THE STORY OF
AIR EVACUATION
1942-1989
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AIR EVACUATION
1942-1989

by
The World War II Flight Nurses Association
1989
DEDICATION

This history is dedicated to the Officers, Nurses and Enlisted Technicians of the Medical Air Evacuation Squadrons, who made the supreme sacrifice and paid with their lives while performing their duties doing what they did best — Air Evacuation of the sick and wounded.

The World War II Flight Nurses Association is proud to honor their lives and deeds in this book. May future generations honor their memory.

CREDITS

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PREFACE

It has been the editor's intent with this book to present a history of Air Evacuation. Sections of this book were taken from a book published in 1944 for the Army Air Forces Troop Carrier Command at Bowman Army Air Base, Louisville, Kentucky. Sections from the history of the 801st MAES in Korea were also used.

From June 1943 to October 1944, one thousand and forty-nine nurses completed the School of Air Evacuation at Bowman Field. Many had taken a shorter course prior to that date and went directly overseas to combat areas to evacuate the sick and wounded. Most of these graduates were not aware that the Bowman Book existed until the reunion of the WWIIFNA in May 1988. After viewing it, many voiced a desire for the book. However, the publishing company had long since gone out of business and obtaining a copy was impossible. Seeing an overwhelming demand for the book, Ethel Cerasale, President of the organization, contacted the Taylor Publishing Company and the wheels were set in motion.

We regret that not all materials submitted are included in this book — space would not permit it and late entries made it impossible.

We express our sincere appreciation to all who participated in this project — space does not permit us to name them all. A special thanks to all Officers, Nurses, and Enlisted Technicians who were the pioneers of Air Evacuation. Their actions and dedication to duty resulted in the best possible care in the shortest possible time for our sick and wounded servicemen.

ACKNOWLEDGEMENTS

Special Thanks to:
Ethel C. Cerasale, President of the WWIIFNA, whose foresight and vision led to this volume.

My committee: Jean Tierney, Eleanor Hoppock and Dorothy Jouvenat, who willingly gave of their time and talents to assist in any way possible, promote sales and most of all provided moral support when my confidence sagged.

Those Air Evac Veterans, who contributed their stories and material and patiently awaited the publication of this book.

My husband, Robert Page, who did much of the leg work, post office runs, purchased supplies, listened patiently to my frustrations and remained optimistic throughout this endeavor.

Ted Kemp, III, Consultant, and Margaret Kemp, Lay Out Design for The Taylor Publishing Co., who gave me much needed guidance, moral support and confidence. Their friendship and genuine desire to see this project succeed, made my task easier.
WWII Flight Nurses Association

After the war, Charlotte McFall Mallon and Mary Oldhoff Stehle would visit back and forth in NJ. Most of their conversations were about their days in Air Evacuation. They knew there were many former flight nurses in the NJ-NY area, and they thought those nurses might like to join in with some reminiscing. Mallon and Stehle gathered as many local addresses as they could and sent notices for the first meeting which was held at the American Red Cross building in NYC May 1948, with eight former flight nurses attending. 25 were present for a June meeting. For several years a meeting was held every three or four months. Occasionally flight surgeons and medical technicians were included.

Names and addresses of all Bowman Field graduates were requested from the School of Air Evacuation. Each person on the list was sent a notice concerning the organization. Many, many of the letters were returned due to out-of-date addresses, but 160 paid dues to join the organization. Numerous small reunions were held, and in 1963, a 20th anniversary of flight nursing luncheon was held at McGuire Air Force Base, NJ. This was well attended with Stehle coordinating the meeting. Mildred Osmun Beeman was elected president and Stehle treasurer. It was decided to collect dues of $5 per person. The aim of the organization was to help members keep in touch with each other and to encourage the rekindling of the spirit de corps the flight nurses had during the war. It was to be a social organization.

Shortly after this meeting, Kay Shafer Mayhue said, “Let me help work on the address list.” And work she did! The next large meeting was also held at McGuire in 1966, arranged by Stehle. Mayhue was elected as president, and Stehle continued as treasurer. Mayhue had accomplished so much for the organization that no more elections or appointments were set up. A roster, containing over 500 names and addresses was printed in 1966 and updated in 1967. Mayhue asked Dorothy Berendsen and Ethel Carlson Cerasale to arrange a reunion of California nurses. That two day affair was held Feb. 25-26, 1967 in Vacaville, Calif. and Travis AFB. Another luncheon meeting was coordinated by Edith Wood Marks at Andrews AFB, Maryland in 1967 with over 50 nurses attending. At this reunion, Mayhue and Stehle were each presented with a framed painting by artist Franklin Boggs of a WWII Flight Nurse administering oxygen to a patient in flight. The following inscription was written on the painting. “With my congratulations for your significant role in establishing the WWII Flight Nurses Association. We of the Air Force, are proud of the accomplishments of our flight nurses, present and past. May you and your group continue your interest in and support of the USAF Aeromedical Mission.” Signed — “Sincerely, John McConnell”

In 1968, Leora Stroup, Mayhue and Stehle were asked to be on a panel along with Col. Ed McBride, Deputy of Administration and Services at the school at Brooks, AFB, Texas, on the 25th anniversary of Flight Nursing. They were to present the story of early air evac to the present-day flight nurses. A movie was made and placed in a time capsule at the large reunion there.

In 1969, Tina Forney Ford-Coates held a dinner meeting at her home in Maplewood, NJ with 24 attending. Mayhue continued to hold other small gatherings including a luncheon at her home in Bradenton, Fla., in 1973, until she retired to North Carolina to be near her son and his family. Kay Mayhue passed away Nov. 1983, after a lengthy illness. Mary Stehle, Denzil Nagle, Ethel Cerasale, and others decided to resume the association meetings with a reunion at Cocoa Beach, Fla. by contacting those members in the state, who could be reached using the 66-67 roster. Cerasale and Nagle set it up for May ’86. When Jenny Boyle Silk was notified, she responded that she was holding an 816th reunion at her home in Texcota, Fla., about the same time. Nurses attended from as far away as Spain and Calif. Thirty nurses and several husbands and guests joined together at Cocoa Beach Holiday Inn and Patrick AFB. At a meeting of the nurses, Ethel Cerasale was elected temporary chairman, Denzil Nagle, vice chairman, and Mary Stehle, secretary. Irene Miller Burch and Martha Radspieler Weisbrad agreed to serve as nominating committee to form a slate for an election of officers to be held at the next meeting in San Antonio in two years. (They were unable to accomplish this). It was decided that donations would be accepted in lieu of regular dues to fund printing and mailing of annual newsletters, and to charge a $10 reunion fee for the ‘88 reunion. Margaret Richey Raffa volunteered to be reunion chairwoman in San Antonio, Texas in 1988.

The gathering in Cocoa Beach was the impetus for expansion of WWII FNA’s roster to 306 nurses in May 1987, when a new listing was printed. Since then, many additional addresses and donations have been sent to Cerasale, and enthusiasm for the San Antonio reunion indicated a large number would attend May 5-7, 1988 at the St. Anthony Intercontinental Hotel and Brooks AFB.

On May 5-7, 1988, 176 flight nurses gathered in San Antonio, Texas to renew old acquaintances and to celebrate the 45th birthday of Flight Nursing which began at Bowman Field, Ky., Feb. 1943 and continues to the present time with the school now being at Brooks AFB, Texas. This is the first large reunion with three fun filled, action packed days with many of the nurses meeting for the first time in 43 years. Much of our spare time was spent perusing at name tags and screaming with joy as we recognized friends from yesteryear.

Bright and early the second day, we assembled at Lackland AFB where a parade was held in our honor. Quite a switch to be on the receiving end of a parade. A letter of congratulations from Secretary of Defense Frank Carlucci was read to the group.

Next stop was Brooks AFB where we toured the Flight Nurse Museum, enjoyed a delicious lunch at the Officers Club, and the graduation of the 182nd Flight Nurse Class. The Mayor of San Antonio proclaimed the week of May 5th as Flight Nurse week. The site of the 1990 reunion will be Melbourne, Fla.

