

The Perfect Flood

DEVASTATION, COURAGE AND THE HEROIC RESCUE
EFFORTS OF U.S. COAST GUARD HELICOPTER 1305

Doug Kroll

HELLGATE PRESS



ASHLAND, OREGON

The Perfect Flood

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Published by Hellgate Press

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Hellgate Press
PO Box 3531
Ashland, OR 97520
www.hellgatepress.com

Editing: Harley B. Patrick
Cover design: L. Redding

Library of Congress Cataloging-in-Publication Data

Kroll, C. Douglas.

The perfect flood : devastation, courage and the heroic rescue efforts of U.S. Coast Guard helicopter 1305 / Doug Kroll. -- First edition.

pages cm

Includes bibliographical references.

ISBN 978-1-55571-719-3

1. United States. Coast Guard--Search and rescue operations--History--20th century. 2. Helicopters in search and rescue operations--California--History--20th century. 3. Helicopters in search and rescue operations--Oregon--History--20th century. 4. Floods--California--History--20th century. 5. Floods--Oregon--History--20th century. 6. Rescue work--California--History--20th century. 7. Rescue work--Oregon--History--20th century. 8. California, Northern--History--20th century. 9. Oregon--History--20th century. I. Title.

VG53.K77 2012

363.34'93810979409045--dc23

2012031531

Printed and bound in the United States of America
First edition 10 9 8 7 6 5 4 3 2

This book is dedicated to the memory of Joe Accamo, Henry (Hank) Pfeiffer, George F. Thometz, Jr., and Richard (Dick) Leisy, and to Vic Roulund, the only surviving hero of these rescues.

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Foreword

The heroic actions of Coast Guard men and women, occurring on a daily basis, only occasionally engender major media reporting because of an incredible scenario. Most rescues involve a single “sortie” by a single helicopter. Sometimes, because of distance involved or unavoidable delays in prosecuting the mission once en route, there may be a required refueling or stopping at some safe place, awaiting a change in weather or other factors that pose unacceptable risk. Crew coordination and unity of effort, along with the professional skill of each crew member in performing the duties of pilot, co-pilot, hoist operator, and rescue swimmer are necessary elements in every case; but, sometimes, the successful rescue results from on-the-spot innovation—not something taught nor envisioned by published doctrine.

In this book, Doug Kroll brings to the reader an incredible true story of rescues which occurred more than a half century ago—not in raging seas, far offshore, but in Northern California floods during Christmas of 1955. The differences between current-day helicopters and the then-current HO4S are profound, and today’s aircrews may have more than a little difficulty in appreciating how “primitive” that helo was...not to mention the bare bones crew of pilot and hoist operator, which was the norm, day or night.

On Christmas Eve, the aircrew decided that a rescue could not be successful without adding one additional crewman, who was told to “get an axe and a knife” before boarding, and then in a dramatic display of ingenuity and perseverance, became, arguably, the Coast Guard’s first rescue swimmer—some thirty years before inauguration of that service’s eminently successful Rescue Swimmer program.

But then, hold on to your hats: an incredible story of one Coast Guard aviator, who, recognizing that helos could not do the job, in those same flood waters, climbed down from the cockpit and transformed himself from pilot to rubber boat coxswain—then, with incredible determination and innovation, saved the lives of two women and two children.

While I revel in learning, today, of miraculous feats by Coast Guard helicopter crews flying their magnificent machines—and marvel at their performance—I must admit to feeling a special pride and appreciation when I learn of the heroic actions of the early pioneers of Coast Guard aviation.

VADM Howard B. Thorsen, USCG (Ret)

Coast Guard Aviator #776

Coast Guard Helo Pilot #442

Ancient Albatross #13

Acknowledgments

I first became interested in these dramatic rescues when reading Tom Beard's article "Yuba City" in the Foundation for Coast Guard History's coffee table book, *The United States Coast Guard* (2004). The more research I did, the more fascinated I became with this story. Along the way I have received assistance and encouragement from Mr. Beard, as well many others, including Dr. Dennis Noble, a fellow author and friend. Vice Admiral Howard Thorsen, USCG (retired) and VADM Charles Larkin, USCG (retired), both of whom flew the HO4S early in their carriers, provided not only encouragement but helped me to understand what it was like to fly that aircraft. I am especially indebted to VADM Thorsen for reading the entire manuscript, offering many helpful suggestions, and writing the foreword.

