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Changing the Face of the Earth: The Morrison-Knudsen Corporation as Partner to
the U.S. Federal Government

by

Christopher S. Blanchard

A dissertation submitted in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Urban Studies

Dissertation Committee:
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Abstract

Beginning with reclamation projects in the western U.S., the heavy construction industry helped the federal government grow in size and sophistication in the twentieth century. The Morrison-Knudsen Corporation throughout the twentieth century represented one of the federal government's favored contractors. Following western reclamation projects, the U.S. federal government then used contractors to help move the U.S. economy out of the Depression, prepare for World War II, wage the Cold War at home and abroad, and win the space race. Thus, at key stages in United States history we observe the necessity of the U.S. federal government partnering with the heavy construction industry to achieve its policy objectives at home and abroad. Morrison-Knudsen was once the largest heavy contractor in the United States, participating in the construction of Hoover Dam, Pacific Naval Air Bases, Hanford Engineering Works, the U.S. Intercontinental Ballistic Missile System, and the Vehicle Assembly Building at the Kennedy Space Center.

Dedication

This work is dedicated to the memory of Daniel D. Huff, MSW and Professor of Social Work at Boise State University. Huff was responsible for getting me into the Honors College at Boise State, and into my M.A. program. Without his dedication as a friend and mentor, this dissertation and all that preceded it likely would not have been possible.

Acknowledgements

While scholarship generally represents a solitary pursuit, no one completes a project like this without a great deal of support from others. An incomplete list of folks to whom I owe a great deal of thanks includes:

At Boise State University my friends, mentors and colleagues Todd Shallat, Dave Eberle, and Melissa Lavitt.

At Portland State University Carl Abbott who took this project on late in his career and saw it through, and the rest of my committee.

Back on the home front, my friends and family in Boise who were always there to offer a kind word during the dog days of completing the Ph.D.

But most of all, credit goes to my wife Carol Crosswhite who agreed to this pursuit after I told her I'd never go back to school again, and then suffered through me flying to Portland every week for eighteen months to complete coursework – while I kept my job at Boise State University. My mood suffered; she tolerated it all.

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Introduction

Today in the small Tunbridge Township, which Harry Morrison left in 1902, fewer than 760 reside. All of DeWitt County, smack dab in the middle of Illinois, claims fewer than 19,000 residents then as now. In the twenty-first century when those with lofty degrees and sought after talents have sorted themselves into the most competitive and usually largest metro areas on the globe, Morrison followed a trajectory more in tune with his own era. Born in the Illinois hinterlands, Morrison in his early twenties preceded the wave of emigration to southern Idaho and literally built his way to wealth, power, and global fame.¹

Harry Winford Morrison, born February 23, 1885, joined the construction firm of Bates and Rogers as a waterboy at age fourteen. There pastures were not greener – but they would be with Morrison’s help. Morrison arrived in dusty Idaho not long after the passage of the Reclamation Act and joined the Reclamation Service. Familiar to most now through the writings of Wallace Stegner and Mary Hallock Foote, Idaho took full advantage of the 1894 Carey Act and the 1902 Reclamation Act. Making the desert bloom took not only horses and Fresno scrapers but also money and ingenuity, and even more importantly manpower.

While Harry Morrison was the first to decry ascribing the accomplishments of the firm he co-founded, Morrison-Knudsen (M-K), to himself alone, he was the not only the name but the driving force behind a firm that encompasses the story of the

¹ Robbins, William G. *Colony and Empire: The Capitalist Transformation of the American West*. (Lawrence, KA: University Press of Kansas, 1994), 141.

West. In *Empires in the Sun: The Rise of the New American West*, Peter Wiley and Robert Gottlieb begin and end their book with the story of “Six Companies,” the conglomerate of which Morrison-Knudsen was part, and which constructed Hoover Dam, among other engineering spectacles. Wilson and Taylor’s *The Earth Changers* tells much the same story. But it was *Time* magazine that elevated Morrison to global fame when it placed him on its May 3, 1954 cover. In the story, *Time* writers asked, “what man in history has done most to change the face of the earth?” They answered, “there is no disagreement. The man who has done more than anyone else to change the face of the earth . . . is Harry Winford Morrison.”² Morrison’s visage appeared on the magazine’s cover that month, white haired, square jawed, craggy-faced, imposed over an earthmover whose bucket held planet earth. *Time*’s writers wrote every bit as triumphalist as Morrison’s *Em-Kayan* staff, closing out their piece, “In the work of Harry Morrison and other U.S. construction men – America’s ambassadors with bulldozers – the world sees the U.S. at its best. They leave behind far more than they take home in dollars, and what they build is long remembered as an example of U.S. brains, energy, and good will.”³ The *Time* writers revealed the difficulty of heavy construction in a day and age when mechanized equipment was in its infancy, construction sites remote, and Home Depot did not exist.

Even as congratulations rolled in from friends, financiers, partners, and competitors, Morrison characteristically deflected the credit and attention from him,

² “The Earth Mover.” *Time*, May 3, 1954.

³ Ibid.

and gave credit to his employees. Here, he also hinted at the differences in M-K's corporate structure, contrasting with that described by Chandler.:

With a glow of pride that our company was singled out for the full-story treatment as an example of America's international construction industry, I must disclaim the overdramatized role attributed to me personally for achievements which cannot belong to any one man.

Of all the industries and professions, large-scale contracting for heavy construction is not, and cannot be, a one-man business. As printed here in the February memo on leadership, many companies have been founded by one or two individuals; but growth and continued success depend upon the process of choosing worthy assistants, who in turn carefully choose and train others, to build a self-perpetuating organization by combined, coordinated teamwork.⁴

Figure 1: Morrison on the cover of *Time* in May of 1954

⁴ Morrison, H.W. "President's Memo: Construction Is NOT a One-Man Business." *The Em-Kayan*, June 1954.

Time was not the only trade or popular publication to recognize Morrison and his company. When the American Public Works Association in 2000 asked for nominations to compile a list of the top ten American and Canadian public works projects of the twentieth century, projects in which Morrison-Knudsen participated took five of the top ten spots: The Hoover Dam, Grand Coulee Dam, the Federal Highway System, the St. Lawrence Seaway, and the Bay Area Rapid Transit system.⁶

Those superlatives stand out at any reader, but how does all this inform our understanding of history? Aside from Morrison's Horatio Alger-like life, and the impact Morrison-Knudsen had on the world's built environment, this story advances claims based upon well-known arguments in environmental history and western history, and makes contributions to urban studies and business history.

Environmental History

This dissertation extends Donald Worster's "hydraulic thesis" in three ways. First, Worster's *Rivers of Empire* argues that the subjugation of western waters "raises issues of world historical significance."⁷ Worster refrained, however, from defining that significance as this study attempts to do. For Worster the Western Empire resulted from the effective combining of capital, technology and social organization, and it occurred in the West in three phases: 1) *incipience* which began with the Mormons in 1847 and ran to about 1890 when private corporations under the Carey Act mostly failed in subduing the desert; 2) the era of *florescence*

⁶ American Public Works Association. "Top Ten Public Works Projects of the Century," 2000. <http://www2.apwa.net/about/awards/toptencentury/default.htm>. Par for the course, the APWA failed to recognize any of the builders of these works.

⁷ Worster, *Rivers of Empire*, 59.

beginning with the establishment of the Newlands Act and the creation of the U.S. Reclamation Service within the Department of Interior; and, 3) the era of *empire* “extending from the 1940’s into the foreseeable future, the two forces of government and private wealth achieved a powerful alliance, bringing every major western river under their unified control and perfecting a hydraulic society without peer in history.”⁸ However, this study argues that the Western water program represented only a trial run for the federal government, which ultimately used heavy construction as a means to implement international policy, fight the Cold War at home and abroad, develop a post-War consumer culture, and win the space age by being the first nation to send men to the moon.

Second, in Worster’s schema of the “power elite” responsible for creating the hydraulic society, the contractors rate barely a mention although without them reclaiming the arid West would have been impossible. Worster wrote that “A culture, including that of capitalism, grows amorphously, anonymously, out of particular historical circumstances, out of particular environments, and in that process of growing up sets up its own distinguishing structure of power.”⁹ What I attempt to show here is that the drivers of the culture of capitalism were anything but anonymous – contractors like Morrison played a well-defined role. Worster did however acknowledge the fact that:

this West would be from the outset an “industrial” order, giving rise to “captains of industry,” home-grown or imported versions of men like Andrew Carnegie, who were taking charge of the country generally. The task of settling the arid West, like that of creating a technological

⁸ Worster, *Rivers of Empire*, 64.

⁹ Worster, *Rivers of Empire*, 283.

society, was too awesome for ordinary people using ordinary skills to carry out; they must therefore “combine under the leadership of the strongest.”¹⁰

But for Worster, like scores of other writers of Western environmental history, those captains of industry go mostly unnamed except to reference an undefined agribusiness elite. Additionally, Worster and others ascribe the taming of the West’s harsh environmental conditions to an all powerful, learned, well-financed and organized federal government. That story is partially true. But private contractors like Morrison-Knudsen largely carried out the task of harnessing the environment leading to the settling of the West. M-K President John Bruce “Jack” Bonny in 1962 described Morrison-Knudsen as “a company which makes a business of competing with nature.”¹¹

Third, Worster ascribes the expertise to actualize the hydraulic society to federal agencies such as the Bureau of Reclamation. “In the American West,” wrote Worster, “the federal government through its Bureau of Reclamation has put up most of the capital. It therefore exerts enormous leverage over local destinies. When that same government also came to supply most of the hydraulic expertise, it gathered into its hands another means of control.”¹² In actuality, private sector contractors executed the construction and design of not only irrigation facilities but later infrastructure of all kinds. It was their expertise which bureaucrats leaned on throughout the course of history as this paper documents. The most important thing

¹⁰ Worster, *Rivers of Empire*, 12.

¹¹ Bonny, John Bruce. “Fifty Years of Construction Progress.” Presented at the National Newcomen Dinner - National Newcomen Society in North America, New York, NY, November 14, 1962.

¹² Worster, *Rivers of Empire*, 52.

the federal government contributed to Western settlement was capital. That capital eventually freed the likes of Morrison-Knudsen from private sector, eastern capital.

Contracting firms did develop that expertise *as a result of government contracts*, employment or education. Ross Thompson studied 1,123 innovators listed in the American National Biography and the Dictionary of American Biography. “Engineers (including metallurgists) made up 46 percent; civil engineers, including sanitary engineers, construction engineers, and military engineers (who typically engaged in construction) constituted almost half the engineers.”¹³ His study showed that most prevalent among those who learned from government were heavy construction operators who performed civil engineering and construction projects for government entities. Even Worster agreed to that point: “The contemporary engineer is the best exemplar of that power of expertise.”¹⁴ For Morrison-Knudsen and Harry Morrison, learning on government jobs set the stage for future success – but the expertise at the end of the day remained with the private sector, and not primarily with the Bureau of Reclamation, Army Corps of Engineers, or Air Force Ballistic Missile Command, which primarily acted as financiers and contract managers. Much of the nation’s Cold War defense arsenal such as the Intercontinental Ballistic Missile bases that dot the interior of the country and much of the space program’s infrastructure were built on the fly by

¹³ Thomson, Ross. “The Government and Innovation in the United States: Insights from Major Innovators.” *Business and Economic History On-Line* 10 (2012).

<http://www.thebhc.org/publications/BEHonline/2012/thomson.pdf>.

¹⁴ Worster, *Rivers of Empire*, 57.

private contractors like Morrison-Knudsen, and often made more complicated by changing management practices within the federal government.

As Wiley and Gottlieb noted, “Working with the Reclamation Service, the Six Companies had taken the great western engineering tradition almost beyond “the realm of reason.” The Six Companies and the Reclamation Service had laughed at the logic of weather and geography and had set out to transform the western landscape by bringing water and electric power to the arid lands of southern California. With the job behind them, they barely paused to reflect before throwing themselves into new efforts which would guarantee that a new industrial empire would be built on the solid foundation of cheap, government-funded water and power.”¹⁵

Western History

In a 2011 article for the *Western Historical Quarterly*, Maria Montoya argued that Wiley and Gottlieb’s *Empires in the Sun*, and Carl Abbott’s *How Cities Won the West* bookend the study of the West.¹⁶ While the role of Morrison and other Six Companies contractors play a leading role in Wiley’s work, it is only implicit in Abbott’s work detailing 400 years of urban history west of the Mississippi. However, without the existence of Harry Morrison and other contractors, we are left without a built environment to study. Former M-K President Jack Bonny even once acknowledged “the evidence of heavy construction is all about us, yet heavy construction is a business that is often little known or frequently misunderstood by

¹⁵ Wiley, Peter, and Robert Gottlieb. *Empires in the Sun: The Rise of the New American West*. (New York, NY: Putnam, 1982), 19.

¹⁶ Montoya, María E. “From Homogeneity to Complexity: Understanding the Urban West.” *The Western Historical Quarterly* 42, no. 3 (Autumn 2011): 344–48.

the general public.”¹⁷ The study of how the West was built – or how heavy contractors built the West – provides insight into a century’s worth of Western history.

First, the close relationship this study describes, which developed at the turn of the last century between agencies of the federal government and heavy contractors, allows us to better understand the development of state sponsored capitalism. Second, in the battle to free the West from economic control by eastern managers and financiers, heavy contractors played a key role. Lastly, if as Richard White proposes the West represented “kindergarten” for the federal government, it was the partnership with heavy contractors like Morrison-Knudsen that carried the U.S. government through to graduate school.

State Sponsored Capitalism

“Through focused research in the West,” William Deverell writes, “we have a great deal to learn about the ways in which national power gets consolidated and extended, attracted and wooed, not to mention contested.”¹⁸ Through this study of Morrison and Morrison-Knudsen we see that the United States federal government consolidated and extended its power by building relationships with private sector heavy contractors that could make the federal vision manifest. Deverell foretells the importance of the story of the contractors in Western history as he continues his assessment of Western history:

¹⁷ Bonny, John Bruce. “Fifty Years of Construction Progress.” presented at the National Newcomen Dinner - National Newcomen Society in North America, New York, NY, November 14, 1962.

¹⁸ Deverell, William. “Fighting Words: The Significance of the American West in the History of the United States.” *The Western Historical Quarterly* 25, no. 2 (July 1, 1994): 197. doi:10.2307/971462.

the federal government's sponsorship of industrial capitalism demands (always) more scholarly scrutiny. In a field full of arbitrary chronological and thematic frontiers and divides, there is at least one near-constant: state care, indeed massage, of a particular capitalistic political economy. Yet this is a research angle oddly, mysteriously untracked in western history.¹⁹

The federal government's ever present contracts with Morrison-Knudsen for nine decades reveals the political economy Deverell describes. And, as he notes, the activities of heavy contractors coincide with the historical narrative he sees at work in the West:

the Progressive Era . . . best displays the transitions inherent in a massive economy's move from industrial to corporate capitalism. From there the story gets more dense, as the West becomes the weapons factory for prosecution of wars hot and cold and the dormitory for millions of weapons-makers and weapons users." (p. 197-198)

Donald Worster, Theodore Lowi and Grant McConnell reference the early days of this public private partnership referring to an "iron triangle" in water development, the triangle consisting of "well-placed western congressmen, the Bureau (of Reclamation), and organized agribusiness." Note that contractors are missing here, however, Worster called this new partnership perfected in the West, the "capitalist state."²⁰

Following Leonard Arrington and Gerald D. Nash, historian Brian Q. Cannon documented the federal government's growing interest and involvement in the West through New Deal spending. Cannon saw evidence of the growing capitalist state

¹⁹ Deverell, "Fighting Words," 197-198.

²⁰ Worster, *Rivers of Empire*, 281.

within the rural electrification program. However, within this program a new set of actors emerged at the base of power:

The fact that the fourteen states with the heaviest per capita expenditures by the New Deal were all in the West, coupled with the fact that westerners played key roles in attracting federal dollars and in administering federal programs in their regions, suggests that the New Deal empowered westerners rather than deprived them of their initiative or agency. As the case of western rural electrification suggests, the realities of power dynamics during the New Deal era favored westerners at the grass-roots level in their relationship with the federal government.²¹

While he does not mention the role of private contractors in the construction of rural electrical infrastructure, he notes that local administrators ran many New Deal programs from the bottom up. This becomes important in understanding how a small, backwater construction firm like Morrison-Knudsen could gain a foothold in local markets from which they could build a broader base of power.

In later sections I discuss more in depth the role of heavy construction in the transition to corporate capitalism. Suffice it to say here that within this burgeoning state sponsored capitalism, Morrison-Knudsen participated from the earliest years of the federal presence in the West, beginning with water infrastructure and remaining intimately involved through the War in the Pacific Theater, building of the nation's highways, and on through to the Cold War ICBM facilities and space systems infrastructure. It was also within these arenas that politicians, boosters, and Western businessmen battled to throw off the yoke of the Eastern establishment.

West versus East

²¹ Cannon, Brian Q. "Power Relations: Western Rural Electric Cooperatives and the New Deal." *The Western Historical Quarterly* 31, no. 2 (July 1, 2000): 160. doi:10.2307/970060.

The new state sponsored capitalism allowed Westerners a chance to gain control of their own economic destiny, and heavy contractors played a vital role. Contractors, in fact, made possible the mining, timber harvesting, electric power generation, and agricultural production that William Robbins called “exemplary case(s) of exploitation in an advanced industrial nation.”²² At the dawning of the twentieth century, the West remained an economic ward of the eastern financial community. “Though it took a while to discover the fact, the West was the natural home of the American Empire” because, notes Worster, Westerners and their federal backers had successfully answered the question, “how could deprivation be translated into wealth and power and influence.”²³ Those things – wealth, power, and influence were the real currency earned for the partnership of the federal government and the heavy contractors. Following the success of Western water development, changing economic conditions and more specifically federal policy in the way of the New Deal gave both entities a new stage upon which to flex their collective muscles.

As Brian Canon recounted,

Bernard DeVoto sharply distinguished between the East's traditional economic domination of the West and the New Deal. DeVoto maintained that before the 1930s, westerners lacked capital and therefore “never [had] a chance” to develop resources to their own advantage. The New Deal, however, offered Westerners the funds to develop infrastructure, generate electricity, and promote economic stability by improving their businesses, farms, and communities.²⁴

²² Robbins, *Colony and Empire*, 141.

²³ Worster, *Rivers of Empire*, 259.

²⁴ Cannon, “Power Relations,” 135.

Though Harry Morrison got his start in central Illinois, it was in Idaho where he came into his own. His experiences in the West led to a bonding with the place, a lifelong affiliation, and a source of identity. This emerged readily as Morrison sought financing for the Hoover Dam project, the contract being let by his old friend Jack Savage whom he had known since his earliest days in Idaho. As Wiley and Gottlieb noted, "When Morrison approached some eastern financiers, his scheme was greeted with skepticism. Utah and Morrison-Knudsen might be major construction companies by western standards, but eastern financiers viewed them as too small to undertake such a major project. Rebuffed, Morrison began thinking in terms of a consortium of western companies."²⁵ That devotion to Western banks persisted throughout Morrison's career and by design. A business reporter once noted that Morrison-Knudsen typically did business with Western Banks. Morrison answered by recounting a solicitation by an eastern banker, whom Morrison rebuffed telling him, "... you wouldn't do business the way that our Western bankers do business."²⁶ Morrison's quest for the Hoover Dam picked up where Wallace Stegner left off, his *Angle of Repose* of course revolves around Oliver Ward's struggle to raise and control eastern capital as he undertakes irrigation projects in the southern Idaho desert. Harry Morrison represents a figure looking once and for all to throw off those eastern shackles by putting together an exclusively western team with the Six Companies.

²⁵ Wiley and Gottlieb, *Empires in the Sun*, 16.

²⁶ Jensen, Dwight Wm. "Builders and Bankers -- Early History of Morrison-Knudsen." *The Pacific Banker & Business*, February 1966.

Morrison was not alone in that fight, however, often getting help from his closest associates, and other like-minded sojourners. His friend and frequent business partner Henry Kaiser waged battle against the eastern steel establishment, for example, the goal of which was “the decentralization of power in industrial organization” and “the independent industrialization of the West.”²⁷ The eastern establishment fought as bitterly to maintain control over the West as the West did to free itself. In the early years of Western development, Kaiser and Morrison were as yet without powerful connections in Washington; they still depended upon relationships with local officials from agencies with whom they worked.

Western interests gained steam too during the years of the Reconstruction Finance Corporation (1932-1945) which Houston businessman Jesse H. Jones chaired. Jones, it was said, had strong opinions about the lack of Western autonomy and at the outset of the RFC counseled if “such a government agency is created, the directors should realize that most of the country lies west of the Hudson River, and none of it east of the Atlantic Coast.”²⁸ By the end of the federal government’s participation in the RFC, a western private sector financial institution had fought its way to the top of the banking heap. Once a provider of banking services to San Francisco Bay area Italian immigrants, A.P. Giannini’s Bank of Italy – now Bank of America – passed Chase National as the largest bank in the world.²⁹

Contractors in Business History

²⁷ Wiley and Gottlieb, *Empires in the Sun*, 22-23.

²⁸ Wiley and Gottlieb, *Empires in the Sun*, 23.

²⁹ Wiley and Gottlieb, *Empires in the Sun*, 23.

Business History's prime chronicler Alfred Chandler did not consider construction companies to be full-fledged modern corporations even as late as the onset of the Great Depression, a status that had persisted for a century. "Before the 1840's," wrote Chandler, "turnpikes and canals, even the largest of them, were built by small contractors, who at first were local farmers, merchants, and even professional men."³⁰ Driven by growing urban regions in the U.S., well-documented by Richard Wade, heavy construction firms grew in response to growing demand.³¹ Urban growth and mayors and city councils controlling infrastructure contracts meant that contractors aligned their organizations with the interests of city politics.³² As contractors' visions and capabilities grew especially following their work in the West, firms led by Morrison-Knudsen invented new business models that allowed them to grow their businesses in size and scope.

Chandler noted the use of partnerships in the heavy construction industry as early as the 1830s.³³ But Morrison-Knudsen, Bechtel, and Henry Kaiser took that form to new heights. In one of the few studies on the business practices of heavy contractors, Christopher Tassava found that within heavy construction firms, firm bosses discovered "the viability of an alternative to the classic Chandlerian model of business development."³⁴ As Tassava noted, "Instead of hiring disinterested professional managers to oversee their projects (a practice that characterizes a

³⁰ Chandler, Alfred D. *The Visible Hand: The Managerial Revolution in American Business*. (Cambridge, MA: Belknap Press, 1977), 45.

³¹ See: Wade, Richard C. *The Urban Frontier: The Rise of Western Cities, 1790-1830*. Harvard Historical Monographs 41. Cambridge: Harvard University Press, 1959.

³² Chandler, *The Visible Hand*, 94.

³³ Chandler, *The Visible Hand*, 45.

³⁴ Tassava, "Multiples of Six," 2.

critical stage in Chandler's evolutionary schema for American capitalism), executives tended to assign present or prospective members of their own cadre to project management posts or to use such positions as proving grounds for long-term employees ascending to the executive group."³⁵ They also pioneered the concept of the joint-venture, which they evolved into a system of partnerships, and "sponsorships." These forms foretell such modern forms of organization as flexible specialization, so thus are an important historical reference point for business historians.

Similar to the treatment of heavy contractors in the business history literature, many scholars write of the federal government's presence in the West, their analyses give the private sector short shrift. I argue that without the aid of heavy contractors like Morrison-Knudsen, national politicians and federal bureaucrats' dreams of U.S. Empire could not have come to pass. If, as Richard White describes, the West served as "kindergarten" for the federal government it was heavy contractors that allowed them to pursue higher aspirations. As White notes:

While the federal government shaped the West, however, the West itself served as the kindergarten of the American state. In governing and developing the American West, the state itself grew in power and influence. A state, as one political scientist has observed, "can be readily identified by its civil service, its army, and its regulation of the economy." Although often only in fledgling forms, all of these accouterments of a powerful state began to develop in the American West, and they set the West off from other regions.³⁶

³⁵ Tassava, *Ibid.*

³⁶ White, Richard. *"It's Your Misfortune and None of My Own": A New History of the American West.* (Norman, OK: University of Oklahoma Press, 1993), 58.

The West was kindergarten for the private sector contractors, too. They applied lessons learned there to their own agendas and successes, which ultimately had impacts on the move from Chandler's managerial capitalism to corporate capitalism.

While the federal government learned to manage large-scale social, economic, industrial, and political change in the West, state and local governments often fractured. As Gottlieb and Wiley describe:

More than anything, the region was a collection of occasionally feuding city states, each with its own sphere of influence separated from the others by broad deserts and mountain ranges. The railroads had laid the foundation for a regional economy, but the struggle over water resources had increased intraregional conflict. Efforts to form regional alliances like the Six Companies were the exception, not the rule.³⁷

Contractors benefitted from usually independent but sometimes coordinated struggles to free the western economy from control by the east. They remained above the fray in the intraregional squabbles. For Morrison-Knudsen and the other Six Companies affiliates, winning the bid – not the political calculus of where roads led, and where governments distributed water and power – was what mattered. These regional alliances on the private sector side marked a transformation point not only for the construction industry, but for the world of business itself.

³⁷ Wiley and Gottlieb, *Empires in the Sun*, 28.

TABLE ONE: SIGNIFICANT PROJECTS SPONSORED BY THE U.S. AND CONSTRUCTED BY M-K

Historical Period	Project	Year(s)
Development of the West	Hoover Dam	1936
	Grand Coulee Dam	1942
WWII	CPNAB projects	1940-45
	Hanford Engineering Works	
Cold War/Int'l	Afghanistan	1946
	Moroccan Air Bases	1951
	ICBMs	1957
Space Program	NASA Mission Control (HOU)	1962
	VAB (Kennedy Space Center)	1964

Table above summarizes signature projects built by M-K that advanced the strategic objectives of the U.S. federal government at pivotal times in global history.

All told then, the story of Morrison-Knudsen and Co-founder Harry Morrison brings new understanding to environmental history and Worster's "hydraulic thesis." By viewing the partnership cast between the U.S. federal government and Morrison-Knudsen in the West, a story emerges showing that dominion over water represented just the tip of the iceberg for what the government hoped to achieve for its own global vision, and for how contractors would grow their businesses and influence. In Western history Morrison-Knudsen represents a case study in the new brand of Western capitalism, which emerged following the great irrigation projects begun after the turn of the nineteenth century. It also shows the importance of the private sector in helping the U.S. federal government graduate from White's "kindergarten." Finally, the story of these contractors sheds new light on the nature

of corporations as they changed over time and the debt business historians owe to the heavy construction industry.

I organize the book in six chapters. “Birth” chronicles Morrison as a young executive and the founding of Morrison-Knudsen set within the context of the growing influence of the federal government in the development of the west. It covers the period from 1885, Morrison’s birth, to about 1941. After that, Morrison’s life changed dramatically when nearly 1,200 of his employees were killed or taken hostage by the Japanese on Wake Island.

The second section, “Wake Island” follows the Wake Island Crisis from Morrison’s perspective, this being one of the more robust collection of primary source documents Morrison retained in his personal corporate archive. It further demonstrates the company’s transition from a builder of western infrastructure, to a primary military contractor.

“Hells Canyon,” part three, highlights another brief time period in the later 1950s when Morrison Knudsen concentrated its corporate power and global leadership as the world’s largest contractor. The fight over the “Hells Canyon High Dam” proposed for a section of the Snake River between Oregon and Idaho, and Harry Morrison’s victory through an unprecedented lobbying campaign shows the dimensions of his role as corporate leader.

Section four, “International Operations” discusses the inauguration of M-K as a player on the international engineering stage, and wielder of corporate power in the U.S. as its size and scope grew beyond American-based government work. It runs from about 1945-1955. Section five, “Militarization” discusses Morrison-

Knudsen's military contracts during the late 1950s and early 1960s as the U.S. Government spent liberally on an Intercontinental Ballistic Missile System and domestic military bases.

"Memorials and Monuments" closes out the story covering Morrison-Knudsen's contributions to the Space Age, consumer culture, Morrison's retirement from the corporate presidency, Board of Directors, and ultimately his passing in 1971 – just before the opening of M-K's signature contribution to the roaring consumer culture, Walt Disney World.

PART ONE: BIRTH

When Harry Morrison was just four years old, he contracted appendicitis. A local doctor performed surgery in an outbuilding on the family's Illinois farm along Salt Creek, which Morrison's grandfather owned. Harry remained laid up for much of the summer of 1889 but it was also then that a Chicago-based construction outfit called Bates and Rogers exposed Harry to the construction business for the first time. To relieve the monotony of convalescing, Harry's father during the afternoons would take Harry to watch the workers construct the bridge across Salt Creek. Harry was too young to know it at the time, but Bates and Rogers maintained a thread through his life for the next half-century.

Harry's illness came just months after he watched his mother die. In the midst of an illness, local church parishioners suggested she be baptized. Following that suggestion, Mrs. Morrison participated in the rite of baptism in the creek neighboring their property. While the act may have altered the course of her afterlife, Mrs. Morrison nonetheless contracted pneumonia and died shortly thereafter. Some writers attest Morrison vowed to not set foot into a church following his mother's passing, but evidence to the contrary shows Morrison frequently contributed to local parishes in Idaho and California in later life.

Harry spent his adolescence in boarding schools and partially paid his way washing dishes and performing odd chores. Early historical accounts of DeWitt County and Tunbridge Township offer no evidence that the Morrison family actively engaged in the town's leadership or management, nor were they part of the small

but thriving merchant class.³⁸ Returning to the farm in the summer meant working there and for neighbors – picking fruit, or running a plow. Disliking farm work on the “Grand Prairie” Morrison sought opportunity in St. Louis. There he looked up Bates and Rogers, which hired on the young Morrison as a water boy. With the benefit of our own hindsight and Wallace Stegner’s *Angle of Repose*, few would consider a move to southern Idaho at the dawning of the twentieth century a plum career move. But Morrison saw only opportunity ahead when Bates and Rogers dispatched him to a Reclamation Service project there, building the Minidoka Dam. As R.J. Newell, former Regional Director for the Bureau of Reclamation said of the era:

... irrigation was started in practically every part of the reclamation states – America’s arid lands – by the wave of settlers going west. Many factors contributed to this rapid spread of irrigated agriculture, but the main reason can be found in the character of our people. We were still a nation of explorers and pioneers seeking new land. The movement of settlers westward, or rebounding eastward from the Pacific Coast line, was tremendous. Challenges, no matter how difficult, were blithely accepted.³⁹

Morrison faced those challenges in his characteristic hard-driving spirit. He recorded in his corporate biography that he worked as a timekeeper for Bates and Rogers from 1902-1905 on the Minidoka Dam project. Federal officials had studied sites in the area between Burley and Rupert Idaho since the 1880s. The embankment Dam, designed by the Reclamation Service’s John Savage, would be the first of its kind for the Service. On the project, Morrison made acquaintance with

³⁸ Brink (W. R.) & Co. *History of De Witt County, Illinois. With Illustrations Descriptive of the Scenery, and Biographical Sketches of Some of the Prominent Men and Pioneers*. Edwardsville, IL: W.R. Brink and Company, 1882. <http://archive.org/details/historyofdewittc00brin>.

³⁹ Newell, R.J. “Water for the West.” *Idaho Yesterdays* 2, no. 1 (Spring 1958): 16–21.

engineer John Savage, which ultimately altered his career trajectory in ways Morrison surely never envisioned. The Interior Department approved the project in 1904 and workers completed the project in 1906. But before they could even pour the first bucket of concrete, a Bates and Rogers superintendent relieved Morrison of his position after Morrison requested a raise. Undaunted, Morrison journeyed to Boise where he hired on with the Reclamation Service as a concrete inspector, and he returned to the jobsite as a representative of the project owner. Morrison progressed through a series of positions with the Service. He recorded those in his corporate biography as “axman, chainman, rodman, levelman, inspector, foreman, draftsman and superintendent.”⁴⁰ The arid deserts of Idaho transformed with the investment by the U.S. federal government, its Reclamation service, and the labor of private contractors like Morrison. With nearly ten years in the desert split between the public and private sector, Morrison felt ready to control his own destiny. He had graduated from kindergarten.

Writers have often repeated the tale, and Morrison-Knudsen corporate publications never sought to dispel it, of Morrison’s foray into self-employment. In 1912 he approached Morris Hans Knudsen, an aging small contractor building a road to the Minidoka Dam, and proposed a partnership. Knudsen’s small outfit commanded a mere capitalization of about \$600 and owned a few horses and other assorted small implements. Knudsen asked Morrison, who had just celebrated his twenty-seventh birthday what he would contribute on the capital side of things, to

⁴⁰ This chain of titles appears in numerous publications, and mirrors what the corporation kept on file for Morrison.

which Morrison apocryphally replied, “just guts.” Former M-K President Jack Bonny once remarked “There is no place on a balance sheet for “just guts,” but, believe me they are a vital asset to the construction business and we thank the good lord for endowing Harry Morrison so abundantly.”⁴¹ In the end, guts were enough for Knudsen and in March of 1912 the two new partners now owned the Morrison-Knudsen Company.

Figure 2: Morrison-Knudsen workers heading to their first job - the Chatten Flats pumping station on the Snake River⁴²

Starting a business bookended by the Panic of 1910-11 and the recession of 1913-1914 proved difficult. Morrison limited his salary to \$100 per month. Knudsen stayed off books during the winter, and even stayed on with the Reclamation Service in order to keep the nascent firm afloat. Morrison kept an office, which doubled as a bunkroom, on the western edge of Boise’s downtown amongst hotels, bunkhouses,

⁴¹ Bonny, “Fifty Years of Construction Progress,” 18.

⁴² Image source: *Em Kayan*, March 1962.

and the city's red light district. More prominently, it was immediately adjacent to the Idanha Hotel, which had been the home of the trial of Big Bill Haywood, accused of murdering Idaho Governor Frank Stuenenberg. Boise in the 1910s was a small city of 17,000 – roughly the size of Morrison's home county in Illinois. Incorporated in 1864, the city had served variously as a fur trade route, stopover on the Oregon Trail, military supply post, and a mining supply town. By the time of Morrison's arrival there, the state capitol building was under construction, and Boise served as the state's commercial center. With the proximity to Reclamation's southern Idaho offices, the firm earned a subcontracting job building a pumping station on the Chatten Flats irrigation project. The \$14,000 contract lost the firm some money, but bigger jobs waited.

In February 1914, Ann Daly made mention of Harry Winford Morrison for the first time in her diary/memoirs. Harry's sister, Edna Allen, lived next door to the Daly family and the two families maintained a close relationship. Before the year closed, the two married in a very small service performed by a Congregational Minister with only family in attendance. They honeymooned in Salt Lake City. Jobs had already started rolling in. In March M-K won the bid on a paving job in Ontario, Oregon, at the west end of the Boise Valley. In the early days of the company, Harry superintended jobs such as this himself, and this time was no different. He packed his bags and headed for Ontario. To keep Ann engaged, he left her the keys to the M-K offices asking her to manage the firm's mail. News of a history-making job roared in that summer.

Figure 3: Harry and Ann Morrison pose at a jobsite in 1914⁴³

In July, the Reclamation Service notified M-K that it was low bidder on the Three Mile Falls Dam on the Umatilla River near Hermiston, having beaten out Morrison's former employer Bates and Rogers. Morrison ran the job himself, and it was the first job site Ann visited. M-K made short work of the big project, completing the dam that same year. Always an example of being the hardest working man on a job, at one point Harry passed out from heat exhaustion following a typhoid shot. M-K earned a \$14,000 profit on the complicated multiple arch dam, which while only twenty-four feet high, curves in a 1200 foot radius and spans 915 feet.⁴⁴

Times remained tough for the next decade. In March of 1916 Morrison laid off nearly his entire firm and cut his pay from \$150 to \$100 per month. Morris Knudsen quit taking salary altogether. At the beginning of the 1917 legislative session, Ann even returned to work as a secretary for the Idaho State Senate, much

⁴³ Image source: *Em Kayan*, March 1962.

⁴⁴ Stene, Eric A. *Umatilla Project*. Denver, CO: U.S. Bureau of Reclamation, 1993.
http://www.usbr.gov/projects/ImageServer?imgName=Doc_1305644113536.pdf.

to Harry's dismay; Ann never held a job again after that session. Harry kept at the work – building logging roads deep in the Idaho wilderness, and paving Boise City streets. By the turn of the decade M-K had started building highways in the State of Oregon. And in August of 1921, Morrison-Knudsen made its first purchase of a piece of mechanized equipment when Harry ordered a Marion dragline – a mechanized excavator - for a total price of \$25,876.06. As time went by Morrison-Knudsen eventually amassed the largest fleet of heavy construction equipment in the world, pioneered the use and design of many types of earth moving equipment, and instituted job costing of equipment, which today is standard practice.

Figure 4: Morrison-Knudsen's first piece of heavy equipment - the Marion Dragline⁴⁵

1923 marked another turning point for Morrison-Knudsen, as the founders incorporated the business after recording their first million-dollar year. Two years later, Morrison initiated the annual company meeting. Eighty-five people attended in 1925, and the event persists even today amongst former Morrison-Knudsen

⁴⁵ Image source: *Em Kayan*, March 1962.

employees. Ann Morrison noted in her diary the expense of hosting the annual meeting but failed to mention the fact that her husband's two-man partnership was now an incorporated, million dollar business. Construction across the West continued apace, including getting a large piece of the Union Pacific's business in Utah. But the real prize for Morrison and contractors in the West came just after the turn of the next decade.

The *Earth Changers* writers tell the story of Harry Morrison and his chief dam builder Frank Crowe by writing a fantastic tale of one Olof Erlander, an immigrant who sought out the dusty desert between Arizona and Nevada for an opportunity to build Boulder Dam – better known as Hoover Dam. In Wilson and Taylor's tale, Olof rushes home to tell his wife Tooe he had seen Harry Morrison and Frank Crowe looking down at the site where Boulder Dam would rise at their hands, "ay saw the feller today who is going to put the dam down there," to which she replied, "No man can put the dam down there." Wilson and Taylor supplied their fictitious Olof with the reply: "This feller can." And Olof was correct.⁴⁶ The eight Western construction firms that bid Hoover Dam as the Six Companies had done about \$400 million worth of jobs prior to bidding Hoover and had a combined backlog of \$30 million at the time. Utah Construction co-founder H.W. Wattis, who lay dying in a hospital, like Morrison harbored one prime consideration about the other contractors on his team: "are they our kind of people?"⁴⁷ M-K had frequently worked with Utah but the inclusion of the rest of the Six Companies crew was Morrison's gambit, put together

⁴⁶ Wilson, Neill Compton, and Frank J. Taylor. 1957. *The Earth Changers*. (Garden City, N.Y.: Doubleday), 19.

⁴⁷ *The Earth Changers*, 21.

with help from San Francisco based surety underwriter Guy Stevick. On the morning of March 4, 1931 in Jack Savage's office in Denver, the U.S. Bureau of Reclamation announced Six Companies had won low bid - \$49,890,000 – and the right to construct Hoover Dam. As Wiley and Gottlieb wrote, "In a daring move, an obscure group of western businessmen, short on capital and lacking influential ties in Washington, had won a major prize for the West, a prize that marked the beginning of the growth of a new kind of western influence in national affairs and the rise of a resource-based western capitalism."⁴⁸ In a ceremony attended by President Franklin Delano Roosevelt, the U.S. federal government celebrated its accomplishment – the largest dam ever constructed – in a dedication ceremony filled with pomp and circumstance. But on that day, September 30, 1935, not a single speaker recognized the efforts of the contractors that had performed this heroic feat for their government. Ann Morrison recorded in her diary "The speeches were mostly political and not one word of commendation was spoken for the contractors who did the work. This omission annoyed me somewhat and the other wives, too, I imagine."⁴⁹ Ann did get to ride the cableway across the new structure with Mrs. Roosevelt, Harry Hopkins, Laura Bechtel, and Project Superintendent Frank Crowe. While the lack of recognition of the contractors set the stage for the historiography of the built environment, Harry Morrison sat perched on the verge of stardom, his partnership with the U.S. federal government only just beginning.

⁴⁸ *Empires in the Sun*, 16-17.

⁴⁹ *Those Were the Days*, 236.

Harry Morrison's early years show several instances of the fine line of history – those chance encounters that ultimately shape a person's destiny. One of his earliest childhood memories was watching the Bates and Rogers construction firm build a bridge across the creek abutting the family's property. As a teen, Morrison sought employment with Bates and Rogers, which sent him to Idaho. Its management was also among the first to send congratulations to Morrison when he appeared on the cover of *Time* magazine. The enduring relationship with Bates and Rogers led to others.

In Idaho Morrison met Reclamation engineer Jack Savage who let the contract for Hoover Dam, and who helped Morrison launch IECo – the International Engineering Company. The reclamation work also led Morrison to Frank Crowe, widely regarded as the world's leading dam builder. Morrison hired Crowe to build Hoover Dam, and Grand Coulee Dam, two of the most important structures in the West, even today. Perhaps most importantly it was in Idaho where Morrison met the kindred spirit Morris Hans Knudsen, with whom he founded what ultimately became the world's largest heavy construction firm.

The unlikely team of Six Companies, which received the contract for Hoover Dam, permanently changed the economic relationship between East and West. The nearly fifty million dollar price tag for the dam made it the largest American public works project in history. It necessitated the combination of many firms simply to acquire the surety necessary to bid the project. Several archival sources suggest that Morrison drove the creation of the team, motivated by a drive to end the eastern economic dominance of the West. The Six Companies team raised the joint venture

concept to an art form, bucking standard corporate forms of organization. The team parlayed the successful building of the dam into other federally backed ventures, ultimately elevating the West into an economic entity more in control of its own destiny.

