

A Case Study in Early Joint Warfare: An Analysis of the *Wehrmacht's* Crimean Campaign of 1942

JOEL HAYWARD

Military theorists and commentators believe that joint operations prove more effective in most circumstances of modern warfare than operations involving only one service or involving two or more services but without systematic integration or unified command. Many see Nazi Germany's armed forces, the *Wehrmacht*, as early pioneers of 'jointness'.

This essay demonstrates that the *Wehrmacht* did indeed understand the value of synchronising its land, sea and air forces and placing them under operational commanders who had at least a rudimentary understanding of the tactics, techniques, needs, capabilities and limitations of each of the services functioning in their combat zones. It also shows that the *Wehrmacht's* efforts in this direction produced the desired result of improved combat effectiveness.

Yet it argues that the *Wehrmacht* lacked elements considered by today's theorists to be essential to the attainment of truly productive jointness – a single tri-service commander, a proper joint staff and an absence of inter-service rivalry – and that, as a result, it often suffered needless difficulties in combat.

Military theorists and commentators believe that joint force operations – that is, operations involving the co-ordinated employment of two or more service branches under a unified command – prove more effective in most circumstances of modern warfare than operations involving only one service or involving two or more services but without systematic integration or unified command. Many see Nazi Germany's armed forces, the *Wehrmacht*, as early pioneers of 'jointness'. The *Wehrmacht*, they claim, routinely conducted operations in which elements of two or more services participated in close co-operation with mutually agreed goals, relatively little inter-service rivalry, and a command structure that, at least at the 'sharp end' of operations, promoted, rather than inhibited, a spirit of jointness. As a result, the *Wehrmacht* enhanced its capabilities and improved its combat effectiveness.

Without becoming anachronistic – after all, jointness as a defined concept is very recent – this article analyses the extent and impact of the

Wehrmacht's efforts to increase its effectiveness by integrating the employment of its forces. As well as discussing joint issues more generally, it focuses on a case study: *Wehrmacht* operations during the Crimean campaign of May and June 1942, which involved two successful German offensives (the Battles of Kerch and Sevastopol) conducted by land, sea and air forces. The selection of this case study stems not only from that campaign's quickly-earned reputation as a paradigm of early joint force campaigning, but, more importantly, from its unequalled aptness for such an analysis; it involved substantial planning, significant forces, the participation of all three services, and a conclusive outcome.

The essay demonstrates that the *Wehrmacht* understood the value of coordinating its land, sea and air forces and placing them under operational commanders who had at least a rudimentary understanding of the tactics, techniques, needs, capabilities and limitations of each of the services functioning in their combat zones. It also shows that the *Wehrmacht's* efforts in this direction produced the desired result of improved combat effectiveness. Yet it concludes that the *Wehrmacht* lacked elements considered by today's theorists to be essential to the attainment of truly productive jointness – a single joint force commander, a proper joint staff and an absence of inter-service rivalry – and that, as a result, it often suffered needless difficulties in combat.

The Strategic Level

This analysis of the *Wehrmacht's* joint practices incorporates a consecutive consideration of joint issues at each of warfare's three levels: the strategic, the operational and the tactical, with specific reference to the Crimean campaign. The strategic level refers here loosely to the overall campaign planning process and to those at the very top of the military command structure who conceived strategy and transformed plans into action. In the case of Nazi Germany, this refers to Adolf Hitler and his small circle of advisers.

Hitler neither inherited nor created a Joint Staff; at least not in the modern sense, such as the Joint Chiefs of Staff in the United States. On 4 February 1938 he strengthened his grip on the armed forces by replacing the War Ministry's *Wehrmachtamt* (Armed Forces Office) with a new, more biddable command authority, the Supreme Command of the Armed Forces (*Oberkommando der Wehrmacht*, or OKW), from which Walther von Brauchitsch, Hermann Göring and Erich Raeder, the respective Army, Air Force and Navy C-in-Cs, would receive coordinating instructions and guidance on the overall conduct of joint endeavours. Adding direct command authority to his existing constitutional prerogatives, Hitler

appointed himself Supreme Commander (*Oberster Befehlshaber*) and Wilhelm Keitel, with the title Chief (Chef), as his principal military adviser and the new authority's overall administrator. On 19 December 1941, following Brauchitsch's premature retirement, Hitler appointed himself *Oberkommando der Heer* (OKH), or Army C-in-C, as well.

The OKW never functioned as a joint staff, with regular scheduled meetings attended by the service C-in-Cs or their Chiefs of Staff, with a clearly understood foundation principle of equality of services, and with a joint operational planning process. Although the service C-in-Cs frequently met together at Hitler's headquarters or at his mountain retreat in Berchtesgaden, Bavaria, most OKW meetings took place with one or more of the services lacking senior representation. This was typical of the way Hitler managed his affairs. He hated adhering to routines and the timetables of others, preferring instead to hold meetings – including Cabinet sessions – when *he* considered them necessary and to summon only those whom he wanted to hear from or speak to. If he wanted to discuss *Luftwaffe* affairs, for example, he would summon Göring or Hans Jeschonnek, the *Luftwaffe*'s young Chief of Staff. He would not bother calling for senior naval or army representation, though, unless he considered the matter pertinent to both services. Naturally, this did not aid the development of jointness.

Hitler did usually have senior army staff on hand, but they had been chosen as much for their compliant natures as for their professional competence, and the advice they gave often proved unhelpful. His closest advisers (who were seldom absent from him during wartime) were Keitel and Alfred Jodl, Chief of the OKW's Operations Staff. Keitel was a 'yes man', incapable of disagreeing with Hitler. Jodl was an honourable man who would stand up to Hitler on occasions, especially if he considered it necessary to defend a colleague from unfair attack, but he usually found it 'easier' to support the *Führer*'s viewpoint.¹ More importantly – at least for the purposes of this study – both were army officers who, although they had championed jointness since the mid-1930s, had never themselves served, trained, exercised or studied with the other services. They reflected this fact in their counsel to Hitler, which usually favoured the Army (*Heer*) over the Air Force (*Luftwaffe*) and Navy (*Kriegsmarine*) and commonly exposed their ignorance of the needs, capabilities and limitations of air and naval forces.

Still, until he fell from grace after the Stalingrad catastrophe, Hermann Göring retained considerable prestige in Hitler's court and managed to keep the *Luftwaffe*'s needs near the top of meeting agendas and offset the poor advice given by Keitel and Jodl. In fact, Göring's elevated status worked against all notions of jointness. For instance, on 6 February 1943, less than a week after the surrender at Stalingrad, Hitler informed a frustrated Field Marshal Erich von Manstein that the creation of a new, tri-service joint

command, or even the appointment of a single joint Chief of Staff, which Manstein had meekly advocated, was entirely out of the question. Feigning regret, Hitler explained that Göring, as his deputy and the only *Reichsmarschall* (Imperial Marshal) in Germany, would not submit to anyone else's authority but his, and would certainly never consider himself merely the equal of the OKW generals or the other service C-in-Cs.²

The *Führer* was correct about Göring's self-importance, but he used this as an excuse to avoid confronting the real reason for not appointing a single tri-service commander: he felt that such an appointment, even if it went to one of the military professions – such as Manstein, whom most senior officers favoured as tri-service Chief of Staff or *Generalissimo* – would shatter the largely-self-generated myth of his military 'Midas touch' and generally diminish his prestige.

Hitler's comments, though, do reveal what wartime patterns of behaviour had already proven: that equality of service representation at the highest levels simply did not exist. Influence in the OKW derived not only from rank, position or personal merit, but also from personality and Hitler's frequently misguided loyalties. As a result, competition for Hitler's favour became fierce among his courtiers, including his own military advisers and the chiefs of land, sea and air forces, creating a situation which exacerbated inter-service tensions.

Those individual staff officers and operational commanders who actually wanted to maximise their chances of success had to live with those tensions, put aside service biases and deal directly with each other as informal 'partners'. They tried to conjure up a spirit of jointness; a difficult task without a formal chain of command involving members of all services and without any formalised concept of equality. They usually managed to attain a higher degree of unity than the service branches of the Anglo-American powers did before 1944, but still failed, with a few exceptions, to act as equals. Almost always, the Army demanded and got the *Luftwaffe's* subordination, usually forcing it into a tactical support role at the expense of its strategic capabilities.

Thus, a unified command in the form of a joint force commander and subordinate staff never existed, partly because of Göring's unique status and massive ego, but primarily because Hitler did not wish to release the reins that he usually clutched so tightly. So, then, was the *Führer* able to rise above the inadequacies of this situation – really the product of his own making – and provide effective leadership in a spirit of jointness? Ironically, the answer is that, at least sometimes, he could. He did so by acting informally and unwittingly in the role of what we today designate as a joint force commander, exercising at the strategic level full authority over the employment of the service branches, whose C-in-Cs and senior field commanders he directed

personally according to his own visions of how operations should proceed.

A good example of this is, in fact, the campaign under investigation: the Crimean campaign of May and June 1942, which, although few realised it at the time, marked a significant step forward towards jointness.

