Supplying the Resistance:

OSS Logistics Support to Special Operations in Europe

by Troy J. Sacquety

This article on OSS logistics was prompted by gaining access to Lieutenant Colonel Fitzhugh Chandler’s photo album, courtesy of his son, William Chandler. The logistics capability of the Office of Strategic Services (OSS) during World War II has rarely been studied. LTC Chandler was the commanding officer of OSS Area H in England, the facility that provided weapons and supplies to the French Resistance, as well as to OSS Operational Groups (OGs), Special Operations (SO), Jedburgh, and Secret Intelligence (SI) teams. Resupply was critical in helping those fighters waging a resistance war against German occupation. Without material support, these OSS teams could not have accomplished their missions. This article explains what was done at Area H, and how those supplies were delivered behind enemy lines.

On 26 June 1942, the OSS and its British equivalent, the Special Operations Executive (SOE), agreed to divide the world into regions in which one service would have primacy over the other. The SOE retained Western Europe, and it was decided that the OSS SO would operate there under general SOE supervision, but would retain its independence. By 14 January 1944, SO and SOE had combined their headquarters to enhance coordination. This arrangement facilitated an exchange of personnel between the two organizations.

While the British had excellent operational capabilities, they had been fighting since 1939 and lacked material. The fledgling SO branch had to build a supply chain in England to assist in the Allied liberation of Europe, as the SOE could not also support OSS operations. The first step was to get aircraft capable of clandestinely delivering supplies into occupied Europe. On 5 May 1943, the SO branch requested a bomber squadron to drop agents and supplies into German-occupied Europe from the U.S.
Stacks of British Enfield rifles await packing into containers.

A modified B-24 Liberator of the 492/801st Bomb Group, or "Carpetbaggers" takes off from RAF Harrington in 1944.

Army Air Force (USAAF). Five months later, after considerable pressure from the OSS Director, Major General William Donovan, SO received its sixteen-plane squadron with the promise of another by the end of the year. The B-24 squadron commanded by Colonel Clifford Heflin had originally been formed for anti-submarine duty. Redesignated the 801st Bomb Group, but popularly known as “Carpetbaggers” [after their mission code name, Operation CARPETBAGGER], the 801st became the USAAF element that would conduct nighttime supply drops to resistance and special operations groups in German-occupied Europe. The first CARPETBAGGER missions were flown out of Royal Air Force (RAF) Tempsford in January 1944. The 801st aircrews were sent to RAF Tempsford to learn from SOE air teams and to be trained in clandestine supply operations. Then, after a short stint at Alconbury, the 801st moved its airbase to Harrington. There, the Carpetbaggers grew to four sixteen-plane squadrons with 2,500 airmen. On 13 August 1944, the 801st was redesignated the 492nd Bombardment Group, and its squadrons renamed: 36th to 856th, 406th to 858th, 850th to 857th, and 788th to 859th.

With airlift resolved, the OSS needed a logistics base in England where it could accumulate, store, and prepare items for airdrop into occupied Europe. A memo dated 6 July 1943 from Colonel Charles Vanderblue, the chief of OSS SO London, to OSS Headquarters, Washington DC, established the need for what would become OSS Area H. “It appears evident from the position of SOE and SO that the greatest contribution we can make is in the form of supplies. Therefore we should be guided in setting up our organization by that condition .” By early August 1943, OSS Washington tasked SO London to meet the logistics requirements of 100 agents, 35 Jedburgh teams, and 100,000 resistance fighters. Anticipating heavy losses during the drop process, SO reasoned that they should double what was estimated to arm a force of this size. That meant SO had to accumulate and store some 71,400 knives, nearly 104,000 sub-machineguns, 24,000 carbines, 104,000 pistols, 793,000 grenades, over 704,200 pounds of explosives, nearly 18 million rounds of ammunition, and 38,000 parachutes. SO London had to find a site quickly where these items could be stored and packed for air delivery.

British Brigadier General E. E. Mockler-Ferryman of SOE suggested that the OSS SO facility be located close to the SOE packing station (Station 61) at St. Neots. That way, the two organizations could access a common reservoir of supplies. Leaving the headquarters of the SO Air Operations section in London, the majority of the staff element moved to Holmewood, a sixteenth-century estate near the village of Holme. Holmewood was eighty miles north of London and twenty miles away from Station 61. The manor was used to house officers and their mess, and also served as the administrative headquarters common recreation rooms. Agents were sometimes housed—and isolated—in the manor prior to departing on their missions. The estate stables and outbuildings were used for storage.

