and draftsmen the ability to increase the detail in their drawings in less time and, as a result, the department’s production efficiency visibly improved.

In continuing efforts to become more integrated, the next step in the digital growth was in networking devices and technology. In the firm’s beginning, networking first involved stand-alone PCs, then printers, plotters, office computers, and field equipment. Combining the connectivity was quite difficult. Data sharing, occurred through “sneaker-nets,” which was the manual movement of files from one computer to another by 5.25-inch floppy discs. Jimmy Ledet, who was also the firm’s one-man Information Technology (IT) Department, remembers that solutions, when they were possible, were achieved by unconventional means. Jimmy recalls, “I remember trying to figure out how to plot something with an old pen plotter. Back then, they hadn’t gotten to the point where you had a software driver like you have today. I would sit and solder the pins in a serial cable to see if I could get it to plot. When we’d get it to plot a square, it was very exciting.”



*Original Pen Plotter*

Around 1993, Jimmy Ledet, Todd Briley, and James Pellegrin installed the corporation's first computer network, a networking system with 100baseT routers. In July 1995, TBS hired Larry Lapeyrouse as its first professional Computer Systems Manager.

Today, the IT group is led by Tony Rivera, Chief Information Officer (CIO), with 11 years at TBS. The IT group has grown to ten associates ranging from IT professionals and system administrators to record specialists. Tony was hired at TBS in 2001 as an IT Systems Analyst in Houma. Tony did everything from fixing PCs and printers to setting up servers and network infrastructure. He assumed control of the IT and Records Departments in 2006 when Kenny named him CIO during an aggressive growth period at TBS.

Thanks to Kenny's prodding, TBS was among the first companies in South Louisiana to embrace these emerging technologies for both office operations and field implementation. Perhaps the first of these new cutting-edge devices was field data collectors that collect and store digital field data for transfer to personal computers. These data collectors revolutionized surveying work by greatly reducing the labor required to transfer data from the field to a blueprint.

Survey Party Chief Danny Richard, who has been with TBS for 26 years, was one of the surveyors who embraced technological change, initially field-testing the first-generation data collectors around 1993. Danny recalls, "We went out and did the first survey job with a data collector surveying the cemetery at St. John's Episcopal Church in Thibodaux." Although initially reluctant to adopt this new digital tool, Clifford was willing to adapt. When the firm purchased its first data collector, which was a tool that reduced crew size and the field time necessary to write detailed notes, Clifford wanted to try the equipment on a small project. He had a crew survey the cemetery at St. John's Episcopal Church in Thibodaux, where his father's mentor, John A. Lovell, is buried. James Pellegrin recalls, "Clifford knew a number of parishioners and agreed to donate the firm's services to establish the plot lines, as the original surveys were old and discombobulated. The data collector, which initially worked in a cemetery, of all places, has evolved into an indispensable surveying tool."



*Danny Richard*

David Martinez remembers when the data collectors were introduced, numerous survey party chiefs responded with horror, stating, “Man, I don’t want to get near that thing.” However, when it became apparent that innovations were key to the firm’s survival and associate job security during a period of economic distress, even those who were most nervous about the technology changes eventually embraced progress.



*Trimble Field Computer - “Data Collector”*

New generations of technology emerged with increasing frequency at TBS. There were great strides in technology when TBS began using GPS to its maximum and geographic information systems (GIS) became a workhorse of the surveying side of the business. Although GPS technology did not experience widespread use in the firm until around 1994, field personnel first utilized this type of equipment in 1989, when the firm secured a Corps of Engineers contract to assess the amount of subsidence occurring in coastal Louisiana.



*Instrument Operator collecting GPS data along a coastal barrier island tidal zone*

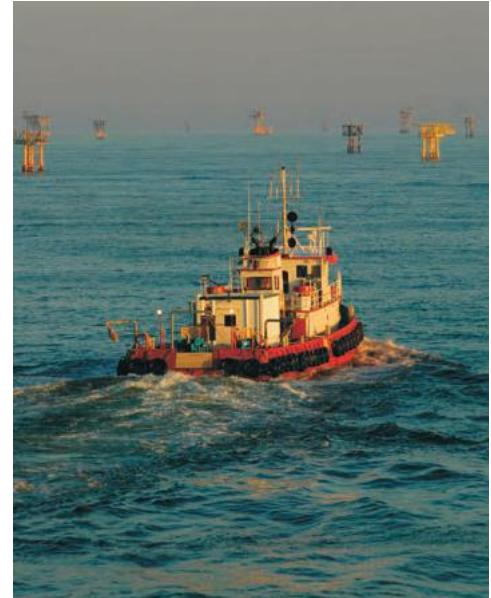
Kenny recalls that “TBS got a project with the Corps to go out and set deep rod vertical monuments and use GPS to establish the elevations on them. The GPS units were literally 4' x 6' and barely fit in the back of a pickup truck. Of course, this was 1989 and you had very few satellites. The satellites had to be lined up in areas to get enough signals, which always seemed to happen in the middle of the night, in the winter, in very remote locations. We literally were putting these bulky and heavy GPS units in an airboat, going out in the middle of the night and observing for three hours from 2:00 a.m. until who knows when.” The 1989 GPS project proved hugely important because it provided the Corps of Engineers with conclusive proof of the extent and severity of wetlands subsidence, which is a major contributor to Louisiana’s coastal land loss. Kenny learned about the potential of this new, emerging technology and its importance from this personal experience.

The timing of the GPS/GIS technological revolution could not have been more beneficial; it coincided with the resurgence of offshore oil and gas exploration and development, prompted by the industry's movement into progressively deeper Gulf waters. Having proven itself as a pioneer in the field use of technology, TBS personnel were poised to take the lead in the new offshore black-gold rush.

The resulting relocation of the TBS IT department to Houston was crucial to the firm's growth potential because it made the massive data sharing necessary for integrated solutions across office locations possible. Kenny points out, "Just seven years ago, we could not do this. It's because there was no data sharing. We were digital. We were using AutoCAD and many other data formats, and we had email, but we needed an integrated approach. It was the moving of the IT system out of Houma to Houston, where there was greater access to faster, high-speed, large data volume internet that made our integrated business model really come to life for the entire firm."

Following the IT department's relocation, TBS technicians established a Project drive, known as the P-drive, to provide a communications vehicle and storage medium necessary for effective collaboration. As the logical next step, TBS provided its associates with laptops, tablets, smart phones, etc. to remain in constant contact with the P-drive and other digital resources.

The result has been a dramatic increase in efficiency. Kenny observes that 2012 "was by far our most efficient and effective year in operation, and you can see it across the board – not only in financial results, but also in client satisfaction surveys. You can see it in our associate engagement surveys. We have more people all going in the same direction than we've ever had in the past. It's actually fun to be a part of. And technology plays a big part in driving this." The associates are no longer "leaning" towards the integrated system's goals and objectives; they are living the system and making everything work together fluidly and seamlessly.



*TBS offshore survey vessel heading out to sea for a project*



*Standard field technology for land base survey crews*



*Eric Deroche and Kenny using TBS' GIS data on a project site inspection*

Technology, however, is merely a tool. It is only as good as the individuals operating the equipment. The TBS IT professionals, who are certified and educated in the most up-to-date cutting edge technology and programs, are fully capable of providing customized applications to meet our clients' needs while also improving the firm's internal operations. Under the guidance of Eric Deroche, Director of Field and Office Technology, who has 11 years of experience at TBS, the IT staff is currently working hard to

automate data analysis, GIS data entry, and other processes to ensure faster turn-around times for projects. Kenny emphasizes, "From the standard data collection process to data transfers from the field, data processing, final deliverables, and data archiving into the GIS, we are leveraging technology more and more each day to get faster, and more importantly, to get better and go from good to great."