Planning the Campaign

The Nazi leader's directive for the 1942 summer campaign in the east, issued on 5 April of that year, reflects clearly the unfinished nature of the previous year's campaign. Although Hitler asserted to Mussolini on 30 April 1942 that, with the exception of just a few 'blemishes which will shortly be eradicated, ... the Crimea finds itself in our hands', the reality was very different.³ At that time the Crimean Peninsula was neither firmly nor entirely in German hands, as Hitler well knew. It was certainly not the 'bastion in the Black Sea' that he boasted to his fellow dictator. On the contrary, powerful Soviet forces still held both Sevastopol, the Soviet Union's main naval base and shipyard in the Black Sea, and the strategically important Kerch Peninsula, which Hitler planned to use as a springboard into the oil-rich Caucasus region. He therefore stated in his directive for the 1942 summer campaign that, before the major offensive into the Caucasus could commence, it would be necessary 'to clear up the Kerch Peninsula in the Crimea and to bring about the fall of Sevastopol'.⁴

Hitler felt satisfied that, with a little rehabilitation and reinforcement, his army formations in the Crimea – the German Eleventh Army and several Rumanian elements – would prove adequate for the strong attacks they would soon be launching at each end of the Crimea. He had confidence in their commander, Colonel General Manstein, reputedly his best operational army commander, a reputation he privately endorsed. Hitler, who had the final say on all strategic and operational issues, requested that Manstein prepare for him and his operations staff a preliminary plan. They liked what the General submitted, and made few alterations. Manstein's plan called for two consecutive offensives, the first, codenamed Operation *Trappenjagd* (Bustard Hunt), to capture the Kerch Peninsula and the second, codenamed Operation *Störfang* (Sturgeon Catch), to break into and capture the massively fortified Sevastopol.

On 16 April 1942 Manstein took his final *Trappenjagd* plan to Hitler, who approved everything except for the *Luftwaffe* dispositions. Making a departure from custom, and acting unknowingly as a joint force commander (albeit a distant one), Hitler announced that he would see to the disposition of *Luftwaffe* forces himself.⁵ The *Führer* was by inclination and experience an 'army man' who, despite his impressive grasp of technical details, initially lacked an understanding of air force tactics and strategy.⁶ During

the successful first years of the war he had rarely meddled in *Luftwaffe* affairs. He was content to leave most decisions to Göring, the ineffectual OKL (*Oberkommando der Luftwaffe*), C-in-C, and Field Marshal Erhard Milch, Göring's capable and dedicated deputy. Over the winter of 1941 and 1942, however, the *Führer* developed a clearer understanding of airpower's tactics, capabilities and limitations and came to appreciate the key role played in ground battles by close air support. In numerous places along the Eastern Front he had seen the *Luftwaffe* patch up frontline difficulties, sometimes even significantly affecting the outcome of battles.

Clearly impressed, Hitler began to interfere in air matters and to coordinate joint army-air force efforts, often without consulting Göring. Late in February 1942, to illustrate this point, Colonel General Georg von Küchler, commander of Army Group North, had laid plans for a counter-attack near Volkhov in the far north. On 2 March, Hitler personally ordered a 'thorough air preparation of several days' before the opening of the attack.⁷ The weather was so unfavourable, however, that few aircraft could take to the air. Consequently, the *Führer* expressly ordered Küchler, who was anxious to get underway, to postpone the offensive 'until weather conditions permit the full deployment of the Air Force'.⁸ A month later Hitler lectured him on the importance of close air support. Back in January, he said, Toropets would not have been lost, and with it key German fuel dumps and supply depots, if the army group commander had fully understood the potential of this support.⁹ Perhaps with this 'failure' in mind, Hitler decided to organize the deployment of air units for the important Kerch offensive himself.

That offensive, Hitler had stated late in February 1942, demanded 'massed airpower'.¹⁰ On 17 April he held a lengthy conference with Lieutenant General Hans Jeschonnek (the Air Force Chief of Staff) and other senior *Luftwaffe* personnel – but apparently not Göring – to work out the nature and level of this 'massed airpower' as well as methods to improve army-air force jointness.¹¹ Until he could discuss the situation with Colonel General Wolfram Freiherr von Richthofen, whose powerful *Fliegerkorps VIII* (Eighth Air Corps)¹² he planned to use in the Crimea alongside Colonel General Alexander Löhr's *Luftflotte 4* (Fourth Air Fleet),¹³ Hitler initially dealt only with the dispositions of Löhr's air fleet. The surviving records of this conference reveal that Hitler had familiarised himself with the key issues involved in the deployment of air forces during the planned Crimean campaign. He issued a clear set of instructions regarding the main tasks that the *Luftwaffe* would perform, demanded the construction of new airfields, issued orders for their protection, and outlined an innovative scheme to increase *Luftflotte 4*'s overall operational strength before the campaign began.¹⁴ He even discussed the manufacture,

procurement and distribution of the anti-personnel bombs that he wanted the *Luftwaffe* to use in certain circumstances.

All things considered, Hitler's instructions to the *Luftwaffe* reveal that he now understood its basic needs, capabilities and limitations and that he would be in overall charge of both the ground effort and the air effort in the Crimea. He clearly understood the importance of airpower to the ground assaults, pointing out to Jeschonnek and his staff that the Kerch campaign in particular was so critical to his plans for southern Russia that he would ensure it received the strongest possible air force, and that once it got underway surface forces in other sectors in the southern zone would even have to go without air support.

Hitler attended not only to the disposition of ground and air forces, but also to that of naval forces. He was far less expert in naval matters than he was even in airpower matters. Yet he realised that the powerful Soviet Black Sea Fleet, which comprised a battleship, several cruisers, numerous other large warships and scores of submarines,¹⁵ would have to be destroyed in order to ensure the safety of Axis shipping in the Black Sea as well as the southern flank of the German advance. That fleet, commanded by Vice Admiral F.S. Oktyabrskii, had already upset his plans in southern Russia, having conducted several major amphibious landings on the Kerch Peninsula.

The *Führer's* initial strategy for dealing with the Soviet fleet had been flawed. The bulk of the fleet would be destroyed by sudden blows from the air, he and his military planners (including Grand Admiral Raeder) had reasoned before Operation *Barbarossa* started, and the remaining vessels would be bottled up in their harbours by minefields and light naval forces until all the Soviet ports had been captured by land forces.¹⁶ 'In this theatre,' one Soviet Admiral later wrote, 'such a plan was comparatively reasonable since the enemy had but limited naval forces at his disposal and could not challenge the Soviet Black Sea Fleet in action.'¹⁷ Indeed, when *Barbarossa* commenced in June 1941, Germany had no naval forces in the Black Sea region except for some river gunboats and minesweepers of the Danube Flotilla.

However, German air units in and around the Crimea during the winter of 1941–42 had proven woefully incapable of significantly restricting the operations of the Soviet fleet. More importantly, while *Luftwaffe* units had identified and attempted to interdict large Soviet troop movements around the Sea of Azov and the Caucasus coast near the Kerch Straits, they failed to prevent those troops embarking on Oktyabrskii's vessels and making major landings on the Kerch Peninsula and other key points on the Crimea.

After a lengthy planning meeting with both air and naval advisers in January 1942, Hitler responded to the Soviet's fleet's continued interference by creating a new naval command, *Admiral Schwarzes Meer* (Admiral

Black Sea), which would, 'in close cooperation and careful coordination' with the *Luftwaffe*, attack the Soviet fleet and prevent it undertaking further offensive operations. He asked Raeder to equip it with light vessels from other theatres, which became a slow process. In the closing days of 1941, Raeder ordered the transfer of easily transportable warships (initially a squadron of six motor torpedo boats (MTBs or E-boats) and various small patrol boats) from the North Sea and the Baltic, but it took several months for them – and an Italian naval contribution, initially involving four E-boats, four small motorboats, each armed with a torpedo, and four small U-boats – to arrive in the Black Sea.¹⁸

Still, these transfers resulted in the slow but steady growth of Axis naval strength in the Black Sea during the early months of 1942. In 1941, Axis vessels had conducted very limited escort and transport operations. By the middle of 1942 they would be capable of performing those tasks more effectively, following in the wake of advancing armies to assume the duties of coastal and harbor defenses in occupied territories, and even carrying out minor offensive operations against the Soviet fleet. Even though Hitler followed the buildup of his Black Sea flotilla with interest, and ordered it to contribute to joint operations during the Crimean campaign, he seldom involved himself directly in these naval matters. He limited himself to issuing Raeder a general 'sketch' of his will for the flotilla, which the Admiral and his operations staff transformed into a detailed directive, dated 23 February 1942.¹⁹

It is clear, then, that even though Hitler could have done far more to facilitate jointness at the political/strategic level by using OKW in a more orderly fashion as an integrated tri-service command authority, a degree of joint control existed nonetheless. Hitler himself functioned as an absentee, or at least geographically distant, unified commander, a situation stemming partly from rivalries among the headquarters of the services and from Göring's unique status (which prevented his subordination to anyone but the *Führer*), but mainly from Hitler's own fear of delegating and his need to control all important matters. He may never have seriously considered appointing someone else as a joint force commander, as several of his braver generals politely suggested on occasions, but this was primarily because he recognised that he was already fulfilling that function, exercising total authority over the services involved in joint operations, and ensuring that joint considerations remained more important than the desires and expectations of individual services.

