

Biographic Background of the Pioneer Para-doctors and Flight Surgeons involved with the origins of USAF Pararescue

The original para-docs of the fledgling Air Rescue Service were significantly influential in determining the mission need core skill and human factors needed for what became the Air Force's enlisted pararescue specialty. This document provides a brief introduction to the physicians who determined and decided the level of semiprofessional medical knowledge, skills, and task proficiencies necessary to provide effective medical treatment at the location parachuted to.

Parachute-doctor and Parachute-medic capabilities developed during the 1940s as an all-risk effort appropriate to all types of aerial search for downed and missing aircraft and immediate air-dropping of survival equipment and medical personnel to stabilize injuries and save life when the aerial search located crew and/or passenger survivors. Although various causals resulted in the parachute-physician utilization being phased out by 1950, the original para-doctors remained influential in deciding and determining the relevant medical and survival core skills and knowledge performance necessary to accomplish the rescue for all such emergency response to the remote and isolated incident location of the survivors of the downed and missing aircraft.

Although all such emergency response requires use of aircraft, command and control structure and other personnel and resources having an implicit response readiness condition to be available at the right time to facilitate and accomplish the rescue, there is no effective emergency response if there is no effort on the ground to stabilize the incident, protect life by providing security and survival assistance, and saving life by providing emergency medical treatments. This degree of impact of being committed off the aircraft and on the ground regardless of the size or complexity of the incident always has risks and requires proper command and control interface to effectively and efficiently complete the rescue. The always a risk and necessity for proper command and control interface contributed to the unofficial mission statement among USAF Pararescuemen since the early 1950s that the mission of ARS/ARRS is to deploy and support pararescue, and don't forget it. Nobody during the 1950s and 1960s in the higher national security and space program levels of operational plans and requirements decision making understood the to deploy and support the parachute rescue team concepts of employment better than the original para-doctors.

Understanding how and why these physicians were so influential requires knowing something of their military and other federal agency or civilian background and their accomplishments. Each had experienced based directly on mission accomplishment and several became involved with the manned space program and strategic reconnaissance programs where a need to have an air-ground system having an implicit response readiness condition to be available at the right time to facilitate and accomplish the rescue or the recovery of sensitive materiel and devices globally was an essential, if not critical, mission need.

The most influential was perhaps **doctor Donald D. Flickinger** (b. 1907, d. 1997) who retired from the Air Force in 1961 as a brigadier general and later was a consultant to the National Aeronautics and Space Administration and other agencies. He graduated Stanford University, Calif., in 1929. Four years later, he received his master's degree from Stanford Medical School,

also taking post-graduate training at Vanderbilt School of Medicine and Harvard School of Medicine. He entered the Army Air Forces in 1937, and was sent to the School of Aviation Medicine at Randolph Field, Texas for training as a flight surgeon.

His official Air Force biography discloses he was eventually ordered to the China-Burma-India Theater as flight surgeon for the Air Transport Wing flying the "Hump." But his official Air Force biography and many books about the manned space program are lacking in disclosing much about his contributions to Human Factors (ergonomics), survival and high altitude survival and influences on the origins of the Air Force Pararescue specialty.

The first recorded historical activities demonstrating his initiatives and involvement with the developing of Pararescue concepts and capabilities is his voluntary jump accomplished on August 2, 1943 into the rugged Japanese Army occupied jungles of northern Burma to rescue the crew and passengers of a downed C-46. In undertaking this rescue, he and the two enlisted medics who jumped with him tendered to the injured and then proceeded to hike them for a week or so to safety.

His penchant for jumping into rugged jungle whenever Allied planes went down on the supply route to China contributed to him being assigned in June 1944 to the Air Force School of Applied Tactics, Orlando Florida as chief of the Aeromedical School. While in this influential position, he advocated and established the first formal survival school and advocated with the commander of the Air Rescue Service the establishing of parachute and land rescue teams. In 1947, his continued efforts and influence contributed to the approval of and establishing of a new Rescue-Survival (Pararescue) occupation.

On November 26, 1951 he was assigned to the Air Research & Development Command as the first director of human factors at that command. In this capacity he was responsible for research and development in the human factors area dealing with the biologic, psychologic and sociologic sciences. Recently declassified documents disclose doctor Flickinger was advising the Central Intelligence Agency (CIA) on high-altitude survival from 1954 to 1974. Many other published book and articles disclose he was also significantly involved with NASA's manned space program and specifically in the screening and selecting of the Mercury project astronauts.

The Don Flickinger Trophy, first awarded by Air Rescue Service in December 1954 for the best Pararescue team, is named to honor General Flickinger's contributions to the origins and development of the Air Force's operational capabilities.