Julie Stark, Director of the Community Memorial Museum of Sutter County and her staff in Yuba City, California along with the staffs of the San Francisco Public Library, the San Bruno Public Library, and the Sutter County Library in Yuba City, as well as to Don Libertino, President of the Sikorsky Historical Archives in Stratford, Connecticut were eager to help me in my research, and I want to acknowledge them.

I am also indebted to the Coast Guardsmen who served at Coast Guard Air Station San Francisco in 1955 for their contributions, espe-

cially Roy Vander Putten, but also Jim Dillian, Art Perry, Art Roset, Frank Shelley, and Karl Zengel.

I am especially indebted to Victor Roulund, one of the heroes of these rescues, along with family members of the other participants who provided me with invaluable information. Without their assistance this book would not have been possible.

Introduction

Throughout its storied history, the U.S. Coast Guard has consistently played an important role in helping the country respond to and recover from natural and manmade disasters. The Coast Guard joined other federal and state agencies to assist flood victims in the upper Middle West in 1951 and 1952 and again in western Oregon in 1953 and 1954. But these, and all other previous flood disasters were relatively minor occurrences compared to the devastating flood of December 1955 in northern California. The Coast Guard has been “Always Ready” to search for and rescue those in need when major flooding occurs. In those flood rescues of Christmas Eve 1955, one Coast Guard helicopter, HO4S CGNR-1305, piloted alternately by Lieutenant Commander George F. Thometz, Jr., and Lieutenant Henry J. Pfeiffer, and with Chief Aviation Machinists Mate Joseph Accamo and Aviation Machinist Mate Second Class Victor Roulund taking turns as crew, pulled 138 people to safety. Mere statistics, however, are inadequate to do justice to this rescue operation. The first fifty-five were picked up in darkness, with the “chopper” hovering above trees, chimneys, and television antennae, the only illumination being provided by an Aldis lamp held by the hoist operator. At one time three women and eleven children were somehow squeezed into the helicopter, which one historian noted must “be a record for an H04S.”¹ Working from 4:15 A.M. to 4:00 P.M. Christmas Eve they established an all-time record for the number of people rescued by helicopter in a twelve hour period.

Captain John “Muddy” Waters, USCG (retired), a legendary Coast Guard pilot and author, described the rescue in these words: “The Coast Guard pilots’ refusal to quit while any person was known to be in danger, together with their own and their crews’ readiness to accept great personal risk as the price of saving others, followed the proud traditions of their service.”²

The performance of this helicopter and four Coast Guard airmen, the Commandant of the Coast Guard would note, was truly an “outstanding performance,” even for a service noted for rescues. Tom Beard, author of *Wonderful Flying Machines: A History of U.S. Coast Guard Helicopters*, would say that this episode on Christmas Eve 1955 “pushed the rescue helicopter into the limelight.” He went on to assert that “It took only one helicopter and four stalwart crewmen to change the future of Coast Guard aviation.”³

While the other military services were operational with a major dedication to helicopters by the early 1950s, there was still a debate within the Coast Guard over whether sea planes or helicopters were better for rescues at sea. This helicopter and its personnel, during the Yuba City flood of December 1955, ended that debate. The helicopter would quickly replace the seaplane in most aerial rescues of persons from the water and in the evacuation of medical cases from ships at sea.

Tom Beard would go as far as to argue that the “Yuba City case marked the end of Coast Guard aviation dating from 1916, and opened up a new ‘road ahead.’ The late 1950s and early 1960s saw a major change to Coast Guard aviation.”⁴

The case can also be made that AD2 Vic Roulund, in his rescue of a paralyzed woman trapped in a house trailer, became the Coast Guard’s first “rescue swimmer,” even though that rating would not be created until 1985.

