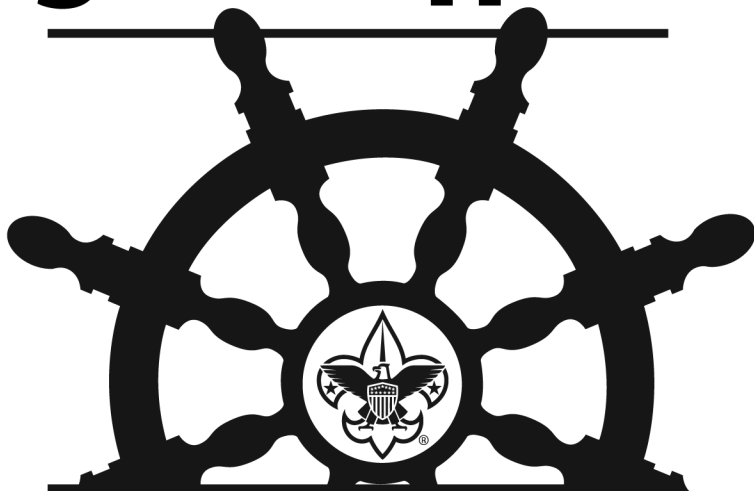


STEADY AT THE **HELM**

STEADY AT THE **HELM**



LESSONS IN LEADERSHIP

From Stephen D. Bechtel Jr.

by Perry L. Cochell





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ANYONE CAN HOLD THE HELM WHEN
THE SEA IS CALM.

Publius Syrus



BEFORE YOU ARE A LEADER, SUCCESS IS
ALL ABOUT GROWING YOURSELF.
WHEN YOU BECOME A LEADER, SUCCESS IS
ALL ABOUT GROWING OTHERS.

Jack Welch

FOREWORD

On January 19, 1961, a strong nor'easter slammed into Washington, D.C., blanketing the city under eight inches of snow and ice. Despite the massive storm, the US Army Corps of Engineers was directed to do whatever it took to clear the streets so that the inauguration of John F. Kennedy as the 35th President of the United States could take place outdoors on the steps of the US Capitol the next morning.

The Commander of the Engineers quickly discovered that even with several hundred troops backed up by 1,000 District of Columbia workers using plows, sanders and even flamethrowers, clearing the snow in time for the ceremony might just be impossible. Of course, not getting the job done was not an option. The Commander picked up his phone at 2:00 AM on inauguration morning and placed a call to the one organization he knew could deliver the assistance he needed to complete the mission: the Boy Scouts of America.

By the time the snow flurries subsided and the sun rose above the capitol dome on inauguration morning, nearly 1,700 Boy Scouts and their leaders were fanned out along the city streets leading to the east portico of the US Capitol. They shoveled out hundreds of stranded cars, cleared the main roads of snow, and scraped snow and ice off of pedestrian sidewalks. The Scouts finished their task in time for many of them to see the new President take the Oath of Office under a cold, sunny sky just before 1 PM.¹

The President later thanked a delegation of DC-area Scouts for their help when they visited the White House.

What made that occasion even more memorable was the fact that John F. Kennedy was the first American president in history who had been a Boy Scout.



The values of leadership that Scouting promotes were deeply ingrained in Scout culture long before President Kennedy took office, of course. Since the day it was founded in 1910, the task of instilling the principles

and practice of leadership into every new Scout has been a top priority of the organization.

You don't have to look far to see the results of that enduring focus. In the field of governance, for example, Scouting has a long and distinguished history of helping to equip local, state and national leaders with the tools, skills and attitudes to effectively represent their constituents. Among the 535 members of the 113th Congress (which met through January of 2015), 192 participated in Scouting. That's over 1/3 of the entire United States Congress! And, both the current President and Vice-President were Scouts. Add to that list 18 currently-serving state governors and three sitting members of the US Supreme Court, and it is clear that Scouting's continuing role in the development of outstanding leaders is deeply embedded in the fabric of American life.²

American business leaders also have deep historical ties to Scouting. Stephen D. Bechtel Jr., namesake and pioneer benefactor of the BSA's Summit Bechtel Reserve was at the helm of one of the world's leading construction and engineering firms for over three decades. Mr. Bechtel is an Eagle Scout. In the field of exploration, Neil Armstrong, the first human to set foot on the moon, also attained the rank of Eagle Scout. And, Gerald R. Ford, 38th President of the United States, was the first Eagle Scout to ascend to that office. In short, to look through any directory of distinguished leaders in American science, technology, media, the arts, industry, education, governance and business is to come across Scout after Scout after Scout.

Each of these leaders—no matter what kind of work they went on to do—share one thing in common: a formative Scouting experience that was instrumental in shaping the paths they took in the future. Many of them tell me stories about the leadership skills they first learned, practiced and sharpened in their respective Troops. Planning meals, assigning camp chores, encouraging younger Troop members, knowing when to push and when to pull—responsibility by responsibility, leadership decision by leadership decision—Scouting helped prepare these future leaders to be forward thinking, decisive, thoughtful and fair.

These are among the core attributes of leadership that thousands of American leaders became familiar with through Scouting. Those fundamental skill sets were enhanced, broadened and deepened by study

at college, during service in the military, on the playing field, and, for many, through long years of apprenticeship in private sector business or as self-employed owners of their own enterprises. It is gratifying to hear how many accomplished leaders look back on their Scouting experience as the place where the seeds of their lifelong appreciation for leadership were first planted and nurtured.

The Boy Scout organization is justifiably proud of the leadership roles that have been played by Scouts in the past century, across all sectors of American life. That pride is matched by an acute awareness of the paramount importance of the mission to train current and future generations of leaders, Scout by Scout. An important part of that ongoing mission is the book you are holding in your hand.



We in Scouting have long appreciated that there was a vast and diverse treasure trove of accumulated wisdom, experience, motivational stories and life lessons “store-housed” by former Scouts who had reached the pinnacle of influence within their chosen fields. That very significant fact raised an equally important question: how could that enormously large reservoir of invaluable insight, practical information and real-world experience about leadership be tapped, distilled, distributed and utilized for the benefit of Scouts today, and for generations to come?

That question has been foremost in my mind for a long time. In my role as Director of the Office of Philanthropy for the Boy Scouts of America, I have been privileged to meet many of the nation’s most outstanding leaders. Each has excelled in his or her chosen field. From aviation and engineering to logistics and natural resources development, from hotel and restaurant operations to construction, real estate and technology, I have been fortunate to meet former Scouts from just about every kind of business one can identify on the global map. Over time I observed that as much as these individuals might differ in their adult backgrounds and experiences, there are two things they share in common: first, they are deeply appreciative for the training they received in their youth as Scouts. Second, they strongly desire to pass the lessons they learned in Scouting—and in life—to following generations.



In the summer of 2016, we took an important step towards achieving the objective of helping leaders share those lessons with the Scouting community when ground was broken for the leadership complex at the Summit Bechtel Reserve. At this historic event, the Boy Scouts of America honored the namesake and founders of this premier youth leadership venue. The namesake, Thomas S. Monson, has given a lifetime of extraordinary service to the Boy Scouts nationally and throughout the world. He has received both BSA's and World Scouting's highest awards of Silver Buffalo and Bronze Wolf, respectively, and is the longest tenured member of the national executive board in BSA history. The four founders of the leadership complex, John D. Tickle, Sr., Rex W. Tillerson, J.W. Marriott, Jr., and Phil M. Condit, each have moving testimonies about how Scouting impacted their lives in a profound way, inspiring them to provide transformational leadership opportunities for young people. All of them have set themselves apart as leaders within their professions, and each is one of the very rare individuals to be bestowed with both the Distinguished Eagle Scout Award and Silver Buffalo Award for his exceptional service to youth.

The leadership complex is comprised of three primary venues. The John D. Tickle, Sr. National Training and Leadership Center will provide essential training to ensure that Scouts and adult leaders at every level of Scouting have the tools they need to provide the highest quality Scouting programs available. Scott Summit Center will feature the Rex W. Tillerson Leadership Center that will offer various leadership modules from a half-day to multiple-day experiences where Scouts participating in any Summit Bechtel Reserve program, from the Christen High Adventure Base to the National Scout Jamboree, can spend a portion of their time learning invaluable leadership skills through experiential learning. On Leadership Ridge, the J.W. Marriott, Jr. Leadership Center will offer extended multiple-day leadership training and experiences in a more contemplative environment. It will be supported by Condit Point as a primary venue for participants to reflect on their leadership journey and challenge themselves to achieve their potential.

Among the core offerings at the Center will be an (ever-growing!) series

of monographs that focus on the topic of leadership. Each monograph is based upon interviews with a former Scout who has gone on to achieve leadership positions of national and international prominence in his or her career, and who has also provided support and expertise for Scouting initiatives, including the Summit Bechtel Reserve. Each new book in the series will take its place in the Leadership and Excellence Center's library to encourage the promotion of youth leadership and character development.

The books will be as wide ranging as the topic of leadership itself. Each relates the path taken by one individual that brought him or her to a place where the consistent application of sound and ethical leadership principles were often all that stood between success and failure for the business or organization. These are not books on leadership theory; they share real stories about real events that brought into sharp focus both the short-term and long-term consequences of decisions made by leaders on the front lines. Readers of all backgrounds—especially youth—will have the opportunity to get to know the subjects of these books as real people who remained true to their principles through good times and bad. The leaders profiled are not hoisted up on pedestals. Instead, they are introduced as if they were standing behind a lectern in a small group classroom, eye-to-eye with their students, be they Scouts, Scout leaders, or the public at large.



Leadership is an art, based in science. It can be modeled, and it can be both taught and learned. Those who argue that leaders are born, not made, are only partly right: I believe that every person who is provided the opportunity to do so can benefit from instruction in leadership skills. To the extent that includes nearly every person everywhere, it is fair to say that leaders are born.

However, to become an effective, efficient, encouraging leader who sets the right tone in the never-ending quest to do the right thing for his business, community or organization, the leader must first be a student. Some of that education will be delivered by life-experiences. Some will come by accident. And some will come through stories, study and

reflection as found in the *Lessons in Leadership* series.

Wherever you may be reading this book, I wish you well on your own journey to acquiring and utilizing the kinds of leadership skills that each of the subjects in this series have so superbly demonstrated. If you are fortunate enough to visit the Summit Bechtel Reserve in person (including a visit to the Leadership and Excellence Complex), take a moment to stand outside on the high ground and look out over the facility. Everything that you see, every building and Adventure Base feature, every trail and tent and bike and zip-line, every education center and every event taking place at the amphitheater is there because individuals who love Scouting applied the leadership principles they acquired over a lifetime to make everything you are looking at become a reality.

Now, it is up to you to take on your own mantle of leadership and share the fruits of the wisdom and experience you gain over the years with your generation and the generations that follow. That is the essence of leadership.

On behalf of Scouts and Scout supporters everywhere, I want to thank each of those who are profiled in these books for their extraordinary generosity, for the commitment of time they made to the process of writing the books, and, especially, for their demonstration of leadership qualities that have distinguished their careers and their lives. Generations of Scouts will forever be in their debt.