Doctor Hamilton H. Blackshear (b. 1922, d. 1997) who retired for the Air Force with rank of Colonel was assigned Surgeon, HQ Air Rescue Service, by orders dated 24 July 1953. He graduated from Tusculum College of Greenville, Tenn. and served in the Navy V-12 program during World War II, completing his pre-medical education at the University of Virginia and the Naval Hospital in St. Albans, N.Y.

He entered the Air Force Reserve after the war and he completed his medical training and received his degree from Cornell University Medical School in New York City. He returned to active duty during the Korean War and completed Para Rescue and Survival training in 1951, Advanced Survival training in 1956; Flight Surgeon training in 1963; and Special Air Warfare

training in 1967. Dr. Blackshear was assigned to the medical staff at Holloman Air Force Base where he worked with the unit training HAM, the first chimpanzee to go into space. Subsequently, he served as Chief of Medicine with the space program at the Pentagon in Washington, D.C. After retiring from the Air Force, he served NASA as Medical Director.

During the Korean War, he was assigned to Detachment 1, 3rd Rescue Group, Korea and obtained much experience in casualty evacuation of wounded from the front lines utilizing helicopters. He is acknowledged being influential in the development of the level of medical treatments Pararescue specialists are trained to provide.

Doctor Rufus R. Hessberg (b. 1921, d. 1995) retired from the Air Force with the rank of colonel in 1973. A graduate of Yale University and Albany Medical College, Dr. Hessberg entered active duty with the Air Force in 1947; he served as flight surgeon and parasurgeon, making an important contribution to air rescue work. In the summer of 1955 he was transferred to Wright Air Development Center, where he served as Chief of the Aero Medical Laboratory's Escape Section and later headed that laboratory's entire Biophysics Branch.

Doctor Hessberg probably has the longest operational participating parachute rescue team utilization history of all the para-docs. His known mission participation history begins with OPERATION HAYLIFT (1949) and appears to end with a jump mission during October 1954 when he was the 12th AF flight surgeon. He made this jump with five enlisted pararescue specialists on 27 October 1954 to a small and dangerous drop zone at about 7,500 feet on Mount Carbone in the Northern Maritime Alps on. Once on the DZ they climbed up to the near vertical slope to the wreckage of the C-46 that flew into the 8,500-foot elevation of the 9,243 feet tall mountain during the night of 24 October 1954. Unfortunately, none of the 3 crew and 18 passengers survived the impact. They carried all 21 victims down the cliffs and steep terrain to where pack mules pack mules could be utilized to move the bodies out of the mountains. A few months after this mission he was reassigned back to the United States at which time he began to become involved with the manned space program and earning reputation of being one of the country's leading experts in aerospace medicine.

Doctor Pope Beauregard Holliday Jr., (b. 1921, d. 2003) He attended the University of Georgia and graduated Phi Beta Kappa and a member of Sigma Alpha Epsilon fraternity. He attended Harvard Medical School where he graduated in 1945. He completed his internship at Johns Hopkins Hospital in Baltimore and his residency at Boston Children's Hospital and Vanderbilt University follow by a Post Graduate Fellowship at Harvard Medical School. During this time, the Army commissioned him as 2nd Lt.

The HQ Air Rescue Service histories disclose he reported to HQ Air Rescue Service November 27, 1946 and was assigned to the 5th Emergency Rescue Squadron. Records indicate he was promoted to Captain in April or May 1947 and proceed to disclose during July 1947 he was in Washington conferring with personnel of Headquarters Army Air Forces concerning concepts and need for pararescue teams and personnel. At the conclusion of these discussions, the Air Rescue Service was given verbal approval, pending written authorization, to organize and train six pararescue teams.

His May 27, 1947 parachute jump from an OV-10 to within 15 feet of the survivor of a B-17 crash in the Nicaraguan jungle certainly contributed to the approval. The jump was necessitated as one of the thirteen surviving of fifteen crewmen who bailed out of a flaming B-17 had failed to retrieve any of the six sustenance kits dropped to him. The only conceivable explanation was that the man was badly injured. As there was no clearing nearby where a helicopter could land and a ground party would take days to hack through the jungle to the survivor's location the only solution was to parachute assistance to him. Once to the survivor, Holliday found him lapsing into shock due to combination of a lack of fluids and the intense heat. Six days later, when a ground party broke through the jungle to them, the survivor had been returned to sufficient health that he could walk to an area the ground party had cleared as a landing zone for a helicopter evacuation. In his mission diary, Captain Holliday wrote: "The speed and ease with which the parachutist can reach survivors in isolated location make it highly advisable this mode of transportation be used whenever possible.