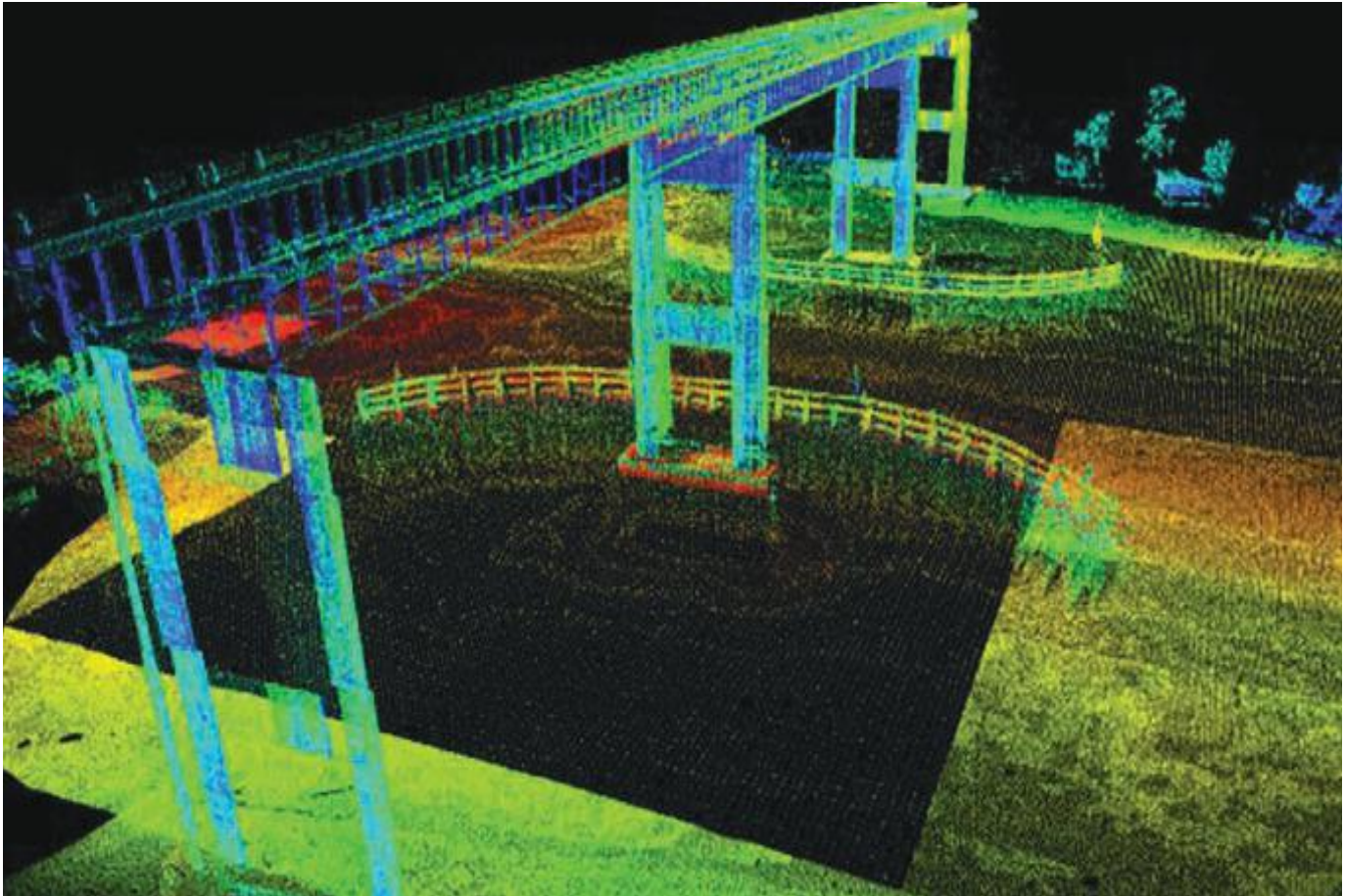
Faster turn-around times are vitally important, not only because they are demanded by TBS' clients, but also because continuously increasing capacity is necessary to accommodate the mushrooming data streams from the firm's increasingly diversified internal disciplines. Kenny stresses that TBS associates now collect billions of data points for 3D digital



*TBS Party Chiefs uploading data at the Field Operations Center, the original T. Baker Smith Office building*



models of proposed buildings, not the “couple of hundred” formerly required for the 2D models of years past. The TBS automated data systems allow our field crews to maximize their efficiency and produce products that set new standards of accuracy.



*Laser scanning “Point Cloud” for a bridge system*

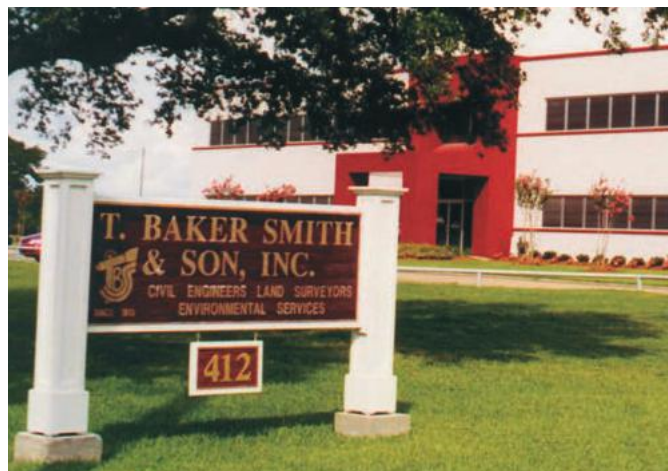
### Part 3

## New Home, New Outlook

The TBS resurgence in the face of adversity is perhaps best exemplified by the reincarnation of its corporate headquarters building, Texaco's former district office at South Van Avenue. Kenny's grandfather, Baker, would be amazed to see the evolution in office buildings from the former sawmill office to 550 South Van Avenue, and finally the building located at 412 South Van Avenue. The new corporate headquarters was a tangible manifestation of the firm's rebirth. Like the building itself, the corporation in the 1980s had fallen on hard times that literally threatened its very existence.

According to Kenny, "Moving into the building was not a part of the reorganization. However, it sure helped! The building was just another one of many great real estate moves my father has made. It took great vision on his part to make this happen. Silly me, I still remember saying at the time how dumb it was to buy this building." Now, the firm is recycling older buildings into new offices and building stand-alone modern office structures.

Following TBS' acquisition of the building at 412 South Van Avenue, TBS embarked upon a massive renovation project. On the exterior, the roof was replaced, a new canopy was constructed over the main entrance, and the grounds were landscaped. In the interior, drop ceilings and a new electrical system were installed; all walls were painted, and all floors and windows were replaced. New electrical wiring, lighting, heating, ventilation, and air-conditioning systems were installed. The new headquarters building had risen to take on a new life.



*Houma office relocated to larger building - 1997*

The course of new existence was charted by Kenny, who began to assume a more assertive leadership role when the firm occupied the present corporate headquarters. Peggy Bourg recalls, “Kenny came to this building in February 1997 and made some sweeping changes to associate job descriptions and billing titles.” Equally important, he accelerated the firm’s move into the Digital Age, arming the firm with the technology needed to separate itself from the pack in an ever more competitive environment, whether offshore, onshore, in the firm’s backyard, or in emerging niche markets.



*Smith house - December 1996*



*Smith house after the rebirth - Summer 2000*

Not only was the firm headquarters taking on a new home, but so was Kenny’s family. In 1996 Kenny and Sheri were expecting their fourth child and recognized the need for a larger place to live. After searching through many real estate listings for a home that would suit their growing family’s needs, Kenny happened upon an opportunity to reclaim his great grandparents, C.P. and Clara Smith’s, former home. Kenny felt it was an opportunity that could not be passed and purchased the home in December 1996. Since the death of his great grandparents, the home had been neglected due to limited resources and depressed economy. With the decision to keep the historical character and details of the historic home, Kenny and Sheri embarked on an intensive nine month renovation project.

Sheri recalls, “The house was neglected with numerous holes in the roof and floor, no electricity, no plumbing, and no air-conditioning. Kenny had a visualization of what the house could look like. Even more important he had the work ethic, drive and passion to make it happen. I’m sure his great grandparents are pleased with the outcome.”

Kenny and his family moved into the home “under the oaks” in downtown Houma, where they still live today. Sixteen years later, Kenny proudly boasts, “the project to renovate the 110 year old family home is still underway with no completion date in sight.” Giving new life to the prestigious home built by his great grandfather has preserved the unique craftsmanship from the past. Since the restoration, many people in the community – and beyond – have shared their childhood memories and stories about the house, giving an even richer history to the cypress walls of the Smith home.