TABLE TWO: M-K GROSS REVENUES AND MARGINS, 1921-1939

Year	Gross Revenue	Margin
1921	\$716,000	7.0%
1922	\$909,000	6.5%
1923	\$1,087,000	3.2%
1924	\$1,891,000	2.0%
1925	\$2,296,000	3.8%
1926	\$2,965,000	1.7%
1927	\$2,380,000	3.4%
1928	\$3,262,000	2.3%
1929	\$2,969,000	2.6%
1930	\$4,361,000	5.3%
1931	\$5,380,000	1.6%
1932	\$3,743,000	(2.2%)
1933	\$4,976,000	2.4%
1934	\$5,312,000	4.7%
1935	\$6,449,000	2.1%
1936	\$6,453,000	7.0%
1937	\$7,404,000	(0.5%)
1938	\$6,620,000	2.4%
1939	\$8,911,000	3.3%

Table above shows Morrison-Knudsen's gross revenues and margins as a builder of western infrastructure. The company had its first million-dollar year in 1923. By 1939, revenues had grown almost nine times over, but the company's growth was just beginning. Source: Morrison-Knudsen corporate archives.

PART TWO: WAKE ISLAND

“I know of nothing to do in this case except tell the truth and hope for the best.”

Harry Morrison, in regards to what to tell workers captured at Wake Island

Following the completion and dedication of Hoover Dam in 1936, Morrison-Knudsen evolved from a builder of waterworks into a military contractor, growing revenues almost eight times between 1940 and 1943. The company's operations also become a template for how private firms interacted with the government in the early era of industrial capitalism. On the economic front, The Great Depression and World War II birthed two of the major social forces of the second half of the twentieth century, militarization and globalization. Accordingly, the U.S. federal government progressed from an upstart governing body to a major influence in the West and a major consumer in the U.S. economy. Also, Morrison-Knudsen pioneered development in the corporate form from Chandler's managerial capitalism to a system of partnerships and joint ventures managed by employees with close ties to company owners. Finally, Harry Morrison evolved as the singular leader of Morrison-Knudsen after the death of Morris Knudsen. Harry Morrison's deep involvement in the Wake Island saga where 1145 of his employees were at work when the Japanese captured the atoll in 1941, tie all these factors together.

For builders like Harry Morrison and his colleagues within the Six Companies, evolving from a regional builder of urban infrastructure to a military contractor seemed a natural transition. As Wiley and Gottlieb noted,

The leaders of the Six Companies saw a link between the western drive to colonize the desert, by spanning it with huge water projects and by filling in the empty spaces with great cities and industrial and

mining projects, and the expansion of American influence into the Pacific basin. During World War II, the Six Companies' Felix Kahn told *Fortune*, "A contractor has to set up a tremendous organization where nothing exists, house and feed thousands of workers, establish his own communication. That is what an army does. In both instances you have to move into the 'enemy's' territory, destroy him, then clear out and set yourself up somewhere else."⁵⁰

The \$300,000,000 in contracts that Morrison-Knudsen and partners secured as part of the Contractors Pacific Naval Air Bases (CPNAB) dwarfed the \$50,000,000 contract let for Hoover Dam. On the CPNAB joint venture, Morrison-Knudsen participated with its Six Companies partners, W.A. Bechtel, J.H. Pomeroy, and Utah Construction, and also Raymond Concrete Pile and Turner Construction, both of New York, and local contracting firm Hawaiian Dredging Company. For the most part, individual companies worked on individual projects on Hawaii, the Philippines, Midway, Wake, Guam, Johnston, Samoa, and Palmyra.⁵¹ The sheer mass and geographical spread of the work and the monetary value of the contracts necessitated the partnership. The participation in the fortification of defenses in the Pacific charted a new path for Morrison-Knudsen, which it parlayed into global fortunes.

TABLE THREE: MORRISON-KNUDSEN GROSS REVENUES AND MARGINS, 1940-1943

Year	Gross Revenues	Margin
1940	\$11,675,000	6.9%
1941	\$25,751,000	5.3%
1942	\$83,840,000	2.5%
1943	\$87,200,000	1.6%

⁵⁰ Wiley and Gottlieb, *Empires in the Sun*, 34.

⁵¹ Pacific Island Employees Foundation. *A Report to Returned CPNAB Prisoner of War Heroes and Their Dependents*. (Boise, Idaho, October 1945), 5.

The table above shows the Morrison-Knudsen's dramatic growth during World War II as it moved from building western infrastructure to helping the U.S. government prepare for war. From \$8.9 million in revenues in 1939, by 1943, the company had grown revenues ten times.

At the same time, the U.S. federal government evolved from an upstart institution into a major influence in the West, and a major consumer in the U.S. economy. At the turn of the twentieth century the relatively small federal government paled in size, wealth, and sophistication compared to the major private sector institution of the day, the railroads. That now had changed. Following prodding from Herbert Hoover and the Commerce Department, the Depression Era New Deal programs, and World War II, the U.S. federal government now represented a major consumer. By way of example, Gerald D. Nash estimated that the U.S. federal government expended \$40 billion in the Western states from 1940-1945.⁵² Economic historian Christopher Tassava documented “firms’ strategic responses to the federal government’s growing economic role as a consumer” in a study of Bechtel and Kaiser – two of Morrison’s “Six Companies” partners.⁵³ Indeed, as Tassava found, heavy contracting firms defined how private industry came to relate to the federal government. Chronicling Morrison-Knudsen’s corporate trajectory over time makes that clear.

To execute the now-far flung operations and increasing spending by the U.S. government Harry Morrison pioneered an evolution in the corporate form - from Chandler’s managerial capitalism to a system of partnership and joint ventures

⁵² Nash, Gerald. *World War II and the West: Reshaping the Economy*. (Lincoln, NE: University of Nebraska Press, 1990), 3.

⁵³ Tassava, Christopher James. “Multiples of Six: The Six Companies and West Coast Industrialization, 1930–1945.” *Enterprise and Society* 4, no. 1 (March 1, 2003): 1–27. doi:10.1093/es/4.1.1.

managed by employees with close ties to company owners. In a sense, this can be seen as a return to previous methods of organizing a firm, i.e., with family members or apprentices in close command of the management structure. The difference though in the early to mid twentieth century is comparing the contractors' use of joint ventures and close-knit managers, to the railroads' organizations, which separated ownership from a thoroughly detached, professional class of managers. The Wake Island Saga illustrates this in Morrison-Knudsen's case as captured Wake Island Superintendent Dan Teters and Office Manager John V. Polak later in their careers moved on to other leadership positions in the company following repatriation. Teters, for instance, would later manage the building of the air bases in Morocco during the Cold War.

The events following the Japanese capture of Wake Island also show changes in the way that private firms interacted with the government in the first half of the twentieth century. Save the men who were captured or killed at Wake Island, and their families, Wake Island impacted few individuals to the extent it impacted Harry Morrison. The events surrounding Morrison's attempts to gain recognition for the sacrifice made by his employees in defense of Wake Island paints a portrait of a growing complex relationship between a private contractor and the federal government. It highlights a very early lobbying effort by a U.S. corporation. Historian David Vogel's work on lobbying and public affairs efforts by U.S. corporations shows Morrison-Knudsen at the vanguard of that practice:

In 1961 only 130 firms were represented by registered lobbyists in Washington, DC, and of these, only 50 had their own Washington staffs. By 1979, 650 firms had their own registered lobbyists, and 247

had full-time employees in the nation's capital. While only a small minority of *Fortune* 500 companies had public affairs offices in 1970, a decade later more than 80 percent had established such units. In 1974 there were 89 corporate political action committees; by 1982 there were 1,555. Corporate public relations programmes and efforts to build "grass roots" support among employees, stockholders, and community groups were relatively rare prior to 1970; they have now become an important component of virtually every effort on the part of the business community to influence public policy.⁵⁴

Two decades before 1961, Morrison had hired Washington D.C. based lobbyist Lee Warren to oversee Morrison-Knudsen/CPNAB efforts to gain federal compensation for captured employees, making the company one of the earlier entrants to the corporate lobbying field. In the later years of Morrison-Knudsen this again becomes relevant as Morrison established a complex grass roots public affairs program in his fight against a proposed federal dam beginning in 1949.

Finally, in the midst of it all, Harry Morrison emerged as the singular leader of Morrison-Knudsen after the death of Morris Knudsen. While Morrison and the Em Kayans revered Knudsen, technology passed the elder partner quite quickly, and Morrison had long run the company. Yet now, it was his alone.

Even with Morrison-Knudsen's operations diversifying and the corporation spreading across the globe, the common thread through the first half of the 1940s remained Morrison's attention to the Affairs of Wake Island. Harry Morrison left behind no children and few personal writings. For Morrison, the company and building for the betterment of man, as he said, constituted life. His efforts on behalf of his employees captured at Wake remain one of the few written records he saved,

⁵⁴ Vogel, David. "Do Business and Government Get Along?" In *Major Problems in American Business History*, 23–28 (26). Major Problems In American History. New York, NY: Houghton Mifflin, 2006.

and they indicate he invested a great deal of time, personal attention and financial resources to the saga. The story constitutes one of the few first person accounts of Morrison's life.

Morrison's Wake

The construction job at Wake Island (actually *atoll*) began like any other job for Morrison with a visit to the job site. The Morrisons departed for Wake Island, via San Francisco on October 6, 1941, first stopping in Los Angeles, with the penultimate stop in Honolulu. The flight, which left just after noon on Monday, arrived in Honolulu the next morning.

Honolulu greeted the Morrison's arrival with a beautiful day. Even so, Harry took off for Pearl Harbor where M-K was building underground storage tanks for the Navy. Ann Morrison entertained herself in Honolulu for the next four days, and then the both of them left for Wake Island on October 12. Clouds had settled in over the Pacific, and the seaplane carrying the forty-five passengers bound for Midway and Wake struggled for thirty minutes to get airborne. The Morrisons arrived into Midway by early afternoon. Midway though, was only a quick stopping point before leaving for Wake. The Morrisons turned in about 10:30 that night, took in breakfast at 6:00 am, and left the Island at 8:15 that morning. They arrived at Wake Island seven hours later. Harry immediately left for the job site, escorted by Wake Island project Manager Dan Teters. Ann visited with Teters' wife, who played a prominent role in the eventual passage of legislation compensating the M-K workers held in Japanese captivity.

For Harry Morrison, the site held no mystique - just another construction job.

For Ann, however, Wake Island possessed great wonders:

Wake Island is a beautiful little spot. The water in the lagoon is the bluest of the blue, clear as crystal and one can see all kinds of fish and strange sea creatures swimming and crawling about. The coral is as white as the driven snow. A scrub tree or bush, two and a half feet tall, grows in clumps all over the island with leaves so green and shiny they appear to have been waxed. And the moon vine, with a profusion of white blossoms, which open only at night, runs wild all over the ground. And what a moon! The island – so tiny, completely surrounded by the mighty Pacific – is a bit awe-inspiring.⁵⁵

Ann's enchantment passed quickly. It rained all night the night of October 14, making the next day sticky as well as hot. Ann and Harry both visited the jobsites during the day and Ann came to realize how the isolation might affect the men over the course of the year-long job.

At dinner that night, Ann and Harry addressed the roughly 1,100 men gathered in the mess, inviting them to drop by their "lodge" as Ann termed it. For a corporate CEO, Harry Morrison's unusually strong connection to the men of his company grew even stronger as the hell of war consumed the job on Wake Island. The city of Boise, Idaho, from where many of the men hailed, had only 26,130 people in 1940. Ann relished her role as Boise's ambassador to the men at Wake.

Construction "royalty" numbered among Morrison's men. Frank Crowe, a nephew of the Hoover Dam builder by the same name, stood out among the roster of construction men fortifying Wake. Then building Shasta Dam in California, most experts considered the elder Frank Crowe the premier dam builder in the world after his work at Hoover Dam, receiving patents in the process for his innovative

⁵⁵ Ann Morrison, *Those Were the Days*, 265.

construction techniques. Foreshadowing the worst to come, at least among the construction crew, Frank the elder had told his nephew, “you damn fool, the Japs will get you if you go over there.”⁵⁶ Ann Morrison did not share that sentiment, nor did young Frank, the two agreeing they both worried more about typhoons than the Japanese. However, the very next day the Island’s daily paper, put together by the workers themselves, reported that an American destroyer had been torpedoed off the coast of Iceland. Congress considered a bill to arm merchant ships. These new realities threatened the idyll.

By October 20, a senior Marine Corps officer on the island, Major James Devereux, had received orders to evacuate all women and children from Wake Island. A storm raged all week. When it let up, Devereux ordered the women to evacuate via a Pan Am Air clipper. Meanwhile, the M-K men awaited more construction supplies, the ships carrying them delayed by gale force winds of greater than fifty miles per hour, and thirty-five foot waves that battered the unsheltered island coasts.

Harry and Ann left Wake Island at 7:00 am, November 3rd, 1941. They stopped first at Midway where Harry checked on the job there while Ann went on to Honolulu. Upon arrival, however, Harry learned via cable that Steve Bechtel had requested Harry be back in Honolulu the next day to discuss the progress on the islands. Harry beat Ann to bed by an hour – he retiring at 1:00 am and she at 2:00 am. This left precious little time for sleep as catching the earliest clipper out of Midway meant arriving at the Pan Am Hotel at 3:30 am. They boarded the clipper at

⁵⁶ Ann Morrison, *Those Were the Days*, 266.

6:30 am with a number of others – mostly contractors' wives, and employees of other companies including Pan Am. They still believed this an unnecessary precaution.

For the next five days, Harry and Steve Bechtel toured the jobsites at Pearl Harbor. There, long-time M-K employee George Youmans supervised construction of the largest underground fuel storage facility in the world. The Morrisons arrived back in Boise on November 10. Not even a month later, of course, the Japanese attacked Pearl Harbor. In Los Angeles the day of the bombing, Ann added a *nota bene* to her Wake Island travel log:

We heard over the radio of the Jap sneak attack on Honolulu and then realized how right the Navy had been in getting the women and children off Wake and Midway. We are greatly concerned and worried over the plight of our civilian construction workers on Midway and Wake. Relatives of the boys are calling all hours of the day and night, wanting Harry to do something to get the boys off the islands. Harry is doing everything in his power to get aid, but our nation is now at war and there is no place for sentiment. It's "whatever is best for the most" and all we can do is keep on trying and hope and pray for an early victory for Uncle Sam.

The first Japanese bombers struck Wake Island at noon on December 8, 1941. A landing force consisting of 900 troops stormed the atoll on December 23. That day the remaining members of the American Armed Forces surrendered, as did a majority of the contractors after prompting by U.S. Marine commanders. The Japanese raised their flag over the atoll at 11:30 am that day, taking prisoner 1,621 American and Guamanian survivors – 1,109 of them contractors. On January 12, 1942, The Japanese evacuated more than 1,200 men from the atoll, leaving behind

367 contractors and twenty American servicemen too sick or wounded to move.⁵⁷

These acts thrust Harry Morrison and the rest of the CPNAB into a role they never imagined for themselves, a role for which they were wholly unequipped: obtaining “recognition, justice, and compensation” for their captured employees.⁵⁸

Finding Billy Ray

On February 4, 1942 U.S. Senator from Idaho John Thomas, drafted a letter to Harry Morrison. Thomas had just won election to his first full term after being appointed to replace William Borah who had died in office. Morrison had inquired of the Senator how he might determine the whereabouts of W.H. “Billy” Ray, Jr. – one of the young men Ann had visited at Wake Island. Soon after, Morrison began a long series of touching correspondence with Billy Ray’s father, W. H. Ray, Sr. Morrison believed that the government had access to better information but the Senator reported, “you have all the information that is obtainable at the present time.” The Red Cross actively pursued an exchange of casualty lists, but that had yet to occur.⁵⁹ A week later, Harry forwarded the Senator’s response to Billy’s family in Downer’s Grove, Illinois, a small village on Chicago’s western edge.

Ray, Sr. replied to Morrison on February 18. He reported to Morrison that the *Chicago Sun Times* got him out of bed with news of Bill Jr’s survival. The paper claimed the U.S. Navy as the source of its information. That information did not

⁵⁷ Anonymous reviewer.

⁵⁸ In a 1945 President’s Memo in the Em Kayan, Harry Morrison uses these words to describe the work of the contractors and the Pacific Island Employees Foundation during the time of the workers imprisonment. That letter is reprinted later in this paper.

⁵⁹ Thomas, John U.S. Senator. “Letter to Harry Morrison”, February 4, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

include Bill's whereabouts. Reporters descended on the Ray's quiet suburban home - attention they did not relish. Mr. Ray noted too that Mrs. Ray's brother reported from Missoula that Japanese detained there were "so well fed & taken care of, they didn't think they will want to be exchanged." He hoped as a father would that the Japanese would reciprocate, should the warring nations exchange prisoners.⁶⁰

While Harry shared Mr. Ray's hopes, his reply to Ray five days letter carried less optimism:

I do not know how the notices were worded in those newspapers in your vicinity. Here, the newspapers stated that it was a list of the men probably in the hands of the Japanese. This word "probably" was, in my opinion, used advisedly. While I do not want to unnecessarily alarm any of our people, and I have therefore refrained from commenting, I must confess that I believe that the list of casualties which we have heretofore received, consisting of fourteen, was not complete.⁶¹

Morrison's letter also updated Ray on the fury of activity surrounding the capture of the civilian workers by the Japanese. He reported that they, meaning the CPNAB, learned that it would cost about \$2,000 to send the names of the Wake employees from Japan to the U.S. through the Red Cross offices in Geneva. Morrison-Knudsen offered to pay those costs; no one took it up on the offer. Morrison further referenced the formation of an "association of relatives and friends of Wake Island employees" which would take the lead on all things related to the men taken

⁶⁰ Ray, Sr., William H. "Letter to Harry Morrison", February 18, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁶¹ Morrison, Harry. "Letter to W.H. Ray," February 23, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

captive.⁶² The Pacific Island Employees Foundation, established June 1, 1942, gathered information on Morrison's imprisoned workers, and provided charitable relief to the workers' families. Lastly, he mentioned legislative efforts to gain compensation for the civilian workers now virtually drafted into the Second World War.

By this time too, the Navy authorized payment of \$100 for January 1942 to "probable dependents as indicated by the employment records of CPNAB." The Navy retained the Liberty Mutual Insurance Company to investigate the dependency status of each employee. After Liberty's review, the Navy further authorized payment of \$100 for February. To round out the month, President Roosevelt allocated \$5 million to a Civilian War Relief Fund, administered by what was then known as the Social Security Board.⁶³

Responding in the second week of March, Mr. Ray sorrowfully admitted to Morrison "while I don't say so to Billie's mom," – he agreed that details were sketchy at best - the truth of the situation, likely unknown:

A bunch of Marines we won't mention others, who had been (in) fights from Dec. 7th to Dec 22nd to my mind did not just suddenly throw up their hands and quit. Far as I can figure, the Navy nor anyone else, in this country, actually knows what happened during and after capture of Wake Island.⁶⁴

⁶² Morrison, Harry. "Letter to W.H. Ray", February 23, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁶³ Pacific Island Employees Foundation. *A Report to Returned CPNAB Prisoner of War Heroes and Their Dependents*, (Boise, Idaho, October 1945), 12.

⁶⁴ Ray, Sr., William H. "Letter to Harry Morrison," March 14, 2012. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

Indeed, Mrs. Ray remained undeterred. Earlier that same day she visited the Chicago office of the Red Cross where staff promised immediate contact if they learned something new. The human cost of the situation shone through in Ray's letter:

There is one thing sure Mr. Morrison when one goes into the Red Cross head-quarters it makes one realize how many people, all kinds, colors and races are in trouble all trying to find some trace of loved ones. Far as I can see it's going to be a lot worse before it is better.⁶⁵

Unfortunately, the revealed humanity, and corresponding inhumanity of the situation, ran squarely into bureaucracy, chiefly the intricacies of the federal government and the varying laws of the states of the United States of America.

In March, the Social Security Board began payments to the worker's dependents. Using rates established by the Old Age Pension Section of the Social Security Act, the Board paid \$45 to a wife plus \$15 for each minor child; \$30 for a dependent parent; \$45 for two dependent parents; \$30 for a minor child not living with a parent plus \$15 for each additional child. They capped payments to any single dependent at \$85. The Contractors knew this would not cover necessities for many families.⁶⁶ Workers on the islands kept only a small amount of money for their own expenses, largely because there was little on which to spend money. Thus, most contractors sent the bulk of their pay to their families. The CPNAB believed they had a long-term solution to the pay deficiency in PL 77-490, which the President signed on March 7, 1942. The law provided for:

⁶⁵ Ray, Sr., William H. "Letter to Harry Morrison", March 14, 2012. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁶⁶ Pacific Island Employees Foundation. *A Report to Returned CPNAB Prisoner of War Heroes and Their Dependents*, (Boise, Idaho, October 1945), 12-13.

Continuing payment of pay and allowances of personnel of the Army, Navy, Marine Corps, and Coast Guard, including the retired and Reserve components thereof; the Coast and Geodetic Survey and the Public Health Service, and civilian employees of the executive departments, independent establishments, and agencies, during periods of absence from post of duty and for other purposes.

However, federal agencies interpreted this to cover only civilian employees of the United States government, not those indirectly employed, as in government contractors.⁶⁷

Morrison-Knudsen and the other CPNAB contractors decided early on to pay the wages due CPNAB employees to their dependents or next of kin. However, that was easier said than done. Legal wrangling ensued. In a letter dated April 2, 1942, M-K corporate attorney Karl Paine explained the difficulties to Mr. and Mrs. John Kimes of Twin Falls, ID:

As early as last January, Mr. Morrison asked me to advise him how the contractors can legally pay the amount due their captured employees to the dependents or next of kin of said employees . . . the California lawyers advised the contractors that California has a statute under which moneys due employees residing in California can be paid to their dependents or next of kin. Unfortunately Idaho has no such statute, and I am at a loss to know how the money due employees who were residents of the state of Idaho when imprisoned may be paid to their dependents or next of kin. Since the money due them is in deposit in California banks, it was my thought that perhaps the California courts have jurisdiction in the premises. But the California lawyers have not as yet acceded to that view.⁶⁸

Mr. Paine concluded by stating what became more and more clear as the situation progressed: "I want you to know that Mr. Morrison has asked me to do everything in

⁶⁷ Ibid, 13.

⁶⁸ Paine, Karl. "Letter to Mr. and Mrs. John S. Kimes", April 2, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

my power to make it possible for the contractors to accommodate you and all others similarly situated.” With the courts stalling payments to workers’ dependents, the CPNAB partners took matters into their own hands.

Not even a week later, J.H. Pomeroy, President of the company by the same name, wrote Harry advising him that eventually someone would sue the CPNAB partnership. He urged getting the partners on the same page. Pomeroy, like Morrison, showed genuine concern for their employees, and their families:

I understand the Bechtels are about to start paying half pay to a good many of the families of the men who were captured at Cavite. My own personal reaction to this is that whatever is done should be done jointly by all concerned . . . I personally feel a good many of these dependents are entitled to more consideration than they have had in the past.⁶⁹

While working on a long-term solution the Contractors established a fund of \$300,000, which they targeted for deposit with a charitable foundation to supplement benefits provided by the Social Security Board. The CPNAB contractors appointed Morrison the head of this new effort, and he advocated the establishment of the Pacific Island Employees Foundation, Inc. By June of 1942, the employees were asking about their pay.

On June 1 came the first letter Morrison retained in his personal correspondence, from one of his captured employees. John V. Polak, Office Manager at Wake Island, wrote that a “large number of our employees” were interned at the Shanghai War-prisoner’s Camp, and that “all are in good health and being well treated and cared for.” The Japanese could have authored such news themselves,

⁶⁹ Pomeroy, J.H. “Our Personnel Captured at Wake, Guam and Cavite”, April 6, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

but there was no mistaking the authorship of certain other parts of the communiqué – “it is urgently requested that financial relief be forwarded to us via official channels now open. Also please advise if the employees’ monthly allotments are being continued. This is a matter of great concern to us.”⁷⁰

By mid-June, the CPNAB Contractors devised a partial solution. While in some states they could not legally pay salaries due employees, they could pay bonuses. W.H. Ray, Sr. learned that the Contractors owed his son Billy’s \$1,050, \$900 of which was a bonus. A letter informed the Rays that a simple reply to the CPNAB personnel office would secure that bonus. The remaining \$150, however, required legal action.⁷¹ At least for the Rays, though, answers proved more important than Billy’s bonus.

A frustrated Ray, Sr. wrote to Harry on June 26: “Well it’s six months since Wake Island fell, and we don’t know any more of what happened there, than we did the first day.” He informed Morrison of radio reports suggesting the Japanese intended to exchange prisoners from Shanghai for Japanese prisoners who were currently embarked on a Swedish vessel. He again implored Morrison for help in contacting official channels:

Mrs. Ray and I were wondering if when this boat lands on its return trip, it would be possible for you to have someone contact one of these consuls and perhaps find out first hand what did happen to the air

⁷⁰ Polak, John V. “Letter to H.B. (sic) Morrison”, June 1, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁷¹ Dinkel, N.B. “Letter to Mr. W. H. Ray, Sr.”, June 16, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

base crowd at Wake. Other wise (sic) all we will learn is what the Government wants to let out. Which means nothing.⁷²

Morrison replied immediately. His letter dated June 30, 1942, reassured Ray, Sr. he would make efforts to get more reliable information. While tamping down expectations he told Ray, "the source of my information is not sufficiently reliable to be dependable. Therefore, it seems we can only wait and see."⁷³ Morrison reached out to fellow CPNAB contractor W. V. McMenimen of Raymond Concrete Pile Company, whose offices were located in New York City – a potential port of call for a ship carrying U.S. prisoners of war. Morrison hoped that McMenimen could arrange to have a CPNAB representative meet any ship arriving in port with U.S. prisoners so the contractors could get some desperately needed first-hand information. The Rays clung to hope. In a July 6 letter Ray Sr., formally requested Billy's bonus be forwarded to him at Downers Grove. But more importantly he wrote,

As to the \$150 mentioned, we can take that later on, I hope by him in person. In a Chicago newspaper printed February 20, 1942: "Names of 178 Sailors and Marines, Officers and Men and Civilians from Chicago and four surrounding states who are presumed to be Japanese prisoners of War were released officially yesterday by Officers of the 9th Naval District." Billie's name was among those listed.⁷⁴

In reality, however, things on Wake Island were changing for the worse.

Unbeknownst to Morrison on April 25, two contractors stole a boat from the island.

The Japanese captured them both and put them to death. In May, the Japanese

⁷² Ray, Sr., William H. "Letter to H. W. Morrison", June 26, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁷³ Morrison, H.W. "Letter to Mr. W. H. Ray", June 30, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁷⁴ Ray, Sr., William H. "Letter to Contractors Pacific Naval Air Bases", July 6, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

beheaded another contractor for habitually stealing, and evacuated the remaining service members who were previously too ill to move. On July 15, another contractor died of heart problems.⁷⁵

While the contractors slowly filled in the blanks about the status of their employees, their own bureaucratic processes slowed payments to families. On July 30, 1942, CPNAB accountants sent a letter to W.H. Ray, Sr. asking him to clarify his actual “need” for Billy’s bonus before they could release the payment. Ray responded the next day, firing off a letter to Morrison. Morrison, the busy President and General Manager of one of the world’s largest contractors issued a lengthy (page and a half) letter on August 5 advising Ray to make another request, and added for good measure, “if necessary, I will insist on this sum being made available to you.”⁷⁶ Morrison got his wish. Still dragging their collective feet, the CPNAB accountants wrote to Morrison directly on August 13 asking what they should do in the matter of the Ray bonus.⁷⁷ Insistent, but characteristically in good humor, Morrison wrote back on August 15 with a simple directive: “I think it would be in order for the P.N.A.B. to pay this bonus, and I will appreciate your handling the matter accordingly.”⁷⁸ Upon receiving the check, Ray wrote Morrison that he had used his name in making the last request, noting that was undoubtedly what got the

⁷⁵ Personal Communication, anonymous reviewer.

⁷⁶ Morrison, Harry. “Letter to Mr. W. H. Ray”, August 5, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁷⁷ Dinkel, N.B. “Letter to H.W. Morrison”, August 13, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁷⁸ Morrison, H.W. “Letter to N.B. Dinkel”, August 15, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

money there so quickly.⁷⁹ Morrison never told Ray he intervened. The end of the year arrived before Morrison heard from Ray again.

Inquiries from workers' families poured in to Morrison. Morrison and his workers' families passed along the spotty information they had: cables from superintendent Dan Teters saying "all our men are well;" the fact that all the men were not in the same camp; that in total they had reports on only 65% of the number of men that were on Wake; that they had received permission to interview Navy nurses coming in on the *Gripsholm*.⁸⁰

The steady stream of correspondence to Morrison, who dictated dozens of letters daily in a single sitting, continued unabated. He began showing signs of frustration. In a September 13th letter to R.H. Young, father of one of Harry's employees captured at Wake, Morrison concurred with Young about the lack of movement on a possible exchange of prisoners: "We agree with you that our Congressional delegations seem to be lacking in aggressive action looking to the accomplishment of something tangible in this matter."⁸¹

At the end of September 1942, a letter to the Contractors from John V. Polak, the office manager at Wake before being taken captive, suggested that channels for repatriation were open, according to what the Japanese told him. W.D. Hammond from CPNAB advised Morrison that they enlist Washington lawyer Lee Warren in

⁷⁹ Ray, Sr., William H. "Letter to H.W. Morrison", August 20, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁸⁰ Morrison, H.W. "Letter to Ray C. Maple", September 1, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁸¹ Morrison, H.W. "Letter to Mr. R. H. Young", September 13, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

seeking a prisoner exchange. Warren's prior experience situated him perfectly to impact a change in the slow pace of the situation. Then in private practice as an attorney operating from an office on Massachusetts Ave. on Capitol Hill, Warren formerly served as a Lt. Commander in the Navy where he worked as staff to Chief of Naval Operations Admiral Robert Koontz.⁸² Though Morrison did not know it, the situation had reached a turning point. On September 30, the Japanese sent 256 more contractors to prison camps, leaving only 98 contractors remaining on the island.⁸³

By October, things came to a head, and the CPNAB partners grew anxious. The communications received from their men interred at Shanghai underscored the men's chief concern: was their pay still being sent home to their families? The answer to that question was of course, no. In addition to the courts tying up monies already paid to the contractors for work performed on the Pacific Islands, the Navy ordered a cessation of payments for the work there that was interrupted or cancelled because of war activity. CPNAB attorneys in San Francisco advised "since the wages are not being paid because of directions from the Navy, it might be well to obtain an official communication from the Navy on the point which could be forwarded to the men."⁸⁴ But assigning blame did nothing to relieve the situation. The contractors found themselves in a difficult, and uncomfortable position. On October 10, Morrison wrote back to Gordon Johnson, their attorney at the San Francisco office of Thelen and Martin with his decision: "I know of nothing to do in

⁸² Felker, Craig C. *Testing American Sea Power: U.S. Navy Strategic Exercises, 1923-1940*. College Station, TX: Texas A&M University Press, 2006: 31.

⁸³ Personal Communication from an anonymous reviewer.

⁸⁴ Johnson, Gordon. "Letter to Mr. H.W. Morrison", October 7, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

this case except tell the truth and hope for the best.”⁸⁵ Morrison wrote Polak explaining the situation.⁸⁶

Waiting on Congress

Meanwhile, the contractors ramped up their efforts to get Congressional recognition of their men. Morrison’s letter to Polak revealed four bills pending in Congress that would provide various benefits to the contractors.⁸⁷ His letter also exposed the depth of his involvement in the situation: “I am personally in correspondence with hundreds of the wives and dependents of the men and we are endeavoring to assist them financially and otherwise in every way possible pending the return of their men folks.”⁸⁸ And indeed they were. Since the incorporation of the Pacific Island Employees Foundation in June of 1942, the Foundation granted nearly 5,000 individual donations to families of the captured men for everything from simple monthly allotments, to payments on homes, furniture, and life insurance premiums. In one instance, the Foundation gave a family \$43.08 toward the purchase of an irrigation pump.⁸⁹ Harry Morrison for his part authorized employees’ families to borrow directly from M-K. Just three weeks from the day Wake fell, Morrison approved borrowing by thirty-two families in Idaho and Eastern Oregon, in the amount of \$1,841. In an interoffice memo to Morrison, M-K’s

⁸⁵ Morrison, H.W. “Letter to Mr. Gordon Johnson”, October 10, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁸⁶ Morrison, H.W. “Letter to John V. Polak”, October 10, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁸⁷ Ibid (Letter to Polak)

⁸⁸ Ibid (Letter to Polak)

⁸⁹ Pacific Island Employees Foundation. *Final Report*, (Boise, ID, June 1, 1946), 4.

bookkeeper noted “all borrowers were quite grateful and extended their thanks to Mr. Morrison for his kindness in this matter.”⁹⁰

The contractors possessed little reliable information. Open questions remained about the number of casualties on the Island; where all the men were being held; if they had been receiving allotments; if communication channels were indeed open between Japan and the U.S. All these unknowns Morrison confided in a second letter to Polak on October 13. Morrison knew that about 400 men from Wake were as yet unaccounted for, chief among them Dan Teters, the Construction Superintendent at Wake. Morrison implored Polak to provide any additional information he could.⁹¹

In November of 1942 a group of women – Women of Wake - organized a campaign to gather and share information about the men interred in Asian camps. Writing from Los Angeles, Mary Ward, the group’s President, acknowledged that the contractors had word from Dan Teters. She also reported ongoing legislative efforts, specifically Senate Amendment S 2312.⁹² Ward included a list of names of men from the Los Angeles area whom were as of yet unaccounted for. Morrison dispatched the list to Tom Hoskot, asking him to fill in the blanks for Ward. Morrison also covered her expenses of \$100 incurred to meet the Morrisons in San Francisco.⁹³ On

⁹⁰ McGarvie, W. “Borrowing by Pacific Island Families,” January 15, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁹¹ Morrison, H.W. “Letter to John V. Polak”, October 13, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁹² It is likely that Mrs. Ward actually meant S 2412, not 2312. S 2412 was enacted as PL 77-784, and signed by the President on December 2, 1942.

⁹³ See: Ward, Mary H. “Letter to Mr. H.W. Morrison”, November 1, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives., and Morrison, H.W. “Letter to Mr. Tom S. Hoskot”, November 5, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

December 2, 1942, Congress too provided some financial support for the worker's families, enacting PL 77-784, effective January 1, 1943. Retroactive to December 7, 1941, the law increased payments to dependents by updating the existing Old Age Pension schedule.

It had now been nearly a year since the Wake Island attack. Harry Morrison busily penned holiday letters to M-K families. On December 23, 1942, Morrison wrote the Ray family in Downers Grove, sending a holiday bonus of \$100, and telling the Rays "Bill was tops with us and all who knew him."⁹⁴ Still, though, Morrison lacked additional news regarding Billie Ray, Jr. Mr. Ray replied just a few days later conveying their gratitude for the money, but said that Morrison's affirmation of Billie, which Mrs. Ray read aloud, "was the best comfort of all."⁹⁵ In what became a long-standing tradition, Harry Morrison in his "president's memo" within the cover pages of each *Em-Kayan*, offered Christmas greetings and prayers for all his *Em-Kayans*, especially those in captivity: "This year many *Em Kayans* are in the fighting forces. Many have been captured by the enemy. All of us, I know, join in a prayer for a speedy and lasting peace and the return of our fellow workers before another Christmas dawns."⁹⁶ The company's magazine, *The Em Kayan*, at the end of 1942 showed the company engaged in seventy seven projects, including: building Norfolk, Anderson Ranch, and Dale Hollow dams; an airport in Alaska; facilities for

⁹⁴ Morrison, H.W. "Letter to Mr. Ray", December 23, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁹⁵ Ray, Sr., William H. "Letter to Mr. H.W. Morrison", December 29, 1942. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

⁹⁶ Morrison, Harry. "President's Memo." *The Em-Kayan*, December 1942.

the U.S. Army at Fort Huachuca, AZ; and a \$180,000,000 steel plant for Geneva Steel in Provo, UT.

January 1943: The short news stories in the “M-K Aggregates” section of the *Em Kayan* reported that “if the entire M-K family for 1942 had been collected in one place, it would have formed a city the size of Idaho Falls, ID. During the third quarter of 1942, there were 14,798 men and women on the payroll with social security numbers. Rosters were doubled twice during the year. During the first quarter there were 3,100, and the second quarter 6,800. Since last January the M-K army expanded five-fold.”⁹⁷ That month the *Em Kayan* also published a composite letter created from hundreds of letters sent home by M-K workers held in various Asian prison camps. The editor’s note warned that, though the reports of the camps seem pleasant enough, the majority of the letters appeared very similar. They urged reading between the lines.

By the summer of 1943, little had changed. Morrison struggled to gather information on the whereabouts of his men. He was also now corresponding with Florence Teters, wife of Dan Teters, the Wake Island project superintendent. Mrs. Teters’ July 3 letter to Morrison highlighted the slow pace of communication. She wrote that she had received letters from Dan. To his wife, Teters reported being “frightfully bored.”⁹⁸ Morrison did not see the Teters’ letters until March 3, 1944. Characteristically, Morrison responded back to Mrs. Teters just three days later, lamenting “there have been practically no letters coming through from the Orient

⁹⁷ Staff. “M-K Aggregates.” *The Em-Kayan*, January 1943.

⁹⁸ Teters, Eleanor. “Letter to Mr. Harry Morrison”, July 3, 1943. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

for several months.” Also a Morrison custom, he closed his letter with an offer of financial assistance: “I hope that you and the children are getting along all right, and if you are having any particular financial difficulties, please advise me concerning same.”⁹⁹

As the War rolled on, women’s groups increased their information gathering activities in relation to their imprisoned family members. Now in addition to the activism by the Women of Wake and Mrs. Teters, Morrison received word of a radio transmission intercepted by the American Women’s Voluntary Services War Prisoners Listening Post in Pasadena, CA. On September 14, women at the post intercepted a message from Morrison-Knudsen employee Lewis Lawrence Farran. Morrison handled the task of thanking the women for their service while the increasingly busy Tom Hoskot set out to track down Farran’s next of kin.¹⁰⁰

Farran’s broadcast provided only the barest of details. He identified himself, noted he was a civilian prisoner of war from Wake Island, broadcasting from Japan. “The most comfortable message I have for my relatives and friends,” the transcript read, “is that I have been able to keep well. Am in good health now and feel that I shall be able to carry on to the finish which I hope is not far off.” The transcript also indicated that Farran reported not receiving any mail since his detention. He closed with a personal message to Harry Morrison: “many of us from Wake Island are

⁹⁹ Morrison, H.W. “Letter to Mr. Eleanor Teters”, July 6, 1943. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

¹⁰⁰ Morrison, H.W. “Letter to the American Women’s Voluntary Services War Prisoners Listening Post”, September 16, 1943. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

certain you did the utmost in our behalf and we thank you.”¹⁰¹ Documents retained by Morrison show that through 1944, the contractors expended \$94,611 of the \$300,000 they set aside to supplement worker’s families. They were anxious for the government to provide recompense and recognition for the civilian contractors that had fought, been captured or worse yet, killed, alongside the soldiers, sailors and Marines who defended Wake.¹⁰²

Finally, the Contractors achieved their most important victory in Congress. As the Christmas break loomed, Congress on December 18, 1943, passed Public Law 216 (HR 3598). This act amended PL 77-784, replacing the Social Security Board’s payment schedule with one specific to the CPNAB workers. The federal government committed to pay each worker their average weekly earnings, and 70% of those earnings to dependents. On January 3, 1944 William McMenimen, Chairman of the CPNAB’s Executive Committee, reported to the group that the President had signed HR 3598 into law. The law provided that “all employees of contractors who are known to have been taken by an enemy as a prisoner, hostage or otherwise, while employed at Wake Island, Guam, or the Philippines shall be paid a salary until such time as such employees may be returned.”¹⁰³ McMenimen also gave credit where credit was due: “This great victory is due principally to the efforts of Mrs. Florence

¹⁰¹ American Women’s Voluntary Services. “Intercept of Enemy Broadcast”, September 14, 1943. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

¹⁰² Dunn, C.P. “Letter to Mr. H.W. Morrison”, October 6, 1943. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

¹⁰³ Committee of the Whole House. *Conference Report on 1st Supplemental National Defense Appropriation Bill, 1944*, 1943.

[http://congressional.proquest.com/congressional/result/pqpresultpage.previewtitle/\\$2fapp-gis\\$2fcisindex\\$2f10764_h.rp.975_index/CIS+Index?accountid=9649](http://congressional.proquest.com/congressional/result/pqpresultpage.previewtitle/$2fapp-gis$2fcisindex$2f10764_h.rp.975_index/CIS+Index?accountid=9649).

Teters, who has practically alone pushed this Bill to a successful completion.”¹⁰⁴

Morrison quickly dashed off letters thanking members of Congress for their commitment to passing the legislation, among them then House member and later Senator Warren Magnuson; House Majority Leader and later Speaker John W. McCormack; Harry R. Sheppard, Chairman of the Navy Appropriations Subcommittee; and, Carl Vinson, a ranking member of the House Naval Affairs Committee who eventually served in Congress for more than fifty years, significantly shaping the modern Navy.

And not to forget – amidst all this M-K leadership had a business to run – and business was booming. In 1943, among other things, Em Kayans were building the Madras Army Air Field in Central Oregon, and airports in Otay Mesa, California, Paine Field in Washington, and two others in Paris, Idaho, and Ontario, Oregon. In Bend, Oregon, they were building a sewage treatment plant, in Moses Lake, Washington a housing project, in Eastern Idaho the Arco Proving Grounds, and near Los Angeles, California, the Santa Fe Dam. With his friend and frequent business partner Henry Kaiser, Morrison had under construction cement and magnesium plants. Morrison-Knudsen, like Bechtel and Kaiser (and often with the two) diversified into building barges through Portland Tug. Its California Shipbuilding “Calship” joint venture that year launched its 225th ship, and its Production Engineering Corporation manufactured ship engine parts. Also that year, Morrison-Knudsen, in a sign of things to come, entered the international market earning its

¹⁰⁴ McMenimen, Wm. V. “Letter to CPNAB Executive Committee, Subject: H.R. 3598”, January 3, 1944. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

first contracts in Brazil and Canada, and building airports and railroads in Mexico. Finally, toward the end of November 1943, Morrison endured yet another heartbreak when M-K co-founder Morris Hans Knudsen “the grand old man of construction” passed away. This elevated Morrison from his vice presidency to President and General Manager of a vast organization.