Perry L. Cochell
Irving, Texas,
June 2016

¹Samenow, Jason (2009, January 5) Inauguration Weather: The Case of Kennedy. *The Washington Post*
²www.scouting.org/About/FactSheets/Congress.aspx

ENGINEERS SHALL BE DIGNIFIED AND
MODEST IN EXPLAINING THEIR WORK AND
MERIT, AND WILL AVOID ANY ACT TENDING
TO PROMOTE THEIR OWN INTERESTS AT THE
EXPENSE OF THE INTEGRITY, HONOR AND
DIGNITY OF THE PROFESSION.

*Canon 3e, Code of Ethics for Civil Engineers
American Society of Civil Engineers*

INTRODUCTION

Stephen D. Bechtel Jr. is a builder.

“Of course he is,” one might say. “After all, he was the longtime CEO of one of the world’s largest engineering and construction companies.” By the end of his tenure his company was building 1,700 projects in 77 counties. However, to get the true measure of the man, one must look at a broader definition of the word “build”: to grow, create or develop.

Throughout his long and productive life, Steve Bechtel Jr. has also been a builder of lives. The projects his company constructed—and the company itself—provided good jobs to more than a million people over the decades. The natural landscapes he preserved and restored as an environmentalist and philanthropist and the youth and education programs he supported through his foundation continue to enrich the experience of millions more. It has been a constructive life.

In that life, Steve Bechtel Jr. has been guided by the values and principles he learned from his family, as an Eagle Scout, as a Marine, and as an engineer.

Engineering is a precise discipline. His training and experience as an engineer helped Steve Bechtel Jr. lead an already large and respected family company to a level of employment and revenue that no engineering and construction company had achieved before. His engineering training also imparted an imperative for quality, which remains a watchword at the company today. “It’s not important that we be the biggest; it’s important that we be the best,” he would remind his company’s team members over and over.

Another principle he learned as an engineer must be highlighted here because it provides a key insight into this renowned global business leader: modesty.

The American Society of Civil Engineers Code of Ethics cautions engineers against actions that are “self-laudatory” and requires them to be “dignified and modest in explaining their work and merit.” In his life and work, Steve Bechtel Jr. personifies these virtues, so much so that he expressed concern that even this factual recounting of his life might come across as boasting. Yet his love of Scouting and desire to pass along

life lessons that might be helpful to readers led him to agree to author the monograph that follows.

Steve Bechtel's San Francisco office is reminiscent of a comfortable den. The walls are decorated with paintings of wilderness and wildlife that cover every inch of available space. There are Western and pastoral scenes, too, and many depictions of ducks and duck hunting. The hallway outside features sensitive photographs of flowers, which he took himself, photos of great natural features, including silhouettes of Everest and Kilimanjaro, and shots of projects built by Bechtel people: airports, mines and power plants. It's a reminder of the balanced life this man has led.



So too are the many framed family snapshots on a table—here a group of smiling people, there a gathering of people with their retriever dogs. A construction worker's hardhat sits solidly among the other items, along with a yellowed booklet from an 80th birthday celebration, and mementos from a lifetime of travel around the world. One wall is dominated by an oil painting of a gnarled oak tree that commands a ridge overlooking rolling California hill country—a beloved family getaway shared with children, grandchildren, and great-grandchildren. Along the wall adjacent to the desk is a trophy of a gigantic rainbow trout, caught by the wiry, bolo-wearing gentleman whose office this is.

The paintings, photos and mementos show a man who values memory, experience, and tradition.

Pointing to the weathered booklet, he says in a soft voice, "That was Dad's 80th birthday."¹ And the hardhat? "I'm still a construction guy at heart."²

"What's important about keeping these things around?" a visitor asks.

"Well," he says after a second, it "helps me remember them."³



Stephen D. Bechtel Jr. was born on May 10, 1925, to Stephen D. Bechtel Sr. and Laura Peart Bechtel. His grandfather, Warren Bechtel, migrated from Peabody, Kansas, to the Oklahoma Territory in 1898 to

help build railroads. His equipment inventory consisted of two mules, one plow and a powerful dream.

Warren Bechtel grew his company steadily through the decades to become a leading contractor in the West. When he died suddenly in 1933 while on a business trip, his company had just taken on its most challenging job ever: helping construct Hoover Dam, still regarded today as one of the greatest structures ever built.

The work was in its early stages when Warren died, but his son Steve Sr., just 35 years old, stepped up to become an executive committee member of Six Companies, Inc., the consortium that built the dam. In this leadership position, Steve Sr. stood shoulder to shoulder with older men, including his partner in the consortium, Henry J. Kaiser. Steve's young son Steve Jr. visited the Hoover Dam site. Even as a boy, he could see the power of organization in making a huge team of workers effective.

When World War II came, Steve Sr. took Bechtel into new areas it had never tried, such as shipbuilding and airplane modification, because his nation needed it. Again, at a Bechtel shipyard in the San Francisco Bay Area, a teenaged Steve Bechtel Jr. observed closely how much more productive a well-organized project could be. He saw first-hand the discipline and attention to detail that was required.

After the war, the company moved into energy projects while continuing its infrastructure work. From the Trans-Arabian oil pipeline (world's longest at the time), to the nation's first commercial nuclear reactor (in Illinois, 1957), Bechtel Corporation was pioneering what came to be known as "megaprojects," requiring enormous organizational skill and discipline.



This was the company Stephen D. Bechtel Jr. was selected to lead in 1960. He was just 35 years old, the same age as his father when he took over the family business. Over the next 30 years, until his retirement in 1990, Steve Bechtel Jr.'s "steady at the helm" leadership transformed the company's business operations and was instrumental in "doubling the size of the business it had taken his forebears 60 years to build." ⁴ Bechtel built hundreds of energy facilities, thousands of miles of pipelines,

complete rail transit systems, mines, mills, hotels, and even an entire city from scratch in the middle of unforgiving desert. What these diverse projects had in common was the need for disciplined organization and strong relationships with clients. Steve Bechtel Jr. was prepared for the challenge.

Steve Jr.'s leadership preparation started early, when in 1937 he became the newest member of Boy Scouts of America (BSA) Troop 4, in Piedmont, California. At the time, the Piedmont Council of Troops was the smallest in the nation, but neither size nor the harsh realities of the Great Depression gripping the country around him deterred Steve Jr. in his quest to achieve personal excellence as a Scout, culminating in 1940 when he earned the rank of Eagle Scout. To this day he credits his Scouting experience for instilling within him a love of the outdoors and for helping to "clarify and confirm" the values that would guide his life.⁵

As his business accomplishments and relationships grew, Steve Jr. was asked to bring his wisdom and experience to outside executive boards including IBM, GM, and Remington, and to industry-related boards including The Conference Board and the Business Roundtable.

He was appointed to advisory boards by US Presidents Johnson, Nixon, Ford, and Reagan; and, in 1991, President George H.W. Bush awarded him the National Medal of Technology, the highest American honor bestowed for technical achievement in recognition of his outstanding leadership in the engineering profession and for developing and applying advanced management techniques to world-class industrial projects.⁶

Throughout his adult life, Steve Bechtel Jr. has been supported by his greatest partner, his high school sweetheart Betty, whom he married in 1946. Their five children, 16 grandchildren, and 17 great-grandchildren have been the source of boundless joy for both.

Always forward-looking, he became interested in philanthropy at an early age, establishing the S.D. Bechtel Jr. Foundation in 1957. From its earliest days, he realized that simply handing out checks was not enough. "Giving money away is easy," he says. "Being sure you are getting results is the challenge." He engaged enthusiastically in his foundation's work with the same energy and dedication he applied to running his company. He even served on the boards and committees of some of the organizations that his foundation supported. He brought proven leadership skills to

those organizations to ensure they received the resources they truly needed to be effective, and he helped them stay on track and succeed.

Today, the S.D. Bechtel Jr. Foundation supports a focused portfolio of contributions with the common goal of building a better future: supporting quality teaching and learning in science, technology, engineering and math (STEM); protecting precious natural resources, especially water and wetlands; restoring parklands to enrich visitor experiences and improve sustainability; teaching young people environmental literacy; improving health care; and building character. In this last category, the S.D. Bechtel Jr. Foundation has awarded numerous grants to the Boy Scouts, including most recently to the Summit National Training Center for the Boy Scouts of America.

Stephen D. Bechtel Jr. has approached every aspect of his business and personal life with a degree of energy that is nothing short of infectious. From his tenure as the visionary leader of one of the most important companies in the world to the personal and financial support he gives to the values, causes, and organizations that are dear to his heart, Steve Jr.'s leadership style has been a dictionary definition of passion and commitment.

In the following passages, Stephen D. Bechtel Jr. shares his philosophy of leadership in his own voice and explains how he came to develop and apply it over the course of his career.

1

A GREAT BIG GUY / A LITTLE CROSSROADS /
4.4 MILLION CUBIC YARDS / IMPORTANCE OF GOOD
ENGINEERING / MY ROLE MODELS / SCOUTING /
EAGLE / LEADERSHIP / TEAMWORK /
COMPETITIVENESS / SAILING / STEADY AT THE HELM

1

I WAS BLESSED WITH A GOOD FAMILY LIFE. I had a wonderful mother and father from whom I learned a lot, just as I learned from other family members who were close by, like my grandfather, Warren; my uncles; and the many people they worked with in the business. There always seemed to be someone around from whom I could learn. Looking back, I realize how important that was to my life.

Much of my early life was spent with my father and mother on the road or at Bechtel job sites. In fact, I spent my first two years living in a railroad car with my parents because my father was managing a construction job. The practice of visiting job sites to personally appraise the progress of a project was more than a routine business practice; it had also become something of a family tradition. On long trips, Bechtel husbands often brought their wives and children along.

When we returned to the San Francisco Bay Area after those two years of living in the railroad car, my parents took an apartment in downtown Oakland on Lake Merritt. It was a co-op building with two apartments per floor. My parents had one of the third-floor apartments and my grandparents had the other. The apartments shared a common patio, which meant I was able to visit my grandparents often. My grandfather Warren was a great big guy, tough, sharp, and interesting. He could come across as rather brusque, but he wasn't that way with me or others with whom he was friendly. When we joined my grandparents for dinner, it was another opportunity for me to learn from their conversations even though I wasn't aware how much I was soaking up at the time.

There was a lot of overlap between my dad and grandfather's work and our family life. For example, it wasn't unusual for us to be joined at the dinner table by some of the company's senior business people.

I remember listening in on so many of those evening gatherings. Spending time with my father and grandfather sometimes meant being at one of the projects they were working on. Being at one job site or another seemed perfectly ordinary to me as a child; our family built things, so occasionally you traveled out to the job to see family members. I remember being fascinated by every job site I was taken to, but there were a few that were particularly striking.

One of the best was when I went with my dad and grandfather to a job site on a river out in the desert. We stopped at a tiny crossroads called Las Vegas on our way to Boulder City which wasn't actually a city yet, but really more of a construction encampment set up to accommodate thousands of workers.

I was a young boy, and I didn't know at the time that the complex and risky job of building an enormous concrete arch gravity dam to hold back the waters of the mighty Colorado River was the largest civil engineering job ever undertaken by the United States government. So many workers lived in the camp during the dam's construction (1931-1935) that it was said to be the second largest city in the state of Nevada behind Reno, hence "Boulder City."