The rapid proliferation of available professional services at TBS parallels the equally explosive growth in the firm’s geographic footprint. From its three locations in Houma (Corporate at 412 Van Avenue; Geophysical, Construction Management, and Environmental at 550 Van Avenue; and the Houma Field Operations Center at 401 Glynn Avenue) the firm expanded in rapid succession, with each office having its own story and purpose.



*Thibodaux location, ribbon cutting - 2002*

In 2002, the firm was denied a public works project in Thibodaux, with one local council stating that TBS was “not local.” Having several professional staff that actually lived in Thibodaux, this did not sit well at the firm. Kenny, along with Jimmy Ledet, decided to place a stake in the ground and opened the first TBS Thibodaux Office. In 2009, the firm built a 5,000 ft<sup>2</sup> building with space for more than twenty professional and support staff, with the associates being rooted from Bayou Lafourche and River regions.



*TBS Houston associates - 2013*

In 2005, Kenny resolved that although TBS did not do a lot of work in Houston proper, he wanted to have a closer presence to many of the firm’s clients that were based there. Thus, in 2007 the firm built a 7,000 ft<sup>2</sup> facility in Stafford, Texas and now employs more than twenty professional staff and has survey crews working throughout Texas and New Mexico. In the aftermath of Hurricane Gustav, with the Houma facilities without power and no access to Terrebonne Parish for two weeks, this facility proved its strategic worth. Kenny and many of the leadership team set up shop here

and were able to keep the firm running to respond to its client's emergency needs and, more importantly, communicate with its associates.



*Lafayette associates with Kenny*



*Lafayette Field Operations Center - 2013*

Jude Comeaux, Vice President of Business Development, with nearly 8 years at TBS, first met Kenny in Baton Rouge in April 2005 and, after several meetings and in-depth conversations, Jude joined TBS in June 2005. Somehow, the topic of where Jude was going to be located was never discussed. Kenny assumed that Jude was going to be located in the recently opened Houston facility, but Jude assumed that an office was going to be opened in Lafayette. In September 2005, TBS opened an office in Lafayette. Today, the firm has over seventy professional and support staff operating out of a 15,000 ft<sup>2</sup> office facility. In 2010, TBS purchased the Guy Scroggins Board Road facility (approximately four acres with an existing 10,000 ft<sup>2</sup> warehouse), which had been shut down and seen limited care and upkeep since the oil bust of the 1980s. Today, this completely restored and renovated facility is the Lafayette Field Operations Center (LFOC). It is the epicenter for all TBS field survey crews, equipment, geophysical, and marine positioning operations.

Jude explains, “We had been looking for something that would suit our pressing needs and that we could develop for the future. The day I saw this property go up for sale, I called about it, and it already had an offer written on it. The original deal fell through, and we were able to make our offer. I do not know if we were blessed or just lucky, but after months of negotiations we had a facility in Lafayette that more than suited our needs. Like true TBS style, it just needed a lot of work, and we got to it. Today, it is nothing like what it was when we purchased it, and looking to the future, there is no question that this facility and the planned expansion and development of a new Lafayette office building will further strengthen TBS’ position in the Lafayette marketplace.”

After surviving the hurricanes of 2005, TBS was in re-building mode, with many of its clients and the availability of professional staff in the lower parts of the Gulf Coast region limited. A decision was made that the firm needed a presence closer to where the larger density of talented professional staff was located; TBS needed to be near LSU. The business plan for the Baton Rouge office was titled “the TBS Talent Depot.” In 2006, a facility was opened in Prairieville. Today, it has expanded to nearly 6,000 ft<sup>2</sup> and employs twenty professionals and support staff that leverage technology to work on projects located throughout the Gulf Coast region.



*Ribbon cutting for the Grand Opening, Baton Rouge Office - 2006*

The explosive growth in the technology behind the exploration of oil and gas in the shale plays associated with fracking has had a strong influence on the growth and expansion of the firm. In 2009, in response to requests from clients, an office was opened in Shreveport to support the firm’s operations in the Haynesville Shale play. In South Texas, TBS has responded to the Eagle Ford Shale demands for its professional services by opening an office in San Antonio in fall 2012 to support the developing exploration and pipeline markets. The current business plan calls for finding fifteen or more professionals from this fast growing region who see TBS as the right place for their growth and development.

For 90 years, TBS operated from one location in Houma, Louisiana. In its quest for growth and talent, combined with the instinct for survival, TBS has expanded its geographic footprint to nine locations that cover the majority of the Gulf Coast over the last ten years. Kenny avows, “The most successful physical expansions for TBS have not been centered on markets, clients, shale plays, larger project demands, or even strategic plans, but on people. When an expansion is rooted in the growth and development of a talented, engaged associate of the firm, its success is almost guaranteed.”



*Newly opened San Antonio office conference room - 2013*

## TBS Physical Expansion Growth



Houma Corporate Office Headquarters - 1997



## Part 4

### Competitive Advantage

TBS' primary competitive advantages over competitors lies in its technological edge, the passion of its associates, and ultimately in the purpose driven culture of the firm. The firm's deep rooted belief that every project is different and every solution should be too no matter how complex or unique the challenge, is critical to its strategic partners (clients).

TBS' technological edge is crucial to the firm's ability to recruit and retain engaged associates. Its technological lead is most apparent in two areas, available in-house resources (state of the art equipment and in-house professional and support staff) and integrated solutions based on innovative technology and massive data sharing/collaboration.

For example, the firm has developed unparalleled expertise in the use of digital marine equipment. Around 2000, when Kenny became CEO, the firm began to utilize side-scan sonar, proton magnetometers, sub-bottom profilers, and other devices. This new equipment allows TBS to create an image of large areas of the sea floor. The side-scan sonar unit may be used to conduct surveys for all types of maritime work. Proton magnetometers can measure small variations in the Earth's magnetic field, allowing ferrous objects to be detected and imaged. The device, therefore, can be used to map buried archaeological features, pipeline routes not marked on any map, or displaced subsurface features after passage of a category three to five hurricane moved



*TBS Offshore Geophysical Survey Vessel utilizing Multibeam, Sub-bottom Profiler, Sonar, and Magnetometer*

marked on any map, or displaced subsurface features after passage of a category three to five hurricane moved



them from their original location. On the other hand, the sub-bottom profiler is an acoustic seabed tool that can identify the surface or sub-surface seabed systems. This equipment utilizes sound waves to penetrate the sea floor. All of these instruments allow skilled operators to “see” the bottom and beyond and to interpret the data to better map the subsurface contours and potential unforeseen hazards or problems.

Each of these units produce data for subsequent interpretation and utilization, but individual data streams from the field are yesterday’s news. What truly sets TBS apart is its ability to provide integrated solutions to complex projects. This is accomplished through the allocation of resources matched to each job’s unique demands. In-house proprietary project planning and management software (TBS P.M.P. System) and data sharing/collaboration systems across disciplines and office locations makes the integrated process seamless. The firm’s bench strength, its professional and support staff (300+ as of 2013), are an integral and trusted part of client teams and provide professional services in a diverse range of disciplines, at all stages from initial concept and financial feasibility to project completion, start up, operations, and demobilization.



*Matt Ledet and Danny Richard surveying*

**Bench Strength:**

300 + Professionals and Support/Staff

- |                                      |                                |                        |
|--------------------------------------|--------------------------------|------------------------|
| Planners                             | Oyster Biologists              | CADD Technicians       |
| Civil Engineers                      | Biologist/Wetland Delineators  | 3D Modelers            |
| Structural Engineers                 | Professional Land Surveyors    | GIS Technicians        |
| Coastal Engineers                    | Near/On Shore Surveyors        | Application Developers |
| Environmental Engineers              | Offshore Surveyors             | HSE Professional       |
| Hydrologic Modelers                  | Project Managers               | Administrative Support |
| Environmental Compliance Specialists | Project Technicians            |                        |
|                                      | Project Controllers/Assistants |                        |

TBS prides itself on the extensive ownership of a variety of transportation resources. The fleet of vehicles and boats, which include survey barges, survey vessels, airboats, marsh buggies, all-terrain vehicles, utility vehicles, skiffs, four wheel drive survey vehicles, and daily operational trucks, allow TBS clients the ability to have many projects completed with quick turnaround. This value adds a “service



*A sampling of the TBS fleet of marine and all-terrain transportation resources*

department” to TBS clients. These in-house resources have been accumulated through the years by immediately filling client needs without having to lean on outside rental companies. TBS fulfills all insurance and safety requirements for associates when operating this equipment and also provides in-house maintenance personnel to enable client satisfaction. Kenny boasts, “Unlike most of our competitors, we choose to own and maintain our equipment. We believe it allows us to respond to our strategic clients quickly, when they need us the most in times of emergency and disasters. We won’t be waiting for a rental company or mechanic to respond.”