The imprisoned men – at least some of them – did not find out about their pay until sometime in May of 1944. It was then that the Office of the Provost Marshal General of the Army passed along to Lee Warren, a cable from the men imprisoned by the Japanese. Tom Hoskot of the Pacific Island Employees Foundation was of course tasked with overseeing the implementation of the Navy’s payment to the men. Attorney Lee Warren negotiated the terms with the Navy and the U.S. Employees Compensation Commission, eventually leading to the outcome that 75% of the men would be earning what they had before capture. Warren advised this was a deal the contractors should accept unconditionally. In an interesting historical footnote, in Warren’s January 11, 1944 letter to Hoskot, he took time to handwrite a postscript at the bottom of the typewritten page: “Had dinner with Henry Kaiser last evening and how he has quieted down. Says he wants no more contracts. Now thinking about what happens when the war is over.”¹⁰⁵ Kaiser had for some time been openly planning what to do after the War ended. His biographer Mark S. Foster noted that Kaiser outlined his general post-War plan in a December 1942 speech to the National Association of Manufacturers.

¹⁰⁵ Warren, Lee P. “Letter to Mr. Tom S. Hoskot”, January 11, 1944. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

Kaiser's concerns were in part driven by the fact that he had 200,000 employees working on government contracts that ultimately would end. Lee Warren's note, never the less, represents an interesting personal remembrance of Kaiser's shift from government contractor to industrial magnate.

A week later, Warren issued another letter to Morrison, this one on the subject of his own compensation. It remains unclear why Warren believed it necessary to write the letter he did – it can be assumed that the CPNAB partners knew the details of Warren's compensation – so the issue must have come up in another context. The text of Warren's letter appears below:¹⁰⁶

My dear Mr. Morrison:

Should the subject of compensation to me for the work I did on legislation which produced payment of the salaries for PNAB employees come up at the meeting on February 1, I will appreciate it very much if you would be my spokesman and quote the following paragraph:

"I will not accept any compensation from any source for work I did in legislation having to do with the payment of salaries to PNAB employees now prisoners of war."

Very truly yours,

Lee P. Warren

Through the first quarter of 1944, the CPNAB partners reported completion of a number of construction projects in the Pacific. G.F. Ferris, President of Turner Construction and one of the original three CPNAB partners, in August 1939 provided the *Em Kayan* editors a summary of the jobs. The attacks on Pearl Harbor

¹⁰⁶ Warren, Lee P. "Letter to Mr. H. W. Morrison", January 17, 1944. Box 116657, Harry Morrison Personal Papers, URS Corporate Archives.

occurred twenty-eight months after the contractors began the first work. By the time they completed the scheduled projects they employed over 24,000 men and women on the various Pacific Islands with over 17,000 of them recruited from the mainland via CPNAB recruiting offices. Average monthly payrolls hovered around \$4,000,000 per month, and final expenditures on the collection of projects came in at \$325,000,000 from an original \$14,000,000 contract. The projects included the Naval Air Stations at Kaneohe, Barber's Point, and Ford Island; the Aiea Naval Hospital; thousands of units of housing, miles of docks and piers, numerous ships from the partners' shipbuilding operations; and, the fuel storage depot at Red Hill – a Morrison-Knudsen project.¹⁰⁷

The following month, in April 1944, the *Em Kayan* launched the first in the "Prisoners of War" series, which featured all the men who variously "sacrificed their freedom, and some of them their lives, in defense of their country's island possessions." The *Em Kayan* staff worked overtime soliciting photographs from relatives of the prisoners. That first photographic exposition contained photographs of eighty-one men, with their names listed in alphabetical order. The explanatory text outlined a brief history of Morrison-Knudsen's involvement in the projects at Wake, Cavite, and Guam, and the circumstances surrounding their capture.

Harry Morrison's memo on the inside cover of the May 1944 *Em Kayan* announced that the company planned to publish all obtainable photographs of the men captured at Wake, Guam, and Cavite – 90% of whom, Morrison noted, were

¹⁰⁷ Staff. "M-K Roll Call." *The Em-Kayan*, March 1944.

under M-K's sponsorship. Morrison's attention to the Wake saga over the course of several years portrays a man deeply concerned over the fate of his employees, many of whom he considered friends. But taking to the pages of the *Em Kayan* he put on a brave face:

Their deep misfortune was an extreme yet a genuine illustration of the role of construction in this greatest world crisis. It is our combined duty and privilege when necessary to face known and unknown hazards, bear discomforts and perform herculean tasks as these men did to build defenses and facilities for America's protection.

The point that comes home forcibly to me is that on the "construction front" we should set the highest standard possible to keep up production that will strengthen the attack. Thus we shall hasten the return of our prisoner comrades of Wake Island, along with the thousands of captives from the armed forces, and may help to spare the live of Em Kayans now in every branch of the military services. Let us keep up *our* fight to finish the job of construction in building the foundations for a victorious peace.¹⁰⁸

The *Em Kayan* continued publishing photos of war prisoners. In September 1944 it also carried a transcript of a radio message intercepted by the War Department on July 31. The radio broadcast emanated from none other than project superintendent Dan Teters. Teters directed his message to Harry Morrison:

Dear Harry, much has happened since we last parted but I am thankful for my health. Red Cross parcels were issued recently and greatly appreciated by all of us. John Polak received your letter and afterwards word of official confirmation of salary. Both of us appreciate your efforts and send sincere regards to you and all of your friends.¹⁰⁹

The *Em Kayan* noted that Harry Morrison passed the news on to Teters' wife, then living in Seattle. The corporate offices of Morrison-Knudsen had also received copies

¹⁰⁸ Morrison, Harry. "President's Memo: It's OUR Fight to the Finish." *The Em-Kayan*, May 1944.

¹⁰⁹ Staff. "Dan Teters Heard on Jap Radio." *The Em Kayan*, September 1944.

of letters from Idaho-based relatives of prisoners of war, from prison camps in Shanghai, Fukoka, and the Phillipines.¹¹⁰

Though the Wake Island crisis demanded what seemed Harry's full attention, he still had a company to run. Morrison-Knudsen's busy year included building an airport in Alaska; irrigation systems in Mexico; Marine barracks in Klamath Falls; Anderson Ranch Dam in Idaho; the Norfork Dam; a supply base at the Navy's Point Hueneme. Further, M-K actively engaged in coal mining, shipbuilding and other industrial activities. At Christmas time, the Morrison's hosted a reunion of Six-Companies personnel in San Francisco.¹¹¹ As 1945 rolled around M-K celebrated contract number 1000.¹¹² Morrison-Knudsen in 1940 had posted gross revenues of \$11.6 million dollars. That had more than doubled with war contracts to \$25.76 million in 1941. 1943, M-K boasted revenues of \$87.2 million. That tapered off a bit to \$69.16 million in 1944, but the company achieved better margins that year. Harry Morrison was at the helm of a going concern.

By May 8, 1945, the Allies achieved victory in Europe. The war with Japan continued. In June, the *Em Kayan* carried an incredible first person narrative of the rescue of prisoners from the Cabanatuan prison in the Philippines. According to author Hampton Sides, on the morning of January 28, 1945, 121 U.S. Army Rangers infiltrated the prison – which included the last survivors of the Bataan Death March

¹¹⁰ Staff. "Dan Teters Heard on Jap Radio." *The Em Kayan*, September 1944.

¹¹¹ Staff. "The Em Kayan in Review." *The Em Kayan*, December 1944.

¹¹² Staff. "Contract 1000." *The Em Kayan*, April 1945.

– and freed all 513 American and British POWs.¹¹³ Among them were three of Morrison’s workers – purchasing agent Marshall N. Hageman, electrical foreman J.W. Georgenton, and warehouseman Rees Hopkin John. The chronicle published in the *Em Kayan* by Theodore Rosenberg – himself a POW – differed slightly in detail. He noted the date of the rescue as January 30, and placed the number of men rescued at 511.¹¹⁴ The latter discrepancy in Rosenberg’s report may have been in accounting for two prisoners who died of heart attacks during the rescue.¹¹⁵ The remaining chronology of the War with Japan remains familiar. American forces dropped atomic weapons on Hiroshima on August 6 and on Nagasaki on August 9. The Japanese agreed to surrender on August 15. On September 2, 1945, Japanese and American military leaders signed the surrender treaty aboard the U.S.S. Missouri.

Harry Morrison celebrated M-K’s role in history in the September edition of the *Em Kayan*. At the time, Morrison’s message appeared somewhat cryptic. In a 1947 *Em Kayan*, he revealed, however, that M-K’s “substantial part in building facilities for the production of the atomic bomb” was in fact the construction of the Hanford Engineering Works where scientists produced the plutonium used in the bomb deployed over Nagasaki.¹¹⁶

¹¹³ Sides, Hampton. *Ghost Soldiers: The Forgotten Epic Story of World War II’s Most Dramatic Mission*. 1st ed. New York, NY: Doubleday, 2001.

¹¹⁴ Rosenberg, Theodore. “It’s the Yanks! We’re Here to Take You Out . . .” *Em Kayan*, June 1945.

¹¹⁵ Jones, George E. “Luzon Prison Camp Rescue Made In Region Thick With Japanese.” *New York Times*. New York, N.Y., United States, January 31, 1945.

¹¹⁶ Morrison, H.W. “Peace and Reconstruction.” *Em Kayan*, September 1945.

With the return of the POWs commencing, the editorial content of the October 1945 *Em Kayan* became obvious. The cover boasted a pen and ink drawing of the captured men disembarking a vessel, one man plunging his fist in the air. The cover caption read, "Welcome home and God Bless you, the returning construction martyrs of Wake Island, Guam and Cavite, who fell among the war's first casualties." Morrison's memo inside the cover made known his personal jubilation: "No single blessing of the war's end so gladdened the hearts of their employers as the news that the great majority had survived their long enslavement." Morrison noted too the disproportionate burden Morrison-Knudsen's workers bore in the saga. More than nine-tenths of all imprisoned construction workers were captured at Wake Island, M-K's assignment. The company recruited many of them from M-K's headquarters in Boise.¹¹⁸

As the *Em Kayan* went to press in October, editors had obtained the names of sixty-three men who had returned to the States, arriving via San Francisco where the Red Cross and CPNAB representatives met the men, provided them cash, transportation, medical care, and lodging. Most importantly, they also processed their wages due, and arranged for checks to be airmailed directly.

In July 1946, the Pacific Island Employees Foundation issued its final report. There it chronicled the fate of the men taken captive on the islands: "of the 37 mainland contracted Cavite employees, 17 returned to the U.S.; 19 lost their lives and 1 who entered the Armed Forces is unaccounted for. Of the 71 men on Guam 68

¹¹⁸ Morrison, H.W. "Homecoming of CPNAB Prisoners." *Em Kayan*, October 1945.

returned and 3 lost their lives. Of the 1145 Wake men, 894 returned; 250 lost their lives and 1 is under arrest at Tokyo.”¹¹⁹

The report recorded the names of all the men who lost their lives, the date they perished, and the manner in which they died. The Japanese had executed one construction worker in July of 1943, for stealing food. That was not the worst of the atrocities. Japanese soldiers executed a number of the men following an American bombing of the island on October 5, 1943. Not wanting to be bothered with supervising American prisoners during the American reconquest of Wake, the Japanese Garrison Commander, Navy Captain Shigematsu Sakaibara ordered his subordinates to execute the remaining ninety-seven Americans left on the island. Sakaibara’s junior officers forced the Americans to dig a large open pit. The Japanese soldiers then gunned them down from behind, disposing of their bodies in the mass grave. On December 21, 1945, the *Los Angeles Times* reported the story “Massacre of 96 Yanks by Wake Japs Disclosed.”¹²⁰ The *Times* on December 23 then ran the story “Jap Admiral Admits Executing 96 Americans.”¹²¹ However, the AP filed story misidentified the victims, labeling them civilian employees of Pan American Airways. The *New York Times* carried a similar article that same day, but their coverage correctly noted “all the victims were skilled construction workers who had labored for the Japanese for twenty-two months.”¹²² In actuality, the death toll

¹¹⁹ Pacific Island Employees Foundation. *Final Report*. Boise, ID, June 1, 1946.

¹²⁰ Associated Press. “Massacre of 96 Yanks by Wake Japs Disclosed.” *Los Angeles Times (1923-Current File)*. Los Angeles, Calif., United States, December 21, 1945.

¹²¹ Associated Press. “Jap Admiral Admits Executing 98 Americans.” *Los Angeles Times (1923-Current File)*. Los Angeles, Calif., United States, December 23, 1945.

¹²² “Foe on Wake Island Slew 98 U.S. Civilians.” *New York Times*. New York, N.Y., December 23, 1945.

reached ninety-seven: one contractor managed to survive the execution and lived for a week until being recaptured by the Japanese, and executed.

Follow-up articles to the original news reports muddled the waters again by misidentifying the victims as employees of Pan American Airways.¹²³ On December 26, 1945, both the *Los Angeles Times* and the *New York Times* carried a United Press story announcing that a U.S. Naval Court sentenced to death then Rear Admiral Sakaibara, and ten of his officers. After the tribunal, American military forces transported Sakaibara to Guam, and put him to death by hanging on June 18, 1947. Again, the stories also understated the number killed (96, as opposed to 97) and again misidentified the victims as employees of Pan Am.¹²⁴

Though details surrounding the fate of the contractors who remained on Wake remained sketchy, it is likely that in July 1946 as Morrison perused the Pacific Island Employees Association's final report he had seen the stories of the massacre of the contractors in the nation's major newspapers. Morrison archived his personal copy of the report in his files, and he made only one note upon it: a hash mark next to the name of William H. Ray Jr., the young man whose father Morrison had long corresponded with after the initial siege of Wake, the young man Ann Morrison took time to visit during the Morrison's stay on Wake Island in 1941. As of the release of "A Report to Returned CPNAB Prisoner of War Heroes, and their Dependents" in

¹²³ "Japanese Admiral Admits Wake Killings". New York, N.Y., December 24, 1945.

¹²⁴ See, United Press. "Nips Sentenced to Die in Wake Yank Killings." *Los Angeles Times* (1923-Current File). Los Angeles, Calif., United States, December 26, 1945 and, United Press. "ELEVEN JAPANESE SENTENCED TO HANG: Commander at Wake Is Found Guilty--He Urges Trial of Americans for Atom Bomb". New York, N.Y., December 1945.

October 1945, Ray was still listed as “missing and unreported.” Now, Morrison knew for sure as the final report read that Ray had been executed at Wake Island, October 7, 1943.

More than two decades later, on February 23, 1966, Harry Morrison arrived in Seattle to celebrate his 81st birthday. During the festivities, Western Union delivered him a telegram at M-K’s headquarters in the Hoge Building. The brief telegram read “the entire membership of the survivor of Wake Guam and Cavite extend their congratulations on your 81 birthdah (sic).” Voluminous return correspondence retained in Morrison’s personal records indicates that Morrison received numerous birthday cards, letters and telegrams, yet he retained only two: one from his close friend and company president J.B. Bonny, and the one from the survivors of Wake Island. Suffering from diabetes and the effects of bells palsy, Morrison lived just another five years. And though we can trace so much American history to Harry Morrison, it was his steadfast determination in support of his men that neither he nor they ever forgot.

World War II took the public private partnership between the U.S. federal government and heavy contractors to new heights, the effects of which were powerful and long lasting. The U.S. federal government with its allies had won a world war on two fronts. In the Pacific, much of the industrial activity and military armaments are a credit to the heavy contractors. The era also witnessed a shift in power to the Western United States, and a focus from the Atlantic to the Pacific. The world was beginning to recognize what the U.S. federal government already knew: Western heavy contractors like Morrison-Knudsen represented a powerful force.

And corporate CEO's such as Harry Morrison gained massive influence. Morrison no longer relied solely on local bureaucrats for contracts. Now, he had access to agency heads, senior members of Congress, and flag rank military officials. Wiley and Gottlieb summarized this evolution, writing:

In a sense, the war in the Pacific never ended. The continued militarization of the region had a hothouse effect on the western economy as federal funds flowed into the western states. The great boom gained momentum, linking the West permanently to this Washington-funded military Keynesianism. In this period, the careers of the leaders of the Six Companies exemplified the uninterrupted rise of western businessmen and civic leaders to positions of national and international influence.¹²⁵

Morrison-Knudsen's lobbying presence in Washington D.C. was one of the earlier instances of corporate lobbying practice in the nation's capitol. M-K learned from the Wake Island process, developing an even more sophisticated lobbying practice in later years as the company's fortunes grew.

¹²⁵ Wiley and Gottlieb, *Empires in the Sun*, 31.

PART THREE: THE BATTLE FOR HELLS CANYON

“The irrigation centralizers, whatever region they represented, were overwhelmingly an elite group promoting an elite program. Their overriding aim was to enlarge, for their own ends, the country’s wealth and influence. To secure peace and stability at home. To earn profits at home and abroad. And to pursue power, always power.”¹²⁶

Donald Worster

Following successful infrastructure building programs in the New Deal and the war in the Pacific Theater, the partnership between the federal government and U.S. heavy contractors was very literally battle tested. The twin forces of globalization and militarization define much of the second half of the twentieth century and their impact shaped heavily the destiny of the contractors. With their newfound fortunes as the private sector elite in the West, Harry Morrison and Morrison-Knudsen were armed with not only economic power, but also political power. As Wiley and Gottlieb noted,

Indeed in a scant dozen years-years that had marked the end of the Great Depression and the successful conclusion of World War II – the West had witnessed one of those incredible economic leaps that characterize its whole history of boom and bust. As Henry J. Kaiser put it, the nation was finally witnessing “the phenomenon of the self-industrializing West.” Kaiser knew the process well because he and his associates in the Six Companies played a major role in this modern-day miracle.¹²⁷

But as the decade of the 1940s closed, Morrison found himself in the unenviable position of battling his partner in prosperity – the U.S. Federal Government – over a proposed dam on the Snake River.

¹²⁶ Worster, *Rivers of Empire*, 169.

¹²⁷ Wiley and Gottlieb, *Empires in the Sun*, 19-20.

Many factors seemingly combined to galvanize Morrison's stringent opposition to the dam. First, his conservative political beliefs favored local control over federal control. In 1937 Senator George W. Norris of Nebraska proposed a series of seven new regional authorities modeled after the Tennessee Valley Authority.¹²⁸ One of these would have been the Columbia Valley Authority. Among political conservatives, and others, fear arose as to the level of control the U.S. federal government would have over the "commanding heights" of the economy. Much of Morrison's correspondence echoes that fear. Evidence also points to the fact that Morrison maintained a social relationship with Idaho Power CEO Tom Roach. That could also have contributed to Morrison's fervor against the federal High Dam. Morrison displayed a keen interest in local politics and in shaping Idaho, as we will see later in his battle over a cross-town freeway in Boise. Further, were the feds to control the Snake, M-K would have to competitively bid the projects. With Idaho Power in control of the Snake's Development, Morrison had close and direct access to the decision maker Tom Roach. Finally, had the federal government succeeded in creating a Columbia Valley Authority or in authorizing a High Dam in Hells Canyon anytime after the fall of 1955 that work would have flooded millions of dollars in work Morrison-Knudsen had already performed. Certainly those factors combined to shape Morrison's views. Morrison's own correspondence does not address the issue directly, but nothing indicates that the monopolistic competition

¹²⁸ Kline, Patrick M., and Enrico Moretti. *Local Economic Development, Agglomeration Economies, and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority*. Working Paper. National Bureau of Economic Research, August 2013. <http://www.nber.org/papers/w19293>.

between Idaho's only power producer and the federal government concerned Morrison at all.

Told here from the perspective of Harry Morrison, the battle over the proposed "Hells Canyon High Dam" features three main themes: 1) the nature of corporate power in the West following the Depression/New Deal/World War II; 2) the changing practice of corporate public affairs activity; and, 3) an agency-based thesis for Harry Morrison and the private sector's victory over the federal government in the fight over the dam, which is also a response to Karl Brooks' earlier institutional argument on the subject.

Following the Newlands era, Worster described the mode of water control in the modern (lower case "m") capitalist state, saying "In this mode there are two roughly equivalent centers of power: a private sector of agriculturalists and a public sector made up of bureaucratic planners and elected representatives. Neither group is autonomous." He continued, "the agriculturalists who constitute the private sector have become in recent times too rich and well organized, when compared with the archaic peasant class, to be cowed into submission by any state."¹²⁹ With the West now a power center in its own right – and private sector contractors like Morrison-Knudsen an integral part of the success, Worster's inattention to their contributions seems curious. If the agriculturalists wielded great power, so too did the contractors.

The Hells Canyon saga from Harry Morrison's perspective also portrays the changing power relations between Morrison-Knudsen and certain elements of the

¹²⁹ Worster, *Rivers of Empire*, 51.

U.S. Federal Government as their interests diverge on the issue of the High Dam. In this fight over the dam, Morrison is able to extend his power in the iron triangle of federal agencies, their constituents such as Morrison and his interest groups, and Congress. With his newfound power as a major WWII defense contractor, Morrison was able at once to continue working as a private sector federal contractor, while openly battling federal supporters of a high dam. As would be the case throughout M-K's corporate history, the federal government needed firms like Morrison's to execute their foreign and domestic policy objectives. And the relationship had its difficulties, as later chapters will show. This divergence of public and private sector interests at times expresses itself in the business history literature as the waxing and waning of corporate support for neoliberalism – a blend of liberal politics and free market economics.

The promotion of neoliberal politics by American business leaders has ebbed and flowed throughout history. Morrison-Knudsen rose to power and influence and gained vast amounts of experience through federal contracts. But Harry Morrison often put his Western paradoxical politics on display. While he grew in wealth and stature from federal contracts, he urged political and economic conservatism in the pages of the *Em Kayan*, asking questions like “Are you willing to resist politically inspired advantage for your community, your industry, or your profession on matters which produce disadvantage for the whole nation?” and “Are you willing to speak out against growing government intervention in fields like public power, or

subsidies, or tax hand-outs, even though you, too, can be the beneficiary of them?"¹³⁰

In context, this appeared right before the elections in the middle of President Kennedy's term. Little was at stake then. Democrats lost seats in the House, as is typical in mid-term elections, yet still retained a majority. In the Senate, Democrats gained three seats giving them a two-thirds majority in the upper chamber. It illustrates though that Morrison could on the one hand maintain close government ties and complete government contracts, while also condemning government involvement in electric power generation.

The Wake Island saga thrust Harry Morrison and his firm into the realm of government affairs. For six years Morrison worked government channels to locate his employees, communicate with them, and finally secure for them federal benefits since his workers had unwittingly been conscripted into the War so he argued. A 1940s entrance into public affairs makes Morrison and M-K one of the earlier, and more robust practitioners of government relations according to authors Regina Blaszczyk and Phillip Scranton.¹³²

Then beginning in 1947, Morrison faced yet another Herculean government relations issue. At that time a battle between the federal government and Idaho Power – the state's electric utility – raged over who would dam a particular stretch of the Snake River, in Hells Canyon between Oregon and Idaho. Idaho Power proposed three dams at the site; the federal government preferred to construct its

¹³⁰ Morrison, H.W. "Chairman's Memo: Six Timely Questions for American Citizens." *The Em Kayan*, September 1962.

¹³² Blaszczyk, Regina Lee, and Philip Scranton. *Major Problems in American Business History: Documents and Essays*. Boston, MA: Houghton Mifflin, 2006.

own dam – a single high dam at the site. Eight years later in 1955, the Federal Power Commission granted Idaho Power the licenses to build the first dam. Morrison-Knudsen won the contract to build the dam. But the drama over the dams carried on for another three years before the issue finally resolved. Over the course of the eight-year saga, however, Morrison revealed himself to be a shrewd political operator, ahead of his peers. His reach extended to politicians all over the country, influential corporate executives, and even to the Oval Office. Morrison established and mobilized grass roots trade groups to influence the issue, and had staff in Washington D.C. monitoring Congressional activity on a routine basis. All of that activity shows a very early sophistication in government relations practice.

In his study of IBM from 1956-2000, David Hart describes the way that company changed its own practice of public affairs over the period and it closely aligns with what we see with M-K: In the early part of the second half of the twentieth century, continuing the prewar tradition, senior managers dealt with policy issues personally, contacting their public counterparts directly to voice their opinions and head off problems. By the end of the 1960s, the sheer volume of issues and the increasing antagonism with which they were being raised led firms to delegate these tasks to new staff units that could gather more detailed intelligence and execute more sophisticated political strategies. The accumulation of such units, along with changes in the structure and operations of government, in turn, helped, by the end of the 1980s, to create a large pool of specialized Washington

professionals into which firms could dip routinely to support and supplement their in-house staff.¹³³

Finally, the Hells Canyon High dam controversy from this perspective offers a new look at an event, which historian Karl Brooks attributed to a political reaction against the New Deal and bureaucratic infighting. Morrison's activities over the course of nearly ten years tells a more fine-grained story where human agency, sophisticated government affairs practice, and the fine line of history intervened in the final outcome. The Hells Canyon saga, from Morrison's perspective, occurred in three primary waves of activity: 1949, the original machinations in Congress; 1955 when a second front occurred; and 1957 when the issue reached its dénouement and conclusion. The next chapter, which focuses on Morrison-Knudsen's international activities, fills in the gaps in the timeline seen here.

The Snake River Battleground

For nearly ten years, corporate powers in Idaho battled proponents of a federally financed and controlled high dam on the Snake River. Both public and private interests long sought development of the dam site situated in one of the deepest canyons in the U.S. – Hells Canyon, which divides Oregon and Idaho. Public power proponents, including Senate luminaries Frank Church of Idaho and Warren Magnuson of Washington State, favored a federally financed high dam, which would be the lynchpin of a new Columbia Valley Authority. Modeled after what would be its counterpart, the Bonneville Power Administration, the new authority would

¹³³ Hart, David. "Red, White, and 'Big Blue': IBM and the Business–Government Interface in the United States, 1956–2000." *Enterprise and Society* 8, no. 1 (March 1, 2007): 1–34. doi:10.1093/es/khl072.

complete federal development of the Columbia basin by bringing the Snake River under federal control. Public power proponents found support in Washington and Oregon because most there believed this would push cheap power downstream, allowing for more rapid urbanization and industrialization. The majority of political support came from Democrats both in the region and across the country, because President Truman made constructing the High Dam a focus of his administration. That all changed when the nation elected Dwight D. Eisenhower President.

Predictably, the Eisenhower Administration sought to roll back federal spending, and foster free-enterprise, and he and the Republicans in the House and Senate strongly opposed the creation of the Columbia Valley Authority or federal construction of the High Dam. Back in Idaho, the Idaho Power Company (a private-sector entity) had been planning for a series of three smaller dams along the same stretch of river. In June of 1947, the company applied to the Federal Power Commission (FPC) for a federal license to construct the first two dams – Brownlee, and Oxbow. More than eight years later, on September 9, 1955, the FPC voted unanimously to grant the licenses to Idaho Power.

In the eight-year span in between, Congress considered bills every year, which would effectively undo the action taken by the FPC. By 1955, Idaho-based Morrison-Knudsen, which had built the Hoover and Grand Coulee Dams, had begun work on the Brownlee and Oxbow dams. If approval of a high dam were to escape Congress, and be signed by the President, it would mean flooding out over \$2 million worth of work already completed. This presented a specter that neither

Idaho Power, nor Morrison-Knudsen President and General Manager Harry Morrison wanted to face.

While publicly maintaining an air of neutrality, Harry Morrison mobilized grassroots groups across the country, law firms, and a full-time lobbyist in Washington D.C. tasked with killing the high dam. Morrison's personal correspondence, rarely seen before, contains colorful memoranda between numerous members of Congress including firebrands such as Barry Goldwater (a staunch opponent of the dam). His memos reach all the way to the White House, where Morrison got answers from on high. While a seemingly obscure policy issue, it wreaked havoc for Republican candidates at all levels of government in 1954 and 1956. Further, it strangely became intertwined with the 1957 Civil Rights issue as members of Congress traded votes over the bills. Dreams of the high dam finally perished in 1958 when supporters could no longer muster the political will to sustain efforts for expanding public power – but only after the likes of Harry Morrison spent over a decade wearing them down.

A New Regional Authority

In the summer of 1948 Idaho Power CEO Tom Roach sent to Harry Morrison a copy of "Reclamation without Waste and Regimentation," a presentation the company gave before the House and Senate Appropriations committees, in response to a federal proposal to establish a Columbia Valley Authority – modeled after other regional water authorities such as the Tennessee Valley Authority. The authors and sponsors of the presentation consisted of the largest electric power companies of the Rocky Mountain area – eastern Oregon, Idaho, Montana, Utah, Wyoming, and

Colorado – an area encompassing 540,000 square miles or 18.13% of the United States.¹³⁴ Emblazoned across the top of the report’s seventeenth page appeared the header “GETTING DOWN TO BRASS TACKS” with the report’s first talking point reading “federal power bureaucracy is an adventure in applied socialism.” From the perspective of the utilities, private sector construction of power facilities along the Snake River would save taxpayers the cost of power plants and transmission lines, place the properties on the tax rolls (noting that utilities often pay 20% of their gross revenues in taxes), and over the course of twenty years pay to local, state, and federal governments taxes equivalent to the cost of building the power generating facilities and transmission lines. After making these points, however, the presentation quickly reverted to the attacking the government’s plan as socialism. “The basic question,” as the closing argument read, was “In short, shall we, or shall we not, have socialized industry in the U.S.A.? The power companies’ presentation set the stage for an eight year battle over who would control the waters of the Snake River: public or private interests.

Near the beginning of 1949, Harry Morrison wrote to Idaho’s Democratic National Committeeman Dan Cavanaugh notifying him of Southwest Idaho Water Conservation Project, Inc.’s (SIWCPI) opposition to the creation of a new Authority. The SIWCPI was a grass roots association established and funded by Morrison and others to advocate for federally funded water projects in Southwest Idaho. He noted that he knew Congressman Henry Jackson, and Idaho Senator Glenn Taylor, who had

¹³⁴ Electric Power Companies of the Rocky Mountain Area. *Reclamation without Waste and Regimentation*. Boise, ID, March 1948. Box 116677, Folder: Organizations, SWICPI, General.

been the Vice Presidential candidate nominee on Henry Wallace's Progressive ticket in 1948, were actively working to get President Truman to propose creation of a new Regional Authority. He also announced that the SIWCPI board had overwhelmingly (only 8 votes for out of 80) voted to oppose creation of a Columbia Valley Authority. The feeling of the membership was that the Army Corps and Bureau of Reclamation could themselves adequately develop the water resources along the Snake River. They also believed that the Governors of Washington, Oregon, and Idaho would each oppose a new authority, though Idaho also feared that Washington and Oregon with larger population bases would ultimately end up controlling such and authority. Morrison closed asking for Cavanaugh's support, in classic Morrison fashion: "If you agree with what seems to be the majority of sentiment on this proposition, we will be glad to have you take such action to support their position as you see fit."¹³⁵

Following the lessons learned in the Wake Island saga, Morrison-Knudsen continued employing lobbyists, and on February 11, 1949 Morrison wrote to Everett Rising, responding to Rising's letter from February 3. Rising served as the Vice President of SIWCPI and Morrison's legislative lead on not only water and infrastructure issues, but all things political. To Rising Morrison wrote

In your letter of February 3rd under No. 1, you say, "just how far will we go in opposing authority legislation?" I have wondered about this myself, because I feel we are somewhat groping in the dark until we know what kind of authority legislation is proposed, but, as far as I can determine, our fellows are generally of the opinion that the only thing we can do is oppose the legislation in every way we can, at least

¹³⁵ Morrison, Harry. Letter. "Letter to Dan Cavanaugh", January 24, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

until there is something indicated somewhere along the line that the legislation is less harmful to the people of Idaho than is generally considered to be the at this time.¹³⁶

Morrison noted that he would be in Washington D.C. toward the end of March, prior to boarding a ship in New York. He and Mrs. Morrison would be touring job sites around the world until June. Rising updated Morrison just three days later.

Rising had been travelling the country meeting with other regional water associations, getting a sense of which groups would be on the side of the private delegations opposing establishment of a new Columbia Valley Authority. Rising wondered aloud to Morrison how much time he should spend opposing the creation of the Authority, vis-à-vis working to secure funding and authorization for water projects in Idaho – the reason that SIWCPI existed. He suggested a work plan combining both. He enlisted Morrison to seek passage of a memorial by the Idaho legislature opposing creation of a new regional authority. He noted that Washington State's House of Representatives had already passed a similar measure in support of the creation of the authority. Rising predicted a new bill appearing in Congress within two to three weeks¹³⁷

Not long after Rising's communiqué, Democratic National Committeeman Dan Cavanaugh responded to Morrison's request to help oppose creation of the Authority. Cavanaugh's cryptic letter made no commitment to help Morrison. Reading between the lines, though, it seemed clear that Truman favored creation of

¹³⁶ Morrison, Harry. Letter. "Letter to Mr. E.W. Rising", February 11, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹³⁷ Rising, E.W. Letter. "Letter to H. W. Morrison", February 14, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

an authority. Cavanaugh wrote, "From what I can observe, there is a move to curtail any further storage in Idaho for future irrigation projects and use these waters for development of power on the lower Columbia." Along the same lines, he noted that "there appears to be no sharp line of cleavage between the functions of the Corps of Engineers and the Reclamation Dept. in building dams for flood control, irrigation, navigation, public power etc. Possibly a consolidation of the two under one agency would work for more efficiency and remove all controversy." That sentiment did not give away Cavanaugh's position. It in fact echoed the findings of the first Hoover Commission. However, Cavanaugh twice noted that he favored "making no concession on Idaho's rights to our waters." As became more common in correspondence on this issue, Cavanaugh requested that Morrison "treat this letter as personal and confidential."¹³⁸ Over the course of the next week, things escalated quickly.

On February 20, 1949 the Portland, Oregon bureau of the Associated Press reported in the Sunday *Idaho Statesman* that CVA proponents met the day prior, with the big news being that President Truman planned to dispatch his Administrative Assistant, Charles S. Murphy, to the region to conduct follow up meetings. Truman put Murphy in charge of drafting the new CVA legislation.¹³⁹ The next day, Morrison received a letter and flyer from Bill Welsh, Secretary-Manager of the Idaho State Reclamation Association. The letter drafted and sent to water users

¹³⁸ Cavanaugh, Dan. Letter. "Letter to Mr. H.W. Morrison", February 19, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹³⁹ Associated Press. "Valley Authority Group Expects President's Aid." *Idaho Statesman, The (Boise, ID)*. Boise, ID, February 20, 1949.

and other interested parties in the state, warned that a new Columbia Valley Authority (CVA) legislation could emerge from Congress at any time. The letter authors urged organizations to draft resolutions opposing any attempt to create a CVA, and further requested that water users contact the Idaho congressional delegation. Like the incendiary Idaho Power presentation warning of creeping socialism, the Reclamation Association's accompanying flyer warned Idahoans, "Beware of the 'Foot in the Door:'"

Advocates of CVA now propose a modified bill. You know how far they would go *if they could get away with it*. Let's not be lulled to sleep by any such subterfuge. *The new proposal would merely be an opening wedge!* Later, when our backs are turned, proponents of CVA can slip through any amendment they desire, enacting all the vicious features of any of past CVA bills. You know from past experience what they want – a Board of three men, appointed by the President and responsible only to the President, but *in no way responsible to the people most vitally affected*. And their control over the natural resources of Idaho, including water rights, would be almost unlimited.¹⁴⁰

Also in February 1949, Jim Polhemus of Portland General Electric, sent a letter to Idaho Power CEO Tom Roach notifying him that Washington Congressman Hugh Mitchell over the weekend hosted a meeting in Portland with CVA advocates. Polhemus reported over 100 people in attendance. His brief letter included the CVA's advocacy program, which he described as "formidable," advising, "we will have to do something to head it off." Rumors and newspaper clippings, said Polhemus, indicated that White House Assistant Charles S. Murphy and C. Girard Davidson, Asst. Secretary of the Interior, would be visiting the region with the same

¹⁴⁰ Idaho Reclamation Association. "CVA Can Still Be Beaten", 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

agenda, but cautioned, "I can find out nothing definite as to when they will be here."¹⁴¹

The "League for CVA" proposed program included three components: an educational program, the national program, and a series of Congressional hearings. The educational program included the distribution of pro-CVA literature, press releases, organization of a speakers bureau, the showing of TVA films to various groups, letter to the editor campaigns, and regional meetings. The national program enlisted support from various valley authorities – the proposed Missouri Valley Authority, Tennessee Valley Authority, and the St. Lawrence Seaway supporters. The remaining portion was the coordination of testimony in front of Congress, and the preparation of research and other briefs prior to hearings.

Just days after the Reclamation Association warned of the possible emergence of legislation, Everett Rising on February 25 sent a late afternoon telegram to Morrison, telling him of plans by a group of Washington power players to fly to the Pacific Northwest over the weekend to drum up support for a CVA. Henry M. "Scoop" Jackson, and Congressman Hugh Mitchell among others, were slated to travel to Spokane, Portland, and Boise. Rising suggested Morrison contact Idaho Power's Tom Roach, Bill Welsh from the Idaho Reclamation Association, and D. B. Noble, the Secretary Manager of the Pacific Northwest Development Association in order to make sure that CVA opponents had attendees at all meetings. The Pacific Northwest Development Association formed in May of 1945 with the

¹⁴¹ Polhemus, Jim. "Letter to Mr. Tom Roach", February 22, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

express purpose of defeating a Columbia Valley Authority. Its leadership consisted primarily of the heads of the state reclamation associations, and received sustaining funding from private utilities.¹⁴² Rising asked for reports back to his office to determine the nature of the visits.¹⁴³ Earlier that day, in response to meetings held by CVA boosters over the weekend prior, Morrison had met with Sharp and Welsh from the Reclamation Association, and a number of Idaho's commercial titans, he dubbed the "Committee of Nine," including Boise retailer C.C. Anderson, and Bank President J.L. Driscoll.¹⁴⁴ The following day, Morrison reported to Tom Roach in a letter that he and his Committee of Nine were "moving locally to perfect an organization to head up the fight for the Idaho area," acknowledging "we are confronted with a real battle on this issue."¹⁴⁵

By summer, the issue remained on the front burner. In a June 3, 1949 letter to Morrison, Rising included a newspaper article about CVA hearings on Capital Hill, hearings columnist Peter Edson labeled "Shenanigans." Truman had summoned Mississippi Rep. William M. Wittington, and New Mexico Senator Dennis Chavez to the White House to ask the two to hold hearings on the CVA bill. Both men chaired Public Works Committees in their respective houses of Congress. Wittington, the head of the National Rivers and Harbors Congress, actively opposed the CVA

¹⁴² McKinley, Charles. *Uncle Sam in the Pacific Northwest: Federal Management of Natural Resources in the Columbia River Valley*. (Berkeley, CA: University of California Press, 1952), 560.

¹⁴³ Rising, E.W. "Telegram to H W Morrison", February 25, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹⁴⁴ Weis, Barney J. "Note to Mr. Morrison", February 25, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹⁴⁵ Morrison, Harry. "Letter to T.E. Roach", February 26, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

proposal, and the House Public Works Committee was evenly split on the issue. Chavez favored creation of the CVA, but he lacked the votes to get a bill out of committee. The Senate held hearings on the bill over the weekend prior to Memorial Day, and on Memorial Day itself. Wittington decided to do the opposite: give hearing to the Army Corps of Engineers and Bureau of Reclamation's "Weaver-Newell Plan." Like the Pick-Sloan plan, conceived to block a Missouri Valley Authority, leaders from the Bureau of Reclamation and the U.S. Army Corps of Engineers – R.J. Newell and Colonel Theron Weaver, the Division Engineer, Northwest Division, U.S. Army Corps of Engineers - conspired to block the Columbia Valley Authority.¹⁴⁶ Columnist Edson identified none other than E.W. Rising as the ringleader of those supporting Weaver-Newell and thus opposing Truman's CVA bill.

Rising's letter to Morrison noted Harry's long absence overseas checking on Morrison-Knudsen projects. At this point, Rising was able to report to Morrison a specific bill – S. 1645 – which would create the Columbia Valley Authority. He also noted three other similar proposals making their way through the process. As Edson alluded in his newspaper column, Rising chronicled to Morrison his adept handling of Wittington's Committee:

Chairman Wittington of the Public Works Committee of the House has been holding hearings for several weeks and is scheduled to complete same on June 10th, preparatory to the introduction of a new omnibus Flood Control and Navigation Authorization bill. A few days ago he reached the Columbia Basin and Colonel Weaver and Regional

¹⁴⁶ Billington, David P., Donald C. Jackson, and Martin V. Melosi. *The History of Large Federal Dams: Planning, Design, and Construction in the Era of Big Dams*. (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 2005), 223.
http://www.cr.nps.gov/history/online_books/dams/federal_dams.pdf.

Director Newell presented their plans for the development of the water resources for the Columbia River basin. The Administration's group tried to frame these hearings so that they could introduce evidence supporting Authority legislation and push the Army and Bureau of Reclamation plans into the background. *They did not succeed in their attempt, due largely to the cooperation of the Chairman with our Coordinating Committee.* The hearings were handled by the Chairman in a very fine manner, and Mr. Davidson and his group were the ones that were pushed aside.