It was a very harsh environment, hotter than any place I had ever been, and a long way from anywhere. As I said, Las Vegas was just a crossroads. Everything had to be brought in across the Mojave Desert on poor roads. Looking back, I was very fortunate to be able to see this great project at a time when most boys my age only had the opportunity to play with toy trucks and bulldozers.

I watched with great interest as the workers diverted the flow of the great river and then built the cofferdam that would allow for construction to occur under the waterline. Then they started pouring concrete, which was quite an operation. An intricate web of cables had been stretched across the open space to facilitate the delivery of concrete to the right place at the right time. I got to go up to one of the control towers from where the cables were run. I watched as they carefully guided one massive bucket across the cableway, lowered it down, and then dumped the concrete in place. That was how they built the Hoover Dam—one bucket at a time.

Bechtel was one of a consortium of companies that worked together

on this massive project under the name Six Companies, Inc. When the first president of Six Companies passed away my grandfather was elected president of the entire enterprise, and my father was named vice president in charge of procurement. Dad was responsible for obtaining all of the materials and supplies that went into the construction of the dam. That was a big task: 45 million pounds of pipe and steel were needed, and 4.4 million cubic yards of concrete would have to be mixed, transported and poured. Of course, we were up to our ears around the family dinner table with talk about the job. It was an extraordinary experience for me to have the chance to see that immense project all the way through to completion.

As awe-inspiring as that job was to me, there were things I as a child hadn't known, which became so important to me later. One was the nature of the work. Hoover Dam was a fixed-price job, meaning the builders agreed to a price and were on the hook if it cost more than that. It was a tremendous risk for Six Companies to take. As my dad later recalled, "We had to do it right. We'd bet our shirts on it."

Something else I didn't see at the job site, but later came to greatly appreciate was the work of designing this enormous structure. I watched all the care that went into building the dam according to the plans...but how did they figure out the best way to build it? That, I learned, was the job of skilled civil engineers who had a lot of weight on their shoulders. It was the tallest concrete dam ever attempted by a wide margin. How did they know it would be strong enough to hold back more than 700 feet of water from the river to the top? It had to be designed right. If it were to fail for any reason, either during construction or later, many lives would be lost. Of course, it has stood strong ever since.

In 1998, I went back with family members, Bechtel executives, and friends to kick off our company's centennial year. I stood in the shadow of the great dam at river level on a cold winter morning and looked up at that still-remarkable achievement. I heard speakers recount how Hoover Dam made the desert bloom with irrigation and provided millions of people with water and power, enabling cities like Las Vegas, Phoenix, and Los Angeles to grow. I remembered what I had seen there as a boy and reflected on how satisfying a career in engineering and construction could be.

Hoover Dam was not the only memorable project I was able to visit as I was growing up. I saw highways laid out across empty landscapes, and I watched as they were graded, paved, and made ready for traffic. I saw the work involved in engineering and constructing massive pipelines. I watched buildings raised from webs of steel frame on empty lots to completed structures, and I saw first hand the kind of jobs that were done by the hundreds of skilled craftspeople who brought the architect's plans and engineer's blueprints and schematics to life. I remember that there were so many jobs happening at the same time.

While the Hoover Dam was being built, for example, Bechtel was also one of the contractors for the construction of the San Francisco–Oakland Bay Bridge. It was exciting to watch the massive caissons in tow from the Oakland shipyard construction site. Each of these huge, floating, watertight retaining structures was carefully guided in turn towards its precise location through the treacherous tides of the bay, sunk in place, and later filled with concrete to become a support that holds up the bridge.

My grandfather Warren did not live to see the Hoover Dam or the Bay Bridge completed. He passed away in 1933 while on a business trip to Russia; I was eight years old. Bechtel was privately owned then—as it is now—and in short order the family decided that my father would become the head of the company. To me though, he was still just my dad.

My father and grandfather were my most important role models when I was a boy. I was also positively influenced by a number of other family members, including my father's brothers, Warren Jr. and Ken. Each was involved with the business to varying degrees. Reflecting about my uncle Warren, I appreciate how he nurtured my lifelong love of the outdoors through the many hunting and fishing trips into the backcountry we took together.

Uncle Ken retired from the engineering and construction business during World War II so he could focus on our Marinship business and build cargo ships for the war effort. One summer I worked with the survey crew that was planning the construction of the shipyard, and I continued to work with the crew on weekends during the war. Ken was also very involved with the Boy Scouts of America and would later serve as the organization's National President.

As a young boy I joined a Scout troop in Piedmont, California. That experience made an indelible impression on me. Even as a young boy I could see that Scouting encouraged personal values that were important to success in life. Scouting also supported the development of leadership skills and emphasized the importance of becoming proficient at a wide range of practical skills. Above all, it was just plain fun to be a Boy Scout.

The Piedmont Scouts were a strong troop. From the outset I looked up to the older guys who served in leadership roles both with the troop locally and also at the Scout camp we attended in the summers. As I gained skill and experience it became my turn to lead. We had meetings in town, and we would often go camping and hiking.

Summer meant spending three action-packed weeks at Camp Wallace Alexander on the Feather River. It was there that we earned new merit badges, passed Scout challenges, and worked toward moving up in rank. All these decades later, I still remember the horseback riding, the camaraderie of the campfire and the companionship of being with the other scouts and our counselors. Eventually I earned the rank of Eagle Scout.

The experiences and lessons of Scouting have been very beneficial to me over the years. In fact, over time the values highlighted in the Scout Oath and Law helped to frame and validate my worldview. They also provided me with an appreciation for the importance of proper organizational structure within a business and the need to pay careful attention to the development of the talents, skills and abilities of every person in a position of authority inside the business. Scouting also emphasized the importance of personal responsibility and integrity, which I learned early on is critical to success in any endeavor, both personal and professional.

I took part in some competitive activities as a Scout, and I also participated in team sports as a child. The experience that helped build my competitive spirit the most—the one that reinforced the importance of knowing who your best teammate was in any given operation—was sailing.

In sailing, your success or failure depends on your crew, your boat, your personal competitive spirit, your sailing skills, and especially on always having a steady hand at the helm. I learned that early on.

Most of my experience in competitive sailing was in the Snipe class, a 15.5-foot centerboard boat with a sloop rig. I raced all over Northern

California and took pride in doing a lot of the maintenance, especially the wood and metal work. My crew was made up of fellows who liked to sail but didn't have boats of their own. They worked the jib, helped with the centerboard, and performed the other tasks that have to come together at the same time to race successfully. I started spending a lot of time with two fellows I knew from our sailing club at Lake Merritt—the Hall brothers, who were International Snipe champions.

My first boat was proving too heavy to compete successfully against the best that were out there. The goal was to race in the lightest boat you could possibly have. When I replaced my original Snipe with a new lightweight hull, Bob Hall and I put on the deck, and rigged and painted it. We got that boat down to just one pound over the minimum legal limit allowed for its racing class.

Bob crewed for me, and we had a pretty darn good run for a couple of years racing in Northern and Southern California regattas. Ultimately, we went to the national championships in Texas. To my delight, Bob and I took second place in the International Championship, and I took first place in the Junior Championship (racing with a local crew because Bob was overage for the Juniors).

It was both fun and personally satisfying to perform well in these challenging competitions. Sailing taught me that it wasn't enough just to be the most competitive person in the race. If your goal was to cross the finish line first, you had to begin preparing yourself, your crew, and your boat long before race day. You had to study, talk to knowledgeable people, figure out course solutions, and ask lots of questions.

Above all, you had to organize a team of people with different skills and personalities. Casey Stengel, the legendary major league baseball manager, had it right when he said, *“Finding good players is easy. Getting them to play together as a team is hard.”* This adage has been proven correct so many times in all sports. Teams with many “all-stars” often come up short, while teams of players with seemingly lesser skills often triumph. This happens because team members recognize the team is more important than themselves and act for the greater good. Sailing, too, demands fine-tuned teamwork.

Once the race starts, success in the face of tough competition requires that you keep thinking all the time, make the right moves, stay in balance,

and keep your speed up. It also requires a steady hand at the helm—you can't zigzag all over.

2

PIEDMONT / BETTY / WARTIME SHIPBUILDING /

GUNG HO / MARINES / ENGINEERING TRAINING /

GETTING MARRIED / STANFORD / SEABEES

2

AS I NEARED HIGH SCHOOL AGE IN OAKLAND, it became clear that attending the academically rigorous Piedmont High School would be a better choice for me than going to the school nearer to where we lived. Piedmont did enroll some Oakland residents each fall, so I knew I had a chance. My application to Piedmont was submitted, and, as luck had it, I was accepted.

My freshman year was fairly uneventful, with one enormous exception. In my Spanish class, I met a beautiful, friendly girl named Betty Hogan. We got to know one another and for the next four years of school we dated and went steady, we broke up, we got back together, went steady again—around and around. Through it all, we were about as close as a couple of kids could be. These were the war years, though, and by the time we were halfway through our senior year we were set to travel down two very different paths. Betty was going to attend the University of California at Berkeley while I volunteered for duty in the United States Marine Corps.

A war was on, and every young man in America was faced with the choice of either enlisting or taking his chance with the draft. My parents didn't try to influence my decision. We didn't even consider seeking a deferment from military service though I could have easily obtained one because of all the defense work in which Bechtel companies were involved. By my senior year in high school our two shipyards were churning out vessels in California, and our airplane modification center in Birmingham, Alabama, was humming along getting equipment ready for battle.

I had worked around our Marinship yard in Sausalito one summer and on weekends while in high school and was sure that employment there would be an option. Shipbuilding was new to our family business, and my

Uncle Ken threw himself fully into learning it. What he saw right away was that the traditional way of building cargo ships was very slow and the war demanded speed. Like our former Six Companies partner, Henry Kaiser, who operated shipyards across the Bay in Richmond, we adopted prefabrication techniques to make the shipbuilding process far faster.

I quickly came to appreciate the enormous levels of organization and discipline necessary to build ships quickly—ships that were desperately needed for the war effort. The discipline included rapidly training people who had never handled construction tools before how to weld and rivet and perform other construction tasks. Many were women who came to be known collectively by the nickname “Rosie the Riveter” and who performed their tasks every bit as well as the men they worked alongside.

The idea of not serving my country in the military during wartime never entered my mind. Like millions of other young American men, I wanted to go fight for my country. I was gung ho.

The Marine Corps had their own plans for me, however. They told me that if I so chose, upon high school graduation I could become a candidate for officer’s training school; it was an easy choice. So, one week after graduation in 1943, I boarded a troop train to Boulder, Colorado, where I enrolled in the University of Colorado as part of the US Marine Corps Officer Cadet Unit. I plunged right into some of the most demanding and rewarding work and study in my life.

As tough as the work and study were, my friends in Beta Theta Pi social fraternity and I still managed to make a little time for fun. On several occasions we got a weekend pass and hopped the train from Boulder for a one-hour trip to the ski resort at Winter Park.

Skiing was a much-needed respite from study and drill, but barreling down the powdery slopes of the Rocky Mountains had to be balanced against the demands of keeping up with university studies, passing room inspection every day, and completing all of the other tasks required of Marine officer recruits.