#### In-House Resources:

30 Standard 3 Man Land/Near Shore Survey Crews  
20 Marine Survey Vessels and Barges  
Offshore Geophysical Survey Vessel  
4 Near Shore/River Hydrographic Survey Vessels  
7 Airboats and 2 Marsh Buggies

20 All-Terrain Vehicles  
20 GPS Total Stations  
Laser Scanner, Multibeam, Digital Sonar  
37 Gradiometers/Magnetometers



*Mitch Marmande overlooking a beach restoration project at Grand Isle, La*



*Party Chief Lee Guidry and crew marking a maze of pipelines*

Another key competitive advantage of the firm is the passion of its people and purpose driven culture. Mitch Marmande, Senior Project Manager, exudes the type of passion that is found in many TBS associates. Mitch, who spends countless hours on coastal restoration projects, recognizes the importance of his work and his part in the TBS family when he notes, “I think, having worked here at TBS, and for the people that we work with, I think we get a level of expertise in the restoration field that probably no one else can get. Where else can you get a century’s worth of experience in creative problem solving and put it to work on projects that will hopefully help save your community? Clifford certainly has been around this fight since its beginning. People started fighting it and you have a wonderful wealth of knowledge and experience at TBS, who were the first people implementing restoration projects. Marc Rogers and people like him really were doing barrier island restoration before anybody else, and, that’s definitely part of the appeal of working here.”

## Part 5

### Masters of Disasters

#### Riding the Storms of the Early 21st Century

The dawn of the new millennium rocked South Louisiana, including TBS, like a hurricane. Literally. The Gulf Coast was battered by Hurricanes Katrina, Rita, Gustav, and Ike in 2005 and 2008 and weathered the 2008 stock market, oil spill in 2010 and the flood of the great Mississippi River in 2011. Though it was a challenging time in the Gulf Coast, TBS once again beat the odds.



*Hurricane Gustav damage to the main TBS facility in Houma - 2008*

While successfully facing the challenges of an unprecedented technological revolution, TBS harnessed its technological capabilities to confront a series of equally unparalleled natural disasters. In the wakes of Hurricanes Katrina, Rita, Gustav and Ike in 2005 and 2008, TBS was a critical first responder for the people of Terrebonne Parish and throughout the entire Gulf Coast community.



*Chinook helicopter hooking up to large sand bags at the Houma Airport - 2008*

As the storm surge after Hurricane Gustav threatened low-lying areas of Terrebonne Parish, TBS associates immediately responded to assess damage to local levees help with the emergency closing of breaches. Using Clifford's contacts as a Member of the Mississippi River Commission, TBS was able to coordinate with federal, state, and local agencies to have the same Chinook helicopters that were repairing the 17th Street Canal in New Orleans sandbag the levees in Montegut, protecting the livelihood of many Terrebonne Parish residents. After mobilizing to reinforce the levees, TBS also mapped the storm's high-water mark, which is an important tool that is used to determine the height of the storm surge. This high-water mapping then plays a crucial role in the FEMA model that is used to determine the amount of disaster relief that is available to the storm's survivors.

In addition to public works clients, TBS was also a first responder to numerous onshore and offshore clients in the aftermath of the storms. Onshore, clients had facilities that were devastated. For Shell Pipeline, TBS literally brought Shell Pipeline personnel to their major pumping station in Plaquemines Parish by airboat from Houma. Together, Shell Pipeline and TBS were able to assess and control the damage to major facility and limit the flow of oil through a damaged pipeline. Offshore, TBS worked to find and still continues to remove downed platforms in the Gulf of Mexico.



*One of seven TBS airboats*

This is just a small sampling of 'TBS' role in the aftermath of these natural disasters. TBS is still working with clients and the community on storm recovery, mitigation, and preparedness. Today, TBS works with the people of Terrebonne Parish, as part of a FEMA grant program, to help our neighbors apply for flood mitigation procedures, where people who have had repetitive flooding in their homes can apply to have FEMA raise their homes. As a result of this program, over 100 homes along the bayous of Terrebonne Parish have been raised.

As part of 'TBS' own disaster mitigation and preparedness plan, Kenny seriously considered whether Houma should continue to be 'TBS' corporate headquarters. Though he never entertained the idea of closing the Houma facilities, he contemplated whether survival of the business – and his family – required moving to higher ground.

Kenny reminisces, “The storm events of 2005 and 2008 woke me up; I realized we had all our eggs in one geographical basket along the Louisiana Gulf Coast. We needed to expand to survive. Like many others along the Gulf Coast, Sheri and I had to decide



*The Smith home after the passage of Hurricane Gustav*

whether to stay put in Houma or to move to higher and safer ground. We chose to stay, but knew we needed to mitigate the storms effect on our lives.” Future disaster planning for survival fit right into the TBS business model to grow and develop our people and, at the same time, assure that we would not be devastated by a natural or manmade disaster.

Ultimately deciding for TBS’ corporate headquarters and his family to remain in Houma, the community where both the business and his family are so deeply rooted, Kenny realized some changes needed to be made to allow the firm to operate quickly, efficiently, and safely during a storm or other disaster. Diversifying the location of TBS’ communications system and historic archive of knowledge, TBS’ IT infrastructure and personnel relocated to Houston. While Houma is 10’ above sea level and 30 miles from the Gulf’s edge, the Stafford office is 150’ above sea level and 50 miles from the Gulf’s edge. In the aftermath of future storms, TBS had an IT system that could continue to communicate important storm updates to associates before, during, and after a storm, while maintaining access to client information.

The years that followed these devastating hurricanes were a challenging time when the entire U.S. economy was feeling the effects of the 2008 stock market crash and ongoing environmental changes wrought by subsidence, erosion, and sea level rise in South Louisiana, literally transformed the region’s physical landscape. And again, the regime braced for disaster in the face of the oil spill from the Deepwater Horizon in 2010 and the Mississippi River flood in the spring of 2011. When describing TBS, a client recently told Kenny, “You guys, besides being survivors, you are so resourceful, so ingenious, and you truly are Masters of Disasters.”

TBS was on the front lines of the Gulf Oil Spill battle. Shortly after oil started appearing off the shores of Louisiana, the firm was called into action to aid in the efforts to prevent it from entering the state’s estuaries. “TBS has a vested interest in protecting our coastline from intruding oil because this is where we live and work,” proclaimed Kenny. “We are concerned about the impact of the spill from both an environmental and an economic standpoint.”

In May 2010, the Surveying and Geophysical groups started work on a boom project on the eastern side of Louisiana’s



*Floating Boom Placed around a Coastal Island to prevent oiling*

coastline. The project started in the vicinity of Cat Island and was expected to end near Grand Isle. Land surveying crews staked out locations for two rows of piling. To expedite the process, geophysical crews surveyed areas for pipelines that could possibly be in the vicinity. A bathymetry survey was also performed to find a suitable water depth for the piles. After the locations were staked, the piles were driven into the seabed to act as anchors for the boom. The boom was attached to both rows of piles in a staggered formation to prevent oil from invading nearby barrier islands and seeping onshore.

Kenny, along with business associate and friend, Chet Morrison of Morrison Energy Group based out of Houma, wanted to figure out a way to expand this effort beyond their Cat Island to Grand Isle project. Both firms looked to their core competencies and where they might be able to make the most of their knowledge and expertise. They came up with an idea to protect the coast with floating pipeline, which is now called the Rigid Pipe Boom (RPB)© system. The aim is to keep oil from passing through channels into inland bays and marshes, where it is harder to remove and could damage already eroded wetlands.