Under the guidance and leadership of Ethel Cerasale, the organization has made some strides forward. After much work and consulting with lawyers, the By-laws were drawn up and approved and the organization was incorporated. Aug. 31, 1988, received tax exempt status Feb. 1988, and approximately 500 names were added to the roster. It was deemed necessary to charge membership dues since the cost of mailing has increased and donations were not covering the costs. By word of mouth, the membership has increased and we fully expect it to continue to do so for Flight Nurses have a history of sticking together and we retirees are as dedicated to the program as we were when we were actively involved.

ARMY AIR FORCES SCHOOL OF AIR EVACUATION INSIGNIA

The insignia of the Army Air Forces School of Air Evacuation was a dark blue disc with two honey bees whose bodies were or and sable with argent wings bearing stars, carrying a brown litter all in front of a cloud argent.

Blue and gold are the Air Corps colors. The honey bees, helmeted and wearing red cross armbands are indicative of the industry displayed by the personnel of the organization. The litter is symbolic of evacuation of the sick and wounded, the cloud indicative of the area in which the mission was carried out.

(The insignia was designed by Mrs. Don Rider (nee: Carter) of Buechel, Kentucky, who was greatly impressed by the work of the Air Evacuation personnel during the flood in Louisville in 1942.)
The Flight Surgeon's Oath

I accept the sacred charge to assist in the healing of the mind as well as the body.

I will at all times remember my responsibilities as a pioneer in the new and important field of aviation medicine. I will bear in mind that my studies are unending; my efforts ceaseless; that in the understanding and performance of my daily tasks may lie the future usefulness of countless airmen whose training has been difficult and whose value is immeasurable.

My obligation as a physician is to practice the medical art with uprightness and honor; my pledge as a soldier is devoted to Duty, Honor, Country.

I will be ingenious. I will find cures where there are none; I will call upon all the knowledge and skill at my command. I will be resourceful; I will, in the face of the direst emergency, strive to do the impossible.

What I learn by my experiences may influence the world, not only of today, but the air world of tomorrow which belongs to aviation. What I learn and practice may turn the tide of battle. It may send back to a peacetime world the future leaders of this country.

I will regard disease as the enemy; I will combat fatigue and discouragement as foes; I will keep the faith of the men entrusted in my care; I will keep the faith with the country which has singled me out, and with my God.

I do solemnly swear these things by the heavens in which men fly.

David N.W. Grant
Major General, U.S.A.
Air Surgeon

Flight Nurses's Creed

I will summon every resource to prevent the triumph of death over life.

I will stand guard over the medicines and equipment entrusted to my care and ensure their proper use.

I will be uniring in the performance of my duties, and I will remember that upon my disposition and spirit will in large measure depend the morale of my patients.

I will be faithful to my training and to the wisdom handed down to me by those who have gone before me.

I have taken a nurse's oath reverent in man's mind because of the spirit and work of its creator, Florence Nightingale. She, I remember, was called the "lady with the lamp."

It is now my privilege to lift this lamp of hope and faith and courage in my profession to heights not known by her in her time. — Together with the help of flight surgeons and surgical technicians, I, can set the very skies ablaze with life and promise for the sick, injured and wounded who are my sacred charges.

... This I will do, I will not falter, in war or in peace.

David N.W. Grant
Major General, U.S.A.
Air Surgeon
The History of Air Evacuation

The origin of air evacuation of the sick and wounded by military air transport is rooted in the period when the Wright Brothers developed the airplane. The first known report of aircraft to be used in the transportation of patients was made by Capt. George H.R. Gosman (MC), and Lt. A.L. Rhoades, CAC, United States Army, to the Surgeon General of the Army in 1910. These officers had constructed an ambulance plane to be used in the transport of patients at Fort Barrancas, Florida. They were the first to point out the great possibilities of the airplane for evacuation of sick and wounded.

During WWI, the service type evac planes were unsatisfactory as the patient was wedged into the narrow cockpit of the open plane. In Feb. 1918, at Gerstner Field, La., Maj. Nelson E. Driver (MC) and Capt. William C. Ocker, Airc Service (as the Air Force was then known) converted a "Jenny" airplane into an airplane ambulance, by changing the rear cockpit so that a special type litter with patients could be accommodated. Two litters were carried. In 1920, the first to have a fuselage which was designed primarily for transportation of patients, was built and flown at McCook Field, Ohio. This plane provided space for a pilot, two Stokes litters and a medical technician.

In April 1921, the Army made a request for Curtis Eagle airplanes which could accommodate four litters and six sitting patients. Unfortunately, for the progress of aerial evacuation, this advanced airplane ambulance crashed while flying in a severe electrical storm. This untimely crash played an important part in delaying the development of aerial transportation of patients in the U.S.

In 1929, Maj. Robert K. Simpson (MC), advocated the use of large transport planes which could be converted to accommodate litters for the purpose of evacuation of casualties in the event of future wars. He predicted that air evacuation by plane would be a very important factor in handling the wounded of the next war, if not the method of choice altogether.

In April 1930, a tri-motoried Ford Transport which would accommodate six litter patients, a crew of two pilots, a flight surgeon and a medical technician, was used in the field exercises of the Air Corps Combat Units.

The Spanish Civil War (1936-1938), the Germans transferred the assets of the Condor Legion, in transport planes. These evacuations made an impression on Dr. Richard Meiling, a young American doctor studying in Germany. Returning to the states, he was commissioned in the Army and became the first and only "Air Evacuation Officer" in the Office of the Air Surgeon.

In 1940, Headquarters AAF proposed the organization of an ambulance battalion to consist of an AT Group together with medical personnel. The Medical Air Ambulance Squadron was authorized Nov. 19, 1941, calling for a group composed of one headquarters squadron and three airplane medical squadrons, under the control of General Headquarters in a theater. Lt Col. David N. Grant (MC), Chief, Medical Div., Office, Chief of Air Corps, pointed out at this time that the proposed organization, "would lighten and speed the task of transporting casualties due to the extreme mobility and would be able to render service at a time and place where other means of transportation are at a minimum."

During the same months, the country was at war and it became a matter of military necessity to evacuate patients by air, even though it was not an accepted practice. The first mass movement of patients occurred in Jan. 1942, during the construction of the Alcan Route to Alaska. C-47 type aircraft were utilized in evacuating these patients over long distances to medical installations. The medical personnel involved were largely unarmed and on a voluntary basis.

The second mass evacuation by air, occurred in Burma in April 1942. Ten C-47's evacuated 1,900 individuals from Myitkyina, Burma to Dinjan, India in a ten day period.

In May 1942, the Buna-Gona Campaign marked the beginning of a counter-attack against the Japanese in New Guinea. Many days of travel would be required to evacuate patients to Port Moresby by surface means; but by air, it was a flight of approximately 1 hour over the Owen-Stanley Range. A total of 1,300 sick and wounded Allied troops were flown over this route during the first 70 days of the campaign.

In June 1942, the 804th MAES arrived in New Guinea to aid in the air evac operations. In late August 1942, Marine Air Transport and in Sept. 1942, the AAF Troop Carrier Transport units began to evacuate patients from Guadalcanal to rear bases in New Caledonia and the New Hebrides; 12,000 casualties had been evacuated by air by the end of 1942.

On June 18, 1942 the AAF was given responsibility for developing an air evacuation system, with primary planning responsibility delegated to the Air Surgeon. There was a need for transport planes capable of mass evacuation, yet there was an acute shortage of aircraft. Experience demonstrated that regular transport planes using regular litters supplant, could only be used for rescuing the air evac as well as for transporting material and combat troops to theaters of operation. This is how the AAF came to decide the troop and cargo airplanes would have not only their primary mission, but also the secondary mission of providing air evacuation.

On May 25, 1943, the AAF activated the 38th Air Ambulance Battalion at Fort Benning, Ga. It was an independent unit under the command of the 4th Headquarters Detachment, 2nd Army Headquarters, Atlanta, Ga. Created in 1925, the cadre of the battalion consisted of a commanding officer and 17 enlisted men.

Because of the proximity of Bowman Field, Ky., to First Troop Carrier Command Headquarters in Indianapolis, Ind., it was decided to establish a training program there using the 38th Air Ambulance Battalion organization as the nucleus for the first unit. On Sept. 28, 1942, the Squadron, consisting of 138 enlisted men and 2 officers, reported to Bowman Field, Ky., and was assigned to the First Troop Carrier Command. On Oct. 1, 1942 the squadron was redesignated the 507th Air Evac Squadron, directed by Troop Carrier Command. The unit was hurriedly trained, and from it, 6 nurses and 15 enlisted men were used with 2 flight surgeons in the Texas Maneuvers.

