Go, Sir, gallop, and don't forget that the world was made in six days. You can ask me for anything you like, except time.

—Napoleon Bonaparte at Borodino, 1812

BACKGROUND

In early September 1944, some 200 days ahead of the schedule originally constructed by the D-Day planners, two Allied army groups in France were in a race to the German border. The chief impediment to further advances now stemmed not from enemy action but from the difficulty of resupplying such an enormous effort.

The question in front of the Allied High Command was how to exploit this success. The choices available to General Dwight Eisenhower were rather limited because his strategic reserve consisted of an airborne army rather than of conventional forces.\(^1\)

Finding a way to exploit this force had become a priority among the planning staffs. In mid-August, a combined Allied Airborne Headquarters was created and began to plan for a major airborne operation designed to vault Allied forces over the “West Wall” (German fortifications on the western border of Germany) and into Germany.

By the time the first Allied ground patrols neared the German border, the Allied Airborne Headquarters had created and discarded 18

\(^{1}\)The units were the U.S. XVIII Airborne Corps, consisting of the 82d and 101st Airborne Divisions, the British 1st Airborne Division, and the Polish Parachute Brigade.
separate plans. Five had reached the stage of detailed planning. Three had progressed almost to the point of launching. But none had matured. In most cases, fast-moving ground troops were about to overrun the objectives before an airborne force could be put into the fight.²

Most of these plans concentrated on getting some part of the Allied armies across the Rhine, which was the most significant natural barrier between them and the German heartland. A plan (code-named COMET) to use one and one-half airborne divisions to seize the Rhine crossing at Arnhem, in the Netherlands, was rejected by Eisenhower in early September as not having enough forces to do the job. The day it was canceled, Field Marshal Bernard Montgomery approached General Eisenhower with a much more ambitious attempt to force a Rhine crossing at Arnhem:

The new plan was labeled Operation MARKET. Three and a half airborne divisions were to drop in the vicinity of Grave, Nijmegen, and Arnhem to seize bridges across several canals and the Maas, Waal [Rhine] and Neder Rijn [Lower Rhine] rivers. They were to open a corridor more than fifty miles long leading from Eindhoven northward. . . . In a companion piece named Operation GARDEN, ground troops of the Second British Army were to push from the Dutch-Belgian border to the Zuider Zee, a total distance of ninety-nine miles. The main effort of the ground attack was to be made by XXX Corps from a bridgehead across the Meuse-Ascaut canal a few miles south of Eindhoven on the Dutch-Belgian frontier.³

MARKET-GARDEN had two main objectives: first, to get across the Rhine, and second, to capture or neutralize Germany’s industrial heartland, the Ruhr Valley. The strategic rationale behind MARKET-GARDEN centered on providing an opening for large ground formations to get into and maneuver on the North German Plain (see Figure 8.1).⁴

³MacDonald, p. 120.
For a variety of reasons, Allied intelligence rated the capability of German forces to oppose this operation as low. German units throughout the western sector were reeling back toward Germany in various stages of disarray, and planners estimated their ability to
provide organized resistance as negligible.\(^5\) The several warnings that this might not be the case were dismissed as “not credible”:

> Despite these warnings, the general view appeared to be as recounted after the operation by the British Airborne Corps. This was that “once the crust of resistance in the front line had been broken, the German Army would be unable to concentrate any other troops in sufficient strength to stop the breakthrough.” Although the British XXX Corps would have to advance ninety-nine miles, leading units “might reach the Zuider Zee between 2–5 days after crossing the Belgian-Dutch frontier.”\(^6\)

During the early days of September, the German Army High Command (Oberkommando des Heeres, or OKH) had directed the First Parachute Army, commanded by General Kurt Student, to deploy its cadres to Holland to organize troops fleeing from the debacle in France. OKH also directed the Fifteenth Panzer Army, commanded by Major General Gustav von Zangen, to withdraw deep into Holland from the Scheldt estuary near Antwerp to reorganize, refit, and stiffen the defense of the northern corridor into Germany. Both of these armies were subordinated to Army Group B, commanded by Field Marshal Walter Model, whose headquarters, in Osterbeek, lay less than 400 meters from a planned British drop zone.\(^7\)

