The Right Wing of the British Fortified Camp at Saratoga

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The Freeman Farm to September 19, 1777.

On January 2, 1768, John Freeman leased for a period of "their lives" 170 acres of Great Lot 16 of the Saratoga Patent from Philip Schuyler, who in 1775 became a major general in the Continental Army. ¹

Lot 16 is described in the Schuyler Papers as beginning

...by the northeast corner of Lott No. fifteen
by the mouth of a small Runn [sic] of water
on the north end of the Vley [sic] and
Runn North Twenty five degrees west four
hundred and Fifty four chains then north
fifteen Degrees East thirty one chains, then
South Twenty-Seven Degrees East to the River,
then Down along the River to the place where
it first began. Contains Two thousand and
fifty acres.²

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¹ For a brief discussion of the pattern of settlement along the northern Hudson and the Saratoga Patent, see John Luzader, Historic Structure Report, Bemis Heights, September 12 to October 8, 1777, (Neillson Farm), (Denver Service Center, 1973), 2-3.

² Philip Schuyler Papers (New York Public Library).
The farm leased by Freeman is described as

...All that Farm on which he now Lives being part of Lot Numbers Sixteen in the Saratoga patent and is known in the subdivision of said Lot Number Sixteen by the name of Farm Number Three and begins at the northwest corner of John McCarty's Farm and thence north seventy-seven degrees west forty-eight chains thence South thirteen degrees west fourteen two chains. To the South line of said lot, number Sixteen thence south Seventy five degrees East thirty three chains to the northwest corner of Jeremiah Taylor's Farm, thence along the west and north bounds of said Taylor's Farm to the southwest corner of said McCarty's Farm thence along the west line of said McCarty's to the place of beginning.

The indenture was to run for the lives of John, his wife Esillanah, and their son Edward, and the rent was set at six pence per acre per annum, beginning January 1, 1743, plus one-fourth of the proceeds of any sales or assignments of land and the reservation of certain mining and mineral rights.

3. Ibid.

4. Ibid.
According to John Freeman's son Thomas, his father settled on the farm in 1766, approximately a year and a half prior to negotiating the formal lease. By 1777, he had cleared some fifty or sixty acres and erected a house, barn, and two "log huts." In a letter to Georg Wilhelm Grau, Lt. August Uhlig wrote concerning the Freeman Farm's appearance on September 19:

General Hamilton's advanced corps under Major Forbes were crossing a deserted, stump-strewn farm when a party of sharp-shooters fired upon it from the farm house. The English gunners fired a cannon-ball through the house and the infantry drove out the rebels, who rallied under the cover of the log barn and two huts at the southern end of the farm.

5. Public Archives of Canada, Ottawa, Loyalist Claims, Number 448, Evidence on the Claim of John Freeman, late of Saratoga, N. York Providence, hereinafter cited as Loyalist Claim 448.

An unknown German Jäger described the Freeman Farm in the following terms:

The first engagement was fought on a neglected farm on which stands a frame house near the woods to the north. South of the house is a log barn and beyond it two log huts.

In his affidavit supporting his deceased father's claim, Thomas Freeman swore that his father had a farm on lease from Genr. Schuyler. He had lived on it 11 years & had cleared 50 or 60 acres, with a House & Barn...

He had left some of his Cattle on the Farm, viz., 13 Sheep, some Hogs & Young Cattle. His stock had been sold to the British Commissary who gave his father receipts which were lost at his death. Farming tools & furniture.

Lewis Mosher, identified as a brother-in-law to the claimant, supported the Freeman claim, testifying that he Remembers John Freeman's Farm at Still Water.


8. See f.n. 5.
it was a farm for their lives. He cleared 50 acres & had a House & Barn. He left some young Stock, some Sheep & Hogs at his farm, farming Utensils & Furniture....

In his Journal, Lt. James Haddon, of the Royal Artillery, made the following entry for Friday, September 19:

...About a mile from our last ground (this center column) we came to a deep Ravin with a run of water sufficient to work a saw-mill in the middle; here the enemy having neglected to destroy a small Bridge we passed the Ravin and creek without opposition.

After describing the ambush of Forbes' advance party, he continued:

About 2 o'clock in the afternoon the British Regiments arrived opposite to Freeman's House thro which I was order'd to fire a Shot and it not taking effect Capt. Jones laid the second himself with success, but there being no Enemy in it (tho. it was from hence Major Forbes was attacked) the Troops passed a small bridge (over a hollow or large gutter apparently made by

9. Ibid.
heavy falls of Rain) and took post at the skirt of wood a little beyond it.

Sep'r 19th continued.
The Enemy being in possession of the wood almost immediately attacked the Corps which took post beyond two log Huts on Freemans Farm....

The map that accompanies and illustrates Haddon's account of the action of September 19 shows four structures on the farm. The northernmost is pictured as located on a road in the rear of two guns between the British 9th and 21st Regiments, another behind the 21st Regiment, and the other two a short distance away behind the angle formed by the 62d Regiment and its two companies that formed on potence.11


11. See Appendix I.
The cartographer of the Burgoyne campaign, Lt. William Cumberledge Wilkinson of the 62d Regiment, prepared a series of three maps that reflect the conditions north of the American position on Bemis Heights between September 19 and October 8. On the one pertaining to the former day, he showed two structures on the Freeman Farm in positions that conform to the two northern buildings on the Haddon map.

Wilkinson's and Haddon's maps also show the approximate extent and condition of the cultivated and cleared land on Freeman's leased land. Documentary evidence concerning Freeman's agricultural activity is scanty, the most informative being Thomas Freeman's and Lewis Mosher's sworn statements quoted above. A brief study of agricultural practices in the upper Hudson Valley is contained in the writer's Historic

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13. See f.n. 8 and 9.
Structure Report, Bemis Heights, September 12 to October 8, 1777.14 Except for the facts that the Freemans had occupied their farm for a longer period and had more livestock, including sheep that would have required fenced pasturage, the same general factors would obtain in both instances.

Thus by 1777, John Freeman's farm was that of a moderately successful farmer in a semi-frontier situation. The farmhouse was a frame structure, which is not surprising since a sawmill stood on the Krummack Kill within a few hundred yards of the farm.15 Approximately 60 yards south of the house stood the log barn.16 South of the barn were the two log huts mentioned by Haddon and the Jäger.

15. Haddon's Journal, 161, 163-4. By referring to the log huts south of the house, Haddon implied that the house was frame. The anonymous Jäger cited in f.n. 7 was explicit in stating that the Freeman House was a frame structure.
16. Ibid.; Dean Snow, Appendices I and II.
Like several of his neighbors, including Jotham Bemus, Ezekiel Ensign, and James McBride, John Freeman and his son Thomas were Loyalists. The elder Freeman's loyalty to the old order was not passive. According to Thomas's testimony, his father served as a guide for Lt. Gen. John Burgoyne's army on its expedition down the Champlain-Hudson line.\(^17\)

After the army was in the vicinity of Stillwater, father and son enlisted in "Jessups Corps," officially termed the King's Loyal Americans.\(^18\) They were among the loyalist troops that Burgoyne permitted to leave the British camp and make their way to Canada prior to the consummation of the Convention of Saratoga. John died at South River, where surviving members of the family still lived in 1788; and Thomas remained in Jessup's Corps until 1783.\(^19\)

\(^{17}\) Loyalist Claim 448.


