Aviation Pioneers: World War II Air Evacuation Nurses
Susan Y. Stevens

During World War II, nurses pioneered a new role for women in the skies. This study of the 1942-1944 Movietone newsreel, the largest of the U.S. newsreel companies with international syndication, identified the exploits of these nurses, compared personal accounts and highlighted flight nurses' contributions to the profession, society, and aviation.

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During World War II newsreels narrated by reporter Helen Claire portrayed war work for women:

They are flying nurses who serve in an aerial hospital service. At this Kentucky flying field, the Army shows the latest methods for transporting the wounded from the battlefields. Here's how, under war conditions, soldiers are taken to base hospitals in an ambulance of the sky. Fitted out according to up-to-date medical science...Oxygen for patients who need it...and the flying nurse is on the job as the wounded are taken for hospital care in the shortest possible time (Fox Movietone, 1943b).

This essay, part of a larger historical study to identify the images of nursing in newsreels during World War II (Stevens, 1990, 1992), describes the pioneering exploits of flying nurses. Flight nurses developed a new role for the nurse. Like the WASPs (Women's Auxiliary Service Pilots), air evacuation nurses also demonstrated that women belong in the skies.

Two types of historical materials were studied. First, all 104 segments of Fox Studios' Movietonews footage on nursing from 1942-1944 were reviewed for content related to flight nurses and analyzed in the context of the times. The segments included 50 newsreels and 64 out-takes. Out-takes are segments removed prior to public showings. Second, archival materials were analyzed, including those provided to the news services, cameramen's dope sheets, and supportive narration cards.

The method of analysis used was historical criticism which includes internal and external elements (Lee, 1988). External criticism answers questions of authorship, genuineness, time and place, as well as fabrications and distortions. The sources were provided by the original producer and were considered complete for the two years studied. Other than film being transferred to more durable videotape, the materials had been undisturbed. Cameramen's dope sheets, describing the film footage, and producer's narration cards (both available in the Movietone archives) were compared with film footage. They matched the footage transferred to videotape. Internal criticism addresses the meaning or trustworthiness of statements within historical materials. Documents are weighed in relation to truth. Issues of competence, good faith, position, and biases of the author are assessed. Credibility must be viewed in the context of the times (Lee, 1988).

The newsreel was not without faults. It suffered from a history of fabrication, censorship, reenactment, bias, and uncritical use of documents produced by the government (Fielding, 1972). Internal criticism was therefore a major focus of the study. Since choices made by cameramen and news producers had the potential to distort truth, out-takes and newsmfilm shown to the public were compared with each other, with archival documents, and with primary and secondary sources including personal accounts of World War II nurses.

The Newsreel

Before television, people attended movie theaters on the average of once a week. Newsreels were considered an important component of the theater's program. Movietone, the largest of the internationally syndicated U.S. newsfilm companies, was a major source of public information during World War II. Fox Movietone was the largest of five major U.S. newsreel companies that survived the 1930s and the Great Depression. Lowell Thomas was chief news commentator for many years (Fielding, 1972).

Movietone had more branches throughout the world than any other news service. By 1946 it was exhibited in 47 countries in more than a dozen languages. While the company had the capacity to produce most of its own film, reciprocal or pool agreements with other newsreel firms facilitated the sharing of

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Footage. Government and military sources also provided film and information (Fielding, 1972). Movietonews ceased production in 1963, but Fox retained the large newsfilm library and later donated the collection to the University of South Carolina.

Criticism of the newsreels, included in later reflections concerning visual news media, revolved around the "appropriate" news to show the public, the use of re-creations, the balance between news and entertainment (Fielding, 1972), and manipulation of the media by influential news makers (Rubin, 1977).

The Times

General Eisenhower (1948) commented that nurses had long been accepted as a necessary part of the fighting forces. They often were found where other women were not welcome.

Before World War II, many U.S. airlines required stewardesses to be registered nurses. The nursing prerequisite was "supposed to instill confidence in passengers..." (Delta Digest, 1990, p. 5). It seems ironic that men were more likely to board a plane if a woman attendant was aboard! The chief stewardess hired and trained other stewardesses, flew the first flight with new nurses, served as company nurse, checked the expense accounts of pilots, and flew 50 hours each month (Delta Digest, 1990).

In the early months after America's entry into the war, nonmilitary airlines struggled to recruit nurses against increasing competition from hospitals, the military, and industry. One advertisement published in a nursing journal to encourage nurses to join American Airlines, Inc., highlighted the vital service to the country that graduate nurses performed:

An American Airlines Stewardess is a technically trained and responsible member of the Flagship crew... She is an "administrative" officer in complete charge of her section of the ship and the things she knows and the things she does are vital to efficient transportation by air.