The 349th Air Evacuation Group, Headquarters and Headquarters Squadron was activated Oct. 6, 1942. The group consisted of 9 medical officers, 2 nurses in addition to the enlisted men. On Nov. 11, 1942, the 620th and 622nd Air Evac Squadrons were activated and assigned to the 349th Air Evac Group. In late Nov. 1942, the War Dept. directed the 349th to train flight surgeons, flight nurses, and enlisted men for air evac duty aboard cargo carriers, and authorized new tables of organization for the basic unit, the Medical Squadron Air Evacuation Transport. This Table of Organization set up the squadron as a unit composed wholly of medical personnel. Each squadron contains two plane section, the headquarters section and four evac flights. The headquarters section would include the CO, Chief Nurse, and Medical Administrative Corps Officer. Each flight headed by a flight surgeon, was to have 6 flight nurses and 6 medical technicians, with one nurse and one technician making up a flight team. Squadrons were to be assigned to Troop Carrier or Air Transport Units.

The early training afforded these units was haphazard and consisted of basic training, squadron administration, the use of the litter and loading of air evac aircraft. A didactic course of study was not established until Jan. 1943. All personnel, with the exception of the 801st and 802nd MAES, who were trained by the 349th Air Evac Group were graduated from the School of Air Evacuation. The personnel of the 801st and 802nd were not so graduated because the training of these units was meager and totally inadequate compared with the training of other squadrons after Jan. 1943. The personnel of these squadrons were desperately needed for overseas evacuation of the war casualties, necessitating cutting their training short. They continued to train and improve their skills and techniques in the theaters of operation. Most of the nurses of these early pioneers later returned to the school of Air Evac for the didactic course. On Christmas Day 1942, the first of the squadrons departed for the North African Combat Zone. Similar units followed to every area, where American fighting men were engaging the enemy and to overseas stations along the global routes of the ATC.

The flight nurse emerged as the counterpart of the flight surgeon. Credit for the original idea of the flight nurse belongs to Miss Laurette M. Schimmoler, who as early as 1932 envisioned the Aerial Nurse Corps of America. She suggested an organization composed of
physically qualified and technically trained registered nurses, who would be available for duty in "air ambulances", as well as other aerial assignments. There was an exchange of letters between Miss Schimmoler and Gen. "Hap" Arnold, then Chief of the Air Corps. In her letters, she sought recognition of her organization. Gen. Arnold advised her to coordinate her project with the Red Cross. She replied that she had contacted the Red Cross in previous years and the personnel in that office were not air minded and could not see the need for nurses to be so educated. The Red Cross maintained this attitude until 1940. By then, the activities of the Aerial Nurse Corps had been publicized and many inquiries were being directed to the Army Nurse Corps and the Red Cross Nursing Service. Answers to these inquiries, revealed an official attitude of opposition to the organization and a lack of imaginative foresight concerning the possibility of the future use of the airplane in the evacuation of the wounded.

By the latter part of 1940, Miss Mary Beard, Director of the Red Cross Nursing Service, acknowledged that Miss Schimmoler had promoted something which was needed. However there was a general lack of enthusiasm among most medical officers. As late as July 1940, the Chief of the Medical Div. felt that in time of war, nurses would not be used in airplane ambulances.

It remained for Gen. David N. Grant, as Air Surgeon, to develop the concept of the flight nurse as a part of the medical team. Without the personal interest of Gen. Grant in furthering the status of the nurse within the field of aviation medicine, it is doubtful the military indifference could have been overcome to the degree that it was during the war. Therefore Nov. 30, 1942, an urgent appeal was made to the graduating nurses for appointment to the Air Evacuation Service. The nursing program at Bowman Field, Ky., was at this time under the direction and leadership of Capt. Grace Mundell.

On Feb. 18, 1943 the first formal graduation of nurses of the 349th Air Evac Group was held at the base chapel at Bowman Field, Ky. The 30 members of this group had completed a program of instruction that was definitely in the experimental stage. The 4-week course included class work in air evac nursing, air evac tactics, survival, aeromedical physiology, mental hygiene in relation to flying, training in plane loading procedures, military indoctrination and a one-day bivouac.

In his address to the first class, Brig. Gen. David N. Grant said, "Your graduation in the first class of nurses from the first organized course in air evacuation, marks the beginning of a new chapter in the history of the Army Air Forces. The sick and wounded is already an accomplished feat, requiring only trained personnel for rapid and extensive expansion." At the end of his address, on the spur of the moment, realizing no one had thought of an insignia for the flight nurse, he unpinned his own miniature flight surgeon's wings and pinned them on the honor graduate, 2nd Lt. Geraldine Dishorn, remarking that the insignia of the flight nurse would be similar to that of the flight surgeon, with the addition of a small "N" superimposed on it. Having created this insignia without authority, difficulty was encountered in having it manufactured as no insignia manufacturer would make the wings without the War Dept.'s approval.

In Feb. 1943, the course was extended to 6 weeks. A small amount of flight training was obtained by taking advantage of Troop Carrier Command planes going through Bowman Field or by scheduling personnel on the shuttle to Indianapolis when the load permitted. Not until June 25, 1943 was the Army Air Forces School of Air Evacuation officially designated and placed under direct supervision of the Commanding General, First Troop Carrier Command. Its mission was to instruct and train students in the professional, technical, tactical and administrative procedures involved in air evacuation. Lt. Col. John R. McGraw (MC) became Commandant of the School, Capt. Mary Leontine was the Principal Chief Nurse and Lt. Col. Anne B. Stoop was the Instructor of the Dept. of Aviation Medicine and Nursing.

The School of Air Evacuation was the first of its kind in the world and its influence was world wide. During 1943, for example, nurses from the Royal Canadian Air Forces attended the school. The Brazilian Government, in cooperation with the Brazilian Red Cross, sent a representative to study the school so that one might be instituted in Brazil.

In Aug. 1944, it was decided that Headquarters, AAFATC would be responsible for evacuation of casualties within the continental United States. Redesignated the 26th AAF Base Unit (AAF School of Air Evacuation) Bowman Field, Ky., was assigned directly but temporarily to Headquarters, AAF. Effective Oct. 15, 1944, the 26th AAF Base Unit (AAF School of Air Evacuation), Bowman Field, Ky., was discontinued and the 27th AAF School of Aviation Medicine assumed the mission of the School of Air Evacuation at Randolph Field, Texas.

With the formal designation of the AAF School of Air Evacuation, June 25, 1943, a curriculum was systematized to acquaint medical officers, medical administrative officers, enlisted men and flight nurses with their special responsibilities for administering medical treatment, classifying patients, loading patients on the plane, and treatment while in the air. Courses concerning administration, military air evacuation, nursing and flying were designed on procedures and tactics peculiar to air evac were carried out concurrently for each of these groups, so that at the conclusion of the training period, complete tactical organizations with their complement of medical officers, nurses and enlisted personnel were ready for further training or assignment to overseas duty. Classes were conducted by squadron officers supplemented by instructors from the school. Actual air evac flights within the Zone of Interior ran concurrently. The training offered medical officers was primarily administrative. Another type of training program was that for Medical Administrative Corps Officers. One Medical Administrative Officer was assigned to each squadron.

The training of the flight nurse was designed to equip her for her duties in connection with the evacuation of the sick and wounded and prepare her for duty with ground medical installations. In order to become a flight nurse, a graduate of the Army Air Forces School of Air Evacuation Service was required to apply for a commission in the Army Nurse Corps. After a minimum of 6 months in an Army Service Forces unit hospital, she could apply for admission to the school. She had to be 62-72 inches in height, weigh from 105-135 pound, her age between 21-36. Physical fitness was important, in view of the fact most of the work was done in air at altitudes of some 5,000 to 10,000 feet. Work at that altitude is very tiring. The work of the flight nurse was not without danger. The flight nurse uses a C-46, C-47 or C-54 type, which acted in a dual capacity. They carried cargo and troops to the battle fronts, after unloading were rapidly converted into ambulance planes for the return trip. Because of the dual use of the planes, they were not marked with the Geneva Red Cross, and on the return trip they were fair game for the enemy. Thus, all nurses, who entered this field were volunteers.