The Operational Level

At the operational level, though, Hitler did little to facilitate jointness. In

particular, he appointed very few combat theatre commanders with authority over the three services. The most notable of these appointments was that of Field Marshal Albert Kesselring, whom he made Commander-in-Chief, South (*Oberbefehlshaber Süd*), with authority over all *Wehrmacht* and other Axis forces in the Mediterranean, a position he held from 2 December 1941 until shortly before the war in Europe ended.²⁰

Kesselring probably came close than any other *Wehrmacht* leader to functioning as a modern joint force commander. He created a tri-service and multi-national staff (including Italians), with several members carefully chosen and assigned in such a manner as to ensure that he remained fully cognisant of the needs, capabilities and limitations of all land, sea and air forces at his disposal. He also put in place a rudimentary (by today's standard) joint operation planning process – a system allowing him to determine the best method of accomplishing assigned tasks and to command and control the forces needed to perform them. Yet the power-selfish Hitler never allowed Kesselring free rein, constantly interfered in his planning process and seldom even supported him when subordinates rejected his unique authority.²¹ Kesselring found Rommel particularly troublesome, and gained little help from the *Führer*, who seemed happy to play off one commander against the other. All in all, Kesselring found his ability to exercise real tri-service authority in the Mediterranean to be severely restricted.

Even so, Kesselring managed better and lasted longer than other tri-service theatre commanders. On most occasions that Hitler made these appointments, he did so only as a temporary measure to solve a crisis that had stumped him. At the height of the Stalingrad crisis, for instance, it became clear that Manstein and Colonel General von Richthofen, the local Army and *Luftwaffe* commanders, were powerless to help Sixth Army. In a last-ditch effort to improve the situation, Hitler ordered Field Marshal Milch to fly to southern Russia to take charge of the entire airlift effort. He granted him 'special powers and authority to issue orders and instructions to every section of the armed forces [in the region]'.²² Milch was a dynamic leader and an outstanding administrator. He displayed excellent managerial skills during the final days of the Stalingrad airlift. Yet he arrived too late to make a substantial difference to its progress and, despite using his 'special powers' as a tri-service commander, was no more able to overcome adverse weather conditions and overwhelming enemy air and ground superiority than local land and air commanders had been. His command of all *Wehrmacht* forces in the Stalingrad sector lasted less than three weeks. After Sixth Army surrendered, Hitler recalled him to Berlin.

Even Kesselring received one of these desperate short-term, 'do-what-you-can' joint command appointments. In March 1945 Hitler 'retired'

Field-Marshal Gerd von Rundstedt and made Kesselring, whose Italian theatre had become a backwater, the new Commander-in-Chief, West (*Oberbefehlshaber West*), with authority over all land and air forces along the rapidly withdrawing Western Front. With Anglo-American forces almost at the Rhine and threatening to enter Germany at any moment, Kesselring knew that he had his hands full. 'My mission was clear: hang on!', he later wrote.²³

The rarity of these appointments, both long-term and short-term, stemmed not only from Hitler's self-perception as a military genius, who could and should direct most operations himself, but also from his unwillingness to create a fuss, something he always hated. The Norwegian campaign of 1940 – codenamed *Weserübung* (Weser Exercise) – is a case in point. Hitler, who for once felt a little uneasy about his own abilities and wanted the services of someone experienced in warfare in Scandinavia, initially planned to place all land, sea and air forces under a single joint force commander. He actually considered giving Kesselring the job,²⁴ but, on Jodl's suggestion, settled on an army officer with Scandinavian experience, General of the Infantry Nikolaus von Falkenhorst.²⁵

Yet despite his omnipotence as *Führer*, and the obvious operational advantages of unified command, Hitler decided not to ignore Göring's furious complaints (although he subsequently banned him from further planning meetings for a month²⁶) or overrule the strong objections of senior naval and air force staff officers, who objected to subordinating their forces to a land commander. Falkenhorst, they worried, did not possess adequate experience with their services. Consequently, Hitler kept the operation under his own personal command, which he exercised through the OKW, and left poor Falkenhorst, with the grand but worthless title of Senior Commander, with no direct command authority over participating naval and air forces.

Hitler found it easier to appoint joint commanders in non-combat zones of occupation, mainly because he ran no risk of being upstaged by them (as he often feared he would be by successful combat commanders) and because the service chiefs themselves were more agreeable to subordination of their forces to a joint commander where no opportunities for glory in combat existed. When planning and conducting major operations, they often bickered over the orientation of their forces and competed not only for higher shares of Germany's meagre resources, but also for opportunities for glory in battle. Yet they seldom squabbled over inter-service matters in quiet theatres or occupation zones. For example, no dissension followed Hitler's 8 August 1942 appointment of Colonel General Löhr, former head of a *Luftwaffe* air fleet, as *Wehrmacht* Commander, Southeast (*Wehrmacht-befehlshaber Südost*), with command authority over all German forces in the relatively quiet Balkans.

Still, these command appointments to occupation zones later proved costly. After liberation, the occupied peoples generally wanted revenge against their former overlords. Löhner fell victim to this desire. Following a flimsy trial, he was executed for alleged war crimes by the Yugoslavs in 1947.

The Operational Commanders

It is not surprising, then, that Hitler himself retained overall control of the 1942 Crimean campaign and chose not to appoint what we today call a Joint Task Force Commander; that is, a single theatre commander with authority over all participating land, sea and air forces. He considered the campaign critical – telling one commander, for instance, that the risk of failure in the Crimea had to be eradicated ‘because the first blow struck this year must be successful’²⁷ – and consequently decided that *he* should stay in overall control. This is not to suggest that Hitler considered the role of operational commanders unimportant. On the contrary, he personally chose the commanders whom he considered best able to ensure that his ‘first blow’ against the Soviets in 1942 would be a success. He already had Manstein, by design, and now he wanted an air commander of equal talent and with the ability to work in close co-ordination with Manstein. He wasted no time in calling on the services of the *Luftwaffe*’s premier close air support specialist: Colonel General Richthofen.

One historian claims that after Hitler’s conference with *Luftwaffe* planners on 17 April 1942 (described above) ‘the potential for concentrating German air power in the Crimea increased dramatically. Richthofen, who interceded personally with Hitler, convinced the Führer of the need to employ *Fliegerkorps VIII* in the operation’.²⁸ Richthofen certainly did meet Hitler at this time, and his powerful close air support force *was* subsequently sent to the Crimea to support *Luftflotte 4*’s and Eleventh Army’s attacks on Kerch and Sevastopol.

Yet even a cursory reading of Richthofen’s personal diary for April reveals that the decision to send him to the Crimea was made in his absence and without his prior knowledge by Hitler and Hans Jeschonnek. ‘Arrived in Lüneburg on 12 April for a four-week holiday,’ Richthofen penned on 18 April. ‘At last! But on 18 April, while entertaining guests, received a phone call from Jeschonnek: By order of the Führer, I must immediately leave again, to work at Kerch. Get there quickly; get everything started!’²⁹ The following day he flew to Berlin and, in Jeschonnek’s company, rang Hitler from the Air Ministry. ‘The Führer’, he proudly wrote that night, ‘insisted in a very respectful manner that I should take part at Kerch, because I’m the only person who can do the job.’³⁰

Hitler clearly thought that the transfer to the Crimea of Richthofen's *Fliegerkorps VIII*, a specialized close air support force with an unparalleled combat record, would guarantee the success of his 'first blow' against Stalin in 1942. His decision to send Richthofen also shows how important he considered the offensive to be. Richthofen was an arrogant and aggressive man, but he was the *Wehrmacht's* most successful and influential tactical air commander. One writer wrote that he was 'certainly one of the best tacticians in the history of air warfare'.³¹ Airpower historian Richard Muller called him 'extraordinary'.³² Even during the war his reputation extended beyond Axis forces. In 1943, for instance, the British Air Ministry praised his outstanding abilities and noted that he was resolute, tough and effective, and that, 'with his good name and appearance, brutal energy and great personal courage, he is the German ideal of an Air Force General'.³³

Richthofen – a cousin of the legendary 'Red Baron' – had a long and distinguished military career, which stretched back to the Great War and included time in the Imperial Air Service and in the *Reichswehr* cavalry, infantry and artillery.³⁴ He also gained a doctorate in engineering, making him one of the *Luftwaffe's* most technologically competent officers. In 1933 he joined the fledgling *Reich* Air Ministry, which evolved into the *Luftwaffe* two years later. As the final commander of the *Condor* Legion during the Spanish Civil War he experimented with close air support tactics and aircraft (including a few early *Ju 87 Stukas*) and, no doubt helped by his experiences as both a soldier and pilot during the Great War, developed tactics and a ground-air liaison system that improved close air support effectiveness.