Chance was to work in the Germans’ favor. In the general confusion surrounding the headlong withdrawal from the Seine, the Germans’ ability to monitor and direct the movement of their forces was severely degraded. One result of this confusion was that, in early September, German forces began piling up in Holland. In addition to the division-plus of the First Parachute Army and the two divisions of the Fifteenth Panzer Army that made it across the Scheldt, Model, on September 3, ordered the Fifth Panzer Army, which was retreating from the confusion in France, to detach the 9th and 10th SS Panzer Divisions to move to the vicinity of Arnhem for refit and reorganiza-

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\(^5\) MacDonald, 1963, p. 121.


\(^7\) MacDonald, 1963, p. 126.
In all, the Germans had approximately three panzer division-equivalents scattered throughout the corridor, with two additional panzer divisions in and around Arnhem.

THE PLANS

Montgomery lobbied hard for the resources with which to execute his plan. He persistently importuned Eisenhower for the authority to supersede all other offensive operations with preparations for MARKET-GARDEN. Finally, Eisenhower promised to deliver a thousand tons of supplies per day from September 10 through October 1. Montgomery promptly set the date for the attack as September 17, giving General Lewis H. Brereton’s staff but seven days to plan and prepare for this operation. Brereton’s staff immediately began working out the myriad details necessary to move three divisions and all their gear 600 miles into a combat zone.

Brereton appointed Commander British 1st Airborne Corps, Lieutenant-General F.A.M. “Boy” Browning, as commander of the airborne force until such time as it had conducted a link-up with the British Second Army. After that, the airborne force would come under the command of General Sir Miles Dempsey, the 2nd Army Commander.

On 10 September, immediately after the cancellation of Operation COMET, the commanders of the three airborne divisions were summoned to Montgomery’s headquarters to be briefed by Lieutenant-General Browning, who was both Deputy-Commander of the 1st Allied Airborne Army and Commander, British Airborne Corps. . . . When given his orders by Montgomery, Browning was told that the Second Army would be up to Arnhem in two days. Feeling some reservation about this optimism, he made the reply famous in Cornelius Ryan’s best-seller, “I think we can hold the bridge for four days but I think we may be going a bridge too far.”

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10 Thompson, 1979, pp. 110-111 (emphasis added).
In planning for the operation, Brereton's staff had to perform four important analyses.

The first was whether to conduct a daylight or a nighttime drop. At night, the flak would be easier to avoid, but the Luftwaffe, swept from the skies during the day by Allied aircraft, had an excellent night-fighting capability. For both ease of navigation and assembly, as well as for air cover, the decision was made to drop during daylight hours.\textsuperscript{11}

The second problem was that of the flight routes and formation into the objective area. Long serial formations expose trailing aircraft to alerted enemy gunners, whereas flying the entire formation en masse places so many planes in the same piece of sky that it is difficult for enemy gunners to miss. Brereton's planners decided on a compromise. They developed two routes into the target area—a northern and a southern route. Half the serials would fly by each route.

The third problem was which drop zones (DZs) to select. Doctrine dictated that the best DZ was the objective itself. The problem with the Arnhem objective was that the target (a bridge in the middle of a large city) was in a built-up area. Because glider-borne troops were essential to the success of the plan, Brereton's planners selected a drop zone for the Arnhem operation that was six to eight miles from the bridge over the Neder Rijn but that could handle glider landings.

The fourth problem was how to deliver the force—one lift per day or two. This was the subject of intense debate between the leadership of Troop Carrier Command and the ground commanders. It highlighted the fact that the real problem with making a success of MARKET-GARDEN was not that there were too many bridges but that there were too few aircraft.\textsuperscript{12} The ground commanders wanted two lifts per day, to build up combat power on the ground as fast as possible. Troop Carrier Command maintained that two lifts per day placed too much stress on man and machine, and would result in the decimation of their forces. Brereton sided with Troop Carrier Command, despite the fact that planners projected that, with one lift

\textsuperscript{11}MacDonald, 1963, p. 130.
\textsuperscript{12}Thompson, 1979, p. 112.
per day, it would take more than four days, even in perfect weather, to deliver all of the forces into the objective area.\textsuperscript{13}

