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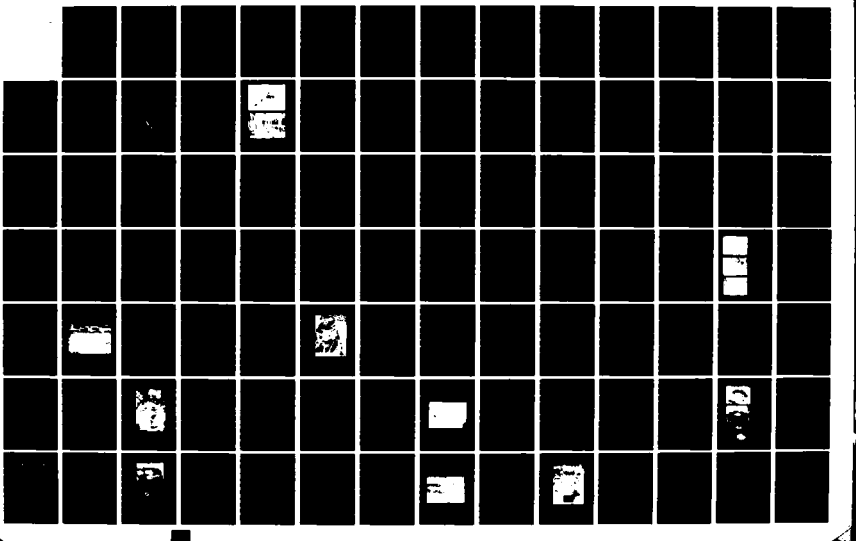

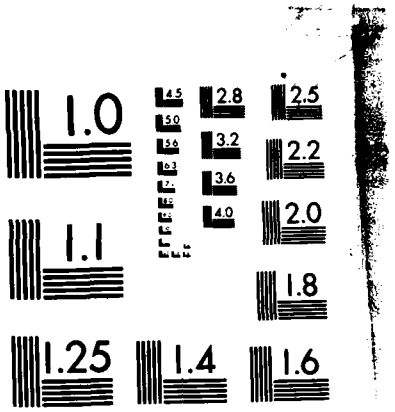

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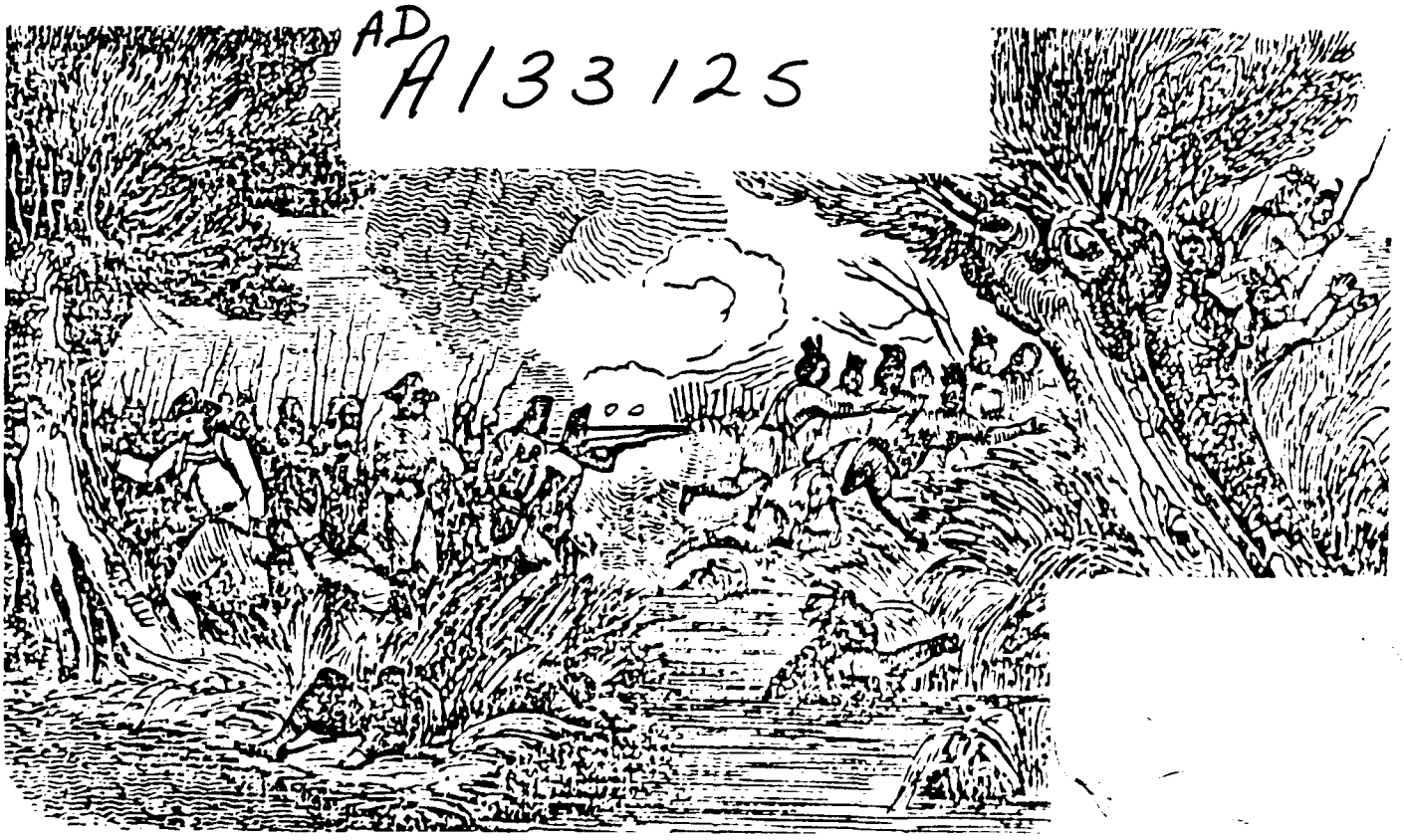
FORT INDEPENDENCE

AN EIGHTEENTH-CENTURY FRONTIER HOMESITE AND MILITIA POST IN SOUTH CAROLINA

BEVERLY E. BASTIAN
BUILDING CONSERVATION TECHNOLOGY, INC.



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RUSSELL PAPERS 1982

ARCHEOLOGICAL SERVICES, ATLANTA, GEORGIA
NATIONAL PARK SERVICE

Cover illustration: "General Williamson and Pickens pursuing the Indians" (original source unknown), the South Caroliniana Library, University of South Carolina, Columbia.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO.	2. AB 3125	3. Recipient's Accession No.

4. Title and Subtitle
Fort Independence: An Eighteenth-Century Frontier Homesite and Militia Post in South Carolina

5. Report Date
December 1982

6.

7. Author(s)
Beverly E. Bastian

8. Performing Organization Rept. No

9. Performing Organization Name and Address
Building Conservation Technology, Inc.
P.O. Box 24032
Nashville, Tennessee 37202

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C) C-54057(81)
(G)

12. Sponsoring Organization Name and Address
U.S. Army Corps of Engineers, Savannah District
P.O. Box 889
Savannah, Georgia 31402

13. Type of Report & Period Covered
Final

14.

15. Supplementary Notes
Project administered by Interagency Archeological Services, National Park Service, Southeast Region, 75 Spring Street, SW, Atlanta, Georgia 30303

16. Abstract (Limit: 200 words)

The procedures and results of archaeological testing and mitigation at the site of Revolutionary period Fort Independence, South Carolina (38AB218), are presented along with the procedures and results of exhaustive historical research on the site, including South Carolina backcountry settlement and the Revolutionary War as it affected that area.

Initially a frontier plantation, Fort Independence was purchased by South Carolina in 1777 and garrisoned with an independent company detached from the state line. Functioning primarily as a deterrent to the restive Cherokees and Creeks and as one of the Whig enclaves in an area of strong Tory sentiment, Fort Independence was important in maintaining South Carolina's frontier at a critical time. The fort was burned by Tories in early 1779.

Archaeologically, Fort Independence was found to be a square, log stockade with three bastions, surrounding a well-built log plantation house. Various aspects of these remains are described and discussed. Identifications and analyses of recovered artifacts are presented along with comparisons to other archaeologically known eighteenth-century occupations.

17. Document Analysis a. Descriptors

b. Identifiers/Open-Ended Terms

Historic Archaeology
Forts
Revolutionary War Period
Richard B. Russell Dam and Lake
History
South Carolina
Eighteenth Century

c. COSATI Field/Group

18. Availability Statement
Unclassified

Approved for public release; its distribution is unlimited.

19. Security Class (This Report)	21. No. of Pages
Unclassified	194
20. Security Class (This Page)	**22. Price**
Unclassified	X

(See ANSI-Z39.18) See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

FORT INDEPENDENCE
AN EIGHTEENTH CENTURY FRONTIER HOMESITE AND MILITIA POST, SOUTH CAROLINA
THE HISTORICAL AND ARCHAEOLOGICAL INVESTIGATIONS AT FORT INDEPENDENCE (38AB218)
Richard B. Russell Dam and Lake
Abbeville County, South Carolina

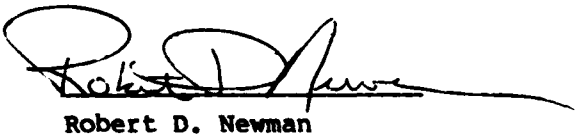
by

Beverly E. Bastian

Submitted to:
Archeological Services
National Park Service, Southeast Region
In fulfillment of Contract Number CX5000-1-4057

Funding Provided By:
The U. S. Army Corps of Engineers, Savannah District

Prepared under the Supervision of



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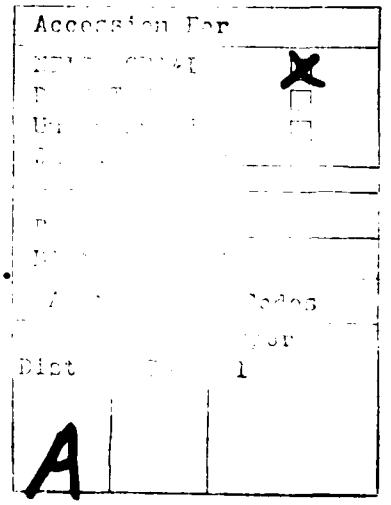


FOREWORD

Fort Independence has long been a part of the history and tradition of Abbeville County, South Carolina, however its location had never been accurately established. The construction of the Richard B. Russell Dam and Lake offered an opportunity to locate, excavate and historically document this little known Revolutionary War fortification.

In August 1980 the National Park Service contracted with Building Conservation Technology, Inc. to conduct archaeological testing, and archival research with the goal of locating and testing Fort Independence for archaeological integrity. The Phase I work was conducted with the assumption that Fort Independence would be typical of Revolutionary War Period forts. This assumption proved to be wrong: Fort Independence much more closely resembled a fortified homesite than an elaborately planned military fortification. Indeed historical research revealed the Fort Independence site to be the homestead of Robert Anderson, and was purchased by South Carolina to establish a garrison.

Phase II excavations were undertaken in the summer of 1981 to define the military and domestic occupations of the site. These excavations found little evidence that the company of rangers occupying the site made the homestead's defenses more elaborate. To the contrary, the only construction directly attributable to the military use of the site was a single, semi-subterranean soldier's hut. The Bowie Papers, a collection of letters written to the commander of Fort Independence, provided additional evidence of the fort's expedient nature. These letters revealed that the garrison quickly abandoned the fort to move only a few miles to a more strategic position.

Analytically, Fort Independence failed to conform to the established archaeological and geographical models for frontier sites. The artifact assemblage did not conform to South's Frontier or Carolina artifact patterns (South 1977). Fort Independence also failed to fit models for frontier sites developed by Waselkov and Paul (1981) and Lewis (1976). Neither of these models accounts for a frontier fortification with no economic importance and little interaction with the indigenous population. Even widely accepted concepts like the Mean Ceramic Dating technique failed to work on the Fort Independence data.

The reason that Fort Independence fails to fit many of the accepted concepts is clear: Fort Independence was strongly influenced by a unique set of historical events that significantly shaped the archaeological record. While Fort Independence is an extreme example, all historic sites have their unique histories and these should play a stronger role in site specific research and the development of explanatory models.

Robert D. Newman

ACKNOWLEDGMENTS

Grateful acknowledgment must be made to many people for their interest, guidance, support, and contributions to this research and this final report. First, Michael Alterman of the Interagency Archeological Services Division of the National Park Service, Southeast Region, and Jim Cobb, archaeologist for the U. S. Army Corps of Engineers, Savannah District, were consistently interested and supportive of the fieldwork and made many useful suggestions. For his ferreting out of historical data and access to useful resources, both human and material, Oscar Brock, also an archaeologist for the Army Corps of Engineers, is acknowledged here, as is Mr. Harold L. Carlisle, who always knew Fort Independence was there and was most generous in sharing his knowledge.

For the success of the fieldwork aspect of the archaeological work, immense credit is due to the crew who put up with periodic harsh conditions and constant hard, physical work to wrest from the Piedmont a meaningful record of an ephemeral phenomenon. The Phase I crew, Joe Ezzo, Mark Febbo, Charlie Prose, and Jeannie Ward spent many wet, cold days finding Fort Independence. The Phase II crew, Diane Bouska, DeeDee Desarmeaux, Mark Febbo, Ken Johnson, Dwight Lyman, Ronnie Rogers, and Ron Schoettmer, had the unenviable task of recovering all data possible from the rocks, tree roots, and red clay which characterized the site. More often than not, they performed beyond duty or expectations and their contributions are gratefully acknowledged. The expertise and skill of Chevis Clark, owner and operator of the metal detector used at the site, are also much appreciated.

The cooperation and tolerance of Mr. B. B. Hutchison, caretaker of the land where Fort Independence is located, are also acknowledged here. The peaceful coexistence of archaeology and cattle-raising can be greatly complicated by extensive earthmoving using heavy machinery, and Mr. Hutchison managed to remain gracious throughout the archaeological assault.

The completion of the historical research owes much to Dr. William J. Reid of Jacksonville, Alabama, who not only brought to light the Bowie Papers, but generously shared the fruits of his private research of many years, enabling me to be much more exhaustive in dealing with the history of Fort Independence than would otherwise have been possible. For establishing a link between Dr. Reid and me, Dr. Robert L. Stephenson of the Institute of Archeology and Anthropology of the University of South Carolina is most gratefully acknowledged. Dr. William Marquardt and Mr. Stanley South, also of that institution, are also tendered thanks here for their interest and assistance. My appreciation must also be expressed to H. Jesse Grove of Clemson University for the historical materials regarding Fort Rutledge which he furnished to me. Also, the cooperation of the office of Special Collections, New York Public Library, Astor, Lenox, and Tilden Foundations, is gratefully acknowledged.

In the lab work and analysis, assistance of many kinds must be acknowledged with gratitude: to Dr. Carl Kuttruff for the equipment and copies of relevant sources of all kinds that he lent to me, along with his encouragement; to Alan Kemper for his expertise in matters concerning the

eighteenth century and for many thought-provoking conversations; to Dr. William M. Kelso for his identification of Fort Independence as an example of a fortified homesite and his sharing of comparative data on sites of this kind; to Tom Scott, Archaeologist for the Forest Service in the Odgen, Utah, area, for his kind provision of reports on the excavations at Fort Buenaventura; to Ronald A. Thomas of Mid-Atlantic Archaeological Research, Inc., for supplying data on Fort Martin; to Marion Drescher for her patient assistance with all aspects of the analysis and report preparation, and mostly for the drafting skills (all the drafted maps and plans are her work); to Jim Thompson for his skillful artifact illustrations and his masterly reconstruction of Fort Independence; to Emanuel Breitburg, Ronald Bridwell, Robert Jolley, and Andrea Shea, for their contribution of specialized knowledge or skills in zooarchaeology, South Carolina history, prehistoric lithics, and botany.

Finally, considerable gratitude goes to Robert Newman, principal investigator for the Fort Independence project, who gave me the opportunity to do the project and then provided encouragement, assistance, a critical ear, and great tolerance of my eccentric work habits.

ABSTRACT

The procedures and results of archaeological testing and mitigation at the site of Revolutionary War period Fort Independence, South Carolina (38AB218), are presented along with the procedures and results of exhaustive historical research on the site, including South Carolina backcountry settlement and the Revolutionary War as it affected that area.

Initially a frontier plantation, Fort Independence was purchased by South Carolina in 1777 and garrisoned with an independent company detached from the state line. Functioning primarily as a deterrent to the restive Cherokees and Creeks and as one of the Whig enclaves in an area of strong Tory sentiment, Fort Independence was important in maintaining South Carolina's frontier at a critical time. The fort was burned by Tories in early 1779.

Archaeologically, Fort Independence was found to be a square, log stockade with three bastions, surrounding a well-built log plantation house. Various aspects of these remains are described and discussed. Identifications and analyses of recovered artifacts are presented along with comparisons to other archaeologically known eighteenth-century occupations.

TABLE OF CONTENTS

Table of Contents, Cont.

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

The construction of the Richard B. Russell Dam and Lake on the upper Savannah River by the U. S. Army Corps of Engineers will inundate the site of Revolutionary War period Fort Independence in 1984 (Figure 1). Consequently, a Phase I archaeological reconnaissance of the site was needed to determine the location of the fort, to assess the archaeological integrity of the fort remains, and to elucidate certain conflicting points in the existing documentary data concerning the fort's identity.

Twenty days in November, 1980, were spent testing at the probable site of Fort Independence with the result that the fort was definitively located and its resources evaluated. On the basis of that testing, extensive excavation was planned for Phase II in order to thoroughly sample and salvage the fort's archaeological resources. Forty days in May and June, 1981, were then spent carrying out that task. Historical research was conducted intermittently, between field seasons and after the Phase II work was completed.

The following report is the presentation of all the archaeological findings from Phases I and II and of all the historical data available on Fort Independence. The report is intended to present and summarize all of the aspects of Fort Independence that can be addressed using both archaeological and historical data. The presentation is primarily descriptive with some *higher* level, comparative analysis undertaken using quantitative artifact data. Historical findings and archaeological findings are treated separately, and synthesis is then attempted in a final section summarizing all of the research and creating a total picture of Fort Independence.

Finally, three tables showing the provenience distribution of nineteen broad artifact groupings are included as Appendices A, B, and C, and the specialists' reports on faunal and botanical remains are presented as Appendices D and E.

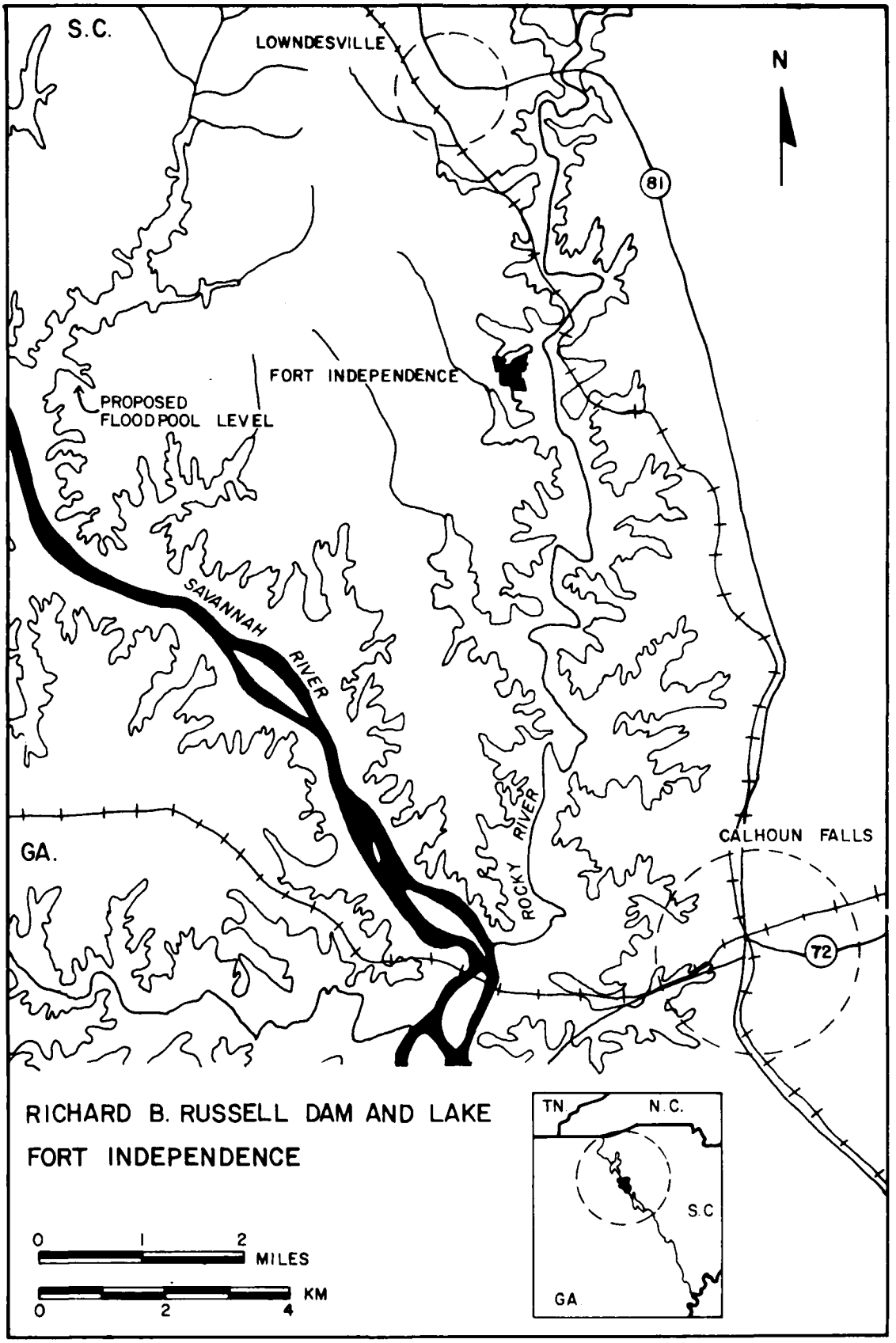

S.C.
LOWNDESVILLE
N
81
FORT INDEPENDENCE
PROPOSED
FLOODPOOL LEVEL
SAVANNAH RIVER
ROCKY RIVER
GA.
CALHOUN FALLS
72
RICHARD B. RUSSELL DAM AND LAKE
FORT INDEPENDENCE
0 1 2 MILES
0 2 4 KM
TN.
N.C.
S.C.
GA.

FIGURE 1

2.0 ENVIRONMENTAL SETTING

Fort Independence is in the physiographic region known as the Piedmont. Located on the Rocky River in Abbeville County, South Carolina, some 4 1/2 miles upstream from where the Rocky joins the Savannah, the site is on a small, partially wooded knoll surrounded by pasture (Figures 2 and 3). The site is at an approximate elevation of 40m (460ft) above mean sea level with a maximum topographic relief of some two m. The Rocky River is about 300m to the east, and a year-round freshwater spring is about 60m to the southwest. The topsoil on the knoll is thin (20-50cm) and consists of clay and clay loam. It lies over subsoil clay which is dense and sticky and varies in color from the top of the soil profile to the base. At the topsoil/subsoil boundary, the subsoil clay is bright rust-red and grades through orange and tan into yellow-gold where the parent granite decomposes into clay, some 1.5m below the surface. The granitic bedrock is veined with quartz.

Local oral tradition purports that the land where Fort Independence stood was under cultivation in the nineteenth century. This agricultural use presumably continued into the twentieth century, changing from farming to grazing at some unknown time. There are no indications, traditional or apparent from visitation to the site, that there was any occupation of the site after the time of the fort.

Figure 2. Aerial view of site, looking west

Figure 3. Central part of knoll where main structure was located, looking west. The cellar depression is in the copse of trees in the foreground.

3.0 HISTORICAL RESEARCH

3.1 PROCEDURE, GOALS, METHODS, AND SOURCES

The first historical research in which Fort Independence figured was a part of the cultural resources assessment of the Richard B. Russell Multiple Resource Area (MRA) by the Institute of Archeology and Anthropology of the University of South Carolina, Columbia (Taylor and Smith 1978:116-121). That initial work provoked more questions than it answered when the existence of two forts, a Fort Royal as well as a Fort Independence, was observed in the records. This resulted in uncertainty about the relationship between the two, since there was a possibility that the two forts were merely a single fort with different names at different periods in its history. Early in 1980, the historians who would be contractually responsible for the history of the Russell MRA (The History Group, Atlanta, Georgia) specifically endeavored to clarify this confusion about the two forts, as well as to determine the precise locations of them, when and why they were built, and what materials and methods were used in construction. The findings of The History Group (1981:167-176) were negative regarding materials and methods and tentatively conclusive regarding location, but only suggestive regarding date and circumstances of construction. Forts Royal and Independence were interpreted as two separate phenomena, the former on the Savannah River and the latter on the Rocky; and they were both probably built between 1775 and 1776 in response to Indian attacks.

Subsequently, archaeological site 38AB218 on the Rocky River, identified as Fort Independence by local historian H. L. Carlisle and observed to yield eighteenth-century artifacts, was assumed to be Fort Independence. Archaeological fieldwork was arranged by contract to test this assumption and to otherwise evaluate the archaeological resources at the site. Early in the fall of 1980, the principal investigator for the archaeological testing at 38AB218 subcontracted with Dr. Ronald E. Bridwell of Coker College, South Carolina, to undertake intensive, site-specific research on Fort Independence as an essential preliminary to the planned excavation. Although Bridwell's report was not available until the archaeological testing was completed, his findings provided a framework for the results of the Phase I testing, a source of testable hypotheses for Phase II excavation, and promising additional avenues for historic research. Like the historians who preceded him, Bridwell was unable to determine the exact location or date of construction of Fort Independence, but he did contribute some previously unknown and provocative particulars, such as the fact that Fort Independence was privately built as a fortified domicile but became a regular military post during the Revolutionary War. This circumstance gave rise to an hypothesis regarding the possible enlargement of the fortifications identified during Phase I field testing after Fort Independence became a formal part of South Carolina's defenses. This hypothesis was to be tested in the Phase II excavations at the site. Bridwell also reported the important historical connection between Fort Independence and Fort Rutledge which helped to focus later historical research.

While Phase II archaeological research was in process, some efforts to continue the historical research were made. The goals of the historical research at this stage were to obtain data on physical aspects of the fort, on the people who lived there, on the life they led, and on the relationship of this fort to other forts and its role in local defense, all such data being highly relevant to interpretating the archaeological record at the site. In pursuit of this kind of information, then, data compiled on the history of Fort Rutledge were requested from the person most informed about that site, Dr. H. Jesse Grove of Clemson University. At the same time, materials documenting claims for land contiguous to Fort Independence were obtained through the efforts of Mr. H. L. Carlisle and Army Corps of Engineers archaeologist Oscar Brock.