*Installation of Rigid Pipe Boom section*

The RPB is an example of “Cajun ingenuity” and a way to use resources that are readily available. Pipe, 30 inches in diameter, is anchored to pilings driven into island passes to narrow the channels. Crude oil in the water is funneled into openings in the barricades for collection by skimmers and vacuum trucks on barges. Long curtains can also be attached to the bottom of the pipes to deflect and collect oil underwater.

Kenny explains, “We looked into a few different options before deciding on the pipe, but it came down to figuring out what we are good at, what our people know how to do, and what material is readily available.” There was no time to develop “proof of concept,” so as a result, 6,100 feet of boom was installed in Pass Abel, south of Barataria Bay and east of Grand Isle. “The Rigid Pipe Boom works best in high-velocity areas where the traditional flex boom has not worked,” Kenny says. The system was a success and now the industry has another option to use in spill events.

TBS was also contracted by BP to handle all LA One Calls, which is essentially a “call before you dig” program that allows utility members to dig safely, to mark their nearby underground facilities. The scope of the project was to ensure proper One Calls were made with LA One Call for BP projects. Before BP would access underground pipeline in a vicinity, TBS coordinated with affected pipeline companies to ensure their lines were marked and would not be damaged in the process of preventing damage from the spill and associated cleanup. Eric Deroche, Project Manager notes, “As One Call tickets were sent in, survey crews were dispatched to those areas.” TBS teams had to work closely with BP’s shoreline team to communicate pipeline crossings in the area where BP would be working to prevent another disaster that required cleaning up offshore oil.

TBS associates participated in other projects related to the oil spill, including assisting NOAA and BP personnel in collecting air and water samples aboard the *Will Bordelon* vessel. Environmental associates were also contracted by BP to perform soil and groundwater sampling in Grand Isle and extensive biological oyster assessments throughout the coastal zone.



*Completed Installation of Rigid Pipe Boom System - Pass Abel, Louisiana*

Kenny remarked, “I was motivated to see TBS associates using our integrated business model and vast resources in any way they could during this oil spill disaster that threatens our way of life here in Louisiana. They all worked tirelessly on these efforts.” Although this disaster was of near biblical proportions, TBS was blessed with the people, equipment, and expertise to meet all of the resulting challenges presented by this incident head-on and in a timely and efficient manner.

One year later, the firm had to respond to another disaster. In the spring of 2011, the swollen Mississippi River was rising to historic levels and threatened to overrun some cities. To relieve some pressure on the Mississippi River in Louisiana, the Army Corp of Engineers opened the Morganza Spillway for the first time since 1973. Flooding in the Atchafalaya Basin was predicted to threaten lives and posed harm to personal property, businesses, and



*Flood waters through the Bonnet Carre Spillway into Lake Ponchartrain*



government property. The Corps' projections and models also forecasted significant flooding in the areas surrounding the Lake Verret Basin, in particular: Morgan City, Amelia, Stephenville, western Terrebonne Parish, part of Assumption Parish, and portions of northern Lafourche Parish. TBS pooled its diversified resources and provided solutions to many government entities.

Terrebonne Parish Consolidated Government (TPCG) trusted TBS with four significant projects; these projects were designed to protect residents living and working in the western half of the Parish. These projects were the 1) La. Highway 20 Sheetpile Project, 2) Geraldine Road Levee, 3) Spanish Trail Road Project, and 4) La. 20 Culvert Crossings. The Terrebonne Levee and Conservation District (TLCD) relied on TBS to assist in securing pumps and coordinating the placement of pumps on right-of-ways owned by utility and pipeline entities. Further, survey crews were dispatched to set elevations on levee alignments in Gibson. They also coordinated with TLCD and other state and local agencies to reduce potential flood damage.

The St. Mary Levee District partnered with TBS in Amelia and Bayou Chene, where emergency flood protection plans were developed. In the Amelia area, TBS managed survey crews that directed the National Guard and LA DOTD (Department of Transportation and Development) in the placement of flood protection materials. These included baskets, dirt, aggregate, and sand bags. Bayou Chene had to be closed



*Barge and wing wall structure being installed in Bayou Chene to prevent backwater flooding*

to protect the region's citizens from a complete inundation of floodwaters. Plans for an anchoring project were prepared, a major undertaking that included stakeout for barge placement, monitoring piles, and levee alignment. Looking back, this was very successful and may serve as a template for future flooding events.

In late August 2012, TBS and the Louisiana Gulf Coast prepared for disaster yet again. Hurricane Isaac was a slow-moving Category 1 hurricane with the entire Louisiana Gulf Coast squarely in the storm's path. Eventually, the storm first made landfall in the U.S. on the evening of August 28th near the mouth of the Mississippi River and again early the next morning at Port Fourchon, Louisiana. The eye of the storm passed directly over Houma.

TBS was heavily involved in both the preparation and aftermath of Hurricane Isaac. While Isaac was moving ashore in Louisiana, the storm sustained winds of 67 mph and gusts up to 85 mph on Grand Isle. Although a slow-moving tropical cyclone, the storm's size produced a large storm surge (11.0 ft at Shell Beach). As the storm grew closer on its projected path towards Louisiana's coastal area, TBS crews began preparing to ensure pumping stations and levees were ready. Mitch Marmande recounts, "The Terrebonne Levee & Conservation District asked TBS to perform a debris field survey (sonar) of Water Control Structure No. 1. The purpose was to map out where the debris was located in reference to its pre-existing location. We were also able to be a part of the immediate team to participate in assessments of damage and flooding throughout the area, which allowed us to check on most of our local projects."

Stuart Babin, Project Manager with 12 years of experience at TBS, explained, "I expected to be without power for a few days and maybe have a few branches in my yard from my ancient oak trees, but an influx of post-hurricane pipeline inspections is something I hardly would have expected." Stuart reported that in a post-apocalyptic world of past moratoriums and oil spill disasters, the Bureau of Safety and Environmental Enforcement (BSEE) appeared to lean on the edge of caution and on September 1, 2012, issued a Notice to Lessees to access potential platform and pipeline infrastructure damage caused by Hurricane Isaac. Prior to the arrival of the storm, Kinder Morgan (the third largest energy company based on combined enterprise value in North America) secured the TBS offshore vessel, hydrographic and multibeam vessels, and conventional crews for premeditated hurricane response. Once the storm passed, many associates left their homes and families without power to begin accessing Kinder Morgan infrastructure. This entailed inspections of pipeline rights-of-way from the Atchafalaya Basin to Breton Sound. Stuart adds, "It seems as though, through the years, we get better and better at these types of emergency responses. From the standpoint of safety and efficiency to completion, this project resembles a well maintained Maserati."

TBS continues not only to survive, but to prosper. In many ways, this is due to an attitude that has sustained the firm for 100 years, as it has emerged as the industry's standard for accuracy, honesty, and uncompromising service. The leadership position has permitted it to greatly expand its once small geographical footprint. The firm has shed its role as a regional firm and has moved into national and international arenas, based on algorithms incorporated into the current strategic plan. Kenny expects the firm's workforce to continue to expand organically, as the firm steadily establishes a major presence in other geographic locations.

Strategic partnerships with first-line local companies and service providers have and will continue to facilitate TBS' geographical expansion. The firm is going to grow and prosper because of its can-do attitude and a vetted group of professional associates who know the benefits of working together to meet every client's needs.



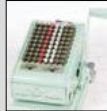
*Kenny making a presentation to his leadership team*

The transition to the third generation of Smith family leadership was vital to the firm's survival and the stability of the growing number of associates in the corporate family. As Kenny observed, "it is essential for expert credibility and long-term strength that a professional service firm be majority owned and led by a person with those professional credentials." He also offers that it's a competitive advantage. In the mid-1980s, Clifford had invested his seven children with equal shares in the firm. Clifford recognized the importance of a succession plan for the continuity of the firm and his family. In this regard, Kenny demonstrated an interest in TBS from the time he worked in the firm as a young man, learning the business of TBS from the bottom up. His experience as a teenager cutting line as a rodman on a survey crew motivated him to earn his degree in civil engineering from Louisiana Tech University. He received professional registrations in civil & environmental engineering and land surveying from 10 states, which gave him the professional qualifications to lead the firm. His focus was evident, as he worked through all levels and disciplines within TBS and learned through his experiences with clients, projects, and associates from the field to the office.