In traversing the 60-mile corridor from Eindhoven to Arnhem (the GARDEN operation), XXX Corps would have to cross three major rivers: the Maas, Waal, and Neder Rijn, plus three major canal systems (see Figure 8.1). The airborne forces (the MARKET operation) would have to seize and hold crossings over all these obstacles. The 101st Airborne was to seize bridges at Zon and Eindhoven in the south; the 82d Airborne Division was to capture bridges over the Maas at Grave, the Waal at Nijmegan, and the Maas-Waal Canal; and the British 1st Airborne was to capture the bridge over the Neder Rijn at Arnhem and establish a bridgehead north of the river sufficient to pass XXX Corps through to the Zuider Zee.\textsuperscript{14}

The drop plan was as follows:

- On D-Day, main combat elements of each division—the three regiments of the 101st and 82d, and the three infantry brigades of the British 1st Airborne—would be dropped in.
- On D plus 1, the remainder of the British 1st Airborne was to reach Arnhem, the 101st was to get its glider regiment, and the 82nd was to get its Division Artillery.
- On D plus 2, the Polish Parachute Brigade was to be dropped outside Arnhem, the 82d would get its glider regiment, and the 101st would get its Division Artillery.
- On D plus 3, the remainder of all divisions were to arrive.\textsuperscript{15} In all, about 34,000 troops were to be dropped by parachute, and 13,781 were to be landed by glider.

While airborne planning was under way, planning and preparation for GARDEN proceeded apace. General Brian Horrocks, commander of XXX Corps, had to solve the problem of moving 20,000 vehicles along a single highway within a 60-hour period. He planned to do this behind an intense curtain of aerial and artillery bombardment,

\textsuperscript{13}MacDonald, 1963, p. 132.
\textsuperscript{14}MacDonald, 1963, p. 131.
\textsuperscript{15}MacDonald, 1963, pp. 132–133.
hoping to achieve a quick breakthrough and penetrate the German defenses below Eindhoven.

As for the Germans, they clearly knew that something was up. German sources reveal, however, that Model’s headquarters had not a clue as to the true nature of the Allied plan.\textsuperscript{16}

**THE BATTLE**

On September 17, between 1230 and 1400 hours, nearly 16,000 troops were dropped and airlanded into the objective areas. The first day’s drops went extremely well. By day’s end, the 101st Airborne at Eindhoven had captured all of their bridges intact, except for the bridge over the Wilhelmina Canal at Zon, which was blown up as leading elements of the 101st approached it. The 82d at Grave captured all of their D-Day objectives, including bridges over the Maas at Grave and over the Maas-Waal Canal at Heuven, and was moving to secure the high ground to the northwest at Grosboek, which dominated the Nijmegan area.

Meanwhile, the British 1st Airborne jumped into a hornet’s nest at Arnhem: into the midst of two half-strength panzer divisions. Having been completely surprised, the Germans reacted commendably to the airborne operation. After fleeing Osterbeek one step ahead of the deploying British paratroopers, Field Marshal Model ordered General Wilhelm Bittrich to move the 9th Panzer Division to protect the Arnhem and Nijmegan bridges. The Reconnaissance Battalion of the 9th Panzer Division stopped three of four British units attempting to reach the Arnhem bridge; Lieutenant-Colonel J. D. Frost’s 2nd Parachute Battalion was the only unit to reach its objective. In turn, after heading south some distance toward Nijmegan, the Reconnaissance Battalion was nearly wiped out by Frost’s unit as it attempted to recross the bridge back into Arnhem.

The distance of the British DZ from the objective necessitated a dependence on tactical radio communication for command and control at Arnhem. The near-complete failure of the British 1st

\textsuperscript{16}MacDonald, 1963, p. 136.
Airborne's tactical radio nets forced their commander, General R. E. Urquhart, to command his division by racing about in his jeep in an attempt to maintain contact between his scattered units. During one dash across no-man's land, he encountered a series of German patrols and was trapped for nearly 18 hours in an attic in Arnhem, unable to move.\textsuperscript{17}

By the end of September 17, as the airborne units were consolidating and digging in, awaiting the second day's drops, General Horrocks' XXX Corps had fought its way north to within six miles of the 101st at Eindhoven. Fighting along the single road was fierce, and although Horrocks' lead units made significant advances, they did not succeed in penetrating the Germans' lines. Kicking off again in the morning of the 18th, Horrocks' lead units made contact with the 101st at the Wilhelmina Canal near Zon late that evening. British Engineers immediately began bridging operations; by morning, they had erected a tank-capable bridge over the canal. The road was now clear to Nijmegan.