Because of his successes in Spain and his competence in the use of the dive-bomber and new methods of tactical air employment, which had a significant effect on German air planners, Richthofen was soon hailed as the *Luftwaffe's* expert in army-air force joint tactics. In July 1939, he formed a special close air support force (*Fliegerführer z.b.V.*), which quickly expanded into the powerful *Fliegerkorps VIII*. Under his command, this specialized ground attack corps distinguished itself in Poland and France by its excellent support of advancing *Panzer* spearheads (for which he won the Knight's Cross and promotion to General of Fliers).

His sluggish *Stukas*, on the other hand, proved so vulnerable to enemy fighters in regions where air superiority had not been attained that he was compelled to provide fighter escorts. Even so, they were severely mauled by British fighters during the Battle of Britain, forcing the air fleet commanders hastily to withdraw them. However, Richthofen's corps provided exemplary close support in the absence of enemy fighters during the Balkans campaign and the airborne invasion of Crete. Enjoying the luxury of almost total air superiority, his *Stukas* inflicted heavy losses on

Allied troops, transports and shipping. For his dynamic leadership he was awarded Oak Leaves to the Knight's Cross.

Richthofen's air corps won further laurels in the eastern campaign, especially during the height of the winter crisis when, operating by itself after the untimely transfer of Kesselring's units to the Mediterranean, the corps' support of the army in the critical central zone before Moscow proved outstanding. In recognition of these achievements, Hitler promoted him to Colonel General on 1 February 1942. This was a unique honour for an air corps commander; it gave him the same rank as the air fleet commanders and the most senior *Luftwaffe* staff officers, such as Jeschonnek and the late Ernst Udet. Now Hitler wanted him to work alongside Manstein, his equally distinguished army counterpart, on the joint operation in the Crimea.

So how were Richthofen and Manstein supposed to synchronise their services and employ them jointly when neither of them, and no-one else, received Hitler's appointment as a combat theatre commander with authority over all participating forces? The answer is clear: after burying any service biases they might have, they were – in a pattern common to all operational service commanders – supposed to deal directly with each other as 'equals' and try to agree on how best to deploy their respective forces. Throughout World War II the success of these efforts varied greatly and depended largely on the personalities and professionalism of the individual commanders involved.

At Stalingrad, for instance, the army commander, Colonel General Friedrich Paulus, and the local air corps commander, General of Fliers Martin Fiebig, simply could not get along. Accordingly, despite the reasonable performance of each *individual* service, their level of inter-service cooperation remained relatively low. Rommel and his *Luftwaffe* counterpart, General Otto Hoffman von Waldau, did not perform any better in North Africa. Yet in the case of the Crimean campaign the harmonious co-operation achieved by Richthofen and Manstein produced a unity of command and a degree of inter-service cooperation seldom equalled during the war.

On 22 April 1942 Richthofen flew to the Crimea and had his first lengthy operational planning meeting with Manstein.³⁵ The conference went surprisingly well, despite the potential for a major ego clash between these two brilliant but conceited personalities. 'Manstein was surprisingly mellow and accommodating', the air commander jotted that evening. 'He understood everything. It was extremely uplifting.' On many other occasions he described his army counterpart in similarly glowing terms. The respect was clearly mutual. 'Baron Richthofen', the army general later recalled, 'was certainly the most outstanding air force leader we had in World War II.'³⁶

The partnership of these men, two of the most talented operational commanders of World War II, was probably unrivalled during that great conflict. They interacted in a highly professional manner, without the jealousy and inter-service rivalry that many observers, including Göring and sometimes even Hitler, expected. The spectre of petty rivalry revealed itself extremely rarely, and even then it appeared only in the pages of their private diaries. They seldom quarrelled, and never over crucial issues, during the many battles they jointly fought in the east (including Kerch, Sevastopol, Stalingrad and Kharkov).

Their only professional (as opposed to personal) disagreement related to the employment of *flak* batteries, an issue of relatively minor importance. *Flak* units formally belonged to the *Luftwaffe* even though they frequently served alongside army artillery batteries. During the Siege of Sevastopol, Richthofen's *flak* commanders complained to him that their army counterparts were trying to control their guns. Richthofen agreed to support the complaint, which he considered justified, and bluntly informed the Army on 3 June 1942 that it must stop interfering with *Luftwaffe* operations. *Flak* units were his to direct, not the army's. The next day, he discussed the situation cordially with Manstein but, despite their bond of mutual friendship and respect, they failed to reach a solution agreeable to both the *flak* and army artillery commanders.

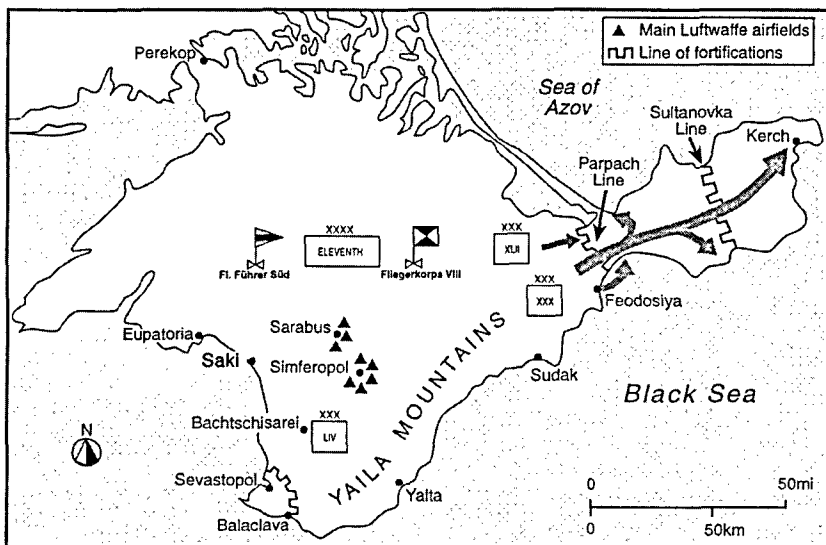
Disagreements over the control of flak guns continued sporadically until Sevastopol fell to Axis forces early in July. For example, Richthofen noted unhappily in his diary on 13 June that there had been a 'great squabble with army commands (division, corps and army) over flak operations.' 'I keep all flak guns subordinate,' he explained,

and deploy them together in great concentration at *Schwerpunkte* against ground targets. The army wants formally to control them and spread them throughout divisions and, therefore—as always, like last time at Kerch—fritter them away.... I remain stubborn and let the army commands continue to rage.

As it happened, the artillery officers did not 'rage' for long, even though they resented Richthofen's decision and wanted it reversed. The *flak* teams performed so well in a direct-fire role against enemy field fortifications, strongholds, tanks and vehicles – and under the authority of their own officers – that, after Sevastopol fell, the Army's artillery officers expressed appreciation for the extra firepower they provided and conceded that their employment had been correct. In any event, aside from this one disagreement, Richthofen's and Manstein's professional relationship remained excellent.

Even their worst *personal* disagreement involved only a minor bruising

MAP 1
THE CRIMEA, MAY/JUNE 1942



Source: Joel Hayward, *Stopped At Stalingrad: The Luftwaffe and Hitler's Defeat in the East* (Lawrence, KS: University Press of Kansas, 1998). Reproduced with permission.

of ego and had no consequences. On 28 April 1942 – to show how insignificant this ‘tiff’ was – Richthofen recorded in his diary that he felt snubbed that day by Manstein: ‘Waited for Field Marshal von Bock [commander of Army Group South]. I said ‘Guten Tag’ to him, after which Manstein apparently tried to prevent me meeting further with him.’³⁷ Despite feeling annoyed that Manstein wanted to exclude him from his briefing with Bock, Richthofen said and did nothing to inflame the situation, but a few days later took great delight in beating Manstein in a debate over tactics at XXX Army Corps’ command post. ‘Victory!’, he jubilantly penned that night, ‘It’s pathetic to say, but I’m “top general!”’³⁸ Thus, he felt he had ‘repaid’ Manstein for his insensitivity (which he probably never realised he had shown) without ever letting it become a point of contention between them.

Richthofen and Manstein established neither a joint operational headquarters nor a modern-style joint staff. They probably never considered doing so; that degree of jointness at the operational level was still in the future and not yet anticipated. Yet they did understand the crucial importance of integrating their forces and deploying them in a complementary fashion according to mutually agreed objectives. In order to

facilitate this, Richthofen established his operational headquarters alongside Manstein's at Simferopol, in the central Crimea. They then established forward headquarters in the same Crimean towns, Sarabus for the attack on the Kerch Peninsula and Bachtschisarei for the siege of Sevastopol. To create a more efficient joint C³ (Command, Control and Communications) system, signals teams connected their headquarters with direct telephone lines, and they appointed liaison teams – experts in the tactics, techniques, limitations and capabilities of their 'partnering' service – to each other's staffs.

