From Bucharest to the Baltic

German Air Operations on the Eastern Front, 1916-1917

Richard L. DiNardo, USMC Command and Staff College

When one thinks of German airpower in the First World War, one is immediately drawn to the western front. One quickly conjures up images of zeppelin and Gotha bomber raids against London. More commonly, people will think of dogfights conducted by daring young men in flying machines, even if they did not look like George Peppard, or bed down German generals’ wives who looked like Ursula Andress. Even the most casual student of the war will recognize the name Manfred von Richthofen, even if that thought is followed by the image of the Red Baron being pursued by Snoopy (“curse you, Red Baron!”). The point is that all of these images are derived from the western front, and to be sure, it does have its rightful place. The Germans employed all manner of aircraft in all manner of sophisticated ways on the western front. There was, however, more than one front in World War I where Germany deployed aircraft.

For far too long, the eastern front in World War I has remained, in Winston Churchill’s words, “the unknown war.” Despite the best efforts of Dennis Showalter, Holger Herwig, Norman Stone and others, the course of affairs in the east is still largely a blank slate, especially in the period between Tannenberg and the Russian revolutions. This article will attempt to address this gap by covering German air operations on the eastern front, focusing in particular on the Romanian campaign and operation ALBION, mounted to seize the Baltic islands of Oesel, Moon and Dagö in October 1917. In both of these cases the Germans employed aircraft in a variety of interesting ways.

From the beginning of the war in August 1914 through 1915, German aircraft were employed essentially for reconnaissance. The distances involved on the eastern front, combined with the rapid German abandonment of the use of mounted cavalry and a lack of major Russian air opposition, made German aerial reconnaissance critical to the conduct of operations. After some initial missteps, such as a botched reconnaissance mission that helped lead to a defeat at Gumbinnen, German aerial reconnaissance improved considerably. German reconnaissance flights proved crucial to providing information about Russian positions at Gorlice prior to the crushing offensive launched by General August von Mackensen’s German Eleventh Army on 2 May 1915. During the latter stages of the Serbian campaign in October 1915, Mackensen was able to use aerial photography to persuade the German High Command (OHL) of the wisdom of his decision to halt the pursuit of the beaten Serbian Army over increasingly difficult terrain and worsening weather.

In August 1916 Romania, emboldened by the German defeat at Verdun, the bloody stalemate on the Somme, and the Austro-Hungarian collapse precipitated by the Russian Brussilov offensive, declared war on the Central Powers. Given the criticality of the situation, a response against Romania had to be mounted as quickly as possible. OHL sent Mackensen, now a Field Marshal
and arguably Germany’s best field commander and practitioner of coalition warfare, down to Bulgaria to take command of a force based on the Bulgarian Third Army, later reinforced by smatterings of Turkish, Austro-Hungarian, and German troops. Aerial reconnaissance played a crucial role in providing Mackensen and his staff information on enemy activity on the Danube as well as Romanian deployments, enabling a clear assessment of the situation.5

Meanwhile, the Bulgarians were able to stabilize the situation by a swiftly mounted attack that caught the Romanians off guard and seized the fortress of Tutrakan on 6 September 1916. By mid-September, however, the Romanians had halted Bulgarian progress and established a defensive line that covered the critical rail line between the Romanian Black Sea port of Constanza and Cernavoda, with the last railroad bridge available to the Romanians over the Danube. Mackensen now set the rail line as his major objective. To take it, OHL reinforced him with the German 217th Infantry Division, heavy artillery and most importantly for this study, an under-strength bomber Geschwader with 24 aircraft. The Turkish high command in Constantinople also dispatched the Turkish VI Corps to Mackensen’s aid.6

The first offensive appearance of German airpower in the campaign was on 9 October 1916, when German bombers dropped close to four tons of bombs on Chitila, a rail station northwest of Bucharest. Meanwhile, German reconnaissance flights kept close watch on activity in the port of Constanza.7

As Mackensen’s plan for the coming campaign to overrun the Constanza–Cernavoda line took shape, airflow served three roles, at least initially. The first goal, air superiority, appears to have been secured rather easily. The second role, reconnaissance, remained constant. German aircraft were always out seeking information on Romanian positions, as well as monitoring the arrival and activity of Russian troops and supplies for the Romanians. The third aircraft role was interdiction. The port of Constanza was a regular target for German bombers. Another priority target was the railroad bridge at Cernavoda. The initial raids against Cernavoda were ineffective, owing to the light weight of the bombs used. Better results were obtained once the bombers began receiving 100 lb bombs. Aircraft were used to attack enemy assembly areas and bivouacs, as well as munitions dumps. Reconnaissance flights also provided information on Russian and Romanian fortifications and deployments.8