Construction on the OSS facilities, named Area H,
was started in January 1944 and completed two months later. Area H became the largest SO supply facility in the European Theater.15 By then, Area H could accommodate 18 officers and 326 enlisted men.16 Although electricity and water came from offsite, heating came from a newly constructed power house. Sheet metal buildings housed the dispensary, administrative and maintenance sections, as well as the motor pool. Isolated buildings for ammunition and explosives, such as incendiary devices, were erected away from the main camp. That area had four Nissen huts and five brick buildings. Each was revetted with brick walls to contain accidental explosions.17 Another Nissen and four Romney huts housed the packing operations.18 A new brick storage shed served to protect the packed containers. Area H could store 500 tons of material. The SOE base at St. Neots could handle an additional 300 tons. Security for Area H was heavy. High woven-wire fences topped with barbed wire surrounded the compound. At night, guard dog teams patrolled the fence line. The three gates had guard houses to control access.

Coordination between the OSS and SOE was constant, and packing procedures mirrored each other.19 The delivery of supplies to occupied Europe started with specially designed packing containers. These long tubular metal or plastic containers came in two types, the “H” and the “C” model. Nearly identical on the outside, “H” containers had compartments inside while the “Cs” did not. Once dropped, an “H” container could be unclamped and separated into five segments, each of which could be carried by one man. The “C” containers were for long items, such as rifles or machine guns. Once taken from storage, the empty containers were stenciled with a serial number before delivery to the packing shed.20 The contents were padded with shock-absorbing material such as burlap, and the containers were squeezed shut. If a particular item would not fit in a container, a package would be custom-designed and specially cushioned so that the contents

Airfields and SOE sites surrounding Area H.
This series of five photographs details the sequence for one of the containers being packed at Area H.

1 Contents of the container, which in this example is the unlikely pair of boots and Bren gun magazines.

2 Shock-absorbing burlap cushioning material being added.

3 Completed packing job. Notice that the cushioning material has been secured to make closing the container easier.

4 Container being forcefully closed.

5 The locks are secured with the help of a hammer so that the container will not open in mid-air. Notice the carrying handles that allowed four men to carry the fully-loaded container.

The photographs are lying on artifacts that are representative of OSS Special Operations. Included are several insignia: a Free French armband, British and American paratrooper wings, and a locally-made dagger. Of special interest is the Airborne Command patch, worn by airborne OSS personnel, since they had no official patch, and the Jedburgh uniform with the Special Force wing attached. The Special Force, or “SF” patch was worn by OSS Operational Group members based out of the United Kingdom, as well as the Jedburghs and Special Operations personnel. British and Allied personnel assigned to Special Force Headquarters also wore this unofficial wing. The “OSS” pin, as seen under photo # 3, was given to former OSS personnel when the organization was disbanded in October 1945.
could withstand the opening shock of the parachute as well as the landing. These were referred to simply as “packages.”

The containers or packages might contain any of 400 separate U.S. Army, British military, OSS, or SOE issue items, in addition to personal sundries. Supplies of all of these items had to be kept on hand. These stocks included British and American weapons of different calibers. When resistance and OSS groups were armed, the personnel at Area H had to know what weapons each element carried to provide the correct ammunition.

Sometimes, the contents of a package or container were further tailored for specific missions or requests. Although he was resupplied by the Algiers packing station, the experience of Captain Arthur Frizzell, the commander of Operational Group EMILY, would be treated the same as a team being supplied by Area H. Fizzell recalled that his containers appeared “to have been packed especially for us and contained those items requested, to additionally include any APO mail from home . . . that mail was heavily censored at Algiers HQs with some of it looking like paper off the player piano roll—what with the excision of names of persons and places. The mail also included goodies from home such as Mom’s favorite cookies, salami, etc. . . . I recall one container had a bottle of bourbon.” Thus, the “assembly” style packing facilities at Area H had to be extremely flexible to satisfy mission requests. Those receiving the air drops needed to ensure that they had enough personnel at the drop zone to carry away and hide the containers and packages before daylight, when the Germans might come to investigate.