The course of instruction for the flight nurses was increased from 6 weeks to 8 weeks in Nov. 1943. Emphasis was placed on the study of anatomy, physiology, ward management, operating room techniques, nursing, first aid, hygiene and sanitation. Two weeks of the 8-week course were devoted to specialized training at cooperating hospitals in Louisville, Ky. With the incorporation of the School of Air Evac with the School of Aviation Medicine, the course in aviation nursing was extended from 8 to 9 weeks. The course was designed to provide special training in emergency medical treatment.

A course in aeromedical physiology was a prerequisite for instruction in aeromedical nursing and therapeutics. The trainee learned the use of oxygen equipment and participated in two chamber flights in which treatment of patients at altitude was demonstrated. Transportation of neuropsychiatric casualties, was thoroughly covered in this program. The Convalescent and Rehabilitation Programs were described to enable the nurse to indicate to the soldier the probable nature of his future and medical care. Simulated problems of evacuation from medical installations to aircraft, and from aircraft to medical installations were presented, using mock-ups of a C-47, C-46 with web-wrap litter supports, and a C-4A glider. Finally, the duties and responsibilities of an officer were fixed in the mind of the nurse. She reviewed military courtesy, custodianship of the patient, logistics, and organization. After trainee learned to safeguard information, to understand the provisions of the Geneva Convention as it pertained to medical personnel and to the treatment of prisoners of war.

Since advanced bases were located in the forward area, often under primitive conditions, physical fitness and a knowledge of field living conditions were stressed. The student was issued field equipment, instructed in tent pitching, practical military hygiene and sanitation, made proficient in the use of camouflage, and taught map reading. Recent developments in diagnosis nursing care, and
treatment of chemical warfare were presented. Regular marches of increasing length for training and conditioning were utilized. The nurse practiced to maintain herself in deep water with minimum effort and learned rescue procedures. Ditching procedures were taught as part of the survival course, including a knowledge of lifeboat equipment. On land, the general characteristics of the desert, arctic, and tropics were studied in association with the use of emergency equipment, kits and safety devices present on the aircraft. After a 4-day bivouac, the nurse was ready to undertake the final three weeks of her training. She participated in the actual evacuation of the sick and wounded within the continental U.S.

In August 1945, the flight nurse's course was changed to accelerate the training schedule and increase the number of nurses ready for assignment. Effective Aug. 20, 1945, the course consisted of three phases, each phase of two weeks duration instead of three. Six Philippine Army nurses, veterans of the Japanese occupation of their homeland, graduated from this abbreviated course and were to become the nucleus of the Philippine Air Evac Service.

Upon the termination of hostilities much of the field work was no longer deemed necessary. The newer course covered a period of 9 weeks, the first five of which dealt with medical subjects related to aviation nursing and other subjects pertinent to tactical air evacuation, while the last four weeks consisted of participation in actual air evacuation flights within the Zone of the Interior. Upon completion of the course, to which she had been on temporary duty, the nurse returned to her proper station to await call for air evacuation duty. The designation flight nurse was not automatic, but upon successful completion of the course a request could be made to the Commanding General, Army Air Forces, by whose authority such a designation was granted. Upon certification, the nurse was then permitted to wear her engineer's wings.

A fourth type of training was that given air evacuation medical technicians. During the period when air evacuation training was given at the AAF School of Air Evac, enlisted men recruited from medical installations all over the country underwent a basic three-week course in the elements of field work, first aid, camouflage, and other basic subjects necessary to the medical soldier. After this period of training, the enlisted men engaged in a five-week specialized training program at Fort Sill, Oklahoma. In the spring of 1945, there were 54 members of the medical corps participating in the medical work in three cooperating Louisville hospitals, where the nurse and technicians were assigned for two weeks. Each nurse was assigned a technician and instructed him in the elements of nursing care, intravenous technique, catheterization, oxygen administration, and other emergency procedures. The enlisted man was then given a didactic course in emergency medical treatment, conversion of the cargo plane to an ambulance plane, loading of patients and use of equipment. The fifth week of the second period of training was devoted to training flights, field maneuvers and the practical study of psychotic patients. The surgical technician worked with a nurse as a member of a team in training flights.

In most cases, the student assigned for this work was required to have served in his military occupational specialty for 6 months or more, and met the physical requirements of class three. He was sent to Robins Field, Ga., for a 6-week course in field medical training at the AAF Medical Service Training School, before undergoing a two-phase program of 3 weeks duration at the Dept. of Air Evac, School of Aviation Medicine. At Randolph Field, the training program was devoted primarily to material pertinent to air evacuation. Like the nurse's program, special emphasis was placed on aeromedical nursing and therapeutics. Air evacuation tactics, plane conversion, patient handling, and critically ill patients in evacuation were taught. Thereafter, a basic training in actual evacuation flights, record keeping, supply procedure, the use of the parachute, and a basic study of weather for an understanding of the terms used in relation to the air evacuation were all part of the course. In the final phase of his course, he was under the tutelage of a graduate flight nurse. Here he engaged in actual evacuation flights within the U.S.

The course of Instructor Training was arranged so that the three phases of training ran concurrently; thus the third phase was in operation at all times. This made possible the full utilization of the aircraft used for this training. Two C-47's, one L-58, and one C-54 type aircraft were assigned to the school but were attached from First Troop Carrier Command for air evacuation.

The first mass evacuation of patients by air in the U.S. was in Jan. 1944 when patients from the Sicilian and Italian campaigns arriving on the ships ARCADIA and SEMINOLE were evacuated from the Stark General Hosp. at the Port of Charleston, S.C. The School of Air Evac and the 814th MAES participated in movement of 661 patients by C-47's to five general hospitals in the U.S. This evacuation exercise proved that air evacuation was practical in this country as well as in the theaters of operation.

Training in air evacuation was planned and organized by the First Troop Carrier Command. The School of Air Evac, however, was in a sense always as separate organization with its own commandant and director of training; and while it was attached and assigned to the First Troop Carrier Command, it exercised almost complete autonomy in perfecting its training functions.

On Aug. 28, the Assistant Chief of Air Staff, A-4 notified the Commanding General, ATC that to meet air evacuation responsibilities, he should make available the necessary aircraft equipment to evacuate patients from the United States to bases as Alaska, Canada, Newfoundland, Greenland, Labrador, the Carolinas, and elsewhere whenever practicable and according to priorities and plans of the Air Surgeon. The plans did not call for special airplanes and stipulated that air evacuation was to be conducted in connection with routine operations of transports.

Three days later, the Chief of Staff cabled all theater and base commanders that air evacuations to the U.S. would be carried out by ATC, that this necessity for determining air evacuation priorities would be determined by the commanders, with first priority given to those emergency cases for whom essential medical treatment was not available locally; second priority to be given to those cases where air evacuation was a matter of military necessity; and third priority to cases where prolonged hospitalization and rehabilitation were indicated, excepting psychotic cases.

First Troop Carrier Units operating in the theater of operations were required to evacuate patients from their bases and ensure that these bases to air terminals in the U.S. Facilities for medical care would be provided enroute and at bases along the routes for regularly scheduled stopovers or in the event of prolonged layovers. One MAES would be assigned to each wing. Receiving hospitals in the U.S. were to be located as near as possible to the airport of entry with facilities available above those normally required.

A scheduled route from Washington, D.C., to the United Kingdom. The C-54, which enabled priority passengers, cargo and mail to be moved in large volume, were to be flown by crews under contract by the commercial airlines. A scheduled route was planned for operations from Washington, D.C. and England via NY and Newfoundland. Harmon Field, Stephenville, Newfoundland was selected as the base to handle the transport operations. The scheduled route was to be the slowest of those normally required. Steps were taken to establish a more direct route which would lead more directly to the United Kingdom. Gander Lake, Newfoundland was selected. With the development of the Central Atlantic air route to North Africa via Newfoundland and the Azores, it became necessary to establish an alternate airfield and refueling stop in the Bermudas. La Guardia Field was the home of American Airlines and when this commercial carrier was awarded a government contract, it was from La Guardia that their ships flew the North Atlantic route.