\(^{19}\) Loyalist Claim 448.
For anyone tempted to accept the stereotyped view that equates Loyalists with wealthy magnates, social aristocrats, sycophantic officeholders, and passive supporters of tyranny, the story of the Freemans and many of their neighbors may be informative. New York's role in the American Revolution was profoundly complicated on the local level by the deeply rooted conflicts between the interests of the patentee landlords and their tenants. A great majority of New York's rural population consisted of tenant farmers, and long-standing mutual resentments occasionally flared into open hostility, as in 1740, 1757, and more recently in 1766, when 200 armed tenants on Livingston Manor, which like most the Saratoga Patent was in Albany County, rose against their landlords. The Saratoga Patent was spared the worst features of these troubles, partly because it was more newly settled and partly because leases were of longer duration and less blatantly exploitive. But even when the causes of friction were less grievous, the conflicts of interests and values were present. If the landlord happened to be a Loyalist, his tenants tended to adopt the revolutionary cause. If he were a prominent Whig, as in the case of the Livingstons and Schuylers of Albany County, the tenants often were pro-British.
Burgoyne's expedition converted many of the tenantry from crypto-Loyalists into overt insurgents, and a large number enlisted in Peters and Jessups Corps. Others, like Jotham Bemus and several of his neighbors became sufficiently active to attract the attention of the Commissioners for Detecting and Defeating Conspiracies. 20

James McBride's Farm

Sometime prior to 1770, James McBride leased from Philip Schuyler a farm that was designated Lot Number 3 of Great Lot 17 of the Saratoga Patent. Book Number One, Farms and Surveys, A and B, on file in the County Clerk's Office in Albany describes the parcel as

Beginning at the S. E. corner of Lot No. 3 in the grand division of Saratoga Patent, and running thence westerly along the South line of bounds thereof...22.80 chains thence...Northerly parallel with the East and on bounds of said Lot No. 3 about 44.80 chains to North line on bounds of the afore mentioned Lot No. 3 of the subdivision of said Great Lot No 17 then along the same Easterly to the N. E. Corner then of and along the East end thereof Southerly to the place of beginning containing 97.15 acres.

Precise information on the McBride farm is scanty, although William C. Wilkinson's map shows five buildings on what appears to be that property. Three were on the road that lay west by northwest

of the present Arnold Monument, and two others, later occupied by Canadian troops, were located along the road as it ran through the shallow vale between the site of the Breymann Redoubt and Freeman's Farm. A sketch of the McBride leasehold is appended to this study.

When Burgoyne made his tri-columned movement against the Americans on September 19, the central column, composed of the battalion companies of the 9th, 20th, 21st, and 62d Regiments of Foot, accompanied by a detachment of the British Royal Artillery, moved across the Great Ravine and onto the Freeman Farm, where they engaged in a fire-fight that developed into the first engagement of the Battle of Saratoga. After about three hours of fighting, reinforcements from the left column under Major Generals William Phillips and Baron von Riedesel attacked the Americans' right flank.

22. See Appendix III. N. B. According to Charles Neilson, the latter two structures were owned by Thomas Leggett; but since no persons of that name were lessees in 1777, Leggett was either a sub-tenant of McBride or Neilson was mistaken. Charles Neilson, An Original, Compiled and Corrected Account of Burgoyne's Campaign and the Memorable Battle of Bemis's Heights, Sept. 19 and Oct 7, 1777 (Albany, 1844), 176.
Grenadiers from the Brig. Gen. Simon Fraser's right column joined this fight, and British rally drove the Americans from the field.

Fraser's Corps accompanied by Lt. Col. Heinrick Christoph Breymann's Brunswick Grenadiers crossed the McBride land, with the latter apparently taking up a position there.

**The Balcarres Redoubt**

September 20 found the British army in naturally strong position. Its front was covered, for the most part, by a series of ravines beginning south-west of the Freeman Farm and extending eastward to within a half mile of the river before turning south. The rear was protected by the "Great Ravine" all the way from the McBride farm to within about two hundred yards of the river.

Burgoyne's engineers improved their position by laying a series of small outworks along the northern crest of the ravines to the front until the ravines turned southward. From that point, the interval between the ravines forms a plateau that was occupied, in part by Jeremiah Taylor's farm. Along the axis of this formation, the British and Germans prepared
a strong continuous line to the crest of the hill above the river, where a system of redoubts ran north and south along the bluffs north and south of the mouth of the Great Ravine. These covered the road, artillery park, hospital, and batteaux. Positions were taken north of the Great Ravine to cover the British rear from any attempts made from that quarter. The British fortified camp was thus a counterpart in its tactical role of the American position on Bemis Heights; and like it, the most critical problem lay in providing for a defence against a turning attack from the west. The British camp lacked a strong natural position at its western end comparable to the crest of Bemis Heights on the Neilson and Woodworth Farms. To overcome this deficiency, the British erected two redoubts—one on the Freeman Farm that contemporaries called the Light Infantry Redoubt and later designated the Balcarres Redoubt and another on the McBride farm that is now called the Breymann Redoubt. These

23. The three redoubts north of the Great Ravine's mouth have come to be called the Great Redoubt, in one of which General Fraser was buried on October 8.
were supported by two outposts west of the Balcarres Redoubt, another west of the Breymann Redoubt. To defend the interval between the two major works, the two cabins on the road running east and west south of Breymann's position were stockaded.24

Turning first to the Light Infantry, or Balcarres, Redoubt, it should be noted that while it was intended to defend the interval between the area between the Middle Ravine south of the British camp and the southwest branch of the Krummac Kill, it was also designed to cover the head of the former at the point where it consists of a web of small "runs" south and southwest of the Freeman Farm.

As early as June 20, while his army was at Sandy Bluff on Lake Champlain, Burgoyne issued this order that defined general policy with regard to field fortifications.

General Orders:

Officers of all Ranks commanding Posts, and Detachments, are constantly to Fortify in the best manner the circumstances of the place, and the implements at hand will permit. Felling Trees with their Points outward, barricading Churches and Houses, Breastworks of Earth and Timber, are generally to be effected in a short time, and the Science of Engineering is not necessary to find and apply such resources. 25

That Burgoyne's army carried out this order immediately after the fight of the 19th is documented by the testimony of his supernumerary aide-de-camp, Charles Stanhope, Viscount Petersham (later Earl of Harrington), during the parliamentary investigation of the circumstances of Burgoyne's defeat:

Q. How was our army employed between the 19th of September and the 7th of October?
A. The army itself was employed in strengthening its position.

Q. Did it take the army eighteen days to strengthen its position before it made any movement?
A. I can't exactly say. They were working all the time.

Q. What works were executed in that time?
A. There were numbers of redoubts erected; the tete-dieu [bridge-head] lines before the camp; outworks to the lines, in which guards and picquets were placed, and batteries.

Q. How many redoubts were erected?
A. I think in all there must have been five or six.26

Burgoyne, himself, touched briefly on the matter of field fortifications in his October 20 report to the Colonial Secretary, Lord Germain, writing:

The army lay upon their arms the night of the 19th, and the next day took a position nearly within cannon shot of the enemy, fortifying their right, and extending their left to the brow of the heights, so as to cover the meadows through which the great river Hudson runs and where their bateaux and hospitals are placed. The 47th regiment of Hesse Hanau, and the corps of Provincials encamped in the meadows as a further security... On our side it became expedient to erect strong redoubts Great Redoubt for the protection of the magazines and hospital, not only against a sudden attack, but also for their security in case of a march to turn the enemy's flank. 27

Capt Georg Pausch of the Hesse-Hanau Artillery wrote in a letter to Baurmeister, the Hessian adjutant general, dated November 26, that was more detailed.

The Army immediately began to fortify its position... On the fields where the first battle was fought, the General Fraser's corps encamped behind a great redoubt, built of timbers and earth. Its length must have been at least one hundred fifty chains. The walls in some places were six feet high. Eight cannon—four light six, two light three-pounders, and two five and a half inch howitzers were mounted at embrasures. Captain Walker, my friend and a good officer, commanded the guns. General Fraser, whose tent is nearby, and milord Balcarres lived in the farmhouse and Major Aeland and Captain Walker were in the barn. On the reverse slope of a hill to the west a small log work contained two light three pound cannon. While it was a strong post, the great redoubt could not have stood against any cannon larger than a six-pounder without suffering. 28

28. Hessische Staatsarchiv, Marburg, ltr., Pausch to Baurmeister, November 26, 1777.
In his journal, Pausch wrote for September 20 that the dead had been buried on the battlefield, "instead of on the hill, because breastworks were thrown up there." He described the redoubt construction as an "entrenchment of newly felled trees laid on top of one another... The cannon and howitzers battery is placed on the hill, and the openings between the trees are filled with earth. And on the outside, too, earth is thrown over them."

