Colin Burgess

SELECTING THE MERCURY SEVEN The Search for America's First Astronauts





Selecting the Mercury Seven The Search for America's First Astronauts

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Selecting the Mercury Seven

The Search for America's First Astronauts



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Colin Burgess Bonnet Bay New South Wales Australia

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This book is dedicated to a humble, generous and inspiring man who became not only the doyen of Soviet/Russian spaceflight historians, but a person of outstanding energy, skills and empathy in the education and betterment of disadvantaged young people, especially the inner city children of London. We have all lost a cherished friend.

> Vale, Rex D. Hall, M.B.E. 6 November 1946–31 May 2010

Foreword

Fifty years on, only two of the seven remain. They are elderly men still pursued for autographs, asked for their insights, honored for their accomplishments. And while the pictures have faded, the newsreels have begun that annoying color shift to blue, the memories remain.

The press conference in Washington, on 9 April 1959, the scrambling press and barrage of flashbulbs that followed the announcement, "Ladies and gentlemen... the astronaut volunteers!"

There was nothing in American history quite like the Mercury astronauts. They arrived on the public stage at a time when the nation was still reeling from Sputnik Shock. Mighty America, the engine of World War II victory, dominant force in the Cold War, had been beaten into space by Communists who supposedly had difficulty building a refrigerator.

How would we catch up? What warriors would we send into that dark and silent sea of space to do battle?

Carpenter, Cooper, Glenn, Grissom, Schirra, Shepard and Slayton.

These seven – We Seven was the title of their book – were thrust not only into the work of developing the Mercury spacecraft, but also into the undoubtedly more challenging business of helping Americans to appreciate the effort. Their stories were told in *Life* magazine. They were photographed constantly. Their families became fodder for human interest journalism.

And then, of course, they were launched on Redstone and Atlas rockets. "Godspeed, John Glenn." "Oh, the view is tremendous." "We may... have lost an astronaut!" "Things are beginning to stack up a little."

There was tragedy, too. One of the seven died in a fire on the pad. And there was glory beyond Mercury... one of the seven would walk on the Moon.

Tom Wolfe has written eloquently, and mostly accurately, about this time, in *The Right Stuff* (1979), which gave a name to the unique mix of skill and bravado these seven possessed.

Of course, they weren't the only ones. These seven were the ones who made the cut and won the prize, but as Colin Burgess shows in this book, there were twenty-five other men... test pilots from the Air Force, Navy and Marines... who passed

successfully through the initial NASA briefings and interviews... who volunteered to be 'shot into space'... who, like Carpenter and Slayton and the others, went through the challenging battery of medical tests at the Lovelace Clinic in Albuquerque, New Mexico, and the psychological exams at Wright-Patterson Air Force Base in February and March 1959.

What about these other men, the ones who might have been the first into space, first on the Moon? Men who, but for a heartbeat, an interview question or a number on a table would have become names in the history books instead of footnotes?

For the better part of fifty years, no one knew! Yes, researchers and historians knew that other test pilots had gone through the Lovelace and Wright-Patterson tests... several names had emerged. Occasionally you would note a reference in a news article to a military pilot who had been part of the Mercury selection. (There were the two famous "washouts", Pete Conrad and Jim Lovell, who made it into the next astronaut selection in 1962 and went on to notable astronaut careers.)

But for the others? Very little. The NASA History Office couldn't even produce a complete list! (To be fair, the original screening was done at the Pentagon, which controlled the candidates' travel. And NASA had an agreement with Lovelace, but no formal association for sharing records.)

Several of the people involved were also reluctant to speak on the subject: NASA astronaut Ed Givens, selected in 1966, never revealed that he had been one of those who were considered but not selected in 1959.

Here, however, for the first time in print, Colin Burgess gives you the story behind the entire process as seen by those who, for one reason or another, didn't make the final list of seven.

Beyond that, to the extent anyone could, he also follows their subsequent lives and careers. And in those tales you will experience tragic irony, dogged persistence, and in some cases, true heroism. And, to be fair, tinges of bitterness at opportunities lost.

Burgess is not just a space historian, but a tireless and dogged student of military history. He has written about aircraft, about World War II and in particular about the heroic Australian POWs at Colditz.

He has also profiled Australian astronaut Paul Scully-Power and the first teacher selected for a spaceflight, Christa McAuliffe. With David Shayler, he published a comprehensive look at NASA's intriguing scientist-astronaut program. My personal favorite of his works is *Fallen Astronauts* (written with Kate Doolan) an account of American and Soviet space flyers who died in the line of duty.