In March 1944, the program expanded overnight from the evacuation and care of an occasional patient to a proposed program for the handling of 200 evacuees per day, of which an estimated 40 percent were to be litter patients. Since the primary mission of these transports, however, was to transport vital military personnel, when smoke cleared from the battle fronts, patients had to be routed so that there would be a minimum of interruption to the scheduled flights. For that reason, it was decided to off-load all patients at La Guardia, N.Y. with the originating station for evacuation being Prestwick, Scotland. From Prestwick, the route of evacuation was to be through Meeks Field and Harmon Field to La Guardia. In Africa, the originating station was Casablanca. The route was to be through the Azores to Harmon Field and on to La Guardia. The carrying aircraft were to be the C-54's and C-54A's operated by Transcontinental Western Airlines, American Airlines, and the Ferrying Div. of ATC.

Each base presented different problems; routes to be traveled passed through climates which varied from warm to sub-zero. The personnel at Lagens, Azores were housed in tents and operated under field conditions. Six Nissen huts were secured from the British and became the framework for the development of an evac hos-
The vast areas covered by the PACD MAES brought up the problem of how to dispatch personnel so that maximum of benefit was derived from each team with a minimum of lost time "deadheading." At the same time, it was desired to give each team the same amount of the good and the bad. All air evac personnel except the flight surgeon were stationed at Hickam Field and traveled from station to station throughout the entire trans-Pacific route. Every team made the entire trans-Pacific run, including the run to Hamilton Field. At the end of this run, the nurses and techs received a rest at their home station at Hickam Field or Hilo, Hawaii.

From March 1943 through Oct. 1945, the PACD evacuated a grand total of over 111,000 patients, reaching its peak during May and June 1945 when over 10,000 patients were evacuated each month. The bulk of the patients were picked up in the Marianas, casualties from the two Jima and Okinawa campaigns.

The ATC transported patients from overseas to island hospitals in the Pacific Theater. From March 1944 to March 1945, the foreign divisions evacuated more than 158,000 patients, mainly in C-54's. The PACD carried the greatest number, 78,000. In the 17 months from Jan. 1943 through May 1945, the AAF in all theaters evacuated more than 1,172,000 sick and wounded. The total death rate in flight was 4 per 100,000.

Air Evacuation in AAF reached its maturity in the ETO where, between D-Day and V-E Day, more than 350,000 patients were flown from a fast-moving front to general hospitals in England and France. The peak of activity in the ETO was reached in April 1945 when, in one month, nearly 2,600 a day stood as a record for all theaters of the war. The record for any single day was 4,707 patients.

The CBI, China, Burma, India Wing of the air evacuation began with the arrival of the 803rd MAES at Chabua, India, Nov. 7, 1943. Three C-47's were assigned for use as hospital planes. Two were used for evacuation from the valley in which became a true aeromedical center. The third was allotted exclusively for flying over the "HUMP" and was equipped with oxygen valves and marked with a red cross. On Dec. 2, 1943, the first American nurses allowed in China since the war, flew over the Hump from Assam, India.

Routine evac activities got under way not only in China but also in India and Burma. Flights were made tri-weekly from Chabua to the station hospitals, with each flight manned by two nurses, one flight surgeon and an aeromedical technician. Allied medical personnel were located in dispensaries at Mohankei, 167th Field Sick Bay at Chabua, and at the Group Dispensary.

The battle to retake Burma began and the emergency evac operations got under way in India and Burma. The air evac people started with the allies and followed them straight down through Burma. The Army maintained Field Hospitals and Portable Surgical Units right along with the combat troops and these heroic medical people must be given unlimited praise. They went not the only place for moving right along with the Army was the famous Dr. Seagrove Unit.

During the next few months, air evac activities from China decreased although there was an increase in patient load from Burma. The C-47 provided an adequate facility. However, a C-46 was also allotted for exclusive use in air evac and was flown to Karachi on its first mission.

The 803rd was given the responsibility of all air evac within the entire CBI theater. The busiest period was the spring and summer of 1944 when the Japs were being driven out of Northern Burma for the building of the Burma Road which climaxd with the capture of Myitkyina. During this period, air evac planes were making several daily round trips to the front line airstrips in Burma. At this time, some of the 803rd personnel were in China attached to the 14th AF and nursing air evac flights wholly within China. A few were in Calcutta operating flights out of Dum Dum. The Hump flights, Assam Valley and Karachi flights were also being maintained. Flying personnel rotated on all of these assignments.

In the fall of 1944, the 821st MAES arrived in the CBI to assist the 803rd. It established its headquarters at Ledo. The 821st took over the Burma operations and the 803rd continued to be responsible for China, Hump and trans-India air evac. At about this time, some members of the 803rd began to rotate back to the states. By 1945, the requirements throughout the theater had dropped considerably and the operation had a lighter work load than had been anticipated. The early part of 1945, the 25 nurse replacements arrived and took up the duties of the original group. In the latter part of 1945, the 803rd flew into Rangoon, Burma to evacuate the liberated
prisoners of the Japanese. Some of these had been held captive since Pearl Harbor; some were women and children and some were the heros of the River Kwai incident.

The Naval Air Transport Service was established by the Secretary of the Navy five days after Pearl Harbor. In Dec. 1944, the Navy School of Air Evacuation at Alameda, Ca. was designed to train Navy flight nurses and pharmacists mates. The first class was graduated Feb. 13, 1945 and saw their first action in the battle of Iwo Jima.

Many types of aircraft were used for air evac. As far back as the Franco-Prussian War of 1870, the French used balloons to send 160 to safety. During WWII, the Army used four-engined C-54's for transoceanic evacs and twin engined C-47's for stateside evac. The Navy evacuated battle casualties in twin-engined Catalina Seaplanes, four-engined PBYS and in landplanes, RD4Ds and RSDs. Light liaison or grasshopper-type planes were used to evacuate wounded in the aerial invasion of Burma. The use of the helicopter for evacuation was just in the experimental stage during WWII although it was used in India to transport casualties. A litter capsule capable of enclosing a patient on a standard army litter was attached to each side of the fuselage. This was used extensively in Korea. The first test of glider evac of wounded in the ETO was made March 22, 1945 when a low flying troop-carrier plane towed a casualty-filled glider from Remagen, Germany to an evac hospital in France, a distance of 15 miles. 2nd Lt. Suella Bernard, flight nurse and Maj. Albert Haug, flight surgeon, both attached to the 816th MAES, made the historic flight with the casualties.

In 1952, the 315th Air Div. Wing went from C-54's to C-124's which could accommodate 127 stretcher patients or ambulatory using fewer flight nurses and technicians. In 1954, MATS added Convair C-131A Samaritans which could carry 40 ambulatory and 27 stretcher cases. In 1961, MATS added the C-135 jet passenger/cargo transport plane. In 1964 during the Vietnam War the C-118, C-130 and C-135 were used. Then in 1965 during the Vietnam conflict, the C-141 Starlifter was added. In 1967, the C-118 replaced the C-130, while in 1968 the C-123 Provider, C-7A Caribou and C-9A Nightingale were added. 1969, saw the use of the C-141 and today the 375th Aeromedical Airlift Wing uses the C-9A Nightingale for domestic flights, the C-9AF and C-130s overseas in theaters, and the C-141 in over water flights.

After WWII, patients continued to be moved by air as a peace-time activity. Training and operations were refined and the quality of patient care rose steadily as new aircraft, equipment and skills emerged. This improved aeromedical evac capability was a principal reason for a higher survival rate of battlefield casualties in the Korean Conflict and the Vietnam war as compared to WWII.

During the Korean Conflict, flight nurses, assigned to a squadron in Japan, evacuated thousands of patients out of the battlefield. Many casualties were loaded hastily aboard the aircraft amidst the danger of enemy fire.

The aeromedical evac system was again tested during the Vietnam era. More than 400,000 people, including approximately 160,000 battle casualties, were evacuated from Vietnam to the states between 1964 and 1972. The mortality rate of Vietnam casualties was 1% which was much lower than that of the Korean conflict.

In the 1970's, flight nurses were privileged to participate in two other major events: Operation Homecoming and Operation Babylift. Lt. Col. Elizabeth Goker recalls the excitement of Operation Homecoming. She was one of several nurses asked to fly to Hanoi, North Vietnam to pick up the POWs in Hanoi.