Wisdom tempered Rising's joy after this initial success. He reported to Morrison that the "Administration will put every ounce of pressure it can develop behind the enactment of S. 1645." That would include, he believed, hundreds of thousands of copies of the hearings distributed to newspapers, libraries and civic organizations, and the cooperation of all of Truman's other agencies. Rising believed that countering this federal effort would cost a half-million dollars over two years.¹⁴⁷ Morrison forwarded the letter to his Committee of Nine for consideration. By the middle of June, Rising circulated a proposal for the creation of the "National Committee on Utilization of Water Resources." Proposed staffing included a research engineer, a writer, and two office assistants. He proposed setting up an office in a "mid-grade" location in Washington, with second hand desks, and minimal amenities. He estimated a first year budget at \$60,000.¹⁴⁸

Morrison spent the tail end of 1949 building opposition to Truman's CVA plans, writing to his old friends, contractors H.A. Dick, George Atkinson and J.A. McEachern, as well as the President of the Associated General Contractors. Though

¹⁴⁷ Rising, E.W. "Letter to H.W. Morrison", June 3, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹⁴⁸ Rising, E.W. "Letter to H.W. Morrison", June 16, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

the national AGC had not taken a position on the CVA issue, Morrison raised the specter of the loss of business to AGC firms, noting that federal agencies had of late reached out to senior M-K engineers with job offers – indicating that the feds intended to manage some large scale construction projects on their own.¹⁴⁹

Morrison also sought support from Idaho Senator Henry Dworshak, who noted in return correspondence his long-standing opposition to the CVA, and that it “will be necessary to plan carefully to combat the claims of the administration concerning CVA, as this issue will probably be one of the most controversial of the 1950 elections.”¹⁵⁰ About that he would be correct.

In writing to Idaho Power CEO Tom Roach about the issue, Morrison returned to arguments about protecting capitalism writing, “It likewise is imperative, if we are to preserve our way of life and our free economy, such part of which is left to preserve, we must all of us make every effort to protect the industry we have and create a favorable climate to induce other industry to locate in our area.”¹⁵¹

M-K and Idaho Power Double Down

By March of 1955 five identical bills authorizing construction of the federal high dam in Hells Canyon sat before the first session of the 84th Congress. Senate Bill 1333, sponsored by Oregon Senators Wayne Morse and Richard Neuberger,

¹⁴⁹ Morrison, Harry. “Letter to H.A. Dick”, December 23, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹⁵⁰ Dworshak, Henry C. “Letter to Mr. H.W. Morrison”, December 31, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

¹⁵¹ Morrison, Harry. “Letter to Mr. T.E. Roach”, December 30, 1949. Box 116677, Harry Morrison Personal Archives, Folder: Organizations, SIWCPI, 1949, Columbia Authority Bill, Columbia Basin Plan.

represented the primary bill. But by the fall, Morrison and Roach were working on a plan of their own. On September 27, 1955, Morrison-Knudsen issued Tom Roach an outline of the major terms of a contract to build Brownlee Dam – they were moving ahead with the project despite machinations in Congress. While Congress and federal agencies with a stake in the matter failed to come to terms over the dam, one agency had: the Federal Power Commission. On August 4, the Commission had granted Idaho Power a license to build Brownlee. The protracted hearing generated 19,215 pages of transcripts and over 400 exhibits.¹⁵² Now, high dam supporters would have to – and did – file appeals there while pressing their case before Congress. Idaho Power continued its PR campaign, releasing a summary of the FPC's findings, and dispatching executives on speaking engagements. Company Vice President A.C. Inman in an October workshop in St. Louis, threw red meat to his audience, opening his talk by saying:

It is unnecessary for me to tell this audience that in the 1956 campaign, further socialization of electric power will again be a major political issue. Public power is a hardy biennial that appears every two years in the lush and sometimes rank garden of American politics; and so, once again, the electric industry will become the political whipping-boy, not only of run-of-the-mill socialists and left-wingers, but also of many good, plain American politicians who hope to obtain votes by berating this particular segment of American Industry.¹⁵³

In mid-November the local paper reported that M-K and Idaho Power had entered into an agreement to begin immediate construction of Oxbow and Brownlee

¹⁵² Chapman, Don. *History of the Hells Canyon Complex*. (Boise, ID: Idaho Power Company, 2003), 2. http://www.idahopower.com/pdfs/Relicensing/hellscanyon/hellspdfs/techappendices/Aquatic/e31_02_ch02.pdf.

¹⁵³ Inman, A.C. "Hells Canyon --- Politics or Power!" presented at the PIP Workshop Conference, St. Louis, MO, October 7, 1955.

Dams.¹⁵⁴ Over 300 people showed up on a chilly November morning to see M-K unload the first of the massive earth moving equipment that would begin diverting the mighty Snake River from its set course. The Cambridge High School Band reveled attendees with song.¹⁵⁵ Morrison busied himself with financing the Brownlee and Oxbow projects, writing to Bank of America and the Idaho First National Bank to secure lines of credit. But all the fanfare disguised the maneuverings back in D.C. where the issue of who would build dams on the Snake River remained far from settled. By the end of November Morrison returned to the business of politics. This of course meant turning to the trusted Everett Rising.

Morrison wrote to Rising, telling him that M-K had spent more than two million dollars on the project already, and was in process of spending another million on equipment. On Brownlee and Oxbow, M-K was all in. Morrison's builder sensibilities shone through in the letter detailing for Rising the size and scope of the dams. Soon though, he got down to heart of the matter:

I am not, however, writing you this letter for the purpose of discussing the size of the structures or the Democratic propaganda, knowing your politics. I am interested, however, in knowing whether or not your services are available to protect ourselves as far as we can from the effect of adverse legislation which may be enacted by the Congress . . . You certainly can recognize that if the program is run over we can suffer a heavy loss. Nowadays with politics being such a factor in everything that is done in the United States, we are subject to hazards not only in this instance but others that we never formerly had to face.¹⁵⁶

¹⁵⁴ Staff. "Idaho Power, Morrison-Knudsen Sign Contracts For Immediate Construction of Oxbow, Brownlee." *Idaho Statesman, The (Boise, ID)*. Boise, ID, November 10, 1955.

¹⁵⁵ Staff. "Cambridge Greet Delegation." *Idaho Statesman, The (Boise, ID)*. Boise, ID, November 11, 1955.

¹⁵⁶ Morrison, H.W. "Letter to Mr. E.W. Rising", November 26, 1955. Box 116654, Legislation, Hells Canyon Bill S1333, 1955.

This was not Morrison's first foray into national legislative politics as Rising's return letter to Morrison indicated: "I will be glad to add Hells Canyon to the list of some twenty of twenty-five items on which I kept you advised during the last session of Congress."¹⁵⁷ Morrison was not keen on having these activities made public, telling Rising "I do not wish to unnecessarily publicize M-K's activity on this matter, nor your own as far as that is concerned, but as I told you before I consider this a very important matter to M-K. M-K has a contract to construct the job and as I see it it is up to us to do what we can in the interest of our client."¹⁵⁸ Ever the lobbying professional, Rising replied to Morrison, "I have in mind a plan under which you can be kept in the background."¹⁵⁹ Staying in the background became the new mode of exercising power as Donald Worster wrote, "In the new mode, power becomes faceless and impersonal, so much so in fact that many are unaware it exists."¹⁶⁰

Where Harry Morrison was concerned, public affairs at the national level had taken a turn for the worse after the 1954 elections. Though President Eisenhower's sympathies rested with the private power interests like Morrison, Americans sent Democratic majorities to the House and Senate in 1954. The Democrats in Congress occupied themselves with another debate over public or private power, the Dixon-Yates contract. In 1954, two power company executives, Edgar Dixon and Eugene

¹⁵⁷ Rising, E.W. "Letter to Mr. H.W. Morrison", November 30, 1955. Box 116654, Legislation, Hells Canyon Bill S1333, 1955.

¹⁵⁸ Morrison, H.W. "Letter to E.W. Rising", December 14, 1955. Box 116654, Legislation, Hells Canyon Bill S1333, 1955.

¹⁵⁹ Rising, E.W. "Letter to H.W. Morrison", December 16, 1955. Box 116654, Legislation, Hells Canyon Bill S1333, 1955.

¹⁶⁰ Worster, *Rivers of Empire*, 52.

Yates had signed a contract with the Atomic Energy Commission (AEC) to provide it power. This power replaced power that the AEC had previously agreed to purchase from the Tennessee Valley Authority. Obviously, this move to private power did not sit well with public power advocates. Hence, Congressional Democrats kept the Dixon-Yates issue on the front burner while they could. This had the effect of chilling the financial markets for private power distributors like Idaho Power – and Congressional Democrats were well aware of this fact. Rising passed this knowledge along to Morrison in mid December saying that public power advocates as a tactical matter planned that the “Dixon-Yates fiasco will be publicized continuously with thought it may cause financiers to hesitate in advancing large sums for construction of Oxbow and Brownlee.”¹⁶¹ Morrison and his allies, chiefly Idaho Power’s Tom Roach kept up their offensive on all fronts, they and their lawyers and lobbyists keeping tabs on statements made by agency officials, and meeting with even back bench members of the House Interior and Insular Affairs Committee.

In February 1956, M-K began construction at the Brownlee Site. Back at M-K’s shops in Boise, welders busied themselves fabricating a tunnel “jumbo,” built for the 38-foot-diameter diversion tunnel on which M-K was already at work.¹⁶² Pioneered at the Hoover Dam site, the jumbo consisted of a number of steel girders acting as floor joists, stacked two levels high, and mounted on the back of a truck. M-K mechanics and welders then mounted drills on the floorplates of the jumbo so multiple workers could concurrently drill a section of rock, speeding the demolition

¹⁶¹ Rising, E.W. “Letter to H.W. Morrison”, December 17, 1955. Box 116654, Legislation, Hells Canyon Bill S1333, 1955.

¹⁶² Staff. “Hells Canyon Jumbo.” *The Em Kayan*, March 1956.

process. A decade and a half later, the process was some somewhat more refined, or more to the point, the platform enlarged so that it sat on top of the wheelbase of a semi truck. By the time M-K began building the Brownlee Dam, a jumbo accommodated fourteen drills. The jumbo ultimately facilitated the drilling of 2,600 foot long tunnel, which would divert the river, enabling workers to construct the dam.¹⁶³ Safety practices had also come a long way since the Hoover Dam days. At Hells Canyon, work commenced in November of 1955, and by February workers clocked 130,000 man-hours at the site. They reported only two lost time injuries in that period – both falls, one from a roof, the other from a sawhorse.¹⁶⁴ Brownlee Dam's tunnel superintendent Claney Browner brought to the job the enviable title of Hoover Dam veteran. There, he had worked with the original jumbo conceived of by M-K Vice President B. "Woody" Williams. Browner as a Bush league pitcher had once thrown a no hitter. At M-K, he remained a go-to superintendent on dam projects across North America.¹⁶⁵

Losing the Battle, Winning the War

In the Spring of 1957 politics remained at the forefront of the Dam controversy, this time because Idaho Power had undone one of its key arguments for the private sector building the dam: that it would fill local, state, and federal tax coffers where a public dam would not. Legislation passed by Congress in 1940 allowed for fast tax amortization, which spurred private investment in defense

¹⁶³ Staff. "Tunneling Begins at Brownlee Dam." *The Em Kayan*, April 1956.

¹⁶⁴ Staff. "Hells Canyon Safety." *The Em Kayan*, March 1956.

¹⁶⁵ Staff. "Man of the Month: Claney C. Browner - M-K Tunnel Superintendent, Brownlee Dam." *The Em Kayan*, June 1956.

facilities that may not have long-term revenue generating potential.¹⁶⁶ The same legislation would allow Idaho Power to defer payment of taxes on as much as \$65 million in construction costs on two of its dam properties.¹⁶⁷ This figure ebbed and flowed as the debate ensued. Idaho Power's Tom Roach put the figure at closer to \$16 million.¹⁶⁸ This, Morrison learned from Everett Rising, who as always was keeping tabs on things in Washington. The Senate Committee on Interior and Insular Affairs had issued a report – "Construction, Operation, and Maintenance of the Hells Canyon Dam on the Snake River Between Idaho and Oregon." The report accompanied Senate Bill S.555, which would authorize construction of the High Dam.¹⁶⁹ Rising recommended that Morrison use his contacts at Texas based construction giant Brown and Root to lean on Senate Majority Leader Lyndon Johnson in order to quell Democratic enthusiasm for the bill.¹⁷⁰ Morrison went to work immediately, issuing a Telegram to Brown & Root CEO Herman Brown, asking him for assistance.¹⁷¹

With the tax amortization complicating the matter, Idaho Power President Tom Roach took little solace in the fact that the U.S. Supreme Court had denied the petition of the National Hells Canyon Association which sought to overturn the license granted to Idaho Power for construction of the dams. He wrote to Idaho

¹⁶⁶ Staff. "Political Morality." *The Sunday Star*, May 26, 1957.

¹⁶⁷ Lyons, Richard L. "Gray Denies 'Writeoff' White House Pressure." *Washington Post and Times Herald*. Washington, D.C., May 22, 1957.

¹⁶⁸ United Press. "Idaho Power Defends Its Tax Writeoff", n.d 1957.

¹⁶⁹ Senate Committee on Interior and Insular Affairs. *Construction, Operation, and Maintenance of the Hells Canyon Dam on the Snake River Between Idaho and Oregon*. Washington, D.C.: United States Senate, May 15, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁰ Rising, E.W. "Letter to H.W. Morrison", May 6, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷¹ Morrison, H.W. "TELEGRAM to Herman Brown", n.d. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

Power shareholders on May 27, 1957 urging them to write their Senators in opposition of S. 555.¹⁷²

While Idaho Power fended off criticisms of its tax deal, Morrison kept at his allies in the construction industry. On June 17, Morrison fired off a letter to H.K. Ferguson executive W. N. Thompson. Ferguson, based in Cleveland, Ohio, was one of Morrison-Knudsen's principle subsidiaries primarily operating in the commercial and industrial construction arena. Morrison once told a magazine reporter that Ferguson's attitude enticed him to purchase a majority share of the company in 1950. Ferguson's corporate motto was "Rome wasn't built in a day because Ferguson didn't get the contract." On this day, though, Morrison was writing Ferguson because Ohio Senator Frank Lausche was as yet undecided on how he would vote on S. 555. Morrison hoped that influential Ferguson executives could sway Lausche in favor of the private power interests.¹⁷³ That same day Morrison lunched with Tom Roach, and diligent as Morrison always was he wrote Everett Rising keeping him abreast of efforts emanating from Boise.¹⁷⁴

On June 19, Rising wrote to Morrison telling him that they had forty-six Senate votes solidly opposed to the Hells Canyon Legislation, with forty-three favoring, and six uncommitted – which still included Senator Lausche from Ohio. Rising believed that four of these would go the way of the private interests, insuring

¹⁷² Roach, T.E. "To the Shareholders of Idaho Power Company", May 27, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷³ Morrison, Harry. "Letter to Mr. W. N. Thompson", June 17, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁴ Morrison, Harry. "Letter to E.W. Rising Re: HELLS CANYON LEGISLATION", June 17, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

defeat of the bill, but he warned of last second log-rolling related to the upcoming vote on the Civil Rights Bill of 1957.¹⁷⁵ By the 20th, M-K executives pegged those opposed to the legislation at forty-nine.¹⁷⁶ June 21 proved the decisive day.

That morning Morrison wrote Tom Roach essentially saying, “now we wait:” “Today will probably tell the final story in the Senate as I presume late this afternoon they may get around to voting on the Hells Canyon legislation.”¹⁷⁷ The shocking news of the day that had hit the national papers was that Idaho Power had rejected the tax write-offs approved by the Office of Defense Mobility, ostensibly clearing the decks for a legislative victory in the Senate. In a letter to Rising later in the day, Morrison confessed that he knew this was in the works, “but was sworn to secrecy.”¹⁷⁸ And that morning, as Morrison noted, the Senate opened debate on the legislation.¹⁷⁹ The issue proceeded rapidly in the Senate – evidence, as Rising noted, that “a deal was on.”¹⁸⁰

Writing to M.K. Asst. Secretary Barney Weis at 8:00 pm EST after the Senate hearings of the Hells Canyon bill, Everett Rising described the goings-on. He noted that a “definate (sic) proposal had been made by the High Dam proponents to the civil rights southern group for a trade.” He continued:

¹⁷⁵ Rising, E.W. “Letter to Mr. H.W. Morrison Re: HELLS CANYON Legislation”, June 19, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁶ Huffstodt, R.D. “Letter to Mr. J.B. Bonny”, June 20, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁷ Morrison, Harry. “Letter to Mr. Thomas E. Roach”, June 21, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁸ Morrison, H.W. “Letter to E.W. Rising”, June 21, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁷⁹ Kamps, John, and Associate Press. “Senate Hears Debate on Dam.” *The Washington Post and Times Herald*. Washington, D.C., June 21, 1957.

¹⁸⁰ Rising, E.W. “Letter to Mr. Barney Weis,” June 21, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

When the vote came today on the Hells Canyon bill, Senators Eastland, Ervin, Long, Russell and Talmadge voted for the authorization. Even this switch of assured votes would have been just short of enough to pass the Hells Canyon bill had not three Republicans that had been counted on heretofore, changed sides. I refer to Cooper of Kentucky, Aiken of Vermont, and Smith of Maine. So confidentially we can be pretty sure that White House failure to hold in line the three republicans, plus civil rights is the cause of defeat.¹⁸¹

Idaho Power's gambit to return the tax credits in order to assure defeat of the Hells Canyon Bill had failed. The *Eastern Idaho Farmer*, a regional farm newspaper, characterized the trade of votes between Senators "the finest example of senate horse trading in recent U.S. history."¹⁸² Now, Morrison and the Idaho Power coalition would have to take their fight to the House. In an historical footnote, the Civil Rights legislation ultimately passed, and was enacted on September 9, 1957 – but only after surviving Senator Strom Thurmond's longest recorded filibuster of 24 hours and 18 minutes.

The next morning with the official Senate record in hand, Rising wrote Morrison and Barney Weis asking for instructions. Rising had of course already drafted what a lobbying campaign in the Democratically controlled House looked like. Morrison replied two days later. Morrison noted that "insufficient efforts were made by the President's office," and that "there is not much use expecting favorable action in the House." Morrison's personal experience contrasted with public reports of the Presidents' efforts, the *Wall Street Journal* reporting "the administration has

¹⁸¹ Ibid. (rising letter to Weis, June 21, 1957)

¹⁸² Hyde, Aden. "Views and News on Subjects Here and There." *The Eastern Idaho Farmer*, June 27, 1957.

vigorously opposed the legislation.”¹⁸³ But Morrison understood that President Eisenhower would desire not to be placed in a position of having to veto a bill passed out of both houses of Congress.¹⁸⁴ Characteristically, Morrison the Chief Executive went straight to the top.

President Eisenhower pioneered the Chief of Staff concept in the office of the President, borrowing the concept from the military. When Eisenhower was Commander at the Supreme Headquarters Allied Powers in Europe from 1951–1952, he recalled Major General Wilton B. Persons from retirement, appointing Persons to serve as a special assistant there. In 1953, Persons became Eisenhower’s Deputy Assistant, and eventually replaced Sherman Adams as Chief of Staff in 1958 following Adams role in the Vicuna Coat Scandal. So when Harry Morrison wanted to test the waters with Eisenhower, he turned to someone within his comfort zone – an Army general – Wilton B. Persons.

Morrison adopted his usual tone of neutrality in addressing Persons, writing, “I have refrained from taking up political matters with you but the recent passage of the Hells Canyon Dam bill by the Senate causes us great concern here in Idaho.”¹⁸⁵ Knowing that Persons juggled as many issues as he, Morrison briefly provided details of the situation, and ended his request with a soft close, “If it is in order to do so, I will appreciate any information you can give me on the probable action of the

¹⁸³ Staff. “House Group Rejects Bill to Build Federal High Dam at Hells Canyon.” *The Wall Street Journal*. New York, N.Y., July 3, 1957.

¹⁸⁴ Rising, E.W. “Letter to H.W. Morrison,” June 24, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁸⁵ Morrison, Harry. “Letter to the Honorable Wilton B. Persons,” June 24, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

President in this matter.”¹⁸⁶ Tom Roach reviewed the letter prior to dispatch, all the while enlisting his shareholders to also communicate their discontent to their members of Congress.¹⁸⁷

One of the more colorful letters in Morrison’s correspondence was that to firebrand Senator Barry Goldwater of Arizona. Goldwater had long opposed the federal high dam proposal, and Morrison wrote to thank him for that, adding “I don’t think we had the support on this legislation from the administration that we were entitled to receive.”¹⁸⁸ From Goldwater he got the answer he was looking for, albeit unsolicited. Goldwater’s letter dated June 28, 1957 confided to Morrison, “There is little chance that this bill will pass the House but, if it should, the President will surely veto it.” Morrison likely took little comfort in Goldwater’s assurances, as he had seen this landscape change many times. The Democratic controlled Senate had defeated a high dam bill in 1950, as had a Democratic controlled House Committee in 1952. In 1956 both the Senate and the House had killed bills circulating through the respective chambers.¹⁸⁹

Morrison again enlisted business contacts in his fight against the House bill, writing to L.C. Ferguson of the Shovel Supply Company in Dallas Texas asking that he contact two Texas Congressmen who sat on the House Interior and Insular Affairs Committee. Ferguson complied, writing both House members immediately.

¹⁸⁶ Ibid. (Morrison letter to Persons)

¹⁸⁷ Roach, T.E. “Letter to the Shareholders of Idaho Power Company,” June 24, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁸⁸ Morrison, H.W. “Letter to Senator Barry Goldwater,” June 25, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁸⁹ Rising, E.W. “From a Washington Information Service,” June 28, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

Morrison also wrote letters in opposition to eleven different members of the House, Idaho's Republican U.S. Senator Henry Dworshak, and Idaho's Republican Congressman, Hamer Budge. Idaho's well-known Senator Frank Church long championed the High Dam, as did three-term Democratic Congresswoman Gracie Pfost, dubbed "Hell's Belle" for her vocal support of a federal dam.

Shortly after 7:00 am on July 3, Everett Rising updated M-K's Barney Weiss giving him a full update and projections on the Hells Canyon Bill. They achieved a major victory in the Irrigation and Reclamation Subcommittee, where by a vote of 15-12, house members approved a gutted bill in which only an enabling clause remained. For now, as the *New York Daily News* reported, the bill was "dead as a mackerel in the moonlight."¹⁹⁰ However, Morrison and his allies still needed to strike the death knell. Congressional leaders scheduled the bill for a hearing before the full House Interior and Insular Affairs Committee. The vote there would of course determine whether the bill would progress to House floor for a vote. Rising believed that they had secured sixteen no votes on the thirty-one member Committee – enough to kill the bill. But they had been in this same position in the Senate.¹⁹¹

Not even Independence Day slowed the action in Congress. Rising wrote Morrison on July 4, telling him that members of the Interior Committee intended to make a motion to table, effectively killing the Hells Canyon bill on July 10. Rising still counted sixteen votes of thirty-one going the way of Morrison and his allies. High

¹⁹⁰ Staff. "Hells Canyon Bites The Dust." *New York Daily News*. New York, N.Y., July 8, 1957.

¹⁹¹ Rising, E.W. "Letter to Mr. Barney J. Weis," July 3, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

Dam proponents reading the same tea leaves concocted a plan to tack the Hells Canyon enabling legislation to an omnibus public works bill. Rising reminded Morrison that President Eisenhower had previously vetoed similar legislation. The stars were aligning for Morrison.

A day later, Morrison learned that far from being absent from the fight, President Eisenhower had dispatched his Chief of Staff Sherman Adams to twist arms in the House, in order to get the votes needed to kill the bill there and avoid a Presidential veto. The *Evening Star* reported on Friday July 5, it was none other than Adams who lined up the votes on the House Irrigation and Reclamation Subcommittee to gut the bill. Having been “caught flat footed” when the Senate passed the bill out, the White House determined to take a more active role.¹⁹² That it did.

The White House understood the political costs of a public veto by the President, hence Adams’ operating in the shadows. The same *Evening Star* article explained the political dynamics of the situation:

Sherman Adams is taking a lot on himself in killing off public development of Hells Canyon. He knows by now, as well as do Republicans in the area how many Republicans went down to defeat on the Hells Canyon issue in the Pacific Northwest last November. It was one of the major issues in the biggest political turnover in that area in this century, extending from races for Senate and House seats, through contests for Governor and down to competition for the State Legislature.¹⁹³

¹⁹² Stokes, Thomas L. “Hells Canyon Dam Legislation: Sherman Adams Seen Trying to Kill Issue In Congress to Avoid Presidential Veto.” *The Evening Star*. Washington, D.C., July 5, 1957.

¹⁹³ Ibid. (Stokes article)

The *Star's* Stokes described the election a “referendum on the Hells Canyon issue,” noting the election results “showed that a majority are for public development by one high dam.”¹⁹⁴ Public sentiment did indeed have electoral ramifications. In Idaho, voters replaced first term Senator Herman Welker with the charismatic Frank Church, who supported the federal high dam. Oregon voters re-elected Democratic Senator Wayne Morse, and Washington voters returned Warren Magnuson to the Senate. Both supported the high dam. In the House, Idaho voters returned Democrat Gracie Pfof, a high dam supporter, and Republican Hamer Budge. In Washington State, voters returned the full slate of incumbents – six Republicans and one Democrat. In Oregon, however, the story was more dramatic. In a year where the House picked up only two seats, maintaining its majority, both those seats came from Oregon. There, Democratic candidate Albert C. Ullman narrowly defeated Republican incumbent Sam Coon, with Ullman earning a scant 50.7% of the vote to Coon’s 49.3%. Charles O. Porter defeated Republican Harris Ellsworth by a slightly larger margin.

On the Gubernatorial side, Eisenhower encouraged Washington’s popular Republican governor Art Langlie to run against Warren Magnuson for the United States Senate. Magnuson easily defeated Langlie, and Langlie’s Lieutenant Governor Emmett T. Anderson lost badly to Democratic candidate Albert D. Rosellini. The State of Idaho had no gubernatorial election in 1956, but Oregon’s 1956 special election also brought a Democratic Governor into office. So though the composition

¹⁹⁴ Ibid. (Stokes article)

of the U.S. Senate did not change, and House Democrats gained only two seats, the regional effect of the Hells Canyon High Dam was more pronounced.

At 10:00 in the morning on July 10, California Congressman Clair Engle convened the Insular and Affairs Committee, intending to vote on the Hells Canyon measure. Taking stock of the situation, Chairman Engle noted that only he and one other Democrat, both favoring the bill, were seated. Eleven Republicans, however, had already assumed their seats. With only thirteen members present, and needing a quorum of sixteen, Engle had been outflanked. Enough members for a quorum were indeed present, but were still milling about the hearing room. Engle quickly ordered the Clerk to call roll. Finding that there was no quorum, he adjourned the meeting, the entire process taking only 60 seconds. High Dam proponents had survived yet again.¹⁹⁵

Two days later, Rising wrote Morrison-Knudsen executives with an update. Among other things he noted that First-term Oregon Senator Richard Neuberger, one of the high-Dams fiercest advocates, had requested an audience with President Eisenhower to discuss the merits of public power. Morrison passed Rising's letter on to Tom Roach with a handwritten note. Morrison, who rarely had a harsh word to say, wrote of Neuberger, "I hope he chokes."¹⁹⁶ As fate would have it, Neuberger suffered a stroke less than three years later while home in Oregon campaigning for reelection. He died at forty-seven years of age, on March 9, 1960.

¹⁹⁵ Rising, E.W. "Letter to Mr. Barney J. Weis," July 10, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁹⁶ Rising, E.W. Letter. "Letter to Mr. Barney J. Weis", July 12, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

Morrison got his reply from General Persons, in a letter dated July 19.

Persons indicated in his letter that he could not speak for the President on the Hells Canyon bill, but instead included a letter the President had written on the topic to Congressman Jack Westland – an opponent of the High Dam, with whom Morrison had corresponded on multiple occasions. Persons closed noting, “I think this will clarify in your mind just where the President stands on this issue.”¹⁹⁷ Eisenhower’s letter to Westland, while not committing the White House to any specific course of action, clearly reflected Eisenhower’s philosophical stance:

I am firmly convinced that in the long run the Idaho Power Company Development will provide benefits to the people of the Pacific Northwest and the Nation as a whole commensurate with those which might reasonably be contemplated in S. 555. It is inconceivable to me that serious consideration is being given in some quarters to stopping this development, depriving the Northwest of power which is badly needed now, and throwing an additional burden on the already heavily burdened taxpayers of the Nation.¹⁹⁸

In August, an exasperated Morrison used his President’s Memo in the *Em Kayan* to sum up his practical and ideological positions on public power:

For several previous years the avowed enemies of private-enterprise power distribution, wanting only federal monopoly, had urged development of a Northwest Bureaucracy to be known as the Columbia Valley Authority, patterned substantially after Tennessee Valley Authority. The basis of their campaign became the proposal to the monumental concrete structure named Hells Canyon Dam, at an estimated cost then of \$429,000,000. Idaho Power’s estimated cost of its series of three dams instead of one high dam was \$133,000,000 – an estimate prepared two years ago by M-K as the contractor. The government dam thus would be a political monument to public extravagance.

¹⁹⁷ Persons, Wilton B. “Letter to Mr. Morrison,” July 19, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

¹⁹⁸ Eisenhower, President Dwight D. “Letter to the Honorable Jack Westland,” July 19, 1957. Box 116654, Legislation, Hells Canyon Bill S1333, 1957.

Privately owned public utilities are keystones of our national economy. They not only provide their own venture capital without tapping the public treasury, but are subject to public regulation of their rates, and thus of their earnings. Government dams are generally and properly built to serve a public need where private financing is unfeasible. But let us remember that the tremendous load of taxes paid by investor-owned electric utilities into federal, state and local governments supplies a large portion of the costs of construction and maintenance of all so-called “free” public works. This is the indispensable nature of American private enterprise.¹⁹⁹

Ultimately, Congressional efforts to construct a high dam fizzled to inauspicious conclusions in 1958. And while the High Dam had clear national implications, toward the end of 1957 other world events overshadowed the dreams of public power supporters. Just over a month after Morrison received word from Persons regarding the President’s stance on Hells Canyon, Strom Thurmond delivered his record setting filibuster against the 1957 Civil Rights bill. A month after that marked the Little Rock Crisis – Eisenhower’s ordering of federal troops to Arkansas to ensure integration efforts at Central High School for nine African-American students. In October, America learned of the Soviet Union’s launch of Sputnik. Just two months after that, Eisenhower suffered a stroke. History marched onward leaving the issue of public power behind.

The Hells Canyon story offers a number of useful historical lessons. Most simply, this is the largest collection of primary source or archival material in Morrison’s own collection, rivaled only by Morrison’s collection of documents related to the Wake Island saga. That seems to indicate that these constituted

¹⁹⁹ Morrison, H.W. “President’s Memo: Hells Canyon Test of Free Enterprise.” *The Em Kayan*, August 1957.

formative or at least critical junctures in his life. Like the lobbying effort required by the Wake Island issue, the Hells Canyon documentation shows Morrison-Knudsen's growing lobbying sophistication. Not only did M-K have representation in Washington, the efforts to defeat the dam included a well-developed national grass roots group of organizations. Again, this constitutes one of the earlier instances of such a robust public affairs machine under direction of an American corporation.

These efforts also undo historian Karl Brooks' more institutional interpretation for the failure of the dam. Brooks essentially argued that institutional dysfunction and bickering between agencies led to the defeat of the proposed federal high dam. Morrison's correspondence over more than a decade tells a different story – one of a concerted effort on the part of Harry Morrison and his corporate lobbyists actively intervening to defeat the dam. Their efforts reached all the way to the White House, and President Eisenhower's Chief of Staff ultimately dealt the final blow to the high dam, not bureaucratic infighting or bickering.

Finally, Morrison's success in defeating the high dam can be seen as the end of the hopes of many in the federal government of creating a national network of regional authorities. The plan that circulated in the 1940s and 1950s included a federal authority in each of the ten regions in the United States, modeled after the Tennessee Valley Authority. With the supporters unable to construct a single dam on Idaho's Snake River, the dream of a federal system of regional authorities was surely now too lofty an undertaking.

Figure 5: Location of Hells Canyon Dam complex

The Hells Canyon Complex (circled) includes the Brownlee, Oxbow, and Hells Canyon Dams. The federal proposal for the high dam at the Hells Canyon site, downstream from Oxbow and Brownlee, would have flooded out the work Morrison-Knudsen performed at those sites. *Image credit: Portland District Visual Information, U.S. Army Corps of Engineers.*

PART FOUR: INTERNATIONAL OPERATIONS

American engineering went global as other nations yearned for development of natural resources to raise their economic standards. Now, C.P. Dunn and a few-score assistants are programming their salvation in San Francisco and Denver Offices.²⁰⁰

Introduction

With the Cold War dawning, the twin forces of globalization and militarization spurred U.S. investment abroad in an effort to supplement America's might and deter the forces of Communism. For Morrison-Knudsen this translated into new contracts abroad to assist developing nations with engineering and basic infrastructure development. Through it all, the firm retained its distinctive Western character, often partnering with firms from its Six Companies days.

"The American West," wrote Donald Worster, "is not so much a colony as it is an empire; for a long time it was an empire in intention only, then after World War Two it became a principal seat of the world-circling American Empire."²⁰¹ From the perspective of builders like Morrison, a Western seat of empire made perfect sense.

As Wiley and Gottlieb explained,

When the postwar foreign-aid program for underdeveloped countries put special emphasis on the construction of the economic infrastructure – highways, water projects, irrigation, and the like – in countries newly penetrated by American interests, the West's great construction companies were ready to step in. The new international thrust was the same that had led to the development of the West.²⁰²

²⁰⁰ Staff. "Planners . . . of International Progress." *The Em-Kayan*, March 1949.

²⁰¹ Worster, *Rivers of Empire*, 15.

²⁰² Wiley and Gottlieb, *Empires in the Sun*, 34.

Historians have sometimes connected the U.S. Western irrigation program with international development of the same kind.²⁰³ Yet the connections between the imperatives of the Cold War and Morrison-Knudsen's growth abroad have attracted little attention.

Establishing a base of wealth and power through irrigation works represented nothing new. As early as the passage of the Newlands Act in 1902 American politicians contemplated how development of the West might eventually play out on a global stage. Historians credit two chief reasons for the bill's passage: either "cult of personality" type rationale citing the strength of Representative Newlands or President Roosevelt, or, attributing state sponsored irrigation to either "Progressive" or "Conservation" movements. Neither sways Worster. He explained the bigger questions at play as judged from the reading of the Congressional Record:

What they were really wrangling over was the wisdom of the traditional American policy of economic expansion and its future direction in the new twentieth century. Did the country need more farmland in production? Was the westward movement now outmoded? What impact did expansion have on older settled regions? *Was it wiser to expand overseas or at home?*²⁰⁴

At the end of the day Worster believed legislators favored the bill because "it promised to augment American wealth and muscle."²⁰⁵ As the Cold War settled in, Worster noted that American politicians "were quick to generalize their formulas to the rest of the globe, especially the underdeveloped countries of Asia, Latin America, and Africa, where water control, they believed, would be needed, as it was at home,

²⁰³ See Worster's *Rivers of Empire*, p. 20.

²⁰⁴ Worster, *Rivers of Empire*, 163.

²⁰⁵ Worster, *Rivers of Empire*, 165.

to save the world for democracy.”²⁰⁶ Just as with the development of the West this was a project, which the American government could not accomplish alone. It again turned to heavy contractors.

As the 1950s approached Morrison had long-established relationships within agencies such as the Bureau of Reclamation and the Navy’s Bureau of Docks and Yards. But again the fine line of history emerged in the fortunes of Morrison-Knudsen as international expansion loomed. Recognizing that a key component of the American Cold War strategy was to assist developing nations with basic infrastructure, in 1941, the U.S. Congress passed legislation authorizing the President to appoint Morrison’s old friend Jack Savage to a special international consulting position. As Chief Design Engineer for the U.S. Bureau of Reclamation, Savage had become the world’s first billion-dollar engineer, designing such projects as Hoover, Shasta, and Grand Coulee Dams. Now, however, he would be the point person for the U.S. government’s international expansion efforts. Ultimately, he visited over nineteen countries including China, Afghanistan, South Africa, India, Singapore, Taiwan, Japan, Australia, Canada, Mexico and Great Britain – all in an effort to sell American financed infrastructure to nations abroad.²⁰⁷ Savage’s placement as an international emissary provided opportunity for Morrison.

Former M-K Chief Engineer Lyman Wilbur recounted a 1945 meeting between Harry Morrison and Jack Savage, with Savage telling Morrison, “If you will

²⁰⁶ Worster, *Rivers of Empire*, 263.

²⁰⁷ Wolman, Abel, and W.H. Lyles. “John Lucian Savage 1879-1967.” National Academy of Sciences, 1978.

organize a company to do the engineering work I will bring you the business.”

Wilbur further noted,

Harry wasn't so much interested in the engineering work as he was in the fact that it could bring us some construction. So he set Charlie Dunn up to organize an engineering company originally headquartered in Denver, called International Engineering Company (IECo). Then Charlie went on to travel the world to get some of this foreign work. One of the first jobs was Afghanistan, where we did a lot of irrigation work, dams, and canal work for the Afghan government.²⁰⁸

Or, as M-K corporate relations writers described in the April 1954 *Em-Kayan*:

A healthy hunger stirred many nations of this earth at the end of World War II. These nations hungered for development of their untapped natural resources to produce a more abundant life and a flourishing new prosperity. They hungered for technical assistance in harnessing their wasting rivers, watering their barren but irrigable acres, and lacing their lands with highways and railroads. It was to help satisfy this widespread need for modern public works that a new associate (IECo) was created by Morrison-Knudsen Company, Inc. in September 1945.²⁰⁹

While Jack Savage emerged as one of Morrison's most important professional contacts over the course of his career, reliance on well-placed and key employees developed into a hallmark of the heavy construction industry. Laton McCartney documented the trend within Bechtel in *Friends in High Places*.²¹⁰ Morrison-Knudsen operated much the same way. When M-K began work in Afghanistan in 1946, the company sent James B. Hays to manage operations. Hays had worked for ALCOA from 1926-1933, the U.S. Bureau of Reclamation from 1934-36; The Tennessee Valley Authority from 1936-43 and the Palestine Survey Commission from 1943 -

²⁰⁸ *Old Timers Reminisce - 3. Lyman Wilbur - MK Vice President*. DVD. Morrison-Knudsen, n.d.

²⁰⁹ Staff. "Engineers to the World." *The Em Kayan*, April 1954.

²¹⁰ McCartney, Laton. *Friends in High Places: The Bechtel Story: The Most Secret Corporation and How It Engineered the World*. New York, NY: Ballantine Books, 1989.

1947. He joined IECO in 1947 and made visits to Egypt, Portugal, Pakistan, Palestine, Turkey, and Afghanistan before taking over in Afghanistan in 1948.²¹¹

That same year M-K employee number one, Morris Olson, retired. He enlisted as the timekeeper on project number one in 1912, but was soon “pushing a wheelbarrow alongside Harry Morrison.”²¹² Olson died October 19, 1953 at his home in Vermont. A few days later on October 24, James B. Hays died at his home in Summit, New Jersey. *Em Kayan* staff noted that Hays was a “widely known M-K engineer who built friendships as lasting as many of the works of progress he designed throughout the world.” He was also “one of the first engineers to make use of aluminum as a structural material. His many articles in engineering journals on dam construction won him wide acclaim. Jim Hays was a brilliant man whose skills helped to make a better world.”²¹³

Ten years after being released from Japanese captivity after the Wake Island saga, in 1954 Wake veteran Dan Teters celebrated his third year supervising the construction of air bases in French Morocco, and Morrison-Knudsen promoted John V. Polak, office manager at Wake Island, to manage the new M-K eastern district office in New York.²¹⁴ Later that year, the October 1954 *Em Kayan* noted the September 8 passing of Judge Curtis Dwight Wilbur – father of M-K Vice President Lyman D. Wilbur. Before serving as a Federal District Judge and U.S. Circuit Court of Appeals Judge, Wilbur served as Secretary of the Navy under President Calvin

²¹¹ See *The Em-Kayan*, July 1953.

²¹² Staff. “Em Kayan No. 1 Dies.” *The Em-Kayan*, November 1953.

²¹³ Staff. “Death Takes Jim Hayes.” *The Em-Kayan*, December 1953.

²¹⁴ Staff. “Aggregate: ‘Teters’ Third Birthday;’ ‘New Title for Polak.’” *The Em-Kayan*, April 1954.

Coolidge. His brother, Ray Lyman Wilbur served as Secretary of the Interior under Herbert Hoover and a president of Stanford University.

These few examples show the importance Morrison placed on developing leadership talent and maintaining connections to individuals who could further M-K's fortunes. Morrison wrote of this several times over the course of his career, in February 1954 noting:

It is a well-known fact of business history that many large and successful corporations were founded by one man, or by two or three in modest partnerships, as was true in the case of M-K. A more self-evident fact, however, is that the most important talent of such men was in hiring and developing other men until they became experienced and trustworthy managers of the growing activities of their companies. Leadership thus is the ability to obtain the loyalty and support of competent people making up the corporate family.²¹⁵

While globalization and militarization proved major disruptors in the decade of the 1950s, Harry Morrison and his firm confronted these new paradigms from their familiar perch in the West, which was now a regional seat in the American empire. And they did it with their own brand of corporate capitalism based upon trust vested in key individual employees, joint venture partners, and relationships with people well placed in businesses and governments across the globe.

Going Global

"Globalization is a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-

²¹⁵ Morrison, H.W. "Leadership Pays Off in Construction." *The Em-Kayan*, February 1954.

human activities.”²¹⁶ The entry of American corporations to the international stage created a number of lines of research for business historians including:

1. How American businesses cooperated with the federal government in promoting America as a “source for good”
2. Agency-based theories of globalization highlighting efforts of individual entrepreneurs
3. How and why corporations seek international opportunities
4. Whether infrastructure projects built abroad by foreign firms created dependence or benefitted the local, regional and national economies
5. The impact of regime change on international operations
6. The efficacy of the joint venture format to mediating political risk and to bridging cultural distance between partners?
7. How managers went about gaining international business.