Fans of space history will remember his two recent works, co-authored with Francis French, *Into that Silent Sea* and *In the Shadow of the Moon*. What characterized those books, aside from the clear prose and skillful interweaving of technical details and human moments, was the authors' willingness to perform original research... not to rely on twice (or a hundred) told tales of the Space Age.

Burgess brings that same energy and rigor to *Selecting the Mercury Seven*. This marvelous book takes you back to the first days of human space flight, to the uncertainty, experimentation, and blind alleys – and then into the crucible of the

American conflict in Vietnam that so shaped the lives of those who were fated not to serve their country as astronauts.

It is a story long in need of telling, and he tells it perfectly.

Michael Cassutt Los Angeles March 2011

Author's preface

It was 1959, and space beckoned.

For as long as humans have gazed into the heavens the moon has held a special fascination, arousing our curiosity with its nearness and mysticism. In 1610 astronomer Galileo Galilei turned his "magic tube" on the moon, discovering a surface pock-marked with craters, mountains and dark areas he called "maria" or seas, while at the same time dispelling many fantastic, long-held myths that had entranced watchers of the skies over countless millennia.

Among many others, Cyrano de Bergerac, Jules Verne and H.G. Wells would go on to describe imaginary space voyages to the moon, fuelling our dreams of one day conquering space. Then, in the latter part of the twentieth century, those fantasies were replaced by actual vehicles which could venture into space and a daring new breed of hero – the astronaut.

In the fall of 1958, as the Soviet Union jubilantly celebrated its achievement of the first artificial satellite, Sputnik, the orbiting of a small dog named Laika, and the first probes to fly past and impact the moon, the fledgling American space agency NASA was directing its attention to our final frontier: outer space. Within weeks a special committee populated by some of the most influential and respected names in rocketry, spacecraft design and bioastronautics had been formed and tasked with the unparalleled goal of placing a man – an astronaut – into space.

From the outset, Project Mercury was a fascinating, driven programme. However the task of selecting the first cadre of candidates was not simply a matter of drawing up a specification of their essential qualities, it faced the question of where to find these future space pilots. The task was made even more difficult by the fact that no guiding rules or precedents existed for selecting the candidates.

This book explores the motivation behind the need to choose up to twelve men willing to risk their lives in one of the most hazardous scientific undertakings of all time, and how directions governing their selection and training rapidly evolved. When President Dwight Eisenhower gave his approval for the candidates to come from the ranks of serving U.S. military test pilots, a veritable mountain of collated data and medical records was scrutinised. Out of this mammoth undertaking came the names of 110 of the nation's top test pilots. That number had to be winnowed down to a dozen. Following top-secret mass briefings at the Pentagon, along with initial medical, physical and psychiatric screening for those willing to continue, thirty-two names emerged. These elite, highly competitive pilots would now undergo further and far more intense screening to determine which of them could best confront the dangerous unknowns of space, and carve for themselves a unique place in history as a Mercury astronaut. By the end of the selection process six men were being sought, but when it proved impossible to differentiate between the final two it was decided simply to take them both, and so seven were selected.

In addition to relating the history and difficulties behind the selection process, *Selecting the Mercury Seven* gains personal momentum when the thirty-two finalists have been selected. Leaving until later in the book the stories of the seven successful candidates and the three who were selected as astronauts in later groups, the lives, motivations, military careers and achievements of the other twenty-two finalists are explored in short but fully authorised biographies. Test pilots for the U.S. Navy, Air Force and Marine Corps, each man has a fascinating and decidedly different story that engages the reader in realising what an incredibly difficult task it was to select just seven pilots from such an extraordinary field of dynamic and highly qualified candidates.

All thirty-two men had to undergo one of the most meticulous, demeaning, and even brutal week-long medical examinations at the Lovelace Clinic in New Mexico. This was followed by another torturous week at the Wright Aeromedical Laboratory in Ohio, where they were subjected to extreme fitness and physiological testing, the sole purpose of which was to sort out the supermen from the near-supermen. Or to quote author Tom Wolfe on the subject, they were looking for a group of men with "The Right Stuff".

The latter part of the book examines the lives, accomplishments and space flights of the chosen seven, bringing their amazing stories right up to date.

The selection of America's Mercury Seven came at a crucial time in that nation's history. The fear and uncertainty of the Cold War, when combined with the competitive spirit of the rapidly evolving Space Race, created a fever pitch of international excitement and intrigue in human space exploration. Through the recollections of the surviving members of those thirty-two men finalists, or those who knew them best, we gain an important insight into the lives and legacies of some extraordinarily skilled and fearless men, any one of whom could have ridden NASA's rockets to glory, and achieved a lasting place in the history books as America's pioneering astronauts.