As the lead units of XXX Corps roared up the highway toward the 82d's position at Grave, the situation of Urquhart's 1st Airborne Division was becoming more and more precarious. Field Marshal Model had managed to get enough combat power into the fight at Arnhem to bottle up the British. The 2nd Parachute Battalion was still holding the north end of the Arnhem Bridge, but the rest of the division had withdrawn 4 miles to the east, into a defensive perimeter around the British DZ. The absence of a tactical communications link out of the perimeter made coordination of close air support ineffective. Additionally, there was no way of warning Troop Carrier Command that the preplanned drop zones for resupply were now in German hands. After the second day, the bulk of the daily resupply was dropped into German positions.

Meanwhile, bad weather was causing serious delays in the buildup of combat power in the objective area. The Polish Parachute Brigade, earmarked for Arnhem, arrived two days late, as did Major General James M. Gavin's glider-borne infantry regiment, the 325th. Several attempts by the 82d to take the Nijmegan Bridge on the 19th and

\textsuperscript{17}Thompson, 1979, p. 120.
20th were stymied by well-sited German defenses guarding the southern approaches to the bridge—helped significantly by the fact that Gavin’s division was still at half-strength.

On the afternoon of Wednesday, September 20, Gavin’s 504th Parachute Infantry Regiment assault-boat ed across the mile-wide Maas River in leaky canvas boats and managed, under heavy fire, to capture the northern end of the bridge and to disable the demolition charges the Germans had set. Simultaneously, the Grenadier Guards assaulted and captured the south end of the bridge. The road to Arnhem was finally open.

As success grew in the south, the situation of Urquhart’s division at Arnhem worsened. By Thursday, September 21, Frost’s battalion at the bridge had been almost annihilated, and the toehold on the bridge had been lost. At the same time, radio contact was finally established between the British perimeter near Osterbeek and the lead elements of XXX Corps. For the first time, General Dempsey, the 2nd Army Commander, was able to discover the predicament of the British 1st Airborne.

Friday, September 22, was a difficult day. Weather again prevented reinforcement and resupply from the air, and XXX Corps made only slight progress toward Arnhem from Nijmegan, although reconnaissance units made it to the Neder Rijn, opposite Osterbeek. The British 1st Airborne was forced into an ever-tighter perimeter, and German resistance to XXX Corps’ advance was strengthening.

On Saturday, facing mounting casualties and very difficult resistance, General Dempsey convinced Montgomery to order the 1st Airborne to abandon its positions and withdraw south across the Neder Rijn. Of the 10,095 “paras” who jumped into Arnhem, only 2,163 made it back across the river (Figure 8.2).

**COMMAND AND CONTROL**

The Allied forces conducted extensive rehearsals and briefings of Montgomery’s plan. Montgomery’s intent was well understood by all key leaders. The chief defect in the command and control arrangements was that the overall ground commander, General Dempsey, had no system by which he could receive an indication
that the plan was flawed. The British radios at Arnhem were the sole means of communication with the forces advancing from the south. They worked so poorly that the division commander could not communicate even with his own forces and was almost captured as a result, which took him out of the battle for over 18 hours.

The entire operational and strategic concept depended on getting across the Rhine and into Germany, an objective that was probably
unachievable after the end of the third day. There were several indicators that could have informed Montgomery that his concept was unworkable or unraveling, but because the operational plan did not provide for identifying and communicating these indicators, the Allies continued to pour men and materiel into the objective area, unaware that the prize was no longer for the taking.