Using examples from the Atomic era and the Cold War, Harris and DeBlois note that, “Despite the culture of secrecy, atomic energy policy provided an attractive career alternative for America’s brightest scientists, as well as business and political bases for promoting America as a source for good.”²¹⁷ The idea that technology transfer from the western world to lesser-developed countries would promote peace and stability, repel communism, and create international opportunities for American corporations while advancing the strategic goals of the federal government is a familiar topic. Why scholars have generally ignored the heavy contractors who played such a pivotal role in achieving these aims remains an open question.

Harry Morrison noted frequently the profitability of M-K’s work, but also trumpeted the benefits to the countries in which they worked. Scientists have

²¹⁶ Al-Rodhan, Nayef R.F., and Gerard Stoudmann. *Definitions of Globalization: A Comprehensive Overview and a Proposed Definition*. Geneva, Switzerland: Geneva Centre for Security Policy, 2006.

²¹⁷ Harris, Robert Dalton, and Diane DeBlois. “The Business of the Atomic Secret: Discerning the Cultural Dimension in the Strategic Economy of the Cold War.” *Business and Economic History On-Line* 4 (2006).

always been quick to promote progress through science, but for Morrison heavy construction represented true progress. Writing of work in Brazil, Morrison noted:

In nearly every instance, these projects are directly associated with four general categories of improvements vital to the progress of any nation – better transportation, increased production of electric power, development of mineral resources and well-planned reclamation. Each project is significant, but in total all are just a beginning, for South America has only begun to develop its enormous potential. To the ambitious and forward looking people of this great land, let it be known that M-K is always “a sus ordenes” – at your service – in the continued pursuit of basic progress through heavy construction.²¹⁸

Several different schools of thought exist about the causes of globalization: factor prices, transportation and communication costs, and the role of national institutions. Additionally, an agency-based theory of globalization attributes causes to the actions of individual entrepreneurs. Geoffrey Jones and Daniel Wadhvani discuss the topic in their paper, “Entrepreneurial Theory and the History of Globalization.”²¹⁹ Jones also extended the concept in, *Multinationals and Global Capitalism: From the Nineteenth to the Twenty-first Century*.²²⁰ Morrison took advantage of the federal government’s international strategy following talks with Jack Savage in 1945, but Morrison-Knudsen had of their own accord already entered international markets – Mexico, Canada, and Brazil by 1943, lending credence to Jones and Wadhvani.

Another pressing question is why firms choose to invest abroad. Jones and Wadhvani suggest to business history researchers,

²¹⁸ Morrison, H.W. “South America Begins to Fulfill Its Destiny.” *The Em Kayan*, April 1961.

²¹⁹ Jones, Geoffrey, and R. Daniel Wadhvani. “Entrepreneurial Theory and the History of Globalization.” *Business and Economic History* 5 (2007).

²²⁰ Jones, Geoffrey. *Multinationals and Global Capitalism: From the Nineteenth to the Twenty First Century*. Oxford: Oxford University Press, 2004.

What the field needs is systematic research on the criteria large multinationals used in choosing to allocate resources to investing in one country rather than another and one product category rather than another. We are likely to find the answers to such questions by looking deep inside corporations at the relative influence of particular management groups, inherited values about the importance of particular brands or products, and chance encounters.²²¹

In the case of M-K, Morrison in part followed Jack Savage's lead – somewhat the result of a chance encounter three decades prior in the deserts of Southern Idaho. But in the simplest sense, written records of M-K executives seem to confirm the Hymer thesis, that “firms undertake operations in a foreign country in order to appropriate fully the returns to certain abilities which they possess.”²²² In short, Hymer says firms enter foreign markets to reap profits. In a May 1957 letter, Harry Morrison reprinted a letter written by M-K Vice President Lee Greenleaf who was responding to an inquiry about overseas work:

You have inquired what we people in M-K's overseas work think about our accomplishments in foreign countries. I believe no one has made any bones about the fact that *the primary reason we take construction work, overseas or at home, is to make a profit for the stockholders* (emphasis added). In order to continue to do this over a long period we must continue to be welcome and, to be welcome, we must conduct ourselves as guests and must benefit the country in which we work.²²³

With construction firms entering international markets the question arises as to who benefits from the construction of basic infrastructure. Political scientists study these types of questions within the realms of dependency theory or economic

²²¹ Ibid, 16.

²²² Hymer, Stephen Herbert. “The International Operations of National Firms, A Study of Direct Foreign Direct Investment.” Massachusetts Institute of Technology, 1960.
<http://dspace.mit.edu/handle/1721.1/27375>.

²²³ Morrison, H.W. “President's Memo: M-K's Objectives in Foreign Lands (Excerpted Letter from Lee M. Greenleaf).” *The Em Kayan*, May 1957.

growth theories.²²⁴ Business historians typically investigate these questions through case studies of individual firms. For example, Caroline Piquet studied the economic results of Egypt's concessions to the British owned Suez Canal Company. She determined that, "The Canal had to serve the financial and strategic interest of the company, not those of the local economy."²²⁵ Piquet's case study though describes only the sort of arrangement where a foreign company contracts to run a major piece of infrastructure located within the borders of another nation. More commonly, as Regina Blaszczyk observed, foreign nations and their American heavy construction counterparts found the notion of a joint venture mutually advantageous:

From the developing nation's vantage point, a joint venture with a Western firm served multiple purposes: it attracted foreign capital, channeled local money into productive enterprise, developed native managerial talent, and provided local workers with technical training. For Western companies, a joint venture often provided the only point of access to markets and resources in developing economies, where local laws mandated that foreign businesses share ownership with local citizens, governments, or companies. The U.S. Department of State and the Agency for International Development advocated the joint venture as a mechanism that would strengthen the free enterprise system at home and abroad, expand the market for American goods, and create an entrepreneurial class in developing nations.

²²⁴ See: Frank, Andre Gunder. *Capitalism and Underdevelopment in Latin America; Historical Studies of Chile and Brazil*. New York, NY: Monthly Review Press, 1967; Huntington, Samuel P. *Political Order in Changing Societies*. New Haven, CT: Yale University Press, 1968; and, Rostow, W. W. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge: University Press, 1971.

²²⁵ Piquet, Caroline. "The Suez Company's Concession, 1854-1956: Creating Modern Infrastructure, Destroying the Potential of the Local Economy." *Business and Economic History On-Line* 1 (2003).

Regina Blaszczyk also studied the impact of political regimes – or regime change on a firm.²²⁶ Her study of DuPont’s entrance into the Iranian textile market in the 1970s raises a number of issues relevant to Morrison-Knudsen’s operations in international markets and how it managed political risk. In the case of DuPont, the differences in business culture combined with the regime change added up for losses for the company. Regime change and war represent continual risks for international business. In the case of Morrison-Knudsen and other defense contracting industries, war of course also led to more work. DuPont experienced greater political risk than Morrison-Knudsen because it faced losing capital investments in plant, property and equipment. Service providers like M-K brought construction equipment into foreign countries, but did not leave any fixed capital it owned behind, mitigating risk to the company. However, regime changes in previously friendly nations did take a toll on Morrison-Knudsen’s international fortunes, primarily with Mohammad Reza Pahlavi fleeing Iran in exile in January 1979, and the Soviet invasion of Afghanistan in December of 1979.

Blaszczyk also raises a number of cultural questions about DuPont’s experiences in Iran:

The stories told here raise provocative *cultural* questions for business historians: How much did the managers who laid the foundations for the late twentieth-century global economy know about the cultural differences between the West and the newly developing countries? How much could they absorb from the Middle Eastern environment, where unfamiliar religious beliefs and cultural practices, including the deferential system of ritual courtesy known as *ta’arof*, affected

²²⁶ Blaszczyk, Regina Lee. “Synthetics for the Shah: DuPont and the Challenges to Multinationals in 1970s Iran.” *Enterprise and Society* 9, no. 4 (December 1, 2008): 670–723. doi:10.1093/es/khn055.

business relations? How appropriate was the joint venture format to mediating political risk *and* to bridging cultural distance between partners? How did DuPont managers hope to apply knowledge and skills honed in North America and Europe to the Middle Eastern market? What types of knowledge were readily transferred, and what not? How did differences and complementarities in American and Iranian culture play out in day-to-day operations, and what impact did they have on corporate and personal memory?

Social scientists and historians posed the same questions for construction-based nation building, and generally attribute the lack of cultural awareness to the failures in places like Vietnam. At least during the core of Morrison-Knudsen's international era, roughly 1943–1963, contractors – Harry Morrison chief among them – saw themselves as “Ambassadors with Bulldozers.” Popular magazines like *Time*, which used that exact quotation, frequently reported international nation building in this light, even if some scholars of the era remained less convinced.²²⁷

Another core question arising in the DuPont study is how managers there went about gaining international business. Blaszczyk quotes a DuPont manager saying that business opportunities just “came across the transom” and they evaluated them on an ad hoc basis. M-K was an early entrant into international business as was Bechtel. M-K executives regularly worked with companies such as Caterpillar and Ingersoll Rand to make connections abroad. DuPont executives and managers had contact with heavy contractors – it worked with M-K at Hanford. Late in the DuPont experience in Iran one manager turned up the heat on Iranian officials by suggesting that DuPont was not the only American multinational experiencing

²²⁷ See: Biggs, David A. *Quagmire: Nation-Building and Nature in the Mekong Delta*. Seattle, WA: University of Washington Press, 2010.; and, Latham, Michael E. *Modernization as Ideology: American Social Science and “Nation Building” in the Kennedy Era*. Chapel Hill, NC: University of North Carolina Press, 2000.

hardship. Gamble knew that B. F. Goodrich and Reynolds Metal were “disillusioned with Iran, were losing money, and planned no further investment.”²²⁸ This suggests that they were gathering intelligence from other industrial corporations but the case study of DuPont makes no direct mention of heavy contractors.

Morrison-Knudsen Abroad

In 1943, Morrison-Knudsen first entered international markets, taking contracts in Canada, Mexico, and Brazil. But two factors then conspired to quickly grow M-K’s international portfolio. The first occurred when the Jack Savage spurred IECo contracts came rolling in the door including a massive \$125,000,000 (the equivalent of about \$1.7 billion today) contract to build the Bhakra Dam in India’s Punjab province. Not long after, in 1946, M-K entered the Afghanistan market beginning a long association with that country. The second major factor impacting M-K’s work abroad was Truman’s “Point Four” program. Historians have referred to Harry Truman’s inaugural address as the “Four Point” speech, because in it he chiefly advocated four things. Point Four stated that the U.S. should make the benefits of its scientific advances and industrial progress available to underdeveloped areas. On November 7, 1950, the U.S. signed a Four Point agreement with the Ceylonese (Sri Lankan) government. The month prior, it had signed the first ever Point Four agreement with Iran. The agreements differed. The Iranian agreement stipulated specific projects. The agreement with the Ceylonese, the *New York Times* noted at the time, “is of the “umbrella” type, in which general

²²⁸ Blaszczyk, Regina Lee. “Synthetics for the Shah: DuPont and the Challenges to Multinationals in 1970s Iran.” *Enterprise and Society* 9, no. 4 (December 1, 2008): 703.

conditions for the use of United States aid are set forth.”²²⁹ *Times* writers reported that prior to 1948, the Ceylonese had principally looked to the British for technical assistance, but that in recent years the nation’s leaders had come to rely more upon the United States. That transition actually occurred a bit earlier.

Figure 6: While Harry Morrison initially doubted IECo's income potential, by 1963 the firm was a global engineering force²³⁰

²²⁹ TIMES, Special to THE NEW YORK. “U.S., CEYLON AGREE ON POINT FOUR AID: Technical Training Is Provided in ‘Umbrella’ Project, First of Its Kind Signed.” *New York Times*. November 8, 1950. <http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/111712511/abstract/710C5C148B4B4207PQ/36?accountid=9649>.

²³⁰ Image source: *Em Kayan*, March 1963.

In 1947, IECo began working up plans for the Gal Oya series of dams and storage reservoir for the Ceylonese. IECo designed the reservoir to hold 775,000 acre-feet of water for irrigation, which would water about 65,000 acres. At the time U.S. officials signed the agreement, Morrison-Knudsen had the dam and canal work and also the installation of a hydroelectric power plant underway. Fifty-five Americans supervised the work of 1,500 Ceylonese on those projects.²³¹

TABLE FOUR: MORRISON-KNUDSEN GROSS REVENUES AND MARGINS, 1946-1950

Year	Gross Revenues	Margin
1946	\$46,394,000	6.2%
1947	\$81,667,000	4.0%
1948	\$113,469,000	4.5%
1949	\$102,130,000	5.5%
1950	\$109,179,000	4.5%

Revenues fell off directly after the War, but Morrison-Knudsen again changed course along with the U.S. government and began working overseas to help the U.S. support its allies in the Cold War. Revenues doubled between 1946 and 1950.

That same year, Morrison-Knudsen also began participation in a joint venture sponsored by Bechtel, which built the Trans-Arabian pipeline from Qaisumah, Saudi Arabia, to the Mediterranean port city of Sidon, Lebanon. As with domestic jobs, firms like M-K and Bechtel competed for the same work, but the heavy construction business is marked by “coopetition” – competitors cooperating. Many large jobs required bonding, manpower, expertise, equipment, and the spreading of financial risk that was best achieved by forming joint ventures. The proposed pipeline the firms would build were then the world’s largest in diameter (30”), capacity (300-400,000 barrels daily), and proposed length of over 1000 miles. The \$100,000,000 contract with the Saudi Arabian government – King Ibn Saud -

²³¹ Staff. “Ceylon . . . Gal Oya Dams Near Finish.” *The Em-Kayan*, May 1951.

was the world's largest private contract ever awarded. Bechtel headed the five JV partners which included Robert Conyer of California; M-K; H.C. Price of Oklahoma; Sverdrup & Parcel, St, Louis, Missouri.²³²

The involved parties had not finalized the pipeline's route at the time, but in any case it would need to pass through Syria before reaching the sea. The *New York Times* reported on February 23, 1947 that the Syrian government remained the lone holdout on the proposed though the *Times* noted that Syria "is now believed to be more amenable." That did not prove to be the case, so the U.S. Central Intelligence Agency (CIA) helped things along by instigating a coup in Syria on March 29, 1949. The Syrian military's Chief of Staff Husni al-Zaim led the uprising against President Shukri al-Quwatli, resulting in the removal of the President, and approval of the pipeline through Syria by the briefly empowered coup leaders. This would be the first of four coups that impacted Morrison-Knudsen's work. The work in Saudi Arabia also earned Harry Morrison a trip to the White House. On January 30, 1957 Harry Morrison attended a sixty-place dinner at the White House at the invitation of President Eisenhower. Eisenhower hosted the dinner in honor of King Saud of Saudi Arabia. Morrison was among only twelve business leaders in attendance – most of whom were somehow engaged in the Saudi pipeline project. Other attendees

²³² TIMES, CLIFTON DANIEL, Special to THE NEW YORK TIMES. "American Companies Get Contract For Saudi Arabian Pipeline to Sea." *New York Times*. February 24, 1947.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/107808555/abstract/710C5C148B4B4207PQ/11?accountid=9649>.

included Steve Bechtel; Fred A Davies, President of ARAMCO; and, Ralph G. Follis, President of Standard Oil of California.²³³

The decade of the 1950s illustrates the complex organization Morrison-Knudsen had become as it approached forty years in business. The “IECo boom” from 1946-1950 grew gross revenues from \$46.3 million to \$109.2 million. The 1950s witnessed more amazing growth as company revenues tripled from 1950-1956 from that \$109.2 million to \$304.8 million. M-K represented a major world force, and Harry Morrison a CEO to be reckoned with. M-K was everywhere.

TABLE FIVE: SUMMARY OF COUPS IMPACTING M-K

Year	Action	Impact on M-K
1949	CIA initiates its first coup d’état against a foreign government when it overthrows the Syrian president to allow M-K and Bechtel to build the Trans-Arabian Pipeline.	Positive
1953	CIA led coup to overthrow Iranian Prime Minister Mohammed Mossadegh secures M-K work on military facilities, the Karadj Dam and other projects.	Positive
1954	CIA coup in Guatemala overthrows president who had approved \$4.8 million in construction work. Prepayment allowed M-K to escape financially unscathed.	Mixed
1958	Coup to overthrow Iraq’s King Faisal II leaves M-K with no way to collect \$8,000,000 it is owed for projects there.	Loss

Summary above shows the impact of coups against foreign governments, and their impact on Morrison-Knudsen’s work in the respective countries.

Morrison referred to this period in the company’s history as the “national emergency years,” and the period prior as “pre-Korea(n).”²³⁴ The Moroccan air bases constructed by M-K and joint venture partners emerged as the most representative project in the national emergency years. In January 1951, M-K signed contracts with the Army Corps of Engineers for a series of bases on the north coast

²³³ “Oil, Bank Leaders at Banquet to Saud.” *New York Times*. January 31, 1957.

²³⁴ *1953 Annual Report - Morrison-Knudsen Company*. Boise, ID, 1953.

of Africa. The Army's short time frame for construction – six months – and ill-defined project specifications confounded the start of the project. Eventually, Congress hauled Morrison-Knudsen executives to Washington D.C. to account for the issues at the job site. This was the first time corporate executives would appear before Congress in a time of national emergency, but it would not be the last.

In February 1951, M-K expeditors in New York began shipping earth-moving equipment first via train, then via ocean liners to Venezuela to bore tunnels for the highway between Caracas and the seaport of La Guira. Em Kayans on the ground in Venezuela had already completed the camp that would serve as the base of operations.²³⁵

April though was business as usual. Em-Kayans busied themselves in Okinawa, remodeling and updating the American military's physical plant there, and reconditioning vehicles and machinery under several contracts with the Army and Air Force. Bob Gebo, the longtime M-K PM once stranded in the Alaskan Wilderness served as Project Manager.²³⁶

In May, Harry Morrison took time to write about the company's far-flung operations, the realities of managing such an organization, and his not unexpected view of what Morrison-Knudsen's work meant to the world. Morrison boasted of the good M-K's work did for the poorer nations of the world as did the mainstream press of the time. This was of course decades before Earth Day and modern environmental concerns.

²³⁵ Staff. "M-K Machines Head to Sea for Venezuela." *The Em-Kayan*, March 1951.

²³⁶ Staff. "Operation Okinawa." *The Em-Kayan*, April 1951.

M-K is frankly proud of its part in building the facilities of progress in faraway lands. Although our activities abroad, as at home, are strictly those of private contracting firms engaged in engineering and construction work for profit, international friendship is being fostered by our people in the natural course of their performance and their contacts with officials and local citizens. In every case they hire and train native workmen in the construction crafts, generally raising standards of productiveness, self-reliance, and prosperity.²³⁷

In the summer, work continued apace. In June M-K Brazil began work on a 500 mile-long system of 220,000 volt power lines for CHSEF – Companhia Hidro Elétrica do Sao Francisco. A U.S. steel strike and Korean War needs delayed the work for a year. Workers completed the project in July 1953.²³⁹ July brought two more huge projects. In New Zealand, M-K began construction of a 28,000-foot long railroad tunnel scheduled for completion in August 1955. Morrison would visit the project in 1953.²⁴⁰ Then, in Canada M-K began work on what writers called “one of the largest projects in the history of North American construction,” the Nechako-Kitimat project for Aluminum Company of Canada. This project produced more electric power than Hoover Dam. In August workers finished up four years of work on the Gal Oya project in Ceylon.

Large international projects of 1952 included a joint venture on the McArthur Falls Powerhouse on the Winnipeg River, eighty miles north of the city. Manitoba’s provincial government commissioned the work. 700 laborers worked at the site.²⁴¹ M-K also sponsored Mocuzari Dam project in Mexico. Workers began

²³⁷ Morrison, H.W. “Building Friendship Around the World.” *The Em-Kayan*, May 1951.

²³⁹ Staff. “Power Lines Across Jungle and Desert in Brazil.” *The Em-Kayan*, September 1953.

²⁴⁰ Staff. “Six-Mile Bore Hits Fast Pace.” *The Em-Kayan*, November 1953.

²⁴¹ Staff. “McArthur Falls Powerhouse Rises on Manitoba’s Winnipeg River.” *The Em-Kayan*, September 1953.

construction December 4, 1952, with projected completion in forty-five months. Eleven American M-K supervisors and thirty from Mexico directed the work of 650-800 people on the \$8.52 million contract which would build a dam 2,427 feet long and 215 feet high on the Rio Mayo. For the Mexican' Government's Secretariat of Hydraulic Resources, M-K had in 1947 built the Sanalona Dam in the State of Sinaloa.²⁴² And, on December 18, 1952, the Arghandab Dam in Afghanistan topped out. But the real fireworks in 1952 emanated from Morocco.

On March 11, 1951, the *NYT* detailed an American proposal to build a string of air bases in Morocco in order to defend the Mediterranean.²⁴³ Very shortly thereafter, Sultan of Morocco Sidi Mohamed ben Yousef complained in a letter to President Truman that the proposed bases "violate the territorial integrity of Morocco."²⁴⁴ With the French largely in control of a fluid political system in Morocco, the U.S. never did consult with the Sultan, who amounted to a figurehead. In July 1951, Air Force officials confirmed they would build six air bases in French Morocco.²⁴⁵ Incredibly, by October 1951, Morrison-Knudsen had completed two

²⁴² Staff. "Mocuzari Dam Promises More Green Vistas in Mexico." *The Em-Kayan*, March 1954.

²⁴³ Sulzberger, C.L. "West Is Now Strengthening Its Mediterranean Flank: Defense of the Strategic Mediterranean--Five Major Objectives of the West." *New York Times*. March 11, 1951, sec. The Week In Review.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/111812617/abstract/863E13B29800445BPQ/1?accountid=9649>.

²⁴⁴ "Moroccan Assails Plans for Air Bases." *New York Times*. April 12, 1951.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/112025514/citation/863E13B29800445BPQ/2?accountid=9649>.

²⁴⁵ Special to THE NEW YORK TIMES. "Capital Confirms Moroccan Bases; B-50's Held Ready to Fly to Area: Long-Delayed Announcement of Agreement on 5 Made by Air Force--Headquarters at Rabat." *New York Times*. July 13, 1951.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/111955697/abstract/863E13B29800445BPQ/7?accountid=9649>.

bases, which the Air Force was operating, and a third was underway.²⁴⁶ The influx of thousands of workers into Casablanca set prices for food, lodging, and clothing among others on a steep ascent.²⁴⁷

The Moroccan air bases constituted only a small part of NATO's plan to modernize air defenses in Europe. The United States Air Force played a major role in the planning and financing of air defenses on the European continent. Under the North Atlantic Pact defense policies, the United States paid forty-eight percent of the cost of new facilities, the French assumed twenty-two percent, Britain eighteen percent, with Canada, Belgium, Netherlands and Luxembourg sharing the remaining six percent. In an interesting bit of irony and foreshadowing, in October 1951, Secretary of the Air Force Thomas K. Finletter complained that the establishment of new bases on the European continent had been "sadly neglected." He laid the blame for this at the feet of his own agency, the U.S. Air Force, admitting, "we are way behind, as usual." He blamed backwards planning and a lack of central organization for the agency's failures. Other Air Force officials had a different view. While the Secretary believed that American construction firms should not be involved in building European defenses, Air Force officers pointed to Morrison-Knudsen's Moroccan air bases as a model, noting that if NATO used American contractors,

²⁴⁶ Thorne, B. K. "Air Force Speeds Its African Bases: U.S. Bases in Morocco." *New York Times*. October 22, 1951.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/111945573/abstract/863E13B29800445BPQ/13?accountid=9649>.

²⁴⁷ TIMES, B. K. THORNE Special to THE NEW YORK. "AIR BASES CREATE CASABLANCA BOOM: Skyrocketing Prices and Lack of Living Quarters Follow Vast New Construction Housing Typifies Situation." *New York Times*. October 23, 1951.

“they could just about halve the time needed to construct them and at a much lower over-all cost.”²⁴⁸ That sentiment didn’t last.

On December 8, Lt. General Curtis Lemay, Commander of the United States Strategic Air Force inspected the work at Rabat.²⁴⁹ But by January of 1952, Morrison-Knudsen personnel were sitting in front of the Senate Preparedness Investigating Subcommittee defending themselves against charges of “wasteful employment practices.”²⁵⁰ M-K’s personnel man in charge R. C. Wall testified that it cost \$718 to get a worker to the job site, and that 1,174 men – twenty five percent – had quit before completing their contracts. Wall noted that the immediacy of getting workers to the site led to incomplete screening of workers, which may have led to a sub-optimal hiring pool. The Moroccan job sites also had few recreational facilities. Some workers just wanted to get a peak at a foreign country on M-K’s dime – or as others may have interpreted, the U.S. dime.²⁵¹

In February 1952, major media outlets glommed on to the idea of cost overruns at the Moroccan sites. The *New York Times* subtitled one story “dollar waste disregarded in terms of speedy efficiency.” The Moroccan air bases

²⁴⁸ TIMES, EDWARD A. MORROW Special to THE NEW YORK. “TOP U.S. AIDE SEES AIR BASE WORK LAG: Secretary Finletter Says Fault for European Shortage Rests on His Own Department U.S. Air Force Is Blamed Europeans to Do the Building.” *New York Times*. October 27, 1951.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/112070901/abstract/863E13B29800445BPQ/16?accountid=9649>.

²⁴⁹ “LeMay Inspects African Bases.” *New York Times*. December 9, 1951.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/111935984/citation/863E13B29800445BPQ/20?accountid=9649>.

²⁵⁰ *Hearing for Work at Overseas Bases [Part 1]*. Washington, D.C.: U.S. Congress, 1952.

²⁵¹ “OVERSEAS JOB COST PUT AT \$718 A MAN: Senate Inquiry Into Expense of Building Bases Is Told 1,174 Quit Within Year.” *New York Times*. January 12, 1952.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/112559303/abstract/863E13B29800445BPQ/21?accountid=9649>.

represented the largest project the Army Corps had ever managed to this point. The ICBM program would in a few years eclipse Morocco – and be plagued by many of the same issues. The Corps estimated that it had spent over \$343 million and at completion would spend a half a billion dollars. Air Force officers and Army Corps engineers agreed the project “has not been set about in the most economic way possible.” But they lay the blame at the doorstep of the Pentagon. The senior U.S. officer in Morocco, Major General Archie J. Old, Jr. told reporters at the time, “most of the information I have seen in the papers alleging waste have been grossly exaggerated or erroneous.” Colonel George T. Derby, chief of the engineers unit supervising construction noted, “when we started work we didn’t even have plans.” Derby refused to acknowledge critics. Echoing Harry Morrison of fifty years ago, Derby insisted “it took guts . . . to carry this thing out.”²⁵² M-K dispatched Vice President for Engineering Lyman Wilbur to the job site to shore up operations. He recalled:

It was a job on which we had to procure the construction equipment before we had the plans and knew in detail what we had to do, because it was to be completed within a six months period and it took months to get material and equipment shipped overseas. As a result, we didn’t have all the equipment that we should have had in order to do the best job. At one of the projects the sub-base material failed during construction. This developed into charges by one of the design engineers that we were not doing our job properly and resulted in a Congressional investigation.²⁵³

²⁵² C. L. SULZBERGER, Special to THE NEW YORK TIMES. “U. S. RUSHES BASES IN MOROCCO AREA: Dollar Waste Disregarded in Terms of Speedy Efficiency -- Officers Defend Project.” *New York Times*. February 8, 1952.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/112345925/abstract?accountid=9649>.

²⁵³ Wilbur, Lyman D. *The Odyssey of an International Engineer: An Autobiography*. Boise, Idaho: s.n., 1994.

The Joint Venture performing the work, known as Atlas Constructors, included, M-K as sponsor, Blythe Brothers Co., Charlotte, North Carolina; Ralph Mills Company, Salem, Virginia; Nello I. Teer Company, Durham, North Carolina and Morrison's former firm, Bates and Rogers of Chicago, Illinois. Under the contract, the Air Force turned over its appropriation for the job, to the Army Corps, also including a rough specification for the work. The Army Corp, in conjunction with the contractors, then drew up final plans. The contracting firm needed access to an enormous amount of credit as they paid their workers, then submitted vouchers to the Army Corp, which verified the work, then paid the contractors. Because the Air Force and Army Corps were unable to define the parameters of the work more clearly, M-K took the contract as a cost plus fixed-fee contract. This is where the rub came in with the public, which saw this as some sort of blank check. It wasn't. Atlas paid all costs, then sought reimbursed. Its fee was set at 1.25% of the job's cost. As of February 1952, Atlas employed 3,700 U.S. civilians at the sites, which included about 400 American designers and architects. 125 uniformed members of the Army Corps, and another 10,000 French and Moroccans also labored at the sites.²⁵⁴

In the third week of February 1952, more bad news hit the press. The House Executive Expenditures Subcommittee, which had been looking into the costs and construction practices in Morocco, alleged that thieves had looted \$2,000,000 worth of supplies from the construction sites, and that \$50,000,000 had been "poured

²⁵⁴ C. L. SULZBERGER, Special to THE NEW YORK TIMES. "New Bomber Bases in Morocco Bolster U. S. Global Air Strategy: General Old Says Big Planes From Africa Fields Could 'Go All Over Russia.'" *New York Times*. February 9, 1952.
<http://search.proquest.com.libproxy.boisestate.edu/docview/112370212/abstract/6FB1D458BE3C4FC9PQ/89?accountid=9649>.

down the drain.” Army Corps and Air Force officials continued defending the program.²⁵⁵ By March, however, the Senate forced the Army Corps to take action on the project. The House Executive Expenditures Subcommittee forwarded its report to the Senate Preparedness Committee, chaired by Lyndon Johnson. Johnson demanded of Army Secretary Frank Pace, that the program be “cleaned up or closed down.” Pace responded by relieving Colonel Derby, and his chief assistant Lt. Col. Leonard Haseman, from command. Pace also convened a meeting with the contractors, essentially putting them on notice.²⁵⁶

In August, Lyndon Johnson’s subcommittee pegged the cost overruns in Morocco at \$120,000,000. A *NYT* article on August 25 proclaimed the committee discovered “confusion, squandering, loafing and drunkenness” on the job sites. While failing to place blame squarely, the Senate condemned Col. George Derby for “the departure from specifications, the use of substandard construction materials and the consequent poor quality of the work” and “permitted such departures . . . despite repeated warnings by representatives of the civilian architect-engineers on the job.” The Senate was equally unimpressed with General Pick, saying he “should have known from the reports received by the Corps of Engineers . . . that the picture

²⁵⁵ The United Press. “AFRICA BASES FOUND LOOTED OF \$2,000,000: House Inquiry Says 50 Million Was ‘Poured Down Drain’ at Airfield Projects STEALING CHARGED AT AFRICAN BASES.” *New York Times*. February 23, 1952.

<http://search.proquest.com.libproxy.boisestate.edu/docview/112437868/abstract/6FB1D458BE3C4FC9PQ/119?accountid=9649>.

²⁵⁶ “ARMY OUSTS HEADS OF AFRICA PROJECT: Pace Acts on Allegations of Waste and Says He May Stop Air Bases Work.” *New York Times*. March 22, 1952.

<http://search.proquest.com.libproxy.boisestate.edu/docview/112495416/abstract/6FB1D458BE3C4FC9PQ/154?accountid=9649>.

was not as he painted it.”²⁵⁷ Pick the next day fired back in the nation’s newspaper of record saying that his recent visit to Morocco and inspection of the work showed things were progressing satisfactorily, and that Air Force commanders on the ground echoed that sentiment. Pick was also responding to a new charge from North Dakota Congressman Usher L. Burdick, who said Pick was “incompetent as an engineer.” Burdick’s charge stemmed from his critique of Pick’s handling of the building of the Garrison Dam in his home district.²⁵⁸ Morrison-Knudsen and Peter Kiewit combined in a joint venture to build that project.

On September 28, 1952 Congressman L. Mendel Rivers visited French Morocco to personally inspect the air base construction on behalf of House Armed Services Committee Chairman Carl Vinson. His visit came a day before a House Appropriations Subcommittee reviewed an 800-page report on the air base program compiled by House investigators. The House investigation differed markedly with the findings from Senator Johnson’s committee. The report, in fact, said that much of the Senate’s criticism of the work was not only “unfair” but also “false.” The House found nothing to support the “legend of scandal and inefficiency” portrayed by the Senate, and that “civilian contractors and architects were not to blame for most of the construction difficulties.” The report castigated the Air Force

²⁵⁷ JOHN D. MORRIS, Special to THE NEW YORK TIMES. “Africa Air Base ‘Fiasco’ Cost Put at 120 Million by Inquiry: Senate Subcommittee Assails ‘Confusion, Squandering, Loafing and Drunkenness’ -- Pick Blamed -- Pace Urged to Act SENATORS ASSAIL AIR BASE ‘FIASCO.’” *New York Times*. August 25, 1952. <http://search.proquest.com.libproxy.boisestate.edu/docview/112281407/abstract/6FB1D458BE3C4FC9PQ/371?accountid=9649>.

²⁵⁸ Special to THE NEW YORK TIMES. “AFRICAN AIR BASES DEFENDED BY PICK: Army Engineers Head Declares Senate Group Is Overcritical -- New Charges Made.” *New York Times*. August 26, 1952. <http://search.proquest.com.libproxy.boisestate.edu/docview/112301599/abstract/6FB1D458BE3C4FC9PQ/373?accountid=9649>.

for poor planning, but lamented that the Army Corps was made to be the “whipping boy.”²⁵⁹

The *Congressional Record* on January 13, 1953 published the findings of Congressman Rivers regarding the air bases in French Morocco. In short, Rivers absolved the contractors of wrongdoing or technical incompetence. The more interesting story, which emerged, revolved around the Army’s Chief Engineer, Lewis A. Pick. Rivers’ testimony in the *Congressional Record*, in part noted

It is coincidental that this report comes during the imminent retirement of Gen. Lewis A. Pick, Chief of the Army Engineers. The work that his splendid organization accomplished is a monument to his magnificent leadership and the loyalty which his far-flung organization reposes in him. It is difficult, in the space of a report of this character to evaluate the obstacles over which the Army Engineers had to surmount in order to arrive at the present state of progress at the bases in question. The pattern of leadership and the table of organization which he has developed for the unique undertaking of which he is charged will stand for future Chief of Army Engineers to follow. The nation owes this great engineer a debt of gratitude, and I herewith consider it my duty to pay my respects to him individually and to call it to your attention in keeping with what I consider my responsibility.²⁶⁰

Former M-K Vice President of Engineering Lyman D. Wilbur tells the story a bit differently. Regarding the Congressional investigation into the problems in Morocco, he wrote:

The result of the investigation on this project was that the engineer who criticized us was discharged from the job and we stayed on and finished the work. One of the problems leading to the investigations

²⁵⁹ “CRITICISM OF BASES IN AFRICA IS SCORED: House Group Says Rush Job Was Most to Blame -- Planning by Air Force Put Under Fire.” *New York Times*. September 29, 1952, sec. FINANCIAL BUSINESS. <http://search.proquest.com.libproxy.boisestate.edu/docview/112390276/abstract/6FB1D458BE3C4FC9PQ/422?accountid=9649>.

²⁶⁰ Rivers, L. Mendel. “Congressman Praises Air Bases in North Africa.” *The Em-Kayan* (reprinted from *Congressional Record Jan 13, 1953*), February 1953.

was that the Chief of the Corps of Engineers at the time was General Pick. The normal procedure for selecting the Chief of Engineers was for the Corps of Engineers to submit to the President three or four names of the top engineers from which the President would select one. However, when this list was submitted to President Truman, he would not accept it and asked for an additional list. The Corps people then submitted another list of three or four engineers. He wouldn't accept them either, and said he wouldn't accept any list unless it contained the name of General Pick, who previously had been district engineer in St. Louis and with whom President Truman had become acquainted. The Corps finally submitted a list of about 30 engineers with Pick at the bottom of the list. President Truman chose Pick.

Succeeding Pick as Chief of Engineers was Sam Sturgis. He explained to Lyndon Johnson what had really transpired in Morocco. Some years later Johnson told Jack Bonny (M-K President and General Manager who succeeded Morrison) that had Pick told him the complete story, there never would have been an investigation.²⁶¹

Morocco was of course only one small piece of the puzzle. By March of 1953, M-K had foreign corporate entities in Vancouver, British Columbia; Venezuela, Brazil, Peru; In Canada, Calgary, Edmonton, Toronto, Winnipeg, and Montreal; Mexico; Columbia; New Zealand; and, Afghanistan where in March, workers completed Kajakai Dam.

Initially only caring about the construction work that an engineering firm could bring to M-K, Morrison sang a different tune by the spring of 1953:

As the national and international scope of heavy construction steadily widens, as ever-improving methods and equipment accelerate our production, more and more engineers will be required, welcomed and well paid. Engineers now operate in so many different fields of modern achievement that their works are sometimes hard to classify, but the Merriam-Webster dictionary gives engineering a simple and comprehensive definition as, "the art and science by which the properties of matter and the sources of power in nature are made useful to man in structures, machines, and manufactured products." It

²⁶¹ Wilbur, Lyman D. *The Odyssey of an International Engineer: An Autobiography*. (Boise, Idaho: s.n., 1994. 118-119).

is a very plain statement of important truth about a profession that is basic to progress.²⁶²

Morrison's prediction about the scale of engineering and construction projects bore itself out on jobs across the globe. On the Alcan job 400 miles north of Vancouver, 3,400 Em Kayans, including 450 women and children, lived in Camp 5, the largest of seven M-K camps in Canada. The mess hall there served 5,730 meals every 24 hours at twenty different servings, and sent 1,390 lunches out to the field. The camp dairy produced 10,000 gallons of milk and cream the first month. The bakery averaged daily production of 1,429 loaves of bread. Elsewhere in Canada M-K had 250 workers on a hydroelectric plant in Manitoba.²⁶³ On April 16, 1953 M-K workers began adding fifty-seven feet to the existing La Joie dam in Vancouver, B.C. on a \$10,000,000 project aimed at bringing more electrical generating capacity into the city.

While thousands of Em Kayans built wonders of the world, Morrison circled the globe marketing the company's achievements in print and in film to all who would listen – mostly leaders of foreign governments, bankers, and corporate executives. Though still actively running the company at this time, Morrison had delegated much of the supervision of construction and operations to Jack Bonny. M-K produced films available in 1951 included: "Afghanistan, Star of Asia," "Ceylon Reclaims the Jungle," "More Power to Rio," "Jungle Railroad," "Power Unlimited," "River Tamers," and "Logging in the Skagit Basin." On April 17, 1953 Harry showed

²⁶² Morrison, H.W. "Engineers Are the Planners of Progress." *The Em-Kayan*, April 1953.

²⁶³ Staff. "New Hydroelectric Power for Canada's Manitoba Province." *The Em-Kayan*, April 1953.

M-K's movie, "The March of Power" to executives at the John Hancock Mutual Life Insurance Company. Company President Paul Clark organized the lunch.

In September, Morrison took to the pages of the *Em Kayan* to clear the air on the Morocco situation:

Despite our phenomenal performance in having made two huge, all-new bases ready for emergency use in the shortest time ever known, a political publicity furor was generated, early in the following, presidential-year of 1952, that forced the contracting group to wade aggressively into the congressional investigation fray in Washington and slug out a costly battle to preserve our good reputations from permanent injury by unfair and inaccurate news releases. An always-confusing factor in that situation was the reiterated stress laid on the "cost-plus" contract – with intent to give the public impression that the more a contractor spends the larger is his compensation.

This is not only untrue but is the opposite of the truth, for no matter how great the cost of the work the contractor's fee does not increase, while his home office expense in connection with the work – for which he receives no compensation – goes on until the work is completed.²⁶⁴

The month prior, Morrison-Knudsen Company de Centro America began constructing what today is known as the Guatemalan port city of Santo Tomas de Castilla. IECO drafted master plans for the port and city, which would expand over time. M-K's initial work consisted of dredging the bay for fill for the port, and to allow ships to port. Workers also built a wharf, transit shed and two outbuildings.²⁶⁶ This would be all the work Morrison-Knudsen would perform there as political upheaval threw future work into question.

On June 27, 1954, the CIA instigated a coup d'etat in Guatemala, overthrowing President Jacobo Arbenz, and installing a military junta. In August of

²⁶⁴ Morrison, H.W. "President's Memo: Revised Contract on Moroccan Air Bases." *The Em-Kayan*, September 1953.

²⁶⁶ Staff. "Caribbean Gateway to Guatemala." *The Em-Kayan*, February 1955.

1953, Morrison-Knudsen had signed contracts with the Arbenz government for construction of a port city, and a network of roads. Morrison-Knudsen had deposited the \$4,800,000 it received for contracts, in American banks, thus the work continued even after the overthrow of Arbenz. Even as late as January 1955, the NYT misidentified the former president, calling him Jacobo Arbenz “Stuzman.” And, the *Times* defend the actions of the U.S., writing that Arbenz’s plan for a road between Guatemala City and Puerto Barrios where there is currently only rail, “would have hurt the United States owned International Railways of Central America” though writers acknowledged that even the International Bank for Reconstruction and Development supported construction of the road.²⁶⁷ The railway firm, itself a subsidiary of United Fruit, represented the only way to get to the port, thus Arbenz’s road interrupted its transportation monopoly. With hindsight of course we understand that American media at the time covered the story government officials fed them. Today, we have a clearer understanding of the toppling of Arbenz in Guatemala and other U.S. instigated covert actions.²⁶⁸ While the removal of Arbenz carried great potential risk for Morrison-Knudsen, the company mitigated that on their own end by securing payment for the contracts and depositing them on American soil. Politically, Morrison-Knudsen was no match for the interests of United Fruit, which owned the majority of the infrastructure in Guatemala. In Iran, however, Morrison-Knudsen benefitted from the CIA’s actions – they worked to

²⁶⁷ Times, Special to The New York. “TWO ARBENZ IDEAS BEING CARRIED OUT: Guatemala Building a Port on Caribbean and Roads Under Five-Year Plan.” *New York Times*. January 5, 1955, sec. BUSINESS FINANCIAL.