Colin Burgess Sydney, Australia April 2011

About the author

Born in Sydney, Australia, in 1947, I spent the first impressionable years of my life in close proximity to Sydney's Kingsford Smith Airport with its entire mystical aura, and the fuss and exciting clamour of air travel. Growing up in a house directly under the flight path, I was fascinated by the prop-jet commercial airliners that used to sweep and scream so majestically over our backyard. Occasionally an unmistakeable howl filled the air as a Qantas Boeing 707 roared over, leaving a slowly dissipating trail of black smoke and kerosene fumes. It seems some of those fumes must have settled and lingered in my sensory glands, because many years later I joined Qantas Airways as a flight steward and flew the world with the airline over the next thirty years before taking an early retirement.

I was fourteen years old when space exploration first captured my youthful attention, inspired by the Mercury flight of astronaut John Glenn. My grandmother Beatrice lived a few doors down. A wonderful, highly intelligent woman with a love of history, she appeared on several Australian television quiz shows. Late in 1961 she was telling me about Glenn's much-delayed orbital flight and suggested I start up a scrapbook on it as a science project for school. I followed her suggestion, locating and cutting out everything I could find as Glenn's flight suffered delay after delay. Finally, there was that momentous day of 20 February 1962, when Glenn and his Friendship 7 spacecraft were safely recovered from the ocean after a dramatic threeorbit flight around the world. By this time, I had also been investigating the earlier space missions of cosmonauts Yuri Gagarin and Gherman Titov and their astronaut counterparts Alan Shepard and Gus Grissom. I became hooked on the subject. Then, at my grandmother's urging, I wrote to the astronauts in Houston. The signed replies that came in only enhanced the excitement and fascination for me, and the resulting profound interest in the history of space exploration remains with me to this day.

When I first began to write, my books were on another subject that interested me – the Australian prisoner-of-war experience. As a school student, and like most of my fellow male pupils, the books that we mostly sought out in the library were truelife adventures of wartime, such as *Reach for the Sky*, *The Wooden Horse* and *The Colditz Story*. When reading these books I was always disappointed that Australians received so little coverage or recognition, and I was determined to redress this one day. I ended up writing all of the books I wanted to on the subject, and found some success in having them published. Eventually, I decided it was time to turn to my first love – space exploration.

My principal interest has always been in the men and women who rode those pioneering rockets, and so my books are mostly biographical studies. These include the life of Australian-born payload specialist Paul Scully-Power, Christa McAuliffe – the young teacher who died in the Challenger tragedy in 1986 – and another on the lives of the astronauts and cosmonauts who died before the moon landings. In 2003 the University of Nebraska Press invited me to become their series editor for a set of books (now fixed at twelve) on the complete history of space exploration – a project in which I am still happily engaged.

In 2007, my friend and colleague Rex Hall and I decided to collaborate on a biographical study on the first twenty Soviet cosmonauts, which was released by Springer-Praxis two years later as *The First Soviet Cosmonaut Team: Their Lives, Legacy and Historical Impact*. We thoroughly enjoyed the experience of researching and writing together, especially since Rex was a widely recognised doyen of Soviet space researchers who worked in a home study crammed with unique information and photographs. However, as we worked on the book Rex was unwell, making frequent visits to his doctor and the hospital, and in May 2010 I received the sad news that he had succumbed to his prolonged illness. Our book on the cosmonauts had been well received by the spaceflight community, and I began to prepare a companion volume on the selection of the seven Mercury astronauts in 1959. Although the number of candidates involved was a daunting proposition, I chose to write about the thirty-two finalists for what were eventually seven prized places. The major stumbling block was that no one seemed to have a complete list of the names.

Then, in September 2009, a retired Lt. Colonel in the United States Air Force, Walter B. ("Sully") Sullivan, Jr. contacted me and said he could not only supply a full list, but was willing to help me write the book – not as a co-author, he stipulated, but merely as someone who has always had the greatest of respect for the men that he met at the Wright Air Development Center in 1959 when they turned up for the stress-test phase of the astronaut screening and selection process. As their liaison officer back then, he has recently enjoyed renewing many fine friendships with these men or their surviving family members after so many years.

Inevitably, many of the thirty-two finalists are no longer with us, a number which also prompts the sad realisation that only two or the original Mercury seven remain with us today. This book is a tribute to them all; not only those who went on to claim fame and fortune as America's first astronauts, but also those who did not make the cut. As many who were involved in the selection process freely admit, almost all of the candidates could have filled those seven pairs of boots and done an equally outstanding job.

I am proud to present their stories - for the first time in most cases - so that history may finally recognise and respect the many accomplishments and amazing lives of these incredibly talented test pilots.