Even more amazing is the fact that George Thometz, one of the pilots, had only recently qualified as a helicopter pilot and had very few hours flying the HO4S. Joe Accamo, one of the aircrew members,

was nearing retirement and had a bad back, and Vic Roulund, the other aircrew member, was twenty-two years old and ending his enlistment in the Coast Guard.

The 1952 rescue of crewmen of the Pendleton off Cape Cod, Massachusetts by the crew of Coast Guard thirty-six foot motor lifeboat CG-36500 is legendary and known by almost everyone in the Coast Guard and is mentioned in virtually every history of heroic rescues made by the Coast Guard. It is also the subject of a number of books. These 1955 dramatic helicopter rescues at Yuba City, California deserve to be the aviation equivalent. They were as dramatic, record setting, and demanding as any rescues made by Coast Guard aviators. As Igor Sikorsky, inventor of the helicopter, said of those who made dramatic rescues in helicopters, “Their action, representing considerable skill and courage, equals the most heroic of battlefield achievements.”

The rescues made on Christmas Eve 1955 in Yuba City were truly equal to the most heroic of battlefield achievements and deserve wide publication and recognition. A journalist writing shortly after these rescues said, “Since there are many trees and television wires in the flooded area, the ‘copter crews ‘risked their lives time and time again to pick up stranded victims.”⁵

It is long past time when the story of the dramatic rescues made by his helicopter should be told. I am indebted to Victor Roulund and family members of the other participants as well as Coast Guardsmen who served with them who provided me with invaluable information.

THE PERFECT FLOOD



Homes stacked helter-skelter in the wake of the Yuba City flood. (*Photo courtesy of the United States Army, www.army.mil*)

One

The Flood

It all started with a mass of turbulent air 2,000 miles in diameter which originated near Japan and became moist tropical air (often described as a “Pineapple Express”) as it moved across the Pacific Ocean in a week during December of 1955. It stopped a few hundred miles off Washington State. It spawned other storms which pounded the California and Oregon coasts. These storms produced moderate to occasionally heavy precipitation along the Pacific Coast north of Monterey. Many reporting stations received more than half their normal December rainfall by the 14th. Fresno and Oakland received more than their normal December rainfall by mid-month. The warm rain loosed the snow pack high in the Sierra Nevada Mountains and sent the melted snow gushing into rivers and streams. One news account stated that it “melted Sierra snow packs like a blowtorch.”¹ By December 18th heavy rain began falling, day after day, for nine days. Precipitation of twenty inches or more were recorded in numerous valley and coastal rain gauges, while several in the Sierra exceeded thirty inches, breaking a sev-

enty-eight-year record. Melting snow combined with the heavy rain streamed off steep hillsides in the area and swollen mountain streams burst out of the foothills. The Klamath, Russian, Mad, Eel, Ten Mile, Navarro and other rivers picked up speed as they boiled out of mountain gorges toward the Pacific.

A 1968 study described these floods as the most widespread and destructive of any in the recorded history of northern California since the legendary floods of 1862 and 1867.² From the standpoint of relief expenditures, it would be the sixth worst disaster since the founding of the American Red Cross in 1881.³

Officials described it as the greatest disaster in California since the San Francisco earthquake in 1906 and “the greatest disaster of its kind which ever occurred in California.”⁴ In California and Oregon at least 80 persons were killed, 335 hospitalized, 4,338 injured, more than 50,000 were left homeless, 1,277 homes were destroyed, 2,725 homes were wrecked, and over 225 million dollars of property was damaged. Many thousands of livestock were lost and as a result of the long period of time the water covered the orchards, many highly developed orchard properties were completely destroyed. It was hard to determine the loss in business volume and reduced crop production in California.

The floods also extended into Nevada. Reno suffered heavy damage from the rampaging Truckee River, which cut the city in half. Undaunted tourists continued to gamble and joked about floating crap games at Harold’s Club. The city suffered \$5,000,000 in damages.

In southwest Oregon the heaviest rains in seventy-eight years brought floods that killed twelve people and flung huge logs off cliffs like harpoons.