In close consultation on a daily basis Richthofen, Manstein and their staffs ironed out minor conceptual differences, meticulously co-ordinated the employment of their forces and created joint *Schwerpunkte* (points of maximum effort). They also looked for ways to improve communication between the services so that, once battle commenced, the joint employment of land and air forces could be co-ordinated quickly and effectively. Orders from XXX Army Corps, for example, which doubtless originated from Manstein, instructed its staff to deal directly with *Fliegerkorps* VIII rather than proceed through normal air fleet channels as in past campaigns.³⁹ This would naturally speed up the time between requests for air support and the time it arrived.

Manstein knew that his own forces were numerically weak and would, therefore, require the best possible air support during the Crimean campaign. He believed that the success of Operation *Trappenjagd* in particular depended on the close co-ordination of land and air forces. 'Trappenjagd is a ground operation', he explained (in Richthofen's presence) to his corps and division commanders on 2 May, but 'its main effort is in the air'. Aircraft would have to 'pull the infantry forward'.⁴⁰ Only the day before, he had enthusiastically stated that the operation would have 'concentrated air support the like of which has never existed'.⁴¹

This was an accurate assessment; at the beginning of *Trappenjagd*, for instance, Richthofen had a remarkably strong air force at his disposal, comprising no fewer than 11 bomber, 3 dive-bomber and 7 fighter groups.⁴² He felt no unease at deploying these forces in support of Manstein's ground attacks. Even though he often cursed in his diary some of his army counterparts, whose ideas, actions and decisions he may have found unpalatable, he remained 'task-focused' and seldom let personalities or service rivalries interfere with the task at hand. In any event, he and Manstein got along famously. Furthermore, although he frequently felt frustrated by the responsibilities and restrictions associated with his force's tactical support orientation (and once described the *Luftwaffe* as 'the army's whore'⁴³), he never lost sight of the fact that close and unhampered inter-service cooperation resulted in improved combat effectiveness. It would do so again, he believed, in the Crimea.

The Tactical Level

Once battle commenced in the Crimea – *Trappenjagd* began on 8 May 1942, and *Störfang* on 2 June, two weeks after the former had reached its successful conclusion – Richthofen and Manstein remained in close contact during all stages of combat. To accomplish this, and to oversee the actions of his own forces, Richthofen travelled constantly from base to base in his light Fieseler Fi-156 *Storch* aircraft, which often came under enemy fire and occasionally had to make forced (and sometimes even crash) landings. He took these risks in order personally to brief his wing and group commanders and *flak* battalion leaders, and to exhort them to increase their performance.

Richthofen also circled at low altitude in the skies over battlefields routinely, monitoring progress on the ground and sending radio instructions back to his headquarters, which would relay important information and advice to Manstein's headquarters or command posts. Sometimes Richthofen was very lucky to survive these daring flights; Soviet *flak* gunners filled his plane with red-hot shrapnel. He was the target not only of Soviet gunners, but, with distressing frequency, also of German gunners. For instance, while inspecting Axis positions on 25 June 1942, troops of the German 387th Infantry Division mistakenly opened fire on his little aircraft, wounding his co-pilot, puncturing the fuel tank and filling his plane with holes. After making an emergency landing, he sent the commander of the division involved a sarcastic letter 'thanking' his men for their efforts!⁴⁴ His diary entry for that day was far more blunt. Well aware that he had escaped death by the closest shave, he angrily scrawled: 'Damned dogs! They don't fire at the Russians, but at our *Storch*!'⁴⁵

To enhance army-air force jointness, Richthofen visited not only *Luftwaffe* command posts and air fields, but also Manstein's various field HQs and the command posts of nearby army formations. Airmen and soldiers alike marvelled at the sight of his light *Storch* bobbing and weaving above the battlefield or landing, sometimes riddled with shrapnel, on unprepared and uneven fields beside command centres. Again, this frequently placed him in grave danger. In order to plan joint operations in the Caucasus on 25 October 1942 – to provide an example from a later campaign – he flew to the forward command post of General of Cavalry Eberhard von Mackensen, commander of III Panzer Corps. This 'command post' was really little more than a deep hole in the ground protected in front by sand-bags. Colonel General Paul Ludwig Ewald Baron von Kleist joined Richthofen and Mackensen to plan the operation's next stage. Their meeting concluded prematurely, however, when all three commanders scrambled for cover, their uniforms sprayed with dirt and flying debris, as Soviet artillery shells crashed around them.⁴⁶

Ironically, despite almost losing his life, on this occasion Richthofen's decision to join the army at the front actually *saved* his life. Even as he brushed the dirt from his tunic, Soviet bombers were pounding and gutting his own headquarters back in Baksan.

Richthofen's regular visits to the field HQs and command posts of participating army formations in order to enhance the jointness of their forces impressed many army officers, including Manstein in the Crimea. He later wrote:

Richthofen made great demands on his units, but always went up himself [in an aircraft] to oversee important attacks. Moreover, one was always meeting him at the front, where he would visit even the most advanced units to get a clear picture of the possibilities of providing air support for army operations. Our cooperation, both at Eleventh Army and later at Army Groups South and Don, was always excellent.⁴⁷

At the tactical level, the close co-ordination of air and ground forces certainly paid off. It enhanced the *Wehrmacht's* effectiveness and brought the Crimean campaign of May and June 1942 to a speedy and successful conclusion, but it was not all smooth sailing. The close air support tactics agreed on by Manstein and Richthofen followed a basic pattern formed during the previous year of war in the east, a pattern General of Fliers Karl Koller, the *Luftwaffe's* last Chief of General Staff, would later describe succinctly as 'Tanks up front, artillery to the rear and planes above'.⁴⁸ The 'planes above' certainly contributed substantially to the army's battlefield achievements during the Crimean campaign, fulfilling Manstein's earlier prediction of 'concentrated air support the like of which has never existed'. Yet the provision of this close air support was very difficult to co-ordinate at the tactical level, and many grim mistakes occurred.

The main problem was that, during the chaos of combat, aircrews found it hard to distinguish between Axis and enemy ground forces, and, in any event, not even the best Stuka pilots could consistently place their bombs precisely on targets. As a result, 'friendly fire' incidents occurred with disappointing (but from the Soviet viewpoint, pleasing) regularity. On 9 May, for example, the motorised Grodeck Brigade surged towards Kerch with such force that Soviet formations virtually collapsed, allowing the brigade to penetrate far deeper than either Manstein's staff or Richthofen's staff had anticipated. Unfortunately, it proved impossible in the chaotic conditions to notify *Luftwaffe* units that the areas they set out to bomb were now clear of Soviet troops but occupied by German troops. As Richthofen glumly wrote that evening, the brigade 'advanced so rapidly that, when it reached the eastern Tartar Ditch [the Soviet defensive line across the Kerch Peninsula], it ran straight into our bombs. There were a number of losses.'⁴⁹

Eleventh Army units had previously been instructed to mark their positions clearly in order to prevent 'friendly fire' incidents like this.⁵⁰ As in earlier campaigns, they were supposed to lay out white identification panels and, if necessary, use flares and smoke pots.⁵¹ Ground troops were not yet able to establish direct radio contact with aircraft overhead – although direct radio communication did begin before war's end. Instead, the *Luftwaffe* attached tactical reconnaissance air units to army and army corps commands, and the aircraft from these units routinely patrolled the combat zone and reported back to those commands the positions, movements and strength of enemy forces. More importantly, *Fliegerverbindungs-offizier* (Air Liaison Officers, or *Flivos*), specially-trained *Luftwaffe* officers attached to every army command down to divisional (and in this case even regimental) level, facilitated inter-service communication at all stages of combat.⁵²

In constant radio communication with their air corps, *Flivos* appraised the air corps of the situation and the intentions of the ground units, advised army commanders on the most practical use of airpower and passed on their requests for air assistance. A joint spirit clearly lay behind the establishment of this system, as an operational order from Richthofen's air corps to its reconnaissance units reveals:

The air liaison officers must work in close contact with the officers of the ground forces delegated for liaison with the Air Force. This contact is achieved by joint allocation of command post positions. In places where there are no Army officers delegated for liaison with the Air Force, their duties are to be carried out by air liaison officers.⁵³

This system worked well when *Luftwaffe* units were attacking clearly-defined enemy positions, as in Operation *Störfang*, and during static or slow-moving operations, but not satisfactorily during operations like *Trappenjagd*, where the situation on the ground was far more fluid and land forces found themselves occupying positions that air observers and liaison staffs still believed to be held by the enemy.