Acknowledgements

I always regard this section of any book – the acknowledgements – as one of the most crucial elements of a publication. For this is where, as in previous books, I can name, thank and recognise those kindly contributors, helpers, fact-finders, fact-checkers, readers, friends and family members of the subjects who have assisted me in crafting this book and bringing it to a solid conclusion. It is far from trite to say that without their knowledge and help, this book would probably never have left the metaphoric launch pad.

Principally, my profound thanks and admiration go to a man I am proud to call a friend and colleague; retired U.S. Air Force Lt. Colonel Walter B. ("Sully") Sullivan, Jr. Throughout all the travails associated with writing this book he was a tremendous source of information, guidance and a can-do spirit I have come to deeply admire. There is something of a Sherlock Holmes in Sully, for he was instrumental in tracking down a group of men with whom, in many cases, he had lost touch during the more than fifty years since the Mercury selection process. He was the candidates' liaison officer at Wright Air Development Center, and got to know most of the thirty-two finalists so well that he counts a few of them as lifelong friends.

There is more to Sully, however, than just an inquisitive mind and a willingness to lend a much-needed helping hand; he readily acknowledges that the men – test pilots all – who feature in this book were the best of the best, the cream of the crop and the bravest of the brave, at a time when America needed seven Cold War heroes ready to lay their lives on the line in achieving those first pioneering steps into outer space. He came into this book project on one proviso, which is testament to his fine character; he is one of only a handful of people privy to the final results of all the testing these men underwent in their quest to become one of their nation's first astronauts. He knows the order in which they were ranked, and the identifying code letter associated with each of them in their final evaluation, but he will never reveal these to anyone – not to me, nor even the thirteen surviving finalists. There were four final sub-lists guiding the selection panel in their final choice: Outstanding without Reservations, Outstanding with Reservations, Highly Recommended and Not Recommended. Both Sully and I feel that to reveal the category into which each of the finalists fell would not honour their lives, their achievements or their families, and should therefore not be for exposure in the public domain. Of course the names of the seven successful candidates are known, and through the official WADC Tech Report 59-505 it was revealed that their relevant code letters were G, K, R, S, U, Z and EE – but not which candidate was assigned which letter. It is also known that one candidate (James Lovell) was unable to complete the final screening at Wright for medical reasons. With profound respect, we prefer to regard the remaining twenty-four candidates as extraordinary equals; pilots whose lives were the stuff of superlatives, and as men who proudly flew in combat for their country, taking test aviation, courage and audacity to impressive new levels.

As always with a project of this scale there are numerous people to whom I owe profound thanks for their participation. Without their interest and cooperation it would have been extraordinarily difficult – if not impossible at times – to collect, transcribe, organise or publish the information and anecdotal material contained in this book. Photographs are also crucial in such an undertaking, and I am very grateful to those who ensured I received these, either as scans or through the mail.

Principally, I would like to extend profuse thanks to the surviving members of that 32-strong finalist group for responding so magnificently to my initial contact, for patiently answering my questions, and for checking their biographies and offering corrections to ensure complete accuracy. Your enthusiasm and support for this book turned what was originally a monumentally difficult task into a very pleasant and rewarding experience. My thanks therefore go to VADM Robert B. Baldwin (USN), Cmdr. M. Scott Carpenter (USN), Col. Harold W. Christian, Jr. (USAF), Col. Richard M. Corbett (USAF), Capt. Dale W. Cox, Jr. (USN), Lt. Col. Frank D. Frazier (USAF), Adm. Thomas B. Hayward (USN), Capt. James A. Lovell, Jr. (USN), Capt. John R. C. Mitchell (USN), Lt. Col. Robert M. Solliday (USMC), RADM John Mark Tierney (USN), and B/Gen. Alonzo J. (Lon) Walter, Jr. (USAF). Many thanks as well to supportive family members of those men, who aided in the compilation of this book: Steve Corbett, Patrick Clark, Terri Tierney Clark, Donna Frazier, Robin and Bill Heyne, Kris Stoever and Katherine Nickel.