Often, drops to multiple groups required similar items. This led to the development of a series of standard loads. It also provided a more accurate estimate of the total weight of a load going into a drop aircraft. For instance, one of the standard loads for an “H” container was 5 Sten guns with 15 magazines, 1500 rounds of 9mm ammunition, 5 pistols with 250 rounds of ammunition, 52 grenades, and 18 pounds of explosives. The weight of this container was 281 pounds. The contents of each container were distributed and packed into each cell to bal-
ancetheloadandimprove
the chances of an easy
landing.\textsuperscript{22} The same was
ture for a “C” container.
In one standard load, a
“C” could hold two British
Bren light machineguns
complete with 16 maga-
zines and 2000 rounds of
.303 ammunition, weigh-
ing 303 pounds.\textsuperscript{23} To
verify their packing tech-
niques, the personnel at
Area H conducted drop
tests—including free
drops of items—to see if
their containers, pack-
ages, or even bazooka
rounds, survived intact.

Once packed, the containers and packages were tak-
en by convoy to the waiting aircraft at nearby SOE or
USAAF airfields. The primary USAAF airfield that Area
H supported was Harrington, where the Carpetbaggers
were based. Although most containers were dropped
into occupied Europe shortly after delivery to the air-
fields, Harrington could store 4,000 loaded containers.\textsuperscript{24}
Just before loading, parachutes were attached to the con-
tainers. This insured that the parachutes would be in the
best possible condition, and reduced malfunctions.

Carpetbagger or RAF crews supervised the loading
and dropping of supplies, as well as any agents being
infiltrated into the occupied territories. The Carpetbag-
gers used specially modified B-24 Liberators. These planes
had radar, flash suppressors mounted on their machine-
guns in the top and rear turrets, static-line cables, British
container release equipment replaced the bomb racks,
and they were painted all black. The removal of the belly
ball turret created a “joe hole” for parachuting agents.\textsuperscript{25}

The Carpetbaggers pioneered low-level night flying
in the USAAF. All missions were conducted only during
the full moon period, when the extra light could assist
the pilot’s vision. European based–USAAF bombing
squadrons clung to the doctrine of daylight “precision”
bombing.\textsuperscript{26} The Carpetbaggers stayed below 2,000 feet to
avoid German radar and anti-aircraft defenses as well
as to make more precise airdrops.\textsuperscript{27} Once over a target,
the Carpetbagger plane communicated with the ground
contacts using a device called an “S” phone, a short-
range ground-to-air radio, which allowed greater accu-
racy in drops. If the reception committee did not have
an “S” phone, they communicated using flashlights or

\begin{itemize}
\item A test drop at Area H.
\item Here is a selection of OSS “gadgets” dropped into oc-
cupied Europe. Among those pictured are a “pocket
incendiary,” “fog signal,” “clam,” firing devices, and timing
pencils. Such items were used for demolitions.
\item A selection of arms that were dropped into German-oc-
cupied Europe. From left to right: bazooka (assembled
and disassembled), M-1 carbine, M-1 carbine with folding
stock, a United Defense model 42 submachinegun, a Brit-
ish Sten submachinegun, a British Bren light machinegun,
and a British Enfield rifle.
\end{itemize}
signal fires.

Airdrops of supplies and personnel were made between 400–600 feet and under 130 miles per hour. This velocity was near the stall speed of the B-24, but it reduced the opening shock of the parachute and lessened the chance of damage to the container contents and casualties among the agents. Often, leaflet drops were made at other sites to hide the primary mission. Sometimes, leaflets, supplies, and agents were dropped by the same aircraft in a single mission.

USAAF began dropping supplies into occupied Europe in January 1944. These initial drops started an ever-increasing demand on Area H.28 Operations conducted in January and February 1944 presented a steep learning curve for the Carpetbaggers. Only twenty-eight of seventy-six operational sorties were successful.29 “Success” was defined as containers dropped and the plane returned. The crew never knew if they dropped supplies to a German-controlled group, or if the supplies were undamaged. By March, the ratio had improved with forty-four of seventy-two sorties successful. During the first three months of 1944, 6 agents, 799 containers, and 265 packages—with more than a million rounds of small arm ammunition—were dropped, with a loss of three aircraft.28 In July 1944, the Carpetbaggers were assigned the mission of bringing personnel back from occupied Europe. A few C-47s were attached to the Carpetbaggers,
The Daylight Drops

The RAF and the USAF Carpetbaggers were not the only groups who dropped supplies to the French Resistance, or Maquis, as they were known. During the campaign to liberate France, the USAF conducted four massive daylight supply drops to arm and equip resistance forces for the OSS. The 3rd Air Division, 8th Air Force, committed hundreds of B-17 bombers with fighter escorts. The missions were Operation ZEBRA (25 June 1944), Operation CADILLAC (14 July 1944), Operation BUICK (1 August 1944), and Operation GRASSY (9 September 1944). Prior to each scheduled drop, local Maquis units would be notified the evening before the drop by coded messages in broadcasts by the British Broadcasting Corporation (BBC). This notified the resistance groups the number of containers to be dropped and the time that they were to light signal fires that would mark the drop zones. The groups had to confirm by radio that they had received the message. These precautions reduced the chances that the supplies would drop into German hands.