In July of 1980, after the Phase II archaeological work was completed and the analysis and synthesis of all data was initiated, the most valuable historical data of all came to light. A set of original documents known as the Bowie Papers was brought to the attention of the Fort Independence field director through the auspices of Dr. Robert L. Stephenson. These documents were letters to a Captain John Bowie, referred to as the commandant of Fort Independence, from his superior officer. No previous historical research had uncovered these letters, and even the very name of the alleged commandant was unfamiliar. While the discovery of these letters held forth the prospect that detailed data to resolve various of the mysteries surrounding Fort Independence would be available, regrettably this was not the case. The Bowie Papers dated to the latter part of the occupation of Fort Independence and so the questions of when, why, and how the fort was built could not be answered from these documents.

Nonetheless, in approaching the Bowie Papers, the goals for historical research remained the same as they had been at the beginning of the Phase II archaeology. Consequently, the Bowie Papers were combed for particulars regarding fort layout, personnel, lifestyle, activities, and relationships. One additional goal was added in this stage: to generate the most detailed, comprehensive site history the records would permit. All goals were achieved within the limitations of the data.

Sources of historical data were of several kinds: maps, newspapers, public records, primary sources, and secondary sources. There were limitations on the usefulness of all of these sources, as must be mentioned. With respect to maps, no contemporary plans of Fort Independence were located. The only general map indicating Fort Independence is in the Mill's Atlas of 1825 (Abbeville District) and unfortunately the actual fort site is not marked; rather, the name is merely displayed in an otherwise blank zone west of the Rocky River. Nonetheless, this is the best map to consult for a geographic appreciation of the events in which Fort Independence played a role.

Public records having information about Fort Independence were limited mostly to indirect evidence, such as documentation of

activities of persons known to be associated with the fort. One exception was the postwar legislative resolution to reissue an "indent" to the builder of Fort Independence because his original was lost in the war, but such direct reference was rare, and this accounts for the apparent paucity of data about the fort encountered in the earlier historical research efforts.

The only primary source for information about this site was the Bowie Papers, mentioned above, and their most regrettable limitation was that they were directed to the fort's commandant rather than being from him. Presumably the letters would have included more detail about life at Fort Independence had they been written by Bowie. As it is, however, the letters reveal more about the fort's external relations than about its internal functioning.

Secondary sources, with the exception of those specifically oriented toward researching Fort Independence (The History Group 1981; Taylor and Smith 1978), had no direct reference to Fort Independence. Rather, they focused on the persons or events having a prominent role in the course of the Revolutionary War in the upcountry, leaving Fort Independence obscure. However, they did provide the necessary chronological framework and background setting for the compilation of such particulars about Fort Independence as could be acquired from other sources.

Regarding the examination of particulars for veracity or reliability, independent corroboration of particulars could not be found for the data gleaned from the Bowie Papers because no other testimony of that nature exists. However, no drastic conflicts between the chronology represented by the Bowie Papers and the general course of the South Carolina upcountry during the Revolutionary War could be found. In the absence of comparable materials with which to critique the Bowie Papers, particulars from that source were accepted as valid and reliable and are presented at face value throughout this report.

Although it exceeded the scope of the present study to critique secondary sources in any thorough-going fashion, and no pretense of that is made, one event was examined with some care in the several secondary sources that had account of it, with somewhat confusing results. The Battle of Kettle Creek, the only important Revolutionary War engagement originating within the area now in the Russell MRA, varied in detail from one account to another regarding dates and who did what when. Presumably this is the result of the perpetuation of participants' unreliable recollections of an event of which they saw only parts, and those not objectively. It is only to be assumed that more important battles of the Revolutionary War are better witnessed and therefore more reconstructible than this rather underrated patriot victory in the most remote South Carolina upcountry. But the existing accounts of the Battle of Kettle Creek in secondary sources leave one unsatisfied about what really transpired there, especially the sequence of events leading up to the battle. Notwithstanding, particulars and facts from secondary sources are used without extensive cross-checking or examination of cited primary sources.

3.2 HISTORICAL FINDINGS

3.21 Historical Background Of The Revolutionary War In The South Carolina Upcountry[1]

Accessible primarily to Indian traders for the first half of the eighteenth century, the South Carolina backcountry began to be sparsely settled after 1750. Most of the new territory which would complete the soon-to-be State of South Carolina was ceded by the Cherokees in 1761. Thereafter, settlement of the new lands was rapid, with settlers coming from other colonies as well as Ireland, England, Scotland, Germany, and France.

John Henry Logan, one of the earlier historians to devote his attention to the upcountry, compiled the descriptions of eighteenth-century travelers and naturalists, as well as those of the oldest settlers he could contact, to assemble a picture of the virgin land those new settlers found. It was covered in luxuriant vegetation, the rolling hills forested with large trees, and the valleys thick with canebrakes. Much of the land was prairie-like, with cane, grasses, and flowers. Trees in the forests were spaced wide apart with no undergrowth to obstruct the view, the ground underfoot being carpeted by grass and peavines. Regarding this sweeping view, Logan observed, "The partizan (sic) soldiers of the Revolution in the Upper Carolina, frequently spoke of this striking feature of the country. It sometimes favored their enterprises, but as often proved the cause of premature detection and defeat" (Logan 1859:7). Buffalo and elk were found in the canebrakes and on the prairie ridges, and deer were abundant in the hills. The land near Abbeville had been a rolling prairie covered in cane. While the land all around Ninety Six had been forested. Even by Logan's time, the mid-nineteenth century, the area had been transformed.

However much like paradise their new land seemed, the South Carolina upcountry settlers could spare little time for self-congratulations on their choice of home. Their first decade in the area was plagued by Indian hostilities, and their second decade marred by what was actually a local civil war within the context of the larger war for independence from Britain. From 1775 until the end of 1782, the upcountry was the scene of many bloody encounters: Whigs versus Tories; Whigs versus Indians; and Whigs versus the British. These encounters were of all kinds: challenges; pursuits; ambushes; bluffs; spontaneous flare-ups; and calculated provocations. Differences in strongly held sentiments resulted in confrontations at all levels: man-to-man; man-to-group; group-to-group; group-to-army; and army-to-army. Few were neutral and few were spared involvement. So bitterly was the war waged in this area that popular, ironic expressions arose from the bloody

1. This general history based on the following: Bass 1978; Hillborn and Hillborn 1970; Landrum 1897; Logan 1859 & 1980; The History Group 1981; Waring 1962. Figure 4 shows the upcountry at the time of the Revolutionary War.

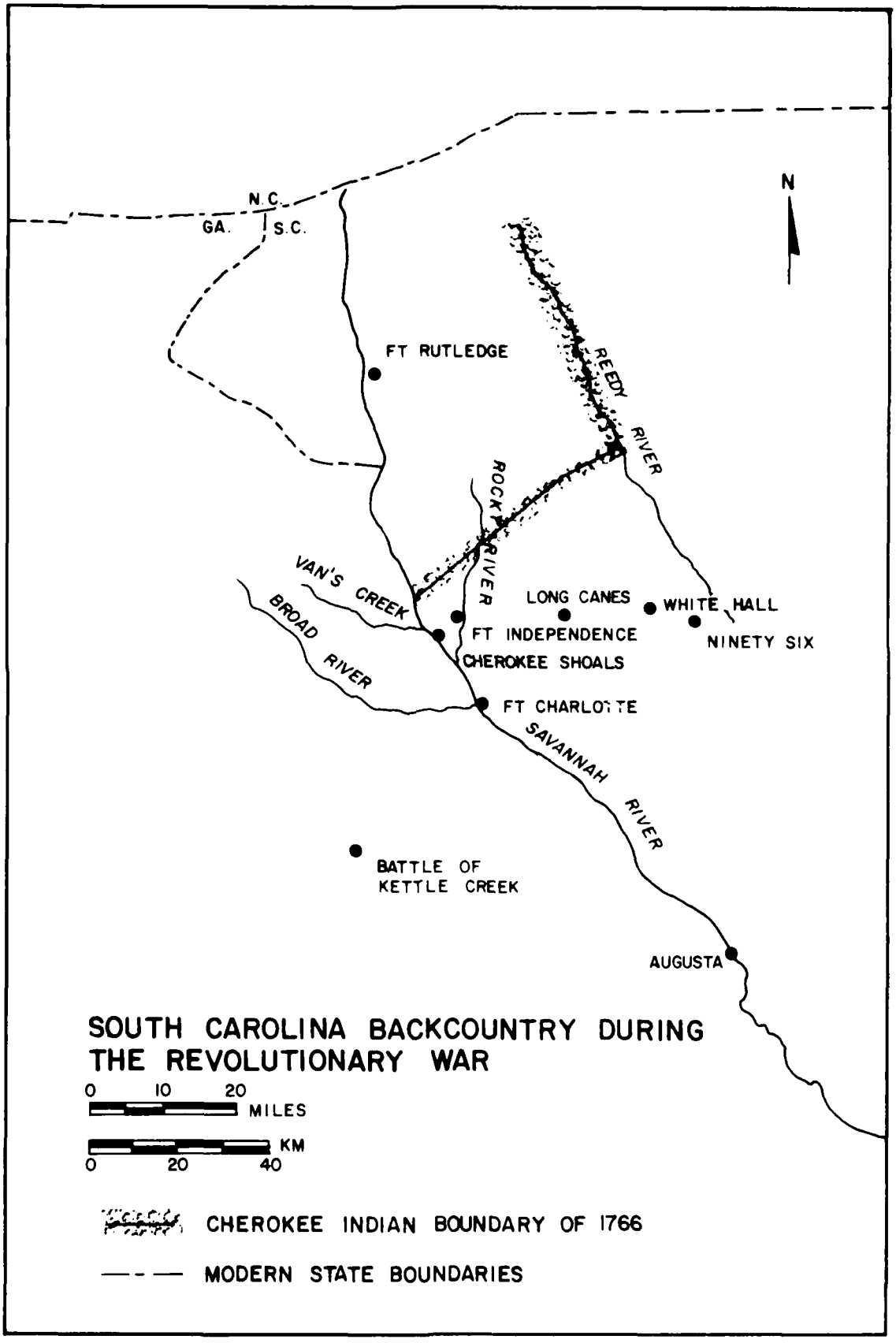

N.C.
GA.
S.C.
N
FT RUTLEDGE
REEDY RIVER
ROCKY RIVER
VAN'S CREEK
BROAD RIVER
LONG CANES
WHITE HALL
FT INDEPENDENCE
NINETY SIX
CHEROKEE SHOALS
FT CHARLOTTE
SAVANNAH RIVER
BATTLE OF
KETTLE CREEK
AUGUSTA
SOUTH CAROLINA BACKCOUNTRY DURING
THE REVOLUTIONARY WAR
0 10 20
MILES
KM
0 20 40
CHEROKEE INDIAN BOUNDARY OF 1766
MODERN STATE BOUNDARIES

FIGURE 4

events that transpired here: "a Georgia parole" meant murder done in the name of pacification.

The first overt act of the Revolution in South Carolina occurred in the backcountry, at Fort Charlotte, on the morning of July 12, 1775. On that date, on the orders of the President of South Carolina's newly formed Council of Safety, Fort Charlotte and her arms and stores were seized by a company of South Carolina Rangers, who made only a show of force to effect their ends (Davis 1949:12-14). The first Patriot casualty of the Revolution in the entire South happened at Ninety Six, in November of 1775 (Landrum 1897:325; Davis 1949:13), a distinction of a kind for the upcountry. Characteristically, it was a conflict between local Whigs and Tories, and it resulted in armed confrontation, the Tories surrounding a group of hastily stockaded Whigs in siege for several days before a truce was negotiated. One Whig was killed and 12 were wounded in this battle. Whig militia participants who would continue to pursue their cause with feeling and commitment rose to prominence in this encounter, and their names appear often in the record of subsequent events in the upcountry: Andrew Williamson and Andrew Pickens in particular.

The next action in this area was instrumental in subduing the British-allied Cherokee Indians at a time when their attacks on the frontier were being coordinated with coastal attacks by the British to press South Carolina *hard from within and* without. In late July of 1776, under Andrew Williamson, the Ninety Six militia marched north along the trading path to destroy Cherokee villages and food supplies, thereby crippling their ability to aid the British. Williamson established a base at the conquered town of Seneca, which became Fort Rutledge, and kept pressing north, eventually coordinating with troops from North Carolina. The expedition was a great success. Although the Cherokees would resume their attacks later in the war, Williamson's campaign bought for the upcountry a temporary respite from the Cherokee threat.

The years 1777 and 1778 were relatively quiet in the upcountry (Landrum 1897:100). There were periodic rumors of Tories or British Indian agents inciting the Creeks to frontier attacks in Georgia, and the Ninety Six militia was involved in the protection of settlers in that area, as well as engagements more far-flung. For example, Williamson and Pickens were in Florida with General Howe in an abortive attempt to take St. Augustine in the early summer of 1778.

In mid-February of 1779, the only major engagement to occur in the wild, newly acquired part of South Carolina and Georgia took place at Kettle Creek, a tributary of the Broad River in Georgia. There, Colonel Andrew Pickens led 400 South Carolina and Georgia militiamen against 700 South Carolina Loyalists led by Colonel William Boyd, a prominent Spartanburg District Tory.

In coordination with the British occupying Augusta, Boyd was attempting to get his troops to Augusta, passing through Ninety Six District southwestwardly across the upcountry. Colonel Pickens was already in Georgia, harassing a small British contingent which was in the upcountry trying to persuade the inhabitants to cease their resistance and accept British control.

Pickens abandoned this effort when he received word of Boyd's progress. Boyd's troops were attacked first (and independently of Pickens) by a small group of Ninety Six militia under Captain Robert Anderson at the Cherokee Ford on the Savannah River. Boyd's far superior numbers held sway and Anderson retreated. Boyd continued his march until Pickens caught up with him at his Kettle Creek camp on February 14th. In the ensuing battle, Boyd was mortally wounded early in the fight, and as a result, his demoralized troops, being neither seasoned nor strongly committed to their cause, quickly surrendered or ran off, some 200 of them finally reaching Augusta.

Boyd's party was within hours of a rendezvous with British troops when Andrew Pickens' militiamen reduced them to refugees. This decisive and timely victory,

> which was the only check on the British advance in Georgia, broke the spirit of the Tories and secured peace for a time in the interior of the Carolinas and Georgia. Some years later, Pickens himself said he believed 'it was the severest check and chastisement the Tories ever received in South Carolina or Georgia' (Waring 1962:27).

The Ninety Six militia participated in more distant actions during the remainder of 1779. In June they were at the Battle of Stono Ferry near Charleston, where they covered the retreat of General Benjamin Lincoln's regular Continental troops. In September and October they were involved in Lincoln's futile storming of Savannah. By the time of the fall of Charleston, May 11, 1780, the efforts of South Carolina to repel the British had failed and the British and the Continental Congress regarded Georgia and South Carolina as conquered provinces. Most of the Whigs in the upcountry were paroled to return to their homes and resume peaceful relations with their ascendant Tory neighbors. The ensuing period was one of travail and humiliation for the Patriots. Continuing Tory abuse and atrocity were largely ignored by the British occupation officials. But the Whig spirit persisted and broke free again in 1781, when the British and Tory oppression could no longer be tolerated.

Patriot victories in 1781 and 1782 gradually pushed the British out of Georgia and North and South Carolina. More than in the first part of the war, militia participation became critical at this time. Colonel Andrew Pickens and his Ninety Six militiamen threw over their British paroles in late 1780 and immediately distinguished themselves

at the important Battle of Cowpens (South Carolina) on January 17, 1781, a joint victory for the Continental Establishment troops and militia, acting in an effective combination which was successfully replicated at most of the battles thereafter: the Battle of Guilford Courthouse (North Carolina) on March 15, 1781; the Siege of Augusta in early May of 1781; the Siege of Ninety Six in May and June of 1781; and the Battle of Eutaw Springs in September, 1781. Only the Siege of Ninety Six was on home territory for Pickens' militiamen, and that engagement was one of the few in this latter part of the war which did not favor the Patriots. The outcome was something of a draw, the Patriots sustained heavy losses, but the British were forced to withdraw, abandoning their last stronghold outside of Charleston. From that time, the remainder of the war was largely a mop-up operation, costly and protracted, but the tide had turned for the last time, and it was running against the British. They finally evacuated Charleston on December 14, 1782.

Robert Bass, writing about the Revolutionary War history of Ninety Six and the upcountry said,

> From the time of the first battle of Ninety Six in 1775 there had been civil war as well as rebellion. No where else in America had there been such ravaged countryside and such fratricidal horror. The strife between Whigs and Loyalists had left 1400 widows and orphans in Ninety Six district (Bass 1978:424).

This, then, is the setting and climate within which to best comprehend Fort Independence and the events associated with it.

3.22 Detailed Chronology Of The Occupation Of The Fort Independence Site

Documentary data relevant to the duration of eighteenth-century occupation of the Fort Independence site were conclusive with respect to when and how the site was abandoned, but not regarding when and how occupation began. It was not possible to establish precisely when the central structure of the fort was built, nor whether the two primary components of the fort (the central structure and the stockade) were built at the same time. Historical data were available, however, which provided reasonable parameters for these important events.

The 1761 treaty between the Cherokees and the colony of South Carolina ended the Cherokee War of 1760-61 and added new land to South Carolina's western frontier (The History Group 1981:72). The new boundary remained unsurveyed and unofficial until 1766 (Taylor and Smith 1978:116), but many new settlers entered the area nonetheless, and on May 2, 1763, James Thompson (probably a relative by marriage of Robert Anderson, who would build Fort Independence) patented 150 acres on Rocky Creek (Colonial Plats, vol. 15, pg. 312). Robert Anderson himself soon followed suit and also patented 150 acres on Rocky Creek on April 16, 1767 (Colonial Plats, vol. 10, pg. 80). On July 8, 1774, Robert Anderson was granted 150 acres on Rocky Creek (Colonial Land Grants, vol. 31, pg. 447) and on December 19, 1774, he submitted a memorial for 150 acres on Great Rocky Creek (Memorials, vol. 13, pg. 154). It is not clear from the records of these claims and grants which of these parcels (including Thompson's) constituted what would later become known as the Fort Independence tract. Thus, it is not certain just when Robert Anderson controlled the land on which he would build Fort Independence. Differing initial survey dates for two land parcels sharing opposite boundaries with the future Fort Independence tract provide at least a bracket for Anderson's date of acquisition: the future Fort Independence land was indicated to be vacant as of May 3, 1768 (Colonial Plats, vol. 19, pg. 282) and described as belonging to Robert Anderson on May 7, 1771 (Colonial Plats, vol. 13, pg. 72). These bracketing dates do not encompass the dates of any of the official land documents known for Robert Anderson on Rocky Creek, given above. It is possible that the formal document for Robert Anderson's claim to the Fort Independence tract, which could be expected to date from sometime within the period bracketed by the neighboring claims just cited, no longer exists. Perhaps the apparent problem is one of time lag between surveying new tracts on the frontier and recording them back at the seat of government.

When the Cherokees ceded the land in question, a great many white settlers rushed in. There were only three families in the area between the Savannah River and the present day location of Abbeville. By April of 1763 these families had been joined by over one thousand more families (The History Group, 1981:72). Their land improvements and self-protective measures often did not wait for official recognition of their claims. Thus, it is possible that Robert Anderson picked his land, cleared it, and built the stone and log house that would be the nucleus of Fort Independence any time

after 1761, with either the stockade-type fortification built then, or added at a later date during one of the subsequent periods of intensified Indian threat. But one piece of indirect historical evidence implies that by the spring of 1766 Anderson had not yet occupied the land where he would build Fort Independence. This evidence is in the official report on the successful demarcation of the new South Carolina-Cherokee Indian boundary in April and May of 1766, submitted by Alexander Cameron, deputy Indian superintendent. Commenting on the extent of white settlement in the vicinity of the boundary line, Cameron noted "I could not learn that we took in any land, that had been surveyed by any White man before; but there is one Atkins, settled within four miles of the Line, near to Savannah" (DeVorsey 1966:132). The site where Fort Independence would be erected is about two miles southeast of where DeVorsey interprets this Atkins to have been in the spring of 1766 (DeVorsey 1966:114). Cameron's observation that only Atkins was in the area at that time certainly does not establish that Robert Anderson was absent, but it is highly suggestive of that. Since Cameron was taking pains to enumerate possible boundary violators at different places along the line, it seems likely that Anderson would have been mentioned along with Atkins if he had been resident on his Fort Independence land when Cameron's party was surveying and marking the western end of the boundary, so close by.

Despite the clearly marked boundary, violations continued and the settlers of the new territory had not only the increasingly disenchanted Cherokees to fear, but also the Creeks, across the Savannah in Georgia, who were neither inhibited by treaties nor willing to allow encroachment on their hunting grounds. Thus, Indian hostilities presented a constant threat in the upcountry, periodically intensifying and provoking spates of fort-building or repair. The Creek massacre of several families at Long Canes in 1764 resulted in the building of Fort Charlotte (Davis 1949:5; Caldwell 1974:46). The Creek attacks in frontier Georgia and South Carolina in early 1774 provoked a strong response from the settlers along the Cherokee boundary--a line of twelve stockaded forts between the Savannah and Reedy Rivers (South-Carolina Gazette, February 21, 1774). Early in 1776, the inhabitants of the Savannah/Rocky River area petitioned the Second Provincial Congress for assistance with defensive measures against Cherokees and Creeks, with the result that a Congressional committee was sent to evaluate the utility of what was probably an existing but deteriorated frontier fort called Fort Royal (Taylor and Smith 1978:118). Finally, emboldened by their British allies' attack on Charleston Harbour in late June of 1776, the Cherokees began raids along the frontiers, in consequence of which, the settlers "constructed a line of forts along the Savannah River and...mustered themselves into companies, stationed principally at these forts", according to the 1833 Revolutionary War pension application of William Gabriel Pickens (Sharpe 1963:143). Another Revolutionary War veteran, William Pickens, stated in his 1833 pension application that "this applicant together with many families were compelled to erect a fort for their safety and defence called Fort Independence" (Sharpe 1963:142), because of Indian depredations committed the year after

the Battle of Ninety Six, (which occurred in November, 1775, Waring 1962:11-12). Another witness to this activity was Major Andrew Williamson, in charge of the Ninety Six District militia, who wrote Captain John Bowie of South Carolina's 5th Regiment and commandant at Fort Charlotte at that date (July 3, 1776), that recent Indian attacks had made his militia companies very eager to engage the Indians, except for "some of your nearest neighbors who are patching up old fforts (sic)" (Bowie Papers, Document 10).

While the assertion of William Pickens would indicate that a cooperative group of settlers built Fort Independence outright in 1776, Williamson's observation introduces the possibility that their effort may have been merely to refurbish an extant but inadequate stockade from an earlier period. Pickens' statement provokes question as to the reliability of the 57-year-old memories of an 84-year-old man, especially regarding what was only a passing reference in a document having entirely other emphases, but it remains a distinct possibility that either the stockade was first erected in mid-1776 (the house having been built as an ordinary frontier house sometime prior to that), or the entire installation was newly built at that time. The latter possibility has little likelihood because of the domestic character of the house. Had that structure been designed as the main component of a fort, the size, lay-out, and probably even the materials would have been different from those observed (discussed in a later section of this report).

One additional piece of indirect evidence regarding the building of Fort Independence concerns the military engineering skills of Robert Anderson himself. The Cherokee attacks following the British assault on Charleston eventuated in a Ninety Six District militia campaign in the late summer and early fall of 1776 to chastise and disable the Indians (Waring 1962:18). Anderson participated in this campaign and was given the responsibility of building an advance base of operations for Andrew Williamson's militia at the subdued Cherokee town of Seneca. This new fort was completed in late August of 1776 and was called Fort Rutledge, honoring the man who was Governor of South Carolina at that time (Laurens Papers: Williamson's Cherokee Expedition, 1776). Thus it is demonstrable that Anderson was capable of fortifying his house at any time. This fact enhances the probability that Anderson himself erected the stockade around his already extant house prior to the beginning of the Revolutionary War, at the time of one or another of the Indian scares discussed above.

To summarize, the historical data provided just a suggestion of when domestic occupation at the site of Fort Independence could have begun, and also an idea of when circumstances motivating the construction of defenses were in effect. The archaeological evidence was also unable to specify the extent of contemporaneity between the central structure and the stockade but the artifact dating indicated an occupation of the site (principally of the central structure) which was earlier than the documented period of exclusive military use, during which the stockade had to be present. Thus it is likely that the house was built first, sometime

after 1763 (when the great majority of settlers penetrated the newly ceded territory), and the stockade was built later, most probably in early 1774, as part of the line of 12 forts erected along the Cherokee boundary.

So, if William Pickens' memories are qualifiedly reliable, Anderson's private stockade was refurbished by Anderson and his neighbors early in the summer of 1776 and the installation was then named Fort Independence and used as a militia station for some fourteen months after that. William Gabriel Pickens also stated in his pension application that, "As soon as I joined the service (October, 1776)[1], which was to aid in guarding the frontiers and in repelling the indians (sic), Captain Anderson stationed himself at one of these forts called Fort Independance (sic), ...where we remained fourteen months in constant service against these Indians--in scouring the country and protecting the inhabitants" (Sharpe 1963:143). Another militiaman, Andrew Pickens (cousin to the officer of the same name who would become a general and highly acclaimed hero before the end of the war), states in his 1832 pension application that he spent ten months recuperating under a doctor's care at Fort Independence from a wound he received in the campaign against the Cherokees during the summer of 1776 (Sharpe 1963:140). No more detailed accounts of this militia utilization of Fort Independence were located. Its occupation by independent companies of the state line is fairly well documented, and that occupation will be treated below.

While Fort Independence was being used for various militia operations, the Governor of South Carolina and the legislature took formal steps to control the Indian frontier and to establish better footing for the Whigs in the upcountry. On February 7, 1777, Governor Rutledge detached three companies from the 5th Continental Regiment of South Carolina to serve as independents in the state line on the frontier. The officers commanding these companies were Captains Benjamin Tutt, John Bowie, and John Moore. Tutt's company, referred to as the "first" independent company, was stationed at Fort Rutledge, probably in the spring of 1777, and remained there until that fort was surrendered to the British sometime in June, 1780 (Tutt Account, 1824 deposition of Thomas Farrar; 1824 deposition of Robert Looney). The permanent station of Captain Moore's company could not be documented. Bowie's company was assigned to Fort Independence, but exactly when in the year 1777 is not known. The first, still extant letter Bowie received at Fort Independence from his superior, General Andrew Williamson, commander of the Ninety Six District militia, was dated November 13, 1777. The surviving communication just prior to that is dated May 31, 1777

1. W. G. Pickens gives 1775 as the year of his entry into military service in one section of his application, and 1776 in another section. The allusion (above) to the British-instigated Cherokee assaults in the summer preceding his beginning service makes the 1776 date more likely the correct one (The History Group 1981:170).

and Bowie was still commanding at Fort Charlotte at that time, having been there approximately a year (Bowie Papers, Documents 12 & 13). If William Gabriel Pickens' recollection of fourteen months of militia service out of Fort Independence is accurate, then Bowie's assumption of command there and his garrisoning Fort Independence with his independent company as replacements for Anderson's militia company could well have occurred late in 1777, as the date of the first letter he received there would indicate. However, before Bowie took command of Fort Independence, only one week after Governor Rutledge created the independent companies, the South Carolina Assembly resolved to purchase Fort Independence from Robert Anderson for L2100. Thus Fort Independence became an official South Carolina fort, and one year later an indent for the above amount was issued to Robert Anderson and the state account for Forts and Garrisons was debited for it (Treasury Journal, February 19, 1778).