Sincere thanks also to the family members, friends and former colleagues of those men no longer with us, who responded so magnificently with personal and service information and photographs of their loved one: *Maj. Robert G. Bell (USAF)* – Jackie Bell, Tom Knight, G. Weldon Slaughter, Bill Hosmer, Frank Snay and Gary Meeker; *Lt. Col. Thomas R. Bogan (USAF)* – Lee Higley, Sandi Halterman, Jay and Claire Bogan; *Lt. Cmdr. Hal R. Crandall (USN)* – Kris Freeman, Darcy Kriminger, Tom Walsh, Tom Wimberly, Bob Prince, Jerry Childers, Sam Jewell, Jake Jaccard, Bruce Cobi and Bob Hulse; *Capt. Halvor M. Ekeren, Jr. (USAF)* – David Ekeren and Nancy Ekeren Doubleday; *RADM Lawrence Heyworth, Jr. (USN)* – Lawrence ("Skid") Heyworth III and Charlotte Heyworth; *Col. Archie T. Iddings, Jr. (USAF)* – Catherine Weaver, Mary Howell, Susan Cobb, Ron Rozelle, Richard Montgomery, Bob Byrd, Don Sharp, George Mushalko and Steve True; *Col. Robert H. Jacobson (USAF)* – Cindy Farrens and Harry Andonian; *VADM William P. Lawrence (USN)* – Diane Lawrence, Wendy Lawrence and James R. Mitchell; *Capt. Jack B. Mayo (USAF)* – Jeanie Mayo Thornton, Richard Mayo, Michael Perry, Kerm Keeley and Bill Demint; *Cmdr. Paul Miller, Jr. (USN)* – Pam Gianola amd Kent Miller; *Cmdr. John Ralston, Jr. (USN)* – Patricia (Patty) Davis, Katie Ralston, Marvin Ray Miller, Jack Edwards, Lowell Paradis, Tom Guttery, Buzz and Pat Husted, Edward Parris and Earl Yates; *Capt. Walter M. Schirra, Jr. (USN)* – Jo Schirra, Suzanne Schirra and Tracy Kornfeld; *Col. James W. Wood (USAF)* – James (Jimmy) Wood, Diane Wood, Susanne Wood, Virginia Wood, Rick Broome and Esther Lee Martin.

Special thanks go to Drs. George E. Ruff and Stan White, who were principal players in the Mercury selection process. Their reflections and generous responses to my questions were greatly appreciated.

Others who deserve unlimited thanks for their help are Joachim Becker (Spacefacts), Michael Cassutt, Dr. Walter B. Forman (Lovelace Scientific Resources), Joanne Hall (Naval Test Pilot School), Al Hallonquist, Ed Hengeveld, Derek Kaufman (PAO Wright-Patterson AFB), Ron Keller (New Mexico Museum of Space History), Deborah Kidwell (Edwards Air Force Base), Anne Lenehan, T/Sgt. Jennifer Lindsey (Secretary of the Air Force Regional Office, NYC), Herb Pearis, Fabio Peña, Nancy Posch, J. L. Pickering, Lee Scherer, Brett Stolle (National Museum of the Air Force, Wright-Patterson AFB), Tom Sumner and Brigitte Tamashiro (USAF Test Pilot School).

David M. Harland is a name well known to the spaceflight community as the acclaimed author of numerous and authoritative books on the subject of space exploration, and I was more than delighted when the publishers assigned him to the task of editing this book. His practised eye not only helped to smooth out many rough edges, but his background knowledge and enthusiasm for the subject enabled him to zero in on some factual anomalies. I am extremely grateful to him for not only adding a final professional polish to this work, but for the amiable way in which he carried out the assignment. I don't believe that we have ever met, but if that occasion should ever come along, then I do believe I owe him a pint of his favoured brew.

Last – but certainly not least – my continuing, sincere and prodigious thanks to long-time friends Francis and Erin French in California for meticulous proofreading and for pointing out overlooked blemishes in this and other manuscripts. Anything I write is far better for your incisive comments, suggestions and support.

Illustrations

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1

Sailing in and out of war

It was Monday, 6 August 1945, as an aircraft carrier nicknamed "Tokyo Express" ploughed a steady and majestic path through white-capped waves somewhere east of Okinawa. Ahead of the carrier, the ocean's curve and the treacherous grey skies blended to form a melancholy azure, warning of a typhoon that the ship's captain was seeking to avoid. That day, however, the overcast skies and white-caps were of little interest to the vast majority of the 3,500 men aboard the *Essex*-class carrier USS *Shangri-La* (CV-38), who had been busily preparing to launch air strikes against mainland Japan as soon as the weather cleared.

The morning had brought some astonishing news and they were understandably confused, but cautiously excited. The ship's radio operators had begun to pick up reports of a single, massively destructive bomb that had been dropped on the city of Hiroshima in southwestern Honshu. As well, reports began to circulate the ship of vast numbers of civilian Japanese casualties. An *atom bomb*, they were told, but no one had any idea what an atom bomb was, or its destructive power. In fact most of them had no idea where Hiroshima was located, or why it had been targeted. "We thought we knew the principal cities of Japan," recalls Dale Cox, then a 24-year-old lieutenant in the U.S. Navy, but he, too, was confused by the reports.