My classmates and I were part of a special wartime fast-track schedule, taking three semesters of coursework per year instead of the two semester peacetime schedule. At that pace I completed two years toward my four-year bachelor’s degree in just a year and a third at Boulder. At this point, the Marine Corps transferred me to Purdue University in Indiana to continue

my engineering education. In addition to my civil engineering major, I also took courses in electrical, mechanical, and chemical engineering. Exposure to the other disciplines of engineering is something for which I have always been grateful.

Thanks to the rigorous accelerated program, I completed my four-year engineering program in two and two-thirds years, graduating in 1946. By then, the war had ended, and I was offered a reserve commission, placed on inactive duty, and told that I would be called up if and when they needed me. Otherwise, said the Marines, I was free to carry on with my life. Although I never got sent overseas, I was taught by my officers and non-coms what the Marine Corps was all about and what it stood for, and it's all good.

There was no question in my mind about what I was going to do first when I graduated. I proposed to Betty in February 1946, and we got married in June. After we got back from our honeymoon, I started graduate business school at Stanford in the fall. Betty withdrew from UC Berkeley, and we prepared to start a family.

The program at Stanford in which I enrolled was also an accelerated course of study; I finished my masters in business administration (MBA) in 1948 after about a year and a half of study.

While I worked on my degree, a number of the guys from my class were called back up into the armed forces. Most were sent to Korea.

I figured that if I got called up to go back into military service, I could do the most good by transferring from the Marine Corps reserve to the Navy reserve. The Civil Engineer Corps of the Navy is the officer component for the Seabees, who do the construction work for the Marine Corps. I made the transfer, but the Navy never did call me to active duty. To this day I have a tremendous amount of respect for the armed forces and the sacrifices so many have made for our country.

3

THREE MONTHS / TRADITIONS AND CULTURES /

DINNER WITH THE KING / I DECIDED I LIKED PIPELIN-

ING A LOT / "YES, SIR" / A REMARKABLE MAN

3

AFTER I COMPLETED MY MBA, Betty and I boarded a Pan American DC4 with my father and mother, heading west across the Pacific. Not many people know it, but shortly before war broke out in the Pacific, Bechtel had helped build bases for the pioneering Pan Am amphibious aircraft, the flying boats known as Clippers, to hop from Hawaii to Midway to Guam to Manila. In wartime, these facilities proved helpful to our armed forces.

Our 1948 journey took us around Asia, the Middle East and Europe for three months, meeting with Bechtel business associates and friends and engaging with many different traditions and cultures.

Our first stop was Tokyo, Japan, where US Army General Mark Clark was overseeing transition operations. From there we headed for Shanghai, China, which had not yet fallen to the Communists, and then to the Philippines, where Bechtel was engaged in construction projects.

We moved on to India and stayed for a very pleasant week at the American embassy as guests of Henry Grady, the US Ambassador to India and a good friend of my parents. That was a memorable perch from which to explore that colorful country.

We continued on to the Middle East. Our family had been involved in many large projects in the region so there was a lot of ground to cover, many people to meet, and a number of job sites to visit. From Bahrain we journeyed to Kuwait, and finally to Saudi Arabia where some of the largest projects in our company's history were underway. I accompanied my dad when he had an audience and dinner with King Ibn Saud, the founder of the Kingdom of Saudi Arabia. At Marinship in 1945, my dad had given a tour to the king's son, Prince Faisal, who later became king

himself. This was shortly after President Roosevelt had met King Ibn Saud on his return from the Yalta Conference, opening the door for stronger postwar relations between the two nations.

At the time of our trip, Bechtel people were building the first airport at Riyadh and starting construction of the enormous Trans-Arabian pipeline that allowed Saudi Arabia to export crude oil to Europe and America, fueling the growth of the postwar economy. We travelled up to Ras Al-Mishab to the pipeliners' camp. It was a great experience for me to be able to get out and spend time with Bechtel people and my dad on that jobsite. Pipelining was especially interesting work and by the time the trip was over, I decided that I wanted to work in Bechtel's Pipeline Division.

We made our way home by way of Europe and reentered the US through New York. While we were in town, Perry Yates came to see my Dad. Perry ran the aircraft modification center in Birmingham, Alabama. He told Dad that the company had just received Tenneco's order for 'looping' a section of their pipeline. Looping is where one pipeline is laid parallel to another. Then Yates looked over at me and said, "You ought to go down there and be on that job. We need an engineer on the pipeline spread."

"Yes, sir," I said.

It made sense. Up to that point, I hadn't decided for sure what my next career steps would be. As I was finishing up my business degree, the postwar housing boom was just kicking off and it was easy to recognize the great potential of that situation. "Geez," I thought, "I could build houses." I certainly could have made a career of home building.



The trip across the globe with my parents had opened my eyes to a whole new world of opportunities beyond being a homebuilder. By the time Perry Yates suggested that I should take on the Tenneco pipeline job, I had already decided that I would go with the company. Of course, I think my dad had a little to do with all of that. It was no coincidence that because of this trip I had been given an overview of Bechtel's operations around the world and been introduced to the company's key issues

and players. My father had obviously wanted to provide me with that exposure, but he also didn't twist my arm. That wasn't his way.

By almost any measure, my father was a remarkable man. He dealt routinely with major world figures in construction, finance, and politics; and some of the decisions he made had a worldwide impact. I had some sense of his role and status in important events prior to our trip, but I didn't fully realize or appreciate it until I was at his side as he engaged important people around the world.

Dad was very outgoing, very personable, and he had a way of engaging and communicating with people that built trust and respect. He had a lot of good friends, business associates, other contractors that he'd partnered with, as well as clients from all corners of the globe. People came from all over to visit him at home, and Betty and I were often invited to join them. His ability to inspire others was helpful to me. I admired this and learned from him.

At the same time, I was well aware of the potential pitfalls in being the boss's son. I knew some would try to give me special privileges I hadn't earned and did not want. Betty and I had to make our own way, and we did, as pipeliners!

4

A PIPELINE DOWN IN TEXAS / LIFE IN A TRAILER /
PRETTY SIMPLE / THE HIGH QUALITY OF OUR WORK /
TO NOT GIVE AWAY THE SHOP / FORECASTING /
HANDS-ON TRAINING

4

THE FORMAL EDUCATION I RECEIVED—in engineering, from the Marine Corps, and in business school—prepared me for quite a lot. But there are some things that you can only learn by being on a job.

My strategy in beginning my full-time career with Bechtel was simple: work harder than anybody else on any job to which I was assigned, refuse any privileges that didn't come with the position I held at the time, and be treated according to the quality of my work, no more and no less.

My first job was the one Perry Yates recommended, a pipeline job for Tenneco in Texas. Although I had an engineering degree, at that time Bechtel was essentially still a construction contractor. Tenneco did the engineering, acquired the right-of-way, and procured the pipe and all the equipment materials.

Our job was straightforward: clear and grade the right-of-way, dig the ditch, and take the pipe from the railroad siding out to where we welded the sections together and laid it in the ditch. My job was to keep track of costs and the materials turned over to us and anything else the superintendent told me to do.

It was a 10-hour day, seven-day-a-week job, sometimes more. We worked outdoors, year round, in all kinds of weather. I remember some evenings we had to go out and move heavy equipment back and forth. That was real fun!

If you are doing your job the right way in the pipeline construction business you are going to be relocating every month or so, spending most of your time in and around small towns like Woodville, Texas, where the Tenneco job was centered. Finding a place to stay in a town with a population of only about 500 people when you have a wife and child

isn't easy. Betty and I solved that problem by purchasing a house trailer that could move when we did. Trailer living wasn't easy, but it sure beat having to leave my wife and first child at home. Many of the men who worked with me also brought their families along.

Those early days were a good experience for our family, which ultimately grew to five children. It also provided the chance to live in some interesting communities. The families of the construction people on our jobs would often get together and do some socializing too. Working with the same people on multiple jobs helped make us a pretty close-knit group.

Being out on the job site was a wonderful experience. The business was pretty simple when you dealt with only one job at a time. When you have multiple jobs in progress and innumerable people and potential pitfalls to worry about, things can get quite a bit more complicated.

Big job or small, and on one job site or many, some people just naturally perform well, some require a little coaching or motivating, and some just never measure up. There is always a mix of new people with the experienced crews, and sometimes you also have to deal with a few old timers who have decided they've worked hard enough, so they start slowing down. The leader has to be prepared to deal with them all. You must always be on your toes.

I didn't have to worry too much on that first pipelining job. Most of those men were good fellows that would give you a solid day's work, and they were there to do the best job they could.

In pipeline work the specialists and craftsmen, particularly the welders and pipefitters, could make or break a deadline. These workers typically weren't Bechtel employees and were often members of national trade unions. That meant that you couldn't expect continuity or consistency from one man to the next. It was imperative to get to know the good ones and to make sure that they got to know you and would be willing to follow you to your next assignment. As soon as you landed a new job in the winter that would start the next spring you had to get word to the good workers and line them up for the new work ahead. Good workers under good leadership, I found, tended to produce great results.

Most pipeline construction work is unit priced, or fixed price work, which means that you will be exposed to the risks of rising costs.

A successful job begins at the estimate phase. Each unit—a linear foot of pipeline installed—costs a certain rate, and any rock or other obstruction that was encountered would be factored in at a higher rate. You had to get that included when you priced the job, or you would have problems down the line.

I really enjoyed the pipeline work. It was becoming a mainstay of the company. One early pipeline job helped shape the evolution of our company. The Trans Mountain pipeline, begun in 1952, stretched 700 miles across the Canadian Rockies from Alberta to Vancouver. Besides the physical and technical challenges involved, we innovated a new organizational structure as well, forming the Trans Mountain Oil Pipe Line Company with my dad as board chairman and our long-time outside-lead attorney, Bob Bridges, as president. This company acted as the owner's representative, with overall responsibility for the entire project, from design, engineering, procurement, and construction management. Beyond that, the company also handled financing and creating a permanent organization to operate the pipeline.

This was groundbreaking for our industry, and it required a much more sophisticated approach than the verbal agreements my grandfather started out using. "If you can't trust a man's handshake, you can't trust his signature," Warren Bechtel would say. There was still truth to that more than a half-century after he began the family business. Integrity was still at the center of all our dealings, but complexity required clear understandings among all the parties involved. The Trans Mountain Pipeline became the model for many jobs to follow.

I am very proud of the high quality of Bechtel work on all of our jobs. We developed a reputation for doing good work, and that meant that there has always been more work to do. Sometimes, paradoxically, we would actually submit a bid to do a better job than the owner wanted to pay for. When they occasionally awarded the job to somebody else who did not build to our level of quality, or who perhaps just misjudged the difficulty of the job or fudged a little bit in performance, it always showed in the end.

My early pipelining work prepared me to tackle jobs of greater size and responsibility. Pipelining required setting clear goals related to schedule, cost, and quality, and then meeting them. It also gave me experience

working with extremely capable people, and taught me how to juggle all the issues that came up day-to-day while dealing with clients at the same time.

Most interactions with clients were positive, but I learned to keep my eyes open in case a client might try to take some unfair advantage. Should that happen, we had to try to find a way to move ahead without giving away the store or making the client angry. Here again, our company's reputation for integrity served us very well.

My project experience helped me deal with issues related to project finance later on when I was appointed treasurer of the company. In the engineering and construction business the ability to accurately forecast costs is both critical and difficult. Forecasting draws upon all of your financial and organizational planning in an effort to anticipate how the jobs are going, and to identify where you are making money and where you're not. As treasurer, I changed our reporting procedures on the status of individual jobs from "as done," or "as being done," or "current status," to "forecasted completed cost," which provided a clearer picture.