The gale-force winds that accompanied the storm snapped power lines in the Bay Area sending widespread areas of San Francisco, Marin and San Mateo Counties into darkness. Gusts of up to 100

miles-per-hour were measured atop Mount Tamalpias and plate glass store windows were smashed in San Francisco as well as roofs ripped off of several houses.⁵ The major wind damage was to Grace Cathedral, standing atop Nob Hill, which suffered \$75,000 damage to its roof and blew in a large clear window in the rear of the Cathedral.⁶

Along the coastal section of California north of San Francisco, the destructive floods began about December 19 and crested about December 22. The Russian River flooded from Ukiah southward. The business section of Guerneville became half submerged. The Russian River emergency was the one that brought in the federal armed forces, including the Coast Guard. The entire Eel River flooded, especially after the Redwood Valley Dam on the upper portion of the river overflowed. Communities along the Eel River and the Klamath River were hit especially hard by the floods. Five small towns with populations close to 500 were reported “smashed” or “wiped out.”⁷

South of San Francisco the floods were not as severe as those in the north. Santa Cruz had six-feet of water in the business district as the San Lorenzo Creek overflowed and cut the city in two. All but two bridges were knocked out and the approaches to the two that remained were flooded. Stores were shattered, houses picked up off their foundations and tossed about and five people drowned within the city limits. Flooding was also reported to cover 125 blocks in Stockton and other cities on the San Joaquin River system. Visalia, one of the first and hardest hit areas, was 75 percent under water after a St. John’s River levee burst. Parts of Fresno, and Exeter were also flooded. Almost every major highway north of the Tehachapi Mountains was cut, including Highway 99; only U.S. 50 was open over the Sierra, and that to eastbound vehicles only, and travel along many portions of the coast was impossible. The flooding wrecked railroad lines and cut coastal Highway 101. Even Los Angeles did not escape completely. Normally busy Flower Street became awash

at the worst state of the brief flooding of the Los Angeles River.⁸

Beginning around December 22, flood conditions prevailed in the Sacramento Valley. The main river of the Sacramento basin—the Sacramento River itself—was for the most part kept within its banks during the flood. The system of levees and by-passes comprised in the Sacramento River Flood Control Project had been in the making for nearly fifty years, and for the previous decade the basin had the additional protection of Shasta Dam. In this flood, Shasta Dam trapped and held 1,120,000 acre feet of runoff of the upper Sacramento River. Folsom Dam, completed only months before the flood, saved Sacramento from what might have been the worst flood disaster in its history. There was some flooding along the smaller tributaries of the Sacramento—Stony Creek, Chico and Little Chico Creeks and Butte Creek—but the tributaries that caused the real problems were the Feather and Yuba Rivers.

Near the headwaters of California's two most important river systems, the Sacramento and the San Joaquin, great dams such as Shasta, Folsom, Friant and Pine Flat held back the rushing water that might have caused even more damage and death. There was no such barrier on the Feather River, where the proposed \$400 million concrete Oroville Dam, planned as the world's tallest, was still stalled in the state legislature.

The most disastrous parts of the flooding centered at the twin California cities of Marysville (population, 12,500) and Yuba City (population, 9,000), about 120 miles northeast of San Francisco. Marysville was the seat of Yuba County and Yuba City was the seat of Sutter County. These two cities face each other across the Feather River. Thirty miles north of these cities the Feather River issues out of the foothills above the city of Oroville, while less than ten miles to the east the Yuba River enters the valley to join the Feather River just below Marysville. Both cities are at an elevation of only forty-five to

fifty-five feet above sea level, but great eighty-two foot high earthen levees had been constructed in 1875 on both sides of the Feather River. Floodwaters from these rivers threatened both Yuba City and Marysville, but the danger to Marysville was considered greater. This city, lying in a bowl-shaped area completely surrounded by a separate levee eighteen feet high and seven miles in circumference, appeared doomed by the floodwaters already approaching the top of the levee. The city was evacuated around December 21 as flooding seemed imminent. Much of the population was sent to Yuba City. Yuba City's last major flood had been the "Great Flood" of 1907.