Mackensen’s attack began on 19 October 1916, and by the 22nd, the offensive had completely broken through the enemy’s positions. As the Romanian and Russian defense collapsed, German aircraft continued their activities. With uncontested air supremacy, German fighter aircraft strafed Romanian columns. Bombers switched their attention largely to Constanza, bombing port facilities to prevent the Russians from getting reinforcements to the area.9

With the Dobrudja region secured, the Central Powers’ forces, namely Mackensen’s Army Group plus General Erich von Falkenhayn’s German Ninth Army, closed in on the Romanian heartland and its capital, Bucharest. As part of this new offensive, German aircraft and zeppelins shifted to launching raids against Bucharest itself, although the conditions were difficult, especially for the zeppelins. Casualties for the German airmen for the entire campaign were very light, however, with only one known pilot fatality.10 Aided by airpower, the Central Powers’
offensive rolled forward relentlessly. By the end of 1916, Romania had effectively been crushed.  

After the Romanian campaign, the scene of action on the eastern front shifted to the north, specifically to the Baltic. With Russia crumbling internally, OHL sought advanced positions from which to launch a possible thrust at Petrograd. The most notable of these was Riga, which General Oskar von Hutier’s Eighth Army seized on 1 September 1917, using the tactics that would later bear his name.

In order to make Riga useful both logistically and as a naval base for light forces, however, it was necessary to occupy the islands of Oesel, Moon and Dagö, which controlled access to and from the Gulf of Riga. Both OHL (in reality, Paul von Hindenburg and Erich Ludendorff) and the head of the German Admiralty’s staff, Admiral Henning von Holtzendorf, agreed on 13 August 1917 to undertake the operation against the islands after the capture of Riga.

The invasion force would consist of some 300 ships, including ten of the Navy’s newest battleships, wrested away from Admiral Reinhard Scheer’s High Seas Fleet by the German Admiralty. The landing itself would be left to the XXIII Reserve Corps, in effect the heavily reinforced 42nd Infantry Division plus some corps-level assets, a total of about 24,000 men. Supporting these forces would be Army Captain Holtzman’s 16th Air Detachment (6 aircraft) and Detachment Baerens (8 seaplanes and the seaplane tender St. Elena, commanded by Navy Lieutenant Baerens). The Navy also committed six zeppelins (ranging from the older L 30, L 37, LZ 113 and LZ 120, to the newer SL 8 and SL 20) to the operation. Also supporting the operation were aircraft detachments at Windau and Libau. Calculating the number of aircraft involved in the operation is difficult, as the numbers vary. One source gives the number of aircraft (not including zeppelins) as 101, although the total number of operational aircraft available on any one day of the operation probably did not exceed 65. Aside from Holtzman’s unit, all of the aircraft (regardless of service) and zeppelins came under the command of Rear Admiral Ludwig von Reuter, the commander of the 2nd Scout Group.

Despite their small numbers, aircraft undertook a variety of roles before and during ALBION. As always, the first of these was reconnaissance. Aircraft tried to provide information on the dispositions of the Russian garrison on the island, as well as those Russian Navy units positioned in Moon Sound that might threaten the invasion force. German aircraft and zeppelins were also used to bomb various parts of the island, with varying degrees of success. Under no circumstances, however, were German aircraft to drop bombs near the landing sites, especially Tagga Bay, the principal landing area. It was feared that any kind of bombing attacks against the Russians there would tip them off as to the location of the landing sites, thus forfeiting the element of surprise.

Weather severely hindered the ability of aircraft to make much of an impact on the operation. On the day of the landing, for example, weather precluded any kind of activity by the zeppelins. Just as worrisome for the zeppelins was the increasing shortage of hydrogen gas. The Baltic Airship Detachment had to use a mixture of air and hydrogen, which increased the risk of fire. This danger eventually caught up with the Germans on 16 October 1917, when L 37 returned to its base at Seerappen having sustained heavy damage in a mid air fire after a bombing mission.
Fixed wing aircraft also suffered at the hands of the weather. Just as zeppelins were grounded on 12 October 1917, weather limited German aerial coverage of the landings to a pair of artillery spotter aircraft and one bomber during the first hour of the landing, followed in the second hour by one bomber and one reconnaissance plane. The 42nd Infantry Division regarded this as completely inadequate. On the 13th, rain and snow precluded effective reconnaissance flights, and although three seaplanes did make brave attempts at flying reconnaissance, two of the three aircraft were damaged upon landing, killing Naval Lieutenant Anton Priemes.\textsuperscript{16}