²⁶⁸ Halberstam, *The Fifties*, 370-378.

secure M-K's work in the country. Somewhat ironically, deposed Guatemalan President Jacobo Arbenz himself appeared on the cover of *Time* magazine on June 28, 1954 just six weeks after Morrison's appearance on the cover of the same publication.

Harry and Ann in September visited New Zealand to check on the railroad tunnel work there. Morrison always packed these kinds of trips with meetings with dignitaries, and this time was no exception. His joint venture partner on the Rimutaka Tunnel, Arnold Fielder Downer was one of New Zealand's most prominent Civil Engineers. The firm, which bears his name – "Downer" – still operates today and is one of the world's larger heavy construction firms with 21,000 employees. Downer coordinated a lunch in Morrison's honor where guests included the upper crust of business and politics in the region: Rt. Hon. S. Holland, Prime Minister; Hon. S. Goosman, Minister of Works; His Worship, Mr. MacAllister, Mayor of Wellington; R.E. McKillop, Commissioner of Works; B. Ashwin, Secretary of the Treasury; R. Moore, General Manager, Bank of New Zealand; J. Coble, Chairman, Coble Holdings; Mr. Hodges, Chairman, New Zealand Railway Board; D.A. White, General Manager, Golden Bay Cement Company; and many of the M-K senior staff on the Rimutaka project.²⁶⁹ Rimutaka Project Manager Louis L. Wheeler was the prototypical Em-Kayan: a long time associate of M-K Vice President Lyman D. Wilbur, Wheeler named their son Robert Lyman in Lyman's honor. It was also Wilbur who convinced the Henry J. Kaiser Company to loan Wheeler to M-K as a Project Manager on its

²⁶⁹ Morrison, Ann. "People, Parties, and Portals, 'Down Under.'" *The Em-Kayan*, February 1954.

Camp Roberts project in San Luis Obispo. Wheeler worked between the two firms before joining M-K permanently in 1947.²⁷⁰

Again in October of 1953, Morrison found inspiration in the company's international work, writing of it in his President's memo. The letter's themes – heavy contractors as ambassadors and construction as progress – emerge here yet again, echoing popular development theories at the time:

A brief but meaningful letter recently arrived from a previously unknown friend of M-K, which I am taking the liberty to quote without revealing the sender. Obviously he is an individual of distinction who gets around this big world. It says, in major part:

“As a small stockholder in your very fine company I think you will be interested in the comment concerning your work in the Far East. The writer, now retired, made a six-months' trip around the world. While in Karachi he came in contact with people of importance and one day the subject of construction arose. Said one man, ‘When Morrison-Knudsen undertakes a job they do it well and finish as per contract.’ Another remarked, “the personnel sent out by Morrison-Knudsen is tops, and they have the ability and tact needed to work with native help.”

Our thoughtful correspondent then adds his own, complimentary conclusion: “If there were more American companies of the caliber of your own, we'd have a better-knit relationship with the world in general.”²⁷¹

That winter, M-K made progress on a number of job fronts. In November 1953 it completed Waneta Dam on the Pend Oreille River, one mile north of the Washington State and Canadian border. The project owner, Consolidated Mining and Smelting Company of Canada Limited, was one of the world's largest producers of lead, zinc, silver and chemical fertilizers. The dam featured a crest length of 950

²⁷⁰ Staff. “Man of the Month: Louis L. Wheeler.” *The Em-Kayan*, February 1954.

²⁷¹ Morrison, H.W. “President's Memo: Good News of Our Reputation Abroad.” *The Em-Kayan*, October 1953.

feet and rose 250 feet. The powerhouse could produce 420,000 horsepower and served the company's chemical plant at Trail, and the Sullivan mine in Kimberly, British Columbia. The same month the *Em-Kayan* reported workers had completed 40% of the world's deepest causeway across the Strait of Canso in Nova Scotia. The causeway connected Cape Breton Island to the mainland of Nova Scotia and represented the eastern end of the Trans Canada Highway.²⁷³

In Latin America, M-K was at the time completing eleven jobs in four countries, Peru (1) – Rio Quiroz Irrigation Project consisting of seventeen miles of canal and ten tunnels; Columbia (3) The Buga-Buenaventura Highway project fifty-four miles of highway, the Central Highway project improvement and rebuilding of 185 miles of highway, and the Santander Highway project improvement and rebuilding of 505 miles of highway; Venezuela (1) Orinoco Railway and Highway project ninety-one miles of railroad and highway; Brazil (6) Paulo Alfonso substations – four transmission line substations, the Cajuru Dam; the Itutinga Dam and powerhouse, the Forcacava project – and underground powerhouse, the fifteen-mile long Pinheiros Canal, and the Cubatao underground powerhouse. M-K got first Latin American contracts in 1943. 200 American supervisors oversaw the work of 7,000 in-country residents. Peru provides a particularly illustrative case study of an international heavy construction business.

In January 1955, a *New York Times* headline declared “Peru Will Exploit Great Resources.” In actuality, Americans exploited Peru's resources. Geologists had

²⁷³ Staff. “Progress in Nova Scotia.” *The Em-Kayan*, November 1953.

discovered a massive copper deposit in the Toquepala region of southern Peru. The quest commenced to get the copper out of the ground. Under the banner of The Southern Peru Copper Corporation, American Smelting and Refining Company of New York would in the name of its subsidiary, begin mining operations. The firm budgeted \$200,000,000 to extract the resource. The United States Export-Import Bank, granted half that amount to the company, in the form of a credit – the largest ever awarded a private firm at the time. In 1959, the Ex-Im Bank granted the firm another \$15,000,000 in financing.²⁷⁴ The company itself set aside \$40,000,000 for the project, and the Southern Peru Copper Corp. negotiated the remainder of the financing from the Peruvian government.²⁷⁵ *NYT* writers noted: “At a time when many other Latin-American countries are following a course of ultra-nationalism, Peru is continuing her free enterprise and free exchange policy with resultant benefits. The nation’s course of encouraging foreign investments is paying off, particularly in its relations with the United States. There are no restrictions on the transfer of earnings or repatriation of capital.” *NYT* writers estimated that U.S. investment in Peru had reached \$250,000,000, highlighting America’s penchant for staking out natural resources in remote locales, importing the profits, and exporting the environmental consequences to the host nation.

²⁷⁴ “15 MILLION ADDED TO COMPANY LOAN: Export-Import Bank Gives Supplement to Help Project in Andes.” *New York Times*. January 19, 1959, sec. BUSINESS FINANCIAL.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/114735250/abstract/710C5C148B4B4207PQ/94?accountid=9649>.

²⁷⁵ WALKER, Guild, Special to The New York Times. “PERU WILL EXPLOIT GREAT RESOURCES: \$200,000,000 to Be Invested in Copper Development That Will Revitalize Economy PERU TO EXPLOIT VAST RESOURCES.” *New York Times*. January 5, 1955, sec. BUSINESS FINANCIAL.

The construction business though had its challenges. By the third week of October 1957, M-K and Utah Construction's 6,000 workers at the Toquepala site were on strike. Peru sent troops to quell the strike, and the Peruvian government declared the strike illegal. *New York Times* writers noted that "labor leaders in the Toquepala area reportedly cross the near-by Chilean border regularly to meet with Chilean Communist agents and labor agitators in the Chilean port of Arica."²⁷⁶ However, even today that trip is an arduous journey of 130 miles. And, the press in the 1950s regularly printed stories of questionable veracity regarding Communist activity, those stories often created by American government officials.

By 1970, the Peruvian government itself turned on Morrison-Knudsen and its joint venture partner Brown and Root, on a different job. The Peruvian government had contracted with Brown and Root to represent its interests on a 146-mile highway across the northern part of the country. Morrison-Knudsen performed the actual work of building the road. After ten years of work, the Peruvian government had accepted less than fifteen percent of the work, and it had hauled M-K and Brown and Root into court alleging that the two conspired to run up costs on the job. The Agency for International Development and the Export Import Bank financed the work, and stopped payments on loans to Peru once it filed lawsuits against the contractors. Both funding agencies refused to intervene in the suit. The Peruvians grew increasingly concerned with Brown and Root's ability to be objective on the job after it changed its position on whether Morrison-Knudsen had caused

²⁷⁶ Special to The New York Times. "STRIKE HELD ILLEGAL: Peru Sends Troops to Quell Copper Workers' Walkout." *New York Times*. October 27, 1957.

landslides that covered portions of the road after construction. Brown and Root originally found M-K at fault but then reversed itself saying that inherent characteristics of the terrain made the slides unavoidable.²⁷⁷ M-K and Brown and Root were also at the time engaged in a \$1.5 billion joint venture in Vietnam, building military facilities for the American government.

M-K's projects abroad were not always at the behest of foreign governments. Some originated in the states, and Morrison-Knudsen earned work based upon the international activities of other U.S. based corporations. In January of 1954, trains on the M-K constructed Venezuelan railroad moved the first load of iron ore out of Cerro Bolivar, a mountain in the southeast region of the country where U.S. Steel had discovered ore deposits in 1947. 200 Em-Kayans directed the work of 2,700 Venezuelans on the project, which utilized \$6,000,000 worth of equipment.²⁷⁸ Just a couple of week prior, Em-Kayans had completed the largest construction project in Peru's history when Peruvian President General Manuel A. Odria opened the gates on a twenty-one-mile system of irrigation canals and tunnels.²⁷⁹ Twenty-eight Americans supervised the work of 2,000 Peruvian workmen.

By the middle of the decade IECO had worked on projects for foreign governments in Afghanistan, China, Ceylon, Turkey, South Korea, Guatemala, Iran,

²⁷⁷ Times, WALTER RUGABER Special to The New York. "The Helpful Americans: In Peru 'No': Payments Suspended Issues Are Intricate The Helpful Americans: Peruvians Disagree Pioneer Road Urged 'False Economy' Seen Peru Reimbursed Decision Changed 'Decisions Reversed.'" *New York Times*. August 23, 1970, sec. Business & Finance.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/117947053/abstract/710/C5C148B4B4207PQ/1199?accountid=9649>.

²⁷⁸ Staff. "M-K Finishes Early as First Trains Move Ore Cargoes From Iron Mountain in Venezuela." *The Em-Kayan*, February 1954.

²⁷⁹ Staff. "Peru Hails Canal Completion." *The Em-Kayan*, February 1954.

Peru, Saudi Arabia, and Lebanon. For private sector clients, IECo had worked in Canada, Switzerland, and Brazil. The Shah of Iran visited the Morrisons in Sun Valley January 12-13, 1955 priming the pump for more growth in the Middle East in 1956. But by the end of 1955, Morrison-Knudsen set a company record for net income - \$6,011,573²⁸⁰

That spring outside the ancient city of Adana, Turkey, M-K in partnership with Garanti-Insaat, Ltd. was building a 240-foot high, 6,400-foot long dam across the Seyhan River. Adana even in the 1950s served as a major agricultural center. The new dam irrigated 360,000 acres of the Cukorova Plain – one of the world’s most productive agricultural regions. New power facilities generated 61,000 kilowatts of electricity for Adana, Tarsus, and Mersin. This project was prototypical of M-K’s international work. M-K often set up joint ventures with international firms. To gain entre to these markets, M-K relied upon its relationships with vendors such as Caterpillar and Ingersol Rand, who sold equipment all over the world. When M-K hoped to bid an international job, it sought out contacts from these companies. M-K also used local banking facilities, and hired local workers. In the case of the Seyhan Dam, M-K’s Project Manager Harold E. Buckert supervised a cadre of thirty-two project managers from M-K’s ranks, but 1,200 Turkish workmen made up the bulk of the workforce. The \$28.8 million contract, let in 1953, would conclude with

²⁸⁰ “MORRISON-KNUDSEN CO.: ’55 Net a Record \$6,011,573, Up From \$5,559,166 in ’54.” *New York Times*. April 4, 1956, sec. Business & Finance.
<http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/113484697/citation/710C5C148B4B4207PQ/74?accountid=9649>.

Turkish President Celal Bayar dedicating the facility.²⁸¹ Bayar had served as Ataturk's Prime Minister before being elected President in 1950, and was ousted in a Coup d'etat in 1960.

Harry Morrison wrote of the project – M-K's first in Turkey – in the May 1956 edition of the *Em Kayan*. Morrison's "President's Memo," which appeared on the inside cover of every *Em Kayan* typically adopted a boosterish tone since primary readers were M-K employees. This one followed that prescription, but also served up a fair amount of American exceptionalism in ignoring Turkey's significant history.

Though not a wealthy nation, Turkey is an ambitious country of the approximate size of Texas, investing much of its scare capital in multi-purpose developments to raise the standards of its agriculture and of its populous cities by harnessing its rivers to produce economical irrigation and electric power. The late Kemal Ataturk, founder of the Turkish Republic, is said to have advised his people as follows: "Remain yourselves, but take from the West that which is indispensable to the life of a developed people. Let science and new ideas come in freely. If you don't, they will devour you." The vigorous administration of President Celal Bayar apparently follows that advice.²⁸²

The final output of the Seyhan hydro project, would by 1956 be a third of all electric power produced within Turkey. The International Bank for Reconstruction and Development loaned the Turkish government \$4.285 million. The Turkish

²⁸¹ Staff. "Seyhan Dam Embankment Topped Out in Turkey." *The Em Kayan*, April 1956.

²⁸² Morrison, Harry. "President's Memo: 60,000 Attend Turkish Dam Celebration." *The Em Kayan*, May 1956.

government also negotiated a private placement (in equity capital) of \$5.714 million.²⁸⁴

The Turkish Dam was but one significant project M-K had under contract in the Middle East. M-K was also at work in Iraq where Project Manager Charles Buck supervised a crew of thirty American and British construction managers, overseeing a crew of 550 Iraqi construction workers laboring on a highway. The project proved challenging. *Em Kayan* writers described the barrenness of Iraq's natural environment, and the limitations it imposed upon construction:

The desert country of Iraq is not only devoid of hills and heavy vegetation. It is also barren of a suitable rock deposit along the entire 103-mile route of the new highway for aggregate with which to surface the road. M-K has to build 75 miles of its own road across the desert beyond Amara to reach to reach an aggregate pit only a few miles from the border of Iran. Crushed rock from this pit will have to be trucked the 75 miles back to Amara, then loaded on Tigris River barges for shipment to four distribution points along the river.²⁸⁵

Morrison's fellow Idahoans would be surprised to learn that the rock crushing and screening plant being installed along the Tigris arrived from Idaho after being used to build the Mountain Home Air Force Base, due south of the Idaho capitol of Boise. But the historical implications of the project eclipsed the marvels achieved by the contractors.

On October 8, 1961, The *NYT* profiled Jack Bonny who had just more than a year prior taken over the presidency of Morrison-Knudsen from Harry Morrison.

²⁸⁴ WELLES HANGEN Special to THE NEW YORK TIMES. "U. S. CONCERN GETS TURKISH DAM JOB: Morrison - Knudsen Awarded Contract for Seyhan River Power Project in South." *New York Times*. July 6, 1953. <http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/112678964/abstract/710C5C148B4B4207PQ/50?accountid=9649>.

²⁸⁵ Staff. "103 Miles of Highway to Baghdad." *The Em Kayan*, May 1956.

Writer John M. Lee noted the usual facts about M-K – that it was “probably the largest heavy construction company in the world,” and that it was a “little known company that kept busy rearranging the face of the earth.” But it was the project on which Bonny was about to engage that illustrated the difficulty of being a global contractor. Bonny had inherited from Morrison the issue of trying to recover \$8,000,000 from the Iraqi government for work approved by King Faisal II.

Faisal had commissioned the highway work, and in process rung up \$8,000,000 in change orders. M-K finished the job in August of 1958, just weeks after forces led by Abd Al-Karim Qasim overthrew Faisal and his Hashemite monarchy in the 14 July Revolution, killing Faisal in the process. Scholars attribute at least part of the frustration of the revolutionary leaders on Iraq’s participation in the 1955 Baghdad Pact. For Morrison-Knudsen, then, the Baghdad Pact represented a mixed blessing. While Iranian leaders pushed for increasing U.S. involvement in the pact, which safeguarded M-K’s work in the country, the same Pact created risk within Iraq.²⁸⁶ Qasim fared little better following the coup. Within ten years, Hussein’s Baath Party controlled Iraq, and when Hussein overran the tiny coastal nation of Kuwait in 1990, he used the M-K constructed highway to get there.

1956 marked another milestone in M-K eastern operations: ten years in Afghanistan. Morrison commemorated that marker in the June *Em Kayan* noting that the U.S. government had been distributing a promotional film of M-K’s work in Afghanistan demonstrating the possibilities to other nations aspiring for U.S.

²⁸⁶ LEE, JOHN M. “Personality: Building Official Shuns Office: Bonny Flies All Over World to Inspect Concern’ S Work Morrison-Knudsen’ S Head Prefers Site of Construction.” *New York Times*. October 8, 1961, sec. BUSINESS FINANCIAL.

assistance. As previously noted, the popular press of the era offered the same endorsement, Morrison recognized that writing “leading American magazines recently have described the vast improvements made by M-K in the valley of the Helmand.”²⁸⁷ The contracts in Afghanistan begun in 1946, totaled more than \$78,000,000. One of the first projects was the Kajakai Dam the largest earth and rock dam in Asia, the Arghandab Dam just north of Kandahar, and the Boghra Canal system. On additional contracts Morrison-Knudsen built power generation facilities and a flight strip for the international airport going in at Kandahar. Afghanistan’s government in cooperation with the U.S. Export-Import Bank financed construction. *Em Kayan* writers noted that His Majesty Mohammed Zahir Shah, King of Afghanistan, garnered worldwide acclaim for opening this new era of “progress and prosperity.” M-K trained and employed over 3,500 Afghans on the projects.²⁸⁸ 1956 closed out with Morrison-Knudsen producing record revenues – nearly \$305 million. Cold War imperatives at home also helped drive this growth – a subject discussed in a later section.

1957 witnessed M-K’s move into Australia, where just north of Melbourne workers labored on forty-three bridges, siphons, and other irrigation facilities bringing irrigation water to 64,000 acres. In northwestern Peru, Em-Kayans constructed the largest earthen dam, San Lorenzo, in South America and 300 miles of canals and laterals. And they brought power - a 30,000 KW power plant near Lake

²⁸⁷ Morrison, H.W. “President’s Memo: Tenth Anniversary in Afghanistan.” *The Em Kayan*, June 1956.

²⁸⁸ Staff. “Decade of Progress in Afghanistan.” *The Em Kayan*, June 1956.

Managua in northwest Nicaragua They also ran their own trade school there as they did in many other countries.

In January of 1958 Morrison celebrated the 46th year of the company recognizing 964 company employees with between ten and forty years of service – twenty-nine of them citizens of Afghanistan. Morrison also announced a new contract – a \$35 million contract to build the Karadj Dam forty miles northwest of Tehran. M-K engineers projected the dam's height at 590 feet, and 1,264 feet across. Like many other international construction projects M-K performed, the King of Iran, His Imperial Majesty Mohammed Reza Pahlevi, visited the project along with other Iranian dignitaries and M-K management. Also that month the *Em Kayan* announced a significant award for a well-known Em Kayan – former Wake Island project manager Dan Teters. The full release read:

The degree of Chevalier in the Legion of Honor has been awarded in the name of the Republic of France to N.D. "Dan" Teters, veteran M-K construction executive now in Casablanca, French Morocco. Teters, vice-president of M-K International Company, is resident partner in charge of the building of the U.S. air bases in Morocco by M-K sponsored Atlas Constructors. The decoration, presented by Ambassador Alexandre Parodi, was "in appreciation for the outstanding manner in which Teters performed his work in readying the air bases as a component of NATO" (North Atlantic Treaty Organization).²⁹²

May 1959 represented the halfway point construction begun in April 1957 on ten military sites for the Imperial Iranian Army and the Imperial Iranian Air Force at a projected cost of \$76,000,000. The Joint venture partners – M-K-O - included M-K, Henry J. Kaiser Co., Oman Construction Company, Inc., R.P.

²⁹² Staff. "French Decorate Teters." *The Em Kayan*, January 1958.

Farnsworth & Co., Inc. and Wright Contracting Co. The U.S. Military Assistance Program financed the construction. The Army Corps of Engineers directed the overall program. M-K-O built over 2,000 structures under the contract, including housing units, hospitals, and maintenance shops. M-K-O subcontracted the majority of the actual construction work to Iranian firms, at times employing 20,000 people. 380 M-K-O staff filled key management and technical positions, and performed all site excavation, road, utility, airstrip and elevated tank construction, and well drilling.

The work in Iran intersected with the third CIA directed coup when it helped depose Prime Minister Mohammed Mossadegh, whom sought to weaken the influence of the Shah and nationalize Iran's oil industry. Years after Mossadegh's ouster, In May of 1957, Iran's latest Prime Minister Manouchehr Eghbal argued for greater U.S. participation in the Baghdad Pact. In the same speech, he also discussed public works projects in the country, including the Karaj Dam. Eghbal blamed the stalled dam project on the loss of oil revenue following the nationalization of the oil industry under Mossadegh. However, other observers noted inefficiencies among Eghbal's own bureaucrats.²⁹³

In October 1959 (begun in June 1957) the *Em Kayan* profiled construction of the Tres Marias Dam in Brazil, which upon completion in 1960 ranked as one of the world's largest earthfill dams at a length of 9,000 feet and a height of 210 feet. Six

²⁹³ HOMER BIGART Special to The New York Times. "BIGGER U.S. ROLE IN MIDEAST ASKED: Iranian Premier Urges Full Baghdad Pact Adherence to Clarify Situation." *New York Times*. May 28, 1957. <http://search.proquest.com.libproxy.boisestate.edu/hnpnewyorktimes/docview/114163502/abstract/710C5C148B4B4207PQ/86?accountid=9649>.

Companies veterans M-K, Kaiser, Utah Construction and Raymond, Int. combined on the joint venture sponsored by Morrison-Knudsen. The project cost \$41,000,000, employed 3,100 people, and utilized over \$8,000,000 worth of heavy equipment. In December 1959, M-K subsidiary River Construction Corp., a pipe-laying specialist, completed 1,700 miles of natural gas and petroleum pipelines that stretched half the length of Argentina. The \$200,000,000 project employed 1,100 Argentinians and 160 Americans, mostly from River Construction. The job necessitated an extraordinary amount of equipment, including eighty-six Caterpillar D7 dozers and sideboom tractors, twenty-two Bucyrus-Erie three-quarter-yard backhoes and clamshells and more than 200 trucks, cars and other vehicles.²⁹⁴ Never a company for anything but superlatives, Morrison-Knudsen closed out the decade profiling work in progress in Iran. Near Tehran, M-K was at work on the Karadj dam, which at 590 feet in height would rank as one of the world's highest concrete arch dams.²⁹⁵

M-K's international operations illustrate a number of important concepts. As with the early days of the company, relationships built decades prior once again come into play as Morrison's old friend Jack Savage helped steer business to the company as U.S. foreign aid supports infrastructure development across the globe. In order to bolster its Cold War defenses abroad the United States as a matter of policy funded development of basic infrastructure in many allied countries. Again like other critical junctures in U.S. history – the Depression and War – the U.S. needed heavy contractors to help implement its changing policy objectives.

²⁹⁴ Staff. "Vast Pipelines Finished in Argentina." *The Em Kayan*, December 1959.

²⁹⁵ Staff. "Modern Progress in Iran (Cover Story)." *The Em Kayan*, November 1959.

This movement of public and private capital abroad helped usher in the modern era of globalization. M-K's own widespread operations also serve as a template for how American corporations operated abroad. An important variable in success abroad involved having high level contacts within the United States government, a lesson today's multinational businesses have elevated to an art form but one that had its beginnings with the operations of heavy contractors.

Lastly, heavy contractors were the first to deal with multifaceted political risk as they operated abroad. Four times between 1949-1958, Morrison-Knudsen found itself in the middle of CIA led coups d'état. At times the company benefitted from American led actions abroad. At other times, however, the outcomes were not as clear-cut or caused financial losses for the company. Whatever the case, American heavy contractors were certainly the first American corporations to find themselves in the middle of a CIA action, and frequently operated in locations with great political risk, again providing a model of operation for other U.S. firms entering unstable markets.

This international growth was but one storyline driving the fortunes at M-K during the Cold War years. Militarization became the driving zeitgeist in the United States as the U.S. and its corporate partners built new military bases and the intercontinental ballistic missile program as Cold War buffers within U.S. borders.

PART FIVE: MILITARIZATION

“The Cold War demanded unparalleled levels of peacetime military spending and organization. The federal government expanded with the creation of the Central Intelligence Agency, the National Security Council, a unified armed services, and a permanent Department of Defense. Defense spending ballooned, equaling 10 percent of the nation’s economy in the 1950’s. In turn, many Americans came to understand the federal government – “the state” – not just in terms of the social programs and policies historians have examined, but also through the defense bureaucracy.”²⁹⁶

Introduction

A second major shift in the twentieth century that impacted the size and scope of the U.S. federal government in relation to private firms is militarization. For the purposes of this dissertation, militarization describes the military buildup by the United States as it pursued its Cold War strategy of forestalling the spread of Communism. Allied topics include Eisenhower’s warning about the Military Industrial Complex (MIC), the shift in the U.S. population as military expenditures created a new “gunbelt” across the South and West, and transforming the West into the “largest peacetime militarized zone on earth.”²⁹⁷ In the business history literature, at least three main themes emerge around militarization: private firms as part of the arsenal of democracy, how and if firms benefitted from the “military subsidy theory,” and private firms as part of America’s decentralized war effort (as opposed to state managed efforts in Europe). Morrison-Knudsen’s experiences during the decade inform all these issues.

²⁹⁶ Heefner, *The Missile Next Door*, 6.

²⁹⁷ See: Markusen, Ann R. *The Rise of the Gunbelt: The Military Remapping of Industrial America*. New York, NY: Oxford University Press, 1991., and Heefner, Gretchen. *The Missile next Door: The Minuteman in the American Heartland*. Cambridge, MA: Harvard University Press, 2012.

Robert Harris and Diane DeBlois note that from the Cold War era forward, “Seeking even better weapons against the Soviet Union, the United States engaged countless corporations, universities, and private laboratories, along with their own internal research laboratories, in developing sophisticated weaponry.”²⁹⁸ Often left out of the wide variety of research on the topic are contractors such as Morrison-Knudsen, which also played a central role in the militarization of the U.S.

Following the success of other Six Companies projects, M-K and Bechtel, among others received hundreds of millions of dollars of contracts to build air bases across the Pacific. This has been well documented by numerous scholars.²⁹⁹ Morrison-Knudsen sponsored the work at Wake Island, and had over 1000 workers killed or taken captive by the Japanese when they took control of the Island in 1941. All told, the Contractors Pacific Naval Air Bases (CPNAB) coalition of companies performed over \$300,000,000 worth of work for the U.S. Navy during the War years. But that was only the beginning of the heavy construction industry’s involvement in the militarization of the U.S. – but often the end of the discussion in the scholarly literature of the industry’s contribution.

The federal partnership with heavy contractors was critical to the history of the militarization of the U.S. Morrison-Knudsen built or participated in construction of the early warning defense systems on the eastern and western coasts of the United States; it built more than twenty facilities for Titan, the Bomarc Interceptor,

²⁹⁸ Harris and DeBlois, 2

²⁹⁹ See: Urwin, Gregory J. W. *Victory in Defeat: The Wake Island Defenders in Captivity*. Annapolis, MD: Naval Institute Press, 2011.

Polaris, and Minuteman missiles; ICBM missile launch facilities at Lowry Air Force Base in Denver, Suffolk County Air Force Base in New York, Altus AFB in Oklahoma, Lincoln AFB in Nebraska, and Minuteman missile silos in Missouri, South Dakota, Washington, California, and Arizona.

The business history literature also reveals how firms benefitted or did not benefit, from a so-called “military subsidy theory.” President Eisenhower warned in his farewell address that one result of the MIC would be the crowding out of human capital, funding, and technology for use in commercial (non-military) markets. Eugene Gholz finds that was not the case, at least with commercial aircraft.³⁰⁰ Gholz summarizes the military subsidy theory by discussing plant and firm level financial and technological level impacts that arose from focusing on producing for the military. Gholz’s findings also reveal insights for the heavy construction industry. Certainly military projects helped M-K amortize tooling and equipment costs; contributed to cost-reducing learning (allied to the concepts discussed by Ross Thompson); generated experience that could transfer to complex commercial projects as technological leadership helped commercial sales; and, participation in multiple projects reduced risk, smoothed business cycles, and kept teams together while awaiting new projects.

The transition of the federal government to a primary consumer in the economy, particularly around national militarization and globalization of the

³⁰⁰ Gholz, Eugene. “Eisenhower Versus the Spin-off Story: Did the Rise of the Military–Industrial Complex Hurt or Help America’s Commercial Aircraft Industry?” *Enterprise and Society* 12, no. 1 (March 1, 2011): 46–95. doi:10.1093/es/khq134.

economy created new opportunities for heavy contractors to extend their own wealth and power, and they did this as active partners with the federal government.

Militarization

Morrison-Knudsen's military work never ceased after the CPNAB contracts in the Pacific. The company with Peter Kiewit as joint venture partner built the Army's Tripler Medical Center in Hawaii, and the sprawling U.S. Navy complex at Guam where they employed 6,500 men. The partners finished both in 1948.³⁰¹ But it was President Truman's creation of the Federal Civil Defense Administration (FCDA) via executive order in December of 1950, and the accompanying military build up between 1951 and 1953 that paid great dividends for Morrison-Knudsen. The FCDA became an official agency of the federal government on 12 January 1951. In February, Morrison had already seen the writing on the wall for what this meant for business, and he ordered a "Full Throttle to Meet the Emergency." His call to arms, so to speak, was reminiscent of his plea to M-K workers during the Wake Island saga:

The past month has brought plentiful signs that the emphasis in this year's federal government construction will be on military preparation – emergency work to strengthen the defense and help provide the striking power that this national and its allies many need to resist the crouching peril of further attack.

The pace of construction doubtless will be stepped up in this vital program. To be ready for our participation in it, M-K's present operations should be accelerated in every reasonable way to make our men and equipment available for jobs now on the planning boards for early construction.

³⁰¹ See: Staff. "Army Construction on the Island of Guam." *The Em Kayan*, May 1948.; and, Staff. "Pride of the Pacific." *The Em Kayan*, April 1948.

Let's key up our thinking, planning, and operating tempo to meet the challenge of 1951.³⁰²

The emergency almost immediately translated into jobs as Morrison-Knudsen in May signed two new military contracts for work in Alaska – both Joint Ventures with Peter Kiewit, and both for the Army Corp of Engineers. At Ladd Air Base near Fairbanks, the “co-adventurers” included not only M-K/P-K, but also long time associates Bechtel and J.H. Pomeroy. There, the group installed an electric power and heating plant. At Eielson Air Force Base, they installed a similar 5,000-kilowatt coal fired plant. The contracts amounted to nearly \$11,000,000. That same month they also won a set of contracts worth \$6,000,000 to build 980 housing units, aircraft parking facilities, a water storage and distribution system, and an underground electrical system at Travis Air Force Base in Fairfield, California, a familiar haunt for M-K.³⁰³ Following World War II, M-K in a joint venture with Stolte, Inc., earned a \$25,000,000 contract to build the original landing facilities, housing, and a 250-bed hospital, completing construction in 1948.³⁰⁴ While M-K corporate staff inked new contracts, the Morrisons in May traveled in Europe, even gaining an audience with Pope Pius XII the morning of May 16.³⁰⁵

TABLE SIX: MORRISON-KNUDSEN GROSS REVENUES AND MARGINS, 1951-1953

Year	Gross Revenues	Margin
1951	\$243,434,000	2.2%
1952	\$230,780,000	2.4%
1953	\$186,859,000	3.1%

³⁰² Morrison, H.W. “Full Throttle to Meet the Emergency.” *The Em-Kayan*, February 1951.

³⁰³ Staff. “New M-K Contracts.” *The Em-Kayan*, March 1951.

³⁰⁴ Staff. “New Roosts for Planes and Airmen.” *The Em-Kayan*, May 1951.

³⁰⁵ Morrison, Ann. “Rome . . . and a Treasured Audience with Pope Pius.” *The Em-Kayan*, March 1952.

Table four shows the impact of the “National Emergency” years, and the purchase of H.K. Ferguson on company revenues. Between 1950-51, the company more than doubled revenues.

In June of 1951 new work included a \$10,000,000 joint venture contract with Kiewit to build indoor training facilities at Fort Richardson near Anchorage, Alaska, and construction of a powder magazine for E.I. DuPont de Nemours & Company.³⁰⁶ At Kirtland Air Force Base near Albuquerque, New Mexico M-K built one of the world’s largest airplane hangers, which it completed in April of 1952. The \$4.1 million contract also included a new concrete parking apron, offices, storage, quarters, fuel pumping plants, and water lines.³⁰⁷ The month of August brought work from the Army Corps of Engineers. M-K and MacDonald Young and Nelson, Inc. would build military warehouses in Sacramento for the U.S. Army Signal Corp. Their facility in Sacramento represented one of their largest, and the \$3.1 million contracts added a new warehouse 1,440 feet long and 213 feet wide, and another two-story building 350 by 375 feet.³⁰⁸ In Ogden, Utah, M-K got contracts to rehabilitate Army ordinance facilities. In Anchorage, M-K earned another contract to build railroad facilities for the Army, and at Miramar, near San Diego, California, M-K, Macco and Ford J. Twaits combined to build a new 8,000 foot long asphalt and concrete runway, a 5,000 foot long concrete taxiway and two 1,800 foot long concrete parking aprons for U.S. Navy planes.³⁰⁹

³⁰⁶ Staff. “New M-K Contracts.” *The Em-Kayan*, June 1951.

³⁰⁷ Staff. “Hugest of Hangars.” *The Em-Kayan*, May 1952.

³⁰⁸ Staff. “Room to Store for the Signal Corp.” *The Em-Kayan*, October 1951.

³⁰⁹ Staff. “New M-K Contracts.” *The Em-Kayan*, August 1951.

The Morrisons spent October of 1951 visiting jobsites in South America. In the meantime, H.K Ferguson had begun work on a plant for the Chrysler Corporation, which less than a year later would roll Patton 48 medium tanks off the line for the U.S. Army.³¹⁰ When the Morrisons returned in November the Army and Navy had ordered more work.³¹¹ In Fairbanks, Alaska the Army Corps of Engineers ordered construction of bulk petroleum storage and other facilities. With their frequent joint venture partner R.A. Westbrook, the contractors reactivated the U.S. Navy Air Auxiliary Station at El Centro by extending runways and aircraft parking areas there. During WWII, Westbrook had built twenty-two Western air bases. Finally, at Point Mugu, California, in a joint venture with Ford J. Twaits, and Macco, the contractors built a missile launch pad, launch control facilities and fifteen other buildings under a \$4,000,000 contract at the Navy's Air Missile Test Center fifty miles north of Los Angeles.³¹²

In Morrison-Knudsen's 1951 annual report Morrison cited "urgent demands made on behalf of the national defense program" as a primary driver of revenues for the year. Following the purchase of H.K. Ferguson, he also notes continued growth in "steel, chemical, auto, railroad, gas, petroleum, and electricity utility industries." Rising labor and material costs and retroactive rates of corporate taxation hampered earnings growth. The military work also contributed to a sizeable backlog carried into 1952: \$361,000,000.

³¹⁰ Staff. "Pattons with a Punch." *The Em-Kayan*, September 1952.

³¹¹ Staff. "New M-K Contracts." *The Em-Kayan*, November 1951.

³¹² Staff. "Test Center for Tomorrow's Weapons." *The Em-Kayan*, May 1952.

Onto the enormous backlog, new military contracts poured in. In January 1952 contracts 1536 and 1537 for more work at Travis AFB; In March 1952 a JV contract with MacDonald, Young, and Nelson for additional work at Travis, and contract number 1553 in a joint venture with the same partners for three warehouses in Sacramento for the Army Signal Corp. Work streamed in quickly enough that Morrison wrote in April, "The 40th anniversary of M-K's birth was passed on the first of March – apparently unnoticed by any of us in our preoccupation with present and future contracts that will soon exceed 1600 in number since we started in 1912."³¹³

As was fairly typical with military contracts, one usually begot more and in May the Army Corps ordered additional work at Travis under contract 1559, in July under contract 1567 for an admin building and warehouse, and in February of 1953 under contract 1610. The same occurred at the Army's Signal Corps facilities where the Corps ordered additional work on a salvage operations building in July 1952. M-K also picked up a joint venture contract with MacDonald to build ammunition magazines for the U.S. Navy at facilities in Hawthorne, Nevada. But June's biggest prize was contract 1565, a joint venture with Ford J. Twaits and Macco for the U.S. Navy. The \$11.5 million contract was for construction of a new Marine Corp Base at Twentynine Palms, California – The Marine Corp Artillery Training Facility. The 550-acre site contained over thirty-five miles of underground utilities, 110 barracks,

³¹³ Morrison, H.W. "President's Memo: M-K Passes Fortieth Birthday." *The Em-Kayan*, April 1912.

mess halls, instruction buildings, hospital and administration buildings with a completion date scheduled for June 1953.³¹⁴

In July M-K landed yet another major base project. In a joint venture with Stolte, the partners would reestablish Camp Beale in Marysville, California. Camp Beale had housed U.S. Army troops during WWII and then fell out of use with the cessation of the War. With the increasing threat level, the Air Force took over the location to use it for training upwards of 4,500 aviation engineers. Stolte, a frequent JV partner from Oakland, California, had built the original facilities at Camp Beale.³¹⁵ Work started on the new project in June of 1952. The original \$3.63 million contract for dormitories, mess hall, and administrative facilities grew into nine additional contracts worth a total value of \$8.0 million.

M-K closed out the busy summer season of bidding new work by getting new contracts to do work for the Army Corps in Toole, Utah; relocating a road for the Corps in Folsom, California; building additional facilities in Anchorage, Alaska – to which the Corps added two more warehouses in June 1953, and utility installation in August 1953; and, relocating a railroad line for the Navy in Pocatello, Idaho which itself generated an additional contract in August 1953. None of the activity slowed the sixty-seven year old Morrison. In October, the Morrisons visited job sites in Europe. On November 6, he and Ann left yet again after being home in Boise only ten days, to check on jobs in Brazil, Peru, and Venezuela.

³¹⁴ Staff. "Desert Base for Leathernecks." *The Em-Kayan*, December 1952.

³¹⁵ Staff. "Camp Beale Returns to Life in Northern California." *The Em-Kayan*, November 1952.

The next spring in May 1953, joint venture contract 1617 with R.A. Westbrook rolled in, and the partners began work on a parking apron and taxiway at Davis Monthan AFB in Tucson, Arizona. And the same month M-K, Westbrook and Twaits won a bid to build a runway and airfield pavement at Edwards AFB in California. This project encompassed two contracts. The first was moving twenty-six miles of rail line owned by the Atchison, Topeka, and Santa Fe Railway Company, whose line bisected a dry lake bed that could otherwise have been used by the Air Force. After moving the line, the contractors put in the runway and airfield at the Air Force's Experimental Base.³¹⁶

A busy summer included more construction in Alaska for the Army Corps (contract 1621); a joint venture with Twaits on ordinance storage area at Nellis AFB in Nevada; Runway extension at Gowen Field in Boise, Idaho; A \$6,000,000 joint venture contract with J.A. Terteling to extend the runways and taxiways at Mountain Home AFB south of Boise, Idaho; and, a joint venture with Macco, and River Construction, to repair of a breakwater in Crescent City, California for the Army Corps of Engineers.

Other major military work completed in the 1950s included 304 acres of aircraft parking aprons and runway touchdown slabs, 142 acres of main runway, taxiways and streets, seventy miles of underground utility lines, and seven miles of base streets at Portsmouth AFB in New Hampshire; work at Alvin Callender AFB and March AFB; and a \$3,000,000 runway and taxiway expansion at Klamath Falls Naval

³¹⁶ Staff. "Desert Railroad Moves Aside for Speeding Planes." *The Em-Kayan*, July 1953.

Air Station in Oregon. As had been the case since the days of Western irrigation, the fortunes of the federal government and Morrison-Knudsen were closely aligned as the United States declared a national emergency at the dawn of the 1950s. Their partnership took yet another step as fears of the Cold War deepened throughout the decade.

Missiles

In late 1955, President Eisenhower approved the National Security Council's recommendations to begin an Intercontinental Ballistic Missile (ICBM) Program, though in reality military planners had begun development of a nuclear missile program shortly after WWII. (Aug 1959 *Em-Kayan*) Air Force Ballistic Missile Division (BMD) began in September 1957 in Inglewood, CA under the direction of Colonel Edward N. Hall. The 75-foot long, 250,000 pound Atlas D Missiles deployed at Cooke (Vandenberg AFB) in CA, in October 1957 represented the first systems to come online. The first nuclear systems went on the ready two years later. ICBMs became part of a nuclear trio used by both the U.S. and the Soviets consisting of the missiles, manned bombers, and Submarine Launched Ballistic Missiles (SLBMs). At the peak of the Cold War, the U.S. maintained 1,054 missiles and the Soviets 1,398.

