Abstract: The Paul W. Knauf, Jr. World War II photograph collection consists of seventy-one black and white photographs depicting events in the European Theater of Operations from 1943 through 1945. Fifteen of the photographs were created using the Army’s radio tele-photograph electronic-transmission system. In addition to the photographs, the collection includes newspapers, a certificate from the Bell Telephone Laboratories School for War Training, and an issue of the publication "Army Talks."
Descriptive Summary

Identification: MSS 0582
Creator: Knauf, Paul W., Jr.
Title: Paul W. Knauf, Jr. World War II photograph collection
Inclusive Dates: 1943–1945
Extent: .2 linear feet (71 photographs)
Language: Materials entirely in English.

Administrative Information

Citation: MSS 0582, Paul W. Knauf, Jr. World War II photograph collection, Special Collections, University of Delaware Library, Newark, Delaware.

Shelving Summary: Box 1: Shelved in SPEC MSS manuscript boxes
Location: Special Collections Department, University of Delaware Library Newark, Delaware 19717-5267 Phone: 302-831-2229 Fax: 302-831-6003 URL: http://www.lib.udel.edu/ud/spec/

Source: Gift of the University of Delaware Art History Department, 1999.
Processing: Processed and encoded by Lora J. Davis, August 2008.
Access Restrictions: The collection is open for research.

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Biographical Note

Paul W. Knauf, Jr., was born in Philadelphia on June 28, 1900. Knauf was an engineer who served in the 805th Signal Service Company of the Army Signal Corps during World War II. He worked on projects which developed digital transmission of voice and images.

In 1922 Knauf graduated from Drexel University (then the Drexel Institute of Art, Science, and Industry) with a degree in engineering. He worked for Bell Telephone of Pennsylvania and served in the U.S. Army Reserve until 1939. Following American entrance into the Second World War, Knauf returned to the Army and served as a Captain in the 805th Signal Service Company of the Army Signal Corps. On April 3, 1943, Knauf became one of the earliest members of this new company to be certified by the Bell Telephone Laboratories School for War Training for work on RC-220-T1 terminals and auxiliary equipment. The RC-220-T1 program focused on improving communications security by first converting voice signals into digital data and then, once the data had arrived at its destination, reconstructing the digital data back into a voice signal. The knowledge gained under this program (known by a variety of nicknames, including SIGSALY, Project X, and "The Green Hornet") provided many insights into digital telecommunications.

While stationed in London, Knauf encountered another new machine in the Signal Corps Headquarters. This piece of equipment used the same radio channels as the SIGSALY to electronically transmit black and white photographs from London to Washington, D.C. It took this radio telephotograph machine about seven minutes to transmit a black and white photograph across the Atlantic. Thus, remarkably, photographs taken on the beaches of Normandy during the D-Day invasion could be transported by air to London, developed (if not already developed at a field laboratory), transmitted to the States, distributed to the American wire services, and published in American newspapers all in a matter of hours.

Following the conclusion of the Second World War Knauf returned home to Pennsylvania with a number of photographs that were offered to him by one of the operators of the telephotograph machine. Well into his 80s he was still serving as a lieutenant colonel in the Army’s Retired Reserve. In 1988 Knauf loaned his collection of photographs to his alma mater for an exhibit at the Drexel University Museum entitled "Images for the Folks Back Home: U.S. Military Photographs of World War II and their Technology." Knauf passed away on May 14, 1999, in Doylestown (Bucks County), Pennsylvania.

Sources:


Social Security Death Index.

Additional information derived from the collection.
The Paul W. Knauf, Jr. World War II photograph collection consists of seventy-one black and white photographs depicting events in the European Theater of Operations from 1943 through 1945. In addition to the photographs, the collection also includes newspapers, a certificate from the Bell Telephone Laboratories School for War Training, and an issue of the publication "Army Talks." The photographs and supplementary material housed in this collection were displayed at an exhibit at the Drexel University Museum entitled "Images for the Folks Back Home: U.S. Military Photographs of World War II and their Technology." This exhibit was on display from May 2 to October 14, 1988, and a catalog is available.