Consequently, being the only child of the seven with professional engineering and surveying credentials, Kenny knew it was time to purchase the firm so that it would continue on its stable path of growth and development. Therefore, in 2011, working closely with Clifford, an acquisition plan was formulated and enacted. Kenny became sole owner of the family business.

Jane Arnette, SCIA Executive Director describes Kenny, "Being a community leader is not a duty. It is a gift. Kenny Smith gave his gift of leadership by accepting the challenges on issues crucial to the wellbeing of his community, region and state. Often times, Kenny forged ahead, sacrificing critical time away from his family and job. His dedication to the oil & gas industry, as well as significant community projects has made a difference in our quality of life. Kenny leads by example of generations of the Smith family serving South Louisiana. We know this commitment will continue for years because of Kenny's high standard of making life better for our area."

## HISTORICAL SNAPSHOT The Technology



- 1913 Baker Smith starts firm using slide rule
- 1914 Free hand drafting on drafting linen
- 1930 First typewriter came to use
- 1937 LeRoy Pen and lettering set introduced
- 1948 First hand-cranked mechanical calculator
- 1950 Drafting film introduced
- 1955 Blue line drawing reproduction process started
- 1960 First electronic typewriter
- 1962 First electronic desktop calculator
- 1970 Hand-held calculators are introduced
- 1985 Disk typewriter introduced
- 1987 First desktop computer at TBS
- 1987 AutoCad drafting and plotting versus paper and pencil
- 1992 Purchased Motorola "Bag" cell phones
- 1994 The last drafting table at TBS was removed and 100% CADD use implemented
- 1995 First IT Manager hired
- 1995 Microsoft launches Windows 95
- 1996 Real World becomes TBS accounting software
- 1998 First TBS email system & High-speed broadband Internet comes to TBS
- 1998 TBS launches "Semaphore Accounting and Project Management" software
- 2000 TBS starts scanning 85 years of records
- 2002 Disconnect blue line process for digital plotting services
- 2003 First Blackberry gives TBS email on the go
- 2003 First wireless connection system at TBS
- 2005 Delttek Vision is implemented at TBS for accounting and project management
- 2007 TBS' first full-time Software Developer hired
- 2008 Developed in house document management system called EDIEOOGLE
- 2008 Automated Project Management Plan (PMP) System designed and developed
- 2009 First iPhone at TBS followed shortly by first iPad
- 2009 TBS develops CHIPS system for serving GIS and other data types to clients
- 2010 TBS designs and develops PEGS system for Performance Evaluations
- 2011 "Field to Finish" system rolled out
- 2012 Every smart phone at TBS is an iPhone



## CHAPTER 6

### THE JOURNEY IS THE REWARD, SHARE THE EXPERIENCE

*“There are four things you need to know and understand to fully take advantage of being a part of TBS. First you need to know me, Kenny Smith. Understand who I am and what drives me. I grew up at this firm and have performed just about any task I can ask you to do. I am a registered, professional engineer and surveyor in numerous states and most importantly, I am a big picture guy who is driven to always get better.*

*‘Good to great’ is my mantra.*

*Second, you need to know and buy into our corporate culture. TBS’ sense of purpose and direction, the things we stand for, and work towards making things happen.*

*Third, you need to understand our integrated business model. It’s our game plan to take the corporate culture from just words on a poster to action within the firm. It defines our synergy and separates TBS from others.*

*With the diverse array of professional services we offer, we could easily operate as four separate firms.*

*However, we believe that integrating these services is what makes our firm superior.*

*Finally, our organizational chart is where the rubber meets the road and it is a true matrix with many moving parts. The clients are on top and I am on the bottom, giving the firm the support it needs to develop our associates and service our clients. Knowing your role in the firm and how you and others flow in the chart, depending on the situation at hand, will help an associate successfully navigate through TBS.*

*Understanding these four major components will allow you, as part of the firm, to fully take advantage of the opportunities we offer to grow and develop both professionally and personally.”*

Kenneth W. Smith, CEO, January 11, 2013

In terms of its size, diversification, and organizational structure, TBS is an anomaly in its present incarnation. This single proprietorship enterprise presently has approximately 300 associates in an era in which “one-man shops” typically have no more than twenty-five to thirty employees; even fewer celebrate their centennial by adding new hires at a rate of slightly more than one a month. Most of the TBS phenomenal growth has occurred over the past decade. In fact, the corporation has grown 500 percent since 2000, and the firm’s current trajectory will maintain this growth for at least the next five years, because, as Kenny sees it, the target goal is that every new hire will be given the chance to grow, develop and achieve the things he/she wants to do professionally.

As mentioned throughout the book, TBS’ current clients are involved with pipelines, oil and gas exploration and production, industrial and infrastructure design, land development, and public works markets through eight professional practice areas; Urban Planning, Environmental, Surveying, Geophysical, Marine Positioning, Engineering, Construction Management, and Mapping/Geographic Information Systems. The diversity and flexibility of the vast TBS institutional, human, and material resources ensures the firm can tailor customize solutions to the unique and complex challenges faced by its individual clients.

Associates can assure custom-tailored solutions when clients permit them to become integral and trusted partners on their project teams. This partnership involves providing professional services at all evolutionary stages of the project’s scope of services from concept and financial feasibility studies to project completion and beyond. Competing firms also offer consulting services that simply cannot match the TBS individualized attention-to-detail service package. When a contract is signed, the firm’s integrated approach means all associates can, if necessary, draw talent and resources from all eight disciplines. The depth and breadth of in-house resources, and accessibility and adaptability of highly advanced, customizable technological instruments assures the client is being served by everyone in the firm. Therefore, every TBS associate takes ownership of every project, regardless of their respective time and job on each individual contract.



*TBS Professionals collaborating on a project*

When Jude Comeaux, first came to TBS as the Lafayette General Manager, from a competitor, he brought a wealth of knowledge and client relationships from the oil and gas industry. His first week at TBS was immediately productive by signing on new projects on the very first day. Jude notes his confidence in growth at TBS came almost immediately, “Kenny really makes a concerted effort to go out and meet people. We go back to project managers and relationships, and that’s the premise of everything, the desire to want to do things right. And caring about what you do to take care of the relationship that you’re working with. You know, they are a good, privately-held south Louisiana consulting firm, kind of deeply rooted in Houma, Louisiana.”

Technological prowess must always take a backseat to the competence of the people that represent TBS, and the firm is celebrating its centennial precisely because, in the midst of the Digital Age, it continues to place a premium on the quality of its human resources. TBS has several managers that are in their fifties or older and they supervise associates that are younger than their own children. The firms leaders quickly recognized that a bridge was needed between the seasoned directors and the fresh and upcoming professionals. When an opportunity presented itself in the Thibodaux office to hire a thirty-something year old, two very qualified professionals submitted their resumes. Kenny’s reaction was an unexpected one. He said, “Hire them both. We’re looking for good people. Let’s load the bus. Let’s go.” This is the mentality of the leader of the firm.

Most importantly, TBS has a century of proven experience in creative problem solving, something no other competitor can match. Nor can most competitors equal the broad range of expertise of the firm’s professionals and support staff and/or the benefits the firm provides to all of its associates.

The diversity and adaptability of professional services afforded by TBS is the product of the firm’s carefully choreographed expansion over the past decade under the dictates of a strategic plan developed by its leaders



*Baton Rouge office update - 2009*



during the firm's strategic planning retreats in 2004 and 2011. Both the original plan, which called for the firm to grow at a rate of ten percent annually for five years, and the newer plan has served as the firm's guiding star. Projections based on algorithms incorporated into the current strategic plan indicate the firm's workforce will swell to approximately five hundred by the year 2016. TBS is now poised to discard its traditional role as a regional firm and mount the national stage as an engineering/surveying/consulting powerhouse.



*TBS Field Crew at Eagleford Shale in south Texas - 2012*

The global oil shale industry started to grow with an emphasis on natural gas thirty years later, precisely when TBS was refocusing and expanding its business. Thus, it is hardly surprising the firm has established a major presence in all of the current oil shale hotspots. With the current advancements made in the country's oil shale plays, this country will become a leader in affordable natural gas. To Kenny that potential is exciting, as TBS is positioned to provide professional services to the exploration and development companies, as well as the pipeline contractors engaged in the shale-based energy business.