All these experiences were excellent hands-on training, and a valuable introduction to the challenges of dealing with complicated jobs that were influenced by many variables. It was the pipeline work early in my career that prepared me for what the realities of work on the ground were really all about.

5

INCREASINGLY RESPONSIBLE ASSIGNMENTS /

POWER FROM THE ATOM / GOING GLOBAL / TIME TO

TAKE THE HELM / "WE GOT ALONG FINE" /

LIVING THE EXAMPLE

5

AS I WORKED MY WAY UP THROUGH INCREASINGLY RESPONSIBLE assignments with the company, I came to appreciate just how complex our business was becoming. During the 1950s, besides the growing pipeline business, my dad led our company into a pioneering role in the nuclear power industry.

The demand for electricity in America was skyrocketing in the 1950s. As the generation of “Baby Boomers” boosted the population, people bought new labor saving appliances, and industries expanded all over the country. Harnessing the atom for peaceful uses became a national priority. Our company built the first reactor to generate electrical power from nuclear fission in Idaho in 1951. Having proved the concept, my dad led the company in an aggressive push to get in on the ground floor of this potentially huge new industry. It stretched the company to its limits financially, just as Hoover Dam had done for my great-grandfather. With great determination and the skills of the Bechtel team, we succeeded, building the first commercial nuclear power plant in Illinois on a fixed-price contract, going on to a dominant role in the industry.

We were also expanding internationally in the 1950s: power plants in South Korea, pipelines and hotels in Europe, mines in South America.

That growing complexity was one reason why, when I was one of several executive vice presidents and Dad pulled me aside and told me that he felt it was time for me to take over as the head of the company, I told him, “No, not yet.” I honestly felt I was not fully prepared for the task; and frankly, I didn’t think he was ready for the transition either.

My answer didn’t bother my dad. He was patient. About six months later, he came back to me and said once again that it was time for me to

step up and run the company. This time we were both ready. This time I said, “Okay.”

My dad and I were different kinds of people. He dropped out of college to work for his father as a superintendent on railroad construction. I had formal education, engineering training, and I had attended graduate school. We did share the experience of raising young families on rural jobsites, he and my mom in a railroad car, Betty and I in a house trailer. We had both learned the importance of having trusted associates who could stay close to the work when we ourselves weren’t able to.

Still, Dad loomed so large as I took the reins of the company that it would have been easy to defer to him and allow business operations to carry on as if there had been no change in leadership at all.

Early on in the transition we reached a pretty good understanding of what he would do and what he wouldn’t do, and how he would support my leadership now that I was in charge. It wasn’t easy at first for either of us, but we got along fine. He was very supportive, but still hands-on in certain areas like some client relationships in the Middle East. He helped carry the banner of the business forward, and I did my best to build on the extraordinary foundation he had created just as he had done with his father when he took over a few decades earlier.

His own transition to leadership had been far more abrupt than mine, of course. One day his father was the president of Six Companies, active as ever, managing the construction of Hoover Dam; and then he suddenly passed away while on a business trip.

In that situation, the familial nature of our business helped to ease the transition of leadership from one leader to the next. There was a shared closeness and earnestness, and a sense of responsibility present that would not have been there if family wasn’t at the center of the business, and the business wasn’t at the center of our family.

Family was present in one way or another at every juncture in my life, as far back as I can recall. The family business permeated everything that we did directly on the surface, and on deeper levels as well. Some of the lessons and values I learned were shared in common by many of my family members.

My father communicated the importance of having a serious work ethic by living the example. Just being around the house and meeting

some of his business associates emphasized the importance of building personal relationships, of being accountable, honest, and trustworthy. I got to observe a lot of this as a boy while I was out messing around in the mud watching the big equipment work. What a way to learn to love the business!

At the time, I sure didn't think that what I was engaged in was some kind of learning experience. Even later, when I realized that, in fact, I had been learning in each of these situations, it didn't really seem that what I had experienced was the result of some kind of directed, intentional process. From the perspective of the boy who got to tag along with his dad and uncles to jobsites, it was just plain interesting, and fun. I didn't appreciate that I had been given a front row seat to one of the most essential and also least understood aspects of our business: witnessing the give and take of real-life relationships between senior people in our company and others. In our business, both internally and with our clients, the personal relationships made a big, big difference.

That's why I was pleased that my dad stayed on the board as the senior director when I took over the company. His strong business and personal relationships, built over decades, helped with some of our clients.

6

GO-GO DECADES / CHANGING TO SUCCEED /

A HOTEL OPENS THE DOOR IN ZAMBIA /

RAPID TRANSIT / AN ENTIRE CITY

6

WHILE MY DAD WAS STILL ACTIVE IN HELPING THE BUSINESS, it was now my responsibility to lead and manage it. The company was now too diversified in the industries we served, the number of clients we had, and geographically, to continue with organizational structures that had served us well. On that, my dad and I were in agreement, but I had to implement the changes.

We started by creating new systems to keep more detailed records and implemented a process to document and track senior management decision-making, so we could look back and see what we had done, when, and why. I simplified the organizational structure and clarified lines of responsibility. I also looked through the organization for up-and-coming executives who demonstrated they could handle complex projects and moved them up as quickly as they showed they could handle more responsibility.

This was a lot of change, and change makes some people uncomfortable. A big part of my job was explaining why we were doing these things. I told everyone that continual change was an essential requirement for future success. If we had been satisfied with the status quo, we would have lost many great opportunities. Moreover, we would have eventually found ourselves running behind competitors as our momentum lagged. This was not a “sit-still” business.

The 1960s were largely a time of economic expansion, and we were well positioned to take advantage of it. Bechtel built petrochemical plants and pipelines around the world. We engineered and constructed mines and mills in such remote locations as Papua, New Guinea to provide raw materials for recovering industries in Europe and Japan and new

ones elsewhere. We helped commercialize new technologies to unlock resources such as the tar sands in Canada, and the conversion of seawater to fresh water to enable development of a tourist industry in the Virgin Islands.

We were also able to use small jobs as a “calling card” for entry into new markets. For example, when I took the reins, we had started building hotels in places we had never worked before. The chairman of Pan American World Airways, Juan Trippe, had asked my dad to help him finish a couple of Pan Am’s Inter-Continental Hotels in countries that neither my dad nor I had ever visited. Fixing troubled projects was something we could do, but these were small jobs. Still, we decided we might use this opportunity to introduce ourselves to new markets. And it worked.

In Zambia, for example, after we completed an Inter-Continental that was the first of its kind in that country and that was brought in on time and under budget, we were asked by government officials to build a new airport, then a refinery, and then additional projects. We ended up repeating this experience in a dozen other countries including Sri Lanka, Congo (then Zaire), and Romania. A lesson I learned from this was that there’s nothing as good as letting the quality of your work speak for itself...but make sure people see it.

You could call the 1960s and the 1970s “go-go decades.” Building on its experience, the company’s workload steadily grew into what came to be known as “megaprojects.” These were complex, multi-dimensional jobs that required us to bring our best expertise in many areas. Mass transit systems were one example. We played leading roles in creating entirely new regional mass transit systems in the San Francisco Bay Area, the Washington, D.C. region, and elsewhere. Tunneling, aerial structures, state-of-the-art computerized train control, even underwater work—these were breakthrough systems that required exactly the kind of systematic, detailed management disciplines that we had already put in place.

Similarly, energy projects were becoming increasingly complex as demand soared around the world. Here again, Bechtel’s robust management systems and ever-broadening skill sets positioned the company well for the work. The company was a leader in both nuclear power plant construction and offshore oil facilities.

Energy was at the heart of the largest Bechtel project ever—Jubail Industrial City in the Kingdom of Saudi Arabia—considered the largest civil engineering project of its era. It grew from a tiny seed my dad planted with King Faisal in 1973 after noticing all the natural gas in the Saudi oil fields that was being flared (burned off) because there was no economical way to get the gas to market from its remote location. My dad, still active in the business as senior director, suggested to the King that he bring the market to the gas instead, by building an entire new city on the shores of the Arabian Gulf, including such facilities as refineries, petroleum and petrochemical plants, and steel, fertilizer and aluminum production facilities—all fueled by the natural gas that would otherwise be wasted.

Thus began a project spanning well over a quarter century, largely managed by Bechtel, right down to the training of Saudi nationals to operate the city and its plants themselves. Today, Jubail is home to more than 200,000 people, and its industries are very important to the Kingdom's future.

As the 1970s neared their end, Bechtel was stronger than ever. For the preceding 25 years, we had grown at a rate of 10 to 20 percent a year. It required constant attention to stay on top of this growth. Fortunately, we had developed a resilient management structure and processes to do that. We would soon need them for a different reason.

7

EXTERNALLY ORIENTED INTROVERT / OPEN /
THOSE DECISIONS / CONTINUOUS IMPROVEMENT /
THE RIGHT SORT OF ATTITUDE / ALL-TIME HIGHS /
RECESSION / WHAT WE HAD TO DO

7

WE EMPLOYED PSYCHOLOGISTS AND OTHER MANAGEMENT SPECIALISTS TO serve as consultants and coaches for Bechtel senior management over the years. They provided insight and assistance to managers at several levels of the business, with a focus on business practices and personnel issues.

A psychologist who worked with me early on in my career was from the University of California at Berkeley. He labeled me an “externally-oriented introvert,” and his detail of what that analysis meant was a help to me as I continued to learn and develop leadership skills. Effectively dealing with people issues is a major determinant of one’s success in our business. Some of our people come to the process of relationship development pretty naturally while others struggle to master relationship skills. Some managers see everything in black and white. Some are too tolerant; others aren’t tolerant enough.

Tapping the skills of outside professionals has been a longstanding tradition at Bechtel. If we didn’t have a particular expertise in-house, we brought it in. For example, my dad successfully encouraged his uncle, John Simpson, to take early retirement from his position as a senior officer at Schroeder Bank in New York. Dad wanted John to bring his expertise out West and become Bechtel’s finance chairman. Dad worked on him for years. When John finally got to Bechtel we didn’t even have so much as a finance committee in place. John set to work as finance chairman and provided us with valuable counsel on the management of our financial affairs.

It is not always easy making decisions about outside consultants or utilizing the recommendations they make. You need to apply your own wisdom and experience to determine whether to listen to them or to say to yourself, “Well, I know more about the business than he does,” and

take a pass on their advice. The ability to discern when to listen and when to pass is a judgment skill that comes only with time and experience.

Some of those same skills come into play when making decisions about people inside your organization and whether they should advance, stay or leave.

You must analyze the situation at hand, take in the data, and then observe enough of what a person is doing—or not doing—in order to make an informed decision. It's true that your intuition is involved as well, but you are relying primarily on the actual experience of working with a person over a stretch of time and talking with other people in the organization who are also around them.

In short, you must get all of the input that you can. As the leader, it's up to you to make the final call. Sometimes that call is really obvious, but not always. There are times you evaluate the situation and say, "That guy is really good where he is, but if he were to advance he would fail." It can also mean telling somebody they'd better leave. That's not pleasant; but, if they were not doing their work correctly, they usually knew it. Sometimes a person wanted to take on more than they were capable of handling, or to take early retirement. In some cases they just lost interest in the work. Whatever the situation, though, we had very few disputes around laying people off, particularly at the senior levels.