Despite the adverse conditions, aircraft did make some positive contributions to the conduct of ALBION. Aircraft operated with infantry units as “infantry aircraft,” as prescribed by German doctrine at the time. When the weather allowed, these aircraft did conduct a number of reconnaissance missions. When the breakdown of wireless radio communications prevented passing the information to the ground forces via radio, pilots resorted to the time-honored back up method of tying messages to strips of cloth and then dropping them next to the units. At times this procedure involved aircraft having to fly through Russian ground fire several times. Aircraft would also “lead” infantry columns, circling around and then flying off in the direction the infantry was supposed to march.\textsuperscript{17}

The Germans were certainly fortunate that Russian air opposition during ALBION was negligible, although Russian anti-aircraft fire could pose problems for planes. The only known Russian air activity was on 14 October, when a German naval aircraft was attacked by three Russian Nieuports. When Holtzman’s 16th Air Detachment moved to an airfield next to Oesel’s largest town, Arensburg, all they found were four Nieuports the Russians had destroyed and abandoned.\textsuperscript{18}

What insights can we draw from these operations? The first thing we can draw from the air operations described here is that although they were on a far smaller scale than those on the western front, they nonetheless illustrate nearly the full scope of flexibility inherent in airpower. With the exceptions of air superiority and the then still nascent concepts of aerial re-supply and rescue, German aircraft in the two operations covered here undertook every other kind of operation associated with air warfare. In addition, the Germans took advantage of the relatively benign conditions in the east as an opportunity to test newly fielded aircraft, especially bombers.\textsuperscript{19}

In both cases, much of the German air effort was spent flying reconnaissance. In the Romanian campaign, German bombers attacked Constanza and the Cernavoda rail bridge, as well as Russian and Romanian assembly areas, depots, reserve and front line positions, missions that might be classified as both operational and tactical in nature. All these activities were later codified in German air doctrine that was published in the spring of 1917. Later on, as fighters strafed retreating Romanian and Russian columns, bombers switched their attention to Bucharest, a strategic target. German raids on Bucharest also had psychological effects on the Romanians, much like the German Gotha raids against London. The Germans would employ aircraft in a similar manner in the 1917 air campaign over Flanders.\textsuperscript{20}

Although ALBION did not require much in the way of bombing, German aircraft undertook a large number of reconnaissance missions, although success in these varied considerably, partly
because of the weather, but also for other reasons that will be discussed momentarily. The most
intriguing aspect of airpower here was the use of aircraft as a means of communications,
particularly as a replacement for wireless radio.

The German expectation was that the majority of wireless radio message traffic, both land and
naval, would be handled through the wireless radio station aboard the invasion force’s flagship,
the battle cruiser _Moltke_. Once collected, information would then be passed on to General von
Hutier, the overall commander, who was at his headquarters in Libau. In some cases individual
aircraft were tied into specific ships by wireless radio for purposes of artillery spotting. In
addition, a system of colored ground signals and signal flares was set up to facilitate
communications between aircraft and ground troops.\(^{21}\)

Actual experience showed many of these expectations to have been overly optimistic. To be sure,
there were instances when the combination of aircraft and wireless radio paid dividends, such as
when the aircraft spotting for the torpedo boat G-104 was able to provide the information needed
for the boat to knock out a Russian field battery.\(^{22}\) Too often, however, radio communications
were simply overwhelmed by the sheer volume of traffic. With some 300 ships to command, not
to mention Army traffic, the _Moltke_’s wireless radio station was quickly overloaded. This also
applied to the command ships of the sub-elements of the invading force. Some of the Army’s
after-action reports noted the need for the Army to establish its own communications system as
rapidly as possible once the ground forces were ashore. German air doctrine stressed this for the
air forces as well, even before ALBION was undertaken.\(^{23}\)

The communications problems described above severely impacted German air operations in
ALBION. Even when zeppelins were able to fly reconnaissance and bombing missions, the
overloaded wireless radio communications prevented the immediate reporting of their results,
thus rendering the information gained useless. This applied to fixed wing aircraft as well. Fixed
wing aircraft did have the alternatives of either dropping written messages on the units they were
supporting, or literally landing by the headquarters of the units and delivering the information
personally. Given the difficult weather and at times unsuitable ground on Oesel, however, the
latter method increased the chances of aircraft suffering damage when landing, as occurred a few
times during the operation.\(^{24}\) Nonetheless, the combination of airpower and wireless
communication held great promise for the future.