In his account of the battle of October 7, Pausch wrote concerning a picket, perhaps the one depicted by William C. Wilkinson as being west and slightly north of the northern end of the Balcarres Redoubt as being "a little earth-work, eight feet long by five feet high."

30. Ibid.
31. Ibid.
Lt. August Uhlig's letter to Georg Wilhelm Grau of Wolfenbüttel, dated November 23, contains this reference to the Balcarres Redoubt and its major outwork on "Bloody Knoll":

A long line extended from this river to the battlefield, where the British light infantry redoubt was built. This very strong fort faced the west and was more than 3,000 yards long. Within it were the houses of the Friedman's whose farm was here. Several cannon and many men made this a most secure post. On a low ridge to the west, an outwork looked over a farm in the shallow vale through which a road ran.  

While posted in the Breymann Redoubt, the lieutenant wrote to an unidentified friend in Braunschweig that beyond the "Canadian Cabins" is the large English light infantry fort on the farm when the battle was fought. It is the army's strongest post—some 3,000 yards long and raised high."  

Another German, Chaplain Johann August Milius, wrote his father Heinrich, a Lutheran pastor, a letter dated September 29. After a brief account of the action of September 19, he noted that "The English and some Germans" had been buried behind the Freeman House.

32. Uhlig's Letters, Nov. 23, 1777.
33. Ibid., Oct 2, 1777.
and "other Germans in a field on the east." \(^{34}\)

He then continued with the following description of the Balcarres Redoubt:

A strong fort has been built by the English soldiers on the field of battle. It is of both logs and earth, but much of it is on such shallow soil that much reliance is put on trees and little entrenching is done. The three houses of the farm are within the fort and are part of it. It contains 7 or 8 cannon well situated. The rebels will not be able to take it by assault. \(^{35}\)

The Baron von Riedesel's papers include, among many other documents, what appears to be a copy of an engineer's notes that describe the defenses of the right wing of the British camp. The portion pertaining to the Balcarres Redoubt reads:

\(^{34}\) Not all the British dead were buried behind the houses. Others were buried in the field west of the redoubt.

\(^{35}\) Niedersächisches Staatsarchiv, Wolfenbüttel, ltr, Feld-prediger Johann August Milius to Pfarrer Heinrich Milius, Sept. 29, 1777. Herinafter cited as Milius's Letters with the appropriate date.
The soldiers of the Corps Fraser have encamped on the Freeman Farm behind a great entrenchment. This is built of trees, some very large, with earth thrown between the trees and against the exterior to a height of from four to six feet, with four exterior sally-ports and eight interior entrances from the camp into the double-walled portion, which includes three-quarters of the work. There are embrasures for the cannon and a bacquet for the soldiers. Freeman's house is in the face of the work and has been barricaded on the exposed end with an extra layer of logs and dirt. Therein General Fraser has his quarters in company with milord Balcarres, both being Scotsmen. The barn stands on the low ridge between the outer wall and a short inner one that forms a traverse into the interior of the fort's northern half. It serves Major Acland and other officers, especially the officers of the guard and their sergeant. Sometimes the major visits his wife in a house near the river. The length from north to south is a little more than one hundred fifty English chains. The southern curtain measures one hundred
two chains and two and one half feet. The southeast curtain is one hundred forty chains long. The length of the line across the northern battery is eleven chains.

In his journal of the campaign, the German commander, Baron Friedrich von Riedesel, wrote:

At the same time for the defence of the right flank, a large redoubt was constructed on the former battlefield near the corner of the wood, that had been occupied by the enemy on this side of the ravine. The Corps of Fraser, who were to occupy the position of the 7 [illegible] companies of General von Riedesel on the day of the battle.

The Baron further noted that fortifying the camp continued daily, that a field of fire was cleared for a distance of 100 paces in front of the positions, and that for two weeks more than 1,000 men were engaged in this fatigue detail.


37. Ibid., MS., Journal des Feldzugs.
British sources are much less detailed and specific in their references to fortification construction. Lt. Col. Robert Kingston, Burgoyne’s adjutant general, wrote in a letter to Gen. Hugh Earl Percy the following brief account of the Balcarres Redoubt:

Brigadier Fraser’s corps encamped on the right behind our largest redoubt, which was built of the best local material, viz. the trunks of trees covered with earth. Its total length must have been at least 15,000 feet, with breastworks about five feet high. To the front was an abbatis of felled trees. Within, were the house and dependencies of the farm on which it was built. It served us well on the fateful day when it withstood the repeated assaults of the Rebels. Had the position of Colonel Bryman’s Corps been as strong, we might have saved our army to fight again, or at least to have executed a successful retreat.

Two purported contemporary accounts have come down to us. One of these is Lt. William Digby’s journal that was written some time after the campaign and based, in part, upon some notes plus what he read and heard from other sources. He wrote the following entries:

Sept. 20th — About 12 the general reconnoitered our post and contracted the extent of ground we then covered to a more secure one nearer the Hudson River to guard our battows \textit{sic} \ and stores, and our right extending near two miles to the heights west of the river, with strong ravines, both in our front and rear.

Sept 23 — It is said we were to strengthen our camp and wait some favourable accounts from General Clinton, and accordingly began to fell trees for that purpose.\footnote{British Museum, MSS. Room, MS \textit{Journal of Lt. Wm. Digby of the 53d Regiment of Foot.}}

The other is an account by Ensign Thomas Anburey of the 24th Regiment of Foot in the form of letters to a friend. Like Digby's work, it was written sometime after the campaign, probably in the 1780's, and besides containing information to which he could not have been contemporaneously privy, embalms some errors derived from other uncredited sources.\footnote{Army List (London, 1778).}
describing the effects of the capture of Breymann's Redoubt, he made this statement:

Whatever favorable opinion the General had entertained of our late encampment, after this attack he thought our flank liable to be turned, and it would be impossible to accomplish an honorable retreat, fearing the only security of the army would consist in ignominious flight as our works would by no means resist cannon shot. Before we quitted them, we heard this enemy bringing up their artillery, no doubt with a view to attack us at day-break. 41

Anburey's description obviously does not fit the Balcarres Redoubt unless the accounts cited previously, especially Pauch's statement that it would have been effective against cannon up to six-pounders, were in error. Pauch, as an artilleryman, was a better judge on the matter.

Contemporary American accounts do not add any additional information concerning the Balcarres Redoubt. Col. Rufus Putnam's journal refers to an "inclosed redoubt," and his "An Orthographical View of the American and British Armies on the 7th and 8th of October 1777," shows a large enclosed work, but the map has no scale and was not intended to serve as a detailed delineation. Arnold's attacks on the redoubt during the battle of October 7 were futile and costly, and no description of the fortification by members of Poor's brigade who participated in the action has survived.

The Saratoga Battlefield attracted visitors almost as soon as the guns were stilled, and some of them recorded what they saw. Several had for a guide a garrulous veteran named Ezra Buel, who lived in the vicinity for many years and was locally credited with extensive knowledge and an excellent memory.

One of the earlier students of the campaign to visit the battlefield and benefit from "Major" Buel's interpretation was Benjamin Silliman, professor of Chemistry and natural history at Yale University from 1802-53. The professor's interests were not confined to the physical sciences, and he was an avid student of the
American Revolution, as well as being an experienced traveler. He twice visited Saratoga in 1797 and 1819. In an account of the latter trip, he wrote: "On our way to Freeman's Farm, we traced the line of the British encampment, still marked by a breastwork of logs, now rotten, but retaining their forms; they were at the time covered with earth....This breastwork, I suppose to be a part of the line of encampment, occupied by General Burgoyne, after the battle of the 19th of September, and which was stormed on the evening of the 7th of October.\(^4\)\(^2\)

Jared Sparks, a prominent 19th century historian, visited Saratoga in 1830 and again in 1831, and was taken over the field by Buel and John Neilson, whose farm occupied the apex of the American fortified line. Although Sparks prepared a useful map of the American position, he believed that the ones prepared by Lieutenant Wilkinson and published in Burgoyne's State of the Expedition... were so good that he did not need to map the British camp. Sparks wrote in his journal of the Saratoga visit:

After the action of Sept. 19th Burgoyne took possession of the Heights between Freeman's Farm and the River, where he established his camp, and fortified it as well as he could. A few remains of the old breast-works are visible. They were formed of timber and earth. 43

In 1877, William L. Stone, Jr., who like his father had an almost life-long interest in the history of the Saratoga campaign, wrote these words concerning the British fortified camp:

...the day that was to have witnessed a renewal of the action of the 19th, Burgoyne devoted to the lay out of a fortified camp. He made the site of the late battle his extreme "left", An error; Stone should have said "right" and extended his entrenchments across the high ground to the river. For the defense of the right wing, a redoubt (known as the Great Redoubt) was thrown up in the late battlefield, near the corner of the woods that had been occupied by the Americans during the action, on the eastern edge of the ravine.