One hundred seventy-six aircraft dropped 2,109 containers at four locations during Operation ZEBRA. One of the thankful Maquis groups signaled after the drop, “The Maquis thank the U.S. Air Force for a damned good show. When is the next?” Operation CADILLAC had 320 aircraft drop 3,791 containers on seven drop zones, enough to supply 20,000 Maquis. A British SOE observer aboard a B-17 described his experience: “As we approached the target area, the bonfires were clearly visible . . . at a range of approximately twenty-five miles . . . a very large quantity of parachutes were so close to the dropping point that they formed an almost solid mass of canopies . . . Excellent shooting!”

Operation BUICK involved four drop areas with 192 aircraft dropping 2,286 containers and a seven-man OSS SO team, code-named UNION II. United States Marine Corps (USMC) Sergeant Jack Risler (UNION II) said that he “got kissed on both cheeks as soon as I got out of my chute!” The final massive daylight supply mission in France was Operation GRASSY, conducted with sixty-eight aircraft on 9 September 1944. The planes dropped 814 containers on one drop zone.

All told, the 812 sorties of B-17s in these massive daylight drops supplied the Maquis with nearly 2,700,000 pounds of equipment and arms. During the four operations, two B-17s were lost and sixty-five damaged. However, nine German aircraft were destroyed in air-to-air combat. A Maquis leader put it well, “We now consider this area to be well armed.” There was a downside. While possibly more important psychologically to the Maquis than the night drops, the daylight drops prompted some severe German reprisals. One case was in the Vercors region, where the Germans strafed villages with aircraft and conducted an airborne landing to counter the Maquis and OSS groups. This retaliatory action, including the ordeal of OSS Operational Group JUSTINE, will be the subject of a future article in Veritas.

1 “OSS Aid to the French Resistance in World War II: Massive Supply Drops,” ARSOF Archives, Ian Sutherland Collection, Fort Bragg, NC.
3 “OSS Aid to the French Resistance in World War II: Massive Supply Drops.”
4 UNION II was lead by USMC Major Peter J. Ortiz and was composed of Army Air Forces Captain Francis Coolidge, USMC Gunnery Sergeant Robert La Salle, USMC Sergeants Charles Perry, John F. Bodnar, Frederick J. Brunner, and Jack R. Risler, and Joseph Arcelin, a Free French officer. MAJ Ortiz, SGT Risler, SGT Bodnar, and Arcelin were later captured and held as POWs.
6 “OSS Aid to the French Resistance in World War II: Massive Supply Drops.”
The riggers at Area H could be called upon to repair parachutes, make harnesses, or to construct diplomatic mailbags that were used to smuggle supplies to neutral Sweden for the Norwegian government in exile.

and through September 1944, carried seventy-six agents into occupied Europe, and exfiltrated 213.\textsuperscript{31}

Work schedules at Area H were demanding. Although the personnel of Area H considered that their job was finished when the packed containers were delivered to the airbases, it was the volume of supply drops that set their pace. To provide the 10,000 containers a month required in July 1944, two eight-hour shifts worked overtime, seven days a week. Packing personnel were given one day off a week.\textsuperscript{32} Periodic surges were also required. Area H packed 15,323 containers and packages in one month.\textsuperscript{33} Many of these surges were to accommodate USAAF massive daylight drops to the French Resistance, or a 19 September 1944 drop of 1,084 containers to the Polish Resistance, who the Germans had under siege in Warsaw.

After September 1944, the pace at Area H slowed. France, the primary country for aerial resupply operations, no longer needed a specialized air resupply. The Carpetbaggers converted their B-24s to fly fuel directly to Lieutenant General George S. Patton’s Third Army, which had outrun its logistic tail. The Carpetbaggers delivered 822,791 gallons of gasoline in a month. Although there was still a need for the Carpetbaggers, it was considerably reduced. By the end of the war in Europe, the 801st/492 Bomb Group dropped 551 agents and 4,511 tons of supplies, at the loss of 223 aircrrew. By then, the scope of their operations included France, Belgium, the Netherlands, Germany, Italy, Poland, and Norway.\textsuperscript{34}

In November, Area H was the scene of renewed activity when resupply of the resistance in Denmark and Norway was increased. Supplying the resistance in German-occupied Norway involved a bit of creativity. In addition to direct air drops, the OSS smuggled supplies over the border from neutral Sweden. Specially-made diplomatic mail pouches were carried by representatives of the Norwegian government-in-exile into Sweden. Once safely secreted in the warehouse of the Norwegian Legation in Stockholm, the bags were unpacked and the contents covertly smuggled into Norway.\textsuperscript{35} Area H was preparing to pack 10,000 containers a month for Norway and Denmark, and one Carpetbagger squadron, the 856th, was retained, when the war against Germany ended in May 1945.