One aspect of operations in general the Germans should have brought away from this experience
concerned joint operations. One of the senior German naval commanders in the Baltic, Rear
Admiral Albert Hopman, wrote to his wife on 19 September 1917 that “our army commanders
have no idea of naval warfare.”\(^{25}\) The reverse was true in ALBION at the lower levels, at least in
terms of the support provided to the Army by naval aircraft. The 42nd Division’s after-action
report on the operation complained that many of the reconnaissance reports from naval aircraft
were either inaccurate or simply false, owing to the fact that naval aviators were unfamiliar with
land warfare. The report also called for Army and Navy pilots to be trained for joint operations.\(^{26}\)

In this case, the Germans generally failed to learn from ALBION. The curriculum of the
Kriegsakademie remained very tactically oriented. An attempt to develop a school, the
Wehrmachtsakademie, to provide joint education to senior officers from all services, failed due to
the death of one of the school’s major proponents (Luftwaffe General Walter Wever) and bureaucratic intrigue on the part of Adolf Hitler and Hermann Göring. So far as the author can tell, ALBION figured prominently in only two articles in German military periodicals in the inter-war period. One was a review by Hermann von Kuhl of Erich von Tschischwitz’s book on the operation, while the other was a broader piece on combined operations by a Captain Sorge. There were also a couple of fleeting references to ALBION in two very short pieces dealing with the possibility of naval support for land operations. Give the chasm that existed between the services from the First World War to the Second World War, this is not surprising.

Organizationally, one thing the Germans should have brought away from ALBION was the need for a robust naval air arm. Indeed, Captain Sorge’s article pondered, from the perspective of 1938, the question of whether or not an operation such as ALBION would even be thinkable in modern circumstances, especially given the threat to the invasion fleet from enemy bombers. Sorge concluded that the best means of protecting the most critical part of the invasion fleet, namely the troop transports, required fighter squadrons based on accompanying aircraft carriers. In addition, he emphasized that securing air superiority was a critical prerequisite.

For the Germans, however, the idea of a strong naval air arm never came to fruition. Although plans for German naval expansion did call for the building of an aircraft carrier, the projected Graf Zeppelin, it never reached completion. Nor did Germany’s top naval commander, Grand Admiral Erich Raeder, consider the aircraft carrier to be anything more than a prestigious adjunct to the battleship. Finally, the concentration of all matters regarding aviation in the hands of the Air Ministry, and thus Hermann Göring’s Luftwaffe, virtually precluded any chance for the development of a strong aviation arm in the German Navy. World War II would show this as a considerable weakness in the German Armed Forces.

How then shall we sum up this brief examination of German air operations on the eastern front? Several observations come to mind. The first is that the Germans were able to employ airpower, although on a small scale in comparison to the western front, in a wide variety of ways, codify into doctrine, and then apply it on a far larger scale the following year.

The second is that the use of German airpower both over Romania in 1916 and Oesel in 1917 demonstrated the German genius for improvisation. Both operations were undertaken with very little notice and demanded rapid planning. The proposed solutions to perceived problems showed great imagination, even if in some cases, especially in ALBION, they did not produce the desired results. In the case of a number of successful improvisations, the proposed solutions were founded on the basis of sound German air doctrine.

Finally, the Germans failed to fully exploit the potential of some aspects of airpower, especially in the post war period. This failure was particularly applicable in the case of ALBION, given the operation’s joint character, and was largely due to the peculiarities of each of the services involved.

Notes


7. KTB/Army Group von Mackensen, 9 October 1916, BA-MA PH 5I/59.


18. Combat Report of the Air Commander With the XXIII Reserve Corps For the Conquest of Oesel, Moon and Dagö, 29 October 1917, BA-MA RM 8/328 and Group Winterfeld,
Communications Between Aviation and Group von Winterfeld During Operations on Oesel, 29 October 1917, BA-MA RM 8/328.


26. 42nd Infantry Division, Lessons of the 42nd Infantry Division From the Conquest of the Islands Oesel, Moon and Dagö, 29 October 1917, NARA RG 165/320/153.


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**Contributor**

**Richard L. DiNardo** is Professor for National Security Affairs at the United States Marine Corps Command and Staff College at Quantico, Virginia. Professor DiNardo is the author of a variety of books and articles on a wide array of topics in military history. His most recent book is *Germany and the Axis Powers*, published in 2005 by the University of Kansas Press. From 1988-1997, he was a member of the History Department at St. Peter’s College in Jersey City, New Jersey. From 1994-1996, he was a Visiting Professor at the Air War College at Maxwell AFB, Alabama. He joined the Marine Corps Command and Staff College faculty in 1998.

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