The defense of this position was entrusted to the corps of Fraser. The reserve corps of Breymann were posted on an eminence on the western side of the ravine for the protection of the right flank of Fraser's division. In discussing the fighting of October 7, he wrote: "... the open space in front of Freeman's Farm was searched by the fire of a redoubt, with walls from twelve to sixteen feet in height, flanked by strong entrenchments behind which some heavy guns were mounted. In spite of his interest in the campaign and his editorial contributions to its literature, Stone's work contains a number of glaring errors; and his comments concerning the Balcarres Redoubt, of little value.

One hundred eighty yards northwest of the Balcarres Redoubt, the troops of Lt. Col. Friedrich Breymann's Brunswick grenadiers erected an important redoubt that was intended to complete the defences of the right flank of Burgoyne's fortified camp. Writing on October 2, Lt. August Uhlig, who was stationed in the work, wrote to his friend in Braunschweig that


45. Ibid, 52-3.
Our post is at the right end of the camp. We have built a log post facing the west on a small hill that commands a little vale /Thalchen/. The trees are laid up like a Silesian hut. They are small enough to move, but give more than 15 inches thickness /Dichtheit/—sufficient against musketry. We have had fatigue parties at work every day, and our men have had little rest.

The cannon—served by Hessian gunners /Hessische Matrossen/ are two in number.

An outpost to watch the bank in our front is built /Ein Auswerk, das Ufer bevor uns um zu belauschen, ist gebaut/.

* * * * *

Our cantonment is directly in rear of our post, and we have slept on our arms every night. We wait for news from the southward and expect soon to drive the rebels from their camp.

Colonel Breymann is as strong as ever, and we never are far from his eye. He has said that the post should be closer to the top of the bank, but the engineer did not agree...46

The Brunswick Jäger recorded in his letter that

We built a fort of trees facing the west, behind which we camped. Behind our tents, we built a log breastwork. The fort was built as an angle, with five sally-ports, and a battery of two 3-pounder cannon in the center. A small outpost was on the top of the bank in front of us.

In his November 26 letter to Bauermeister, Capt. Georg Pausch wrote concerning the Breymann Redoubt:

The Reserve Corps Riedesel under Lt. Col Breymann encamped on a hill on the right, where a fortification of trees was built en potence. Its front occupied seven hundred fifty feet and stood about seven feet high with musket ports. Two three-pound cannon from our corps were in place in the center. The camp lay behind at an angle, protected in the rear by a breastwork of trees.

Notes in the papers of the Baron von Riedesel contain this discussion of the Breymann Redoubt:

The right is covered en potence by a redoubt built of trees, strong enough to withstand musket fire. The trees are laid between pickets [Feldwachen] to the height of about seven feet, with openings [Brechen] for shooting. The front

47. Jäger's Letter.

48. Pausch to Bauermeister, Nov. 26, 1777.
is 750 feet with five entrances. The camp is behind and at an angle, and behind it is a breastwork of trees perhaps five feet high. In front of the fort is a small alarm post.\(^4^9\)

General von Riedesel wrote that:

...The Reserve Corps of Lieutenant Colonel Breymann built their Emplacement beyond the Ravine to defend the right flank of the Corps of Brigadier Fraser en potence and at the same time cover the road that ran over the hill into the rear of the Army...\(^5^0\)

The final phase of the battle of October 7 consisted of two actions involving the Breymann Redoubt: its capture by several units of the American army and a German attempt, led by Lieutenant Colonel von Speth, to recapture the post. American accounts of this phase of the action contain useful information concerning

\(^{49}\) Urkunden Riedesels.

\(^{50}\) Riedesel, MS, Journal des Feldzugs.
the position and character of the Breymann Redoubt.

Col. Rufus Putnam, commander of the Fifth Massachusetts Regiment of Nixon's Brigade, wrote in his journal:

...In front of these works was a clear, open field, bounded by a wood at a distance of about one hundred and twenty yards. In the skirt of this wood I was posted with the fifth and sixth Massachusetts regiments. The right and left of these works were partly covered by a thin wood, and the rear by a thick wood. The moment orders were given to storm I moved rapidly across the open field and entered the works in front. I believe, at the same moment, the troops of Learned's brigade, in which Jackson's regiment was entered on the left rear. I immediately formed the two regiments under my command and moved out of the works which were not enclosed in the rear, into the wood towards the enclosed Balcarres redoubt on the right flank of their main encampment.

51 Marc Cone, Life of Rufus Putnam, with Extracts from his Journal, 51.
Capt. Benjamin Warren, of the Seventh Massachusetts Regiment wrote:

We marched up on the right of Col. Morgan's riflemen to their lines within ten rods of a strange fort; fought them boldly for better than half an hour when they gave way; left the fort and fled. Our people marched in and took possession of their cannon and 600 tents, standing with baggage etc.  

Lt. Col. Henry Dearborn, commander of the American light infantry battalion that was composed of detachments from the Continental regiments and acted in concert with Col. Daniel Morgan's Rifle Corps and under the latter's command, left two accounts of the attack on Breymann's Redoubt. In his journal, he recorded the following:

Immediately after the Enemy got into their out works we attacked & carried them, found their Tents standing & several Pieces of Artillery in their Lines, & several field officers & a Number of officers & soldiers, the Enemy Retired Down Near the River into their strongest works....


In his "A Narrative of the Saratoga Campaign," written in 1815, he gave a more detailed account that reads:

Our troops pursued, and after dislodging those who occupied their outworks, Genl Poor with his brigade advanced to the main work of Frazer's Camp, while Arnold with the light troops and several parts of the Regts of the line, assaulted the German intrenched camp (which was on the right of Frazer's) and carried it with the loss of but few men not exceeding 20. The camp with the tents and baggage and a considerable number of prisoners fell into our hands. This was a few minutes after sunset. The assault was commenced by the advance of Arnold with about 200 men through a cops of wood which covered the Enemies' right, the appearance of Arnold on the right was the signal for us to advance and assault the front. The whole was executed in the most spirited and prompt manner and as soon as the Enemy had given us one fire, he fell back from his works to his line of tents, and as we entered he gave way and retreated in confusion. When Arnold entered on the right he ordered the Enemy to lay down their arms. A platoon fired upon him, killed his horse and wounded the Gen'l in the same leg that was
shattered at Quebec. His horse fell upon the other leg, and as we entered at the same moment, seeing his situation, I assisted in extricating him from it by removing his horse. I asked him if he was badly wounded. He replied, in the same leg, and wished the ball had passed his heart. He was conveyed to camp, and the troops being formed, and the prisoners sent off, we continued on the alert until the tents, baggage, etc. etc. were sent to camp, and at 12 o'clock we were relieved by other troops that had not been in action, and we retired into our camp. When Gen'l Poor's Brigade had advanced into the trenches of Frazer's works and were in the act of entering the works, the Gen'l discovered a large body of troops in motion in the rear of Fraser's troops and concluded it was a reinforcement and therefore ordered his men to retire from the trenches, and the instant his men retired, the Enemy abandoned their works and cannon and retired to their main works on the river. The troops discovered by Gen'l Poor, were the body of Germans fleeing from their camp which we had taken....I saw no other Gen'l Officers in either of the actions except Gen'l Arnold and Gen'l Poor.  