Maj. Marcia Tate participated in Operation Babylift. Thousands of abandoned Amerasian children, fathered by American military men serving in Southeast Asia were airlifted to the states, where eager and loving adoptive parents awaited them. The spirit of Operation Babylift was saddened by the tragic crash of one of the aircraft on April 4, 1975. Numerous orphans and two medical crew members, including one flight nurse, Capt. Mary T. Klinker, were killed.

Air Evac personnel have been involved in a variety of humanitarian efforts. They participated in the evacuation of hostages from the Pan American airliner detained in Karachi, Pakistan and the Iran Hostages. They airlifted the injured sailors from the US Navy Ship, the USS Stark. When American troops went into Grenada to rescue the American students there, the injured were evacuated by air. The bombing of the Marine Barracks in Beirut, Lebanon Oct. 23, 1983 with such a tragic loss of life and so many casualties saw air evacuation teams arrive as needed.

Jan. 8, 1987 an on board fire in an aero-medical helicopter and subsequent crash, resulted in the loss of the pilot, patient, chief flight nurse, Mike McGinnis, R.N. and asst. chief flight nurse, Pam Demaree, R.N.

Air Evac personnel continue to be trained at Brooks AFB, San Antonio, Texas and remain ready for a call in case of a national emergency. From WWII to the present day, numerous Air Evac personnel have made the supreme sacrifice with their lives. This history is dedicated to those brave Officers, Nurses and Enlisted Medical Technicians, who gave their all. We honor them — may they never be forgotten.

*See Department of the Air Force — Medical Support of the Army Air Forces in WWII by Mae Mills Link and Hubert A. Coleman. Credit is given to the Surgeon General, USAF — 1955.

*See "Flying Our Wounded Veterans Home" by Catherine Bell Palmer in Sept. 1945 issue of National Geographic Magazine Page 363.

*See "Taking" by Carmelita Schimert and Maureen A. Darmody in Nov. issue of American Journal of Nursing Page 1420.

Insignia

Those of you, who had occasion to serve in or be air evacuated from Southeast Asia, may be familiar with the insignia of the 9th Air Medical Evacuation Squadron, USAF. While not presently in hand I understand that the beer can type of insignia worn by the members of this unit is practically the same as that once worn by the 801st Medical Air Evacuation Sqdn. The latter is a redesignation of the war-time 801st. However, the device was redesigned slightly in that the uniforms worn by Donald Duck and his nephews have been changed from olive drab to jungle green. Donald wears an old style aviator's helmet and Dewey wears a green beret. Depicted on the insignia is Donald with feet raised in air while the three nephews strain to carry Donald and the litter, all superimposed on a silver colored cloud (original was in white), all on a blue disk with red border.
Louisville’s scenic east side airport takes its name from its developer, Abram Hite Bowman. In 1920, Bowman succeeded in his pursuit to establish an airport that has had a long and colorful history and still provides aviation services to the community.

Abram Bowman was born in a small town south of Louisville in 1875. Seeking adventure and fortune, he journeyed to gold rush Alaska at the age of 25. Three years later, he returned to Kentucky to settle in Louisville and open a business with what newspapers of the day called “‘a small stake’ gained from his travels to the north.”

Mr. Bowman’s business venture evolved into a trucking company that established his position in transportation. During World War One he took an avid interest in aviation closely reading accounts of aviators and their machines in combat. Furthermore during that period of time, Bowman took a position with the Louisville Board of Trade and became a strong advocate for aviation in Louisville seeing the role of the airplane in a modern city’s future. Interestingly, he never became a pilot.

In 1920, Abram Bowman formed a business partnership with Louisville native and World War One aviator Robert Gast launching the Bowman-Gast Aero Company. During the same year, Mr. Bowman leased land and purchased an airplane, but more significantly established a flying field that officially took his name some time later. In 1922, Bowman along with local officials travelled to Washington, D.C. and gained for the airport an Army Air Corps Reserve outfit that became the 325th Observation Squadron Reserve. With military aircraft at Bowman Field and government financed hangar construction, the future of the airport was insured. In 1927 Mr. Bowman enlisted support from local government to purchase the airport. Voters eventually approved a $750,000 bond issue and Bowman Field became public property.

During the late 1920s and early 1930s, major construction projects saw the reality of large permanent hangars and an administration/terminal building at the airport. The early 1930s also saw the arrival of scheduled airline service to Bowman Field. Still Abram Bowman continued to take an active part in airport activities despite the time devoted to his businesses, an important position with the Louisville Board of Trade, and presidency of a local bank. Mr. Bowman often visited the airport to greet notables arriving to the city and each year he would approve and put his signature on the airport’s annual report. In 1938 at ceremonies marking the construction of hard runways at Bowman Field, he personally released the first load of concrete. During the wartime years, Mr. Bowman attended numerous programs and graduations at the Bowman Field Air Base. Unfortunately in July 1943 he suffered a fatal heart attack and passed away during sleep. He was survived at that time by a wife and two daughters.

Abram Hite Bowman, a man with a vision, followed through on a dream and converted a farmer’s field into an airport establishing a legacy that is a testimony to his name — even today.

By Charles W. Arrington

WINGS OVER AMERICA

The following fifty-five pages are reprinted from the Bowman Army Air Book Wings Over America beginning with the history of the Army Air Force School of Evacuation.

Ethel Guiffey, Flight Nurse, receiving first diploma in first graduating class February 18, 1943 — Bowman Field.
To Officers and Enlisted Men of the School of Air Evacuation and all Medical Air Evacuation Transport Squadrons, wherever they may be:

During the past seven months, it has been my privilege to be associated with the School of Air Evacuation. During this period of time, many hundreds of you have come and gone who are now actively performing air evacuation functions, not only in the various theaters of war, but also in the continental United States. Your willingness and desire to improve yourself, expressed by each and everyone of you during your student days at the School, cannot help but leave one with the feeling that you will do your best for air evacuation.

On behalf of the Staff of the School, I wish to express our appreciation for the excellent work you have performed, and to tell you that it is with a great deal of pride that daily we read of your achievements and success. In this publication, while we cannot hope to adequately cover almost two years of the School's existence, an honest attempt has been made to give each of you a souvenir or remembrance of the School of Air Evacuation and your part in its development.

John R. McGraw

JOHN R. McGRAW
Colonel, Medical Corps
Commandant
JOHN R. MCGRAW
COLONEL
Commandant, School of Air Evacuation

Colonel John R. McGraw, former Executive Officer Surgeon's Office, Second Air Forces Headquarters, Colorado Springs, Colorado, is Commandant of the Army Air Forces School of Air Evacuation at Bowman Field, Kentucky. He has been in command of the School since December, 1942.

Colonel McGraw, 48 Shady Lane, Johnstown, Pennsylvania, is a graduate of three of the Army's "upper bracket" schools: Medical Field Service School, Carlisle, Pennsylvania, 1939; Army Air Forces School of Aviation Medicine, Randolph Field, Texas, 1940; and the Command and General Staff School, Fort Leavenworth, Kansas, 1942.

Having held a reserve commission since June 6, 1934, he entered upon active Army service at William Beaumont General Hospital, Texas, January 4, 1935, and received a regular commission of First Lieutenant August 17 of that same year.

Subsequent assignments, from October, 1937, to July, 1940, took him to Fort McKinley, Manila; Walter Reed General Hospital, Washington, D. C.; the Medical Field Service School at Carlisle, Pennsylvania; and Fort Lewis, Washington.

He was graduated from the AAF School of Aviation Medicine in August, 1940, after which he served 10 months at McGuire Field, Washington. In 1942 he attended the Command and General Staff School and was graduated in the same class with Colonel Stevenson whom he succeeded as Commandant of the AAF School of Air Evacuation here.

Colonel McGraw next was assigned to the Second Air Force Headquarters at Spokane, Washington, and moved with it to Colorado Springs, Colorado, in July, 1943, as Executive Officer in the Surgeon's Office. He remained there until his transfer in December, 1943.