The collection has been divided into two series by material type. The first series, Series I. Supporting Documents, includes all of the non-photographic items found in the collection. These items provide some background on the period and insight into the life of Paul W. Knauf, Jr., who was stationed in London from 1943 until the conclusion of the war with the U.S. Army’s 805th Signal Service Company. Included in this series are Knauf’s 1943 certificate from the Bell Telephone Laboratories School for War Training, two issues of London newspapers (The People and Evening Standard from April 29 and May 8, 1944); two reprints of American newspapers (the Philadelphia Inquirer and the New York Times both from June 8, 1944), and one issue of the Army publication "Army Talks." The London newspapers were presumably obtained by Knauf while he was overseas and saved due to their significance as papers announcing the end of the war in Europe. The American newspaper reprints, most likely printed from microfilm and taped together long after the end of the war (perhaps at the time of the 1988 Drexel University Museum exhibit), contain articles about the D-Day invasion. These articles are accompanied by D-Day photographs that were transmitted to America by the radio telephotograph process; copies of the photographs appearing with these articles are housed in Series II. Photographs.

Series II. Photographs includes seventy-one black and white photographs. All of these photographs were kept by Knauf following the conclusion of the war. Fifteen of the seventy-one photographs were created via the Army’s radio telephotograph process. These photos are electronically-transmitted facsimiles of original photographs and are stamped on the back with the designation "Official Signal Corps Radio-telephoto, Please Give Credit." Additionally, the captions for these photographs are embedded into the photo. The telephotographs are distorted to varying degrees as a result of the transmission process. Most notable are horizontal white lines across the images, and a slightly poorer overall image quality. Photos which were created in this manner bear the designation "Electronically-transmitted copy" within the item description notes found at the conclusion of this finding aid.

The remainder of the seventy-one photographs are "traditional" black and white photographs. The vast majority of these photographs originally had paper captions affixed to them with glue or tape. Most photograph captions included a heading such as "ETO HQ 44 6568 Murray (5) 4 July 44." This string of letters and numbers let the recipient of the photograph know that the photograph was taken in the European Theater of Operations (ETO), Headquaters (HQ), in 1944 (44), the negative number (6568), the cameraman (Murray), the area in Europe where the photo was shot (5), and the processing date (July 4, 1944). These paper captions have been removed and placed above the photographs in mylar sleeves. The captions provide very valuable information about both the content of the image as well as the source of the photograph. Most likely these
captions were affixed to the photographs prior to transmission via the facsimile machine so that the recipient of the facsimile had all the necessary information about the image. The majority of the photograph captions include a statement that reads "Signal Corps Radio Tele-Photograph from London." This would seem to imply that most of the photographs housed in this collection are originals that were fed through the facsimile machine in London and sent abroad.

In addition to the paper captions affixed to the front of the photos, most of the original photographs also have captions, stamps, and handwritten comments on their reverse sides. These captions and comments can be very useful in illustrating how captions were changed or corrected by the censors prior to the photo being released for publication. Many photos have stamps on the reverse side indicating when the censor released the photo for publication and the initials of the censor.

The events depicted in the photographs vary, but they all hail from the European Theater of Operations and were all taken sometime between December 1943 and March 1945. Many of the photographs depict the events leading up to and following the D-Day invasion. Several additional photographs depict women from the Women’s Army Corps, African American soldiers, and various forms of entertainment for the troops. Notable individuals pictured in the photographs include Winston Churchill, Charles de Gaulle, General Dwight D. Eisenhower, General James G. Doolittle, General Bernard Montgomery, Queen Elizabeth and King George VI, Lord Louis Mountbatten, and Secretary of War Henry L. Stimson.

A complete list of the photographs housed in the collection can be found in the contents section of this finding aid.
Selected Search Terms

Personal Names
Knauf, Paul W., Jr.

Corporate Names

Topical Terms
Phototelegraphy--20th century--Sources.
Photography--20th century--Sources.
World War, 1939-1945--Sources.
Radio facsimile--20th century--Sources.

Form/Genre Terms
Black-and-white photographs.
Newspapers.
Certificates.
Wire photographs.

Occupation
Soldiers.
Photographers.
Arrangement

Series I. Supporting Documents, 1943–1944
Series II. Photographs, 1943–1945
Detailed Description of the Collection

Series I. Supporting Documents, 1943–1944 6 items

Includes a 1943 certificate from the Bell Telephone Laboratories School for War Training; the London newspapers *The People*, April 29, 1944 and *Evening Standard*, May 8, 1944; reprints of the American newspapers the *Philadelphia Inquirer* and the *New York Times* both from June 8, 1944; and one issue of the publication "Army Talks," used for preparing staff on how to build the morale of their troops.