In 1822 Dearborn's son H. A. S Dearborn prepared a manuscript, "The Life of Major General Henry Dearborn," that was purportedly based upon the father's writings and recollections. The second volume contains a detailed account of elder Dearborn's service in the Saratoga campaign. Included in a description of the events of October 7 is the following:

After giving directions for removing the captured artillery, two twelve and two six pounders, into the American camp, (1) Dearborn marched with his corps, in pursuit of the enemy, who, after passing through a copse of wood, into another field, attempted to form again, but being severely galled by the riflemen who got to their left, and Dearborn's corps with other troops, and General Frazer [sic] receiving a mortal wound, they made a rapid retreat, abandoning two field pieces on the left, to their advanced works, called Fraser's and the German camps. They were situated in the skirts of a wood, on rising ground, at a considerable distance from the field of battle, in a line at right angles with the left of the British line of battle.
General Poor, with his brigade, advanced directly on Fraser's works, routed small parties, from two redoubts, made of poles ten feet high, open on the rear side; and were advancing under a heavy fire to the ditch, when the General observed a body of troops moving in the rear, which he presumed was a reinforcement, for Fraser's works, and under these impressions, he ordered his men to retire from the ditch.

Morgan and Dearborn had united their corps in front of the German camp, together with Weston's regiment and some other detachments. Arnold came up to Morgan and Dearborn, who were conversing on the propriety of a forward movement, and clapping his hand on the shoulder of the latter, observed, with great energy and zeal, "within fifteen minutes we will carry those entrenchments." In reply to him, it was stated by Morgan and Dearborn, that the works appeared formidable against musketry; were well manned and that their troops were much fatigued and nearly exhausted. Arnold replied, with cheering confidence beaming on his countenance, "that the enemy were panic-struck and would not fight, that he would take a small
party and pass through the woods to the rear of the enemy's right, where there were no works; and when he opened fire on their right it would be the signal for them to advance in front, and storm the works." The necessary arrangements were promptly made and when it was discovered Arnold had gained the rear, the riflemen and infantry gave three cheers and pressed forward with spirit and impetuosity. There were neither redoubts nor palisades in front of this work. There was one small passage into it, near the centre, with a traverse behind it; and two embrasures towards the right. The enemy gave but one fire, by which but very few were killed or wounded, and then the remainder ran out, on the left, by the rear of Fraser's camp, through the woods to the British main camp, near the Hudson river. The Americans entered rapidly; some through the sally port, some through the embrasures, and others by climbing over the breast-work, which was formed of small timbers, seven or eight feet high, supported by strong posts, fastened together at the tops, with an opening about nine or ten inches wide at a suitable height for
small arms. It was an excellent cover against infantry, being of sufficient thickness, to prevent musket balls from passing through.

It was not more than twenty minutes from the time the project was formed before the Americans were in full possession of the German works, with their tents, wagons and baggage, together with a considerable number of prisoners. It was the retreating troops from the German camp to the rear of Fraser's works, which were seen by General Poor, and induced him to suppose that they were reinforcements; but as soon as the British troops in Fraser's works discovered that the German camp was carried, they also fled and the Americans immediately marched in and took possession. This was a few minutes after sunset.

When General Arnold entered, on the right of the rear of the camp, he ordered the troops, which had suddenly faced about to receive him, to lay down their arms, but a platoon, directly in his front, fired, by which his horse was killed, and he wounded, in the same leg that was shattered in the attack on Quebec. The horse fell on the other leg, and Dearborn having entered the front, at the same moment, ran up and extricated him, enquired if
he was badly wounded; Arnold replied with great heat, "in the same leg that was wounded before; I never can go into action without being shot; to be disabled at such a time—I wish to God the ball had gone through my heart." He was speedily sent to his quarters and Dearborn continued on the alert with his corps, while the tents, baggage and stores of all kinds were sent into camp, and until about twelve o'clock at night, when he was relieved by other troops, that had not been in action. 55

Dearborn's accounts have been quoted at length because he was an important participant in the battle and especially because they contain evidentiary problems that will be examined later in this study.

The cast that performed in Saratoga's drama included several controversial characters, not the least of whom was young Lt. Col. James Wilkinson, American Deputy Adjutant General. In 1816, while many of the leading figures on both sides still lived, he published his Memoirs of My Own Times, in which he wrote the following concerning the Breymann Redoubt and its capture:

This right flank defence of the enemy, occupied by the German corps of Breymann consisted of rails piled horizontally between perpendicular pickets driven into the earth, formed _en potence_ to the rest of the line, and extended about 250 yards across an open field, and was covered on the right by a battery of two guns. The interval from the left to the British light infantry was committed to the defence of the provincialists, who occupied a couple of log cabins. The Germans encamped immediately behind the rail breast-work, and the ground in front of it declined in a very gentle slope for about 120 yards, when it sunk abruptly; our troops had formed a line under this declivity, and covered breast high were warmly engaged with the Germans. From this position, about sunset, I perceived Brigadier-General Learned advancing towards the enemy with his brigade, in open column, I think with Colonel M. Jackson's regiment in front, as I saw Lieutenant-Colonel Brooks who commanded it, near the General when I rode up to him; on saluting this brave old soldier, he inquired, "where can I put in with most advantage." I had particularly examined the ground between the left of the Germans and the light infantry, occupied by the provincialists, from whence I had observed a slack fire; I therefore
recommended to General Learned to incline to his right and attack at this point: he did so with great gallantry; the provincialists abandoned their position and fled; the German flank was by this means uncovered; they were assaulted vigorously, overturned in five minutes, and situated in disorder, leaving their gallant commander, Lieutenant-Colonel Breyman dead on the field. By dislodging this corps, the whole British encampment was laid open to us; but the extreme darkness of the night, the fatigue of the men, and this disorder incident to undisciplined troops after so desultory an action, put it out of our power to improve the advantage; and in the course of the night General Burgoyne broke up his camp, and retired to his original position, which he had fortified, behind the great ravine. 56

Concerning Arnold's part in the attack on Breymann's post, Wilkinson wrote:

...he finding himself on our right, dashed to the left through the fire of the two lines and escaped unhurt; he then turned to the right of the enemy, as I was informed by that excellent officer, Colonel Butler of Morgan's corps, and collecting 15 or 20 riflemen threw himself with his party into the rear of the enemy, just as they gave way, where his leg was broke, and his horse killed under him....

If the reader is not sufficiently bored or confused by the American accounts, let him read Ebenezer Mattoon's one of 1838:

...At this juncture Gens. Lincoln and Arnold rode with great speed towards the enemy's lines. While they were absent the picket guards the right. At this moment Arnold says to Col. Brooks (late governor of Massachusetts), 'Let us attack Balcarres's works,' Brooks replied, 'No, Lord Auland's detachment is retired there; we can't carry them.' 'Well, then, let us attack the Hessian lines,' Brooks replies, 'with all my heart.'

57. Ibid., 273.

58. Stone, Visits, 243.
Lieutenant Mattoon continued with this version of the attack:

We all wheeled to the right and advanced. No fire was received, except from the cannon, until we got within about eight rods, when we received a tremendous fire from the whole line. But a few of the men, however, fell. Still advancing, we received a second fire, in which a few men fell, and Gen. Arnold's horse fell under him and he himself was wounded. He cried out, "Rush on, my brave boys."

After receiving the third fire, Brook mounted their works, swung his sword, and the men rushed into their works. When we entered the works we found Col. Breyman dead, surrounded with a number of his companions dead or wounded. We still pursued slowly; the fire, in the meantime, decreasing.

Nightfall now put an end to this day's bloody contest. During the day we had taken eight cannon and broken the centre of the enemy's lines. 59

Although Mattoon wrote in a manner that implied that he was an active participant in the events he described, he sailed under false colors. No American artillery took part in the fighting of October 7, but remained in the

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59 Ibid., 249.
camp on Bemis Heights. His account of the conversation between Arnold and Brooks preliminary to attacking the Breymann Redoubt could not have taken place because the men were not in personal contact, Arnold being with Poor's Brigade in front of the Balcarres Redoubt and Brooks with Learned's several hundred yards to the left. His story of the attack is so imprecise as to be worthless.