As the flagship of Carrier Task Force 2, under the command of Vice Admiral John S. McCain, the *Shangri-La* had led a series of bombing attacks against the Japanese home islands, beginning in June 1945. "For three days we had launched every plane and dropped every bomb we had on Tokyo," Cox reflected. "Then we retreated, rearmed and went back to hit other cities for second and third attacks. Everyone expected a major counter-attack, that the Japanese would launch massive strikes against the task force. We were resigned that some of the ships would be sunk." Now, once again off Okinawa and preparing for action, they pondered the incomprehensible power of the so-called 'atom bomb'.

Like Cox, his shipmates had become increasingly mystified by the lack of any retaliatory enemy action. They waited, anxiously scanning the leaden skies over a cloud-strewn horizon for the enemy attack they knew must come. Instead, there was just an eerie, disquieting silence broken only by the constant rumble of the carrier's powerful engines forcing them through the choppy Pacific.

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USS Shangri-La in 1945 with the carrier's crew on deck. (Photo: USN)

Unexpectedly, Cox received immediate orders to attend flight training at a new duty station in Texas. "My interest in 'atom bombs' and other new things faded and I dreamed of going home," he recalled. "My three years in the Pacific were over. Two days later I was transferred on a 'high wire' to a destroyer with all my possessions jammed into one dirty canvas sea bag, about three feet long and two feet in diameter, with a strong handle."

According to Cox, the destroyer he boarded in such dramatic fashion, swinging from a wire above rough seas in a boatswain's chair, was headed for Iwo Jima "to deliver classified documents, the U.S. mail, and two passengers." From Iwo Jima he would fly to Texas in stages. But getting onto that States-bound plane would prove to be both vexing and a truly unforgettable experience for the young aviator-to-be.

AN ENSIGN PUTS TO SEA

The city of Spokane is located close to the eastern border of Washington State, 110 miles south of the Canadian border. It was here, on 17 December 1920, that Dale William Cox, Jr. entered the world. Times were tough and unrelenting back then; although the city had patiently developed into one of the major rail centres in the Western United States, Spokane – still recovering from a devastating fire which destroyed thirty-two blocks of its downtown commercial district in 1889 – was experiencing a major decline, both in population growth and in its economy, which was inexorably grinding to a halt. It was also the year that prohibition – the Noble Experiment – effectively kicked in, and America suddenly went 'dry'.

The son of Elva Pauline (née Bowers) and Dale William Cox, Sr., young Dale would likely have led an entirely different life but for the unsparing influence of the Depression. He did, however, come from hardy pioneering stock. "In 1845 my grandfather, a child at the time, was in the third wagon train to arrive in Oregon. Later he and his father founded the town of Colfax, Washington, in 1871, and homesteaded quite a bit of land around there. My father was born and raised on a cattle and wheat ranch in Washington State."

Both of his parents inherited considerable fortunes at an early age; his mother had received half a million dollars at the tender age of six when her father died of food poisoning, while Dale Sr. inherited a one-thousand-acre property near Hay, Washington, when he was only a teenager.

"After they were married," Cox told the author, "my father mortgaged the ranch and bought another ranch in British Columbia with ten times more acreage, plus two thousand head of cattle." However promising the outlook might have seemed for the young family, financial devastation was only months away. "The following winter was exceptionally severe and most of the cattle froze to death. That wiped him out."

Cox's parents were ill-prepared to cope with such adversity. "They decided to leave Spokane and move to Long Beach, California. Typical of my mother, she went out and bought a new Auburn automobile so we could arrive in style. In Long Beach we moved in with my father's sister in a three-bedroom house. It was quite crowded with four adults, two teenagers and my younger sister and me."

While Elva took on work as a waitress in her sister-in-law's restaurant, Cox's father became a real estate agent, an employment for which he seemed to have a real flair. "He worked for Mortgage Guarantee, a company with many foreclosed properties they were trying to sell. Slowly, my father bought distressed properties for his own account; three duplex apartments and a forty-unit apartment complex in Hollywood." At this time, young Dale was attending Virgil Junior High School, but the change in fortunes meant he would be enrolled in the Hollywood Military Academy on San Vicente Boulevard, then owned by aircraft company magnate Donald Wills Douglas.

"Mortgage Guarantee owned the property in Brentwood where the academy was located," he explained. "Thus, I was offered a scholarship there. I was required to get good grades to bring the school's academic score up. The school had several children of famous parents who were not motivated to study, including Fred Astaire's two boys, Jean Paul Getty's son, and Donald Douglas, Junior."