Richthofen certainly never found a way to prevent cases of 'friendly fire', despite his best efforts. In fact, he even initiated some. For example, on 29 June 1942 several *Stukas* spotted a company of the elite *Grossdeutschland* Division on a hill two kilometers east of the Tim River. Although the soldiers 'immediately spread out orange-coloured air identification panels as well as swastika flags and set off smoke signals', the pilots failed to recognize them as German and swooped down and scattered bombs among them.⁵⁴ They killed 16 men, wounded many others and destroyed numerous weapons and other equipment. Richthofen's diary reveals that he himself ordered the attack, believing the area still to be held

by enemy troops. 'It was my own fault,' he lamented, 'because I ordered it, and did not expect such a rapid [German] advance.'⁵⁵ 'Friendly fire' incidents like this occurred in all campaigns of World War II, and on both sides, and no systems or safeguards seemed capable of preventing them entirely (and still cannot, as accounts of the 1991 Gulf War reveal).

Jointness *par excellence*

At the tactical level, the best examples of Jointness during the Crimean campaign did not even involve Richthofen and Manstein. They involved Colonel Wolfgang von Wild, who headed *Fliegerführer Süd* (Air Command South), a small anti-shipping air command subordinated to Richthofen's *Fliegerkorps VIII*, and the senior officers of *Admiral Schwarzes Meer* (Admiral Black Sea), the small Axis naval flotilla that was operating around the Crimea by June 1942.

Realizing that *Admiral Schwarzes Meer* would soon be able to play a greater combat role in the Black Sea, on 2 February 1942 the command staff of *Luftflotte 4* had requested the small fleet to supply it with a naval liaison officer. A spirit of jointness lay behind this request, as the wording itself reveals. The air fleet explained that it was 'strengthening its operations against the Russian Black Sea Fleet' and, therefore, needed an experienced naval officer at its headquarters 'in order to guarantee close cooperation between the air fleet, *Marine-Gruppenkommando Süd* [Naval Group Command South, the fleet's parent naval command] and *Admiral Schwarzes Meer*'.⁵⁶

Admiral Marschall, in overall command of all Axis naval forces in the Aegean and Black Seas, felt equally keen to increase co-operation between his small but steadily-growing Axis fleet in the Black Sea and the various air commands within *Luftflotte 4*'s operational zone, especially the small anti-shipping air command. Accordingly, on 9 February he radioed the Naval Staff a request for a suitable officer.⁵⁷ 'Success against the Russian Fleet will depend', he insisted, 'on close cooperation between *S-Flottille* [the planned MTB squadrons], submarines and *Luftwaffe* units.' The air force's marked intensification of operations against shipping and the transfer of small Axis warships and submarines to the Black Sea meant that 'still closer operational and tactical cooperation with *Luftflotte 4*, especially *Fliegerkorps IV* is crucial'.

Marschall requested, therefore, the appointment of a 'suitable officer with fleet experience'. The last thing he wanted was a glorified desk clerk. The new liaison officer, he stated, should be a 'sea-going reserve officer with naval combat experience'. To ensure that the new appointee gained a sound working knowledge of air command matters and tactics, Marschall continued, he should first be sent away for specialized training.

Admiral Schwarzes Meer's war diaries reveal that the various naval liaison officers appointed to the *Luftwaffe* over the next few months worked vigorously, especially during the Crimean campaign itself, to break down inter-service rivalry and ensure that no operational or tactical dissension existed between their fleet and local German air units. Their task was made easier by recent improvements to the radio communication system in the region, resulting in a steady transfer of up-to-the-minute intelligence information between the various naval and air commands. This information – on weather conditions and the activities and position of enemy vessels – was gathered mainly by sea and air reconnaissance and a sophisticated radio intercept service.

Manstein's command staff also considered the small Axis flotillas valuable and requested them 'to interfere with incoming and outgoing naval traffic at the start of the Battle for Sevastopol'.⁵⁸ By the time the ground battle actually commenced on 7 June, this force comprised a German flotilla of 6 E-boats and a few light patrol vessels (based in Ak Mechet) and an Italian flotilla of 4 E-boats, 6 midget submarines and 4 armed motor boats (based in Yalta).⁵⁹ This force would grow even stronger in following weeks.

Admiral Marschall had originally planned to deploy all these vessels from Yalta, under the joint command of the Italian flotilla commander, Capitano di Fregata Mimbelli, the German flotilla commander, Lieutenant Birnbacher, and the local *Luftwaffe* commander, Colonel Wild himself.⁶⁰ However, Vice-Admiral Götting, who exercised operational control of naval forces in the Black Sea, disagreed. He persuaded Marschall to keep the German and Italian MTB flotillas separate, arguing that 'the massing of all forces in the small harbor at Yalta constitutes an unwarranted risk, as such a concentration of boats would not escape the enemy's notice and would lead to heavy air attacks'.⁶¹ Despite insisting on the separation of flotillas for security reasons, Götting agreed that they could contribute best to the battle if they were closely integrated at the tactical level, not only with each other, but also with the *Luftwaffe*. He therefore considered the idea of a joint command very reasonable, and promptly ordered Birnbacher 'to proceed to [Wild's headquarters at] Saki to confer with Air Commander South and Commander Mimbelli and to establish a joint combat HQ there for the period of activity in the sea-lanes around Sevastopol'.⁶²

Thus, a joint naval-air command developed in Saki under the joint direction of Birnbacher, Mimbelli and Wild, with the latter assuming, unofficially but by agreement, overall authority. He was the ideal choice; during World War I he had served as a cadet in the Imperial German Navy, and he was commissioned into the Weimar Republic's small fleet in 1923. After more than a decade of naval service he transferred to the newly formed *Luftwaffe*.

Because of Wild's naval background the Luftwaffe High Command steered him towards a career in anti-shipping air operations. He saw action during the Polish campaign in coastal air units and, from April to October 1941, he then commanded Air Command Baltic (*Fliegerführer Ostsee*), which distinguished itself in the far north by its excellent reconnaissance and anti-shipping work, conducted in close co-operation with the local naval command.⁶³ When Göring disbanded that command, he sent Wild and his staff to the south of Russia, where they resurfaced as *Fliegerführer Süd*. Thus, as well as having already commanded sea-mining and bombing squadrons and long-range naval reconnaissance units, Wild brought solid experience in naval support and anti-shipping operations to his new post as *de facto* joint commander of the integrated anti-shipping command established in Saki. As noted above, a key component of effective joint command is a solid understanding of the needs, techniques, tactics, limitations and capabilities of the participating services. Wild had that.

To improve inter-service communication, Wild's joint staff ordered *Kriegsmarine* signallers to construct powerful new radio transmitters in the Crimea.⁶⁴ These greatly accelerated the dissemination of important information – especially vessel sightings by reconnaissance aircraft – among the various air and naval commands and bases. To increase inter-service co-operation further, Admiral Marschall also sent Rear Admiral Eyssen, the Naval Liaison Officer to *Luftflotte 4*, to work at Wild's headquarters.⁶⁵ Relations soon became extremely good; Wild even informed his naval colleagues that they could request air reconnaissance missions as they saw fit. His willingness to work closely with them did not pass unnoticed. Marschall's naval command, for example, was clearly impressed. Wild 'has himself been a naval officer', it reported, 'and possesses an extraordinary understanding of naval combat leadership'. As a result, 'cooperation between naval and air forces in the operational zone exists, and without friction'.⁶⁶

This was no exaggeration. Occasional 'ethnic' tensions between Italians and Germans arose during the Battle of Sevastopol, yet Wild and his naval counterparts all worked energetically, and as equals, to ease those tensions and to maximise the effectiveness of their relatively weak forces. They met or communicated frequently in order to plan missions, co-ordinate their activities and to create, in the own limited way, joint *Schwerpunkte* (points of main effort). This paid off. Wild's anti-shipping air command always operated in close co-operation with the German and Italian E-boat, armed motor boat and midget submarine flotillas, which consequently raised their overall level of effectiveness.

A 'typical' evening joint operation – reconstructed here from the war diaries listed in this essay's footnotes – involved a pre-operation briefing in

the afternoon, chaired usually by Wild but always involving air and naval officers. They analysed the Army's requests (if any), air reconnaissance and other intelligence information and, after Birnbacher, Mimbelli and Wild discussed what their forces could and should do, planned that evening's operation. Under cover of darkness, a flotilla of 6 to 10 (and occasionally far more) E-boats or midget submarines slipped out into the Black Sea in search of the Soviet vessels identified during earlier by the *Luftwaffe*.

If both visibility and radio tracking proved inadequate, the captains might radio back to the joint headquarters for assistance from aircraft, four or five of which would fly over the general area in search of lights from the evasive enemy ships. If no ships could be seen, but their presence was suspected, the *Luftwaffe* planes might drop illuminating flares in the hope of revealing them. Even though those aircraft had little chance of bombing or torpedoing any vessels they found at night, they sometimes facilitated their destruction by radioing their positions back to headquarters, which would forward them immediately to the E-boat or submarine captains.

The respective strengths and weaknesses of air and naval units complemented each other. Air Command South lacked adequate night navigation and torpedo aiming equipment and was consequently unable to contribute much directly to night combat operations, but it did provide Axis naval forces with up-to-the-minute reconnaissance information and the types of assistance mentioned above. During the long summer days, it flew constantly over Soviet ports and sea-routes and was able, as a result, to inform its naval partners which enemy vessels were in port, which were at sea, on which courses they sailed, and where they were likely to be when they reached Crimean waters after nightfall.