These formations are the focus of companies presently willing to invest billions in both acquiring the necessary leases and drilling into the subsurface formations. Each of these "plays" requires professional services and TBS project teams have the expertise to design and layout the well and necessary pipeline "footprints" in this new black-gold rush. The firm, consequently, opened offices in Shreveport to focus on Louisiana's Haynesville Shale formation, San Antonio for the Eagleford, and developed strategic professional partnership for the Permian Basin and the Marcellus Shale in Pennsylvania. As a result, TBS has positioned itself to become a key player in these new and expanding hydrocarbon provinces.

TBS has begun to shed its regional identity largely as a result of its critical role in the development of oil and gas shale exploration and development. As geologists began to improve their predictive techniques through a myriad of new technologies, it became clear to some companies that horizontal drilling could be used to exploit the country's vast natural-gas-shale formations.



*Dimensional Control Survey*



*Shell Pipeline Safety Award accepted by Luke Marcel, Chad Robichaux, David Martinez, and Bart Dupre*

TBS' recent strides have not gone unnoticed. For several years, *Engineering News Record (ENR)* magazine has recognized TBS as one of America's top 500 engineering firms. In 2009, Zweig White Hot Firm List identified TBS as one of the country's top 200 engineering firms. As its professional merits and achievements make clear, for its size TBS is one of the best engineering companies in the nation, and while accolades demonstrate the firm's business and technological prowess, they are not the principal reasons that its associates have proven fiercely loyal to this 100 year old family-run enterprise. It is, in fact,

not unusual to find TBS associates with more than thirty, or even forty, years of service. These grizzled veterans have been sustained by the nurturing work environment that the firm consciously fosters at all of its branch offices and in all of its disciplines. TBS is in a very real sense as many, many associates have indicated, as much an extended family as a dynamic, driven, professional enterprise.

Thad Lovell celebrated his golden anniversary with TBS in October of 2012. Along with his many stories of the field, office, co-workers, and accomplishments he shared his reason that keeps him "coming to the office." Thad proudly explains, "I want to make sure that my grandson gets a college education." Thad's enthusiasm and still going strong attitude inspires not only his family at home but also his TBS family.



*Celebrating Thad Lovell's 50th year with TBS*

Over the years, the firm has helped numerous workers weather medical dilemmas, and TBS associates recently raised more than \$15,000 to help a disabled co-worker. It is precisely this altruistic support network that makes this firm one of the nation's very best employers.

But individuals do not live by goodwill alone, and, as the following testimonial by longtime associate Marshall Faulk, makes clear, TBS' salaries and benefits are more than competitive: "We are a premier firm in terms of what we offer people, for one, the pay. I think we're one of the top-paying firms in South Louisiana. From a benefits standpoint, we match one hundred percent and up to six percent of what people put into their 401K plans. We pay for all of their life insurance. I think one should strongly consider the opportunity to work for an individually owned company that provides a benefit package that is unparalleled to anybody else: TBS has provided job security to 300 people for several years, even as things have gone downhill for some other firms. Being a part of a firm that gives personal ownership motivates associates to take it from good to great. Portions of the profits are shared within the firm, not only by managers, but throughout the firm giving a vested interest to all."

As Marshall indicates, TBS also offers employment stability in an era notorious for economic volatility. Most, if not all, of the firm's senior leaders have declined employment opportunities at competitors for substantially more money because of TBS' rock-solid reputation for job security. Jimmy Ledet, declares, "If you do what you're supposed to do, perform like you're expected to perform, you can work here for life, because we look for people who want to do that." David Martinez, echoes those comments, stating, "Am I going to have a job in a year? I look long-term. I see this as a long-term deal. I've got a family, I've got kids, I've got bills. You've got people that jump around for a dollar or two more an hour. If you're single, that's fine, but when you start getting house notes and food bills, you've got to start looking for stability. I think we offer stability."

Clifford believes the social and economic impact on our communities by TBS is extraordinary. He explains, "It is estimated that over the past 100 years, TBS has employed and been a part in shaping the lives of and supporting the families of thousands of people. The payroll over these years has probably exceeded \$120,000,000 and the payables are estimated to be over \$182,000,000. The firm has provided professional services to a vast array of clients over the years, with approximately sixty percent of these having been non-Louisiana based, therefore the majority of the \$300,000,000 plus has been brought into our state and communities from outside companies. This coupled with the profits which have been reinvested in our area represents a sizeable part of our economy over the century. This is the true purpose of TBS – it's all about community, people, and quality of life improvements."

That stability has given opportunities to many family members of present-day associates. Many associates like Josh Bridges, Survey Project Manager with 6 years experience, came to work at TBS because of the relationship with its leaders. Josh is the grandson of C.E. Bridges, a lifelong friend of the firm's founder, Baker. The tale goes that C.E. helped Baker run the firm while Clifford was off at LSU. When Baker died, C.E. was instrumental in helping Clifford establish himself as the new leader of the firm.



*Josh Bridges and Kenny*

Josh's father, Ed Bridges came to work at TBS, from the late 1960s to the early 1980s, based upon the relationship built between his father and the Smith family. Josh followed in the footsteps of his father and grandfather in pursuing a career in surveying at TBS. After working for other companies, Josh has found a place where the work he does is appreciated. He claims he would go anywhere or do anything TBS asked him to do. Third generation associates are taking a good firm to the next level of being a great firm, keeping the family thread weaved into the fabric of TBS.

However, stability and financial rewards are only part of the story. Unlike their counterparts in publicly traded corporations, where toxic, impersonal work environments are typically the rule, rather than the exception, TBS associates are emphatic that they are not mere statistics. Most TBS associates appreciate the fact "that they are not a number. That means a lot to people."



*Nick Gaspard and Kenny at a corporate event*

The fact that the firm's leadership values associates as individuals resonates with most associates, particularly those with families. Mothers and fathers at the firm consistently express great appreciation for TBS' willingness to accommodate the demands of modern family life. Marshall acknowledges the central importance of family, a hallmark of south Louisiana culture, at TBS, "I raised two kids by myself, and, I had to take off. I had to go here and I had to go there. They never questioned me. And we do that now with people that work with me. I mean, in your personal life you're going to have problems, and you're going to have issues, and you need to be able to take care of that. And being able to do that says a lot in terms of how you view the firm, I think." The firm's four-and-a-half-day work week affords associates considerable additional scheduling flexibility for family-related issues.

TBS lives up to one of its core values of: “Work is an important part of our lives and should be fun!” Everyone works together to get the job done and shares the responsibility and the celebration. Projects may not always go smoothly and someone on the team may be having a bad day, but the good definitely outweighs the bad. Associates from the top down are sensitive to personal lives and instead of brow beating someone for a mistake, they give support, until life reaches a more even keel.

Also, in line with the TBS core values, “We are dedicated to building trusted relationships with our clients, our associates, and our community,” TBS provides associates with several ways to grow professionally and



*TBS Go-cart Racing team raising funds for charitable events - 2005*



*TBS Lafayette softball team*

personally one of which is giving back to the community. SPARK (Social Purpose and Responsibility Krewe) is a recent development for that opportunity. Its purpose is to keep a charitable/community outreach focus within the TBS family. The SPARK initiative is composed of a diverse group of associates who are responsible for identifying charitable activities or organizations that TBS can support. They also develop and share with associates the details of each outreach idea.

An initial notion on the SPARK agenda is to create a program where associates can take “purpose time off” that would encourage them to participate in a community project they are passionate about. Examples would be helping hurricane victims, working on a beach restoration or marsh grass project, building a house for Habitat for Humanity, etc. Another task for the group is to consult with executive leadership about the logistics of other ways to give back to the region.



*Laura Caldwell and Tony Rivera of the Houston Office taking time for Habitat for Humanity - 2012*

Lorre Autin, remembers Kenny telling her, “We all have to pay rent for the time we spend here on earth, the more you are blessed with, the more rent you owe. I owe plenty.” Giving back to the communities that we are a part of has always been a priority for Kenny. He has made several trips to Nicaragua building houses and schools through local churches. He has been able to experience poverty and basic human survival at its purest form. It was a personal experience he wanted others to have. So in true Kenny fashion, he began giving associates the opportunity to “give back” to the communities that we live in.