Layoffs aren't the only situations that present a leader with personnel challenges, of course. It is every bit as important to inspire the people doing the most basic entry level labor out in the field as it is to inspire the people working in top management. If you know what your people should be doing and they do their job well, compliment them. On the other hand, don't hand out praise where it isn't called for. If a person is experiencing problems on the job he is probably acutely aware of the fact. That doesn't mean you should overlook those problems. Sometimes by simply saying, "Well, I know you're working on it, let me know if I can help," you can open up lines of communication that can lead to progress, even in situations that look to be impossible.

Leaders at Bechtel were setting an example with their people skills long before I took the reins and was in a position to truly influence others myself. The truth is that the growth and health of the entire enterprise is contingent upon a successful program of continual leadership

development. People in management have a responsibility to bring along their successors, and to create the most open environment possible.

This matters so much to us that we don't leave it to chance. In practice this includes a process of formal performance reviews where a supervisor or an executive sits down with his or her subordinates and provides feedback on their performance. These are usually two-way dialogs; and if they are done right, the person being reviewed will have a chance to respond to suggestions, comments or criticisms. In my experience the information is accepted the right way if it's given the right way—fairly, honestly and directly. This process helps to provide a pretty good reading of how the person is doing at his or her job, and how and where he might improve. Every person in the organizational hierarchy can benefit from striving to improve, from the head of the boardroom to the guy sweating it out under the desert sun on a job site. We strongly believe in the importance of embracing a philosophy of continuous improvement as an organization and as individuals.

In a certain sense, leaders have an even greater responsibility in this area because they are more visible in the organization. Leaders have to keep trying to do things better, to keep looking for where they might be missing the boat.

That means eliminating the things you are not doing properly, and striving to get better at the things you know you are not doing as well as you could.

A leader has to have the right sort of attitude to excel at all of this and to be willing to shift responsibilities around so that the organization gets better. A positive approach is an important part of the leadership attitude: positive actions tend to gain more traction than negative ones.

An effective leader must also recognize reality even when (especially when) the reality at a given moment might be less than pleasant. No one in a leadership position will experience permanently ideal circumstances. Sometimes factors outside of your control make it impossible to conduct business as usual. When that happens, a leader must be willing to make the changes that are in the best interests of the health of the business no matter how painful those changes might seem at the time.

We were put to the test—and how—in that regard in the early 1980s. For the preceding 25 years, we had recorded fast and steady growth,

reaching all-time highs in revenue and productivity. However, the broader worldwide engineering-construction market began experiencing a recession. Also, the accident at the Three Mile Island Nuclear Plant in Pennsylvania sent chilling winds through that industry. Bechtel didn't build that plant, but because of our expertise, we were called in to clean it up. Public fear about nuclear power grew, though not based on facts, in my opinion. Still, new nuclear plant orders dried up.

That, plus the general recession inevitably made a big impact on our business. By 1983 the company was faced with a substantially reduced workload and we had to make painful layoffs. We couldn't justify keeping on many of the people that had been added to the payrolls as we were experiencing the greatest boom in the company's history. The revenue just wasn't there. We had to find ways to cut costs while also making sure we kept our key people. Some of the key people had to be reassigned to work that seemed menial or maybe didn't use their full capabilities; but it did keep them on the payroll. At the same time, we took on many more jobs of a much smaller size from a greater number of clients—jobs that we wouldn't have dreamt of taking on just a few years earlier. We entered markets that we hadn't worked in before. All of this meant that we worked harder and dealt with greater complexity for less revenue; our smaller workforce was stretched thin.

We had to do what we had to do. We believed that eventually things would turn around, and we wanted to keep our team together so that when it happened we would be ready to tackle new business. Through it all, though we were faced with a drastic reduction in workload, there was no question that we had to stay profitable, stay in the black, and stay healthy. We battened down the hatches and we toughed it out. It certainly was rough, and things got worse before they got better.

Despite the slow down, we were able to stay profitable through those lean years; and by the time the construction-engineering market hit bottom in 1988, we were ready to begin growing again. One thing is certain: we came out of those difficult times a smarter and more resilient company than ever.

8

PRUDENT COUNSEL / PRETTY HIGH-POWERED GROUP

OF FELLOWS / LASTING RELATIONSHIPS /

UP TO YOUR EARS / TOP QUALITY COMPANIES /

ABOUT OUR BUSINESS / CLOSE ENOUGH

8

AS THE YEARS PASSED, I came to appreciate the importance of the intelligence and loyalty demonstrated by those with whom I interacted in the business world. My father had placed a high value on loyalty. He went out of his way to build lasting relationships with people who demonstrated that value and that were uniquely qualified to offer prudent counsel. He was very involved with the Business Council, and once served as its chairman. I had a chance to join my father at some of the council events, and years later I became a member of the Business Council and also served as its chair.

Participation in the Business Council puts you in the room with a pretty high-powered group of fellows. People who run major businesses tend to be strong-minded individuals, and in the case of those who were on the council with me, good citizens as well. Being around people of that caliber, people who were really accomplishing things on a big scale, was as interesting to me as it was enjoyable. It was satisfying just being with these leaders, listening to them, and even trying to help them when it was needed. Of course, just because a person is the head of a large business doesn't mean he or she was someone you were going to respect and want to stand with. Values matter.

I was also invited to serve on several corporate boards. It turned out these experiences were probably the most informative of my business career.

My first outside board position was with Industrial Indemnity, one of the first firms to specialize in providing workers' compensation, where my Uncle Ken served as chairman. It was an interesting opportunity. Their business was strictly finance and insurance, but I learned a lot about

the inner workings of a large enterprise. Like all the outside boards I served on, it was a top-quality company, headed by outstanding people.

I served on the Crocker Anglo National Bank board, but I wasn't getting enough exposure to what they were doing to feel comfortable advising them. I dropped off that board after four years although several of the people I met during my time there continued to be important relationships for me moving forward.

Gardner Simons asked me to join the Tennessee Gas Transmission (later Tenneco) board. That was fascinating because they were in the pipeline business and Gardner was trying to expand beyond that. He was a real go-getter, a very stimulating guy to be around. However, I finally resigned from my position on the Tennessee board because I wasn't able to attend enough of the meetings, most of which were held in Houston, Texas.

For five years I served on the board of General Motors, which I really enjoyed. I eventually left that board because there was a potential interlocking director problem. GM wanted to get in the project management business for rapid transit, a business Bechtel was already in. It was a significant part of our business, and our business had to come first. The government didn't challenge us on the potential conflict, but I felt a challenge might be coming, and I didn't want the government worried about me or for me to be worried about our business. I've still got a warm spot in my heart for several of the people I got to know serving on the GM board.

IBM was another company on whose board I served, this time for about 17 years. When Lou Gerstner succeeded John Akers as chairman and CEO of IBM, he wanted to reduce the size of the board. Since the monthly board meetings were in New York and I was up to my ears in our own business and had only had two more years to go before I would reach the mandatory IBM board retirement age, I said, "Well, hell, I'll be one of those that leave."

I learned so much over the years from the people with whom I sat on those boards. I felt like I had more in common with those people than with a lot of other folks, in part because most of those with whom I served were as involved in their business as I was in ours. However, you've got to be careful when accepting something like an outside director position. If you get overcommitted trying to resolve issues related to that other

company and don't pay careful attention to pressing matters in your own business, things in the home office can fall by the wayside.

In part, that is because of the nature of the engineering–construction business: you're always running out of work, so you have to constantly be looking for and winning new jobs. The relationships you have built over time come into play here in a big way, because clients who know and trust your work are interested in working with you again and will provide introductions and references to new clients.

There are many different kinds of contracts in the industries Bechtel serves, often driven by client preferences. Some contracts are big and open ended with negotiable terms. Others are fixed-price jobs. We always preferred incentive-type contracts; even if it was a reimbursable cost job we preferred to be measured on our performance, on keeping to cost and schedule—in short, on the overall quality of the job that we did.

We had very few problems with quality on the job, but on the schedule and cost side we could sometimes run into unforeseen problems. Here, too, relationships mattered: I tried to visit all of our major job sites in person, and to get to know our top clients. My associate partners handled many of the day-to-day relationships and negotiations, though I stayed plenty involved.

I was able to focus on being close to what the clients were saying, and then measure the performance of our own people to be sure that what I was hearing from our team was the unvarnished facts. We didn't have a lot of issues getting the straight story on any given job situation, but it is a hazard in any organization if the people down the ranks feed you some news that is polished up to look better than the facts. There is no substitute for having several ways of being kept posted on what is going on in the work, including straight information on how the clients are looking at your performance. The best way to accomplish that is to make sure that you have good relationships with the clients in the first place.

9

MY BEST FRIENDS / CLOSENESS / MORE THOUGHTS

ON THE IMPORTANCE OF RELATIONSHIPS /

I WAS LUCKY / I THREW MY HAT IN THE RING /

MANAGEMENT VERSUS LEADERSHIP / INSPIRATION /

SINK IN / THE PEOPLE AT THE TOP /

THOSE WITH ALL THE ANSWERS

9

MY BEST FRIENDS HAVE ALWAYS BEEN PEOPLE THAT WORK FOR BECHTEL. Some of our clients also are my very good friends. That closeness makes business a lot easier. We understand them—they understand us. They get exposed to our business practices and ethics in the field in addition to our capabilities on jobs. I think that combination gives clients greater confidence in us.

When you are invited to go on outings and be at social gatherings with the leaders of companies you are doing business with, you know that your personal relationship with them is solid. Those relationships mean things will go better in good times, and they'll help you get through the tough times, too. Bechtel works with some pretty big companies on substantial jobs, so when a problem arises, it is crucial for both parties that it isn't allowed to fester. I was grateful for the occasional phone call from a leader of a firm we were working with who would say, "Steve, you guys got messed up out here and you better pay attention to it." If there wasn't already a solid relationship in place, that level of honesty wouldn't be present in the interaction, that call wouldn't happen, and a problem that could have been addressed head on right now could instead become a major issue.

I also learned that if you want to do something really well, a good place to begin is by making sure that you enjoy it. Sure, you may tough out a job because you need the paycheck, but at some point, if you aren't happy and satisfied with the work you are doing you will walk away from it if you can. That's an important lesson for young people to learn. I advise them to choose a business or industry that they think is interesting, challenging, and that provides good opportunities. And then? Enjoy it!

Also, if you want to succeed in business, you are going to have to work some pretty long, hard hours. It is difficult to get ahead if you are clocking in at nine and out at five. When you are enthusiastic about what you are doing, those extra hours don't feel like such a burden.

I was fortunate. I enjoyed the work I was doing right from the start. As a boy I loved just watching the activity going on around me. I spent years listening to people talk about the jobs they were working on, or working on together, or wanted to work on together. It was stimulating even if I might not have been able to articulate exactly why. I really wasn't thinking about what I might do when I grew up. I was just soaking it in.

The day did finally come when I decided to go into the engineering and construction business. I threw my hat in the ring with everything I had, and over time I was promoted steadily through the ranks to positions where I eventually had some serious responsibilities to manage. When the time for assuming those major responsibilities arrived, I found myself calling upon everything that I had picked up around the dinner table all those years ago.