Cox would play halfback on the academy's football team, becoming a brief hero in one hard-fought game against a rival military college when he caught a winning touchdown pass in the final minute. "This 'moment of success' pushed me towards athletics," he recalled. "I found academics easy and consistently got good grades. My English teacher required us to memorise famous poems and recite them in class. To this day, I can recite certain passages from Shakespeare and Browning from memory."

He happily thrived on his work and education at the academy, but it would all be dramatically curtailed by what he describes as "an altercation" with an instructor over a fellow student. He still does not know or understand why it led to his removal

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from the academy, although he later found out the other boy was homosexual. Confused and desperately unhappy, he transferred to Beverly Hills High School, from which he graduated in 1938.

The Vice President of his father's employer, Mortgage Guarantee, was a retired Navy Commander, and would often talk to young Cox about determining his future, encouraging him to seek a Navy career. Cox decided this was sound advice "because in the Depression my family couldn't afford to send me to college". After attending a Navy Preparatory School, he passed the entrance exams for the United States Naval Academy (USNA) in historic Annapolis, Maryland, and reported in September 1939. Here, in February 1942, he was named National Collegiate Gymnastic Champion. He graduated on 19 June 1942, and was then commissioned an ensign in the U.S. Navy. The following month, aged twenty-one, he began three years' service with the Navy in the Pacific theatre of war.

When asked how supportive his family was to his career in the Navy, Cox said, "My parents were very supportive. My father became successful with his real estate holdings but, unfortunately, became an alcoholic. In the 1950s they moved back to Spokane and I seldom saw them. My sister married one of my classmates at Beverly High, who was also in my class at the Naval Academy. He died very young and my sister inherited half of his family's property on Rodeo Drive, which has turned out to be a 'gold mine'."

On a Sunday evening in 1942, six weeks after the decisive Battle of Midway had been fought and won against Japanese naval forces near the Central Pacific island of Midway, Cox was bound for Kodiak, Alaska. He was on board the destroyer tender USS *Black Hawk*, steaming north from Pearl Harbor. Also aboard were four other recently commissioned ensigns, all with orders to join USS *St. Louis*, the newest cruiser in the fleet.

The *Black Hawk* (AD-9) was a relatively elderly vessel that had been on station on the Yangtze River when the war began. As a result, most of its 400-strong crew were Chinese. Originally launched in 1913 under the name SS *Santa Catalina*, the ship had been acquired by the U.S. Navy in December 1917, and was by now one of the oldest auxiliary ships in the Navy fleet.¹ It would prove a discomforting journey for the brand-new ensigns, chugging through dangerous waters at the ship's maximum speed of twelve knots, knowing that any Japanese submarine lurking en route could easily outrun and outfight her.

"When we boarded, all of us expressed immediate doubts that we'd ever reach Kodiak in such a rust bucket," Cox reflected. "As one ensign griped, 'This is a hell of an introduction to war. We could be sunk in this old clunker [during] our first week.' Not only were all the ship's characteristics carried over from the prior century, but all routine upkeep apparently had been deferred to the next. The ship still used coalfired boilers to produce steam for ancient reciprocating engines. Watching young Chinese coalmen, naked to the waist, hurl shovelfuls of black coal into fiery furnaces was a once-in-a-lifetime experience."

Optimistically, the ship's captain tried to confuse any Japanese submarines by zigzagging back and forth on track to Kodiak; he also recruited the young ensigns to help by assigning them to the bridge as the Junior Officer of the Deck – a watch that

changed every four hours. While they now had a duty to perform, Cox felt it was a relatively ineffectual exercise. "This would be the first time any of us had ever stood watch on any bridge. Our usefulness in any tight situation with an enemy submarine seemed questionable."

To further add to the discomfort on their first wartime voyage, whenever the ensigns were off duty the stewards in the wardroom were intentionally insolent to their unexpected passengers, viewing them as extra work and not worthy of a true officer's privileges. "In sharp contrast," Cox recalled with a chuckle, "the few American officers in the ship's company received outstanding service from the Chinese mess attendants. As one old-timer explained to us, our problem was that recently minted officers had insufficient 'face' – important to the Chinese."

On 29 July the *Black Hawk* approached Kodiak in overcast conditions. As Cox and his ensign shipmates peered through the near-solid mist, a large green island slowly emerged ahead. The captain carefully manoeuvred through a complicated waterway lined with lethal mines to enter a large, oblong-shaped body of water known as Woman's Bay. They were hoping to see the *St. Louis*, so that they could promptly take their leave of the ancient destroyer tender. Instead, as they prepared to tie up at the innermost pier, which smelled of rotting fish and diesel oil, they were greeted by the sorry sight of a few decrepit cargo ships.