Late in 1778, General Williamson wrote Bowie regarding various business matters, and referred to an idea Bowie had proposed in earlier correspondence: to build a new fort elsewhere. Williamson said at that time, December 20, 1778, that such a task could not be undertaken immediately, but they would consider it further (Bowie Papers, Document 47). Very shortly thereafter Williamson wrote Bowie as follows:

White Hall
Decembr 31st 1778

Dear Sir:

As I understand it is the General Opinion of the Inhabitants, as well as your own that plan(t)ing the Garrison now kept up at Fort Independence, on some spot near the old Boundary line, on or near the banks of Savannah River would tend more effectually to secure the frontier Inhabitants of this State. I desire you will as speedily as Possible look out the proper place Whereon to erect a fort agreeable to the plan you furnished me with Yesterday - you will get the soldiers belonging to your company to do the Work, for which I will see them paid according to the agreement you make with 'em, and have wrote Cap.t Moore to immediately put himself and Company under your command, and assist all in his power to effect this Business as quickly as Possible. I have also wrote to Cap.t Robt Anderson, Whose abilities in such Matters is Well known and requested him to assist you in the Choice of the Ground, and also to Carry on the Work for Which I Will see him paid - as Colo Pickens has the direction and arranging the troops who do the line duty, you will before you send Cap.t Moore's letter to acquaint him, and also take his orders when occasion makes it necessary.

I am Dear Sir
Your Mo Hble Servant,
A. Wmson

(Addressed:) To Cap.t John Bowie (Bowie Papers, Document 50)

Thus, early in 1779, strategic considerations made it desirable to move the Fort Independence garrison closer to the Savannah River. Subsequent letters to Bowie indicate that the new installation which was built continued to be called "Fort Independence". This could account for the conflict in the historical record which other researchers reported and attempted to reconcile (The History Group 1981:171-172), regarding the exact location of Fort Independence. The solution to the problem is simple but unexpected: There were two, sequential installations, both called "Fort Independence", the earlier one on the Rocky River and the later one on the Savannah.

Not long after the decision to relocate the Fort Independence garrison, in mid-February of 1779, at least 800 Tories, led by Colonel William Boyd, burned the original Fort Independence on their way from Spartanburg District to join the British at Augusta (Waring 1962:25; Taylor and Smith 1978:455). Their number reduced to 700 by the time they reached Georgia, these brigands were soundly defeated by Colonel Andrew Pickens and 400 South Carolina and Georgia militiamen at the Battle of Kettle Creek on February 14, 1779 (South Carolina and American Gazette, February 25, 1779), with Boyd and some seventy others killed (M'Call 1969:398).

An independent and unsuccessful attempt to stop Boyd's troops at the Cherokee Ford on the Savannah River had preceded the main confrontation by a day or two (M'Call 1969:394; Waring 1962:25). This skirmish took place at Van's Creek on the Georgia side of the ford as Boyd was trying to get his troops across the river. Captain Robert Anderson and 80 militiamen had learned of Boyd's move through the area and rushed out (probably from Long Canes) to cross the Savannah and attack Boyd's men as they landed, but the far larger party of Tories was strung out along the bank and able to sweep around from above and below and attack Anderson's small party from the rear, forcing him to retreat, with 16 wounded or killed and 16 taken prisoner. Boyd, however, lost 100 men here, mostly to desertion (M'Call 1969:395), which doubtless was a help to Pickens two days later.

In all of the accounts of this event, what is most interesting from the perspective of this research, is the absence of any mention of John Bowie, John Moore, or the independent companies. They had been assigned to protect the farmers and settlers of northern Georgia, cooperating with Georgia militia in this, during the fall of 1778, but by November 5th they had been relieved by regular South Carolina militia and both independent companies were back at Fort Independence (Bowie Papers, Document 45). Their replacements, part of Colonel Pickens' militia, remained on duty in Georgia for several more months, such that they were in the right place at the right time to stop Boyd. But where were Bowie's men when Boyd burned the original Fort Independence and when the skirmish at Van's Creek took place, virtually in their backyard? From most of the accounts, it seems likely that Boyd was avoiding direct confrontation, due to the questionable reliability of his men. A quote from South Carolina's Revolutionary War historian, David Ramsey, regarding the character of Boyd's followers must be offered here: "Their general complexion was that of a plundering banditti, more solicitous for booty than for honour and

interest of their royal master" (Ramsay 1785:14). In any event, Boyd probably found the old Fort Independence empty when he and his men arrived there. He may have camped there overnight and looted whatever was valuable before he burned the old fort and moved on to meet his fate. It is mere speculation, but perhaps the garrison had already moved to their new fort and were busy finishing it at the time of the above action. Had anyone been at the old fort, surely some lively anecdote of the encounter would have survived along with the one told of Boyd and the lieutenant at the blockhouse on Cherokee Ford (Taylor and Smith 1978:121) and the one told of Boyd and Pickens at the death scene of Boyd (Waring 1962:27).

Fort Independence is mentioned in several more letters to John Bowie written during the year following the Battle of Kettle Creek and the burning of the original Fort Independence. The tenor of these letters in their passing references to Fort Independence gives an impression of an ongoing entity, operating on much the same terms as before the garrison was moved to its new location. Williamson wrote Bowie on November 13, 1779 at Bowie's Long Canes home where he was recuperating from a wound (Heitman 1893:93) received at the Battle of Savannah on October 9, 1779:

White Hall November 13, 1779

Dear Sir,

Berry going your way, I should be glad that the Trial of the Two Prisoners now here was brought on as Soon as Possible. Cap.t Tutt and his brot are now below and Moore and Hayes at fort Independence who can be all readily Convened. as I am unacquainted Wt the law that directs the mode of trial, it will principally rest upon Yourself. Will be glad to have your Opinion and Whether the trial can take place before you sett out to Charles towne.

I am wt great Reg.d
Dear Sir
Yr Mo Obt Servant
A. Wmson

(Addressed:) To Major John Bowie
Wt James Berry (Bowie Papers, Document 54)

Obviously, Fort Independence was still a going concern at that time, and Bowie still in authority, even if not physically present at the new fort, as the following letter shows:

Dear Sir,

Having had no particular success since I saw you I returned this day to the fort, and for reasons to numerous to insert I take this opportunity too inform you that it does not suit me to continue any longer in the service tho' am Still willing to serve you or my Country as far as in my power lies I send you with this a letter from my father in which I presume he has mentioned something in Regard to the

same Subject it is Needless for me to Mention to you any uneasiness in Regard too your ill state of health as I hope your Fully sensible of that yourself I shall conclude with wishing you may be happier in another choice. And am dear Sir Your Most Obdt Hble Servt

Saml Earle

P.S. I hope to hear from you tomorrow by the bearer as I am obliged back shortly as before

SE

Fort Independence, 8th December 1779

(Addressed:) To Major John Bowie
in
Long Canes (Bowie Papers, Document 57)

The last mention of Fort Independence in the Bowie Papers deals with the mundane matter of supplies:

White Hall January 22nd, 1780

Dear Sir,

Advices just received from the Gov.r of a large Transport Ship full of Soldiers being spoke wt off our Coast bound to Georgia and advice by Colo Laurens just arrived from Congress of a large embarkation of Troops from New York, gives the outmost reason to expect that they are destined for Georgia, and wt the troops now there attack this State, in consequence of which I am ordered to draw out a body of men and take Post at Augusta as quickly as possible. Of course a Number of the Independents will be called into the field, on examining I find a Number of shirts recd (received) fall sixteen short of the Number I (ordered) to be sent, this of course renders it out of my Power to give the men now here, 2 Shirts each. Wd therefore request you will stop as many as you conveniently can, out of those sent to fort Independence by the Waggons, in order that we may do as Well for those who are called into the field as Possible. You will send down all the articles had for the building or repg (repairing) the fort, by return of the Wagons. Mr. Brown joins me in best Complimts to you, and we will be glad to see you here as soon as you can make it convenient.

I am Dr Sir Yr Mo Hbl Servt
A. Wmson

I need not tell you to Keep the News to yourself

(Addressed:) To Major John Bowie

(Bowie Papers, Document 59)

Of interest in the foregoing letter, too, is the mention of "articles... for building or repairing the fort". It is possible that work on the new Fort Independence continued for as long as a year after the garrison moved. Regarding frontier forts, Ivers observed that few South Carolina forts were built within a year, and that, "Within about five years of its construction a fort required complete rebuilding" (Ivers 1970:30). This could have provided additional reason for building a new Fort Independence. If the original Fort Independence stockade was built in early 1774, as suggested above, then by late 1778 the garrison was probably confronted with a major construction task in any event, and it was more practical to just start over at another, more strategic location.

From early in 1780, the paths of John Bowie and his independent company diverged, and the site of the first Fort Independence had already lain dormant for a year while its former occupants went off to make history in other places. Even though Lord Cornwallis surrendered to George Washington at Yorktown on October 19, 1781, the war continued in South Carolina for 14 bitter months after that, the British finally evacuating Charleston on December 14, 1782 (Waring 1962:81). About a year later, South Carolina sold the Fort Independence tract, along with various forfeited lands and property formerly held by Loyalists, at public auction at Ninety Six. A gentleman named John Vanderhorst bought it for L144/9 and he was issued a lease of release for the land on December 8, 1783, described as "formerly the property of Robert Anderson and known by the name of Fort Independence" (Trask Documents). Two years later Vanderhorst was granted an additional 529 acres adjoining the Fort Independence tract on the north and extending west (Trask Documents). Beyond this, there is a gap in local land records until after 1880, so occupancy and land use subsequent to the fort can only be derived from oral tradition and/or archaeological findings. The last official record regarding Fort Independence is the resolution approved by the South Carolina Senate and the Assembly to grant Robert Anderson's request that his 1778 indent for the Fort Independence land be replaced because the original "was destroyed with his papers in 1780 by a party of Tories" (General Assembly, Legislative Reports, 1786, No. 12).

The independent companies were discharged by the British in the aftermath of the fall of Charleston (Bowie Account: Statement of Services, November 20, 1820). Although there is no record of the final fate of the Fort Independence garrison, the fate of Benjamin Tutt's first independent company and Fort Rutledge may be indicative of what became of Bowie's men and their new fort. Tutt gave an account of this in his 1783 petititon to South Carolina's Governor Guerard and several later (1823-24) supporting depositions of veterans of the first independent company give supplementary information (Tutt Account). Tutt's company suffered considerable attrition in the spring of 1780 because the term of enlistment for the independents was three years and many of Tutt's men had been recruited shortly after the creation of the independent companies in February of 1777. Tutt found himself unable to finance the continuation of his men's service or the recruitment of new men because of the depreciation of the currency. Thus, the first independent company had only 40 men and officers when Tutt surrendered Fort Rutledge to the British sometime in June of 1780. Some of the men

were made prisoners but most were paroled. These men probably found themselves leaderless for some time, as the prominent militia leaders were paroled on their honor (and pain of death) to take no further action against the British, or were dispersed as refugees to North Carolina, or, worst of all for Whig morale, "turned coat". Eventually, a number of the ex-independents filtered back into the militia, probably as their convictions and the circumstances in the upcountry dictated. Tutt and several of the men who were in his command at Fort Rutledge were at the Battle of Eutaw Springs, Tutt as a major of militia, and his men as rank and file soldiers. Tutt continued to serve in the militia until the end of the war. If the expiration of enlistment time affected Bowie's company like Tutt's, some of Bowie's men may have gone over to the militia as Bowie apparently did in early 1780 (Wates 1956:20; Bowie Account). Others may have joined later when the course of the war was more favorable to South Carolina. John Moore and Samuel Earle both were with the militia toward the end of the war (Salley 1917:281; Wates 1956:19). There is no record of the final disposition of the new Fort Independence.

3.23 The Fort Independence Garrison: Aspects of Routine and Lifestyle, Upcountry Relationships, Military Role, and Actions

No daily routine at Fort Independence can be assessed from the Bowie Papers. There is no mention of regular drill or patrols, but this is not surprising considering that the letters are generally intended as orders and information directed to the garrison. (For an overview of the lifestyle of South Carolina's colonial soldiers, see Ivers 1970:30-36.) Aspects of lifestyle at the fort that are mentioned in the Bowie Papers include subsistence and maintenance data in the form of supplies listed as coming into or going out of the fort, political intrigues at election time in 1778, and the suggestion of a comfortable existence for Captain Bowie, implied by the regular presence at the fort of his wife and of a gentleman and physician named Dr. Begbie.

Supplies for the independent companies came from Ninety Six or White Hall by wagon shipments, but sometimes the commandants had to journey to Ninety Six or White Hall to have their supplies allotted to them. Sometimes Bowie was thrown back on his own resources to obtain what he needed, particularly cattle. Neither herding nor farming was mentioned, so Fort Independence was probably not attempting self-sufficiency. Frequently mentioned supplies going into Fort Independence include meat, in the form of live cattle or barrels of salt beef, and flour, type unspecified. Sides of leather, stands of arms (muskets with bayonets), and cash money are mentioned a couple of times each. Also mentioned are shelled and ground corn, buttons, a cask of rye (whether grain or whiskey is not specified), shoes, clothing, sealing wax, rum, hemp, and sugar. Williamson occasionally requested things from the stores at Fort Independence: 14 panes of glass; arms; clothing; and materials and/or tools for fort construction or repair.

The political situation represented in the Bowie Papers (Document 46) involves an election to take place in late 1778. On November 28th, Williamson wrote Bowie about the election, discussing an intrigue within their Whig party. Several Whigs in the Ninety Six District were running against the incumbent Whig Assemblymen on the platform that the incumbents were all officers and thus would be inclined to prolong the war rather than vote for peace. Williamson provided Bowie with a list of desirable candidates (Document 69) and suggested he "countenance (it) wt your interest". Williamson went on to recommend that Bowie send any of his men who were eligible to vote to Ninety Six early, allowing plenty of time for them to make the journey so they would be sure to participate in defeating the scheme of the divisive Whigs. Williamson did not tell Bowie to tell his men how to vote, but the implication is clear.

Interestingly, the list Williamson sent Bowie has seven of its ten Assembly slots occupied by men who were all officers in the Ninety Six District militia. Their names appear frequently in the Bowie Papers, including Williamson himself, Andrew Pickens, and Robert Anderson. The eighth slot is taken by the name of the local Indian agent (another name familiar from the Bowie Papers), the

ninth slot by an unfamiliar name, and the tenth slot Williamson suggested Bowie fill with "some other person you see fit to add".

There are no data regarding the population of Fort Independence. Some indication of the number of people stationed there can be extrapolated on the basis of the size of militia companies in that time and place. While company size for South Carolina's Revolutionary War militia could not be researched readily, the particulars for North Carolina Revolutionary War militia companies were available and probably provide a good approximation for South Carolina. Each company was to be composed of 50 rank and file (minimally), with two sergeants, two corporals, one drummer, and one fifer, and commissioned officers as follows: a captain, a lieutenant, and an ensign (Gobbel 1919:52). Thus a company was composed of 59 men. Bowie's independent company was not of the militia but of the line, and therefore the numbers and ranks may have differed somewhat. However, remarkable consistency can be seen in checking the specifications for a company of the regular United States Army 86 years later. A company of infantry at that time was, minimally, 42 privates, four sergeants, four corporals, and two musicians, all enlisted, and one captain, one first lieutenant and one second lieutenant, all commissioned, totaling 55 men (Scott 1861:50).

For the duration of its occupation, then, Fort Independence had one company present, and for a month or two in late 1778, it had two resident companies. If these companies were full strength, population density at this small fort could have been great. However, there is a good probability that the ideal numbers were not realized often. Resignation, desertions, extended personal leaves, and the ambiguous status of the independents probably all contributed to the fort being undermanned, by the standards of the period, despite active recruiting by the officers of the independent companies. A best guess, then, for the fort's average occupancy would be 40, plus-or-minus 10, most of whom probably did not live within the stockade walls, as will be discussed below in the Archaeological Findings section.

From the Bowie Papers it is possible to glean some picture of the relationship of the Fort Independence garrison to other upcountry forts and to look at some aspects of the command structure among the independent companies and between them and the militia. The commanding officers of the independent companies, Tutt, Bowie, and Moore, took their orders from General Andrew Williamson, head of the Ninety Six District militia, or from his aide-de-camp, Malcom Brown. Bowie and Tutt seem to have been on equal footing, i.e., neither had precedence in terms of transmitting orders one to the other from Williamson, whereas Moore sometimes received his orders through Bowie. While both Bowie and Tutt had permanent stations for their companies, Moore's seems to have floated around. Only Bowie's and Moore's companies acted in concert on occasion, Tutt's company seeming to stay close to Fort Rutledge most of the time, and when Bowie's and Moore's companies took to the field together, Bowie was the superior officer. Bowie and Tutt communicated primarily

regarding the movement of supplies in the upcountry or to frontier Georgia, when the theatre of action was there. Tutt planned to come by Fort Independence at least once, but there's no record of Bowie ever going to Fort Rutledge. Both garrisons provided support for various militia activities: supplies from their stores; men for escorting wagons or important persons; guards for prisoners awaiting trial; musicians for formal military activities; and expertise and personnel for courts martial. Tutt's company had a spy and an armorer (Tutt Account). Bowie and Tutt both actively recruited men for their companies but at least once Bowie requested and got five additional men sent from Ninety Six by Williamson. Enlistment was for three years or for the duration of the war. A bonus of $30.00 was given for enlisting for three years, and the same for enlisting for the duration, plus a bounty of land (Bowie Account: Orders from Governor Rutledge to John Bowie, August 19, 1777).[1]

The independent companies occupied a curious niche in that they were, in effect, neither militia nor line. Most of the time when they were in action they were with Pickens' militia and in this role saw duty with both Georgia militia and Georgia line troops. Whether they saw action with regular South Carolina line troops is uncertain, but they may have done brief stints as relief troops. Bowie was at the Battle of Stono Ferry in June of 1779 (Logan 1980:69). If Bowie's presence at Stono implies that his independent company saw action there, then that action represents at least one instance where the independent company acted with regular line troops.

The specific actions of a military nature in which the Fort Independence garrison was involved were sometimes merely routine and sometimes hazardous and critical to the general course of the war. The earliest assignment covered by the Bowie Papers was guarding the jail at Ninety Six during the time of the circuit court meeting there. Bowie, another officer, and thirteen men were at Ninety Six from mid-March through at least early June, 1778 (Bowie Papers, Documents 20 through 36). The prisoners being held for trial were apparently Tory sympathizers. The Ninety Six jail was not very secure, and there was concern that "the disaffected" would attempt to free the prisoners before justice could be done. In mid-April, orders were emphatic regarding alertness and caution for the guards: arms at hand at all times, no leaves, a separate guard over the arms, roll calls morning and evening, and sobriety encouraged. Sometime in May "the Criminals" were to be executed and Williamson warned Bowie that their desperation would require extra vigilance on the part of the guards. Early in May, Williamson refers to some enemy group eluding the patriots, but it is not clear whether they were escapees from the Ninety Six jail or some other group.

1. That the bonus was specified in dollars rather than in pounds at this date seems odd, but the document stated, "Thirty Dollars", unequivocably.

Early in August of 1778, Bowie, having returned to Fort Independence, received word from Williamson that Creeks were rumored to be preparing for attacks on the Georgia frontier and was advised to stock up on flour, salt and cattle "in case of the worst". By early October, Bowie and Moore and their men were in north Georgia, Bowie at Phillip's Fort and Moore at Neal's Fort, with orders to continue providing guards for farmers harvesting their fields until relieved by some militia troops Williamson was sending out. They were joined by Georgia militia troops for a couple of weeks and then Bowie was ordered to march his and Moore's men back to Fort Independence (where they were by November 5, 1778) with the expectation of going out to relieve militia troops at some unspecified time in the near future (Bowie Papers, Documents 38 through 45).

No further military actions are detailed in the Bowie Papers, but Bowie's participation in the Battle of Stono Ferry in June of 1779, mentioned above, could indicate the presence there of the Fort Independence garrison. Similarly, Bowie was at the storming of Savannah in September and October of 1779, and thus his independent company may have been there, too. General Lincoln is said to have gathered every soldier in South Carolina for his assault on Savannah (Hillborn and Hillborn 1970:95). Tutt's independent company was there (Tutt Account, 1824 Deposition of John Looney), which enhances the probability that Bowie's was, also. Both Stono Ferry and Savannah were difficult and dangerous battles, where the Patriots suffered heavy losses and set-backs which allowed the expansion of the British sphere of military control and resulted ultimately in prolonging the war in South Carolina.

4.0 ARCHAEOLOGICAL RESEARCH

4.1 PHASE I: TEST OBJECTIVES, STRATEGY, AND METHODS

The site on which the remains of Fort Independence were located has long been known as such to some residents of Calhoun Falls and Lowndesville, towns nearest to the site. Eighteenth-century items such as musket balls and gun flints would occasionally be turned over by the plow and these collected as curios by interested local people. In late 1979, Mr. H. L. Carlisle led Army Corps of Engineers and Interagency Archeological Services personnel to the site, identifying it as Fort Independence. Tests by the government archaeologists turned up several eighteenth- century artifacts in association with a stone foundation.

With this foundation as a starting point, Phase I testing on the site was intended to determine primarily if there had been a fort there, and secondarily, if a fort were indicated by archaeological remains, whether the remains were, indeed, those of Fort Independence. In this phase, it was also important to evaluate the archaeological potential of the site and to assess the physical aspects of the possible fort. In the absence of most of the documentary information that later became available, a strategy designed to determine the size, shape, and nature of a possible fort was needed. The development of this strategy drew on two different sources of inspiration: 1) the current lay of the land where the fort was allegedly built, and 2) eighteenth- century fortification theory, as set forth in the contemporary manuals.

Fortification theory applicable to a fort built circa 1774 would suggest that the fort enclosure should be a palisade, with possibly a surrounding earthwork parapet/ditch complex. Archaeologically, a palisade would be represented by a trench or series of closely spaced postmolds evident in the subsoil, outlining the enclosed area. A parapet/ditch complex might still be visible as surface contours. Both of these kinds of remains could be expected to be continuous archaeological features. Fortification theory would also predict that the fort would be situated and oriented to maximize defense of those parts of the fortified area most vulnerable to attack, i.e., where a road or a river gave tactical advantage to enemy troops or commanding positions gave advantage to artillery.

With these concepts as guidelines, the strategy designed to locate fortifications at 38AB218 required, first, simple observation of the terrain around the knoll top for signs of a continuous, low-relief contour of a regular shape; and, second, exposure of the subsoil in a systematic way which would reveal enough of the expected palisade trench or postmold series to allow the projection of the entire regular polygon called for by formal fortification theory.

No remains of earthworks could be observed on the surface of the site, although what was probably intentional, agricultural terracing was visible. In order to look for subsoil remains of fortifications,

backhoe stripping was planned. Based on the assumption that the fort would have had a wall or at least a bastion projecting toward the Rocky River, long, narrow transects to be stripped to subsoil were laid out to run parallel to the river such that, hypothetically, they would cut across the defensive works. A convenient but arbitrary origin and orientation for a coordinate system grid was chosen, and parallel backhoe transects staked out every six meters running 22 degrees west of magnetic north. Figure 5 shows a plan of backhoe transects and stripped areas in relation to the located fort features. Twenty-one backhoe transects, 90cm wide and 18 to 60m long were stripped to subsoil, the depth varying between 20 and 80cm. One of the backhoe transects nearly perfectly coincided with the entire east wall of the fort stockade, making it possible to locate the rest of the stockade by projection and backhoe stripping.

The knoll top and most of the southwest quadrant of the site were excluded from the backhoe stripping. The existing remains of the stone foundation on the knoll top required more careful treatment than could be afforded by backhoe work, so hand excavation and dry screening for thorough artifact recovery and minimal destruction were carried out in that area. The southwest quadrant was left unsampled because of the existing access road and adjacent woods. The same grid system used for the backhoe transects was imposed as 2 x 2m squares over the knoll top area for the purpose of contiguous hand excavation, with dry screening of deposits. Use of cultural levels within squares or features as collection units was planned, with baulks retained as needed to maintain vertical control. In all, an area of some $33m^2$ was hand excavated to delineate the extent of the remains on the knoll top (Figure 6).

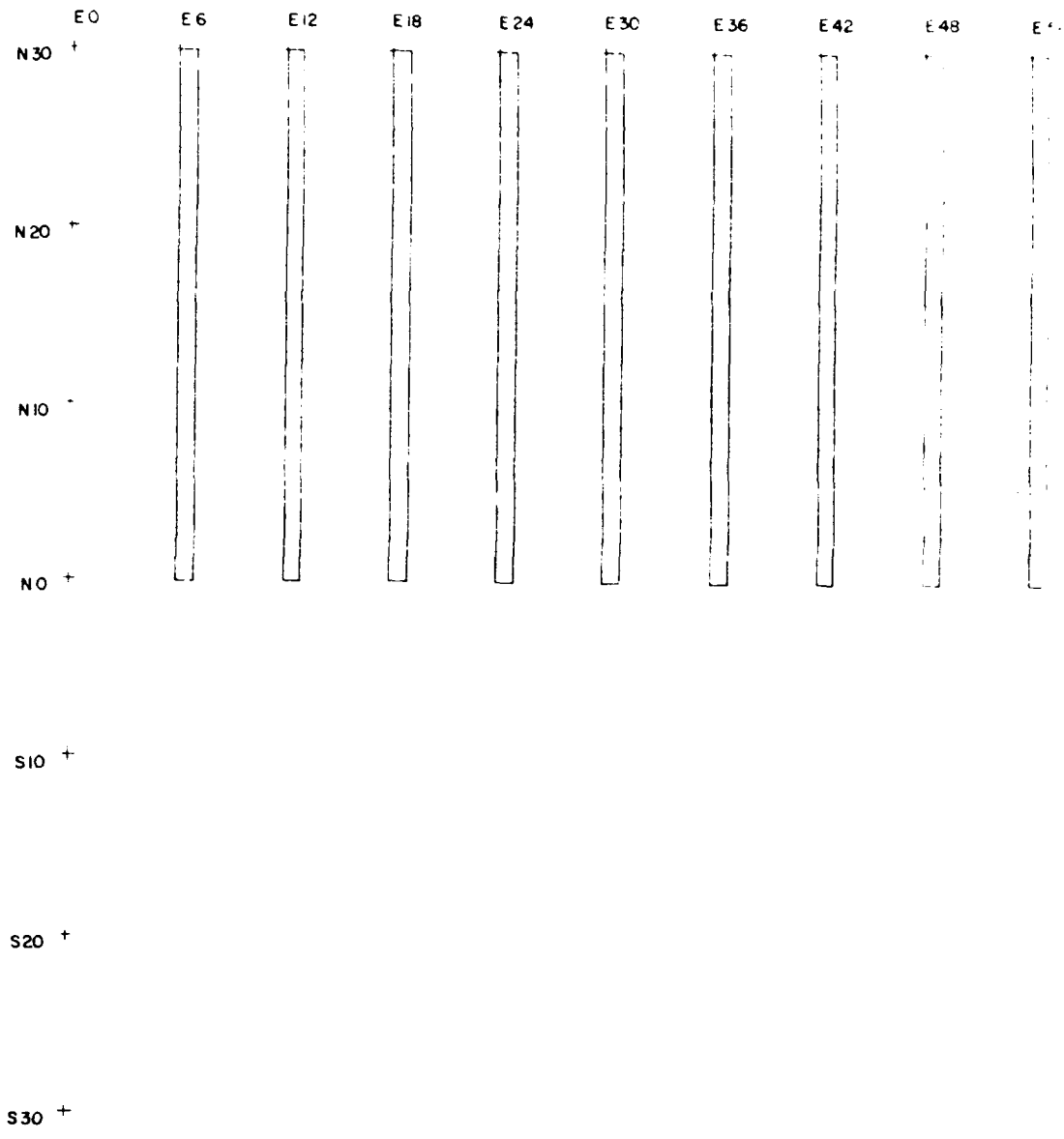
Intensive Phase I testing resulted in the fortuitous location of the remains of the entire stockade, indications of two structures and two subsoil features within the stockade enclosure, and a large feature outside the stockade where the absent southwest bastion of the stockade would have been. Limited testing indicated the presence of possible archaeological remains in the wet deposits of a nearby natural spring and inconclusive indications of outlying archaeological remains present in the subsoil of stripped backhoe transects. Both of these areas would require more evaluation in subsequent work. In addition, limited survey in the nearby woods located two rock mound features considered worthy of additional assessment.