Having disposed of Mattoon's contribution, some attention should be directed toward trying to reconcile the disparities contained in the other American accounts.

Colonel Putnam's version seems accurate, although one could wish that it were more detailed, providing such information as who gave the order to attack and a description of the fortification. However, it does give useful data concerning the character of the open field in front of the redoubt, especially his reference to its 120 yard extent.

Captain Warren's description is also an accurate summary, within the limits imposed by its brevity, although he exaggerated the number of tents (600) captured.

General Dearborn's versions pose a number of problems that are made especially difficult by their mixture of facts and fancy. His journal entry, which was written closest to the event, is a simple straightforward
statement, but his 1815 "Narrative" is both more detailed and troublesome. In the first place, it completely ignored Arnold's role in the attack of Poor's brigade on the Balcarres Redoubt and erroneously placed him at the extreme left of the American line. Secondly, he represented Arnold's attack on the Breymann Redoubt as coming from the Germans' right. This contradicts the German accounts, everyone of which had the attack coming over the front and into the rear from the left through the gap left by the evacuation of the "Canadian Cabins." Nothing could be more explicit on this than the following note in the Riedesel papers and substantially repeated in the Baron's October 21 letter to the Duke of Brunswick. The note reads:

Die Rebellen, die zuglicher zeit attaquerten das Retranchment von Oberslieutenant Breymann, der todtgeschossen weirde, und dier Feind ihm von die Front, in Rucken, und von die linke Seite hammen....

The rebels at the same time attacked the entrenchment of Lieutenant Colonel Breymann who was killed, and the enemy came in from the front, in the rear, and from the left side....

60 Urkunden Riedesels.
The letter reads in part:

Zugleich der Zeit attaquiste derselbe das Retranchiment vom Oberstl. Breymann, welches sich lange heilt, da aber dieser todtgeschossen weirde, und der Feind ihm in Rüchen kam...

At the same time the latter [the Americans] attacked the entrenchment of Lieutenant Colonel Breymann, which held for a long time, but the latter was killed, and the enemy came in at the rear... 61

The Baron's Journal repeats this account in similar times. 62

The Baron's statements are supported by the November 23 letter of Lieutenant August Uhlig, in which he wrote:

It was here that the brave Colonel Breymann was killed when an overwhelming rebel force captured our post. We had only 200 men and two cannon when the post fell. To our left in a small vale were provincials in two log houses. The position was weak and the men untrustworthy, and when they retreated our left was uncovered. We had not worried a great deal about

61. Ibid., ltr., Riedesel to Duke of Brunswick, Oct. 21, 1777.
them because our post and that of the English were complimentary, and if all had been as it should, we would have been able to defend ourselves. As it was, we were overrun, our post and camp fell, and we were not even able to bring off our colonel's body. 63

An unidentified Brunswick Officer wrote:

The corps of Fraser and Breymann were separated by a ravine, and both were stationed upon two separate hills. The low ground between these elevations was occupied by Canadians and provincials. Colonel Breymann's corps covered the entire right of the army, and therefore stood in en potence. The Provincial and Canadian Corps had given their quota to the reconnaissance of the morning; and the grenadier and rifle battalion had, moreover, become greatly weakened by the affair at Bennington. This entire division therefore mustered scarcely two hundred men. The defeated corps, likewise, instead of throwing a portion of its men into Breymann's entrenchment, threw all of them into Fraser's. Colonel Breymann was attacked in front and defended himself bravely.

63. Uhlig's Letter, Nov. 23, 1777.
The enemy, however, overpowered the posts in the depressed ground between the two hills, and threw themselves from the side and rear upon Breymann's entrenchments. Breymann fell dead as he stood near to cannon. His corps became dispersed, the greater part of them, however, retreating into the forest, and afterwards joining Fraser's division. The enemy captured several cannon, set the tents on fire, and plundered the camp. 64

An equally compelling reason for doubting that Arnold led an attack into the right rear of Breymann's position is that the German's right rested on the crest of a steep bank that would have rendered a quick assault impossible, to say nothing of a mounted man's taking that route. Furthermore, it was defended by a log breastwork that stood between the crest of the bank and the camp. 65 This condition is illustrated on William C. Wilkinson's map, supported by Uhlig's letter of October 2, and the Jäger's letter, Pausch's letter of November 26, and the Riedesel papers, and by Dr. Dean Snow's archeological investigation. 66

64. *Urkunden Riedesels.*

65. See Appendix II.

Another reason for skepticism concerning Dearborn's "Narrative" is his statement that Poor's men had advanced into the trenches of the Balcarres Redoubt and were in the act of entering the work when they saw a body of troops in the rear of the redoubt that they took to be reinforcements but which were really Breymann's retreating Germans. There was no trench in front of the Balcarres Redoubt; all European sources agree in stating that the attacks were unsuccessful, and no troop in the rear of the redoubt could have been seen by men attacking from the front unless they were in actual possession of the redoubt's interior. 67

Dearborn's son took his father's accounts, added a number of filiopietistic interpretations, introduced some dialogues of doubtful origin, and embalmed all of the facts and errors that had appeared in the originals, plus some glaring errors concerning Arnold's status on October 7.

Another important American participant was Lt. Col. James Wilkinson, whose subsequent career earned him an unsavory reputation. That reputation has made it convenient for some students to discredit whatever appears in Wilkinson's Memoirs of My Own Times that does not

67. See Appendix II.
agree with either their own interpretation or the testimony of more respectable sources. While it is necessary to remember that Wilkinson was often guilty of the not uncommon fault of exaggerating his importance and a great deal of self-justification, in matters not touching his personal role his version stands up well. Even in matters dealing with his role, it is unwise to dismiss him out-of-hand, because he occupied an important position and, in the autumn of 1777, enjoyed an especially close relationship with Maj. Gen. Horatio Gates, the American commander. His description of the Breymann Redoubt is generally accurate; and, excepting when he repeated Dearborn's "Narrative" statement, which he had when preparing his Memoirs, his account of the attack is the most nearly accurate of the American ones.

**The Encampments**

As has been noted, the British light infantry camp lay behind the Balcarres Redoubt and Breymann's Corps encamped at a right angle with the rear of their redoubt. In both cases, the camps probably conformed, with some modifications dictated by the terrain and the tactical situation, to the standard European lay-out. If one remembers that the terms "regiment" and "battalion" were
used synonymously, as they were by 18th century military
texts, a representative encampment may be developed.
In his *An Universal Military Dictionary*, Capt. George
Smith described a battalion /regimental\ encampment of
320-yard depth in the following manner:

At the head of the camp was the Quarter Guard, a small
guard under the command of a subaltern (lieutenant or en­
sign) posted 84 yards in front of the regiment's line.
Fifty-four yards behind the Quarter Guard lay the Parade,
a 30 yard deep area where the units assembled for formations,
guard mount, drill, and other purposes. Immediately
behind the Parade was a line upon which the colors,
surplus drums, and the "bell tents" in which the muskets
were kept, were aligned. Four yards behind this line
with their "bell tents," the companies' tents were
aligned to a depth of 30 to 45 yards, depending upon the
number of enlisted men in the battalion. The tents
were transported in wagons, usually one to a brigade, with
the men carrying the tent poles. Common tents for the
men measured six and a half feet square and five feet high
and could accommodate six men, although they were some­
times pitched together in a manner that would allow them
to shelter as many as eighteen men. Between the lines lay the
company streets. To the right of the companies stood the
guns, wagons, and gunners' tents. Twenty or 32 yards behind
the companies was the line of subalterns' tents; and 12 or
24 yards behind them stood the captains' tents, separated by a street from the tents of the field officers. Behind these were the tents of the staff officers; and behind these was the line where the horses were picketed. Next was the officers' dining tent; and 20 yards behind it were the tents of the butchers and sutlers. Fifteen yards to the rear were the tents of the rear guard.