Says Robert H. Hinkley, Assistant Secretary of Commerce:

Both the War and Navy Departments consider the air transport industry to be a necessary adjunct to national defense. I sincerely trust that the personnel of America's scheduled air transportation systems will feel that they are fulfilling an important duty in our national war effort and that they will continue zealously to perform this duty, subject to the call of the armed services (American Airlines, Inc., February 1942b).

Within two months, the same nursing journal published a second advertisement acknowledging the "call of the armed services" and dropping the registered nurse requirement from the job description:

American Airlines recognizes no profession more worthy of its tribute than the nursing profession, from which, since the first Flagship took the air, this company has drawn the candidates for its Stewardess Staff. American has sought among these women—and has found—loyalty, integrity, and competency in marked degree. Now registered nurses are urgently needed both in hospitals and in the armed forces. We have therefore discontinued the prerequisite of registered nurse training. At the same time, we have established a college education as a prerequisite... (American Airlines, Inc., April, 1942a)

The airline's apparent patriotism in declining to further pursue nurses as stewardess candidates was also tempered by the reality that nurses were resigning in increasing numbers to pursue other war-related duty (Delta Digest, 1990).

Many former airline stewardesses would later serve as pioneers in flight nursing, evacuating wounded soldiers from combat zones. As early as 1932, an Aerial Nurse Corps of America was proposed (Kalisch & Kalisch, 1978), but there was opposition to the idea of evacuating wounded personnel by aircraft and the role of nurses in such evacuations. The resistance persisted through 1940 despite requests for information about flight nursing and tenacious efforts by nurses. Initially, enlisted men who had been taught first aid worked in bomber or cargo aircraft to transport ill and wounded soldiers. By September 1942, however, the Nursing Division in the Air Surgeon's Office was established (Kalisch & Kalisch, 1978; Link & Coleman, 1955).

A draft for nurses was not necessary. They volunteered in such large numbers that hospitals and schools of nursing sometimes had to beg nurses not to volunteer for military service so as not to deplete their personnel resources. Powerful forces in the early days of America's involvement in World War II were: increasing public support for involvement of the United States in the war; incredible changes in women's roles in the war effort (commercials highlighted "Rosie the Riveter's" contribution to the war effort); media appeals to nurses to join the war effort; and nurses' own patriotism and their desire for adventure and commitment to serve humanity (Stevens, 1990).

In return for their volunteerism, nurses gained the opportunities to practice their profession in new ways. Flight nursing dramatically improved the survival rate of the wounded. Nurses established the extraordinary record of only five deaths in flight for every 100,000 transported patients (Piemonte & Gurney, 1987).

Nurses of the Sky

The first U.S. air medal ever awarded to a woman was presented to an air evacuation nurse, Second Lieutenant Elsie S. Ott, for her record-breaking evacuation flight from India to the United States in January 1943 (Office of Public Relations, 1943b). She was in charge of "five desperately sick" patients and was "aided only by a ward man." The flight that would have taken two months on a steamship took less than a week (News Release, Office of Public Relations, Bowman Field, 1943). Her personal account of the pioneering flight (Ott, 1943) described a stopover at a hospital where Sudanese ward men cared for English patients. The Atlantic Ocean leg to South America was flown by a Canadian pilot. Censors restricted information about the evacuation plane's route; therefore, Ott's account was not shared with the public. Her travels, however, were characteristic of the lure nursing had for many women of that time. A flight nurse was able to travel to exotic climes and work with people of many nationalities. Redmond (1943), in an
A biographical account of her service in Bataan, stated that she believed nursing was the only work that would enable her to travel to faraway places. Adventure and world travel were certainly characteristic of flight nurses' work.

The citation for an air medal (Office of Public Relations, April 1943) confirmed that the Lieutenant's efficiency, professional skill, and unflagging devotion to duty "further demonstrated the practicality of long-range evacuation by air of seriously ill and wounded military personnel..." Film of her award presentation by Brigadier General Fred S. Burum was never shown to the public (Fox Movietone, Army Nurses Take to the Air, March 1943). Ott later joined the Air Evacuation Group, under the First Troop Carrier Command at Bowman Field, Louisville, Kentucky.

Many U.S. Army nurses who had airline experience joined the air evacuation training program begun at that base in Kentucky. The first class graduated in February 1943 (Kalisch & Kalisch, 1978). There, nurses learned about such tropical diseases as dengue, yaws, and filaria (Office of Public Relations, Troop Carrier Command, Bowman Field, 1943a). Although not generally well known by the public, more soldiers were felled by disease than by combat wounds. A more romantic version of flight nurse training was described in a press release. A flight nurse was prepared to:

* Wing across burning African wastes to evacuate wounded from battle stations far up at the front. Or she may be flying over the wide blue waters of the Pacific, bound for some distant island outpost... (Office of Public Relations, Bowman Field, Troop Carrier Command, 1943a)

In November 1943, the length of time for flight nurse training increased from 6 to 8 weeks. Classes reflected updated knowledge in areas such as emergency medical treatment, transport of the sick at altitudes of 5,000 to 10,000 feet, the need for oxygen and methods to combat cold at high altitudes, antibiotic and blood plasma therapies, ditching procedures, and survival training (Link and Coleman, 1955). This new knowledge added to the increasing recognition of nurses' abilities and autonomy. Flight surgeons rarely accompanied patients on airplanes. Instead, flight nurses became responsible for the care of patients until a hospital was reached (Link and Coleman, 1955).