Because Axis naval forces were vulnerable during daylight hours to attack by Soviet aircraft and vessels, but were hard to detect at night, they operated only during the hours of darkness. Using radio intercepts and the detailed reconnaissance information provided by Air Command South, they patrolled the sea-routes around Sevastopol. They stalked Soviet warships and transports hoping to sneak into the besieged city under the cover of darkness protecting them from air attacks. Their patrols were even assisted on occasions by Wild's aircraft, which, as noted, dropped illuminating flares and sometimes even attacked Soviet warships that pursued them.

As it happened, the Axis flotillas' nightly patrols, which perfectly complemented Air Command South's sea reconnaissance and interdiction missions, had an impact on the Siege of Sevastopol far outweighing the material damage they inflicted on enemy vessels; these carefully coordinated joint naval and air operations compelled Vice Admiral Oktyabrskii to curtail his fleet's fire support missions against German targets along Crimean coasts and to reduce, and finally stop, its vital supply

convoys to the besieged city. The gradual cutting of Sevastopol's lifeline had a major effect on its defenders' ability to resist Manstein's and Richthofen's joint ground and air assault. Not only did the blockade disrupt and finally prevent Soviet troop reinforcements, but it gradually starved defenders not only of food and medicine but also of ammunition. Late in June, for example, they became so desperate for the latter that they sent down naval divers to retrieve shells (and anything else of value) from the wrecks of ships lying on the bottom of Sevastopol harbour.⁶⁷

Conclusions

To sum up, then, the *Wehrmacht* seldom conducted operations using all three services. With the notable exception of the invasion of Scandinavia in 1940,⁶⁸ and the less notable exceptions of troop transportation and logistics missions across the Mediterranean to North Africa, the *Kriegsmarine* conducted few significant missions alongside both the Army and Air Force. Usually it operated alone, or with the *Luftwaffe* providing air cover and reconnaissance information.

The Army and Air Force, on the other hand, did carry out most operations together. In fact, the Army never undertook any sizeable tasks without the *Luftwaffe's* assistance. On most occasions these two service branches displayed a general willingness to work together as partners in order to attain mutually agreed goals. Yet even the *Wehrmacht*, one of the best fighting forces of this century, had far to go towards the level of jointness advocated by today's military theorists. Hitler provided no formal mechanisms for the attainment of jointness, and his own passion for power and prestige ensured that he created no modern-style joint force commanders or joint staffs. Instead, service chiefs often quarrelled over the orientation of their forces and competed not only for greater shares of Germany's limited resources, but also for opportunities for glory in combat.

This study also shows, though, that sometimes, as in the case of the Crimean campaign of May and June 1942, the *Wehrmacht* attained a high degree of jointness and, as a consequence, improved its effectiveness. On those occasions – usually with Hitler acting informally and unwittingly but with full authority as a joint force commander – individual staff officers and operational commanders wanted to maximise their chances of success and were prepared, as a result, to live with inter-service tensions at all levels, to put aside whatever service biases they might have themselves, and to deal directly with each other as equal 'partners'.

Axis success in the Crimea occurred primarily because the two principal commanders, the Army's Manstein and the *Luftwaffe's* Richthofen, clearly understood the crucial importance of co-ordinating their forces and

deploying them in a complementary fashion according to mutually agreed objectives. In close and regular consultation, they – and, at the tactical level, their subordinate land, air and naval commanders – meticulously co-ordinated their operations and created joint *Schwerpunkte* (points of main effort). Their efforts greatly enhanced their overall effectiveness, and clearly illustrate the value of improved jointness.

At both Kerch and Sevastopol, German forces achieved victories over better-prepared and numerically superior forces enjoying significant geographical advantages, and did so because they managed, to a large extent, to put away their traditional service rivalries and work together to get 'the job' done. Their efforts represent one of the best examples of *Wehrmacht* jointness from World War II. As such, it provides an excellent lesson in the great advantages to be gained by increasing inter-service co-operation and co-ordination.

NOTES

1. For Alfred Jodl's courageous stand on behalf of Field Marshal List, for example, see my book, *Stopped at Stalingrad: the Luftwaffe and Hitler's Defeat in the East 1942-1943* (Lawrence, KS: UP of Kansas 1998) p.171.
2. *Ibid.* p.320.
3. Bundesarchiv-Militärarchiv (Federal Military Archives), Freiburg, Germany (hereafter cited as BA/MA) RM 7/259: *Bericht über Besprechung am 30.4.1942. Ort: Berghof. Diensttuender Adjutant: Generalmajor Schmudt. gKdos. Gegenstand: Der Führer bespricht die militärische Lage.*
4. *Weisung Nr. 41*, in W. Hubatsch (ed.) *Hitlers Weisungen für die Kriegführung, 1939-1945. Dokumente des Oberkommandos der Wehrmacht* (Koblenz: Bernard & Graefe 1983) pp.183–8. Readers interested in Hitler's insistence on an offensive to clear up the Crimea should see my article, 'Hitler's Quest for Oil: The Impact of Economic Considerations on Military Strategy, 1941-1942', *Journal of Strategic Studies* 18/4 (Dec. 1995) pp.94–135.
5. E. Ziemke and M. Bauer, *Moscow to Stalingrad: Decision in the East* (Washington DC: United States Army Center of Military History 1987) p.264.
6. R.J. Overy, 'Hitler and Air Strategy', *Journal of Contemporary History* 15 (1980) pp.405–21.
7. F. Halder, *Kriegstagebuch: Tägliche Aufzeichnungen des Chefs des Generalstabes des Heeres, 1939–1942*, ed. by H.-A. Jacobsen (Stuttgart: W. Kohlhammer 1965) Vol.III, p.408.
8. *Ibid.* p.412.
9. P.E. Schramm (general ed.) *Kriegstagebuch des Oberkommandos der Wehrmacht (Wehrmachtsführungsstab) 1940–1945* (Frankfurt am Main: Bernard & Graefe 1961) (hereafter cited as *KTB OKW*), Vol.II, p.321 (13 April 1942).
10. Halder (note 7) p.421 (28 March 1942).
11. National Archives, Washington, DC (hereafter cited as NARS) T971/18/975-981: *OKL, Chef Genst. 7644/42 Chefsache – Notiz über die Besprechung beim Führer am 17.4.1942, bezüglich Einsatz der Luftflotte 4.*
12. The largest operational commands within air fleets were the *Fliegerkorps* (air corps). These commands, always designated by roman numerals (*Fliegerkorps* I, II, III, IV and so on), normally functioned under the authority of the air fleet in the region. On numerous occasions throughout the war, however, the *Luftwaffe* High Command (OKL) directed certain *Fliegerkorps* to operate independently and under the direction of their own commanders, who were usually of *Generalleutnant* or *General der Flieger* rank. Air fleets seldom