4.2 PHASE II: EXCAVATION OBJECTIVES, STRATEGY, AND METHODS

As outlined in the interim report detailing the outcome of Phase I testing and proposing additional work based on those findings, Phase II work had the following objectives:

1) To treat well-assessed archaeological remains thoroughly.

2) To define, test, and treat as deemed appropriate those archaeological remains located but not well-assessed in Phase I work.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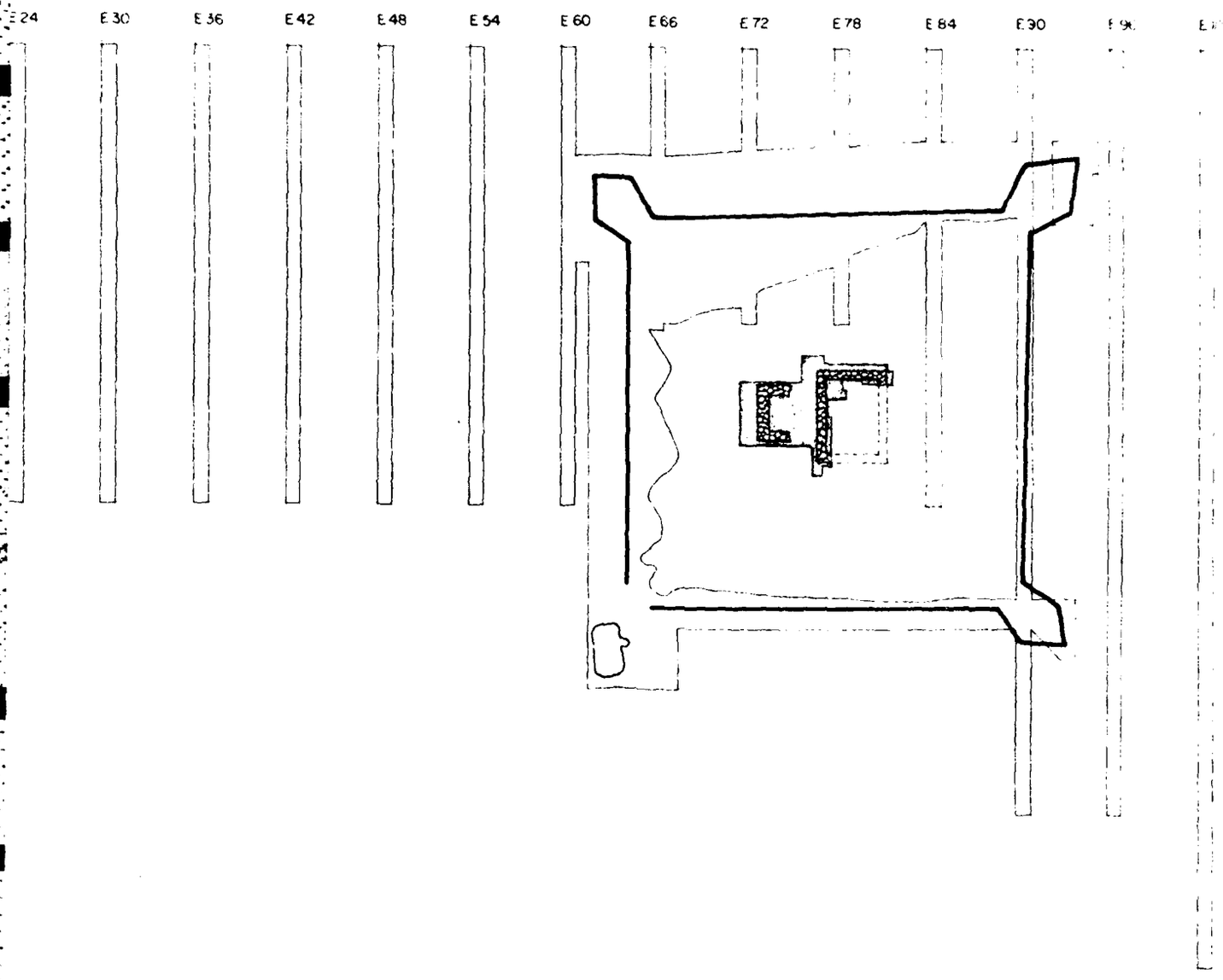
ROCK CONCENTRATION
SPRING AREA

FIGURE 5



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PHASE I TE

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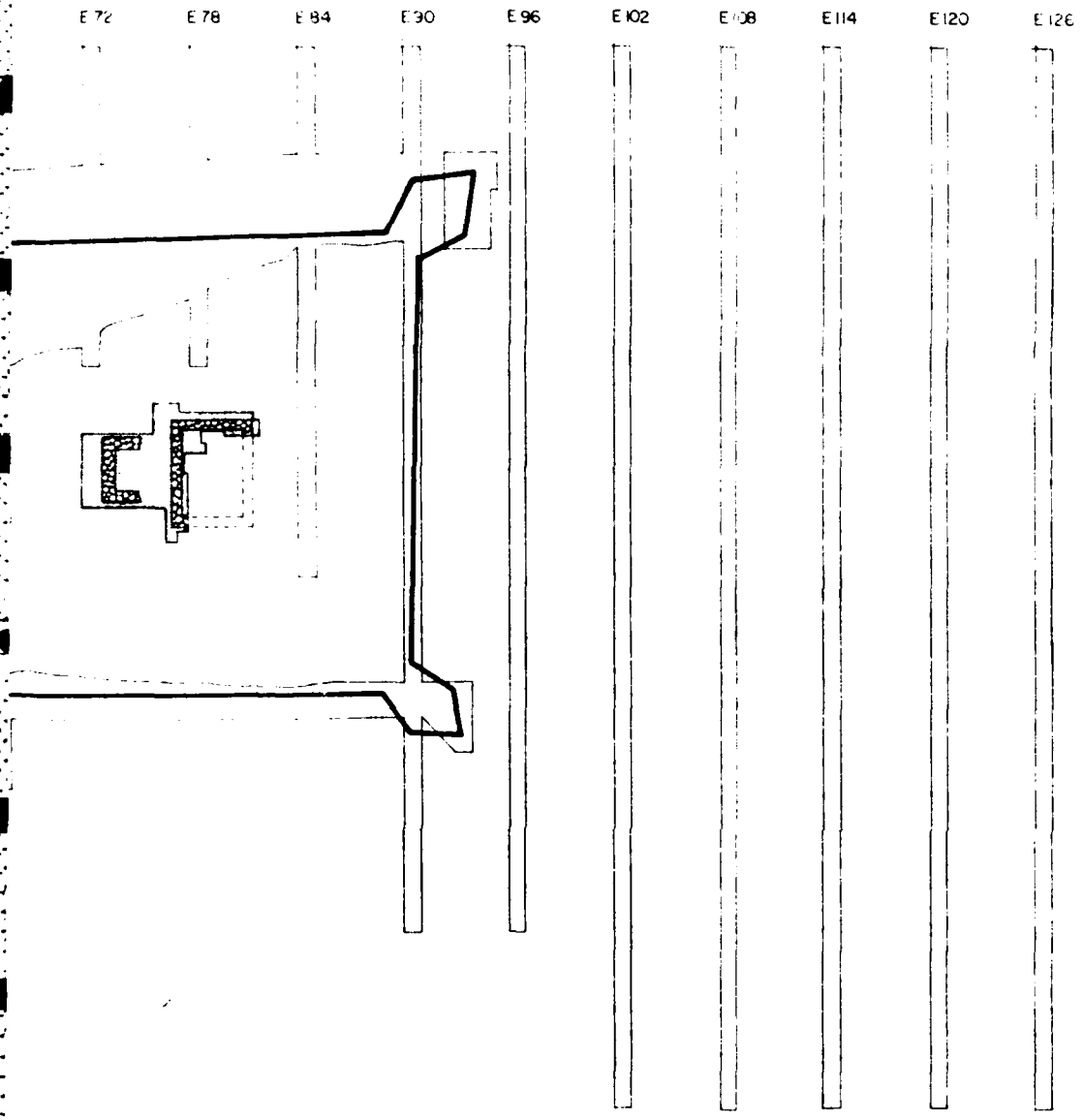
SPRING AREA

2



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0 5 10 20 METERS

0 25 50 FEET

GN

PHASE I TESTING

OUTLINE OF STOCKADE

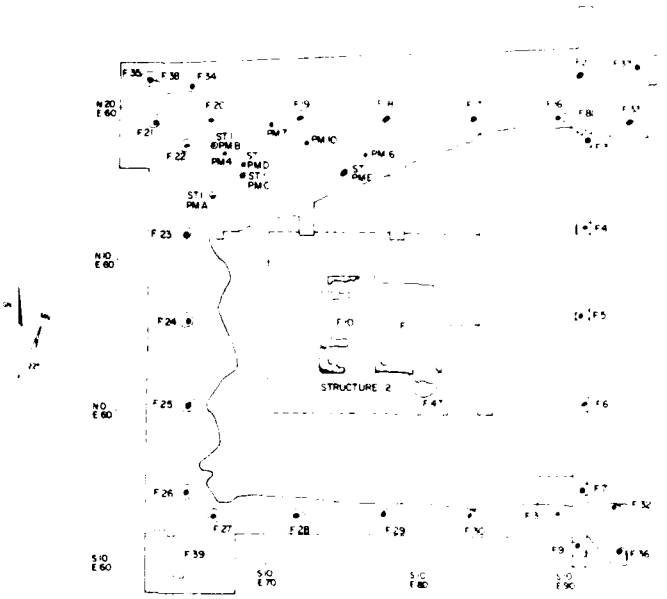
HAND EXCAVATED AREA

GRANITIC & QUARTZ FIELDSTONE FOUNDATIONS OF CENTRAL STRUCTURE

BACKHOE TRANSECTS & EXTENT OF BACKHOE STRIPPED AREA

INTERPRETIVE LINE

3



FORT INDEPENDENCE
38 AB 218

PHASE II EXCAVATIONS

HAND EXCAVATED AREAS

BACKHOE EXCAVATED AREAS
(CENTERLINES APPROXIMATED)

SPRING AREA

FIGURE 6

3) To locate and treat as deemed appropriate possible additional archaeological remains, either hypothesized and thus explicitly tested for, or fortuitously located.

4) By means of 1, 2, & 3, above, to refine the relative intrasite chronology (to the extent the data allow) in order to compare the earlier, primarily domestic occupation to the later, primarily military occupation.

To implement these objectives, specific discovery and excavation procedures were proposed. (Figure 6 shows the locations of all the following archaeological remains.) All stockade postmolds were to be hand excavated and their clay- filled holes were to be profiled by backhoe. All of the rubble fill of the main structure's (Structure 2) cellar (Feature 1) was to be hand excavated and water screened. All 2m grid squares surrounding Structure 2 were to be hand excavated and water screened. All well-defined features (trench Features 8 & 38, and midden Feature 39) were to be hand excavated and water screened. Less well-defined remains were to be partially hand excavated and water screened as an evaluative procedure with more such work planned if warranted. This procedure was to apply to the lesser structure found within the stockade enclosure (Structure 1), to the spring area remains, and to the rock mounds found in the woods (Features 43 and 44).

A combination of backhoe stripping and hand excavation was planned for outlying remains located in backhoe transects. The most promising was an area southeast of the fort where three adjacent stripped backhoe transects revealed three square postmolds thought to indicate a possible structure. The planned procedure there was to hand excavate some 25% of the relevant area for artifact recovery and then to backhoe strip all of it to reveal any subsoil patterning. The other subsoil remains observed in outlying, stripped backhoe transects were to be re-exposed (all backhoe transects having been backfilled at the end of Phase I testing because of the regular presence of a cattle herd in the area), profiled by machine, and treated thereafter by hand as deemed appropriate, the expectation being that profiling would prove the greater proportion of such remains to be natural in origin.

Finally, efforts to locate new archaeological remains were to be concentrated on two areas. The first was the unexcavated area within the stockade. There, the 2m grid system was to be imposed over the entire area, with 50% of the resultant squares to be hand excavated and water screened. The 50% sample of squares was to be selected on a random, probabilistic basis and any new archaeological remains thus found were to be dealt with as appropriate, with hand excavation emphasized, generally. The second area where new remains were to be sought was contiguous with the east wall of the known stockade and encompassed a square area up to 20m on a side. This was to be stripped by machine to subsoil in order to reveal any remains of the hypothesized, second and larger stockade. If such remains were encountered, they were to be hand excavated. Any other new archaeological remains were expected to be found only as a result of the work procedures summarized above. Any such new remains were to be

dealt with as time and their assessed significance would deem appropriate.

As the Phase II work proceeded in the field, various conditions and developments necessitated tactical changes in the above proposed strategy. Difficulty in setting up adequate water screening facilities close to the site resulted in the substitution of dry screening for most deposits. Only those deposits which were so wet that dry screening was impossible were water screened. The deposits in the spring area and the lowest zone of the cellar fill were in that category. Some deposits were troweled out but not screened: the stockade postmolds; the postmolds of Structure 1; and Features 8, 38, and 39.

Other changes in strategy were the result of time limitations, where work given a high priority required more time to complete than originally planned, and other work, judged less crucial to understanding the range of activities at the site, was thereby given less attention than would have been the case, ideally. Thus, the difficulties encountered in undertaking complete excavation of all deposits associated with the central structure, (obviously a focus for activities at Fort Independence) absorbed much of the hand labor intended for the planned, systematic, hand excavation of 50% of the unexcavated area remaining inside the stockade enclosure. In order to explore this area, then, another approach was substituted which was considerably less labor intensive than hand excavation, but also less certain to disclose subsurface remains. This approach involved use of a Fisher Model 553-D metal detector employed by an experienced operator. A systematic survey with this instrument covered the entire area inside the stockade, with the various responses of the instrument recorded within the spatial framework of the 2m grid system. The instrument was designed to emit differing responses to ferrous as opposed to non-ferrous metals, and the operator could distinguish shallow as opposed to deep occurrences of metallic objects, single as opposed to multiple occurrences of metallic objects, and large as opposed to small metallic objects, all by the pitch and duration of the response signal. The absence of post-eighteenth-century occupation and the minimal human impact of agricultural and pastoral use made the employment of the metal detector very efficient, since little time was lost in chasing non-productive signals, e.g., pop-tops. The adequacy of this approach to finding subsurface remains at 38AB218 would be a function of whether or not the subsurface remains contained metallic objects which would cause the metal detector to react. Those features with metal items present would be found and those lacking metal items would be passed over.

With the metal detector responses as indicators, then, those squares registering the presence of concentrations of metal or deeply buried metallic objects were slated for excavation to subsoil, with the subsurface remains evaluated and treated in an appropriate manner. A back-up plan accompanied the substitution of the metal detector survey for the partial hand excavation of the enclosed area. Once the metal detector results were evaluated and any new features excavated, a backhoe would strip the remaining area. This

would provide a check on the adequacy of the metal detector survey and reveal any subsurface remains that escaped detection by the instrument due to absence of metallic contents.

Unexpected complications arose in the employment of the metal detector which somewhat reduced its usefulness, but which probably did not negate the overall reliability of the results of the survey. Apparently, certain properties of the subsoil clay deposits on this Piedmont site rendered the discriminator function of the instrument unusable; i.e., at 38AB218 the machine could not distinguish ferrous from non-ferrous metals. Also, the same subsoil properties produced some anomalous responses. The few signals indicating deeply buried metallic objects were found to be from undisturbed subsoil clay, with the signals disappearing when the clay was broken up with pick and shovel. The high iron content of the subsoils in the Piedmont area is obvious wherever exposure occurs (road cuts, plowed fields, etc.), and this must be related to the problems experienced in the use of the metal detector at Fort Independence. Nonetheless, almost all signals indicating shallow (plowzone) presence of isolated metallic objects were reliable, with many nails, several lead balls, plow parts, a fork handle, and miscellaneous pieces of scrap iron recovered. No concentrations of metallic objects were signaled, and, as noted above, no deeply buried metallic objects were reliably indicated. Thus, the presence of additional subsurface features inside the stockade was contra-indicated by the metal detector survey and the follow-up backhoe stripping was scheduled according to the substitute strategy for this area.

The utility of the metal detector as a discovery tool was proven sufficiently by the survey inside the enclosure, so additional use was made of it for the evaluation of the possible structure defined in the backhoe transects outside the enclosure, to the southeast of the fort. As originally planned, this possible structure was to be assessed by a combination of hand and machine excavation techniques. In the revised plan, the metal detector was substituted for hand excavation as a means of associating artifacts from the plowzone with the structure whose subsoil remains were expected to be revealed by backhoe stripping. The metal detector found only two nails in this area and so the stripping was scheduled to follow up the metal detector work there, also.

Final use of the metal detector at the site was a general survey of the area surrounding the fort. Although not originally planned, the opportunity to economically explore this larger area for additional archaeological remains could not be ignored. At least the extent of the area sampled by backhoe transects (see Figure 5) was covered by the metal detector survey, with results being negative for anything but isolated finds. Several fort-period artifacts (a horseshoe, a second fork, several nails) were recovered, along with nineteenth- or twentieth-century agricultural equipment or hardware items. These negative findings justified the abandonment of the original plan to devote more attention to the various possible archaeological remains observed in the Phase I stripped backhoe transects. The metal detector results supported the prediction that

much of what was observed in the backhoe transects was of natural origin.

Adverse soil conditions ultimately resulted in further changes to the already modified strategy for the areas where the metal detector survey had economized on hand labor. As discussed above, backhoe stripping of the plowzone was the follow-up plan for the unexcavated area inside the fort and for the area where the possible structure had been defined in backhoe stripped transects southeast of the fort. For these and other tasks, the machine was brought in relatively late in the field season, after a sustained period of unseasonably dry weather. Very dry soil conditions had complicated even the ongoing hand excavation, so backhoe stripping was first attempted on the possible structure southeast of the fort in order to evaluate the results prior to working on the more sensitive area inside the fort. The results were quite unsatisfactory. Plowzone and subsoil pulled out together in undifferentiated chunks, leaving a very broken and irregular surface. This had not happened in the Phase I backhoe stripping, but apparently the aridity at the time of the Phase II efforts greatly exacerbated a problem not apparent when the soil was moist, namely, that there was no ready separation between the plowzone and the subsoil because the area had not been plowed in recent years. So the gross irregularity of the subsoil surface stripped when too dry made soil color and texture discriminations impossible in Phase II. Not even the square postmolds first noted in Phase I could be re-located. Backhoe stripping as a technique was abandoned at that time for all areas. As a result, the conclusion that no additional subsurface remains were to be found either inside or outside the fort, based on the results of the metal detector survey, would have to stand on its own merits.

Most of the other strategy changes which field conditions and the general course of the work necessitated were minor ones. Superficial clearing of the two rock mound features in the woods near the fort was sufficient to disclose that one, Feature 44, was nothing more than a pile of field stones and probably the result of agricultural clearing, while the other, Feature 43, although more purposeful and culturally significant, was found to postdate the fort. Thus, no excavation was done on these features, although observations were made on Feature 43 which will be discussed more fully under the Archaeological Findings section of this report, below. Shortage of time resulted in three squares along the east side of the central structure remaining unexcavated. The work that was completed on that side of the structure revealed neither subsoil features nor stratigraphic complexity, so probably little of importance was missed by the failure to excavate that part of the periphery of the main structure. Hand work and water screening in the spring deposit were carried out as originally planned and a feature, Feature 46, was defined there. An adjacent part of that feature was later exposed by use of a backhoe, with no further attempts made to recover artifacts from the wet overburden. The initial hand work was conclusive regarding the age and nature of Feature 46, and the saving of time and effort afforded by machine work justified its auxiliary use for further definition of the layout of that feature and exploration of deeper deposits.

With regard to the objective of locating the remains of an hypothesized later and larger stockade, excavation of the postmolds of the known stockade provided ample evidence early in the Phase II fieldwork that the known stockade had, indeed, been burned in place, not dismantled as had been suggested in the interim report. Since the known stockade clearly was in existence at the time of the destruction of the fort and since it seemed unlikely that two stockades would have been in place simultaneously at a frontier fort, the backhoe stripping intended to explore for the hypothetical, second stockade was abandoned, even before the problems brought about by the dry soil conditions were encountered.

Specific efforts to find other new aspects of the fort's occupation were neither exhaustive nor systematic, but cursory survey work in the woods north and south of the fort produced no further evidence of obvious structural remains. However, the presence of large chunks of slag on the surface of the ground some 20m south of the southwest corner of the stockade drew attention to that area. Superficial clearing of humus indicated a low, squarish mound whose center showed signs of burning. This was judged to be an area where blacksmithing could have occurred in conjunction with the occupation of the fort and the mound was designated as Feature 48. It was subsequently hand excavated, with the removed deposit being dry screened. Other new features were encountered in the process of dealing with old ones according to plan. Feature 47, the cellar entry of the main house, was an element of Feature 1, the cellar itself, and further elements of the masonry foundation of the main house were defined when the debris zone around the fireplace foundation, Feature 10, was excavated. Also, the debris zone just mentioned was designated Feature 45, defined in extent, and recognized as having two strata.

Overall the most important aspects of the site were dealt with according to plan. The treatment of the central structure, the stockade remains, and the trash and midden features was only modified to the extent that dry screening replaced water screening in most cases, or fill was troweled out rather than shoveled and screened. The strategy modifications detailed above did not affect the successful accomplishment of most of the objectives of the archaeological investigations. The known remains were thoroughly treated, the partially defined remains were assessed and dealt with conclusively, and new remains were systematically sought and definitively treated once located. Thus the data collected are representative of the historic occupation at the site and are derived from an adequate sample of that historic occupation. More limited success was achieved in refining the intrasite chronology (distinguishing the domestic occupation from the military occupation), but the fault for this lies with the data limitations, not with the archaeological strategy or methods. This matter will be discussed further, below, in connection with the archaeological deposits associated with the central structure.

4.3 ARCHAEOLOGICAL FINDINGS

4.31 Structures And Associated Features

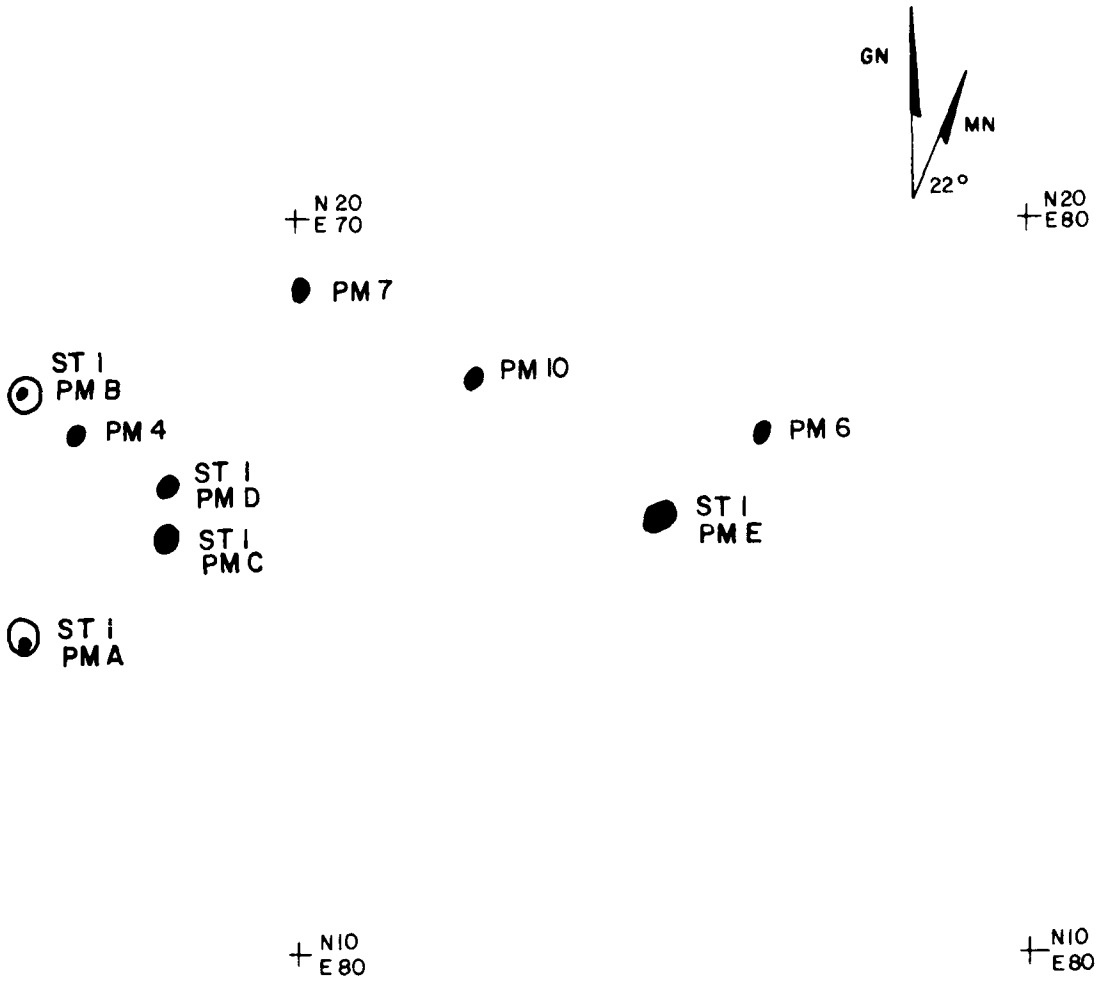
Structure 1

During Phase I stockade exploration, a series of postmolds and what appeared to be sills in the red clay subsoil were exposed by backhoe stripping in the northwest part of the fort within the stockade line. These postmolds and sills were designated Structure 1, but no detailed evaluation of this structure was made until the Phase II work. When the entire area was troweled and all the dark spots and soil stains could be seen at once and graphed, it was apparent that several different kinds of archaeological and natural phenomena were present. Originally, sixteen possible postmolds and two sills were identified. Excavation reduced these to nine postmolds (Figure 7) and no sills, the other spots and stains having been found to be tree root molds and animal burrows. The nine postmolds could be further broken down into three types. The first was a posthole/mold type which was a smaller version of the large posthole/molds of the stockade. There were two of these, designated Postmold A and Postmold B of Structure 1 (Figure 8). Both A and B molds were flat bottomed and the mold fill of both was dark brown clay loam with charcoal, small rocks, and fort-period artifacts present. (Table 1 gives the metrical attributes of all Structure 1 postmolds.)