*Kenny on the streets of Granada, Nicaragua - 2004*

Kenny points with pride that he will “support almost anything associates are passionate about, financially and respectfully. Associates have expressed that they want to help with projects from beach clean ups to building a school in a third world country,” Since the inception of SPARK, a TBS in-house scholarship program has been instituted and an annual charity event is being established. In 2012, five children of associates were awarded scholarships.

Holiday giving efforts started to take flight in 1999 and are now under the umbrella of SPARK. TBS has always matched dollar-for-dollar, on all contributions raised by any associate fundraising event. Cookbooks, silent auctions, football pools,



*Baton Rouge Food Drive - 2009*



*Tammy Koike visiting an assistant living home during a holiday giving program - 2011*

and raffles have been some of the ways TBS has raised monies to donate to “adopted families,” cancer research, homeless shelters, and senior citizen homes. Associates enjoy the giving opportunities and working for a firm that cares. TBS has touched thousands of individual lives through their giving and the path forward is endless.

Equally important, to individual associates and ultimately to TBS, is the emphasis on providing opportunities for individual growth. Peggy Bourg, and perhaps most TBS associates, have opted to stay with the firm “because of the opportunities to learn and to grow.” The firm affords its associates forty hours of professional training per year, plus subsidized training at vocational/technical schools and institutions of higher learning. This type of benefit gives every associate an opportunity to expand their individual knowledge base to be better prepared for any professional challenge. To the Smith family all forms of education are the keys to success.

Champions of education, TBS and the Smith family have always given of their time, talents, as well as treasures. All of the office locations partner with a school in each community



*Paul Hearn speaking to students on a field trip to TBS - 2009*



*Dan McDonald helping explain TBS field equipment - 2006*



*Luke Marcel reading at a local school - 2008*

where they work. Hands on activities, which include facilitating field trips to the corporate headquarters, reading to students, Character Counts programs, career days, and science fairs, are a few examples of how the associates interact with the students, many of whom may become associates. In 2002, because of their commitment to education, TBS received the Louisiana Distinguished Partners Award for their significant contributions to education. This is one of the awards acknowledging TBS’ stewardship of future generations by constantly bridging the gap between education and business.



*Kenny Smith proudly receiving the States Partners in Education Award for the firm’s associates - 2002*

More over, TBS alumni from L.S.U., Louisiana Tech, Nicholls State University, and Tulane University still sit on boards, teach classes, and help develop programs that will shape the path of the engineering, surveying, and environmental curriculum. The firm was awarded the L.S.U. Fastest Growing Tiger Business Award in 2012 and presented with the Corporate Mark of Honor in 2001.

Most of the firm's associates need little additional incentive to take advantage of these opportunities to remain competitive in the ever more challenging, tech-dependent present global economy. In fact, on the fortieth anniversary of his employment at TBS, project representative Thad Lovell enrolled in an AutoCAD class to learn about computer drafting, which would add to his skills and be beneficial to his job.

In addition, the mobility afforded by easy transfers between TBS locations provides associates with opportunities to pursue degrees at institutions of higher learning in Thibodaux, Baton Rouge, Lafayette, Houston, San Antonio and Shreveport. There is a high correlation between the opportunity for personal growth and the ready availability of advancement opportunities with workplace satisfaction and overall firm productivity. This workplace philosophy, perfectly tailored to the Digital Information Age, was introduced into the firm by Kenny, who insists that “the thing that gets me going every day is watching people grow and develop.”

Personal growth and development go hand-in-glove with professional advancement and job satisfaction. At TBS, the firm's associates are not asked to make the boss look good but instead are individually expected to take the initiative to excel and meet all of the firm's respective expectations. Those who do meet or exceed their goals consistently are often rewarded by promotion to project manager, a role in which they effectively operate small businesses under the TBS umbrella. Leadership roles, however, are dynamic because its integrated services model routinely makes managers subordinate to others, therefore, grounding them and making them live with the consequences of administrative decisions.

Kenny notes that a TBS associate “could be an environmental professional today, managing a project for a client, and then an hour from now, he or she could be doing a wetland delineation on someone else's project.” Because of the TBS emphasis on integrated problem-solving, associates are thus faced with fresh challenges every day. As Marshall observes, “It's never dull. It's not like sitting in your office doing the same thing day in and day out. It's always something new. It's always something adventurous.”



*Baton Rouge associates receiving the Ascension Parish Community involvement award*



Thus, it is hardly surprising that TBS associates are generally passionate about what they do. This passion is particularly evident among the engineers and environmental scientists who fully understand that they can and do make a difference. Living in an area threatened by subsidence, unprecedented coastal erosion, pollution, and rising sea levels, they understand that engineering projects are quite literally part of the coastal region's ongoing battle for survival. As Marc Rogers proclaims, "it's not just a project to me, it's where we live and it's our survival."

TBS is one of the few remaining companies in the modern world at which a job is more than a paycheck and more than a performance review. The firm affords its associates the resources and opportunities to achieve personal and professional fulfillment, to reap rewards and appreciation for their productivity, and, at least on the Gulf's coastal plain, to make a real difference in the world.

As a family-owned firm, TBS is more than an "engineering/surveying/consulting powerhouse;" it is a firm that is constantly adapting to global economic fluctuations, rapid technology shifts, and market uncertainty. As it celebrates its centennial, the firm looks to the future, sustained by empowered associates willing to adapt, while never losing sight of the firm's core values, which remained centered on the importance of family. Leadership, of course, matters, but when an associate is no more than two people from the C.E.O., resolutions are quick and decisive.

At TBS, the philosophy is built all around its people and hosting fun events in appreciation of their hard work and efforts has always been important. Christmas parties have changed over the years from Santa delivering toys to the children of the TBS family, to the "adults night out" parties, and more recently to associate luncheons at each location. The Christmas season is one that the Smith family likes to share and count as one of their many blessings.



*Face painted children of TBS associates at a Family Fun day - 2003*



*Clifford preparing turkey for an associate holiday dinner - 2012*

Crawfish boils, picnics, and barbeques have been given over the years as well. Since 2000, Family Fun Day has been an annual event that keeps in line with the spirit of the TBS corporate culture. These gatherings give associates and their families the chance to come together and enjoy a great meal, play games and really break away from the daily grind at the office. The gathering has evolved into a small festival that associates look forward to each year. To commemorate the centennial anniversary in 2013, additional friends and associates will be given the opportunity to celebrate and reminisce with the TBS family.

This company was built to last, and shows great promise to continue for generations to come. TBS is going places, and encourages an understanding that the journey is the reward, by consistently offering new opportunities to share in the experience, and join the TBS family.



*Josh Hazen and family enjoying Family Fun day - 2012*



*Sarah Hulin dunking Marshall Faulk at Family Fun day - 2010*

Andrée Cortez, P. E., Principal in Charge//Thibodaux Office Manager and 2012 new hire to TBS, expresses a clear message on being given a chance to excel by stating, “I can certainly attest to the fact that TBS is the firm of opportunities! I have had more opportunities in my first six months at TBS, than I have had in my whole career. Kenny’s enthusiasm and passion for TBS was genuine in our meetings before joining the firm, and now I witness it every day. When he talks about TBS’ history and giving people the opportunity to grow and develop personally and professionally, it is apparent that it comes from the heart. His enthusiasm is contagious! The picture that was painted for me during my interview process of an integrated, close-knit firm, similar to a family atmosphere, is real. After being at TBS for only a few months, my family’s home caught on fire. By 7:00 the next morning, I had multiple calls from TBS management offering to help in any way that they could. They even sent a survey crew to help put a tarp on my roof! Making a decision to switch jobs is a hard one especially when you have young children at home, but I have never regretted my decision to join T. Baker Smith. ”



2012 Family Fun Day

*In 1913, founder, T. Baker Smith, was committed to precision, integrity, and ingenuity.*

*Three generations of leadership and 100 years later, the quest of providing*

*Superior Integrated Professional Solutions is engrained in the firm's culture.*

*Built to last, through enduring engaged associates that are anchored in tradition and leveraging technology,*

*TBS is proud to celebrate a Century of Solutions.*