Air evacuation was an important innovation and was given considerable attention in the Movietone newsreels. Several segments of the newsreels illustrated the training, work, and hardships involved in flying air evacuation routes. Nurses were shown receiving training at Bowman Field and at the Army School of Air Evacuation, receiving awards for gallantry, arriving on planes at airfields, and performing air evacuation work on transcontinental flights.

One newsreel showed nurses bandaging and administering plasma and oxygen while in flight (Fox Movietone, 1943b). A public relations document contained in the newsfilm archives explained that during flights a nurse may have to apply splints, administer medications, stop a sudden hemorrhage, treat shock, administer oxygen, or handle any other emergency. The document claimed that "The flight nurse can do anything an MD can do except operate" (Office of Public Relations, Bowman Field, Troop Carrier Command, 1943a).

A newsreel depiction of Army nurses working with wounded personnel aboard a transport plane carried this narration by reporter Helen Claire:

"Army nurses in England are mobilized for their great task. Second-front invasion forces many thousands of wounded soldiers to be taken care of and what a grim horror that would be without the Army nurses. They go to the battle front to do their work of mercy under fire. In France, the transportation of the wounded is by air and with a nurse on the job. Flying back to a hospital in Britain, the lifesaving plasma is administered. (Fox Movietone, 1944a)

The nurse in the scene was assisted by a male soldier. This was a dramatic change from the original stance taken by Colonel W.F. Hall, Medical Section, Army Air Force in 1939 when he was approached about having nurses participate in air evacuations. He stated that nurses were not necessary since "Enlisted men in the Medical Department are taught first aid..." (Link and Coleman, 1955). Soon the nurses' special skills would be recognized as needed and they would be assisted by enlisted men. Nurses increased the caliber of care aboard a plane and contributed mightily to the morale of patients who often were airborne for the first time: "The presence of the nurse quieted their fears" (Link and Coleman, 1955).

The Cutting Room Floor

The risks of flight nurses, said to exceed the risks to other classes of personnel (Skinner, 1981), were not given great attention in the newsreels. Nurses worked in nonpressurized cabins at altitudes of 5,000 to 10,000 feet. They often flew in C-46 "Commandos" which had two purposes: to unload troops and cargo then load wounded soldiers at the battle-fronts. The planes, therefore, were without the red cross insignia of noncombat aircraft and prone to interception by enemy fighters (Kalisch & Kalisch, 1978). Film provided to Fox Movietone (1944d) depicting unloading of supplies and loading wounded into C-47 "Dakotas" for evacuation in France were never shown, nor were comments provided about the dangers. An account by Jopling (1990) of her World War II flight nursing experiences affirmed the dangers:

* I have heard men—even some of high rank—say if they had not seen me, a woman, on board the plane, they would not have flown on it!

* We carried a .38 pistol for self-protection and to help obtain food in case we were downed on an island. We also wore a cross around our neck because many natives would not harm people if they wore one. We took a knife, cigarette lighter, and Mae West life preserver most of the time also.

Second Lieutenant Mary Louise Hawkins was working on a flight loaded with casualties enroute to Guadalcanal when the plane crash-landed. One patient's windpipe was severed when a propeller tore a hole in the side of the cabin. Lieutenant Hawkins kept the man's throat clear of blood for 19 hours by creating a suction tube from a syringe, a colonic tube, and the inflation tube from a Mae West life jacket (Kalisch & Kalisch, 1978).
Comparisons between what was shown to the public and nurse’s reports of their experiences show an attempt to portray nurses of the air as heroines who endured neither boredom nor too much danger. Scenes in the outtakes would have shown the public a less flattering side demonstrating danger and routine or unpleasant work. Unglammorous but necessary tasks such as spraying for protection from mosquitoes in air evacuation planes in the South Pacific (Fox Movietone, 1943d) were left on the cutting room floor. Nurses flew on planes through hazardous conditions and often on only one airplane engine (Fox Movietone, 1943c).