On Air Force Day, August 1, 1947 Captain Holliday was a member of the pararescue team formed for a public demonstration at Bolling Field, Washington, D.C. The team parachuted to a simulated crash site, treated simulated patients, and prepared them for evacuation by means of helicopter. The entire demonstration was broadcasted on NBC television.

Captain Holliday separated from active duty in 1950 and went into private practice of pediatrics.

Doctor Stanley H. Bear (b.1921, d. 1985) who retired from the Air Force in 1973 with rank of Brigadier General was also one of the original pioneer para-docs and is credited with making 43 parachute jumps doing Pararescue duties. He was drafted into the U.S. Army as a private in June 1943 and served 34 months as an enlisted man. Upon discharge in March 1946, he was commissioned a first lieutenant in the U.S. Army Reserve. He was called to active duty in August 1947 and assigned to the Medical Field Service School at Fort Sam Houston, Texas, as a physician. He then completed parachute and glider training at Fort Benning, Ga. Dr. Bear became a pararescue physician in the 5th Air Rescue Squadron, Westover Field, Mass., in November 1947. He attended the primary course in aviation medicine at Randolph Field, Texas, in March 1949. He flew 82 combat missions totaling 186 hours in Southeast Asia in the RF-4C Phantom, F-100F Super Sabre, 0-1 Bird Dog and 0-2 forward air control aircraft, and the A-37 attack jet. In March 1969, General Bear became the assistant to President Nixon's personal physician, with responsibility for assisting in keeping the president, his family and staff in good health. During his assignment as vice commander of the U.S. Air Force School of Aerospace Medicine, Brooks Air Force Base, Texas; surgeon of Headquarters Seventh Air Force, Tan Son Nhut Airfield, Vietnam; deputy command surgeon, Pacific Air Forces, Hickam Air Force Base, Hawaii; and Command Surgeon, Military Airlift Command he was often influential in the oversight of pararescue medical programs.

Doctor Charles Harvey Roadman (b.1914, d. 2000) retired from the Air Force with the rank of Major General in 1971. At the time of his retirement, he was serving as commander of the Aerospace Medical Division of the Air Force Systems Command with headquarters at Brooks Air Force Base, Texas. He was responsible for bioastronautics research and development programs in support of Air Force systems development, assigned research programs in support of the Air Force personnel system, and aerospace and clinical medicine programs.

Roadman entered active military duty with the Medical Corps in October 1940. He completed the School of Aviation Medicine in 1941, and entered flying training and received his pilot wings in 1942. During World War II, he assisted in the development of the Central Pilot Instructor's School, and actively instructed both in the flying and ground school phases.

Although he wasn't a para-doc, the HQ Air Rescue histories disclosed he accompanied doctor Donald Flickinger to the conferring meetings with personnel of Headquarters Air Rescue Service and Headquarters Army Air Forces that were deciding on the approval of establishing pararescue teams. His involvement most likely happened during 1947 as result of his assignment to the School of Aviation Medicine as chief of the Preventive Medicine Division.

The historical documents further disclose both he and doctor Flickinger were to research the problems of medical aerial delivery kits, bundle identification, oxygen therapeutic assembly for aerial delivery, and improvements in insect repellants.

Doctor Roadman graduated with a bachelor of science degree from Dakota Wesleyan University. Following his undergraduate work, he graduated from Northwestern University Medical School with bachelor of medicine and doctor of medicine degrees in 1939 and 1940, and served his internship at Baylor University Hospital, Dallas, Texas

His duty assignment history suggests he was familiar with Pararescue medical abilities and supported efforts pararescue teams be involved with the rescue and recovery of astronauts. He was chief of the Human Factors Division in the Directorate of Research and Development, Headquarters U.S. Air Force (1955-1960) and various National Aeronautics and Space Administration assignments (1960-1963) where he was responsible for the planning, programming, and implementation of all medical development and medical support for Projects Mercury, Gemini and Apollo, and the Manned Lunar Landing Program.

Doctor Burt Rowen (b. 1921, d. 2012), retired from the Air Force with rank of Colonel in 1986. Dr. Rowen graduated from Lafayette College in Easton, PA, in 1942 with a B.A. and earned an M.D. from the New York University College of Medicine in 1945. He completed the Primary Course in Aerospace Medicine at Randolph AFB, TX, in 1946 and then attended the Airborne School at Fort Benning, GA. He was a para-rescue surgeon with the 5th Rescue Squadron before entering flying training. He graduated as a pilot in 1948 and flying with the 56th Fighter Group for a year. From 1949-1951, he became a faculty member of the School of Aviation Medicine at Randolph AFB. From 1952-1955, he was an Assistant Air Attache (Medical) in Stockholm, Sweden. He then completed the National Naval Medical Center Preventive Medicine Course at Bethesda, MD, in 1955. From 1956-1962, he was Chief of the Bioastronautics Branch and Bioastronautics Coordinator for the X-15 at Edwards AFB, CA. He was then appointed the Assistant for Bioastronautics to the X-20 (Dyna-Soar) System Program Director in 1962.