The second type of postmold was a shallow, basin-like mold with a flat bottom. These were of a larger diameter than the first type. Three of this second type of postmold were identified and designated Postmolds C, D, and E of Structure 1 (Figure 9). All of these molds had dark brown clay loam fill with charcoal in it. Postmolds C and E had fort-period artifacts. These molds have been interpreted as the remains of wooden piers, not posts.

The third type of postmold was small in diameter, round to oval in plan, of medium to deep depth, and tapered to a point in profile shape. Four such postmolds were defined. Along with the tree root molds which were subsequently eliminated from the analysis, this third type of postmold had been designated by numbers. The four which were identified as cultural in origin were Numbers 4, 6, 7, and 10 (Figure 10). All contained dark brown clay loam flecked with charcoal. Numbers 4 and 6 yielded fort-period artifacts but the other two had no artifacts.

The five larger, letter-series postmolds form a symmetrical pattern in plan, of which the number series seem independent. It is possible to recognize and describe the pattern formed by the letter-series postmolds, and it is possible to extrapolate some of the characteristics of the posts the letter-series postmolds represent, but beyond these elementary observations, Structure 1 is an enigma. Postmolds A and B were the remains of deeply anchored posts set 3.30m (10ft 10in) apart and aligned parallel to the west curtain of the



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0 1 2 3 4 5 M

0 5 10 20 FT

STRUCTURE I & MISCELLANEOUS POSTMOLDS

● POSTMOLD

⊙ POSTHOLE / MOLD

FIGURE 7

Figure 8. Structure 1, Postmold A; example of Type I posthole/mold.

Figure 9. Structure 1, Postmold E; example of Type 2 postmold.

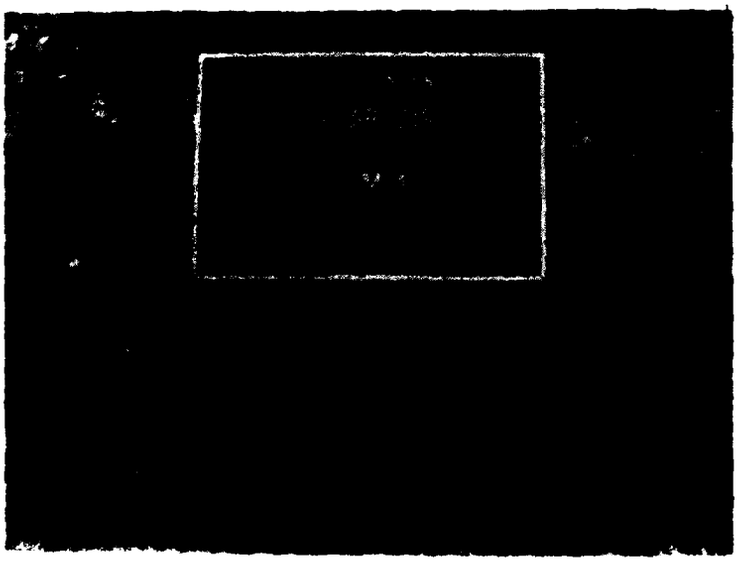


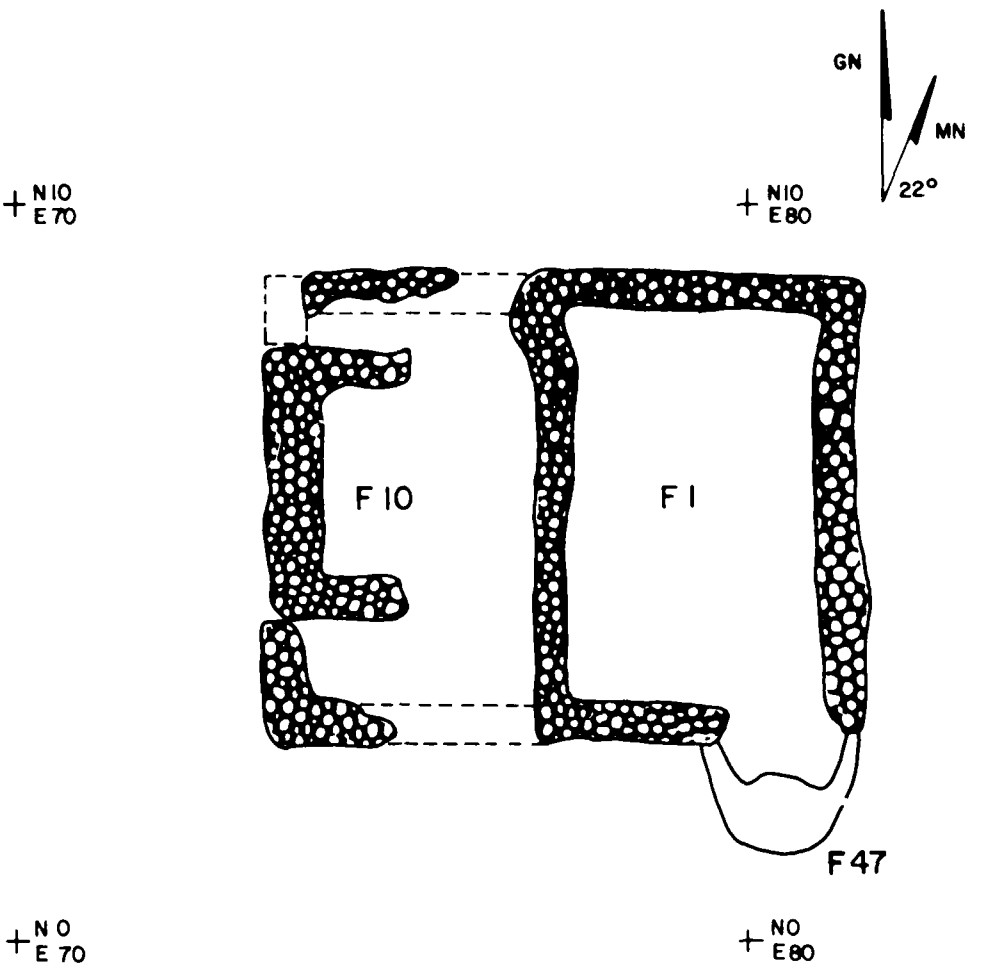
Figure 10. Postmold 4; example of Type 3 postmold.

stockade. Postmolds C and D were the remains of shallow piers set 70cm (27 5/8in) apart and also aligned parallel to the west curtain. Postmold E was the remains of an isolated, larger, shallow pier, at a distance of about 6.70m (22ft) west of C and D. If an imaginary east-west line bisecting first the distance between Postmolds A and B (mid-points) and then the distance between Postmolds C and D (mid-points) were drawn, it would intersect approximately the mid-point of Postmold E. In other words, there is a bilateral symmetry around an east-west axis exhibited by these postmolds. The posts represented by A and B, being deep, were intended to hold up something of some height and were capable of resisting lateral force. The posts represented by C, D, and E, being shallow, were more like props to hold something horizontal up off the ground a short distance and were only capable of stability under vertical force, i.e., weight.

Adding the third type of postmold to the picture did not make the pattern any more meaningful. It is probable that the posts represented by the third type of postmold were not part of Structure 1, though just what purpose these smaller, deepset posts may have served was not evident, either. It is entirely possible that more postmolds of the first and second types complete the pattern of Structure 1 but were located in the unstripped part of the site and so were not found. No plowzone artifacts were recovered to aid in the identification of Structure 1 because this area of the site was stripped by backhoe. Artifacts were present in the postmolds because Structure 1 burned and the holes filled up with soil and whatever was lying on the extant surface. However, the artifacts recovered from Structure 1 postmolds were neither unique nor informative regarding function (nails, bone, wine bottle glass, a brass button), and Structure 1 must remain tentatively identified as some kind of animal pen or shelter.

Structure 2: The Main House

The main structure of the fort, located on the crest of the small knoll which is the center of the fort, was designated Structure 2. The surviving remains of this structure were found to consist of the sturdily constructed, granitic and quartz fieldstone masonry foundations of a fireplace, a cellar with an outside entry, and part of a continuous linear support foundation for the structure itself (Figures 11 and 12). The fireplace was designated Feature 10 and the stone-lined cellar with its fill, Feature 1. Associated with these masonry features were several relevant archaeological deposits: a rubble fill in the cellar capping a layer of burned and collapsed structure remains; an irregular, stratified zone of burned structure debris spread out around the west end of the structure over a deposit of refuse (together designated Feature 45); a redeposited layer of sterile subsoil clays resulting from construction of the cellar and a generalized plowzone stratum extending over the whole site which is what remains of the stockade-enclosed occupation surface of the fort inhabitants.



FORT INDEPENDENCE
38AB218

0 1 2 3 4 5 M

0 5 10 20 FT

STRUCTURE 2 PLAN

GRANITIC & QUARTZ FIELDSTONE

---- INTERPRETIVE LINE

FIGURE 11

Figure 12. Structure 2, overview in plan, looking west. Cellar in foreground, chimney foundation in background.

TABLE 1: METRICAL ATTRIBUTES OF STRUCTURE 1 POSTMOLDS IN CENTIMETERS AND INCHES

	Postmold Number or Letter	Mold Diameter		Hole Diameter		Mold Depth	
		cm	in	cm	in	cm	in
Type 1	A	20	7 7/8	38	14 3/4	30	11 13/16
	B	20	7 7/8	42	16 1/2	34	13 3/8
Type 2	C	29	11 3/8	-	-	6	2 3/8
	D	25	9 13/16	-	-	4	1 5/8
	E	38	15	-	-	10	3 7/8
Type 3	4	17	6 11/16	-	-	44	17 1/4
	6	22	8 11/16	-	-	64	25 3/8
	7	26	10	-	-	48	18 7/8
	10	17	6 11/16	-	-	27	10 5/8

The excavation of the central structure used the squares of the 2m grid system as data recovery units, except for the rubble fill of the cellar. That deposit was divided into four unequal quadrants by two perpendicular, 50cm wide baulks aligned with the grid system. These quadrants were the data recovery units for Feature 1. For vertical control the natural/cultural strata themselves were utilized for all Structure 2 deposits once these were established by the Phase I testing. Absolute elevations in meters above mean sea level were taken from a permanent transit station just north of Structure 2 on the highest part of the site.

All deposits from 2m squares were excavated by shovel and screened through 1/4in hardware cloth, as were the two topmost layers of the cellar fill. The rest of the cellar fill was shoveled out and water screened. When the cellar quadrants were excavated to the subsoil clay floor and the profiles of the baulks drawn, the baulks were removed, but only the bottom stratum of the baulks was water screened.

The stone masonry features of the main house were built up within excavated holes using large, irregular, granitic and quartz fieldstones, each hand-fitted to interlock (Figure 13). Sometimes, small stones were wedged between larger ones to secure them. Yellow subsoil clay was packed between the face of the stonework and the face of the subsoil hole into which the stonework was let. This was done on all sides of the fireplace footing and on the subsoil face of the cellar stonework. Thus, there is no builder's trench, per se. The stonemason left himself very little working room and he filled that small space with clay as he built up the masonry. It is possible that clay was similarly used as a filler within the stonework, although this was not superficially evident. Some indirect evidence for the use of clay in this way will be presented below.

The fireplace foundation was excavated on all sides. Its mode of construction and materials are described above. One 2 x 2m square, taking in most of the northwest (outside) corner of the fireplace foundation, was excavated all the way to the base of the stonework and a little beyond to allow observation of its construction and relation to the stratigraphic levels in the area, as well as measurement of its extent down into the subsoil. Fireplace dimensions were: length, 3.66m (12ft); width, 1.83-1.98m (6ft-6ft 6in); average width of stonework, .56m (1ft 10in); total height of surviving stonework, .70m (2ft 3 1/2in).

The stonework of the cellar formed a facade from the cellar floor up on all four cellar walls, interrupted only at the southeast corner, where a wide gap in the stonework was left for a door to the outside of the structure. Although well below the modern surface when found presumably the cellar stonework originally extended above the ground level to provide a foundation for the eastern half of the house.

The outer dimensions of the cellar were: length (north-south), 6.25m (20ft 6in) and width (east-west), 4.45m (14ft 7in). The height of the surviving stonework facade from the cellar floor was measured at the middle of each side with the following results: north side, 1.24m (4ft 3/4in); east side, .91m (2ft 11 3/4ft); south side, 1.11m (3ft 7 3/4in); west side, 1.28m (4ft 2 1/2in). The average width of the stonework of each wall was .44m (1ft 5 1/2in).

The western half of the structure was supported by a linear masonry foundation which probably was continuous around the whole perimeter of the structure, directly abutting but not joining the fireplace and the cellar stonework. Only two remnants of this foundation were recovered: the southwest corner and a part of the long, north section (Figure 11). Neither foundation remnant was built up from a deep subsoil hole like the fireplace and cellar facade were. At best, the stones were laid in a shallow, prepared trench, probably no more than 6in below the fort-period ground level. This is probably the reason why only remnants of this foundation survived. The assumption that the foundation originally extended around the entire perimeter of the house was based, first, on the presence of several isolated stones found in the area between the northern foundation remnant and the cellar stonework, and second, on the basis of the dissimilar shape and length of the two foundation remnants recovered, i.e., symmetry was assumed.

Measurements on the perimeter foundation remnants were: to the south, the foundation extended 1.73m (5ft 8in) from the fireplace to the southwest corner, where it turned east and extended another 1.83m. The average width of this remnant was .52m (1ft 8 1/2in). The northern remnant was 1.93m long and .46m wide (1ft 6in), at the maximum.

The outer dimensions, then, of The Main House can be derived from the stonework foundations: total length (east-west) = 8.08m (26ft 6in), and width (north-south) = 6.25m (20ft 6in).

The stratigraphy recorded in the squares within and around Structure 2 consisted of three distinct layers (Figure 14B), not all present in all squares. The topmost zone, designated Level A, was very dark and humic and yielded fort-period artifacts. This level was observed in all squares in the Structure 2 area. Level A ranged between 3 and 18cm in thickness and averaged 7.30cm. The middle zone, Level B, was a sterile, mottled, sticky, dense clay of mixed colors--tan, yellow, and orange--veined with both greenish, decomposed granite and dark brown topsoil. This level was limited in horizontal extent. It ranged between 10 and 24cm and averaged 16.90cm in thickness. The last zone, Level C, was another dark, humic zone that graded into red clay subsoil. Level C had both prehistoric and historic artifacts, but in sparse quantities. This level was also limited, occurring only where Level B had preserved it. It ranged between 4 and 17cm and averaged 9.20cm in thickness. It was noted that Level A but not Level B lay over the rubble fill of the cellar, and, once the cellar floor had been exposed, it was apparent that Level B was backdirt from the original excavation of

Figure 13. Example of stone masonry, rear of Feature 10, looking south.

the cellar. The cellar floor was subsoil clay, yellow with shadings into tan and orange colors, and with decomposed granite bedrock in occasional patches--identical materials to those composing Level B, but in differing proportions. Level B extended in a semicircle around the west end of the central structure with a radius of some 1.5 to 2.00m, lensing out at its edges. Two small, isolated patches of Level B were observed to the north of Feature 1. If Level B can be interpreted as backdirt, then Level C must be the original humus/topsoil zone at the time of the construction of the cellar. The hole for the fireplace footing was let down through Levels B and C, indicating that the construction of that feature was begun after the hole for the cellar had been dug out. Notably absent in all levels were rocks of any considerable size.

On the west end of the main house, then, the created surface of Level B was the occupational surface for the fort's inhabitants, eventually yielding the topsoil which developed out of the Level B cellar backdirt and which contained fort-period refuse. This situation was complicated by the destruction of the fort. Structure 2 collapsed to the west and south when it was burned, and thus another distinct layer was deposited over the fort's occupational surface there. That layer was designated Feature 45, and two zones within the layer were recognized. The upper zone consisted primarily of small rocks and daub in a clay loam matrix, with charcoal as a minor component. Many nails were in this zone, as well as other artifacts. The lower zone of Feature 45 was characterized mainly by charcoal, with burned and unburned artifacts in a clay loam matrix. In the squares where Feature 45 was recognized, the topsoil zone which was excavated first as Level A was actually part of Zone 1 of Feature 45. Similarly, during excavation, Zone 2 of Feature 45 apparently extended down into the Level B clay (cellar backdirt) and was arbitrarily defined as ending when no further artifacts or charcoal were encountered. Later it was recognized that the Feature 45, Zone 2 deposit thus removed probably had two components which could not be distinguished from each other: the true Zone 2 of Feature 45 and the fort-period topsoil and midden zone which was wholly a product of the fort's occupation and the greatest concentration of fort-period refuse that was encountered.

The horizontal extent of the two zones of Feature 45 contrast (Figure 15), Zone 1 extending farther than Zone 2 and covering it completely. Zone 1 also covered the stonework foundation remnants but not Feature 10, the fireplace. Zone 2 did not cover any of the stonework, but rather was nested within and around it. Neither zone of Feature 45 was observed to the east of the fireplace, i.e., in the area formerly covered by the structure. The thicknesses of the two zones of Feature 45 were variable: Zone 1 ranged between 12 and 25cm and Zone 2 ranged between 1 and 5cm (Figure 14B).

The two zones of Feature 45 were interpreted as representing two aspects of the destruction of the main house. The first event, the burning and collapse of the wooden part of the structure, resulted in the deposition of Zone 2, which was mostly charcoal. The second event, which followed after the first only shortly, was the

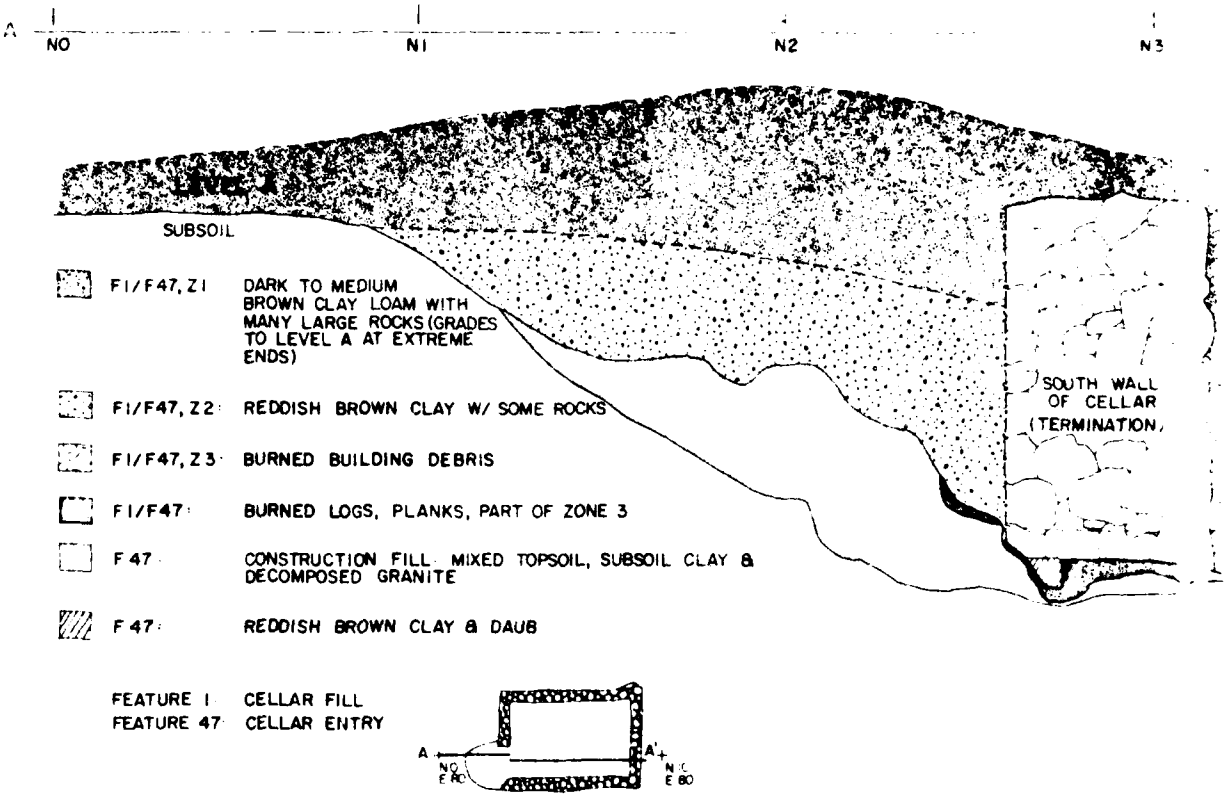


FIGURE 17B

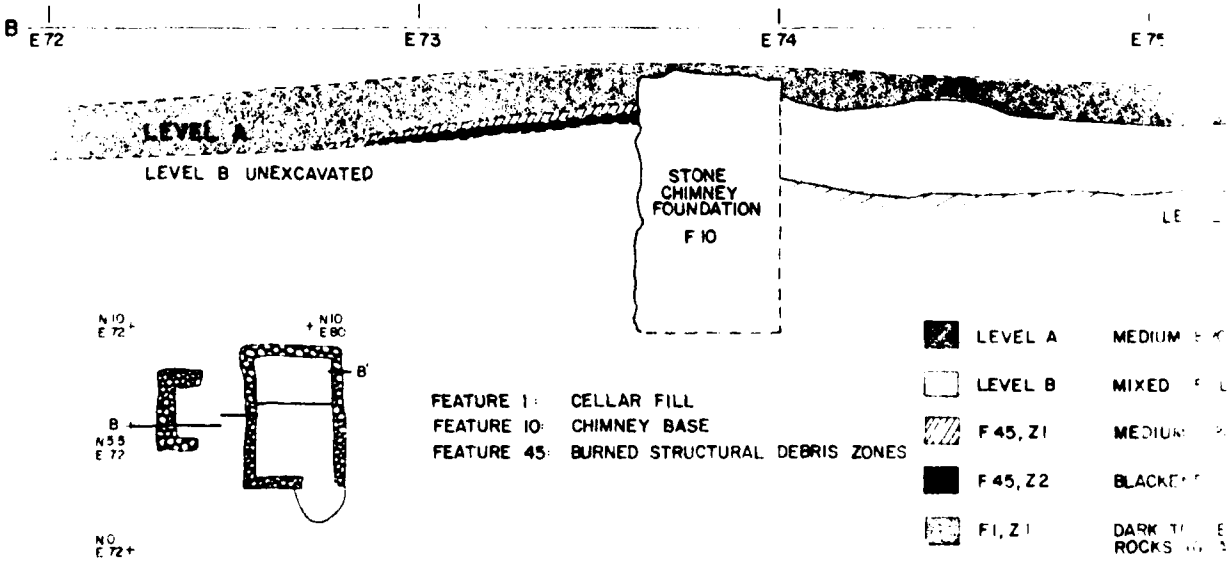
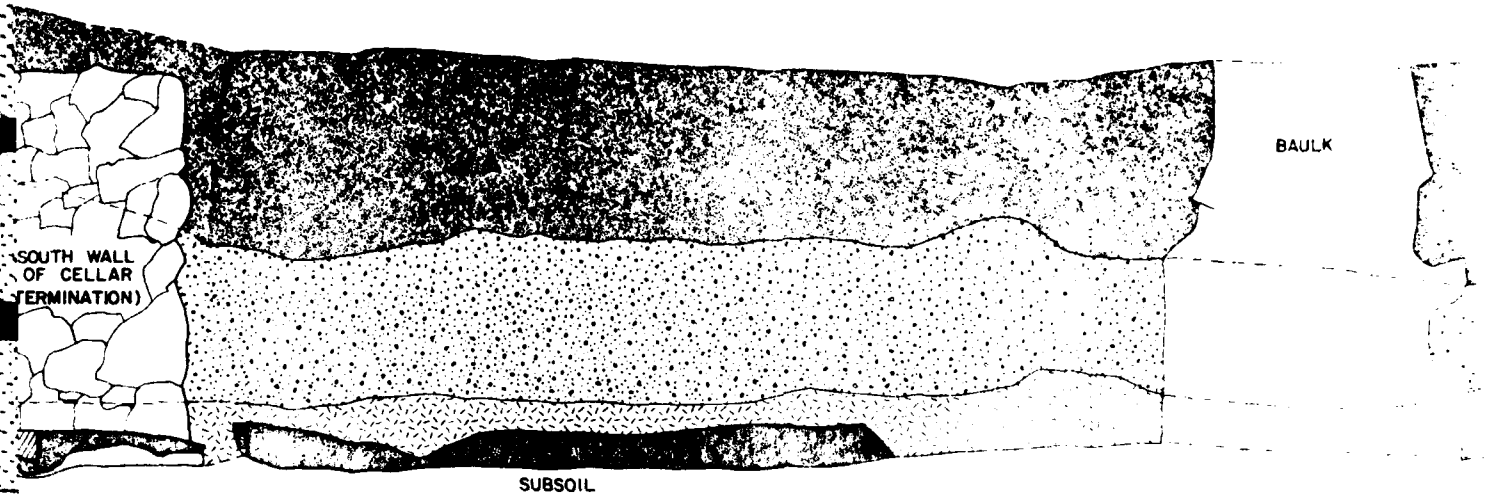