The enemy did not always respect the red cross insignia on hospitals. Bombings of medical facilities killed some nurses and wounded others. Because planes were serviced for wartime experience, the planes sometimes seemed more dangerous than combat action. Nurses were killed or injured in plane crashes and ditchings. Thirteen women nurses and 17 men made their way by foot through the Balkan mountains after crash-landing in enemy-held Albania in 1943. Enduring enemy dive-bombings, knee-deep snow, dysentery, jaundice, and pneumonia, the nurses cared for the sick men and each other throughout the ordeal (Link & Coleman, 1955).

The following information was provided to the newsreel company.

The 32nd American Division ferried troops in by air, landing them in the jungle behind Japanese lines. Rations were dropped by plane, a complete portable hospital was flown in and set up in the field. All this was done through a rain of fire from Jap planes, whose attack American and Australian flyers repulsed. In addition, 100 tons of supplies a day were flown to the troops...and casualties were evacuated daily. (Office of Public Relations, Bowman Field, Kentucky, 1943a)

A portion of Major General Hubert Harmon’s speech at a military decoration for flight nurses was deleted as well as his referral to “you heroic officer nurses.” The deleted portion included the following.

There may be some glamour because you are women: some inclination to emphasize your feminine charm rather than your real achievements. (Fox Movietone, 1944c)

No public mention was made of the absence of or later the temporary nature of nurses’ military commissions (Bullough, 1976). It was not until June 1944 that Army nurses were given temporary commissions for ranks through colonel with full pay and privileges for the duration of the war plus six months (Jopling, 1990). The true value of nurses and the dangers they faced were avoided in the newsreels. Sometimes, censorship decreased the visibility of the nurses’ real achievements and substituted an artificial image (sometimes presenting the feminine charm alluded to by Major General Harmon). As one historian described it, there was “an invisibility to the real nurses and an over-visibility to the image of the nurse” (Hamilton, D., 1993). There was also evidence that the newsreelers participated in recruitment efforts by glamorizing nursing and decreasing presentations about hardships (Stevens, 1990). It was not yet commonplace for women to be risk-takers despite the examples of famed aviatrix Amelia Earhart (once a World War I volunteer nurse), or Jacqueline Cochran, originator of the World War II women pilots organization, the WASPs.

Avoided, too, were reports of the dangers of contagious and other tropical diseases to which the nurses were exposed. Depictions in the Movietonews were limited to nurses treating soldier’s wounds. Descriptions of the seriousness of those wounds were sometimes limited for the sake of families, morale at home, and recruitment of other nurses into military service.

The Sky’s the Limit

During World War II, Army Flight nurses on Guadalcanal were shown being given Air Medals by Major General Hubert Harmon. Movietone newscaster Lowell Thomas described the heroic exploits and vital mission of the nurses. Harmon concluded:

In the hearts of the Thirteenth Air Force, you are not only lovely ladies, but real comrades. Comrades who have shared our dangers and privations; comrades who have flown longer, worked harder, and complained less each day than we ourselves; comrades who have eased the pain and the suffering of many a sick and wounded soldier in this theater...God bless you, we love you all. (Fox Movietone, 1944b)

Nurses’ willingness to do more and work harder was typical of women in aviation. The need to prove themselves able to withstand the rigors of flight was something nurses had in common with WASPs and other women aviators.

Images shown in the newsreels of flight nurses were apropos of the historical moment in views of women, needs of society, and stories of journalists. Nurses belonged in the skies, they were needed, and they were feminine. In a 1944 Stars and Stripes article, soldiers wrote:

To all Army nurses overseas: We men were not given the choice of working in the battlefield or the home front. We cannot take any credit for being here. We are here because we have to be. You are here because you felt you were needed. So, when an injured man opens his eyes to see one of you...concerned with his welfare, he can’t but be overcome by the very thought that you are doing it because you want to...you endure whatever hardships you must to be where you can do us the most good... (Piemonte & Gurney, 1987)

Nurses did pioneering, important work. A whole new area of health care was developed that was to affect both military and civilian populations. Nurses’ use of independent judgement in crisis situations was further developed, publicized and accepted. Flight nurses were welcomed and were not perceived to be competing in the “man’s world of aviation.” Movietonews depictions of flight nurses also showed women’s achievements: professionalism, intelligence, autonomy, international involvement, technological competence.

Sharing the achievements of flight nurses is particularly important during the observation of the 50th Anniversary of World War II. During World War II, women of courage and commitment paved the way for others. Flight nurses helped the country recognize that women had a place in aviation. A new field for nurses was pioneered that demanded independent judgement, skill, and courage.


Fox Movietone. (1943a). Army nurses take to the air (Newsreel outtake). Columbia, SC: University of South Carolina Newsfilm Library.

Fox Movietone. (1943b). In the feminine world: Nurses of the sky (Newsreel and Archival Documents). Columbia, SC: University of South Carolina Newsfilm Library.

Fox Movietone. (1943c). Medals to three flight nurses (Outake and Archival Documents). Columbia, SC: University of South Carolina Newsfilm Library.


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