On the other side, Yuba City seemed safe, even though it had no secondary protective levee, simply because of the broad expanse of lowlands extending miles to the south and west. Attempts were made to bolster the levees with assistance of the military personnel from nearby Beale Air Force Base. These attempts proved to be unsuccessful.

A major levee break occurred about noon on December 23 a half mile south of Nicolaus Ranch, which itself is nineteen miles south of Marysville. It flooded the entire Nicolaus area, from which residents had been evacuated that morning.

An even greater and much more tragic levee failure occurred at approximately midnight on December 23 when the west levee of the Feather River suddenly failed two and three-quarters miles south of Yuba City and one quarter mile north of Shanghai Bend and opposite a landmark known as "Gum Tree." This was at the confluence of the Yuba and Feather Rivers. At the time the river at Yuba City was at its crest at approximately 82.5 feet. Its normal height was forty-seven feet. When the failure occurred the flow was 386,000 second-feet, whereas the levee was built to carry only 276,000 second-feet of flow.

In less than a minute the break was approximately 2,200 feet in width. The break was wide enough to allow the largest passenger ship in the world (at that time), the *Queen Mary*, to pass through.

The initial surge of water spread northerly into Yuba City. Within forty-five minutes, all but about one sixth of Yuba City was flooded. A wall of water twenty feet high and 2,200 feet wide charged across Yuba City like a tsunami, smashing and battering homes, stores, and orchards, leaving in its wake devastation, uprooted trees, smashed homes, and utter havoc as far as the eye could see. The Ledford tract and the downtown were the worst hit. The flood area in the entire county was between 140 and 150 square miles, including Yuba City and rich farmlands to the south.

When the levee broke, the roar of the oncoming water acted as an evacuation notice for many. The city fire siren was sounded and the Sutter County Sheriff and Yuba City police spread the alarm as best they could.

It was not until just after 2:00 A.M. on Christmas Eve morning that the shocking news was announced by radio broadcasts and the order given to evacuate Yuba City immediately. People fled with the clothes on their backs. About 9,000 residents left these semi-rural areas by means of some 2,000 autos interspersed with trucks and buses, establishing a record for the largest and speediest evacuation ever staged in the West. Most of these people took refuge at Beale Air Force Base seven miles to the east.

In Yuba City the water stood four to six feet deep over a wide area. There were low places in the city where depths of twenty to thirty feet were reported. About ninety percent of the city and 100,000 acres of land were flooded. Two hundred eighty houses in Yuba City were destroyed and 1,000 more suffered major damage. A total of 2,100 out of 3,000 homes in the city were affected by the flood.

By 3:00 A.M. everyone who was able had evacuated. Due to the speed with which the flood waters overtook the city, many people were stranded on their housetops or overtaken in their cars and forced to scramble for high ground by climbing trees or taking refuge in and on the houses of strangers.

About 3,000 people in the Yuba City area were unable to evacuate and marooned by the floodwaters and would have to be rescued by boats, amphibious vehicles and helicopter. Rescue efforts by federal, state, and local agencies and by uncounted civilian volunteers prevented a greater loss of life. Memorial Hospital in Marysville would be used at a screening center for victims of the flood, while nineteen other hospitals, including one as far away as San Francisco, would treat the Yuba City area sick and injured.

During the afternoon hours of December 24, California Governor Goodwin J. Knight made a five-hour aerial inspection of the flood-stricken areas in his plane, the Grizzly, a California National Guard DC-3. He later commented that he found the desolation “hard to believe.” As he flew over Marysville, Governor Knight likened it to a “city of the dead.” Ironically, Marysville residents had been evacuated first to Yuba City in the belief that Marysville would take the brunt of the flood. Instead the combined populations were forced to flee Yuba City.⁹

The flood gained national attention and was written about in *Look*, *Life*, *Newsweek* and *Time* magazines. It made the front page of the *New York Times* on December 25. Besides the devastation, that fact that it occurred during the Christmas season awakened the sympathy of the nation. Public decorations hanging across Yuba City’s main street contrasted dismally with the deserted and flooded condition of Yuba City.