Compared to later technologies used in the Minuteman I, II, and III, and the Titan II Missiles, the radio guided Atlas and Titan I suffered low reliability and accuracy, and rang up large maintenance costs. The Minuteman and Titan II systems replaced the Titan I and Atlas programs by 1965, with the first Minuteman systems

coming online in 1962. The U.S. maintained fifty-four Titan II Missiles with nine-megaton warheads from the mid-1960s to the mid 1980s.³¹⁷

In April and June of 1959, M-K received two contracts for \$68,740,000 to construct six Titan I Missile launch facilities for the U.S. Air Force. Air Force officials chose Lowry Air Force base east of Denver, home of Eisenhower's "summer white house," as the training and operations site for the program. The configuration of the silos included the missile silo, a cavern 155 feet deep and 40 feet wide, the equipment terminal, which measured 50x40, and a 37x34 propellant terminal. Heavy steel doors sealed the silos, and remained closed unless of course the missiles launched. Rather than tunnel underground, M-K engineers chose to "cut and cover" the facility – meaning they excavated the area for the facilities, built the facilities, then backfilled the area with the removed dirt. Secretary McNamara announced the phase out of the Titan I missiles in November of 1964. By April of 1965, Strategic Air Command had removed the final missile from Lowry. BRAC II closed Lowry entirely at the end of September 1994.³¹⁸

Later that year, 1,000 HKF workers were installing one of the first Bomarc missile installations in the U.S. on a 300-acre site near Suffolk County Air Force Base at Westhampton Beach Long Island, New York. HKF constructed facilities to house fifty-six pilotless interceptor missiles. Boeing designed the Bomarc IM-99 missile.³¹⁹

³¹⁷ Simpson, Charles G. "Missiles, Intercontinental Ballistic." In *The Encyclopedia of the Cold War*. Vol. 3 (M-R). Santa Barbara, CA: ABC-CLIO, 2008.

³¹⁸ Staff. "Buried Nests for Deadly Birds." *The Em Kayan*, August 1959.

³¹⁹ Staff. "Complex Roosts for Missile Brood." *The Em Kayan*, November 1959.

As with the frequent talk of the international work in the pages of the *Em Kayan*, Morrison and then later Jack Bonny several times wrote of the company's work on various missile sites. In February of 1960 Morrison retired as President and General Manager and transitioned to Chairman of the Board. With many years of building the nation's military capabilities under his belt, Morrison wrote with a certain amount of circumspection about M-K's work on the missile bases – just as he had years ago when describing M-K's work at Hanford. Grateful for the challenges and revenues generated by the enormous missile bases Morrison noted "every construction man derives satisfaction from seeing a finished project in full and beneficial use. In the case of the missile facilities, however, it is our fervent hope that this particular construction project will forever remain dormant." While he still fervently believed in the transformative nature of infrastructure development, "missile bases return nothing," he wrote, "but they are today a necessity to safeguard peace and security."³²⁰

While Morrison praised his Em Kayans for their labors on the missile program, it was not without its discontents. Colonel Sidney T. Martin – head of program at South Dakota - called it the "greatest construction effort in history." However, for Morrison-Knudsen, history repeated itself on the ICBM program with corporate executives winding up in front of an inquiring Congress once again because of suspicions about cost overruns. The Army Corps of Engineers' Ballistic Missile Construction Office (CEBMCO) managed construction for the Air Force's

³²⁰ Morrison, H.W. "Construction Keep Pace with Missile Age." *The Em Kayan*, February 1960.

Ballistic Missile Division. That was at the root of the problems Gretchen Heefner noted in her 2012 book *The Missile Next Door*.³²²

On February 13, 1961 Jim McClary, M-K's Vice President for Administration, arrived in Washington D.C. to testify before the U.S. House Committee on Appropriations regarding the Air Force Intercontinental Ballistic Missile Program. Many of M-K's partners also appeared, including: Raymond International, HKF, Kaiser, Peter Kiewitt, C.H. Leavell, Paul Hardeman, Western Contracting, Utah, and others. Harry R. Sheppard, Congressman from California chaired the hearings. M-K sponsored the work performed at the Titan I complexes near Lowry AFB outside of Denver, Colorado; the other an Atlas F Missile Launch complex at Altus AFB near Altus, OK. The Army Corps of Engineers awarded both contracts. M-K also participated as a joint venture partner on the Titan I facilities at Larson AFB near Moses Lake, Washington and Ellsworth AFB near Rapid City, South Dakota. The Army Corp awarded the contracts for Lowry in April and June, 1959. Since that time McClary explained, the government had made 600 change orders. The Corp let the contracts for Altus AFB in May 1960. By the end of the year, the Army Corps of Engineers altered that \$21 million contract 65 times.

McClary described three chief problems with the missile construction program: 1) the government's elimination of a contracting officer with authority to negotiate contracts; 2) micromanagement by the government; and, 3) "the concept of equitable and reasonable adjustments in contract costs, contract time, and

³²² Heefner, Gretchen. *The Missile next Door: The Minuteman in the American Heartland*. Cambridge, MA: Harvard University Press, 2012.

schedules is and has been completely ignored.” McClary further explained the issues with having to report to the “using” agency as opposed to the “contracting” agency: “Our contracts are with the Corps of Engineers – the designated representative of the U.S. Government. They are not with the Air Force, the architect engineer or the weapons system manufacturers. Nevertheless, it is obvious that the latter three are controlling in almost all decisions in one way or another.”³²³ For an M-K executive like McClary, travelling cross-country and testifying constituted business as usual. He was home for Valentine’s Day and the hand-made Valentine from his daughter read, “I’m glad you’re back.”

R.W. Olmstead, President of H.K. Ferguson testified as well. HKF first constructed missile bases for the government in 1954 under the NIKE program, building facilities near Cleveland, Ohio and were more or less continuously involved in the missile program since that time. Additional work included installation of BOMARC missile systems at Suffolk AFB on Long Island, ATLAS missile installations at Offutt Air Base in Nebraska, and joint venture work at Vandenberg AFB for Convair and Martin. At present, Olmstead appeared before the committee to talk about the subcontracting work on a high-energy fuel plant at Muskogee, Oklahoma. The primary issue arising on the work there was that HKF and the prime contractor, Callery Chemical Company, had been given by the government, preliminary plans on which they bid. Combined with the problems McClary outlined above, this led to large numbers of change orders and cost overruns, covered by the contractors.

³²³ *Air Force Intercontinental Ballistic Missile Base Construction Program*. Washington, D.C.: U.S. Government Printing Office, 1961.

Problems notwithstanding, the missile program showed no signs of slowing down. The same month that McClary testified to Congress, Brigadier General Don Coupland, deputy vice-commander of the U.S. Air Force Air Materiel Command, Ballistic Missile Division, attended Harry Morrison's 76th birthday party at Boise's Owyhee Plaza Hotel. And Em Kayans readied themselves for another new assignment and a new technology. On a 2,000 square-mile area outside Altus Air Force Base in Altus, Oklahoma, M-K engineered twelve underground sites for the Atlas ICBM. Morrison-Knudsen and Hardeman & Associates shared the \$21,000,000 contract, sponsored by the U.S. Army Corps of Engineers.³²⁴ They were also building Atlas Missile silos near Lincoln Nebraska. 2000 men from Ferguson and H.C. Smith labored on twelve silos there. Construction began in May 1961 and finished up near July 1962. General Dynamics Astronautics Division rather than the U.S. government owned this project, however.³²⁵

In July of 1961 a joint venture between C.H. Leavell & Company, M-K, and Alaskan Plumbing and Heating Company combined to build "Air Force Plant 81," which built the third-stage rocket motor for the Minuteman missile. Owned by the Air Force and operated by the Hercules Company, the project added to the existing Bacchus Works site in Utah, which had long produced armaments for the Navy. DuPont organized Hercules Powder, ironically the same year of Morrison-Knudsen's founding – 1912. 400 men carried out the work.³²⁶

³²⁴ Staff. "Precision Work Brings Atlas to Altus." *The Em Kayan*, March 1961.

³²⁵ Staff. "Intricate Systems for Atlas Silos." *The Em Kayan*, July 1962.

³²⁶ Staff. "From New Utah Plant . . . Rocket Motors for the Minuteman." *The Em Kayan*, April 1962.

In August of 1961 the missile storm subsided, and the Army recognized Morrison-Knudsen's work with a Certificate of Achievement. It read:

For outstanding service from April 1959 to August 1961, while under contract to the U.S. Army Corps of Engineers to construct Titan Intercontinental Ballistic Missile facilities near Denver, Colorado. The superior professional and managerial competency displayed by the members of this organization resulted in the completion, on schedule, of the first missile squadron base in the Titan ICBM system. The high quality of construction and timely performance of this job, involving unique facilities and complicated by multiple design changes, reflect the highest credit upon the personnel of this Joint Venture. The construction of this vital ICBM project for the U.S. Air Force represents a major contribution to the national defense of this country.

Morrison essentially allowed the letter to speak for itself, but noted the special nature of that type of government contracting: "M-K would far rather build peaceful, productive structures, but an unsettled world demands a strong America and missile bases, at least for the present, have become a field of construction in themselves – a field in which M-K will continue to do its best for our country."³²⁷

Morrison waited until further in to the missile program to issue comment, which he did in August of 1962. With Congress looking to assign blame for the issues facing the nation's missile program, Morrison wisely adopted a unified front, giving kudos to the functional managers whom were often personal friends in addition to being important business contacts. Morrison lauded his employees who had grown up in the missile age and added for good measure, "great credit is due the dedicated men of the Corps of Engineers, the Air Force and the missile industry itself for bringing, swiftly and surely, a new front line of defense to reality, a line that is still

³²⁷ Morrison, H.W. "Chairman's Memo." *The Em-Kayan*, September 1961.

growing.”³²⁸ Always the motivator and proud leader of Morrison-Knudsen, Morrison also heralded the superlative nature of the missile projects: M-K’s construction of the Minuteman base in Missouri which covered 8,000 square miles, and completing the first and largest operational base for the Titan system. The huge Minuteman complex Morrison described was ongoing at Whiteman Air Force Base near the city of Sedalia, Missouri. Joint Venture partners there included Paul Hardeman, Inc., Perini Corporation, and C.H. Leavell & Co. The contract totaled \$60,665,000 and 1050 men worked at the project site.³³⁰

In April 1963 Em-Kayans were at work on the country’s largest Minuteman Missile base. Spanning three states – Wyoming, Nebraska, and Colorado – M-K workers would construct 200 silos over an 8,000 square mile area surrounding Warren Air Force Base near Cheyenne Wyoming. The \$83,960,000 contract went to a joint venture of M-K and familiar partners Utah Construction, Paul Hardeman, Inc., Perini Corporation, and C.H. Leavell & Co. The U.S. Army Corps of Engineers In October of 1962 let the contract on behalf of the U.S. Air Force. The huge span of the site necessitated the staffing of twenty field offices, and required the labor of 1,450 men.³³¹

Gretchen Heefner argues that the massive Minuteman Missile system remains critical to the interpretation of the Cold War. As the sponsor of America’s largest Minuteman base, M-K shaped the built environment to an extent that

³²⁸ Morrison, H.W. “Chairman’s Memo: Construction Meets the Missile Challenge.” *The Em Kayan*, August 1962.

³³⁰ Staff. “Minuteman Base in Missouri.” *The Em Kayan*, August 1962.

³³¹ Staff. “Largest Base for Minuteman Missile.” *The Em-Kayan*, April 1963.

Americans view those changes to the landscape as central to the historical record of the period. As Heefner wrote of the post-missile installation period:

For the next few decades landowners in the missile fields would periodically scrape up against these new realities. But always they carried with them the thought that this would be temporary, that someday the Cold War would end and those missiles would come out. What they did not count on was the permanence of the project. As the Minutemen were nestled into the ground, the defense bureaucracy was insinuating itself into every congressional district, countless industries, and thousands of local economies. When the Cold War came to an end, none of these things – not the hardware, not the political institutions or defense dependencies – could be fully pulled from the ground.³³²

The Marriage of Business and Science

Toward the end of the 1950s, militarization involved a close interaction of business and science. This translated into contracts for the construction of research and development (R&D) facilities that combined military imperatives with high technologies being developed by the private sector. These projects provided more than immediate work for Morrison's burgeoning staff. As with jobs in the past, they provided an opportunity to learn new construction techniques and to become familiar with innovative technologies that would set them up as leaders in the next phase of growth: the space race. While M-K and its subsidiaries had previously performed much of this type of work, the 1950s proved a high water mark with the below a sampling of the scientific and technical work the company undertook, which set them up for the space race.

By July of 1959, H.K. Ferguson was at work on their twentieth project for Aerojet-General. This subsidiary of General Tire and Rubber founded in 1942 by a

³³² Heefner, *Missile Next Door*, 110.

small group of CalTech based scientists operated a 20,000-acre facility eighteen miles east of Sacramento, where it developed and tested liquid-fuel and solid-fuel rockets. It was, at the time, the world's largest site for rocket engine development, and is still today the company's headquarters. Aerojet devoted a large portion of the site, 6,000 acres, to development of the Titan Missile, testing the Bomarc Interceptor, the Vanguard launch vehicle, and the Thor-Able "Moon Shot." Workers at the solid-fuel rocket facility manufactured Polaris and Minuteman missiles, as well as the Dyna-Soar manned orbital vehicle.³³³

Also that summer, Ferguson workers were developing new facilities for the Atomic Energy Commission at the 900 square-mile site in Arco, Idaho, "the world's largest and most varied array of atomic reactors." Scientists at the facility produced the first usable electricity from the atom; provided electric power to an entire city (Arco, ID); developed nuclear power for ships and submarines; and conducted advanced experiments into "atomic breeding." The breeder reactor built in Idaho in 1951 generated more fissile material than it consumed.³³⁴

In November 1959 HKF secured yet another AEC contract, this time for \$44,000,000 in construction at the Oak Ridge facility. Ferguson workers built an Experimental Gas-cooled Reactor (EGCR).³³⁵ What this new reactor – EGCR - would do was perfect the use of the atom for the delivery of electricity at cost competitive prices. This new reactor used helium gas to absorb heat rather than the traditional water, molten sodium or other organic agents. Engineers in Philadelphia built the

³³³ Staff. "Construction for Rocket Power." *The Em Kayan*, July 1959.

³³⁴ Staff. "New Facilities for Atomic Pioneers." *The Em Kayan*, August 1959.

³³⁵ Marsh, Tom. "Huge Atomic Job." *The Em Kayan*, November 1959.

core of the reactor, the pressure vessel. HKF then had to figure out how to move the 350-ton unit to the job site. It took 30 days along a 3,000-mile stretch of water down the Atlantic coast, through the Intracoastal Waterway, up the Mississippi, then along the Ohio, Tennessee, and Clinch Rivers to its final destination at Oak Ridge. 1,000 HKF workers labored on the project.³³⁶ That same month, Ferguson reported receipt of a new contract with NASA: the Plum Brook Reactor at Sandusky, Ohio.³³⁷ Plum Brook Station, today part of the Glenn Research complex in Cleveland, hosted testing facilities for rockets.

In September 1961 Ferguson secured construction of a High-Flux isotope reactor at Oak Ridge. HKF had come up in the nuclear age as one of the prime contractors on the Manhattan project. Following the War, the company designed and constructed a “hot” laboratory and a 30,000-kilowatt research reactor at Brookhaven National Laboratory. Science was progressing so rapidly that each construction job brought a new superlative: the reactor at Brookhaven, when built, was the most advanced, the first built exclusively for research, and the first for peaceful purposes. HKF also built the “Breeder Reactor” EBR II for Argonne National Laboratory, which it was deploying in eastern Idaho. In 1958, HKF modified the Materials Test Reactor and Engineering Test Reactor (MTR-ETR) at the National Reactor Testing Station in Idaho Falls. Other projects Ferguson completed included: ORR Reactor (Oak Ridge Research Reactor) for the Atomic Energy Commission (AEC), Oak Ridge, Tennessee, which Union Carbide operated and went into

³³⁶ Staff. “New Pioneering in Atomic Power.” *The Em Kayan*, September 1961.

³³⁷ MacKeigan, Dan R. “Reactor Engineers.” *The Em Kayan*, March 1961.

operation in 1958; the UTR Training Reactor – American Standard-Advanced Technological Lab, Mountain View, CA; Naval Experimental Test Loop – AEC, NRTS Idaho; Lynchburg Test Reactor – Babcock & Wilcox Co., Lynchburg, VA; Organic Moderated Reactor Experiment – AEC, NRTS Idaho; Plum Brook Reactor and Auxiliaries – NASA, Sandusky, OH; Solid State Physics Laboratory – AEC, Oak Ridge, TN.³³⁸

In August 1961, Morrison devoted his Chairman's Memo to a reprint of a *Seattle Times* article that ended up being unusually prescient. After outlining the worldwide operations of M-K, writer Boyd Burchard predicted, "At the rate M-K is going, chances are good it will be the first construction company on the moon."³³⁹ Burchard guessed correctly. The Soviet launch of Sputnik in October 1957 caused a rallying of the American public and its elected leaders, proving yet another historical windfall for Morrison-Knudsen. The U.S. response, in part, included accelerating the space program and winning the race to the moon. In January of 1964, NASA let the first of \$101,000,000 worth of contracts for development of the Vehicle Assembly Building (VAB) at the Kennedy Space Center outside Orlando, Florida. Historians and trade writers did then and now refer to the VAB as the world's greatest engineering project. M-K writers called it a "structure of unparalleled proportions." By the time the joint venture team of M-K, Perini Corporation and Paul Hardeman, Inc. finished the building, it sat on a floor plate

³³⁸ Staff. "H.K. Ferguson Adds Anew to Long Record in Nuclear Engineering." *The Em Kayan*, September 1961.

³³⁹ Morrison, H.W. "Chairman's Memo: Seattle Business Writer Discusses M-K." *The Em Kayan*, August 1961.

encompassing seven and a half acres. The building rising 524 feet, contained 125.5 million cubic feet of space, and could be seen from a distance of fifty miles. By comparison, *Em Kayan* staff said the Great Pyramid at Giza contained 88,000,000 cubic feet of space. Even today, the VAB is the largest single story building in the world.

M-K performed \$63 million worth of construction on the job including building the VAB, the launch control center, gas storage facilities, water supply, sewer treatment plant, the exterior underground electrical system, and of course the 2/3 mile long “crawlerway” upon which the Apollo rockets move to the launch pad. Workers built the 6.5 foot thick crawlerway to withstand loads of 17,500,000 pounds – the strongest highway every built. By comparison, a B-52 bomber weighs about 1.75 million pounds.³⁴⁰ The project overflowed with superlatives. The air conditioning system in the building could cool 3,000 average sized homes. It featured the tallest doors in the world at 456 feet high and 152 feet wide. Each leaf in the giant door weighed between thirty-two and seventy-three tons. The doors took an hour to open. At 100,000 tons, the VAB required almost twice the steel of the Empire State Building (at 60,000 tons).

In yet another history making endeavor, M-K and partners were laying the “groundwork for trip to the moon.” Twenty miles southeast of Houston, workers were clearing a 1,700-acre site for facilities that became NASA’s Manned Spacecraft Center. M-K participated in the contract with Paul Hardeman, Inc. Morrison’s long-

³⁴⁰ Staff. “Huge Building for Vehicle Assembly Reaches Toward Moon.” *The Em-Kayan*, March 1965.

time friends at Brown and Root had the contract for architecture and engineering.

540 men worked on the project.³⁴¹

Figure 7: Jobsite sign declaring Morrison-Knudsen and Paul Hardeman as "prime contractors" for the Manned Spacecraft Center in Houston, Texas.³⁴²

Conclusion

Throughout the 1950s Morrison-Knudsen progressed from building comparatively simple military facilities requiring only well-honed skills – grading, paving, simple stick built and concrete tilt-up buildings. As the Cold War progressed, construction became more technical, best typified by the work in support of the Intercontinental Ballistic Missile program. M-K reached the pinnacle of the militarization period when it capitalized on the marriage of business and science and completed an increasing number of research and development projects for both government agencies and private sector firms best demonstrated by its development of the space program.

A number of factors combined to assuage the fears of every day Americans who were witnessing major changes to their landscapes, communities, and culture.

³⁴¹ Staff. "Groundwork for Trip to the Moon." *The Em Kayan*, August 1962.

³⁴² Source: *Em Kayan*, August 1962.

All favored the continued success of Morrison-Knudsen. Patriotism and the national security imperative, explained Gretchen Heefner, “legitimized the creation of the Cold War state while also providing the fuel for its expansion.”³⁴³ The U.S. federal government through their partnership with heavy contractors had since the reclamation days been engendering the trust of the American people, even if at times communities paid a high price. Historian Bob Reinhardt described the phenomenon:

Through New Deal projects in the Tennessee River Valley, and at Bonneville and Grand Coulee Dams on the Columbia River, Reclamation and the Corps had developed powerful legal, rhetorical, and practical tools for displacing small communities in the name of progress. During the war, the federal government further demonstrated its power to dispossess through river development projects such as Shasta Dam in California and Cottage Grove Dam in Oregon as well as secretive defense works such as the Hanford Site in southeast Washington. In short, by the late 1940s, federal agencies like the Corps had become finely tuned agents of creative destruction. With the onset of the Cold War, dam proponents gained further advantages. “National Security” helped justify western hydropower projects, as it did for atomic testing in Nevada and weapons development in California.³⁴⁴

“Big” prevailed during the era of the Cold War. Whether it was government or business, Americans placed faith in large organizations. Big business created record numbers of jobs and it was the era of the “welfare consensus” – the truce between business and labor that created extraordinary wealth for both parties. General O.J. Ritland, one time head of the Ballistic Missile Division noted “The Air Force frequently played up its relationship with U.S. corporations, claiming that its

³⁴³ Heefner, *The Missile Next Door*, 109.

³⁴⁴ Reinhardt, Bob H. “Drowned towns in the Cold War West: Small Communities and Federal Water Projects.” *Western Historical Quarterly* 42, no. 2 (2011): 149–172.

business-minded approach saved time and money.”³⁴⁵ In “Drowned Towns,” Bob Reinhardt profiled the Detroit and McNary dams in Oregon, each of which flooded small towns in the name of progress – and M-K had a hand in both. M-K participated in moving the UP railroad facilities, and performed other building work at the McNary site. It was second low bidder on the dam work. M-K built Detroit Dam (winning bid went to consolidated builders which was the name of the Six Companies/MWAK consortium which built Grand Coulee). But Americans learned to treat such disruptions as temporary and the machinations of big government and big business as necessary for the greater good.

Finally, during the Cold War era, Americans placed a great deal of faith in science and technology, a third factor that allowed Morrison-Knudsen to flourish during the decade. Like the gospel of “big,” authors of the science and technology doctrine had begun authoring the future in the irrigation age, as Reinhardt noted, “Power from McNary Dam could contribute to the Pacific Northwest’s critical aluminum industry – aluminum, as everyone knew, made airplanes. And airplanes could deliver atomic weapons, which required plutonium from another Army project, Hanford Engineering Works. Power-thirsty Hanford had provided plutonium for the Manhattan Project bomb dropped on Nagasaki.”³⁴⁶

Morrison-Knudsen played an integral role as a primary contractor to the federal government in America’s struggle against Communism during the Cold War. Contrary to theories posed about the potential negative impact of the Military

³⁴⁵ Reinhardt, “Drowned towns,” 35.

³⁴⁶ Reinhardt, “Drowned towns,” 157.

Industrial Complex on innovation and private sector capacity, Morrison-Knudsen used jobs to learn complex new construction techniques it applied on later jobs, to smooth the business cycle, to pay for equipment, and keep teams together between projects. And, as one of the chief builders of critical military infrastructure both home and abroad, Morrison-Knudsen's participation in Cold War efforts personified the American decentralization of war. Morrison-Knudsen as a primary contractor on five different missile systems transformed the heartland of the United State into what Gretchen Heefner called the "largest peacetime militarized zone on earth." Morrison-Knudsen's work during this period also played a key role in shifting economic power from east to west, as described by Gerald Nash, Ann Markusen, Leonard Arrington, Richard Lowitt and others.

The partnership between the federal government and Morrison-Knudsen birthed the built environment of the West. They then combined to win a War in the Pacific. That victory led to a global political and economic restructuring and the resulting Cold War required more infrastructure, more military armaments. The partnership had literally changed the face of the earth, environmentally, economically, politically, and culturally. On Earth, they had pushed the boundaries of science and engineering to almost unimaginable limits. They had helped man reach the moon. With Morrison advancing in age and corporate officers like J.B. Bonny increasingly involved in day-to-day management, Morrison's latter days were spent devoted to memorials and monuments.

PART SIX: MEMORIALS AND MONUMENTS

“In this “consumer’s republic,” the American standard of living became the country’s way of life – proof of the superiority of U.S. capitalism and government. In the West, hydropower projects united national defense and prosperity, generating electricity for both kinds of Cold War weapons: aluminum airplanes and aluminum cans, nuclear bombs and electric ranges.”³⁴⁷

Introduction

Building Cold War defenses drove Morrison-Knudsen’s growth in the early part of the 1950’s. The company carried a backlog of \$202,061,000 into 1951, and the purchase of 98.1% of H.K. Ferguson doubled M-K’s gross revenues between 1950 and 1951. That level of backlog continued during the emergency years: \$286,235,000 into 1953, \$208,054,000 into 1954, and \$206,950,000 into 1955. Morrison wrote to shareholders in 1953 describing the impacts to the company’s top line growth:

We are approaching the culmination of a period which, from the standpoint of business volume, is the most spectacular in our forty-two year history. The national emergency years, 1951, 1952, and 1953, saw many imperative demands made on behalf of the National Defense Program. In order to meet the challenge of that program and at the same time fulfill our normal construction commitments for hydroelectric developments, railroads, highways, pipe lines and various industrial facilities, we increased our domestic construction output more than two and one-half times – from its \$84,220,000 level in the pre-Korea year of 1949, to \$230,564,000 in the year 1951. Our completed domestic construction volume of \$219,327,000 in 1952, and \$174,192,000 in 1953, reflects the gradual passing of peak construction phases of the National Defense Program and a return to operating levels of more normal periods.³⁴⁸

³⁴⁷ Reinhardt, Bob H. “Drowned Towns in the Cold War West: Small Communities and Federal Water Projects.” *Western Historical Quarterly* 42, no. 2 (2011): 151.

³⁴⁸ 1953 Annual Report - Morrison-Knudsen Company. Boise, ID, 1953.

The later years of the 1950s and early 1960s Morrison-Knudsen employees set construction records, and drove innovation in the field. For company leadership recognition, remembrances, and transitions defined the decade. Harry Morrison, perhaps America's greatest and busiest construction stiff, still found time to permanently alter the spatial arrangement of Boise, Idaho as well as its municipal trajectory. New paradigms drove the world, too. Americans embraced the consumer culture and the automobile became ubiquitous. Morrison-Knudsen's projects reflected these changes. And the Cold War battle between the U.S. and its allies, and the Soviets shifted from one driven by missile technology to the race to lead the world in Space exploration. Morrison-Knudsen, was of course there for it all.

TABLE SEVEN: M-K GROSS REVENUES, 1954-1964

Year	Gross Revenues
1954	\$156,555,000
1955	\$183,582,000
1956	\$304,817,000
1957	\$279,865,000
1958	\$220,709,000
1959	\$169,708,000
1960	\$222,644,000
1961	\$261,000,000
1962	\$226,173,000
1963	\$279,648,000
1964	\$327,867,000

As a missile and space systems contractor, M-K doubled revenues between 1954-1964. By the company's demise in 1995, annual revenues topped \$2.5 billion – but the firm posted losses of greater than \$300 million.

Em Kayans at Work

Morrison-Knudsen's employees engaged in record setting construction activities across the globe. The company claimed several records for setting explosions – some conflicting. For example, on May 22, 1951 M-K exploded 320,000

pounds of dynamite, setting a record, in a blast ninety miles southwest of Salt Lake City at the Dugway Proving Ground's White Sage Flat.³⁵⁰ M-K also operated the world's largest ballast crushing plant in Granite Canyon, Wyoming for the UP Railroad. Workers there use dynamite to explode rock in the quarry. Frequently the site of large explosions, in April 1952, M-K used what they said represented a record 290,000 pounds of dynamite to break 750,000 cubic yards of rock.³⁵¹

The company set more than explosion records. On November 29, 1952 M-K workers in Canada set the world tunneling record, driving 274 feet in six days. This was the latest in a string of successive record-breaking activities. Em-Kayans on the Big Creek Dam No. 4 project in California had set the original record of 241 feet in 1949. The Canadian crew originally shattered that record September of 1952, driving 248 feet, then in October 258 feet, and 261 feet in early November. Ultimately workers on the Alcan project set the world tunneling record of 282 feet in six working days. The Alcan project itself broke a number of records – the record setting tunnels housed the world's largest underground powerhouse.³⁵² In May 1954 M-K paved the world's longest concrete runway at Edwards Air Force Base in CA - 15,000 feet long, 300 feet wide, and between seventeen and nineteen inches thick.

Often the trade press used superlatives in describing megaprojects. In March of 1956, 6,000 Em-Kayans were again engaged on one of the nation's greatest construction achievements, the building of the St. Lawrence Seaway. M-K's seven

³⁵⁰ Staff. "Biggest Blast Touched Off at Dugway." *The Em-Kayan*, July 1951.

³⁵¹ Staff. "Granite Canyon Starts Year With Bang." *The Em-Kayan*, April 1954.

³⁵² Staff. "Alcan Power in July from B.C.'s Wilderness Colossus." *The Em-Kayan*, May 1954.

separate contracts with the U.S. Army Corps of Engineers and the New York State Power Authority were worth a combined \$100,000,000. The work begun in 1954 deepened existing channels from fourteen to twenty-seven feet, allowing for much larger ships to reach the Atlantic from inland ports such as Cleveland, Detroit, and Chicago. M-K's projects included building the Galop Island Channel – a new 8,400-foot long channel that required workers to literally slice off the tip of an island and remove 6.14 million cubic yards of earth. The Long Sault (pronounced “soo”) canal, a joint venture with Peter Kiewit, entailed digging a five-mile long canal 442 feet wide, necessitating removal of 19,000,000 cubic yards of material. Other projects included intakes to provide fresh water, shipping locks, a dam, and a powerhouse. Former Wake Island POW, John V. Polak managed the M-K district office in New York, which oversaw all aspects of the Seaway project³⁵³

In April of 1961, M-K President J.B. Bonny announced in the pages of the *Em Kayan* the award of a new construction project that ranked among the most important in the company's recent history: the Tagus River Bridge in Portugal. On the Tagus River bridge project, M-K built bridge piers and anchorages, an approach viaduct, and access highways with its partner Unites States Steel Exports. In April of 1963, *Em-Kayan* writers profiled the construction of the Bridge in Lisbon, calling it “one of the most challenging jobs in the annals of modern engineering and construction.” One of the main piers would be among the deepest in the world. It would be the longest span structure outside the U.S. It featured the highest bridge towers in Europe, the longest continuous stiffening trusses in the world, and be the

³⁵³ Staff. “Big Works Defy Winter on Seaway.” *The Em Kayan*, March 1956.

longest span bridge in the world which accommodated both highway and railway traffic. Lyman D. Wilbur directed construction of the \$75,000,000 project.³⁵⁴

On what most people knew as the island of Formosa, M-K was building for the Nationalist Chinese government, the Shihmen Reservoir project. Another M-K superlative, this dam at 436 feet would rank among the world's highest when complete. By February 1963, the dam was nearly complete. Final headcount at the site amounted to 5,500 workers, supervised by forty-one veteran M-K construction managers. The United States contributed loan financing and direct aid to the project.³⁵⁵

Commercial and industrial construction sites were also places of innovation. In April 1954 Harry Morrison wrote of M-K's role in designing new equipment along with equipment manufacturers, or at times directly onsite, as conditions required. On one dam job, workers combined two circular saws, a conveyor belt, and a potato digger resulting in a machine which could slice open cement sacks, empty them, and throw the bags into an incinerator four times faster than the manual process. The June 1959 *Em Kayan* printed a photograph of a carrying scraper – an implement used in heavy construction to both scrape earth from a surface and carry it to a dumping location – that M-K welders had altered to better suit its purposes. Heavy construction crews often modified machines to meet the needs of a particular job. Executives also relied upon mechanics and welders – on the ground construction stiffs – to help them come up with ways to cut costs on a job so as to win bids. This

³⁵⁴ Staff. "Giant Bridge Begins at Lisbon." *The Em-Kayan*, April 1963.

³⁵⁵ King, R.R. "Shihmen Dam Nears Finish on Taiwan." *The Em-Kayan*, February 1963.

machine was such an example. M-K welders led by Art Fletcher had taken a stock carrying scraper and extended it thirty inches in length and raised its sideboards so that it could haul forty five cubic yards rather than the thirty four cubic yards the production machine carried. This allowed M-K workers to make fewer trips moving dirt, thus reducing excavation costs – and time – on the job. These gains in comparative advantage were often short-lived for individual firms, however, as construction companies and implement manufacturers such as Caterpillar and Ingersoll Rand worked in close concert. Construction firms often took these home-built prototypes to the manufacturers, which in turn incorporated them into their own designs.³⁵⁶

In September the *Em Kayan* carried a photo of a massive Jumbo – still in use after M-K pioneered the tool on Hoover Dam. By 1959, however, the house made tool rested on the bed of a tractor, and was moved by yet another. The four-decker tool used on the Oxbow Dam – the second in the Hells Canyon complex featured four powerful drills on each of the three lower levels, and additional drills on the top level.³⁵⁷ Other times, Em Kayans were among the first to demo new equipment, as they did on a Seattle skyscraper in 1959. They were among the first to use the German developed Beatty-Pecco 401 crane, which could pick up a two-ton load seventy feet from its base, raise the load high enough to clear a ten-story building, and then deposit the load seventy feet away in less than a minute.³⁵⁸

Recognition and Remembrances

³⁵⁶ Staff. "Modified Earth Mover." *The Em Kayan*, June 1959.

³⁵⁷ Staff. "Giant Jumbo Digs Oxbow Power Bores." *The Em Kayan*, September 1959.

³⁵⁸ Staff. "Tall Crane Makes Debut." *The Em Kayan*, September 1959.

Accolades and record-setting construction projects seemed the norm for so many Em Kayans who were approaching their “golden anniversary” – fifty years in business. Morrison took to the pages in early 1961 to kick things off:

As M-K approaches the threshold of a half-century, it is well on the way toward its five-billionth dollar in total construction contracts. It has built the structures of progress in more than 30 countries around the world and, in the process, has built what we believe is a firmly established reputation for ability, sincerity and integrity that is cherished even more highly than the success with which the years have rewarded us.³⁵⁹

Often along the way, Morrison paused to remember his friends, colleagues, and employees with whom he labored. In September 1956 Morrison noted the passing of Engineering VP Charles Bernard “Woody” Williams. Williams passed on August 4 in a Boise hospital at the age of 53. Williams was responsible for inventing the “jumbo,” the one-shot diversion blast first used at Cabinet Gorge Dam, and the tunnel mucker mounted on an electrified crawler tractor.

In July 1959 Morrison used his President’s Memo to mourn the loss of colleague and friend Ford J. Twaits. Twaits, a California builder, had co-founded Twaits-Wittenburg and collaborated with M-K on numerous projects throughout the West. Their first “coadventure,” as Morrison liked to say, was in construction of Fort Ord in 1940. By the time of Twaits’ passing, the two firms had participated in thirty-three joint ventures worth over \$200,000,000. Projects included the San Francisco Army and Marine Storage Depots, Naval air bases at Klamath Falls, OR and

³⁵⁹ Morrison, H.W. “M-K Enters Its Fiftieth Year of Operations.” *The Em Kayan*, March 1961.

Lakeview, the LAPD headquarters, and the Twentynine Palms Marine Corp Artillery Training Center in California's southeastern desert.³⁶¹

The May 1961 *Em Kayan* featured the work of M-K subsidiary Selby Drilling Corporation, which like its parent boasted operations from coast to coast and internationally. Selby was drilling at Oxbow and Lucky Peak Dams in Idaho, three dam sites in California, Cannonsville dam in New York and widening the Panama Canal. M-K organized the subsidiary eleven years prior with R.E. Selby, then a five year M-K veteran as company President.³⁶² Like many of his hard-laboring peers, Selby died at the age of 53 just months after being featured in the *Em Kayan*, on January 16, 1962.

In 1962 the company celebrated its golden anniversary. As became more common as Morrison grew older, his Chairman's memo rang with sentimentality and remembrances of things passed – especially the people who built M-K.

Morrison-Knudsen Company observes its Golden Anniversary this month and, to those of us whose lives and labors are inseparably intertwined with the M-K organization, it is indeed a proud event.

By far the greatest debt of gratitude, however, is owed the thousands of loyal people who have contributed to the growth of M-K, whatever and wherever the tasks have been. Our heritage of memories is rich and we can be everlastingly grateful for the towering presence of such departed builders of this company as M.H. Knudsen, Wallace Puckett, Frank Crowe, Karl Paine, Ray Shinn, Morris Olson, Woody Williams, Dan Teters and, a builder in her own way, the late lady Ann Morrison. Still others, now retired, who have given their best are such men as C.P. Dunn, Al Johnson, C.W. Joslyn, Roy Herrick, and George Youmans. Countless more should be named, but their roster would surely

³⁶¹ Morrison, H.W. "President's Memo: M-K Loses a Great Friend and Associate." *The Em Kayan*, July 1959.

³⁶² Staff. "Drill Specialists Probe for Progress." *The Em Kayan*, May 1961.

exceed the pages of this special issue of the *Em-Kayan* which now commemorates our 50th year.³⁶³

The introductory pages of the Golden Anniversary *Em Kayan* resound with triumphalism: "Fifty years is but a twinkling of an eye, a mere fraction of a moment, as time is reckoned in the celestial forces which shaped this earth. But 50 years is a great span as measured in the life of a man and in the history of a company whose business it is to change and to improve this very earth through the dynamic and impatiently creative process known as heavy construction." *Em Kayan* writers continued in that same spirit,

The month of March in this year of 1962 marks the 50th anniversary of Morrison-Knudsen Company and, because the people of this company have been fashioning their structures of progress for half a century, the world wears a different face.

There are lakes brimming behind great dams where lakes never before existed.

There are crops blooming in fields once bone dry.

There are new mountains that have appeared and old mountains that have disappeared, gone down the road in trucks.

There are rivers flowing as man chooses them to flow and not in the capricious abandon condoned by nature.

There is electric power of total energies beyond most men's comprehension, brightening homes and turning factory wheels.

There are airfields, harbors, bridges and thousands of miles of highways and railroads, each bringing distant horizons nearer.

There are industrial plants by the score, great tunnels deep in the bowels of the earth, city buildings large and small, mining

³⁶³ Morrison, H.W. "Chairman's Memo: Golden Anniversary of M-K," March 1962.

developments, vast systems of pipelines and far-reaching power and communications networks.

And there are military cantonments, broad roosts for jet aircraft and mighty bases for mighty missiles to keep free countries strong.

Man must always build and continue to make things better or his world and his way of life have lost a great deal of their purpose. The imprint of progress and the hallmark of M-K construction go together. It has been that way from the very beginning.

From construction of a \$14,000 pumping plant on the Snake River, by 1962, M-K completed \$5 billion worth of construction in thirty-six countries. As an organization it could carry on 200 separate contracts at once. Total employment varied between 20,000 and 40,000 depending upon the contracts held. The company's fifty-five subsidiaries engaged in engineering and construction, equipment sales, banking, real estate, and shipbuilding. On Guernsey (1925) and Deadwood Dam (1929), M-K pioneered the concept of the Joint Venture, both as a means to qualify for bonding and a way to spread risk. It was also among the first to use gasoline-powered bulldozers, revolving shovels, and diesel trucks. A Western infrastructure builder had grown from a million dollar per year business to one doing ten million a year before World War II. By 1948, M-K grew annual revenues to \$100 million. The international boom and establishment of IECo doubled the company's revenues to \$200 million. And the national emergency years of 1951-1953, and the establishment of the ICBM program grew revenues to \$300 million annually by 1956. "After Hoover, the spectacular became the commonplace," said M-K President J.B. Bonny. And by 1962, M-K was on top of a world it had an outsized part in building.

The January 1963 *Em Kayan* featured coverage of the M-K 50-year anniversary. Morrison presided over the December 7 ceremonies with company president J.B. Bonny. The coverage contains a touching photo of Morrison presenting his longtime assistant, Petra Asumendi with her 20-year plaque. Petra's name appears often on correspondence from Morrison's office.³⁶⁵ That same year, another of Morrison's veteran assistants, B.J. "Barney" Weis retired. Weis featured prominently in the coordination of the Hells Canyon fight over many years. He served as Morrison's assistant for 28 years.³⁶⁶ In May 1963 Morrison mourned the loss of M-K Vice President M.G. "Mike" Kennedy, whom Morrison described as a man who "began his construction career with pick and shovel." Kennedy, Morrison recorded, showed up at an M-K jobsite in Idaho in 1918 still wearing parts of his Army uniform. Morrison instantly put him to work. Like Morrison, he too rose from humble beginnings and toward the end of his career negotiated the company's first contracts in Brazil. Morrison's touching eulogy to his friend belies the tough exterior of one of the world's biggest construction bosses:

Our company and the entire construction industry suffered a great loss on April 7 with the passing of M.G. Kennedy, one of the most capable executives I have ever known and one of the dearest friends man could have.

Great was the wisdom and the understanding of this man. He was unerring in his appraisal of opportunities and in his insight into the abilities of other men, scores of whom owe a large measure of their success to the fact that it was he who hired them and he who counseled them at the start of their careers. He was a kind and gentle

³⁶⁵ Staff. "M-K Service Awards Now Total 1,564." *The Em-Kayan*, January 1963.

³⁶⁶ Staff. "M-K Co - Aggregate: Barney Weis Retires." *The Em-Kayan*, January 1963.

man, a man of dignity, integrity, and sincerity. As he was to a legion of others, he was my good friend and to him we say a fond farewell.³⁶⁷

Even with many of the M-K founders and co-adventurers passing on, Morrison found cause for celebration. He recognized October 1962 as the 60th anniversary of the U.S. Bureau of Reclamation and used the Chairman's column to sing praises of the Bureau and its accomplishments, calling the agency "one of the most competent, productive and respected entities yet created by federal government."³⁶⁹ Reclamation though was nearing its apogee. In February of 1962, Ferguson and M-K workers were building a project at the National Reactor Testing Station in remote eastern Idaho near to where the local farming communities used irrigation water from the Teton River. In the February of 1962, as in springs past, the river flooded – seriously flooded. M-K and Ferguson management dispatched workers and their equipment from the NRTS worksite to help with the cleanup, portending one of the greater envirotechnical disasters in American history.