As I took on increasing levels of responsibility in the company, I was confronted with the kind of challenges that are unique to senior leaders. In each of these situations it was important for me to distinguish between the roles and activities that comprised company management, versus those that comprised company leadership. There is some overlap in the two roles, to be sure; but management is more concerned with the mechanics of daily operations, that is, doing things right, while leadership looks over the horizon and makes sure that the organization is doing the right things.

Some leadership activities are concerned with larger and sometimes less-concrete issues—things like affecting a culture shift within an organization, trying to help in the community, or providing moral leadership, which is doing what is right for the greater good.

One of the most basic and vital aspects of organizational leadership often gets overlooked: that is the importance of inspiring your group as you give them direction. It isn't enough to merely give direction, even if it is clearly the right direction; you must also inspire those you lead so that your directives will be carried out in a manner that is satisfactory to you and the company, and in a way that reflects the vision of the greater good.

It is pretty hard to get people to follow along if they don't think you know what you're doing, which is why your own performance matters more than anything. That includes instilling confidence in others and earning their confidence in you. The way you conduct yourself in the industry and in your organization and the way you recognize talent are all directly correlated with the level of confidence the people around you have in you.



All along the way I was a “hands-on kind of guy.” That perspective sometimes made it difficult for me to participate in certain situations. In fact, I chose to leave a couple of boards on which I served as an outside director because I didn't feel close enough to the details to be able to grasp what was really going on though I'm not sure others would have had the same reservations.

The Bechtel company is not publicly traded, so we did not have the same requirements for outside directors and feedback as the public companies on whose boards I served. I don't believe that I ever felt the need to be reassured about company operations or performance by outside people. Receiving the reassurance of the people in the company that we were doing the right things, however, was pretty darn important.

The fact that I was in leadership roles in our company did not mean that I had all of the answers in hand myself, either. I would be suspicious of any person in any organization that purported to have all of the answers. I figured out who I needed to listen to, and who I shouldn't listen to, and tried to spend my time receiving the counsel of those with helpful opinions. Good leaders learn to respect people who ask for advice when they need it, and leaders also learn who doesn't want advice even when they probably should be asking for it.

10

RECREATION, GROWTH AND REFLECTION / ALASKA
AND NEW ZEALAND / THREE GENERATIONS OF OUR
FAMILY / DUST DEVIL'S SHOOT THE MOON /
SUCCESS IN ANY ARENA

10

THE BUSINESS WORLD WAS NOT THE ONLY PLACE I learned the importance of building and growing strong personal relationships. As much as I have learned directly from people in leadership positions, I have also gleaned much from observing the wider world. In particular, recreation has provided me with many opportunities for growth and reflection.

I love being in the great outdoors. I've always loved it. Our company has been blessed with interesting projects all over the world, and in the course of getting the work done on this continent or that continent I found that there is usually some pretty good fishing wherever the job might take me. When possible, I would squeeze in a few extra days to do some recreational fishing.

I have many fond memories of fishing with my family members, too. When I was a boy my Uncle Warren took me fishing in Colorado. I remember watching him fish and how much I enjoyed just being there with him. As I grew older, being out in nature hiking forest trails or teasing a trout onto my fly-fishing line in a cold, clear stream provided me with time to think, reflect, and relax.

In my book, some of the best fishing in the world is in Alaska. We have done several jobs up there, and I have had occasion to visit many times. I found New Zealand to be an awfully good place to fish as well. Bechtel has done big jobs down there, including the innovative Gas-to-Gasoline Project on the North Island, where our son Riley worked for a while and fit in a little weekend fishing.

As much as I have enjoyed a lifetime of fishing, for me it was hunting that provided the best opportunities for fun and camaraderie. My first duck-hunting trip was with my Uncle Warren and one of his buddies when I was seven. We went to a duck club Warren belonged to in Northern

California, and it was a wonderful introduction to bird shooting, which became one of my favorite pastimes. My family joined in, too, and we have been fortunate to be able to spend time together at shooting clubs all across the country. Three generations of our family get together to go hunting. That's pretty special. Of course, we love to eat the birds we take—ducks and pheasants, quail and dove.

Another aspect of bird shooting that has always appealed to me is the interaction between the hunters and their retriever dogs. At the end of a pheasant hunt I fell into a conversation with some of the hunters who were there with their dogs. That exchange piqued my interest in retrievers and their training, and I attended a few field trial events to learn more about these remarkable dogs. Pretty quickly I was hooked. I purchased a young dog with the help of a trainer and his assistant in Seattle, and just like that I started going to field trial events.

Field trials are usually held over three-day weekends. They typically include four different events designed for the differing levels of experience and age of the dogs. The "Derby Stake" is for dogs up to two years old. The "Qualifying Stake" is the intermediate testing level, and the toughest tests are known as the "Open Stake," where a professional handler or an amateur can run dogs that have qualified for this level of competition. Finally, there is an "Amateur Stake," which is restricted to amateur handlers and the dogs that have qualified. While many amateurs choose to run their dogs in an Open themselves, I worked with a professional trainer and usually let him run my qualifying dogs in the Open. He also started my young, inexperienced dogs at the Derby level. After they got going pretty good, I would run them in the Amateur.

I really took to the sport, and enjoyed success right away. At one event a week before the US National Trails began, my trainer took first, second, third and fourth place with four of my dogs. My top dog was Dust Devil's Shoot the Moon, or "Shooter" for short. He was the High Point Open dog in the United States four different years, and was eventually elected into the Retriever Field Trial Hall of Fame.

Field Trials are a great sport. Once you get where you halfway know what's going on, you can start training with a pretty experienced fellow who can show you the ropes. Amateurs do all of the judging, and most of them run dogs themselves when they don't have judging responsibilities.

Events are held all over the country. On any given weekend there are as many as two-dozen trials going on. To be successful you have to run your dogs in a lot of events, and that can be pretty time consuming. You also need to train your dogs during the week. It's a lot of work and it takes a lot of time, but there is something so gratifying about working with the dogs and watching them grow across the years. Retrievers are smart, competitive, friendly, and loyal animals. A man could not ask for a better dog.

I ran Shooter until he was 10 years old. Then I retired him and gave him to my son Gary who enjoyed hunting ducks and happened to be in need of a good dog. Gary agreed not to run Shooter in field trails again. He had earned his retirement.

11

A PRETTY UNUSUAL FAMILY / DOING SOME THINGS

RIGHT / GENERATIONS OF BECHTELS /

“THE ORGANIZATION WILL RUN YOU OFF” /

TOP QUALITY TEAM / A PROPER SPEED

11

I THINK WE'RE A PRETTY UNUSUAL FAMILY, particularly in the way that generations of Bechtels have remained close to one another.

Betty and I raised our children to be independent. We felt that every member of our family ought to have his or her own life and be able to make up their own minds about what they wanted to do. Like all parents, we hope we have been positive influences on their character and values. We make no requirement that they spend much time with us, though, to our great delight we seem to get together quite often.

It was important to us that our children be exposed to cultures and places outside their own experience when they were young. We made a point of taking family trips all over the world. We went as a family to the Middle East, visiting some of our jobs there. We also explored here at home, experiencing great natural beauty while hiking in the Sierra and the Rocky Mountain ranges. Some of our longer treks together were done on horseback with pack animals carrying the tents and supplies. On one memorable trip before any of the children were married we explored the headwaters of the Yellowstone River, taking care of ourselves for a week. We all made it out alive.

On the business front, as well, it is fair to say that our family is pretty unusual. You won't find many companies that have gone on for more than two generations under family ownership or control. We are now in our fifth generation of family ownership. They are doing a great job, but, as it was with every generation of Bechtels who came before them, they were given no promises of where they might go, or that they would ever get to the top simply by virtue of the spelling of their last name.

From the standpoint of things that can help keep a family together, it doesn't hurt that we are in an exciting, satisfying and rewarding business,

or that we can point to the many benefits that the Bechtel company has delivered to communities around the world. Across the decades we have constructed dams, tunnels, power plants, airports, ports, rapid transit systems and many more infrastructure projects. As we sit here today, my grandchildren are enjoying the fruits of projects that their great-great-grandfather Warren worked on including Hoover Dam, that to this day supplies water and electricity to western states. It is wonderful to think that our children, grandchildren, and generations of Bechtels to come can link themselves directly to the family and the work it has done, extending back for well over a century.

Both of my sons worked for the company during the summers. Following college graduation I told each of them, “I will help you get your first permanent job at Bechtel. If you can’t do the work, I won’t have to fire you—the organization will run you off.” I’m glad to say that they both got along pretty darn well. Our oldest son, Gary, worked for Bechtel for 22 years. He was president of Bechtel Civil as well as a director and senior vice-president of the Bechtel organization by the time he took early retirement. Gary had a NASCAR race team on the side, and that’s where he turned his attention after retirement. Gary has been a great help to me in recent years by heading up our California Conservation Fund and managing its more than 4,000-acre wetland restoration program.

Our son Riley joined Bechtel in 1981, and he has been running the company successfully since 1990. As I write this in 2015, Riley continues as chairman of the Bechtel organization, while his son Brendan has been named president and chief operating officer of the Bechtel organization. They are the fourth and fifth generations of our family to lead the company.

Our family has been able to achieve continuity with the business from generation to generation for several reasons. First, our children went to work in our business early on. They knew I enjoyed the work, and they found that they enjoyed it too. They also knew my dad who was a strong example of someone who really lived the business. The effect of those factors (in addition to meeting and working with a lot of Bechtel people who they liked) helped our sons to develop a real appreciation for the business. That was how it worked for me when I started out, and how it worked for my father when he went to work for the company his dad had founded.

Another reason we have succeeded as a family company has to do with the relationships we build with our key employees, clients, and vendors. Through the Bechtel generations, we have worked diligently to keep a top-quality senior-management team assembled by sharing the financial rewards of our work in a way that builds loyalty and commitment. Similarly, we have built lasting relationships over the generations with numerous clients and vendors because we have continually performed and delivered results, and because we are honest and trustworthy in our dealings.

I do not say that as a boast; if we didn't have an impeccable reputation for being honest and trustworthy, our family company wouldn't still exist over a century after its founding.

This combination of a strong, committed management team and good client relationships is essential for enduring success.

The megaprojects we specialize in almost inevitably face some kinds of problems due simply to their size and complexity. Sometimes clients' desires or completion schedules change. Sometimes they add things that change the scope of the project, or, after a project has begun they may want to remove some parts of the job. It can be a real challenge to keep everybody in the same boat while keeping all of the parts of the project moving along at a proper speed. To accomplish that, field management, project management, and executives with oversight responsibility for these projects must be on top of their jobs—and they must have good relationships with their client counterparts. By working through any potential issues transparently with a client, little problems tend not to become big problems and all the relationships that are connected with the job are mutually strengthened.

Finding the proper speed for jobs is an important consideration. It is vital in construction work that the job be finished as soon as possible—without wasting money. To do that you must balance the cost of speed on a given job with the value of the completed project. The client will have a profit potential in the project; they have an interest in seeing it completed since they are accruing interest on the capital invested during construction.