Supporting Documents, 1943–1944 [Box 1 F1]

Series II. Photographs, 1943–1945

The photographs in this series are organized by date of publication (when available). The scope and content note for each photograph provides as much detail about the photographer and source of the photograph as is known. When available, the name and rank of the individual photographer is given first. Often, only the last name of the photographer is noted on the photograph, if any name is noted at all. Next, the body responsible for the creation of the photo is listed (for example, the British War Office, the Signal Corps, or the AP Pool). A Signal Corps Radio-Telephotograph statement is provided if the original photograph included this citation. If the photograph being described was actually transmitted using the radio telephotograph process then the statement "Electronically-transmitted copy" is included in the citation. Each of these pieces of source information is separated with a period.

December 1943 1 item

U.S. Nurses stationed in N. Ireland rehearse carols, 1943 December 17 [Box 1 F2]


January 1944–February 1944 3 items

WACS ring at Grosvenor Chapel, 1944 January 1 [Box 1 F3]

No source information available.

British advance through trench toward Heinsburg, 1944 January 25 [Box 1 F3]

Ministry of Information Photo.

"Pallas Athene, The G.I. Jane," the first bomber to be named in honor of the WACS, 1944 February 12 [Box 1 F3]

Marquardt.

March 1944–April 1944 3 items
8th Airforce over Greater Berlin, 1944 March 8 [Box 1 F4]

B-26 returns from pounding Airdrome at Leeuwarden, Holland, 1944 March 9 [Box 1 F4]

Bombs falling on German twin-engine fighter base [original caption mostly missing], 1944 April 1 [Box 1 F4]
Signal Corps Radio-Telephoto from London.

May 1944–June 1944 24 items

Gen. D.D. Eisenhower salutes the WACS, 1944 May 11 [Box 1 F5]

Gen. James G. Doolittle extends birthday greetings to three WACS, 1944 May 15 [Box 1 F5]

American troops embark, 1944 June 6 [Box 1 F5]

Eisenhower gives order "Full Victory -- Nothing Else" before first assault in invasion of Europe, 1944 June 6 [Box 1 F5]

Jeeps & men landing in France, 1944 June 7 [Box 1 F5]

Wounded Canadians wait on beach, 1944 June 7 [Box 1 F5]

American soldiers on beachhead in France, 1944 June 7 [Box 1 F5]

American assault troops, 1944 June 7 [Box 1 F5]

First Allied troops hit the beach, 1944 June 8 [Box 1 F5]

Aerial view of D-Day, 1944 June 8 [Box 1 F5]

"Liberation of Europe", 1944 June 8 [Box 1 F5]

US troops on the move at Normandy, undated [Box 1 F5]

Medics give first aid to combat engineer who stepped on mine, 1944 June 11 [Box 1 F5]

Youthful German prisoners, 1944 June 11 [Box 1 F5]

General Montgomery at Normandy port captured by Allies, 1944 June 12 [Box 1 F5]

Winston Churchill, Sir Alan Brooke, and General Smuts visit General Montgomery, 1944 June 12 [Box 1 F5]
Neuman. Signal Corps Photo.

Lt. Margaret Ketchum gives water to injured soldier, 1944 June 13 [Box 1 F5]

American Doughboys reaching coast of France after their landing craft had been sunk, 1944 June 13 [Box 1 F5]
Bren gunner in action near Bayeux, 1944 June 14 [Box 1 F5]

Blood plasma given in front line field hospital, 1944 June 15 [Box 1 F5]

German gun with its dead crew after advance of Americans across the Cherbourg Peninsula, 1944 June 17 [Box 1 F5]

Doughboys take cover at St. Saveur de Vicomte, 1944 June 18 [Box 1 F5]

Service held at WWI monument draped with parachutes of dead, 1944 June 19 [Box 1 F5]

General Dietrick Von Schlieber splattered by mud after defeat at Cherbourg, 1944 June 27 [Box 1 F5]

July 1944–August 1944 19 items

Black soldiers celebrate 4th of July, 1944 July 5 [Box 1 F6]

Troops receive first pay in French currency, 1944 July 6 [Box 1 F6]

US troops camp on French beach with ships anchored peacefully offshore, 1944 July 11 [Box 1 F6]