FIGURE 14A

N3 N4 N5 N6

NORTH - SOUTH PROFILE



FORT INDEPENDENCE
38 AB 218

0 50 100 CM

0 1 2 3 FT

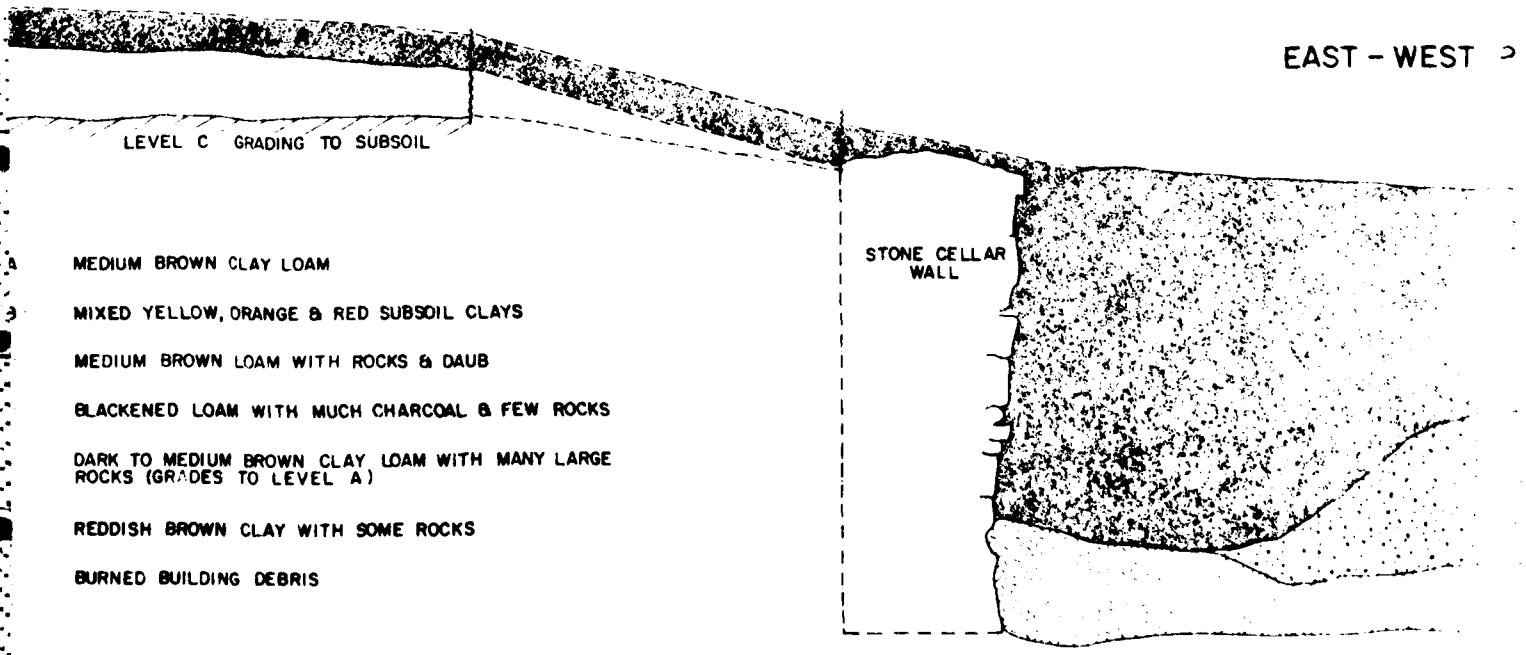
STRUCTURE 2 PROFILES

---- INTERPRETIVE STRATIGRAPHIC LINE BASED ON PLAN ELEVATIONS

—·— PROJECTED DIMENSIONS

E75 E76 E77 E78

EAST - WEST



A MEDIUM BROWN CLAY LOAM

B MIXED YELLOW, ORANGE & RED SUBSOIL CLAYS

MEDIUM BROWN LOAM WITH ROCKS & DAUB

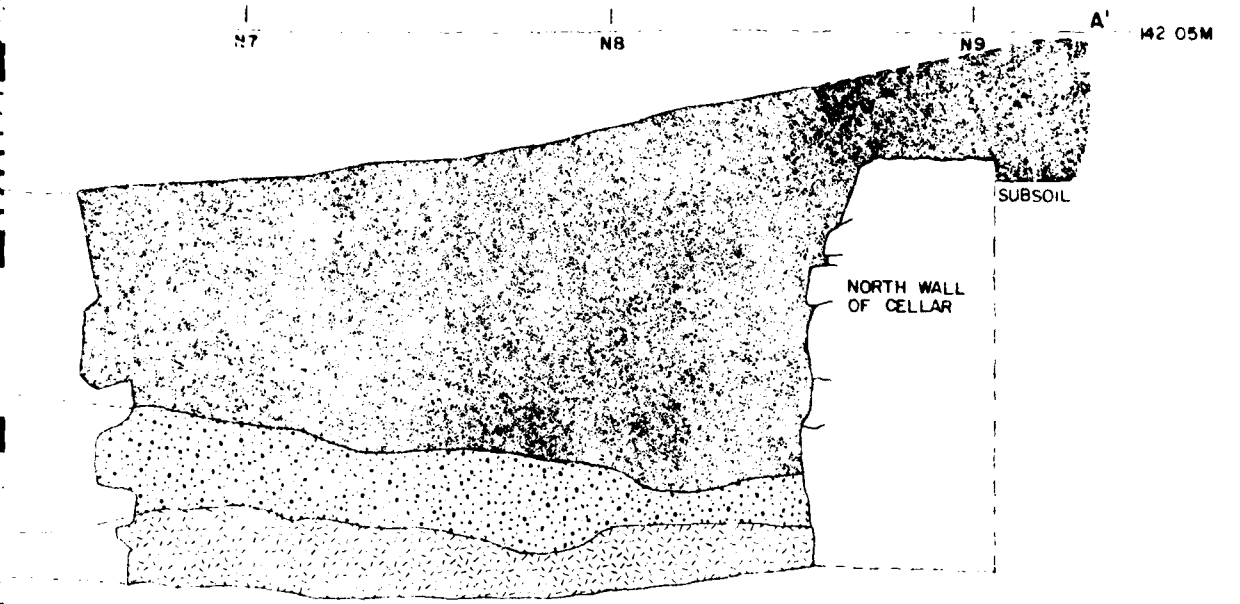
BLACKENED LOAM WITH MUCH CHARCOAL & FEW ROCKS

DARK TO MEDIUM BROWN CLAY LOAM WITH MANY LARGE ROCKS (GRADES TO LEVEL A)

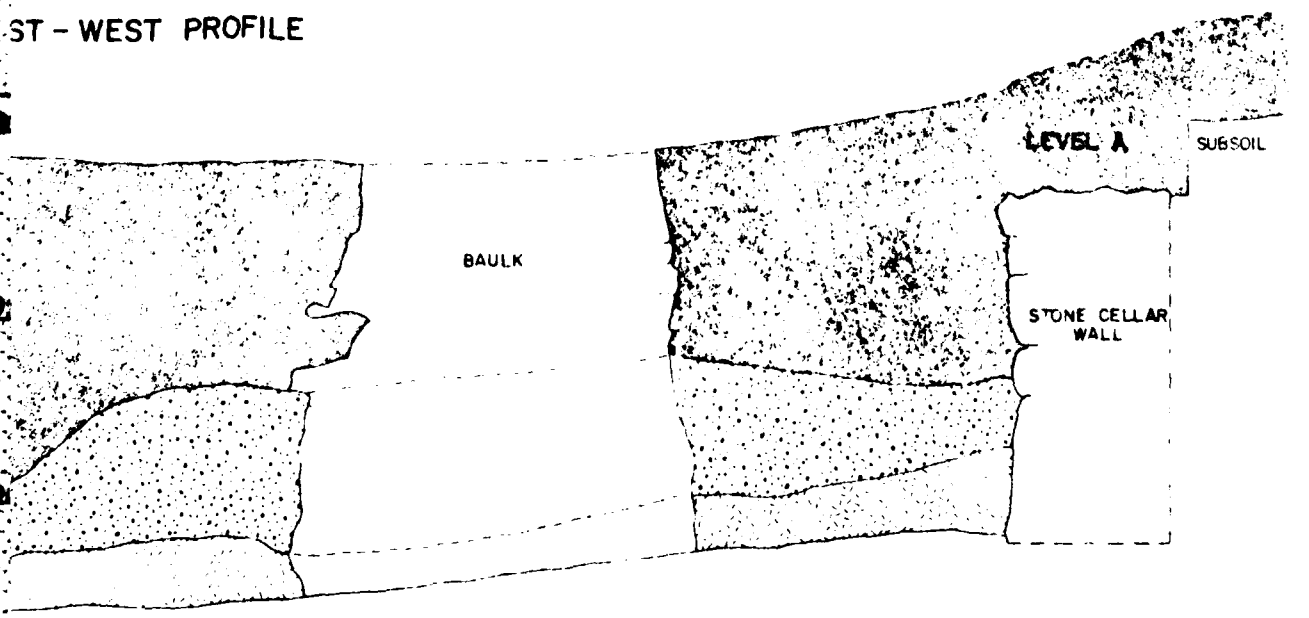
REDDISH BROWN CLAY WITH SOME ROCKS

BURNED BUILDING DEBRIS

2



ST - WEST PROFILE



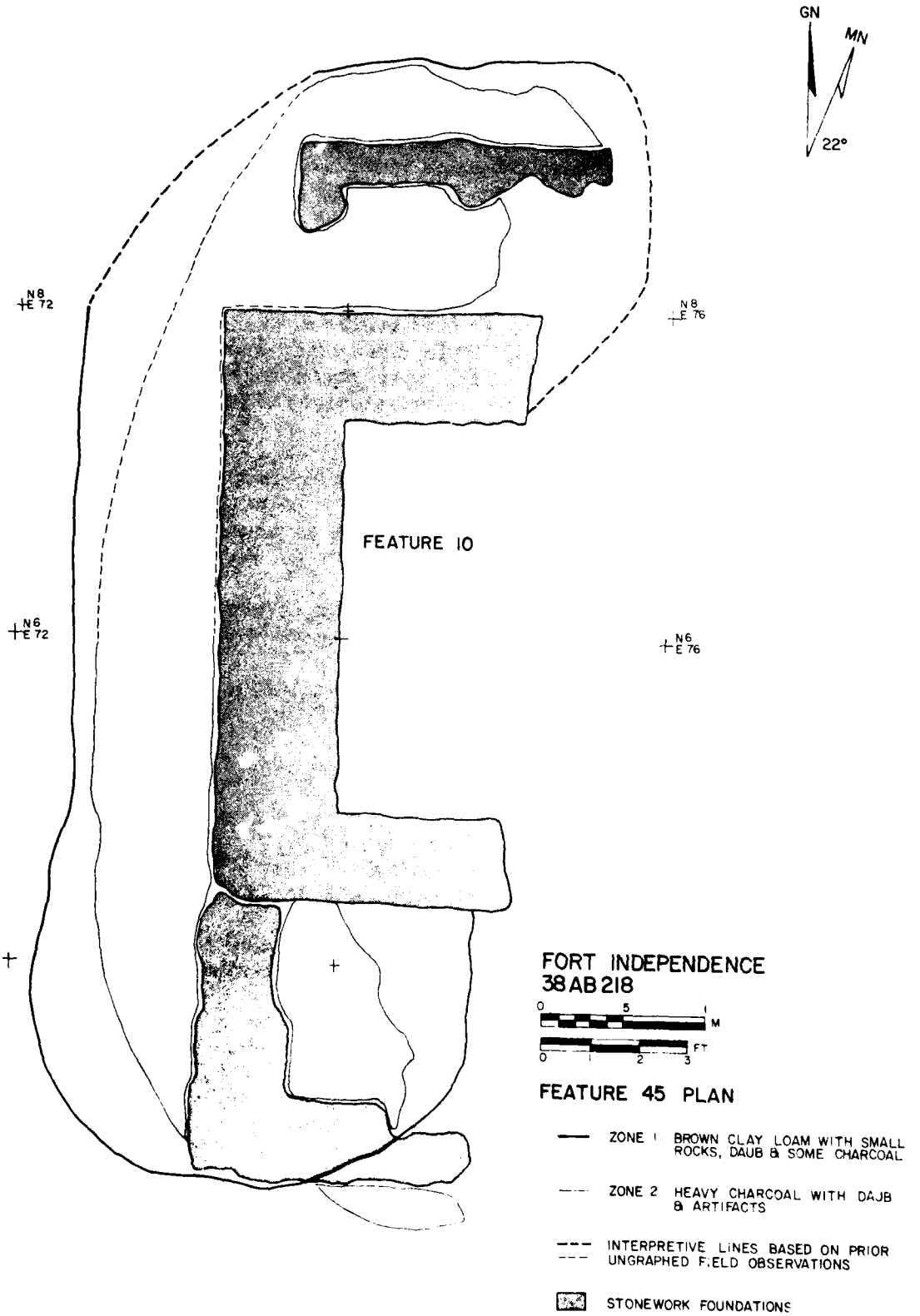

GN
MN
22°
N8
E 72
N8
E 76
FEATURE 10
N6
E 72
N6
E 76
FORT INDEPENDENCE
38 AB 218
0 5 1 M
0 1 2 3 FT
FEATURE 45 PLAN
ZONE 1 BROWN CLAY LOAM WITH SMALL ROCKS, DAUB & SOME CHARCOAL
ZONE 2 HEAVY CHARCOAL WITH DAUB & ARTIFACTS
INTERPRETIVE LINES BASED ON PRIOR UNGRAPHED FIELD OBSERVATIONS
STONEWORK FOUNDATIONS

FIGURE 15

collapse of the stonework chimney, resulting in rocks and fired chinking (possibly from within the masonry) being spread around the west end of the former structure. The collapse of the chimney may have been due to natural causes, but it also may have been the deliberate act of a group of people who undertook to clean up the site of the destroyed fort only shortly after its destruction. Clearly, neither zone of Feature 45, nor any other superficial deposit around Structure 2 could account for the considerable amount of rock and debris which would have been the result of the destruction of Structure 2. Almost all of that material was collected and redeposited in the closest handy hole--the cellar of Structure 2, to be discussed in detail below.

The complexity of the depositional sequence of the west end of Structure 2 was alluded to above. This complexity can be explicitly outlined from the site's known historical chronology. This holds implications for interpreting the archaeological findings. Hypothetically, the following occurred:

1. The cellar was dug and the backdirt was thrown all over the west end of the knoll, possibly to build up and make level that part of the site to accommodate the planned structure.

2. The structure was built and occupied and refuse was deposited on the created ground surface.

3. The structure was abandoned and unwanted things were left where they fell.

4. The structure was looted and things were tossed around and left where they fell.

5. The structure was burned and the wooden part collapsed, carrying with it things that were part of the structure or that were left in it.

6. The stonework of the fireplace/chimney collapsed or was toppled, depositing rocks and daub on top of the charcoal

7. The bulkiest debris from the burning of Structure 2 was cleaned up and dumped in the cellar, leaving only a thin layer of charcoal and a somewhat thicker layer of more substantial debris to indicate where the primary locus of the collapse had been.

Although it was desirable to distinguish the primary occupational refuse deposit around the west end of the main house from the more accidental deposits resulting from abandonment, looting, and destruction, this was not possible. The collapse of the burned structure onto the extant ground level where the primary occupational refuse was already deposited created an interface which could not be recognized. It is very probable that the primary refuse deposit

contained considerable charcoal prior to the buring of Structure 2, and the addition of more charcoal from the burned structure did not enhance the liklihood of distinguishing a separation between Feature 45 and the fort-period ground surface. The site cleanup which followed the fire further reduced the possibility of recognizing the archaeological manifestations of the several distinct events outlined above. Fragments of ceramic and glass artifacts from the lowest zone of the cellar's fill cross-mend with fragments from Feature 45, Zone 2. This implies that the cleanup operation affected the distribution of artifacts over the entire area of Structure 2, down to at least the fort-period occupation surface. Thus, no distinctions between the occupation phase and the abandonment/destruction phase could be made within the deposits associated with the central structure, the area where, theoretically, more and varied activities resulted in a greater concentration of archaeological deposits and more complexity in the relationships pertaining among these deposits. In an eighteenth- century site occupied for sixteen years, at the very most, relative intrasite chronology would have to be based on superimposition of discrete deposits rather than on documented artifact date spans. As discussed just above, recognition of discrete deposits in the part of the Fort Independence site where the greatest superimposition would be expected was rendered impossible by the final events which occurred there. Thus, relative intrasite chronology, the focus of a primary research objective, could not be successfully established for the area of the central structure. Further, most of the remaining archaeological deposits were distant from each other, or such superimposition as was observed among them was of limited significance, with the result that, for most intents and purposes, intrasite comparisons will have to be synchronic (i.e., dealing with such issues as social status reflected in spatial patterning of artifacts), rather than diachronic.

The excavated periphery of the east half of the main house did not exhibit the complex deposition just discussed for the west half of the structure. Rather, Level A was merely the plowzone of the normal soil profile, overlying sterile subsoil clay. Presumably, the fort-period ground surface and the modern ground surface on the east end of the central structure were the same, apart from the intervening effects of agriculture and erosion. In any event, no culturally created surface was found which was analogous to the Level B deposit on the west end of the structure. Not much charcoal was noted in the Level A deposit excavated from squares around the east end of the house, especially compared to the west end. Fort period artifacts were present, however. No subsoil features or other remains were observed in this area.

Feature 1, the cellar of the main house, was found to be deliberately filled in with the rubble and debris from the destruction of the fort, especially the rocks from all the masonry of Structure 2. This deliberate fill was in two layers and constituted about 80% of the material excavated from the cellar (Figures 14A and 14B). The remaining 20% was charcoal and burned structure components and contents lying right on the cellar's clay floor where they fell when the structure collapsed.

The two zones of the rubble fill were quite distinct. The topmost, designated Zone 1, was the thickest and covered the entire cellar area, grading into Level A beyond the cellar. This zone consisted of brown clay loam, darker at the top than throughout the rest of the zone, and contained many large quartzite rocks, concentrated in the lower half of the zone. Charcoal in quantity and fort-period artifacts were present in this zone, also. The other rubble fill zone, Zone 2, was more subsoil-like in character: brown-red clay with sparse charcoal and artifacts and a lot fewer rocks than Zone 1. The rocks of Zone 2, like Zone 1, tended to be in the lower part of the zone. These fill zones were not even in thickness or extent. Zone 1, as noted, was over the entire cellar area. Zone 2, however, was absent from the northwest corner of the cellar and from most of the west wall, lensing out within one meter of it, except at the southwest corner. Zone 2 was thickest toward the southeast corner, and it is suggested that Zone 2 was probably deposited from that side of the cellar. In contrast, Zone 1 was observed to be thickest in the part of the cellar where Zone 2 was absent. The nature of Zone 1 (rocks and charcoal being primary components) suggests its origin to be the burned and collapsed building debris from the western part of the structure. Zone 2 originated from the opposite or eastern part of the structure, but the source of this fill (material) cannot be interpreted so easily. Zone 2 was subsoil-like and nearly sterile, it is possible that this fill was removed from somewhere specifically to cap the burned debris layer in the cellar (although the motive for this is obscure). Another possibility is that subsoil clay from an excavation unrelated to the site cleanup was dumped into the cellar to get rid of it. No such feature or borrow area was found in the archaeological work at the site, but considerable site area went unexposed.

To evaluate the likelihood that considerable effort would be allotted to filling up the cellar and cleaning up the site of the former central structure, an idea of when this cleanup occurred and who was responsible would be useful. The historical record provided very little help in this, but there was archaeological evidence of a negative kind that the cleanup immediately followed the destruction of the fort. This evidence consisted of the absence of any weathering to, or deposition of dust or water-borne sediment on, the burned debris zone resting on the cellar floor. That is to say, the Zone 2 fill lay directly on a layer of charred debris, with nothing sandwiched between and no evidence of the alteration of the surface of the charred zone by exposure to the elements. The fort was burned in mid-February, and it could be expected that seasonal rain or wind would have left some indications of the passage of even as little as a month before the cleanup was undertaken, had that interval or a longer one gone by. No such indications were observed. If the cleanup was done very soon after the destruction of the fort, then it is most likely that is was done by John Bowie's independent company. Perhaps they were scavenging materials such as nails or iron that could be made into nails for their new fort. It does seem curious, though, that much effort would have been put into cleaning up the mess at the old fort unless there were some motive beyond neatness or thoroughness. After all, Bowie's men had a fort to finish.

The lowest zone found in the cellar was composed primarily of charcoal, as mentioned above. This zone was designated Zone 3. The matrix was a moist, black muck with some rocks present, as well as chunks of burned and unburned logs, a 60 x 90cm section of burned planks (probably flooring), many nails, a variety of other artifacts, burned and unburned, and a concentration of charred botanical remains, which was found against the north wall of the cellar 1m east of the northwest corner. These remains, totaling 91.74g have been identified as 78% wheat grains (Triticum aestivum), 21% corn kernels and cob fragments (Zea mays), with several barley grains (Hordeum vulgare) and several oat grains (Avena sativa) present but representing less than 1% of the sample. Several weed (corn cockle) seeds were also present and a single grape seed. This concentration of grains and seeds was on the top of Zone 3 and may have been a residue in a bag on the first floor or possibly in the loft. No remnant of the container of the grain was found.

Zone 3 thickness varied over the extent of the cellar from 10-12cm in the southeast corner to 24-28cm in the northwest corner. Zone 3 was thick in the corners and along the walls and thin in the middle. The greatest thickness (32cm) was along the middle of the west wall, another indication that the building collapsed toward the west.

The cellar floor was yellow subsoil clay with some patches of green-gray decomposing granite and several parallel veins of quartz running perpendicular to the long axis of the cellar, giving a first impression of stones laid to support partitions. A little troweling proved the quartz bands to be natural. No trace of any kind of prepared or packed surface was found when the last of Zone 3 was troweled away from the subsoil floor, nor were any artifacts found embedded in the floor.

One additional aspect of Structure 2 which the excavation of the cellar revealed was the door in the southeast corner. This door and outside entryway were called Feature 47. An interruption in the stonework became evident as the lower part of Zone 1 was being excavated in the southeast corner of the cellar and this was the first indication that something atypical was there. Two of the larger trees which had grown up on the knolltop were right on top of the cellar stonework along the eastern half of the south wall and their root systems were well established right where the gap in the stonework was. Thus it was at least a possibility that the trees had disturbed the masonry rather than that there was a constructed gap. Two squares to the south of the possible door were excavated to subsoil to check for a regularly-shaped hole dug in the subsoil to give outside access to a door at that corner. The results of that work were ambiguous, with a broad semicircular area of brown-red clay defined in plan against the red subsoil clay. The brown-red clay resembled Zone 2 of the cellar's rubble fill, but, again, it was judged that the trees' root systems could have displaced the cellar fill outward in a shape like that observed.

The continuing work in the cellar demonstrated that the fill zones excavated from within the gap in the stonework were consistent with the rest of the rubble fill in the cellar. As more vertical exposure of the termination of the east cellar facade at the southeast corner allowed closer observation of the stonework, it became apparent that a vertical notch had been deliberately formed (Figure 16). No such notch was observed in the stonework termination across the gap, but a vertical charcoal stain on the stonework was noted in an analogous location on that side of the gap. Greater exposure of the terminations of the stonework also revealed that the terminations were vertical and deliberate, not the result of tree disturbance. The gap was 1.41m (4ft 7 1/2in) wide. However, it wasn't until the top of the lowest zone was reached within the stonework gap that conclusive evidence of a door was found. In this area, Zone 3 consisted of several burned logs placed lengthwise across the gap in the stonework. Above these logs were found three wrought iron pintles and one large strap hinge. Two of the pintles and the strap hinge were found near the southwest side of the stonework gap and the other pintle near the notch in the stonework in the southeast corner. These were interpreted as being from a pair of inward-opening plank doors hung on two sets of pintle hinges from vertical door frame posts fastened to the stone facade.

The burned logs found deliberately placed across the threshold of the door were horizontal and at about the same level as the rest of Zone 3 in the cellar proper. As excavation continued to the south of the threshold in order to find the termination of the burned logs and/or Zone 3, it was found that the burned level began to rise sharply at an angle. When completely excavated, the door of the cellar was revealed to have an outside access entryway cut out of the subsoil in the shape of a half-elipse (in plan) with a greatest radius of 1.68m (5ft 6 1/8in) (Figure 11). From the ground level outside, this entry sloped down into the cellar at an angle of 35 degrees from horizontal, with a vertical drop of 1.27m (4ft 2in) (Figure 14A). This subsoil cut is rather ramp-like and seems as though it would have been adequate for rolling casks into the cellar or for passing sacks or bales hand-to-hand, but it was rather steep for easy entry or exit on foot. Doubtless, wooden stairs or a ladder were normally used to enter and exit from the cellar from the ground floor of the structure.

At some time the ramp entry just described was modified by the addition of a fill zone faced by logs. Since no signs of packing or smoothing of the subsoil face of the entry (whether by use or design) were observed, the fill and log modification may have been simultaneous with the construction of the rest of the main house. The applied fill zone was composed mostly of mixed subsoil clays and decomposed granite, with some topsoil concentrated in the part of this fill placed in the threshold area. These materials were identical to those the ramp entry was cut down through, so this modification could have been part of one construction operation. Only one nail was found in this fill zone.

Figure 16. Feature 47, (the cellar entry) notch in stonework at southeast corner of cellar.

This fill was only observed in profile, where its shape suggests three vague steps rising from the cellar with the last (southernmost) sloping gradually up to the outside ground level. No plan view of this modification to the ramp was observed because the excavation procedure (removal of layers, one by one, with retention of a vertical control column) was intended to reveal the shape of a subsoil cut, not the shape of a superimposed fill, especially when that superimposed fill was not readily distinguishable from either subsoil or the cellar fill Zone 2 which lay over the entry modification fill. Thus, no interpretation of the horizontal extent of the three terrace-like "steps" sculpted in the entryway to the cellar can be given. Nor were any surface characteristics observed, such as staining, packing, or hollows worn where most frequent use occurred. However, the profile did show that logs were applied to the surface of the added fill in the threshold area of the door and up the entry slope as far as the surface of the first "step." These logs may have been split in half lengthwise, compression from burial making it difficult to determine this one way or the other. The logs were approximately 20cm (7 7/8 in) in diameter. There were traces of six or seven of them, all charred through. Red clay, burned and unburned, was found between the logs in a few places. In the threshold area, beneath the logs, the excavator observed a 10-15cm layer of sand and within it a few small, flat, unaligned rocks. This zone was not observable in the profile of the control column, so this sand and rock layer was not continuous across the threshold. Finally, the deepest-lying elements of the modification to the cellar entry were two small flat stones found embedded in the subsoil clay extending eastward into the threshold about 30cm from under the western masonry termination.