Colonel McGraw was born at Lakemont, Pennsylvania, was graduated from the Johnstown High School, 1928, and from the Pre-Medical and Medical Schools of the University of Pittsburgh, M.D., in 1934. Upon completing his internship at Conemaugh Valley Memorial Hospital, Johnstown, in 1935 he entered private practice but, six months later, became associated with the United States Public Health Service at Marine Hospital, Galveston, Texas. He was with this institution, in an official capacity, until the time he began his Army career.
HISTORY OF AIR EVACUATION

Often referred to as one of medicine's outstanding developments of World War II, Air Evacuation has expanded during World War II with the same speed that has marked the development of our "Astronomical" air force. Today it is saving lives and alleviating suffering on all of our far-flung fighting fronts.

Organized at Bowman Field, Louisville, Kentucky, on October 6, 1942, the first Air Evacuation training program was a realization of a dream which medical officers of the Army Air Forces had for many years to train Flight Surgeons, Flight Nurses and surgical technicians. It was still in the experimental stage when Major Scott M. Smith, then Commanding Officer of the School, and his staff of officers and nurses constantly sought new systems and ways to increase the speed and efficiency of the science of evacuation by air.

First known as the 349th Air Evacuation Group, and later redesignated the Army Air Forces School of Air Evacuation on June 25, 1943, and placed under the direct control of the Commanding General, Army Air Forces, this School has during its short history, trained numerous squadrons of officers, nurses and enlisted technicians who are now serving on all major battle fronts of the war.

Instrumental in the development of the School and its training program has been Colonel Ralph T. Stevenson, former Commanding Officer of the School, who assumed command of the organization soon after its establishment. Formerly a Dayton, Ohio, general physician, Colonel Stevenson received the rank of Lieutenant Colonel in December, 1942, and was promoted to the rank of full Colonel in October, 1943. He joined the Army in 1933 and after training...
AT BOWMAN FIELD

at numerous Army Schools served in the Philippines from 1938 to 1940.

Present Commanding Officer of the School is Colonel John R. McGraw, 32, former Executive Officer, Surgeon’s Office, Second Air Force Headquarters, Colorado Springs, Colorado, who relieved Colonel Stevenson on January 1, 1944. On that date, Colonel Stevenson was transferred to Headquarters, First Troop Carrier Command, Scott Field, Indianapolis, Indiana, where he assumed the duties of Command Surgeon.

An integral part of the program of the Army Air Forces School of Air Evacuation is the training of Flight Nurses, the Angels of Mercy who ride the skyways to care for the sick and wounded while in flight from battle zones to hospitals far behind the combat lines. A class of these nurses is now graduated from the School of Air Evacuation every eight weeks.

Today the Air Evacuation Nurse receives instructions in more than a dozen different courses which range from aircraft identification to oxygen indoctrination. Upon successfully completing this course she is presented with a diploma and a pair of gold wings which officially designate her as an Air Evacuation Nurse. Although numerous nurses were trained at the School of Air Evacuation and sent to active duty overseas prior to the establishment of a definite curriculum of study, the first class of nurses was not formally graduated until February 18, 1943.

The curriculum at the school is designed to acquaint the three classes of personnel involved—flight surgeons, flight nurses, and enlisted men of the Medical Department—with their special responsibilities for administering emergency medical treatment, classifying patients, loading patients on the plane, and treatment while in the air. Training courses are carried along concurrently for each of these three groups so that, at the conclusion of the training period, complete tactical organizations with their complement of doctors, nurses, and enlisted personnel are ready for assignment to overseas duty.

The curriculum of the School has been set up with one primary purpose: to equip each nurse for the vital hours she spends in the plane. All the courses are practical.

Core of the Flight Nurse’s course is training in subjects that specially pertain to her work under flying conditions. Her instructors at the School are Flight Surgeons—graduates of the School of Aviation Medicine at Randolph Field, Texas, which has long been famous for its experimentation with the effects of flying on the human body. Effects of high altitude on a patient’s condition must be taken into account; dosage of certain medicines must be increased; others sharply reduced.

The activities of the School of Air Evacuation and its comprehensive training program has attracted international notice and acclaim. Many prominent personages have visited the School to inspect its training curriculum. These include Mrs. Franklin D. Roosevelt, General H. H. Arnold, Commanding General of the Army Air Forces; Senora Anesia Machado, Brazilian aviatrix, and Lieutenant Colonel Nellie V. Glee, Chief Nurse in the Air Surgeon’s Office.

Latest figures released from Army Air Forces offices show that 250,000 casualties from every major theater of operation have been successfully evacuated since the outbreak of the war. Playing no small role in this vital function have been the hundreds of pretty, competent Lieutenants of the Army Nurse Corps whose names appear on the following pages of the history of the Army Air Forces School of Air Evacuation at Bowman Field.

Lieutenant Ruth M. Gardiner of Indianapolis, Indiana, was the first nurse to be killed in a theater of operation in this war. Lieutenant Gardiner graduated from Philadelphia General Hospital in 1935.

First Lieutenant Burton A. Hall was the first flight surgeon from the School of Air Evacuation lost in action in the South Pacific area. Lieutenant Hall graduated from Hahnemann Medical School in 1938.
CHESTER C. DOHERTY
Lieutenant Colonel
Assistant Commandant of School of Air Evacuation

EDWIN J. MERRIDE
Captain
Deputy of Administration and Services

JOHN J. HORTON
Captain
Deputy of Supply and Maintenance

RUSSELL C. SMITH
Major
Director of Training
SCHOOL OFFICERS

ROBERT M. ATKINSON
Captain

GRIFF W. BILBO
Captain

MAURICE BLINSKI
Captain

R. LEE BOLING
Captain

EDWARD M. COE
Captain

HERMANN H. GEIGER
Captain

DONALD H. HASSELHUNN
Captain

HOWARD R. LAWRENCE
Captain

J. C. TURLEY
Captain

SPENCER A. TRUEX
First Lieutenant

DONALD W. BRUNDAGE
Captain
Personnel Officer, 826th AET

ROBERT T. CURLEY
Captain
Flight Leader, 826th AET

NORMAN FABIAN
Captain
826th AET

ARETUS D. MARTIN
Captain
Flight Leader, 826th AET

ANTHONY P. SOLIMINE
First Lieutenant
Supply Officer, 826th AET

THOMAS L. CULLEY
Captain
Flight Leader, 827th AET

NORMAN E. MARSH
Captain
Flight Leader, 827th AET

ROBERT C. STOW
Captain
Commanding, 827th AET

STEWARD C. WHEELER
Captain
Personnel Officer, 827th AET

RICHARD E. FOELL
First Lieutenant
Supply Officer, 827th AET

WILLIAM C. BROWNE
Captain
Flight Leader, 828th AET

PAUL T. COOK
Captain
Flight Leader, 828th AET

MARTIN J. STEFFEN
Captain
Assistant Base Operations Officer, 828th Unit Base

HAROLD BERG
First Lieutenant
Commanding, 829th AET

IRVIN M. BERKOWITZ
First Lieutenant
Commanding, 829th AET
The Blunder Mug, as any one can plainly see, is an award both beautiful and utilitarian. This magnificent trophy is presented to that individual in the Army Air Forces School of Air Evacuation who, in the opinion of a wise and fair committee, behaved in the most unorthodox and unmilitary manner during any given period.

Strange and wondrous have been some of the misdemeanors. Space does not permit a discussion of this subject. So we hereby publish a list of the winners—those miscreants whose names are emblazoned on the gleaming walls of the mug for future generations to gaze upon in awe and envy?

Major William K. Jordan . . . . . . . . . . . . . . . . . . . . . . . . . . . . April 21, 1943
Lieutenant George H. Gray . . . . . . . . . . . . . . . . . . . . . . . . . . . . June 2, 1943
Major R. C. Weinstein . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . August 30, 1943
Colonel R. T. Stevenson . . . . . . . . . . . . . . . . . . . . . . . . . . . . December 29, 1943
Captain G. H. Lemon . . . . . . . . . . . . . . . . . . . . . . . . . . . . January 1, 1944
Major Mary Leontine . . . . . . . . . . . . . . . . . . . . . . . . . . . . . January 21, 1944
Snapshots of School of Air Evacuation

Left to right: General H. H. Arnold, left, conferring with General D. N. W. Grant, Colonel E. L. Bergquist and Colonel R. T. Stevenson after inspecting the School of Air Evacuation at Bowman Field on May 5, 1943.