The OSS logistics effort at Area H was an unqualified success. During 1944, Area H packed 50,162 containers
White canisters were used for air-drop operations in Scandi
navia.

Men of the Rigger Section pack parachutes. Notice the bright lighting which helped to ensure that the parachutes were packed correctly.

Area H personnel pose with the 50,000th canister packed.

Lieutenant Colonel Chandler takes his bike for a spin. On the back is Major Louis Rafferty and on the front, his pet dog "Ack-Ack." Ack-Ack was GI slang for "flak" or German antiaircraft fire.

for air delivery by the RAF and the USAAF. In the first nine-months of 1944, this included more than 75,000 small arms and 35,000 grenades. Area H provided 96 tons of supplies to Belgium, 9 to Denmark, 3,055 to France, 119 to Poland, and 56 to Norway. Operations in 1945 in Denmark and Norway raised the total tonnage supplied. Supplying the resistance forces, as well as the SOE and OSS teams in occupied Europe, did not come without cost. Twenty-one Carpetbagger aircraft and most of their crews were lost in action.

Although the logistics division gets little credit for the success of OSS operations, the staff at Area H played a vital role in the liberation of France. Major General William J. Donovan, Director of the OSS, commended the Area H personnel, “I personally wish to commend each of you for the superior manner in which you have performed your duties. Unquestionably, the work of the packing station constitutes a vital link in the difficult job of supplying the Resistance groups and has contributed materially to the effectiveness of these Groups against the common enemy.” By the outstanding manner in which they performed their mission, the logistics personnel at Area H, and the aircrews that delivered the supplies and agents behind German lines, directly contributed to the success of the OSS in occupied Europe.

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OG, SO, and SI were separate branches in the OSS. The Jedburghs were inter-allied teams composed of US, British, French, Belgian, Dutch, and Canadian personnel. The OSS portion of the Jedburgh program fell under the SO branch.


2 The agreement was formally approved by the Joint Chiefs of Staff (JCS) on 26 August 1942.


5 OSS London War Diary, “Special Operations Branch: Air Operations, Roll 9, Vol.6,” chronological summary, vii, Copies held at the National Archives II, College Park, MD, the ARSOF Archives, and selectively available online at http://home.comcast.net/~defactohistorian/Index.html.


7 For more information, see Thomas L. Ensminger’s excellent website; http://home.comcast.net/~defactohistorian/Index.html or his two-volume book, Spies, Supplies and Moonlit Skies (United States: Xlibris, 2004)

8 Airfields under RAF control/use are denoted with the prefix RAF. If they had been given over for USAAF use, not RAF prefix is used.


15 Roosevelt, ed., The Overseas Targets, 198; There was a smaller OSS logistics base in Algiers, with 142 personnel, to supply operations in Southern France during and after Operation DRAGOON. Southern France was beyond the range of England-based supply bombers.


18 Nissen huts were half-circular sheet metal sheds developed in 1916 by Peter Norman Nissen, a Canadian Mining engineer. They were used extensively in WWII by the U.S. military and were a feature of many Army bases. Romney huts were a similar version used by the British. The more famous Quonset hut was a U.S. Navy adaptation of the Nissen hut.


21 Arthur Frizzell to Troy Sacquetty, email, 23 March 2007.


26 The RAF adopted the policy of night bombing.


34 Two Carpetbagger squadrons were retained for dropping operations. The group reverted back to its traditional bombing role except the 859th which was sent to Italy to supply the Balkans, and the 856th which was used to supply operations in Denmark and Norway.


37 OSS London War Diary, “Special Operations Branch: Supply, Roll 10, Vol. 10,” 13, 17; A slight majority of the Area H prepared supplies went to the RAF.

38 OSS London War Diary, “Special Operations Branch: Air Operations, Roll 9, Vol.6,” 7; A ton equals 2,000 pounds.