Some jobs can be sped up quite a bit by spending more money on them, but the client and contractor both need to understand whether the

benefit of completing the project sooner is really worth the additional cost—which in some cases is a hell of a lot of money. Then there are jobs that can't be sped up much at all because certain critical path items, such as delivery of specialized equipment, is beyond the control of both the client and the contractor.

Ascertaining the proper speed for a given task or function involves understanding the processes of design, procurement, and construction, what areas you have the most control over, and, of course, the cost benefit of making the change. There is no simple formula and no simple answer.

I mention this because I believe there is a proper speed for everything in our lives as individuals. I have been a high-energy person all the way through. I subconsciously apply things I learned many decades ago in school, as well as lessons from business and recreation, wherever they are relevant. Yes, I have been blessed with quite a variety of learning experiences, and at the same time I know that not everyone gets the chance to have the breadth and the depth of some of the things that I have been able to enjoy. As a result of my experiences, I learned that there is a unique and proper speed that is right just for me. I aim to continue moving along at just that speed.

12

GOOD CITIZENSHIP / AN OBLIGATION / HONESTY /
HARD WORK / A FUNDAMENTAL CHARACTERISTIC OF
FREEDOM / A WAY OF LIFE

12

I BELIEVE THAT GOOD CITIZENSHIP IS KEY to the development of good societies. A good citizen is someone who takes care of his or her own interests and needs, while also paying attention to the greater community, state, country, and world in which he lives. Citizenship begins at home. Anyone can help to make a positive change in his or her local community, and it doesn't always take money to do that. There are all sorts of things you can do right in your own backyard. It starts with helping where you can, with what you have to give, especially with your time and energy.

One of the things that our personal foundation is working on is character and citizenship education. In my mind, the two go together. Sadly, the subject of civics is no longer taught in most high schools. That is one of the reasons that many Americans seem to act as if they are just out for themselves, and that they are not interested in what the community, their neighbors, or other people in their country might need.

In a broad sense, I believe that we each have an obligation to do what we can to support what is in the best interest of the nation we all share. That is the essence of good citizenship. Unfortunately, it seems that good citizenship is in short supply in our country today. It seems to me that there are more people who don't appreciate the wonderful things we have than there are people who do. Too many people are busy tearing down rather than working to find ways to improve things. It is a pretty deep-seated problem, I'm afraid.

I am glad to say that this is one of those places where Scouting stands in the gap. Teaching citizenship is one of the things that Scouting does really well. Beyond the formal aspects of what it means to be a good citizen, like emphasizing the importance of voting, Scouting also advocates for

the development of character, hard work, honesty, a sense of civic duty, and a pride in one's community. That is a pretty complete definition of citizenship.

My sense of values, including my views on the importance of citizenship, began with the influence of my mother and my dad. Scouting was also an important influence in the development of the values by which I live.

I believe in honesty, hard work, and respect for people's individual rights. The importance of freedom and the right of every person to choose what he wants to do with his life is central to how I see the world.

I also believe that if your relationships with people are not based on honesty, you have nothing. If you do not trust someone there is no value to anything he says to you, and therefore no basis for any conversation or exchange between you.

It is also my belief that if a person is not willing to work hard, he is not entitled to the largesse of our society. You've got to work for what you receive, and if you expect to receive anything of real worth, you are going to have to work hard. The good news about hard work? It gets to be a habit. The rewards of hard work are many, and over time they will reinforce your decision to put in the effort and stick with it. Hard work really does become a way of life.

These are all values that matter to me. Of course, I don't expect everybody to agree with all of my beliefs; I respect people for having their own views, and believe that the rights enjoyed by every individual are a fundamental characteristic of freedom. People should be free to do things they want and can afford to do just as long as they do not violate the rights of others.

These values—my values—are not simply nice ideas. They form a framework for living that I have strived to consistently apply in every aspect of my life.

Strong personal values are the foundation of success, I believe.

On the occasion of my retirement from leadership at Bechtel, I spoke about what personal success means to me. This was the list: 1) have an outstanding character; 2) continuously strive to improve your personal performance; 3) be a team player; 4) be a positive, constructive influence, and be involved in activities around you, both inside your organization and in your community; 5) be open-minded, objective, and realistic—

accept change as a reality, recognizing that it offers opportunities; 6) be a visionary—focus on areas where your experience and abilities can be matched by few others, strive to foresee the industries and geographic areas that will offer the greatest opportunities for long-term profit, develop a competitive, innovative mentality, and create something new, uniquely suited to your organization’s strengths; 7) be a hard working participant; and 8) enjoy your work and show your enthusiasm for it. It will be infectious to those around you.”

13

FRUITS / BRIGHT / BETTY, AGAIN / TAKING CARE OF

MYSELF / PHILANTHROPIC THINGS / THE SUMMIT /

KEEP DEVELOPING / BLESSED /

WHAT I'VE BEEN DOING

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A CLEAR AND UNAMBIGUOUS SET OF VALUES has helped to guide our family across the generations. Today the Bechtel company is at an all-time high in global activity. Business is good. We have a solid organization headed by strong leaders. Our son Riley and his son Brendan, the fourth and fifth generations of Bechtels at the helm of the company, are doing an excellent job. I feel a great sense of satisfaction when I hear what the company is accomplishing. I believe the future for the business and for our family's role in it is bright.

My confidence in that bright future is based in part on my belief that as long as you continue to work at delivering the best possible service, utilizing the best help you can find, your chances of success are good, no matter what business you are in. That is what we did at Bechtel, and how we achieved the global status that we now enjoy. It wasn't just me, of course; the people in the organization I was privileged to lead for 30 years worked continually to improve. I'm proud of our people and our company. We built a solid foundation upon which following generations will continue to make their contributions. Bechtel has been blessed with some wonderful people.

I have also been blessed with the presence of wonderful people in my personal life, especially my wife, Betty. I was so fortunate to find her. It says a lot for her character that she went into our marriage knowing what she was in for when she married me. She happily tramped around the world with me on visits to jobs, spending time with Bechtel people and with clients—all while raising five terrific kids. Our children arrived within a span of just seven years, so it was an awfully busy time for her at home. I was working long hours and was frequently traveling, so Betty

had to do everything on the home front. I could not have had a better partner. After 68 years of marriage we are happy, working together and still plugging away. Our family now includes 16 grandchildren and 17 great-grandchildren.

I do what I can to take care of myself these days. I was lucky to have had healthy parents. I try to be halfway sensible in what I eat, and I get some exercise, though it's nothing like the exercise I used to get out in the field, constantly walking and climbing around on job sites. I used to do a lot of jogging, but I traded that exercise in for walking, which is kinder on the knees. Betty and I both use exercise equipment around the home, too. We do what we can.

Looking to the future, I will spend more time on philanthropic activities. Our middle daughter, Laurie, is president of our family foundation. She and our other children each have their own foundations which Betty and I have helped to support. I am proud of the fine job Laurie has done in developing the S.D. Bechtel Jr. Foundation as an organization, and strengthening the strategic focus of our grant making.

After my retirement we began devoting a lot of time to determining where funding would be the most helpful. Our approach is that the more hands-on we get, the more we will be able to figure out the best ways to achieve real change in our areas of focus. We are especially interested in STEM programs, particularly here in California where the public schools are running way behind in math and science education. We are also supporting character development, some health-care initiatives, and land conservation and water management programs in California.

Having traveled all over the world, I feel pretty certain that California has some of the most beautiful scenery anywhere. Millions of people come thousands of miles to see its natural wonders and man-made attractions as well. During my lifetime, California's population has grown from five million to 39 million, and it's still growing. This puts recreational lands under great threat. We've been able to purchase and restore some 4,000 acres of wetlands, equally divided between northern and southern California, to maintain a healthy environment for waterfowl for generations to come. We've also worked closely with a group called the Golden Gate National Parks Conservancy to restore natural lands right around the Golden Gate Bridge and make it accessible to more

people. I find the juxtaposition of this engineering and construction marvel against the nearly untouched hills ringing the entrance to San Francisco Bay to be breathtaking.

It is my hope that new generations will appreciate that natural beauty and structures needed to provide us the necessities of life can exist side by side. To foster that appreciation, our foundation added an environmental literacy component to its existing programs. The goal of this program is to enlist young people to become stewards of the environment, and to encourage them to become actively involved in support of environmental issues in their communities.

We've gotten more focused with our charitable contributions in recent years. We are careful about what programs we give to and how much we give. That's one reason I decided to get involved with The Summit, the Boy Scouts of America's national training center, high adventure base and Scout camp.

Our contribution to the Summit Reserve project in West Virginia is, by far, the biggest and best investment we have ever made. The Summit itself is symbolic of the Scouts and their mission. Intentionally locating the Summit Reserve in a setting that enables maximum attendance is also very smart and bodes well for the future of the facility and the future of the organization.

The Boy Scouts of America are doing a very good job of teaching young men the important attributes of citizenship and personal character, and it was very meaningful to us to be able to help them in their hundredth year as an organization. With that important milestone in mind we are pleased to be able to point at this great Summit project and say, "This is for the next century." As Scouting goes into its second century, we are building on the foundation, values, virtues, beliefs, and activities that made the first century of Scouting possible. I am convinced that this Summit and all of the activities that will be hosted there will attract even more boys to Scouting's positive message and values.

With continuing good leadership at all levels, the Boy Scouts of America can be expected to make even greater contributions to the country than they have in the past. I am very optimistic about what is ahead for Scouting, and gratified to know that they have such a strong base of support in the business community, which is so important for

funding and day-to-day leadership of Scout activities. I am personally indebted to the organization not only for what I learned as a Scout, but also for what I've learned in the years since that grew out of my Scouting experience. I know I am not alone in that feeling.

I want to encourage Scout leaders to keep up the good work, and I challenge the organization to keep developing. This is extremely important, now more than ever, because so much of what is going on in our country stands in opposition to the values and principles advocated by Scouting. Right now the Scouts are swimming against the current, but I thank God they are doing it. I believe that there are plenty of people of good sense out there and that once they realize that the government can never and will never do everything for them, they will get the job done themselves. Those people will find a home in the Boy Scouts of America.

I hope to keep active with what I'm doing for quite a few more years including being helpful to the Bechtel business to the degree I can. I also want to be helpful to our family, and to my foundation, which occupies most of my time these days.

I have been very fortunate to be able to spend my life as a builder. Being exposed to the engineering and construction business at an early age started me down a most productive and rewarding path. The help of excellent professionals along the way, along with values I learned in Scouting, from my family, and on the job, enabled me to contribute all I could during my tenure. Riley, Brendan and the senior management have the helm now, and from where I sit, they are keeping it straight and steady.

SOURCES

¹Interview with Stephen D. Bechtel Jr. August 2-3, 2012.

²Interview with Stephen D. Bechtel Jr. August 2-3, 2012.

³Interview with Stephen D. Bechtel Jr. August 2-3, 2012.

⁴Donald E. Wolf (2010). *Big Dams and Other Dreams: The Six Companies Story*. University of Oklahoma Press.

⁵Julie Pitta (August 1, 2003). "Building a new world: Behind the scenes with Bechtel". *World Trade*.

⁶*Building a Century: Bechtel 1898-1998*.

Contents of the sections written in Stephen D. Bechtel Jr.'s voice are sourced from the interviews conducted with Stephen D. Bechtel Jr. November 10-11, 2011, and from *Building a Century: Bechtel 1898-1998*.