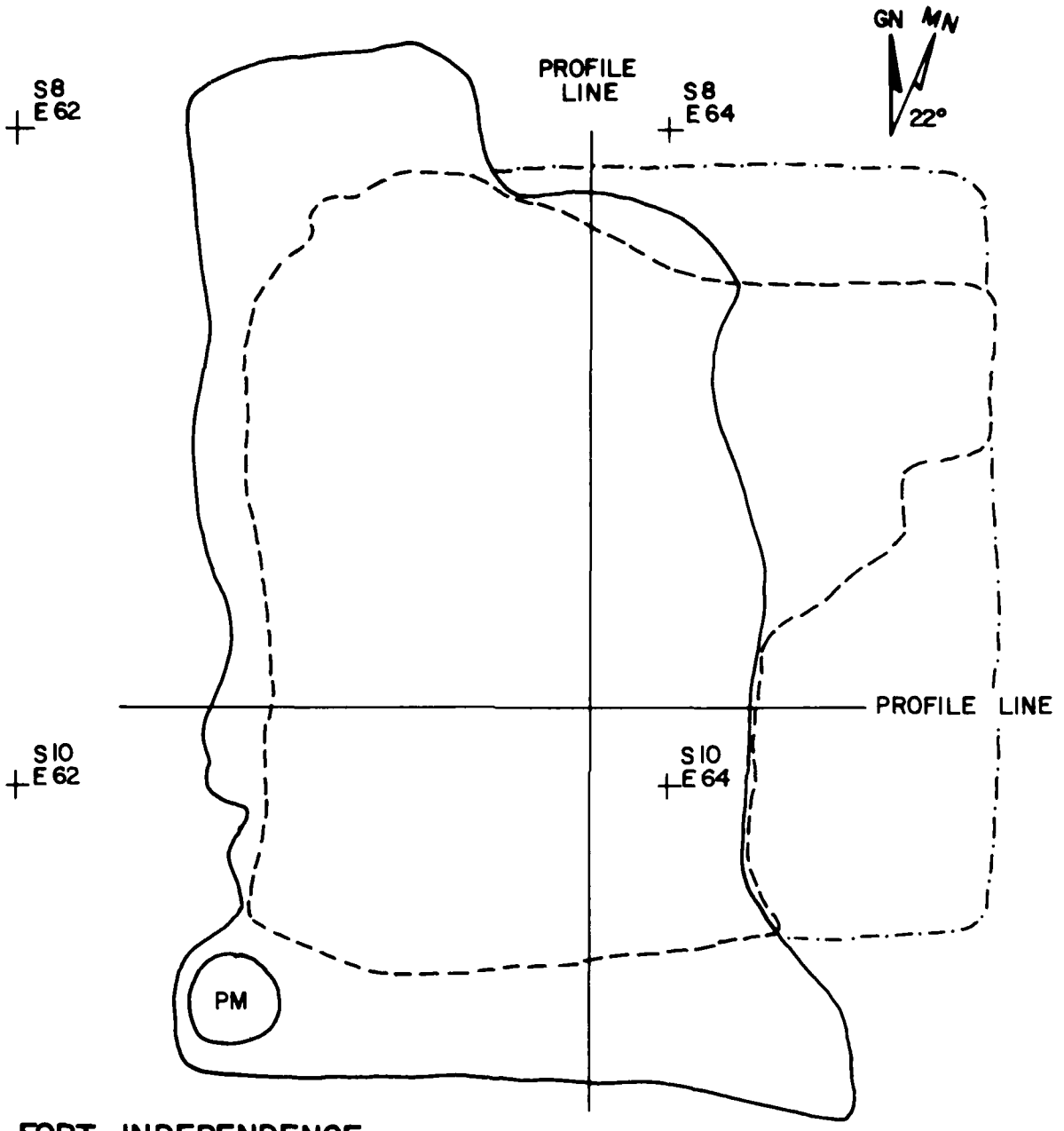
The utility or advantage of the modification to the cellar entry just described is difficult to comprehend with only the data at hand. Some efforts to protect the subsoil entryway from erosion and the cellar from flooding could be expected, but for these purposes a bulkhead would be most effective. No evidence for such an element was found. Logs or half-logs embedded in clay fill and placed perpendicular to the entry slope would have improved the footing, especially if the subsoil entry was to be regularly wetted by rain, creating a slick slope into the cellar. But nothing about the modification seems intended to prevent erosion or flooding.

Overlying the applied fill and the charred logs of the entry was the same Zone 2 fill described for the rest of the cellar, but with the few rocks which characterized the lower part of Zone 2 in the cellar confined to the area over the threshold. The Zone 2 fill over the entryway had more artifacts than Zone 2 elsewhere in the cellar. Sixty-six percent of the nails from Zone 2 in the entire cellar came from the area over Feature 47, as well as small quantities of bottle glass and Delft, a pipestem, a gunflint, a deformed musket ball, a kettle fragment, a chisel, singletree hardware, and a small brass name plate. Thus, the locus suggested to be the point of origin for the Zone 2 fill also had the greatest concentration of artifacts to be found in that zone. Over the ramp, Zone 2 was identical with the cellar Zone 2: sparse charcoal or

artifacts (relative to Zones 1 and 3) in subsoil-like, red-brown clay. The cellar's Zone 1 was also present in the entry cut, overlying Zone 2, but there were very few rocks in it, contrasting greatly with Zone 1 in the cellar. This could be due to the origin of the Zone 1 cellar fill material, proposed above as coming from the area west of the cellar, such that most of the rocks ended up in the near hole, the cellar, rather than in the far hole, the entry cut.

To complete the discussion of Structure 2, some attempt to describe the structure from the archaeological findings can be made. The historical record is nearly mute on this subject. Only one mention of anything regarding the physical appearance of Fort Independence could be found, but at least this did have reference to the central structure. In the Bowie Papers, Fort Independence commandant John Bowie was instructed to expect a shipment of 150 bushels of ground corn which he was to store "in the loft at the House in the fort" (Bowie Papers, Document 15). So, Structure 2 was a one-and-a-half story building at the least. The masonry foundation was certainly sturdy enough for a structure of that height. Some fired clay chinking and fired mud daubers' nests from Feature 45 in squares to the west of Structure 2 had impressions of the flat, hewn, wooden surfaces to which they had adhered. These and the charred log chunks found in Zone 3 of the cellar are good indications that Structure 2 was made of logs trimmed and squared by an adze or some such tool. The kind of wood used can even be suggested from archaeological data. Feature 1, Zone 3, and Feature 45 produced burned and unburned wood samples which were identified as follows: white oak, hard pine, poplar, red oak, hickory, cedar, sourwood, and black willow. What wood was used for what structural elements could not be ascertained from the samples. A section of burned plank flooring was also found in Zone 3 of the cellar. This was identified as hard pine. No archaeological evidence for the floor plan of Structure 2 was found. Possibly the ground floor had two rooms, the partition running north-south at about where the west cellar wall was.

Location of doors and windows can be hypothesized from indirect archaeological evidence. Window glass fragments found in the cellar fill and in Feature 45 north of the west half of the main house indicate the presence of glazed windows, probably the casement type. (The Bowie Papers also mention panes of glass being stored at Fort Independence, though this was very early in the fort's occupation by the independents.) From the provenience of the window glass fragments, a ground floor window could have been over the cellar door and another in the north wall of the hypothesized west room. The presence of more refuse around the west end of the house suggests that the main door (possibly the only ground floor door) was in the south wall of the west room. This relationship between the location of refuse and the door of the house is posited on the basis of the Brunswick Pattern of Refuse Disposal which states: "On British-American sites of the eighteenth century a concentrated refuse deposit will be found at the points of entrance and exit in dwellings, shops, and military fortifications" (South 1977: 48).



FORT INDEPENDENCE
38 AB 218

0 50 100 CM

0 1 2 3 FT

FEATURE 39

——— FEATURE BOUNDARY AT DEFINITION ; EXTENT OF ZONE I REMAINING

- - - - FIRED CLAY BASIN ; EXTENT OF ZONE 3 REMAINING

—·—· SUGGESTED RECONSTRUCTION OF EXTENT OF SUBSOIL BASIN

FIGURE 17

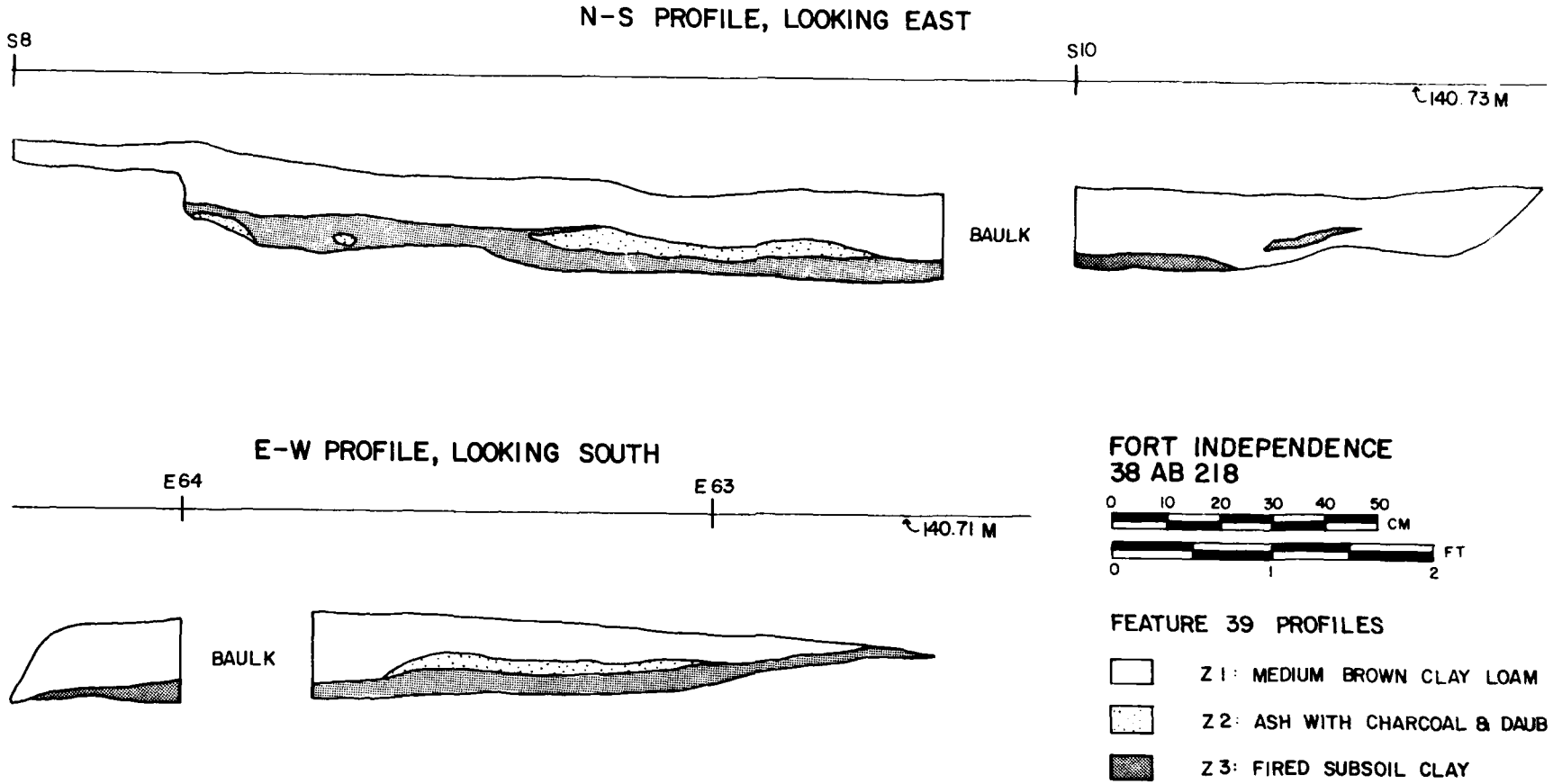

N-S PROFILE, LOOKING EAST
S8
S10
140.73 M
BAULK
E-W PROFILE, LOOKING SOUTH
E64
E63
140.71 M
BAULK
FORT INDEPENDENCE
38 AB 218
0 10 20 30 40 50
CM
FT
0 1 2
FEATURE 39 PROFILES
Z 1: MEDIUM BROWN CLAY LOAM
Z 2: ASH WITH CHARCOAL & DAUB
Z 3: FIRED SUBSOIL CLAY

FIGURE 18

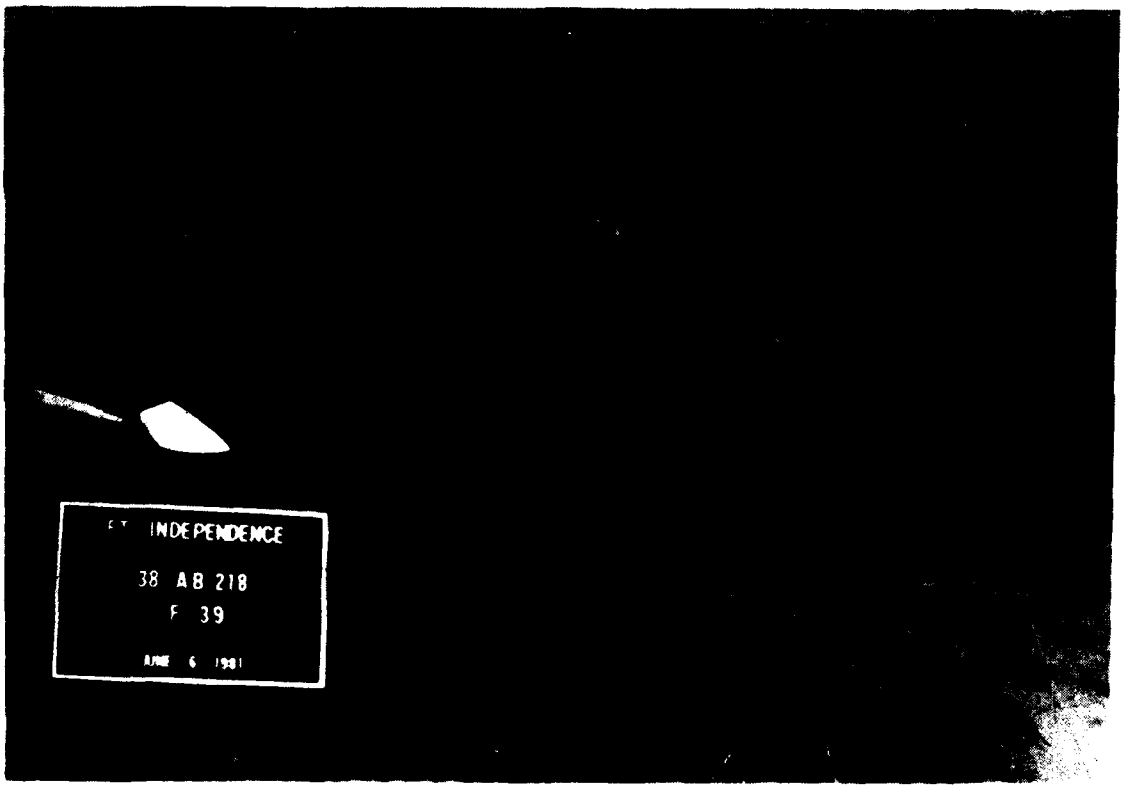


Figure 19. Feature 39, profile, looking west, with rocks in the southeast quadrant.

Feature 39: A Soldier's Hut

When one of the Phase I backhoe stripped transects happened to coincide with the east curtain of the stockade, it served as a point of departure for more backhoe stripping to expose all of the stockade. When the existence of bastions on the northeast and northwest corners was realized, the backhoe was used to seek an analogous formation at the southwest corner. As the topsoil was stripped away there, no large stockade postholes were revealed as had been expected, but rather, additional topsoil-like material. Thus the worker monitoring the stripping allowed the backhoe to continue digging out more of the material. By the time subsoil was revealed and the field director checked on the stripping, a portion of what was only then recognized as Feature 39 was destroyed. Some part of the feature's east side and some of its uppermost zone over the extent of the entire feature were thus unrecoverable.

What remained was excavated in Phase II (Figure 17). The feature was divided into four unequal quadrants by the retention of two intersecting, 25cm wide baulks oriented along grid lines. The feature was excavated by trowel, with recognizable cultural levels excavated separately, first in the quadrants and then in the baulks after profiles were drawn. The deposits were not screened.

When defined in plan, Feature 39 was seen to be roughly rectangular. When completely excavated, it was found to be a shallow, flat-bottomed basin with sloping sides cut into the subsoil of the down-slope of the knoll. The north and south sides of the basin sloped more steeply than the west side and, presumably, the east side. It held three distinct zones of fill, the topmost spreading out beyond the subsoil basin (Figure 18). That zone, designated Zone 1, was the topsoil-like material first exposed by the backhoe. It was a medium-brown clay loam, well-consolidated, with burned and unburned clay chunks, charcoal in small pieces, a few, scattered, medium-sized quartz rocks (more frequent in the southeast quadrant, Figure 19) and many fragments of unburned rotted wood, too small to salvage. The part of this zone which was recorded was generally 10-12cm thick except where it lensed out at the edges.

Zone 2 was primarily ash in hard and soft pockets and patches, with some charcoal concentrations and isolated burned clay chunks. The transition between Zone 1 and Zone 2 was gradual, with the amount of ash increasing as Zone 2 was reached. The larger lenses of Zone 2 were 3-4cm thick.

The bottom zone was the burned, reddened surface of the subsoil clay basin. The entire area was not burned evenly; some places were hard and some soft, as though there had been separate loci of greater heat.

Artifacts were found in all of the zones, but more were in Zone 3 than in Zone 1. Zone 2 was so thin that no artifacts were exclusive to it. The artifacts were few, consisting of the remains of at least two blue-decorated Delft plates, fragments of a wine

bottle and a case bottle, two nails, a fragment of a cast iron kettle, a single blue glass bead, and cow, pig, chicken, and, possibly, deer bones, some burned.

A postmold was found in the subsoil under Zone 1 in the southwest corner of Feature 39. When excavated it was found to be very shallow (12cm), but its fill was so similar to Zone 1 that the upper part of the mold was probably excavated away with Zone 1. Vertically oriented, unburned wood from this mold was identified as cedar.

The strata of Feature 39 represent one event: the incomplete burning of a vacated rude hut which reddened and partially hardened the dug out subsoil clay floor, deposited lenses and pockets of pure ash, and left a pile of charcoal, unburned wood, and mixed soils to consolidate and homogenize into a topsoil-like midden over a couple of broken and abandoned Delft plates, broken bottles, and some other domestic refuse.

Calver and Bolton (1950:19-22) excavated the site of a Revolutionary War period British winter camp in Manhattan and found the remains of rows of crude, semisubterranean huts, each of which had been dug into the sloping hillside to combine a subsoil hole with mounded-up backdirt in the creation of three walls, the fourth wall and pitch roof being constructed of scavenged lumber. The doors were in the wooden fronts of the huts and the fireplaces were in back, against the subsoil wall. Various arrangements for the hearth and chimney or flue were noted, utilizing scavenged brick and stone. Even instances of using barrels plastered with clay as chimneys were observed. Carved-out subsoil niches for bunks, multiple sand layers on floors from several sequential winters' use, and carved subsoil steps from the door down into the hut were described, as well as a great number and variety of artifacts found in association with these hut floors and hearths.

Feature 39 may not have been as elaborate a structure as even the crude shelters the British used in Manhattan. The amount of daub noted in all the layers of the deposit could suggest a chinked log facade. The basin of Feature 39 was not very deep. No indications of built-up walls were found, but plowing, erosion, and overzealous archaeological exploration may have eliminated any such evidence. In any event, the hut was probably very low, not intended for comfortable or idle occupation, but rather for basic sheltering: sleeping, cooking, eating and getting out of inclement weather. No good evidence for a hearth was found, but the east side of this feature was destroyed. Some rocks were found within Zone 1 in the remnant southeast quadrant of the feature and these might be from a hearth or chimney that was in the southeast corner of the hut. This would be at variance with the Manhattan examples. The shallow postmold in the southwest corner of Feature 39 is interpreted as a pier support for the log facade. A similar feature may have been in the destroyed southeast corner of the feature.

The probable inside dimensions of the hut, assumed to be equivalent to the projected extent of the subsoil basin, would be 2.42 x 2.26m (7ft 10 3/4in x 7ft 4 3/4in), which is not commodious. Perhaps only two or three men inhabited it.

The location of this hut at the corner of the stockade where no bastion was found is quite logical if one accepts the suggestion that the gate to the stockade was at that corner. This hut, then, would have been right outside the gate, on the way to the spring area, if it can be assumed that the extant spring was the water source for the garrison. Excavations in the spring area yielded no fort period artifacts (Section 4.34).

The presence of this hut at Fort Independence is significant. It must be only one of a number of such crude shelters which housed the rank and file soldiers of the independent company when they were in residence at Fort Independence. These huts were probably scattered around the outside of the stockade, with most of them close to the gate, both because of the greater proximity to safety and because the hill slope there would better serve the type of construction involved in these huts. Thus, most of the time, the majority of the garrison was housed outside of the stockade. Structure 2, "the House in the fort" mentioned in the Bowie Papers, would have been the residence of Captain John Bowie and his wife. Possibly the gentleman and physician, Dr. Begbie, also lived in the main house, when he was in residence. The contrast in housing based on rank is only to be expected at a military site, however remote and small, and for Fort Independence, this contrast will inform the comparison of artifacts from the two proveniences which should represent differential status in domestic occupation debris, Structure 2 and Feature 39.

4.32 Fortifications

The Phase I backhoe transect stripping produced positive evidence of the fort's stockade-type enclosure. By extreme good fortune, one of the transects almost exactly coincided with the archaeological remains of the east wall of the stockade. These remains consisted of a linear series of seven large, isolated postholes with large postmolds within them. With this east wall from which to start, the backhoe stripped an area from the northeast corner westward at a right angle to the east wall until the north wall line of posthole/molds was exposed. Then stripping continued south, and then east. The observation that with each successive 90 degree turn, the new line was offset between the last two posthole/molds of the old line gave the clue for the recognition that the corner treatment was more elaborate than a mere right-angle joining of two walls. Backhoe stripping out in a fan-shape from the corners produced more posthole/molds that ultimately delineated three bastions, on the northwest, northeast, and southeast corners of the stockade.

TABLE 2: DIMENSIONS OF BASTIONS

Bastion	Length * North Flank	Length * North Face	Length * South Face	Length * South Flank	Width * Of Gorge
Northeast	3.25 m 10 ft 8 in	3.71 m 12 ft 2 in	3.76 m 12 ft 4 in	3.20 m 10 ft 6 in	2.39 m 7 ft 10 in
Northwest	2.59 m 8 ft 6 in	2.82 m 9 ft 3 in	2.79 m 9 ft 2 in	2.59 m 8 ft 6 in	2.40 m 7 ft 10-1/2 in
Southeast	2.74 m 9 ft 0 in	2.74 m 9 ft 0 in	2.82 m 9 ft 3 in	2.54 m 8 ft 4 in	2.43 m 8 ft 0 in

* Measured between midpoints of postmolds

Figure 20. Feature 19 example of stockade posthole/mold.

Figure 21. Feature 25, example of stockade posthole/mold.

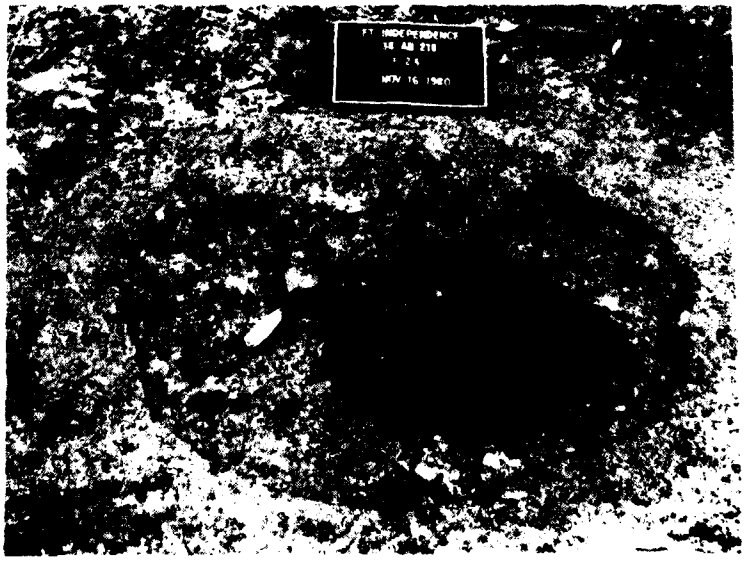


Figure 22. Feature 31 example of stockade posthole/mold.

The configuration indicated by the posthole/molds is of a stockade-like enclosure symmetrical around the central structure and oriented in alignment with it (Figures 5 and 6). There were four curtains, each 23.20m (76ft) long, with three diamond-shaped bastions, the northeast bastion being larger than the southeast and northwest ones, which were nearly equal in size. The dimensions of the bastions are given in Table 2.

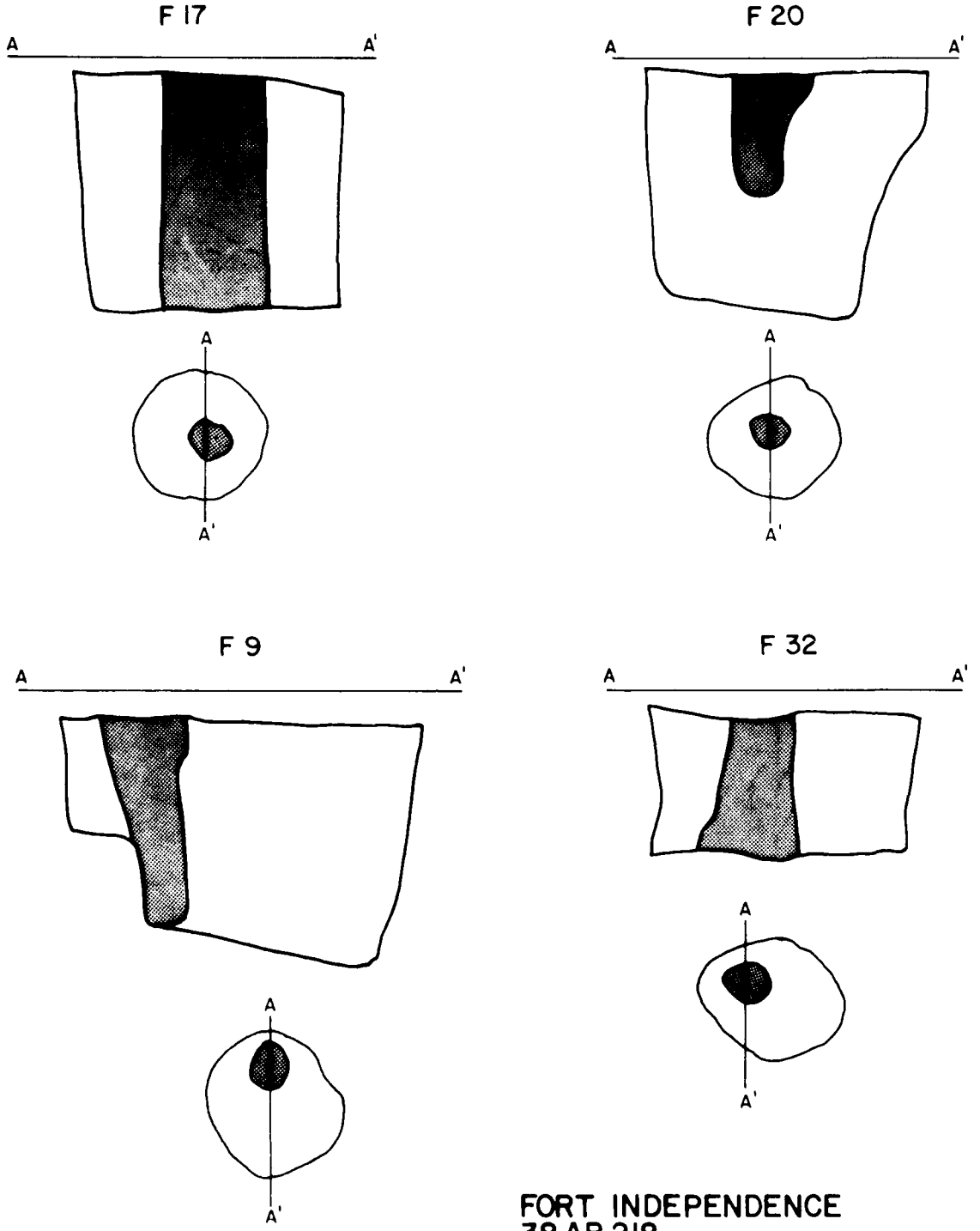
In all, 29 posthole/molds form the stockade (see Figures 20, 21, and 22 for examples). These were all given feature numbers which are shown with their respective posthole/molds in Figure 6. The holes were round to oval in plan and were filled with a multicolored, mottled, clay subsoil veined with brown topsoil. The holes ranged in size between 80 and 120cm (31 1/2in to 47 1/4in) in maximum diameter. The molds within the holes were also round to oval in plan and ranged between 24 and 50 cm (9 1/2in to 19 11/16in) in maximum diameter. The molds varied in their placement and usually were not centered in the holes.