A standard 18th century European work on camps and field fortifications was J. G. Tielke's *Unterricht für die Officiers die sich zer Feld-Ingeniers bilden*. The following are extracts from his discussion of camps:

> Whether the front of the encampment is open or entrenched, there must be a space of at least 300 paces between the tents and the quarter-guards, that the troops may have room to form themselves in order of battle, and that the cavalry may be able to make their movements without difficulty. In some situations, and frequently in hilly countries, it may be necessary to pitch the tents nearer the entrenchments. In that case, if the enemy should make an attack, they must be immediately struck, the pegs taken up, and every hole made as level as possible.

The length of the front or parade of each regiment, will depend upon the number of men it contains; because the tents are to be entirely covered when they are under arms, and the intervals must neither be too great nor too small. One pace is generally allowed for each infantry soldier, and one and a half for each cavalry soldier... the intervals between battalions must be equal to one-eighth of their front... The streets between the battalions must be 20, 25, or 30 paces in breadth, as circumstances may require, and in general there must be a space of about 300 paces between the first and second lines.

Pl. 2 (Appendix V) represents the encampment of a regiment of infantry of three battalions. The whole front a, b, is 570 paces; the depth of the parade a, c, 30; and c, d, i, f, show the space which the battalions occupy when drawn up. The front rank is six paces in the rear of the lines of Officers c, d, the three ranks are four paces asunder; the non-commissioned officers are two paces behind the rear rank; and six paces behind them are the
Second Lieutenants. The Colours are 16, and the Bells of Arms eight paces in front of the line of tents g, h; the first tent of each company fronts the parade, and the last, towards the rear: the rest front their respective streets. The depth of g, i, and h, k, depends of course upon the number of men, and, in general, each tent contains five soldiers, their wives included.

The Captains' tents p, q, are behind their companies, 15 paces from those of the Lieutenants n, o, and are 10 paces in depth. The Lieutenants' tents are six paces in depth, and four from the private soldiers; the First Lieutenants are upon the right of their respective companies, the Second or Ensigns upon the left; and, unless two Subalterns sleep in one tent, there must be another row of Sub-Lieutenants behind the Captains. T, t, t, are the tents of the Majors; the Colonel's tent is marked u, I, and that of the Lieutenant-Colonel is u, 2. In most field situations, the Colonel, being titular, was not present—the Lieutenant Colonel being the tactical commanding officer. These five tents are 12 paces deep, and 20 from the Captains. The Adjutants are behind their respective Majors in tents 1, 2, and 3; the
Quarter-Master behind the Colonel in 4; the Auditor in 5, the Chaplain behind the Lieutenant-Colonel in 6, and the Surgeon in F; all these tents are 20 paces in the rear of the rear of the Field Officers.

The Drum-Major and the Quarter-Master-Sergeant are in one of the tents v, v; the regimental Provost, and the Wagon-Master in the other; these tents are seven paces behind the Adjutants, &c. -
The Servants and Batmen are in the line w, w, six paces in the rear of v, v, the horses x, x, two paces in the rear of the Batmen, and 10 paces in front of the Wagons y, y; the Mess-tents are 20 paces behind the Wagons, and the Kitchens 26 behind the Mess-tents.

A, a is the Quarter-Guard, and b, b, the Rear-Guard.-The Rear-Guard is six paces from the Mess-tents, and the Necessaries (latrines) tz, tz are 150 behind the Kitchens. 69

How closely the encampments behind the redoubts followed Smith's or Tielke's standards could only be determined by a comprehensive archeological study of the sites. There were probably modifications dictated by the exigencies of the tactical situation, but they are not reflected in the contemporary documents.

69. J. G. Tielke, "Unterricht für die Officiers die sich zur Feld-Ingeniers bilden" (Berlin, 1772), 63-4.
Some General Data on Field Fortification Construction

Tielke opened his discourse on field fortifications with this observation:

Notwithstanding this branch of the military science is founded upon the rules and principles of Fortification, it is by no means necessary that they should be followed, except when the nature of the country, the object you have in view, and other concurring circumstances should make it advisable to do so; and even then you are by no means compelled to adhere to the same degree of regularity. Theorists are too apt to forget that there is a material difference between the formation of retrenchments upon paper and in the field. A fault which must be attended with dangerous consequences: because, unless proper attention is paid to the nature of the ground, and to the advantages which may be derived from it, there is no doubt, but that the best works will make a very moderate resistance. For instance, if I throw up lines along the side of a summit of an elevated piece of ground, my angles must be either salient or rentrant, as its form or the ravines below may seem to require; and I must take care that there
shall be the heaviest cross fire, wherever an enemy will be likely to penetrate. For if in conformity to the rules of theorism, I was to place any part of my works at such a distance from the edge of the height, that I could neither see nor fire upon my assailants, till they had gained the summit, or perhaps till they were within a few paces of my parapet, it is evident that I must commit a very great error, and at the same time expose the army to imminent danger.  

Neither the Balcarres nor Breymann Redoubt had an exterior ditch. The engineers apparently believed that the elevations on which they were partially located rendered the feature unnecessary. If Paush was correct in believing that the Balcarres Redoubt would be effective against six-pounders, its parapet should have been about six feet thick. 

An outstanding source in studying 18th century field fortifications is the Chevalier de Clairac's *L' Ingénieur De Campagne, an Traité De La Fortification Passagere* (2d Edition, Paris, 1757), translated by John Muller, Master

70. Ibid., II, 1-5.
of the Royal Academy at Woolwich, under the title, The Field Engineer of M. le Chevalier de Clairac (London, 1773). In summarizing field fortifications, the Chevalier wrote:

When the proper height of a profil [sic] is determined, its thickness or strength must be next considered, and where cannon can be brought against it, placed nearly on the same level, or higher than that of the line, no less thickness can be given to the parapet than 12 feet, and if time will permit it should be from 15 to 18 feet, for no less can stop a cannon ball; if the battery is lower than the level of the line, from 6 to 12 feet thick will do; since the shot will in this case fly upwards after it has hit the parapet. In such places, where the enemy cannot bring any cannon against it, a thickness from 6 to 9 feet will do. 71

After recommending a height in profile of seven and a half feet, Clairac wrote concerning the superior slope of the parapet in the following terms:

We must therefore give the least plunge to the lowest and weakest parapets, and increase the others in proportion to their height... for besides their

greater thickness, the top cannot be battered horizontally, and consequently with little effect.

On this account, I find the slope at 1 foot in a fathom for profiles 6 feet high, and an increase of 1 inch in every 1/2 foot, giving 13 inches to those of 6 1/2 feet, 14 to those of 7 feet, and 15 inches to those of 7 1/2 feet. 72

Clairac continued his discussion of parapets, writing:

...4 1/2 feet is generally allowed to the interior part of the parapet. A custom so persued seems an established maxim. This rule would have been less followed had it been more strictly examined; it is proper for the construction of places whose parapets sink in time, and have also much less plunge or slope....

I know myself, that a man of 5 feet 6 inches, standing as he should do the left foot 18 inches distant from the upright of the crown of a parapet 4 1/2 inches, which is the common slope, fires with more ease horizontally, than if it had a plunge of 8 inches in a fathom. As few soldiers are of this standard, it is not surprising that so many shot are lost in the air.

72 Ibid., 187. *N. B.* a fathom equals 63.946 inches.
There is but one remedy for this; it is not only to diminish this height, but also to diminish it in proportion to the plunge, this circumstance is so essential, that he should be near 6 feet high, to fire over a parapet 4 feet and a half high, and 18 inches plunge in a fathom, such as mentioned in the preceding article.

Therefore a horizontal parapet, such as those of some communications, and other works no higher than 4 feet 6 inches from the ground, should not be more than 4 feet four inches; in regard to others, they should be lowered in a proportion of 4 inches in a foot plunge.

Clairac noted that:
Slopes depend on the consistence of the earth, though we cannot determine any thing positive in this respect, it is proper to form a general rule to avoid errors.

The nearer the soldier is to the crown of the parapet, the better he can follow the direction of the slope or plunge; therefore the inside will be better to be quite perpendicular; but as this can be seldom done, we give it as little slope as possible, which is commonly about one third of the height.