Doctor Amos R. "Bud" Little Jr. (b. 1916, d. 2010), served in the Army Air Forces from 1943 to 1946. During those years he was performing Air Rescue Service parachute duties and accomplished more than 50 rescue jumps during this period. In 1944 he parachuted to the 11,000-foot crash site of a B-17 and provided medical attention to four surviving crewmembers. At the time, it was listed as the highest parachute landing on record. During his three years of military service, he received the Army Commendation Medal, the Air Medal and the Legion of

Merit. After separating from military service he continued on as a volunteer “mercy” jumper with the U.S. Forest Service, parachuting to the aid of injured firefighters and others. He also assisted the Forest Service and other agencies in establishing parachute units and search and rescue organizations.

Doctor Little received his bachelor of arts degree from Dartmouth College in 1939, his medical degree from Johns Hopkins University, School of Medicine in 1942, and accomplished his rotating internship from 1942 to 1943 at the Mary Hitchcock Memorial Hospital. He then entered the Army Medical Corps in 1943, and in the same year became one of the first doctors to be trained in Smoke Jumper parachuting methods by the U.S. Forest Service.

After leaving the Army, Dr. Little settled in Helena, Montana and practiced general medicine in Helena from 1946 to 1978.

Doctor Little grew up with a love of skiing, starting his racing career at Gunstock in Laconia, NH and skiing at the Vermont Academy. He grew his skills as an athlete, racing for Dartmouth College from 1936-39 winning a national slalom title. After separating from military service he reclaimed his passion for the sport, becoming president of the then National Ski Association’s Northern Rocky Mountain Division, and also headed up the U.S. alpine championships in 1949-50 in Whitefish, MT, as well as playing a key role in the 1950 FIS World Alpine Ski Championships in Aspen, CO.

A growing leader in alpine skiing, he became the representative for his sport with the U.S. Olympic Committee from 1952 through 1980, serving as the alpine team manager for the 1960 Olympics in Squaw Valley, as well as the FIS World Championships in 1962 and ’67. He served as a competition official at both the 1964 and ’68 Olympics.

While serving on the governing board of the National Ski Association (now U.S. Ski and Snowboard Association) from 1948-73, he also took on international roles. He was a member of the FIS Alpine Committee from 1960-67, and served as a vice president of the FIS from 1967-88, remaining an honorary member of the FIS Council.

Archived documents reveal the identities of other physicians and para-doctors contributing the formation of the enlisted pararescue specialty from 1947 to 1950, but discloses very little specifics about them and their involvement.

Captain Randall W. Briggs (para-doctor/pilot-physician); Captain Robert Goulding (para-doctor); Captain A.G. Lewis (Assistant of the Surgeon, Air Rescue Service and Chief Medical Instructor in the Rescue Survival School); Major Frank Perri; Major Victor Young; Lt Charles Beal (5th Rescue Sgdn-MacDill AFB); Lt Holbrook Bonny (Rescue Sgdn B-Hamilton AFB); Lt Robert Wiese (para-doc); and Major Wallace Brannon, and Rufus Hessberg (para-doc).

Lt Hillmuth S. Schroeder, Medical Corps Surgeon served as ARS surgeon until September when Captain Benjamin A. Johnson, Medical Corps Surgeon, was assigned to the position. Captain Johnson arrived directly from 3rd Rescue Group in Korea where he had served in a key position as the unit gave direct support to combat operations.

Captain Robert H. Klotzman, ARS acting medical officer, was directly responsible for the course of study set up at the School of Aviation Medicine in emergency medical procedures. Captain Klotzman formulates all procedures regarding Air Rescue Service emergency medical teams.

The pioneer para-doctors other physicians identified in this document had determining influence in the origins of the enlisted pararescue specialty. Their influences are the predominant causes for certain decision being made. They advocated USAF pararescue as the best solution for particular operational need to put emergency response at the location of an incident when the incident area (location) is many miles over the horizon from the staging area (location) and access is only possible by parachute or helicopter insertion. The decision to utilize pararescue to do many space program and national reconnaissance program missions was unlikely to have happened if the original para-doctors were not in position of influence to acquaint mission planners and commanders at the highest decision making levels with pararescue being an available trained and equipped operational team capability.