- controlled more than one *Fliegerkorps* at a time, although in critical theaters or during major offensives a fleet might assume control of two (and sometimes even elements of a third). *Fliegerkorps* differed markedly in size and composition, depending on the importance of theaters and the nature of operations each air corps was called upon to perform, but 'typical' corps during the first two years of war in the east possessed between 350 and 600 aircraft of different types (bombers, fighters and so on).
13. By the time the war in Europe finished in May 1945, the Luftwaffe had organised all its operational aircraft into seven *Luftflotten* (air fleets), three more than it had when hostilities broke out almost six years earlier. They were designated *Luftflotten* 1, 2, 3, 4 (the original four), 5, 6, 7 and *Reich* (created during the war, the latter being responsible for home air defense). Each *Luftflotte* was similar to an individual 'Air Force' within the US Army Air Forces; that is, it was a self-contained air command, comprising all types of combat units (bomber, dive-bomber, ground-attack, fighter and reconnaissance) as well as transport, flak and signals units. Senior operational commanders—usually of *Generaloberst* or *Generalfeldmarschall* rank—headed the command staff of each air fleet, exercising full authority over subordinate *Fliegerkorps*.
 14. Readers wanting details of Hitler's instructions to the High Command of the Luftwaffe should consult my article, 'Von Richthofen's 'Giant fire-magic': The Luftwaffe's Contribution to the Battle of Kerch, 1942', *Journal of Slavic Military Studies* 10/2 (June 1997) pp.97–124.
 15. M. Salewski, *Die deutsche Seekriegsleitung 1935-1945; Band III: Denkschriften und Lagebetrachtungen 1938-1944* (Frankfurt am Main: Bernard & Graefe 1973) pp.163, 164.
 16. Hayward, *Stopped at Stalingrad* (note 1) pp.42–4.
 17. I.S. Isakov, Admiral of the Fleet, *The Red Fleet in the Second World War* (London: Hutchinson n.d.) p.67.
 18. BA/MA RM 7/991: *Seekriegsleitung B. Nr. 1/Skl 313/42 gKdos Chefs., Berlin, den 9. Februar 1942. Niederschrift über die Besprechungen des Chefs 1. Skl. im Hauptquartier am 6. und 7. Februar 1942* (see also the appendix to the same document); BA/MA RM 35 III/22: *Anlage 1 zu K.T.B. Mar.Gr. Süd vom 17.2.42: Niederschrift über die Besprechungen mit Admiral Schwarzes Meer und den von ihm nach Sofia entsandten Offizieren über Transportabsichten und im Zusammenhang damit stehenden Operationsabsichten für das Jahr 1942.*
 19. BA/MA RM 7/248: *Der Oberbefehlshaber der Kriegsmarine und Chef der Seekriegsleitung, B. Nr. 1. Skl. I m 275/42 gKdos Chefs., Berlin, den 23. Februar 1942, an Marinegruppe Süd. Betr.: Operationen im Schwarzen Meer.*
 20. A. Kesselring, *The Memoirs of Field Marshal Kesselring* [orig. 1954] (London: Greenhill Books 1988) p.103.
 21. Cf. S. Bidwell, 'Kesselring', in C. Barnett (ed.), *Hitler's Generals* (London: Phoenix Giants 1996) p.277; Kesselring (note 20) pp.103ff.
 22. United States Air Force Historical Research Agency (hereafter cited as USAFHRA) 168.7158-337: *Kriegstagebuch Sonderstab Generalfeldmarschall Milch*, entry for 15 Jan. 1943; *KTB OKW*, Vol.III, p.42, entry for 15 Jan. 1943.
 23. Kesselring (note 20) p.239.
 24. R. Knauss, 'Der Feldzug in Norwegen 1940' (This unpublished manuscript by a Luftwaffe officer on Falkenhorst's staff is from the collection of Professor James S. Corum, School of Advanced Airpower Studies, Air University) p.18. My thanks, as always, to Professor Corum.
 25. *Weisung Nr. 10a*, in Hubatsch, pp.47–50; Halder, *Kriegstagebuch* (note 7) Vol.I, entry for 21 Feb. 1940.
 26. D. Irving, *Göring: A Biography* (London: Macmillan 1989) p.285.
 27. BA/MA N671/9: *Dr. Wolfram Frhr. von Richthofen, Generalfeldmarschall. Persönliches Kriegstagebuch: Band 9: 1.1.-31.12.1942* (hereafter cited as *Richthofen Tagebuch*), entry for 19 April 1942.
 28. R. Muller, *The German Air War in Russia* (Baltimore: Nautical and Aviation 1992) p.70.
 29. BA/MA N671/9: *Richthofen Tagebuch*, entry for 18 April 1942.
 30. *Ibid.* entry for 19 April 1942.

31. S.W. Mitcham, *Men of the Luftwaffe* (Novato, CA: Presidio 1988) p.170. An excellent biographical sketch of Richthofen is Edward L. Homze's 'Wolfram Freiherr von Richthofen – Hitlers Schlachtfliegergeneral', in R. Smelser and E. Syring (eds.) *Die Militärelite des Dritten Reiches: 27 biographische Skizzen* (Berlin: Ullstein 1997) pp.446–59. See also my own article on Richthofen, cited below in note 34.
32. Muller (note 28) p.137.
33. *Notes on the German Air Force*, Air Ministry Publication No. 1928, 2nd Edition, April 1943, p.76.
34. Details of Richthofen's life and career, plus his personal papers and diaries from 1937 to 1944, can be found in the *Nachlass Dr Wolfram Frhr. v. Richthofen* (BA/MA N671). For his time in Spain, see Vols.I, II and III. His abbreviated service record is in BA/MA MSG 1/1248. Readers wishing to learn more about Richthofen's World War II career should consult my article, 'A Case Study in Effective Command: An Analysis of Field Marshal Richthofen's Character and Career', *New Zealand Army Journal* 18 (Jan. 1998) pp.7–18.
35. BA/MA N671/9: *Richthofen Tagebuch*, entry for 22 April 1942.
36. E. von Manstein, *Verlorene Siege* (Bonn: Athenäum 1955) p.258.
37. BA/MA N671/9: *Richthofen Tagebuch*, entry for 28 April 1942.
38. *Ibid.* entry for 2 May 1942.
39. Muller (note 28) p.71.
40. Ziemke and Bauer (note 5) p.264.
41. *Ibid.*
42. Hayward, *Stopped at Stalingrad* (note 1) p.74.
43. USAFHRA 519.619-7 (14 August 1945): HQ, US Strategic Air Forces in Europe (Rear), Office of the Historian, AAF Sta 390, APO 413, US Army, 'Questionnaire on GAF Doctrine and Policy: Answers by Gen. Maj. von Rohden (P.W.) and Col. Kriesche (P.W.) to Questions Submitted by Major Engelman'.
44. This fascinating report to 387th Infantry Division is appended to Richthofen's diary (BA/MA N671/9: *Richthofen Tagebuch*, entry for 28 June 1942).
45. *Ibid.* entry for 28 June 1942.
46. *Ibid.* entry for 25 Oct. 1942.
47. Manstein (note 36) p.258.
48. Quoted in Muller (note 28) p.67.
49. BA/MA N671/9: *Richthofen Tagebuch*, entry for 9 May 1942.
50. Muller (note 28) p.73.
51. For the development of these identification methods – which were first employed by Schlachtstaffeln during the Great War and reintroduced by Richthofen during the Spanish Civil War – see James S. Corum's excellent article, 'The Luftwaffe's Army Support Doctrine, 1918–1941', *Journal of Military History* 59/11 (Jan. 1995) pp.53–76.
52. From their inception, Flivos were trained especially in the support of armoured and motorised units. Before 1939, an entire infantry corps would have a single Flivo when even an individual Panzer division received one. During wartime, Flivos became more common, and could be found down at the Panzer regiment level.
53. USAFHRA 512.625-3: *Fliegerkorps VIII Staff, Operations Department (Reconnaissance Branch), No. 7790/42, Secret, 29.7.1942: Standing Order to the Reconnaissance Units of Fliegerkorps VIII*, p.3. Note: this is an American Intelligence translation of a document captured by the Russians. My thanks to Richard Muller.
54. H. Spaeter, *Panzerkorps Grossdeutschland, Vol. 1*, trans. by David Johnston (Winnipeg: J.J. Fedorowicz 1992. First published in German in 1958) p.324. According to Spaeter's account, the pilots saw the identification markers but believed them to be part of a Soviet ruse.
55. BA/MA N671/9: *Richthofen Tagebuch*, entry for 29 June 1942.
56. *Mar. Gruppe Süd op B. Nr. 627/42 gKdos*, in BA/MA RM 35 III/21: *KTB Mar. Gr. Süd, I.-15. Februar 1942* (under entry for 2 Feb. 1942).
57. BA /MA RM 35 III/21: *Anlage zu K.T.B. Mar.Gr. Süd vom 9.2.42: Mar. Gruppe Süd op B. Nr. 730/42 gKdos*.
58. USAFHRA 180.04-12: US Dept. of the Navy, Office of the Chief of Naval Operations, Naval History Division: War Diary of [German] Admiral, Black Sea, 1–30 June 1942 (PG Numbers 31512-31513), entry for 2 June 1942.

59. BA/MA RM 7/115: *KTB, I/Skl. Teil B IX: Lageübersicht, Mittelmeer-Ägäis-Schwarzes Meer, 1.–13. Juni 1942.*
60. Source cited in note 58, entry for 8 June 1942.
61. *Ibid.*; *Reisenotizen O.B. Mar. Gr. Süd: 2) Gefechtsstand für Führung offensiver Seestreitkräfte*, in BA/MA RM 35 III/30: *KTB Mar. Gr. Süd, 16.–30. Juni 1942.*
62. Source cited in note 58, entry for 9 June 1942; BA/MA RM 7/115: *KTB, I/Skl. Teil B IX: Lageübersicht, Mittelmeer-Ägäis-Schwarzes Meer, 1.–13. Juni 1942.*
63. Hayward, *Stopped at Stalingrad* (note 1) pp.41–2.
64. BA/MA RM 7/248: *Oberkommando der Kriegsmarine B. Nr. 1 Skl. I op 9045/42 gKdos, Berlin, den 17. April 1942: Fernschreiben an S Marinegruppe Süd; Reisenotizen O.B. Mar. Gr. Süd: 5) Zusammenarbeit mit der Luftwaffe*, in BA/MA RM 35 III/30: *KTB Mar. Gr. Süd, 16.–30. Juni 1942.*
65. *Ibid.* Eyssen remained at Wild's command post until late in June, when he returned to *Luftflotte 4*'s headquarters in Nikolayev.
66. *Ibid.*
67. V. Karpov, *The Commander*, trans. Y. Shirokov and N. Louis (London: Brassey's 1987) p.91; B. Voyetekhov, *The Last Days of Sevastopol*, trans. R. Parker and V.M. Genn (London: Cassell 1943) pp.58, 59.
68. See article by James S. Corum, 'The German Campaign in Norway 1940 as a Joint Operation', *JSS* 21/4 (Dec. 1998) pp.50–77.