It would be a further eleven seemingly endless days before they spotted *St. Louis* steaming in. "As the ship entered the bay, we took turns with binoculars to examine our future home. She looked sleek and deadly; triple six-inch gun turrets fore and aft and eight five-inch anti-aircraft batteries, their twin guns pointing menacingly skyward." The cruiser eventually moored to the pier closest to the channel and farthest from the *Black Hawk*.

The ensigns could barely wait. "We rushed to the pier, waiting for the *St. Louis* to tie up. All of our worldly possessions were stacked beside us. As soon as the cruiser's boatswain lowered the ship's boarding gangway, we climbed aboard. Each saluted the Officer of the Deck, turned, saluted the American flag on the fantail, turned again and requested, 'Permission to come aboard, sir.' On a misting gray morning, 11 August 1942, we were logged aboard.''

USS *St. Louis* (CL-49) was a light cruiser commissioned in 1939, and the fifth U.S. Navy ship to carry that proud name. Just eight months earlier, on the morning of 7 December 1941, the ship had been moored at the Southeast Lock in Pearl Harbor when Japanese airborne forces attacked just before eight o'clock. The ship's gun crews, overcoming complete surprise, managed to man the operable anti-aircraft guns. They shot down an enemy torpedo bomber while the engine crew frantically scrambled to get up steam. The cruiser then rapidly backed away from the pier, heading for South Channel and the relative safety of the open seas. *St. Louis* was the first major combatant ship to get underway that infamous morning. The gunners quickly accounted for another two enemy aircraft as the ship fled from the flaming wreckage in Pearl Harbor. Then, as *St. Louis* moved into the channel entrance, she narrowly avoided falling victim to a Japanese midget submarine whose torpedoes fortunately hit a coral reef just 200 yards from the vessel.²

Once the new shipmates were on board in Kodiak they were immediately split up.

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Dale Cox had just been shown to his new quarters and was beginning to unpack when he was startled to hear his name being broadcast over the ship's public address system. "Ensign Cox, report to the Executive Officer's stateroom immediately." He had to ask where this stateroom was located, and the sailor looked at him piteously before pointing aft, indicating that any fool would know how to find it. After all, the ship was only six hundred feet long, with a beam of sixty-two feet.

"I found the stateroom, knocked, and was told to enter. The commander was tall, weighty, and to me, old. I guessed his age at forty. He didn't waste any time. 'You are today's Shore Patrol,' he informed me without ceremony, handing me an arm badge, a belt with a holster and a .45 calibre pistol. 'Go topside and the Officer of the Deck will give you your orders.'" Such was life as a brand-new ensign in the U.S. Navy.

TORPEDOES AND DIVE-BOMBERS

The *St Louis* arrived in the South Pacific in December 1942, some four months after U.S. Marines had invaded Guadalcanal. In the ensuing months the ship commenced convoy duties and participated in intercepting enemy shipping in the Kula Gulf, a waterway in the Western Province of the Solomon Islands that opens in the north into New Georgia Sound, also known as 'The Slot', down which the Japanese ran their convoys. One major engagement for the *St. Louis* was the shelling of new Japanese air facilities being built at Munda Point. Then, in early July 1943, her crew took part in the fierce bombardment of Vila and Bairoko Harbor, New Georgia.

On 13 July, on a black night, the *St. Louis* took a torpedo hit during the Battle of Kolombangara. Fortune was with them that day as the torpedo hit well forward, and even though it shattered the cruiser's bow there were no casualties. In dry dock they learned that a second torpedo had dished in the fantail above the screws and failed to explode. Little wonder the ship had been nicknamed the "Lucky Lou".

As Cox recalls, he was stationed in Sky Forward that July night, situated above the bridge in one of the ship's highest battle stations. His duty was to operate the anti-aircraft fire-control computer. "In 1943, a computer was a series of dials and knobs whose inputs had to be manually matched," he explained. "This generated a solution, directing which target the five-inch guns should fire at." While he was carrying out his duties the Japanese torpedo suddenly exploded near the bow, and the entire ship – all 10,000 tons – shook violently. A wall of water shot upward hundreds of feet then crashed back down on the ship, while 143 feet of the underwater bow separated and dropped to the bottom of the ocean. There were 1,200 men on the *St. Louis* that day, and almost to a man they feared that the ship would sink.

In the inky blackness, panic began to set in, with many of the men fearing they would share a similar fate to the crew of their sister ship, sunk by a Japanese torpedo just a week earlier. That ship, the light cruiser *Helena* (CL-50), had been part of the same task group, charged with protecting troop ships involved in the allied invasion of New Georgia. She had moved into the Kula Gulf just before midnight on 4 July.