Brigadier General Grant, left, Air Surgeon of the Army Air Forces, talks things over with Brigadier General E. G. Chapman, commanding general of the Airborne Troops, at the first graduation of nurses at Bowman Field, February 26, 1943.

Colonel Rapu s. Stevenson, left, and Lieutenant Colonel John R. McGraw (right) welcome back to Bowman Field three nurses who have returned from active duty in the South Pacific. From left to right, the nurses are Lieutenants Regina Brown, Seraphine Petrocelli and Gerda Bouwman. 801st.

Mrs. Franklin D. Roosevelt is escorted on her inspection of the School of Air Evacuation by General Grant and Lieutenant Colonel McGraw.

Ceremonies presenting Air Medal to Second Lieutenants Gerda Bouwman, Seraphine Petrocelli and Regina Brown, Colonel Stevenson and Lieutenant Colonel McGraw made the presentation.

Loading demonstration in honor of General Arnold.
Above: High Army officials review the School of Air Evacuation on the event of its first anniversary.

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Right: Canadian nurses and officers of the Royal Canadian Air Force completed the course at the School of Air Evacuation at Bowman Field, graduating with the seventh class. Shown, left to right, are: Nursing Sisters Lack, Lebrequin, Collings, Jorgenson, Hardwick, Pinckney, and Flight Lieutenants Lloyd-Smith and Nonnansker.

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Below, left: Instructing at bivouac with the fourth class are, left to right, Captain Edward Phillips, Lieutenant Leora B. Streep, Captain William P. McKnight, Second Lieutenant Andrew F. Gruber, Captain Andrew D. Henderson, Captain Edward A. Sawan, and First Lieutenant Joseph A. Allieri.

Below, right: The Flight Training Office.
BIVOUAC

Explaining the compass during bivouac of the fourth graduating class (upper left) are, left to right, Lieutenant Colonel Stevenson, Second Lieutenants Mary R. Snedula, M. Elizabeth Binley and Beatrice E. Roberts. During bivouac one may expect to crawl through the most inaccessible places (upper right). There are no beauty parlors on bivouac. The girls shown at the lower left are not primping for dates. The idea is to make oneself look as much as the surrounding terrain as possible. Hard work brings on a tremendous thirst, and the old litter bag (lower right) comes in handy. Coca-Cola wasn't there that time, but the good old drinking water was.

The Air Evacuation nurses line up for inspection (upper left). A different but more popular lineup is that for mess (upper right). During a lull in the seventh inning, the nurses indulge in the pause that refreshes (lower left). During off-moments a popular place with nurses is the Post Exchange (lower right).
CLASSES

Classroom work keeps them occupied for a considerable portion of the time during the courses at the School of Air Evacuation at Bowman Field. Many and varied are the subjects covered, and all tend to condition the pupils for the circumstances they will face on the flying fronts. Nurses are briefed before flight (upper left); trained in a mock plane to attend wounds during flight (upper right); given the old one-two-three for added pep (lower); instructed in the proper manner in which to load casualties (center); and are taught to identify planes immediately upon sight (bottom).

Below: Unloading ambulance plane.
Lower: Nurses march after retreat parade.
Graduation day finds them eager and ready to go on their first mission. Shown, upper left, flight nurse and surgical technician simulate the evacuation of wounded from the battle zone. Flying nurses go on the air in more ways than one (upper right), while others, in flying togs, scan the horizon with maps in hand (lower left). A nurse cuts her cake while they sing "Happy Birthday" (center), while another proudly displays her wings (lower right).

The nurse fully realizes the importance of discipline in Army life as she stands rigidly for inspection.

Wings for

Four rigorous weeks of training ended, gold Flight Nurse's wings were waiting for these nurses, the first official air evacuation group graduated from Bowman Field, as they were told to prepare for immediate call to foreign duty. Flying nurses wear flying togs, but her hospital uniform is the traditional white dress.
Flying nurses, angels of mercy to the men on the battlefronts, line up in V formation before a giant plane of the type that will take them to the battlefronts to evacuate the wounded, giving the professional medical attention en route to the hospitals behind the lines. The lives of many soldier boys who otherwise might have been lost are saved by brave nurses who risk their lives regularly that others might live and fight.

**Flying Nurses**

"Hot-two-three-four, hot-two-three-four." Garbed in natty blue flight suits, graduates of the first class for air evacuation prepare to parade before Brigadier General Borum, commanding general, First Troop Carrier Command, who presented diplomas. Soon after they were flying over the front lines, evacuating the wounded from foreign battlefronts.

Above, left: Flight Nurse Mae E. Olson of Little Falls, Minn., tells Brigadier General Raymond E. O'Neill, Commanding General of Chanute Field, Ill., of her experiences on Guadalcanal. Lieutenant Olson was the first nurse on the island. She was awarded her fourth oak leaf cluster for heroic efforts in evacuating the sick and wounded in troop carrier planes. The presentation was made at Bowman Field's Air Evacuation School, Louisville, Kentucky. Lieutenant Colonel Chester C. Sheppy, Assistant Commandant of the school, looks on. Right: General H. H. Arnold, Commanding General, Army Air Forces, awards Lieutenant Matilda D. Grinevich with the Oak Leaf Cluster to the Air Medal at ceremonies at Bowman Field.

The award of the Air Medal to Second Lieutenant Dorothy P. Shiosaki by Lieutenant General Harmon, New Hebrides.

General H. H. Arnold’s Review.
Six flight nurses assembled at the Air Evacuation School’s instiant at Bowman Field, Louisville, Kentucky, watch a Troop Carrier Plane coming in for a landing. Upon completion of their studies at the Air Evacuation School, the nurses will be assigned to Troop Carrier Planes to evacuate sick and wounded soldiers from the war zones. Left to right, overhead: Lieutenant Helen Logan (637 Van Crossland Park Avenue) Yonkers, New York; Beatrice Eastman (16 Richardson Street), Barre, Vermont; and Rita Marie Dowd (2618 Swain Street), Philadelphia, Pennsylvania. Lower left: Lieutenant NEA Bergman (1014 1st Avenue South), Escanaba, Michigan. Anne Bey (1020 Wisconsin Avenue), Washington, D.C., and Betty Burkelman, Seymour, Wisconsin.

Flight Nurse Burnette Stensrud of Freeborn, Minnesota, points where she wants to be in the Philippines. General MacArthur’s men are getting closer, and she hopes to be out there evacuating the sick and wounded in Troop Carrier Planes. Looking on are Flight Nurse Lucille Sluda of Chicago and Captain Leroy B. Stroup, chief nurse, of Cleveland, Ohio. Lieutenant Sluda and Stensrud have seen service in the South Pacific. Captain Stroup, who waved goodbye to them two years ago, welcomes them back to Bowman Field’s Air Evacuation School, Louisville, Kentucky, where the nurses are taking refresher courses.

Nurses’ quarters on Guadalcanal.

Nurses’ quarters on the New Hebrides.
826TH
M. A. E. T.
SQUADRON
BERNADINE L. SHULE
Second Lieutenant
Nurse

HARRIET J. SILVERSTEIN
Second Lieutenant
Air Evacuation Nurse

JANE E. SIMONS
Second Lieutenant
Air Evacuation Nurse

MARY F. SPIRAG
Second Lieutenant
Air Evacuation Nurse

REGINA L. STANK
Second Lieutenant
Air Evacuation Nurse

JEANNE A. SULLIVAN
Second Lieutenant
Air Evacuation Nurse

EDITH G. TERMAAR
Second Lieutenant
Air Evacuation Nurse

826TH MEDICAL AIR EVACUATION SQUADRON

(Reading from Left to Right)

First Row: Master Sergeant Lattier, Alphonse J.; Sergeant Ishmael, James T.; Corporals Git, Yup Y.; Jackson, Edward L.; Rives, Lombe H.; Welland, Lanus J.

Second Row: Corporal Wong, Foek K.; Technicians Fifth Grade Christop, Arthur J.; Witt, Eli; Privates First Class Boatright, Alton R.; Muolo, James R.; Vondracek, Charles J.

Third Row:Privates Belfour, Ray Y.; Benage, Gedage; Crawford, Archie E.; Larrick, William F.; Wigger, William; Williams, William A.