**MONTGOMERY’S COMMAND CONCEPT**

Embedded in the MARKET-GARDEN planning were many assumptions, most of which concerned especially the ability—or rather the inability—of the Germans to form an organized resistance to the assault. Assuming, however, that weather and the enemy had behaved, an ideal command concept, if explicitly written, might look as follows:

**I. ABOUT THE ENEMY AND HIS PLANS:**

1. The enemy [the Germans] currently has no more than 4,000 troops in the Eindhoven-Arnhem corridor. He does not suspect our intentions.

2. The enemy is expected to resist XXX Corps’ breakthrough attempt fiercely. However, once the corridor is penetrated, resistance along it will collapse.

3. You [U.S. and Allied troops] should expect the Germans to attempt to reinforce and assist the troops garrisoning the bridge areas at Eindhoven, Nijmegen, and Arnhem with at most 3 infantry battalions and 50 to 100 armored vehicles.

**II. ABOUT OUR FORCE DISPOSITIONS AND PLANS:**

1. Our strategic objective is to invade Germany and force a peace by the end of 1944. Our tactical objectives are to (a) cut off the remaining German forces in Holland and force their surrender, (b) outflank the West Wall, and (c) establish a salient across the Rhine to enable a drive into the North German Plain.
2. Over a 3-day period, we shall drop and airland 3-1/2 airborne divisions in three separate areas to seize and hold bridges over major water barriers along the Eindhoven-Arnhem corridor.

3. We shall isolate the Eindhoven-Arnhem corridor area with air and artillery bombardment to facilitate the advance of XXX Corps. XXX Corps will link up with the 101st Airborne at Eindhoven by the end of D-Day, the 82d Airborne will be at Nijmegen by the end of D-Day plus 1, and the British 1st Airborne will be at Arnhem no later than D-Day plus 4.

4. Once across the Neder Rijn at Arnhem, Second Army will exploit this breakthrough by advancing to the Zuider Zee.

III. ABOUT CONTINGENCIES:

1. Given the enemy situation, we should be able to capture and hold the six key bridges. However, if XXX Corps cannot break through, the airborne forces will be stranded and will be defeated in detail. A swift advance by XXX Corps will prevent this outcome. Therefore, priority of air and artillery fires will be to XXX Corps units in contact with German defenders, with the objective of destroying them.

2. The insertion and sustainment of our airborne forces is a paramount consideration. If we can get them in and keep them supplied, we should succeed. Therefore, we will select our drop zones, routes, and timing to reduce risks during delivery, even if that imposes additional burdens (such as distance or the absence of surprise) on the delivered forces.

3. If communications with units break down, we shall proceed with our deliveries and resupply operations according to our original plans.

4. Our domination of the air will be used to prevent the Germans from reinforcing their forces in the corridor and to compensate for any unforeseen resistance.
**ASSESSMENT**

Given the assumptions embedded in the plan, MARKET-GARDEN might be considered a reasonable gamble. It offered a very attractive prospect: the opportunity of ending the war in 1944. Nonetheless, the judgment that we must render is that, even if the above assumptions were correct, as a command concept the plan was badly flawed: there was no provision for informing Dempsey or moving to a contingency plan if the original plan did not work. The chief problem with the concept was that all of the structural weaknesses of the plan were counterbalanced by the intelligence estimate of the Germans’ inability to resist. Given that the estimate turned out to be wrong, verifying this assumption should have engaged every sensor and collection asset in the theater. The plan collapsed from its inherent shortcomings:

In drawing up its plans, XXX Corps gave little credence to Dutch warnings on how easy it would be for quite small parties of Germans to hold up the advance or interrupt the lines of communication along the single road, much of it on an embankment from which, along considerable stretches, tanks could not deploy. Nor do the warnings of the Dutch Resistance of increasing German strength in the area seem to have been given the weight they deserved.\(^{18}\)

The Allies gambled that strategic surprise could overcome the extremely limiting terrain, dependence on good weather, poor tactical communications, insufficient airlift assets, and suboptimal location of the drop zone at Arnhem. Neither intelligence nor the C2 system could support the validation of this concept—before or after its implementation began. The true situation at Arnhem—the key to success of the operation—could only be verified by a physical link-up. The result of this conceptual error was the destruction of the British 1st Airborne Division as a fighting force.

\(^{18}\)Thompson, 1979, p. 100.