British infantry dig slit trench, 1944 July 13 [Box 1 F6]

Howitzer reloaded for action, 1944 July 13 [Box 1 F6]

Secretary of War Henry L. Stimson autographs soldiers cast, 1944 July 13 [Box 1 F6]


WACS board for France, 1944 July 17 [Box 1 F6]


Service at US military cemetery, 1944 July 18 [Box 1 F6]


GI's set up first Cinemobile, 1944 July 18 [Box 1 F6]


First WACS to receive Purple Heart, 1944 July 19 [Box 1 F6]


First Yankee Café in St. Lo, France, 1944 July 21 [Box 1 F6]


Front line infantry unit rests at a vaudeville show, 1944 July 26 [Box 1 F6]


Queen Elizabeth talks with injured black officer, 1944 July 27 [Box 1 F6]


A jeep serves as an altar as soldiers worship on chateau grounds, 1944 July 30 [Box 1 F6]


Tank rolls down the ramp of a Landing Ship Tank on a Normandy beach, 1944 August 15 [Box 1 F6]

Signal Corps Radio-Telephoto from London.

Two German soldiers surrender in Doucelle, France, 1944 August 17 [Box 1 F6]

Lord Louis Mountbatten with General Montgomery at Normandy, 1944 August 25 [Box 1 F6]

Victory parade with General de Gaulle placing wreath on Grave of Unknown Soldier, 1944 August 27 [Box 1 F6]

Lieutenant General Omar N. Bradley at Tomb of the French Unknown Soldier, 1944 August 31 [Box 1 F6]

September 1944–October 1944 10 items

Infantry cross blown up bridge over Marne at Mareuil Survay, 1944 September 3 [Box 1 F7]

People in Meru, France place flowers on the graves of neighbors shot by the Germans, 1944 September 3 [Box 1 F7]

Belgian woman waves flag to welcome Americans, 1944 September 3 [Box 1 F7]

General Eisenhower inspects overturned German tank, 1944 September 5 [Box 1 F7]

Nazis leave Belgium on bicycles and horse drawn transport, 1944 September 14 [Box 1 F7]

Great Armada of carriers fly over Gheel, 1944 September 18 [Box 1 F7]

Towplanes and gliders over windmill at Valkenswad, 1944 September 24 [Box 1 F7]
British Official RAF Photo.
Canadians with Nazi flag, 1944 October 3 [Box 1 F7]

King holds investiture and Major General Sir F.W. de Guingand receives the K.B.E., 1944 October 18 [Box 1 F7]

Paul Knauf, Virginia Robinson and Frank Schroeder -- Speak no evil, Hear no evil, See no evil, 1944 October 21 [Box 1 F7]
Photo taken for personal use. Not published.

November 1944–December 1944 2 items

German soldiers surrendering to Americans line up outside of Fort San Quentin, near Metz, France, 1944 December 6 [Box 1 F8]
PFC Gilbert Horton. Signal Corps Foto.

Sign erected by men of 95th Infantry near Saar-Lantern, 1944 December 9 [Box 1 F8]
LT Cohen. Signal Corps Foto.

January 1945–February 1945 7 items

Wounded of Bastogne landed from C-47 Dakota Air Transport, 1945 January 1 [Box 1 F9]

Infantrymen of 75th Division move forward with tanks, 1945 January 10 [Box 1 F9]
Linden. Signal Corps Foto.

Rocket passes through two engines of B-17, 1945 January 16 [Box 1 F9]
8th AF Foto. Signal Corps Radio-Telephoto from London.

Infantrymen advance under fire in Mont-Le Ban, Belgium, 1945 January 18 [Box 1 F9]

British Infantry eliminate snipers in streets, 1945 January 22 [Box 1 F9]
Series II.

British War Office Photo. Signal Corps Radio-Telephoto from London.

US Infantrymen with white snow suits pause on boundary of Brachelen, 1945 January 28 [Box 1 F9]

15 mm Howitzers cross a pontoon bridge over the Roer River, 1945 February 26 [Box 1 F9]

March 1945 2 items

9th Army troops crossing the Rhine River in outboard boats, 1945 March 24 [Box 1 F10]
Ramage/Pool/INP/Hel. Signal Corps Radio-Telephoto from London.

Barrage balloons kept ready near US bridge over the Rhine, 1945 March 29 [Box 1 F10]