The spring of 1962 flood again drew demands from area residents – chiefly the leadership of the Fremont Madison Irrigation District – to dam the Teton River. Those calls ultimately led to success, albeit for a brief moment. The U.S. Bureau of Reclamation hired Morrison-Knudsen to build an earthfill dam across the river at a controversial site. On June 5, 1976, a beautiful summer morning, M-K workers had only just finished filling the dam when they noticed it leaking at the lower right face.

During construction, M-K supervisors had noted to the U.S. Bureau of Reclamation the massive fissures in the rock at the exact location where contractors

³⁶⁷ Morrison, H.W. "Farewell to the Man We Knew as Mike." *The Em-Kayan*, May 1963.

³⁶⁹ Morrison, H.W. "Sixtieth Anniversary of Western Reclamation." *The Em-Kayan*, October 1962.

installed the dam. The fissures in the rock required enormous amounts of grout, or liquid concrete, to seal them so water could not escape through the fissures into the earthen dam. The Bureau signed off on the grout work even as the contractors held doubts. And on that morning of June 5, their worst fears came to pass.

Workers at the site scrambled two bulldozers down the face of the dam to push riprap into the growing hole. The efforts were of no avail, and the dam collapsed at noon that day sending water, mud and debris hurtling through eastern Idaho at a terrifying clip. The floodwaters, which raged for three days killed eleven people, and 18,000 cattle, horses, hogs, and goats. Covering 112,000 acres, the floodwaters washed away the valuable topsoil, and virtually everything else in its path. Congress appropriated \$200,000,000 to compensate victims. The U.S. Bureau of Reclamation paid out nearly a half-billion in claims through 1987. But for their efforts in 1962, the office of the President of the United States commended the Ferguson workers “for your efforts which were instrumental in preventing catastrophic damage in the city of Idaho Falls.”³⁷¹ By the 1970’s the water empire was “ringed . . . by loud, angry, protesting voices” as Donald Worster wrote, but in 1962 Morrison recalled only fondness for the Bureau for which he labored, and because of which he prospered.³⁷² While affairs of the company attracted most of his attention, Morrison had personal agendas as well, something which came to a head upon Ann’s passing in late 1957.

Morrison Builds Boise

³⁷¹ Staff. “Ferguson Men Lend Helping Hand in Flood.” *The Em Kayan*, April 1962.

³⁷² Worster, *Rivers of Empire*, 299.

Ann Morrison's passing of Leukemia on October 25, 1957 represented the most visible evidence of the M-K's founders reaching their twilight. Jack Bonny wrote Ann's corporate eulogy, which appeared in the *Em Kayan*:

The passing of Anna Morrison on Friday, the twenty-fifth of October, 1957, was a deep shock not only to her beloved life partner, Harry Morrison, and her relatives, but also to her truest friends and staunchest admirers, the men and women of M-K scattered all over the world.

Anna Morrison was above all a great builder. She passed on with the serene knowledge that she had played no small part in the creation and growth of a great world-wide organization that will endure and continue to build at home and in many lands for the benefit of generations to come. No greater monument could be erected to the memory of anyone.

It is with this salute on behalf of Em Kayans everywhere, builders all, that we say to Anna Morrison, great lady and friend, well done, hail and farewell.³⁷³

Ann's passing drew responses from across the globe. The task to coordinate the responses fell to long-time Morrison aide, B.J. Weis. Cables came in from the Bechtels, Kaisers, Eccles and Kiewits among 200 others. In a memo to Morrison, Weis estimated that well-wishers sent over 400 bouquets of flowers to M-K headquarters.³⁷⁴ If he wasn't already, Harry Morrison soon began to think of building a park dedicated to Ann's memory. The spot where he envisioned doing that sat squarely in the middle of two local land-use battles that mirrored planning concerns in other places. The first issue revolved around how best to provide for the increasing demand for high school classroom space following the War. The second

³⁷³ Bonny, J.B. "Farewell to a Great Lady." *The Em Kayan*, December 1957.

³⁷⁴ Weis, B.J. "Wires - Number I (letter to Mr. Morrison)," October 29, 1957. Author's personal archive.

issue was where to build the urban highway that would pass through Idaho's major metropolitan area.

School districts across the country struggled with how to meet the post War need for classroom space. In 1944, the Boise School District commissioned the Dean of the University of Idaho's School of Education to study Boise's future high school needs, and author a report with recommendations. He recommended the district build one large school to accommodate future need, which comported with prevailing wisdom at the time.³⁷⁵ Following that logic, between 1950-52 school district officials cobbled together options on 100 acres of swampy land just south of the downtown along the Boise River. In the 1940s, most of the parcels there were still devoted to small scale farming, gardening, really. Yet, the site sat just west of Capitol Boulevard – the city's main thoroughfare leading from the airport directly to the state capitol building. It was also directly west of what was then Boise Junior College, now Boise State University.

In 1950 the School Board's master plan for the site included a "community educational area," with twenty acres of ball fields, ten acres for croquet, horseshoes and similar activities, ten acres for an ROTC drill field, and seventeen acres for parking. Although it did not identify a specific auditorium site, twenty acres for "park extension and development" could be converted into a space for the

³⁷⁵ Staff. "The School Board Issues a Report-Explanation of the Project Planned on Capitol Boulevard." *Statesman*. May 20, 1951.

auditorium.³⁷⁶ The *Idaho Statesman* fiercely criticized the plan to build at that site. The public remained mostly non-committed.

In 1951, the District released its, “Report to the PEOPLE.” Citing the U of I Dean, and other national experts, the District echoed the recommendations for one large school. This option, it argued, was both less costly than building several neighborhood-based schools, and the larger footprint would allow for more community functions and extracurricular activities.³⁷⁷ A centralized school on a large campus also dovetailed with planning efforts to build a public auditorium, something local leaders had hoped for since the late 1940s. A 1952 report from the College of Education at the University of Illinois further bolstered a plan for a large school. “A School for Tomorrow” recommended that 450 students required a campus of at least forty acres.³⁷⁸

By 1954, public opinion and even some trustees had turned against the site along the River. Some worried about traffic, others about cost, and some just didn’t favor the marshy location at all. Also turning the tide was the end of public discussions about a civic auditorium, and the building of an additional two smaller junior high schools. All these factors combined to weaken the school board’s position. Then in a major blow, a task force appointed by the Board to study the issue in the end endorsed the building of two schools. Failed bond initiatives in

³⁷⁶ Staff. “Master Plan for School Site Is Discussed.” *Evening Statesman*. December 12, 1950.

³⁷⁷ Board of Trustees, Independent School District of Boise City. *A Report to the PEOPLE of Greater Boise*, May 15, 1951.

³⁷⁸ College of Education. *A School for Tomorrow: A Plan for Building and Educational Program and the Facilities to House It*. Urbana, IL: University of Illinois-Urbana, 1952. Independent School District of Boise.

October 1955 and January 1956 proved the ultimate undoing. Yet another report, this time by the Stanford Research Institute, recommended building a school at the city's western edge – not near the downtown. Toward that end, voters passed in July of 1956 a \$2.12 million bond initiative, a large portion of which trustees for the school district used to build Borah High School on the city's west side. The school district now had 100 acres of surplus land strategically located at the southern border of the central business district. It did not take long for planners to develop new uses for the space, and a second controversy to bloom.

During the formative years of the Interstate Highway system cities grappled with where to locate routes, and their decisions bore major consequences not only for the spatial arrangement of the nation, but most of all for local residents impacted by these new routes. In Boise, transportation planners envisioned four routes, but initial discussion centered on just two: a “penetrator” which passed through the School District's land along the river, and a bypass route.

Since the middle 1940s, state transportation planners in Idaho envisioned running a freeway through the spot where the school district had planned its large downtown high school. The creation of the Interstate Highway system in 1944 brought the issue to a head. Initially, Boiseans and the media expressed little interest in or concern with the idea. Within a decade, though, that policy landscape changed dramatically. In hindsight, had the State Highway Department moved forward after 1945 Boise today may have a freeway running through its heart. But in the middle 1950s, a string of newspaper editorials started undoing the dreams of

traffic engineers enamored with throughput, and planners concerned with maintaining the central business district as a unitary center.³⁷⁹

The Boise School Board had agreed to allow the route to pass through its land, according to its 1955 master plan. Still, relatively few Boiseans held an opinion in the fall of 1956, and public officials remained split. Boise's mayor and planning commission favored the bypass route as did *Statesman* editors, and the Chamber of Commerce. The state's Highway's Committee favored the route through town. By 1957, the school district was hoping to unload the property to the Highway Department, but the Department dragged its collective feet. And then came the bombshell.

On May 29, 1958, the school district officially declared as surplus its land fronting the river. That same day, Harry Morrison wrote Mayor Edlefsen, requesting a meeting. On June 2, Morrison convened a meeting with the Mayor, members of the City Council, the Planning Commission, and a representative from the School District. Morrison announced his intentions that day to buy the land from the District. Members of the Planning Commission in attendance declared that they only requested land be set aside for an auditorium. Those in attendance also discussed their preference for the freeway's location. Morrison had set the stage for some tremendous fireworks.

On June 5, Morrison completed purchase of the School District's property for the sum of \$200,000, and on June 8 the *Statesman* made public the purchase and

³⁷⁹ See for example, Emerine, Ed. "Comments by the Editor." *Boise Journal*. July 30, 1954; and, Staff. "Let's Be Sensible." *Statesman*, April 20, 1955.

Morrison's intentions to build a park.³⁸⁰ By this time too, the City of Boise made its position on the proposed highway official: it opposed any route "north of the first Bench." A half-mile south of Boise's downtown, the terrain rises markedly above the Boise River. Area locals refer to that section of the city as "The Bench." So what City leaders communicated was opposition to the "penetrator" route along the river and through the property that was soon to become Ann Morrison Park. The rapid development of the park set transportation planners and other interested groups on their heels and for the time being, the public's attention focused on the building of a park.

In traditional Morrison fashion, he placed a trusted associate, J.V. "Vern" Otter in charge of building the park. Retired M-K executives described Morrison calling Vern into his office and telling him to get going building a park. The two sketched back of the napkin elements and Otter began moving equipment into the area and assigning staff. Boise Parks Superintendent Bowen noted that Morrison "was a man who was always in a hurry," something recounted by trade press writers many times over the course of history. Morrison himself scheduled the park's dedication for June 7, 1959 before formal design plans even existed.³⁸¹

The *Statesman* compared the transformation of the land to "the force of a cyclone, but with beneficial results."³⁸² M-K didn't have to work to gain buy-in from Boise residents, but they involved the public in both the design and construction of

³⁸⁰ Staff. "H.W. Morrison Offers Memorial Park to Honor 'Lady Ann.'" *Statesman*. June 8, 1958.

³⁸¹ Bowen, Gordon S. *Boise's Parks: A Cause and a Trust*. Boise, Idaho: G.S. Bowen, 2002.

³⁸² Staff. "Transition of School Site to Ann Morrison Memorial Moves Rapidly." *Statesman*. September 7, 1958, sec. 4.

the Park. To wit, residents donated over 1000 shrubs, plants and trees to the park, which featured over 35,000 plants when the park opened. Ann Morrison Park was twice the size of Julia Davis Park – previously the city’s largest. Parks Superintendent Gordon Bowen calculated estimated the annual budget for the park at \$58,000. He figured at opening day the park required four full-time staff and required an additional fourteen during peak usage. In actuality, he ended up hiring a crew of eight people, which grew to twenty then dropped back to sixteen as the crew’s efficiency grew. The budget for all other parks in the City totaled \$100,000.

An estimated 10,000 people attended the park’s dedication on June 7, 1959. The Morrison Family Foundation (now the Harry W. Morrison) foundation spent \$1.25 million building the park. Morrison set to paper his own remarks for Ann:

These grounds are lovingly dedicated to the life and memory of ANN MORRISON

They help perpetuate, in natural beauty, the warmth love and spirited loyalty she felt for her native State of Idaho and the City of Boise.

Known and beloved as the world’s “First Lady of Construction,” Ann Morrison bore the honor graciously and modestly – preferring to share the credit for achievement and success with her people around the world – people who helped to build and expand the organization she played so great a part in developing – Morrison-Knudsen Company, Inc.

Honored and respected by royalty and working people alike, she traveled widely – an ambassador of gracious and inspiring goodwill to all. To her, life was a rich and rewarding series of heart-warming human contacts. She lived it with joy and shared it delightfully with others.

She knew the shrines and temples and exotic gardens of faraway lands. She found delight in visiting the world’s most celebrated cities –

yet the one she loved above all the rest, and chose to call it Boise, the Beautiful.³⁸³

One of the program highlights included the unveiling of the plaque of Ann. And on that element, Morrison actively participated. As a surprise to Harry, M-K staff commissioned John Elliot, a Seattle-based sculptor, to design a bronze plaque in Ann's likeness. Morrison's tribute, above, was excerpted for use on the plaque. In late April 1959, Morrison visited Elliot's studios and on April 24 wrote to Vern Otter saying, "I do not believe anyone could identify Ann from this plaque based on the way it looks to me." In uncharacteristic fashion, he did not recommend a course of action to Otter, but the message carried none-the-less: the work was not acceptable.³⁸⁴ By this time, however, it was too late to change course and M-K Vice President Carroll Zapp unveiled the plaque at the park's grand opening.

Within the span of a month, Harry Morrison had launched a park in tribute to his late wife Ann, and received an honorary doctorate for his "unparalleled achievements as well as his many contributions toward peaceful, constructive international relations."³⁸⁵ Then, he flew to Las Vegas where he married Velma Shannon, a restaurant owner from California whom he had met in travels to Vandenberg Air Force Base. The couple married in a private ceremony in Las Vegas on July 1, 1959, and honeymooned in Hawaii. By the winter of 1960, Harry retired from the Presidency of Morrison-Knudsen, turning over the reigns to Jack Bonny.

³⁸³ Morrison, H.W. "Dedication to Ann," July 4, 1959. Author's personal archive. Morrison himself dated this document July 4, 1959 which adds some confusion since the park's opening was the month prior, and on July 4, Morrison was honeymooning with new wife Velma.

³⁸⁴ Morrison, H.W. "Letter to Mr. J.V. Otter: RE: PLAQUE OF ANN MORRISON," April 24, 1959. Author's personal archive.

³⁸⁵ Staff. "New Honor for HWM." *The Em Kayan*, June 1959.

Morrison though retained the title and position of Chairman of the Board, and continued as M-K's elder Statesman and conscience. In that role he continued chronicling the human transitions within the company and industry.

Figure 8: M-K President J.B. Bonny in February 1968, gave Harry Morrison his 55-year service award while Harry's wife Velma looked on.³⁸⁶

He also remained unsatisfied with Ann's likeness on the Memorial Wall at the Park, and in 1962 he commissioned renowned sculptor Anthony De Francisci to design a new likeness of Ann. DeFrancisci had most notably design the Peace Dollar

³⁸⁶ Image source: *Em Kayan*, February 1968.

for the U.S. Mint in 1921, which remained in circulation until 1935. Morrison involved himself in the production of the work from the outset, the original sketches of which remain in Morrison's personal archive at URS (now Aecom). DeFrancisci completed the \$5000 commission in late 1962. By January 1963 the new bronze sculpture arrived in Boise. Park employees installed it on Harry's 78th birthday, February 23, 1963.

In the purchase of the school district's land, Morrison had at once insured the school district would never build on the site along the river and delivered to citizens the largest park in the city. Amazingly though, even with the construction of the park, there still lingered the issue of where to locate the highway. On June 18, 1959 Highway Department staff recommend a highway route through the desert at the south edge of town near the airport. However, their maps still showed a line for a penetrator route. State Highway Engineer G. Bruce Bennett spent the next two years trying to drum up support for a penetrator route, citing the fact that a vast majority of trips in the Boise Valley began or ended at the city center.³⁸⁷ By this time though most citizens opposed a penetrator route fearing it would destroy the small town feel of the city. Others feared just the opposite: that failure to run a freeway into the central business district would forever consign Boise to small town status.

In the middle of 1960 four options for a freeway existed: 1) the bypass north of the airport; 2) a "railroad route" following a north-south route into town from the airport; 3) the "river," "parkway," or penetrator route along the Boise River; and 4) a

³⁸⁷ State of Idaho. *1959 Origin-Destination Study: Boise, Idaho*. Boise, ID: Department of Highways, 1959. Hummel Collection, Boise State University Library Special Collections.

“bypass alternate,” which would stub off the bypass route into a set of couplets downtown. The State Highway Engineer emphasized that the bypass alone would not meet local needs – there would have to be a penetrator route one way or another. Discussion seized on those two routes. Thus, the showdown over the location of the freeways was set.

The penetrator route would eliminate twenty acres or one quarter of Julia Davis Park, just east of Ann Morrison Park. Boise’s Mayor, Robert L. Day, a real estate developer by trade, actively supported the penetrator route. Voters failed to reward him with a second term. The City Council remained neutral. The Ada County Commissioners being advised by their Planning Director – Morrison’s ally Lynn Rogers – believed the citizens themselves should decide.³⁸⁸ Committees formed in support and opposition. Those opposed vastly outgunned those in support.

The opposing committee, the Citizens Committee for a Practical Interstate Routing, counted among its members the Presidents of Idaho’s two largest banks, the head of Idaho Power, former Republican Governor Len Jordan, the head of the State Democratic Party Carl Burke, and Morrison-Knudsen’s Jim McClary. Harry Morrison opposed a downtown freeway from the beginning, the purchase of the park property done in part to thwart the Highway Department’s efforts.³⁸⁹ The park’s rapid development was in itself an attempt to get the job done before the Highway Department had the opportunity to stop it. At a hearing over the parkway route in November 1960, M-K’s Jim McClary attempted to put the nail in the coffin

³⁸⁸ “City, County Leaders Urge Interstate Action by People.” *Statesman*. July 14, 1960.

³⁸⁹ “Results of Poll.” *Statesman*. October 1, 1960.

denying that the Parkway Route, could “in any way . . . be useful in our local traffic situation.”³⁹⁰

As if the political and economic firepower of the Citizen’s Committee was not enough, news that the federal government would only fund one route killed talk of the parkway route once and for all. For the time being Boise residents would get the bypass route in the desert, north of the airport. Later, in May of 1962, the Highway Board approved \$2.76 million for the first phases of the little discussed compromise plan, the “bypass alternate” that would bring traffic from a stub off the bypass route to a set of couplets downtown. State transportation planners dogged by residents, fearful and weary from the penetrator battle did not complete the bypass alternate – now known as “the Connector” (I-184) – until 1989.

As a postlude to the highway issue, by August of 1963, Morrison-Knudsen had thirty-five highway projects underway in the United States, Hawaii, and four foreign countries. That work included the new bypass route in the desert between Boise and Mountain Home.³⁹¹ And Harry Morrison and the City’s desire for a public auditorium on the park site became even a larger and longer standing political issue. State statute provided for the creation of auditorium districts. Local leaders responded by creating the Greater Boise Auditorium District (GBAD) and voters in the Greater Boise Auditorium District got their chance to approve bonds for construction of an auditorium within the grounds of Ann Morrison Park in late 1959. That vote went down to defeat, and another half-century’s worth of issues

³⁹⁰ Staff. “Logsdon Says ‘Parkway’ Wrong Name for Route.” *Statesman*. November 16, 1960.

³⁹¹ Staff. “35 Highway Projects Now Rolling.” *The Em-Kayan*, August 1963.

regarding the auditorium district set to motion. Morrison's dream of a public auditorium never came to pass on the park property, but Morrison's second wife, Velma, muscled through an eventual Morrison Center for the Performing Arts on the campus of Boise State University, across the street from Ann Morrison Park. The Center opened April 7, 1984 with a production of "My Fair Lady," capping Morrison's legacy on local issues in grand fashion.

M-K in a Consumer's Republic

Personal income grew during the decades of the 1950s and 1960s, and the advances in science and technology that accompanied Cold War military spending produced a vast array of consumer products. The increases in income and mobility also allowed people to travel and recreate at greater distances. Once again Morrison-Knudsen emerged as a central player in the new consumer culture as the company developed plants and properties for the production of consumer products, built highways across the U.S. as part of the federal highway program, and developed resort towns and shopping centers as destinations.

Morrison-Knudsen's purchase of H.K. Ferguson in 1950 brought with it not only the roster of atomic clients, but also a blue-chip array of consumer driven industrial clients. Ferguson had Ford Motor Company as a client since 1927. As the age of the automobile progressed that translated into work for M-K/HKF. Ferguson built Ford plants in 1950 and 1954. In 1956 Ferguson accomplished "one of their toughest installation assignments ever tackled" – the construction of Ford Motor Company's Engine Plant No. 2 in the Cleveland suburb of Brook Park, OH. The plant's physical floor space measured 450x640 feet, and within it, HKF workers

installed over 250 production machines weighing in at nearly 3,000 tons. Engine Plant Two originally produced eight cylinder engines for Ford's Thunderbird. Today, the plant employs just shy of 1,000 people, producing the EcoBoost engine for the F-150, and the 3.7L Duratech engine.³⁹² That same year Ferguson also built a Chevrolet production facility in Van Nuys, California for production of convertibles and station wagons. For Chrysler, Ferguson established a twenty-one acre plant in Newark, NJ.

The post War population boom of course increased demand for food for people and their pets - and M-K was there to meet that need as well. In August 1954 HKF built a plant for General Mills that produced Bisquick, Cheerios, and Wheaties among other things. Two years later, Ferguson built corporate facilities for Kellogg, General Mills and Procter and Gamble. The food explosion included that for domestic pets. In July 1956 in the Central California town of Stockton, a Ferguson crew was at work on livestock feed mill for General Mills. The mill, on a twelve-acre site, produced 100,000 tons of prepared feed annually. In 1961 Ferguson built its third plant for pet food giant Ralston Purina, in Battle Creek, Michigan. HKF had also previously built another Ralston plant in Macon, France with Ralston's associate Duquesne-Purina, S.A.³⁹³

M-K reached deeply into the commercial and industrial markets. One year's projects included an NCR plant in Dayton, Ohio; Eli Lilly's antibiotic manufacturing

³⁹² Ford Motor Company Corporate Communications. "Global Operations - United States: Cleveland Engine Plant No. 1," n.d. <http://corporate.ford.com/our-company/operations-worldwide/global-operations-detail/unitedstates-engineplants-clevelandengine1>.

³⁹³ Staff. "More Chow for Hungry Hounds." *The Em Kayan*, May 1961.

facility in Lafayette, Indiana; Westinghouse Electric Corporation's small motors manufacturing plant in Union City, Indiana; and, a viscose rayon staple plant for Courtalds, Inc. in Mobile, Alabama. The company built refineries for Arco; factories for heavy equipment manufacturer Bucyrus-Erie, General Electric, General Tire & Rubber, and Allis-Chalmers Manufacturing, among others.

Central to the mid twentieth century history of the United States is of course the interstate highway system, and there too the federal government cast Morrison-Knudsen in a starring role. In 1956, M-K had contracts for highway projects in Idaho, Nevada, California, and New Hampshire. Those contracts grew. M-K workers in the Spring of 1959 were at work on seventeen different freeway projects across the Western U.S. Projects spanned Washington, Oregon, California, Nevada, Idaho, Montana, Utah, New Mexico, Wyoming, Colorado, and Arizona.

Figure 9: A lone vehicle travels an M-K constructed span of highway near Fresno, California in February of 1963.³⁹⁴

³⁹⁴ Image source: *Em Kayan*, February 1963.

M-K completed several portions of the iconic Highway 101, which spans the western coast of the United States. In 1959 they were competing sections in Otis, Coos Bay, and Brookings, Oregon.³⁹⁵ Two summers later Em Kayans paved nineteen miles of new highway along the popular California 101 along stretches between Crescent City and Eureka, south of Weott (the “Redwood Highway”), and along the U.S. 199 section between Brookings, OR and Crescent City.³⁹⁶ The contracts for the U.S. DOT came at the same time the California legislature approved the beginnings of a 12,414 mile highway system which would link all cities of 5,000 or more in population. They projected the system would eventually be complete in 1980, and cost greater than \$10 billion. For the project, M-K joint ventured with R.A. Westbrook, Inc. with whom M-K partnered on many California highway jobs, including paving the infamous Donner Pass. Their 1959 contract built a 14.5-mile stretch of 6-lane highway, connecting Fresno with the town of Selma, at a cost of \$12 million.³⁹⁷

While M-K crews paved iconic highways, others labored on now iconic roadways. In 1956, M-K built the multi-deck roadways in San Francisco that connected to the embarcadero freeway, which baseball fans remember collapsing just prior to the start of game three of the World Series in 1989.³⁹⁸ The Loma Prieta earthquake of October 17, 1989, killed 63 people, injured nearly 4,000 and left additional thousands homeless. The quake also damaged another signature M-K

³⁹⁵ Staff. “New Roads Across Western America.” *The Em Kayan*, April 1959.

³⁹⁶ Staff. “New Vistas of Travel in California.” *The Em Kayan*, July 1961.

³⁹⁷ Staff. “More Freeway Miles in California.” *The Em-Kayan*, February 1963.

³⁹⁸ Staff. “Multi-Deck Roadways for San Francisco Traffic.” *The Em Kayan*, March 1956.

project – the San Francisco Bay Bridge. According to a *New York Times* report, a fifty-foot section of concrete fell to the lower roadway of the bridge, killing one motorist. The entire frame of the bridge shifted three inches from the two million pounds of thrust generated by the shifting of the San Andreas Fault, which caused the quake.³⁹⁹ In Seattle, crews built the Alaskan Way Viaduct, today being torn down out of concern for seismic safety, and the Hood Canal Floating bridge, a 6,500 foot long structure, which spans Washington State's Olympic and Kitsap Peninsulas.

All the new lane miles were of no use unless destinations existed to attract mobile Americans. Morrison-Knudsen played a role there too. For example in March 1953 M-K built the Westgate Shopping Center in Cleveland consisting of forty stores and 4000 parking spots on forty-seven acres. The same year M-K began building the \$4.5 million Jackson Lake Lodge for the Grand Teton Lodge and Transportation Company, chaired by Laurence Rockefeller. Morrison, always an enthusiastic supporter of private enterprise noted the project "spotlights a fine example of American private philanthropy, wherein successful business families have generously endowed many cultural institutions and contributed multimillions of dollars to provide public recreation and enjoyment."⁴⁰⁰ John D. Rockefeller had been buying land in the Jackson area since 1925, and since 1950 had donated 37,500 acres toward the cause of preservation, which still defines the Jackson area today.

³⁹⁹ Special to the New York Times. "THE CALIFORNIA QUAKE: THE BAY BRIDGE; Damage to Link Across Bay Is More Serious Than Thought." *New York Times*. October 20, 1989.
<http://www.nytimes.com/1989/10/20/us/california-quake-bay-bridge-damage-link-across-bay-more-serious-than-thought.html>.

⁴⁰⁰ Morrison, H.W. "A Great Businessman's Gift to the Nation." *The Em Kayan*, January 1955.

Beginning in 1960, M-K built another of the country's great Western tourist destinations – Incline Village on the Nevada side of Lake Tahoe. There, on the 9,000 acre development M-K built and graded sixteen miles of roads, twenty miles of water and sewer lines, and two, one-million gallon reservoirs. M-K subsidiary International Engineering Company, Inc. handled the design work for the 550-acre central area of the Village.⁴⁰² In southern California M-K erected a new headquarters building for the Los Angeles Police Department. Like the U.S. federal government, Morrison-Knudsen had achieved ubiquity.

While Morrison-Knudsen seemingly had their fingers in every pie, historian Jim Duran argues that M-K's dependence on the federal government as a primary source of contracts ultimately proved the company's undoing.⁴⁰³ The billion dollar contracts awarded to the Morrison-Knudsen led RMK-BRJ joint venture in Vietnam ended "Harry Morrison's style of business," wrote Duran.⁴⁰⁴ As the decade of the 1970s closed, company loyalty as an American value waned, anti-American sentiments grew, unfriendly regimes inhabited places where M-K used to do business, and policy makers grew wary of international assistance programs. Following Nash, you could additionally argue that M-K failed to capitalize on the

⁴⁰² Staff. "Roads and Utilities Prelude to New Lake Tahoe Resort." *The Em Kayan*, July 1961.

⁴⁰³ Duran, James David. "Building the Modern World: Morrison-Knudsen Construction Company." Boise State University, 2013.

⁴⁰⁴ Duran, "Building the Modern World," 98.

technological innovations wrought by the transistor and the Kondratieff wave appearing in the later half of the twentieth century.⁴⁰⁵

The global markets for construction had also slowed, and M-K corporately believed the next frontier lie in building mass transit systems. M-K had built railroad lines since its inception and counted large railroad companies as customers throughout its history. It had expanded its railroad construction practice to maintenance of rail cars, and then manufacture of rail cars. It even had major success with the construction of the San Francisco Bay area's Bay Area Rapid Transit system (BART). But it was slow to adopt new technology and ultimately floundered in the marketplace. Demand among large municipal areas also failed to materialize as projected further complicating the company's financial projections.

After Morrison's twenty-one year run as company president, Jack Bonny assumed the reins for ten years (1960-1970) before "aging out." B.L. Perkins then took over leadership of the company, but a car crash cut his tenure short. He served as company president for just over two years before his untimely death. William McMurren, a long-time company engineer ascended to the presidency after Perkins' death, restoring stability to the management. He served thirteen years until he too died in office at the age of fifty-seven.⁴⁰⁶ McMurren was also the last of the functional managers to run Morrison-Knudsen. Bill Deasy, a lawyer-engineer who

⁴⁰⁵ Nash discusses Kondratieff waves throughout the book – see pages 41, 52, 74, 80 as examples in, Nash, Gerald D. *The Federal Landscape: An Economic History of the Twentieth-Century West*. Tucson, AZ: University of Arizona Press, 1999.

⁴⁰⁶ Staff. "William McMurren, 57, Dies; Head of Morrison Knudsen." *The New York Times*. August 21, 1985, sec. U.S. <http://www.nytimes.com/1985/08/21/us/william-mcmurren-57-dies-head-of-morrison-knudsen.html>.

had served as a project engineer before entering management ran Morrison-Knudsen from 1985-1988. Unable to restore the company to its former glory, M-K's board of directors demoted Deasy from the position of Chief Executive Officer, installing the controversial William Agee as the new CEO. Then the real fireworks started.

Agee, a Boise native and eleven-year M-K board member, had a questionable exit from Boise Cascade before taking the helm at the Bendix Corporation. There, Agee gained notoriety not for strategic corporate leadership, rather quite the opposite. He first raised eyebrows among observers when he had his long-time marriage annulled in order to marry his protégé Mary Cunningham, with whom he had a relationship since her graduate school days. What should have been his professional undoing, however, proved nothing of the sort. While leading Bendix, he launched a hostile takeover of Martin Marietta, which launched a successful defense, the result of which was the Allied Corporation taking over Bendix and deposing Agee. He and Cunningham largely went dormant from 1982 until his resurfacing in 1988 as M-K's CEO. The honeymoon with Agee and the venerable construction firm was short lived, if it ever existed.

Young, cocky, and strangely a leader of the business casual wear movement in corporate America, Agee surrounded himself with similar figures. Like much of corporate America, financial managers and Ivy League MBA's came to dominate the operations of Morrison-Knudsen rather than engineers. Not even the engineering focused and dominated M-K could escape the transition to financial capitalism. Agee's strategic and tactical moves did little to improve corporate performance.

Agee bet big on municipal rail, “Build own and operate” deals, and made forays into manufacturing leading M-K away from its core competencies.

The Agees proved wildly unpopular in Boise. Bill came across as smug. Mary disdained the meet-and-greet scene, preferring instead to direct operations of her favored Catholic charities, which soon became enmeshed with corporate operations. They travelled in an entourage in SUVs. Boise’s small western sensibilities collided head on with the Agees, whom *Forbes* Magazine depicted as the “Imperial Agees.”⁴⁰⁷ As popular executives left or were fired, Mary tasked staffers with entertaining their children, and Bill reduced retirement benefits. Resentment grew. It culminated with someone mailing a black rose to the Agee’s office. After that, the Agees left Boise for good, retreating to their home in Pebble Beach. From there, Agee directed corporate operations, shuttling executives via M-K jets for weekly meetings.

Toward the end of February 1995 M-K’s directors fired Agee, in the process revealing the depth of the company’s woes. The total loss for 1994 reached \$310 million. The company was in default on \$225 million in loans.⁴⁰⁸ M-K newly reconstituted board and management remained unable to steady the firm’s finances. In May 1996, corporate officers agreed to sell the eighty-four year old company to Montana-based Washington Construction Group for \$247 million.⁴⁰⁹ Just over a decade later URS Corp, one of the world’s major design firms, purchased

⁴⁰⁷ Stern, R.I., and R. Abelson. “The Imperial Agees. (cover Story).” *Forbes* 149, no. 12 (June 8, 1992): 88–92.

⁴⁰⁸ Greenwald, “The Wreck of Morrison Knudsen,” 52.

⁴⁰⁹ Bloomberg Business News. “Troubled Morrison Knudsen Agrees To Sale With Washington Construction To Appease Creditors.” *The Seattle Times*. May 17, 1996.

Washington Group for \$2.6 billion.⁴¹⁰ In the summer of 2014, URS itself sold to rival Aecom for \$4 billion.⁴¹¹ Morrison-Knudsen in 2014 has virtually vanished from memory. National newspaper coverage of the Aecom deal for URS included no mention of the former M-K as a component of URS, though URS still boasts a large presence in Boise, ID. Boise's local paper, the *Idaho Statesman*, of course wondered aloud what might become of the staff in Boise. Those concerns likely remain far from the mind of Bill and Mary Agee, who following Bill's ouster remain sequestered in the Bay Area, both reportedly operating a venture capital firm which maintains no web site. Ironically, a small cadre of editors carefully maintains Agee's Wikipedia entry which reports that Agee delivered record profits for Morrison-Knudsen under his tenure, and that a leak of a possible resignation "resulted in Agee resigning earlier than originally planned."⁴¹²

⁴¹⁰ Baer, Justin, and Gillian Wee. "URS Corp. Acquires Washington Group." *The Seattle Times*. May 29, 2007. http://seattletimes.com/html/businesstechnology/2003725375_washgroup29.html.

⁴¹¹ Benoit, David. "Aecom to Acquire URS Corp. in \$4 Billion Deal." *Wall Street Journal Online*, July 13, 2014. <http://online.wsj.com/articles/aecom-to-acquire-urs-corp-in-4-billion-deal-1405284566>.

⁴¹² "William Agee." *Wikipedia, the Free Encyclopedia*, July 14, 2014. http://en.wikipedia.org/w/index.php?title=William_Agee&oldid=613963034.

CONCLUSION

This study adds a new dimension to the history of the twentieth century by identifying heavy contractors such as Morrison-Knudsen as major and necessary players in the march of history, both nationally and internationally. The argument follows that of other scholars who recognized that irrigation projects in the west represented the early stages of the federal government's transformation into the ubiquitous entity it is today. Carl Abbott in "The Federal Presence" detailed the federal government's role in the west dividing it into time periods – a federally assisted frontier, regional depression, the Pacific War and the military economy, and Western emergence.⁴¹³ Also at the macro level, Gerald Nash in *The Federal Landscape* showed the transformation of the West and the federal government's role from what he calls a "colonial landscape" in 1900, to deindustrialization beginning in 1973. While not delving into the details of the government's private sector partners, Nash recognized that the government could not have achieved ubiquity unaided:

In its collaborative efforts with private enterprise, government set the parameters and goals. The government was the senior partner, and private enterprise the junior associate, in carrying out the mobilization of the western economy for war. The war effort included facilitating major shifts of population westward, a vast overhaul of selected sectors of the western economy, an enormous increase in the size and number of military establishments, and a reshaping of the physical and economic contours of western cities.⁴¹⁴

⁴¹³ Abbott, Carl. "The Federal Presence." In *The Oxford History of the American West*, 469–99. New York, NY: Oxford University Press, 1994.

⁴¹⁴ Nash, Gerald D. *The Federal Landscape: An Economic History of the Twentieth-Century West*. (Tucson, AZ: University of Arizona Press, 1999), 42.

Nash amplified his argument on the micro side in *World War II and the West: Reshaping the Economy*. Richard Lowitt wrote a detailed study of the earlier period in *The New Deal and the West*, and Leonard Arrington quantified the impacts of federal spending during the New Deal in “The New Deal in the West: A Preliminary Statistical Inquiry.”⁴¹⁵ Wiley and Gottlieb in their only major publication came closest to connecting heavy contractors to their role in history in *Empires in the Sun*.⁴¹⁶ And William Robbins’ *Colony and Empire: The Capitalist Transformation of the American West* also identifies the impact of global capitalism on the West. This story of Harry Morrison and Morrison-Knudsen amplifies this strain of scholarship by identifying the partnership between the federal government and Morrison-Knudsen, and illustrating their combined activities throughout the twentieth century. The story of Morrison-Knudsen brings new detail to the role of the “junior associate” - to use Nash’s term – in helping the U.S. government achieve ubiquity both at home and abroad.

Morrison-Knudsen’s activities indicate that global irrigation control was itself not the end game as proposed by Donald Worster. It was only the beginning of the way in which the U.S. federal government used heavy contractors to implement its domestic and foreign policy objectives. After moving on from Western irrigation projects, the U.S. Federal Government utilized heavy contractors in the WWII build

⁴¹⁵ See: Lowitt, Richard. *The New Deal and the West*. Bloomington, IN: Indiana University Press, 1984; and, Arrington, Leonard. “The New Deal in the West: A Preliminary Statistical Inquiry.” *Pacific Historical Review* 38, no. 3 (1969): 311–16.

⁴¹⁶ Wiley, Peter, and Robert Gottlieb. *Empires in the Sun: The Rise of the New American West*. New York, NY: Putnam, 1982.

up, Cold War military and infrastructure projects abroad, military projects at home, construction of a federal highway system, the elevation of the scientific and research and development communities, and the space race, among others. This dissertation also reveals heavy contractors as part of a private sector power elite unidentified by Worster. Further, Worster failed in recognizing that it was the contractors, not the federal government which held the expertise necessary to carry out the vision of federal bureaucrats.

The Morrison-Knudsen story also illustrates state sponsored capitalism at work. A large body of literature exists on the influence of capitalism on the West and on the impacts of federal spending on the west. But in this story we get a firm-level account of how Morrison-Knudsen used *public* capital, rather than eastern private capital to build a powerful private sector, western firm, which was not merely an adjunct of eastern financiers. M-K developed significant financial capacity from its federal contracts, but the firm's behavior as it became more powerful supports the contention that the federal government equally depended upon the capabilities of the heavy contractor. This became evident in Morrison-Knudsen's battle over Hells Canyon as the company flexed its muscles within the iron triangle. The federal government needed M-K's abilities to implement its foreign and domestic agendas, tilting power in M-K's favor. And, the expertise which contractors brought to their partnership with the federal government allowed politicians and agency bureaucrats to extend their reach into new areas of the global economy, growing their own power base and building their capacity to exert power.

At the firm level this portrait of Morrison-Knudsen shows a corporate form of organization, which differed from Chandler's depiction of corporate capitalism in the early twentieth century. Morrison-Knudsen's system of joint ventures and sponsorship of jobs arose as the size of jobs demanded by the federal government grew beyond the financial, technical, and managerial capacity of lone firms. With our more recent understanding of the "post-Fordist" economy and the tendency toward flexible specialization among industrial corporations, it is interesting to note that Morrison-Knudsen's organizational form foretold these shifts in global production styles. M-K deployed workers across the globe in all manner of projects under the M-K banner – mostly construction and engineering, but also in maintenance, and natural resource extraction like mining. Other corporate subsidiaries engaged in shipbuilding and transportation services. Harry Morrison is often credited with elevating the system of joint ventures and sponsorships to new heights.

Morrison-Knudsen benefitted from the strong entrepreneurial leadership of Harry Morrison, who operated at the center of history for most of his life. The depiction here shows him taking active roles in developing the west, supporting the U.S. efforts at winning the War in the Pacific, shifting economic power to the West, building Cold War defenses for America and her allies, accelerating the consumer culture, and winning the race to the moon. As a study of an individual entrepreneur, Mark Foster's *Henry J. Kaiser Builder in the Modern American West* provided a useful template for observing Morrison's life by looking at one of his friends and business partners. In that same vein, Morrison's life provides another seldom-viewed role of construction oligarchs in the twentieth century. Morrison capped his life having put

the infrastructure in place to send men to another planet. He retired as Chairman of Morrison-Knudsen's Board in 1968. On July 16, 1969, NASA launched Apollo 11 to the moon, with Morrison in attendance. Perhaps content that "no greater monument could be erected to the memory of anyone," Harry Winford Morrison passed away on July 19, 1971 at the age of 86. No surprise then that the world felt his impact after his death. Disney World, on which M-K began construction while Morrison still lived, opened on October 1, 1971 – just months after his passing. Disney World set in motion not only the largest tourist attraction in the world, but a new way of interpreting history, a new way of interpreting the increasingly urbanizing world. While Morrison would not be there to see it, America finally observed a U.S. President in 1980 openly partner with the construction executives whom historians have mostly ignored. As Wiley and Gottlieb noted,

Reagan's reliance on Bechtel executives George Schultz and Caspar Weinberger was understood to reflect his reliance on corporate, as much as western, appointees. Reagan the westerner was not the harbinger of a new version of the "new Republican majority." Instead, he sought to share power with his corporate backers from New York, Los Angeles, and San Francisco. Reagan, nonetheless, ha(d) access to the kind of western geopolitical thinking that began with Brigham Young, developed out of the western engineering impulse during the New Deal among the Six Companies and the Reclamation Service, and emerged on the world scene in the Pacific Rim strategy of the 1960s and the Nixon Doctrine of the 1970s.⁴¹⁷

While Morrison-Knudsen no longer exists but in memory, the physical changes to the earth and to the built environment, which the corporation affected through Harry Morrison's guidance, constitutes a powerful and lasting legacy.

⁴¹⁷ Wiley and Gottlieb, *Empires in the Sun*, 305-306.

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