73. Ibid., 187-8.
74. Ibid., 190.
In answering objections to subjecting troops to a greater degree of exposure through decreasing the height of the parapet, he wrote:

It will be objected, that the soldier will be much more exposed; I acknowledge it, but of what service is a slope we cannot use? Besides, a soldier on these occasions naturally stoops, so that more than his head is never above his firelock.

The contemporary documents are silent on the subject of whether either of the redoubts had a firing step, although it is possible that the Balcarres Redoubt may have had one for a part of its parapet. This is a question that a comprehensive archeological study may answer. There certainly was none in the Breymann Redoubt.

Both the written accounts and the Wilkinson map indicate the presence of cannon in the Balcarres Redoubt. John Muller in his *The Elements of the Science of War*, Volume I, provides the following information on the mounting of artillery within a redoubt:

1. When cannon are planted in fortifications..., proper places are constructed for them to stand upon, so that they may either be fired over the parapet, or through openings cut in it, called embrasures.

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75. Ibid., 188. See Appendix.
2. The height of the cannon, or of the muzzle of the piece from the ground, is from 3 feet 10 inches to 5 feet, and therefore the height of the parapet, where the guns are placed, ought not to exceed this...

5. The length of the banquette ought to be from 14 to 16 feet, and its breadth from 10 to 12. If the banquette is however in a salient angle, or where the line of the parapet makes an angle towards the field, it ought to have on each side from about 14 to 16 feet...

6. The banquettes for howitzers are constructed in the same manner as those for cannons; but the height from their platforms to the crown is generally somewhat less...

The apareilles \textit{ramps}... are the ways by which the pieces are brought upon the banquettes \textit{platforms}: small pieces do not require apareilles, as may easily be lifted.

If the base of the apareille is in proportion of 5:1 to its height, it will have a proper slope. In small and confined places, the apareilles often take up too much room.
The breadth of the aparailles may, according to the nature of the soil and the width of the wheels, advantageously be from 7 to 10 feet.  

Because the Breymann Redoubt had embrasures for its two cannon and the Balcarres probably had them for its ordnance, Louis Lochee's comment on the construction of embrasures may be useful.

That the common may fire upon the enemy, it is usual to cut openings in the parapet, called embrasures. The dimensions of the embrasure depend, not only upon the nature of the soil, and the height and thickness of the parapet, but also on the caliber of the piece, the height of the wheels, and the construction of the carriage.

The embrasure is cut sloping towards the country, and within 3 feet of the horizon. The breadth of the embrasure within, is no more than is absolutely necessary to receive the cannon; but that without, if from 7 to 9 feet. The confined width within, is given to keep under cover, as much as possible, both the piece and the men who serve it; and the extended breadth without, is given to obtain

a wider view of the enemy in his approach.

In discussing field fortification parapets, Tielke wrote:

Every work consists of a breastwork or parapet and a ditch.—The ditch is intended to keep off the enemy, while the parapet defends your troops against the fire of his artillery or small arms. Consequently, whenever the Engineers begin the foundation of a work, they ought to be aware of the number and weight of the cannon with which there is a probability of its being attacked, and to carry in their minds what I have before observed, viz. that a shot from one to four pounds weight will penetrate good earth to the depth of four or five feet; that a shot of six or eight pounds will penetrate from six to seven feet; that a shot of twelve pounds will penetrate from eight to nine feet; that a shot of twenty-four pounds will penetrate even to the depth of fifteen or sixteen feet.

Parapets are generally four feet and a half above the banquette \( Firing-step \); and (as it seldom happens that soldiers measure more than five

feet ten or eleven inches) they would be altogether useless if their height was increased; and perhaps a deduction of ten or twelve inches might make them still more convenient. For in the first place, many short men cannot hit the enemy when he has gained the ditch, or is even within a few paces of it; while those who are taller will seldom stand erect, that they may be better defended, and thus fire into the air. And secondly, the more a soldier is in the habit of being covered, the more he will require: for I am persuaded, that if the generality of them had a parapet as high as their chins, they would soon feel a degree of dissatisfaction at not being totally concealed. If the half of a man's body is defended, he ought to think himself sufficiently secure, and he will then have the following advantages over his enemy, which are by no means inconsiderable. Let the height of the parapet be what it may, the enemy must be exposed during the attack, and the ground upon which he stands will be lower than the banquette. Therefore, the fire of his musketry cannot have its full effect...; and if, instead of firing, he only attempts to march expeditiously up to the work with a view of taking it
by storm, its lowness will not be detrimental: provided the ditch is of sufficient depth. Hence it is evident, that such a parapet cannot counteract the great advantage which is to be derived from every fieldwork, viz. that of keeping off the enemy.

* * * * * *

I have already observed, that the ditch is intended to keep off the enemy; consequently it ought to be in front of the parapet: except when the height is the situation...or some other obstacle, should make an approach to it.

Because it was a palisade type fortification, the remarks concerning external dimensions do not apply to the Breymann Redoubt.

The artillery posted in the Balcarres Redoubt included four light six-pounders, two light three-pounders, and two five and a half inch howitzers. 78 Two light three-pounders were located in the Breymann Redoubt. 79 In the absence of definitive documentary

78. Hessische Staatsarchiv, Marburg, Ltr, Pausch to Baumeister, November 26, 1777.
79. Ibid.
evidence concerning banquetts, ramps, etc., data on these features will need to come from comprehensive archeological studies of this sites.

According to some accounts, at least a part of the Balcarres Redoubt's face was protected by an abbatis. Tielke, who did not have a high regard for abbatis, wrote that they might be justified:

1st. When woods are included within the position of a corps.
2dly. When you wish to put your advanced posts or other small bodies into a state of defence, or to prevent their being carried off; and,
3dly. When you wish to retard the enemy's march through hollow-ways, ravines, &c. or to make them impassable.

In the first case, that is to say, when an abbatis forms a part of our defence and retrenchment, every expedient must be used to prevent its being opened by the enemy.

The usual method of filling the trees with their tops towards the enemy is obviously erroneous, because a removal of the branches gives him at once a free passage. But if they
are allowed to cross each other, these openings cannot be made without difficulty, and of course, half the depth of wood will then give you a better defence.

If the wind is not too high, almost all trees may be filled in the position you wish, provided you first chop them to the heart on the side you intend they should fall, and afterwards begin on the other about four or five inches higher; and, whenever they lean in a contrary direction, two or three men will be able to pull them down.—If the trees are young, you ought not to cut through their stems, that they may preserve a strong hold upon the remaining stumps.

Outposts Associated with the Balcarres and Breymann Redoubts

Information on the several outworks that were erected west of the Balcarres and Breymann Redoubts is diffuse and fragmentary. Wilkinson's map of the British fortifications shows relatively a strong post on the western slope of a low ridge west of the Balcarres Redoubt that some 19th century writers called "Bloody Knoll" and a smaller work west and slightly north of the northern end of the redoubt.

There is more, but not much more, information about these outworks associated with the Breymann Redoubt. Wilkinson's map of the situation of September 19 shows two structures on the road that ran south of the south branch of the Krumma Kill between the Freeman and McBride farms—one building on either side of the road. They are unidentified and a search of the Schuyler Papers provides no precise clues beyond suggesting that they probably were among the McBride buildings.

Wilkinson's maps of the British encampment show the above-mentioned structures incorporated into two outworks. According to General von Riedesel, these were occupied by the Canadian provincial companies of Novin and Bocicherville. These were the "Canadian Cabins" mentioned in a number of American and German accounts of the attack on Breymann's Redoubt.

One other outwork of the Breymann Redoubt was located on Wilkinson's maps of the encampment near the crest of the bank northwest of the right end of the redoubt. It is shown as a nearly square structure with an opening in the rear covered by a traverse.


82. Supra.
**Conclusion**

This report represents a consolidation of all the known documentary data on the subject fortifications. Graphic representations are attached as appendices.

Because a number of gaps exist in our information, it is strongly recommended that comprehensive archeological investigations of the redoubts and the camps that lay behind them. The results of such studies may provide details that are not covered by documentation, as well as supplying data useful in development and interpretation.

83. Appendix