Excavation of these features followed a consistent routine. First the mold was bisected along a north-south axis and the east half was troweled out to the bottom. The resultant profile was photographed and then the west half of the mold was troweled out. A final photograph was taken. When all the molds had been excavated in this manner, the backhoe was brought in to profile all the postholes along their north-south axes. Then the profiles were drawn.

All mold fill was dark brown clay loam. Only one mold had no artifacts in its fill. Several had small rocks in the fill. Twenty-one molds contained faunal remains totaling 501 pieces, 472 of which were from indeterminate, large mammals. Identified faunal remains from stockade postmolds included cow (16), pig (6), deer (2), bird (2), and indeterminate other mammal (3). Features 25 and 29 had faunal remains in quantity with 230 and 97 pieces, respectively. Only two molds had no charcoal. When concentrated charcoal was noted, it was usually toward the bottom of the molds. Nine postmolds had recognizable charred post remains (nos. 4, 19, 21, 22, 25, 27, 28, 30, 32), eight samples of which were identifiable. Seven of the eight were white oak and the other (no. 21) was hard pine. For all posthole/mold measurements, see Table 3.

Profiling the posthole/molds showed how these features were constructed. A round hole with straight sides which tapered slightly to a flat bottom was dug out to an average 60.70cm (23 7/8in) depth, and a trimmed tree with a flat-cut end was set directly on the bottom of the hole at whatever place within the hole it would be in alignment with the posts to either side of it (Figure 23, F. 17). No tamping rocks were used. The subsoil clay backdirt was then packed back in around the post.

Considerable variation on this model was to be observed among the profiles. Six posts were evidently too short and so backdirt was replaced in the hole to compensate and the posts set on top of it (Figure 23, F. 20). Some molds appear to be angled slightly from



PLANS ARE $\frac{2}{5}$ SCALE OF PROFILES

FORT INDEPENDENCE
38 AB 218

STOCKADE POSTHOLES/MOLDS
NORTH – SOUTH PROFILES

VARIATIONS IN POST PLACEMENT

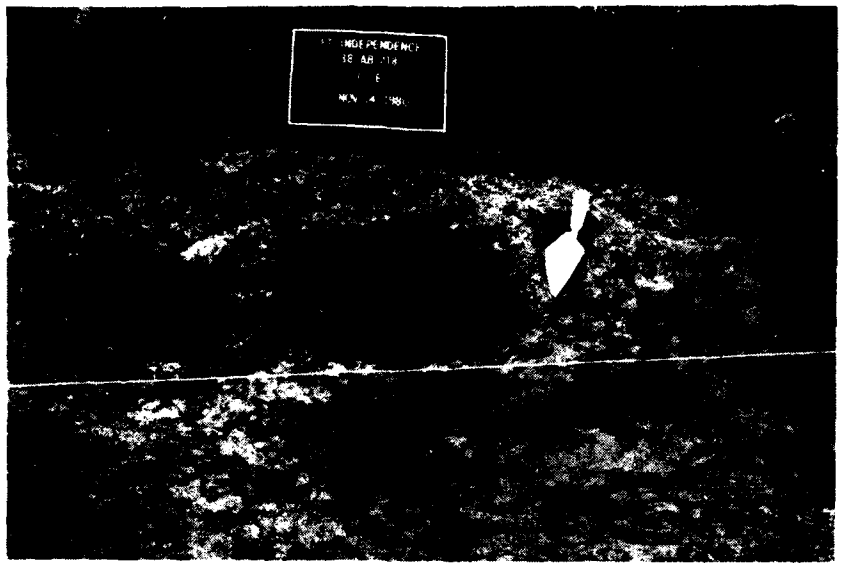
POSTMOLD

FIGURE 23

true vertical, but this could be partially an artifact of the plane of observation. At least one hole was originally dug too far south, with the result that it had to be expanded slightly to the north to allow the proper alignment of its post (Figure 23, F. 9). Three mold bottoms were concave rather than flat, one was conical, and two of the molds show that the logs of which they are impressions were cut on a bevel on the bottom end. Some mold profiles bell at the bottom (Figure 23, F. 32), and some have very lumpy side walls. The latter is probably a result of the settling or compression over time of the clay hole fill, rather than an indication of the surface contours of the posts. A fine, thin, bluish clay layer was noted at the bottom of the molds in Features 2, 33, and 36. Features 2 and 33 were also among the ten posthole/molds which had a flaring, compressed area to one or another side of the clay hole fill, as if the post had been pried out, crushing the top and side of the surrounding fill. The blue zone of Features 2, 33, and 36 was thus interpreted as subsoil clay stained by organic material washed or fallen into empty holes. Perhaps some partially burned stockade posts were removed as part of the cleanup operation evidenced for the Structure 2 area.

During the Phase I work, two molds were noted to have inner molds of a lighter color and finer, sandier texture. When profiled, these inner molds of Features 2 and 16 were found to be very shallow, 10cm and 4cm, respectively, and bowl-like. No artifacts or other materials were found in the inner molds. The outer molds of these features were otherwise the same as all the other stockade molds. The shallow depth of these inner molds precludes their being evidence of re-use of the burned-out postholes, as originally suggested, unless this re-use was for piers rather than posts. Also, the historical and archaeological evidence all points to the conclusion that salvage may have gone on at Fort Independence, but not re-occupation. If the suggestion is accepted, that the post of Feature 2 was removed as part of the cleanup operation with the hole left to fill in naturally, that implies that the inner mold was formed at some later date. The inner molds could certainly be just washed-in sediment filling concavities in partially filled holes, but the lengthy time factor for the filling makes that explanation less than satisfactory. No other can be tendered at this time, however.

The posthole/molds in their function as foundation for the stockade would seem to have merely anchored (albeit deeply) large upright posts which were probably little more than roughly trimmed trees. From there, reconstruction is entirely hypothetical, but it is easy to visualize the uprights connected by two or three crosspieces with many smaller trimmed trees nailed or pegged to the crosspieces vertically. The result looked like a stockade, but was less strongly founded. Because the areas between the posthole/molds were stripped to subsoil by the backhoe, any gate support posts present between the larger posts would have been observed. That none were is considered evidence that the gate was located at the southwest corner of the stockade where no bastion was found. Other observations indirectly support this conclusion, such as the placement of the door of the main house and the location of the soldiers' hut and the spring. Figure 25 illustrates a conjectural reconstruction of the main components of Fort Independence.



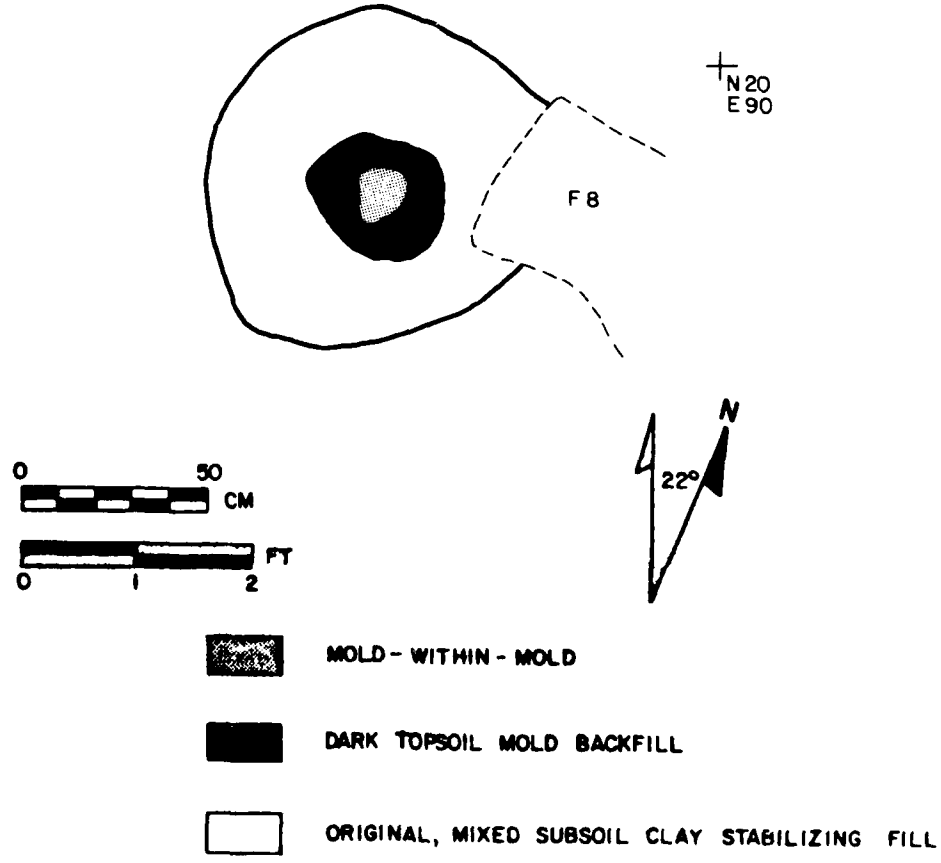
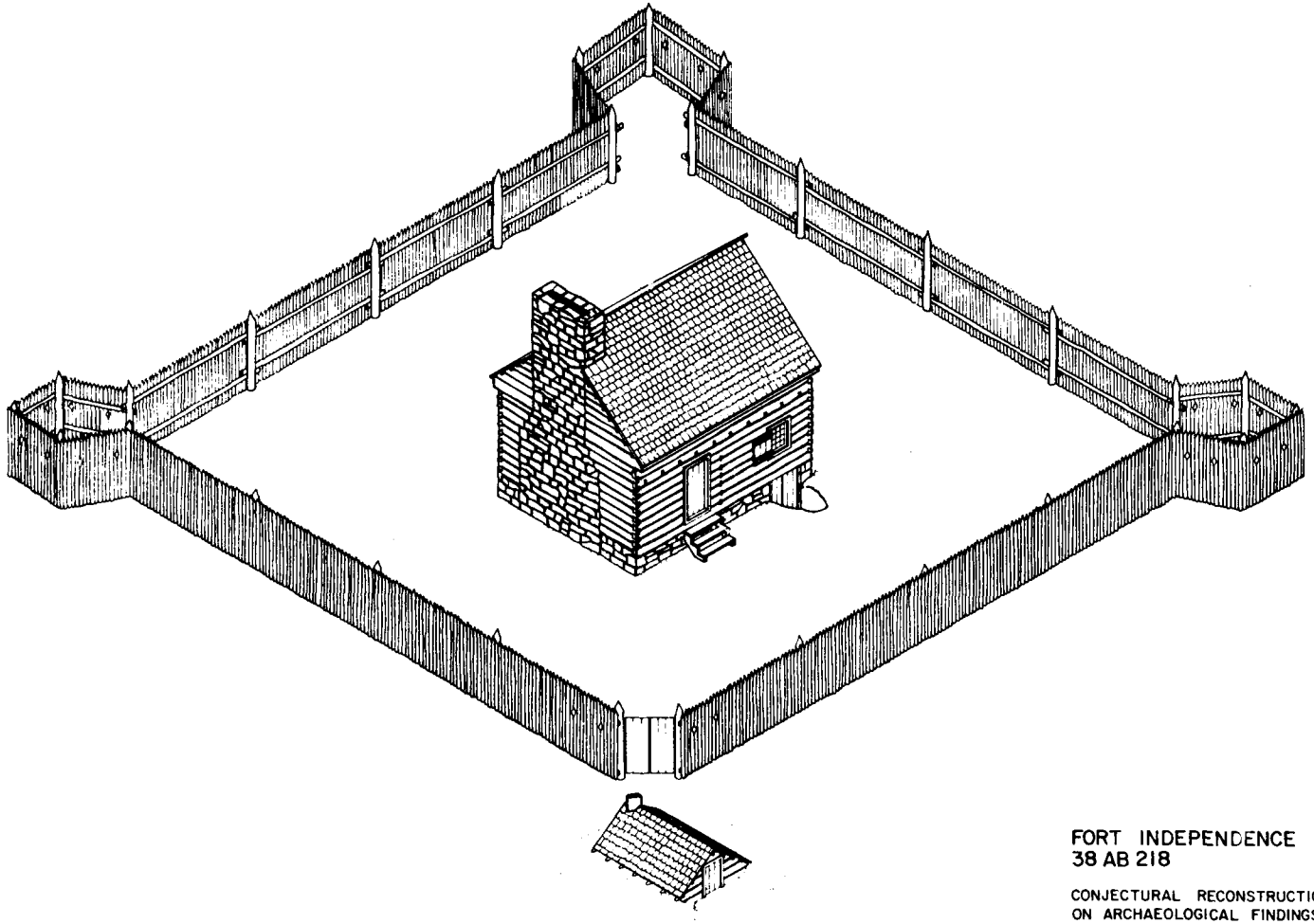

N20
E90
F8
N
22°
0
50
CM
FT
0
1
2
MOLD - WITHIN - MOLD
DARK TOPSOIL MOLD BACKFILL
ORIGINAL, MIXED SUBSOIL CLAY STABILIZING FILL

FIGURE 24



FORT INDEPENDENCE
38 AB 218

CONJECTURAL RECONSTRUCTION BASED
ON ARCHAEOLOGICAL FINDINGS
AND PERIOD ARCHITECTURE

FIGURE 25

TABLE 3: METRICAL ATTRIBUTES OF STOCKADE POSTHOLE/MOLDS IN CENTIMETERS AND INCHES

Feature Number	Max. Mold Diameter At Subsoil Top		Max. Hole Diameter At Subsoil Top		Max. Mold Depth From Subsoil Top		Max. Hole Depth From Subsoil Top	
	cm	in	cm	in	cm	in	cm	in
2	47	18 1/2	123	48 3/8	44	17 1/4	44	17 1/4
3	37	14 5/8	97	38 3/16	67	26 3/8	67	26 3/8
4	42	16 1/2	98	38 3/16	75	29 1/2	75	29 1/2
5	28	11	100	39 3/8	38	15	71	28
6	40	15 13/16	99	39	71	28	71	28
7	37	14 5/8	92	36 3/16	70	27 5/8	70	27 5/8
9	30	11 13/16	118	46 1/2	67	26 3/8	78	30 11/16
16	38	15	100	39 3/8	65	25 5/8	65	25 5/8
17	36	14 3/16	114	44 7/8	75	29 1/2	75	29 1/2
18	42	16 1/2	108	40 5/8	72	28 3/8	72	28 3/8
19	35	13 13/16	97	38 3/16	70	27 5/8	70	27 5/8
20	29	11 3/8	114	44 7/8	39	15 3/8	74	29 1/8
21	34	13 3/8	85	33 1/2	73	28 11/16	73	28 11/16
22	45	17 11/16	86	33 7/8	71	28	72	28 3/8
23	41	16 1/8	86	33 7/8	63	24 13/16	71	28
24	39	15 3/8	104	41	80	31 1/2	81	31 7/8
25	50	19 11/16	95	37 3/8	60	23 5/8	69	27 3/16
26	32	12 5/8	110	43 1/4	37	14 5/8	62	24 3/8
27	39	15 3/8	95	37 3/8	48	18 7/8	56	22
28	33	13	112	44 1/8	53	20 7/8	53	20 7/8
29	41	16 1/8	119	46 7/8	69	27 3/16	69	27 3/16
30	29	11 3/8	93	36 5/8	74	29 1/8	74	29 1/8
31	34	13 3/8	88	34 11/16	64	25 3/16	75	29 1/8
32	24	9 1/2	107	42 1/8	46	18 1/8	46	18 1/8
33	35	13 13/16	109	42 7/8	36	14 3/16	38	15
34	40	15 13/16	87	34 1/4	45	17 11/16	80	31 1/2
35	40	15 13/16	108	42 1/2	67	26 3/8	67	26 3/8
36	36	14 3/16	113	44 1/2	66	26	67	26 3/8
37	35	13 13/16	126	49 5/8	54	21 1/4	54	21 1/4

4.33 Other Features

Feature 8

This elongated, rectangular feature was found at the same time and in the same way as the two stockade posthole/molds on which it was intrusive. Feature 8 cut neatly and, apparently, quite deliberately across the gorge or opening of the northeast, largest bastion (Figure 6). Feature 8 was located by backhoe stripping and was excavated by troweling. The deposit was not screened. The feature was first bisected longitudinally, with the northeast half being troweled out first, but no stratigraphy was noted. The fill was shallow, 8 cm, and composed of mottled orange clay and loam, well mixed and consolidated, with a few, tiny bits of charcoal present throughout. Toward both ends, yellow clay became admixed, due to the intrusion of Feature 8 on the hole fill (but not the mold fill) of both stockade posthole/mold Features 16 and 3. Nine fragments of large mammal bone were present.

The plan dimensions were 1.90 x .46m (6ft 2 3/8in x 1ft 6in) A small, rectangular projection on the northeast side of this feature was 63 x 12cm (24 13/16 x 4 11/16in) in plan and about 5cm (2in) deep, forming a small shelf-like extension of the feature, with fill identical to it.

Feature 8 was a shallow trench dug across the gorge of the northeast bastion at a time when the stockade was still extant. Originally identified as some kind of sill mold, Feature 8 was subsequently found to contain fill consisting of mixed soils that were clearly backfill and not the result of replacement of wood by humic topsoil. Although the presence of faunal remains indicated that the trench was used for the disposal of garbage, it was too shallow to be much of a trash pit unless it was only meant to be used once. Its shallow depth, its regular shape, and its placement all mitigate against Feature 8 being merely a trash pit, but no other clues regarding its primary purpose were found.

Feature 38

Another rectangular trench feature resembling Feature 8, Feature 38 also intruded upon the fill of Feature 35, one of the stockade postholes of the northwest bastion (Figures 6 and 26), but not in the calculated and regularized way seen for Feature 8. This trench was also found at the same time and in the same way as the stockade posthole/molds, i.e., by backhoe stripping during Phase I. The excavation procedure for Feature 38 in Phase II was the same as for Feature 8.

Only the topmost zone of the feature's fill was uniform in extent and in its mixture of materials. This zone was medium brown clay loam mottled with orange clay. It contained both charcoal and daub bits. It ranged between 2 and 11cm in thickness and covered the entire feature at the level of definition in the subsoil. Below this zone, 11-16cm of mixed fill materials were not uniform in either

vertical or horizontal placement. Loam-mottled orange and yellow clays dominated the west half of the lower fill and dark brown loam with heavy charcoal content and red or orange clay lenses interspersed within it dominated the east half, extending partially under the mixed orange and yellow clays of the west half. All zones had a few fist-sized quartz rocks. There was a concentration of charcoal measuring 35 x 45cm in plan and 15cm in thickness (at the maximum) located against the bottom and east end of the trench. Within this were many rust spots and nails. Other artifacts, both burned and unburned, were also from the lower fill of the east end of the trench and included wine bottle glass, sherds from coarse earthenware bowls or porringers, peach pit fragments, and bones from unidentified large mammals.

The plan dimensions of this trench were 1.76 x .62m (5ft 2 1/4 in x 24 3/8in), the maximum depth being 24cm (9 1/2in). The walls of the trench were nearly vertical, but the plan outline was more trapezoidal than truly rectangular. The west end of the feature intruded on Feature 35, the corner posthole/mold of the northwest bastion, right up to the edge of the postmold itself, so Feature 38 was dug out while the stockade was still extant.

The only interpretation offered for this feature is that it was a single-use trash pit, dug to dispose of fireplace residue and kitchen garbage and immediately backfilled. The artifacts would seem to be lower-status items, but they could have been used by the residents of the main house, as their proximity suggests.

4.34 Post-Fort-Period Features

Feature 43: A Cooking Pit

This rock mound feature was found in the woods some 70m west of the spring during Phase I work. At the beginning of Phase II, this feature and the area around it were cleared of vegetation and loose stones to reveal an elongated, rectangular, trough-like construction of dry-laid stonework masonry (Figure 27). The maximum plan dimensions of this feature were 3.10cm x 1.12m (10ft 2in x 3ft 8in). Approximately three courses of unmortared, quartz fieldstones survived above the extant ground level, to a height of 20-41cm (8-16in). The north end was higher and closed, whereas the lower, south end was open. Partially on the surface and partially buried near the northeast corner of this feature were three iron singletree ends and a 76.50cm length of half-round iron bar, pierced by bolt holes, one end of which was twisted 90 degrees to the long axis. One of the singletree ends had a wire nail in its fastening hole, precluding it and Feature 43 from being contemporary with the fort. Another piece of bar iron, nearly identical to the first right down to the twisted end, was found near the south end of the feature. Surface remains of charred wood were observed spreading out from the feature about 2m, indicating rather recent use.

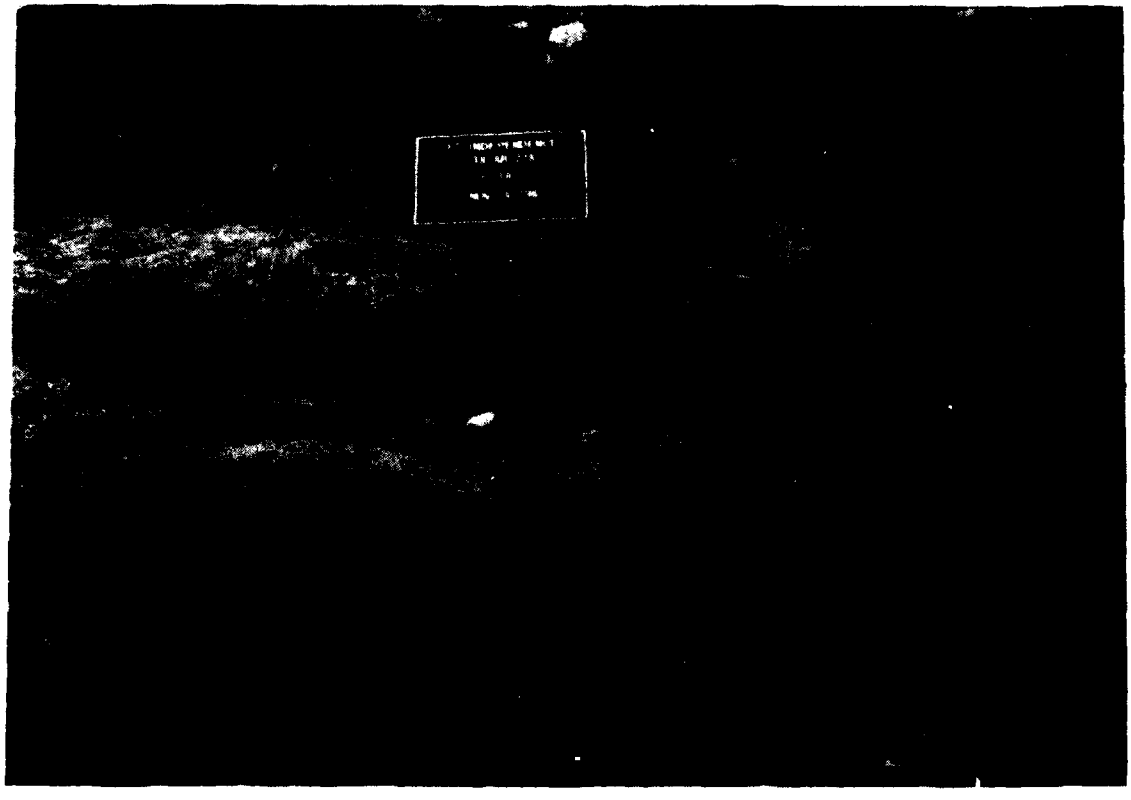


Figure 26. Feature 38, plan view, looking north.

Army Corps of Engineers archaeologist Jim Cobb identified this feature as possibly a molasses cooking pit, and this opinion was independently corroborated by longtime local residents, visiting the site with other Corps personnel at a later time. They suggested that the iron bar lengths were used to support pans containing pressed-out sorghum juice over the coal bed, which was the southern, lower part of the feature with an open end. The higher, closed part was where the chimney was and where wood was reduced to coals prior to being raked out into the bed area.

The above interpretation of this feature's function seems entirely plausible. The artifacts could be either nineteenth or twentieth century, though the reason for their presence is obscure, unless the remains of some old wagon were being burned, just to get rid of them. Recent use need not be as a molasses hearth, but possibly as a camping spot or even as a still, a twentieth-century practice mentioned in the oral tradition of this area. It should be noted that the spring was not far away from this feature, and could have provided the water necessary for the manufacture of either molasses or distilled spirits. A survey of the woods around the area located no traces of the residence which would have been expected according to the usual occurrence of molasses hearths at homesites, rather than as isolated features. Once this feature's approximate date was established, no further work was done on it due to the need for emphasis on the fort-period resources at the site.

Feature 44

This rock mound was found during Phase I near the edge of the strip of woods that borders the Rocky River, some 215m east of the fort. When cleared of vegetation, the rock mound exhibited no arrangement to the rocks and subsequent dismantling revealed no core of masonry, so no further effort was applied here. The feature has been interpreted as an accumulation of fieldstones resulting from agricultural clearing.

Feature 46: The Spring

This number was given to a crude construction which was found in the small, shallow bog created by the generous outflow of a natural spring located 61m southwest of the stockade's southwest corner and probable gate (Figure 6). The bog fills a shallow basin which is semicircular in shape around the outflow but narrows from that, elongating and curving as it drains downslope to the southeast. The diameter of the semicircular part of the basin is about 4.6m and the elongated part is about 15m long. The southeastern end attenuates to a narrow, sluggish, root-choked channel which probably joins up eventually with Thompson Creek to the south. On the surface the deposit appears to be a fine, wet, light brown clay. There is no standing water, except in recent cattle hoofprints. The deposit probably stays wet all year round. It was observed to be equally wet during Phase I (November, 1980) and Phase II (May-June, 1981) work at the site. Around the edges, tufts of long grass tend to stabilize

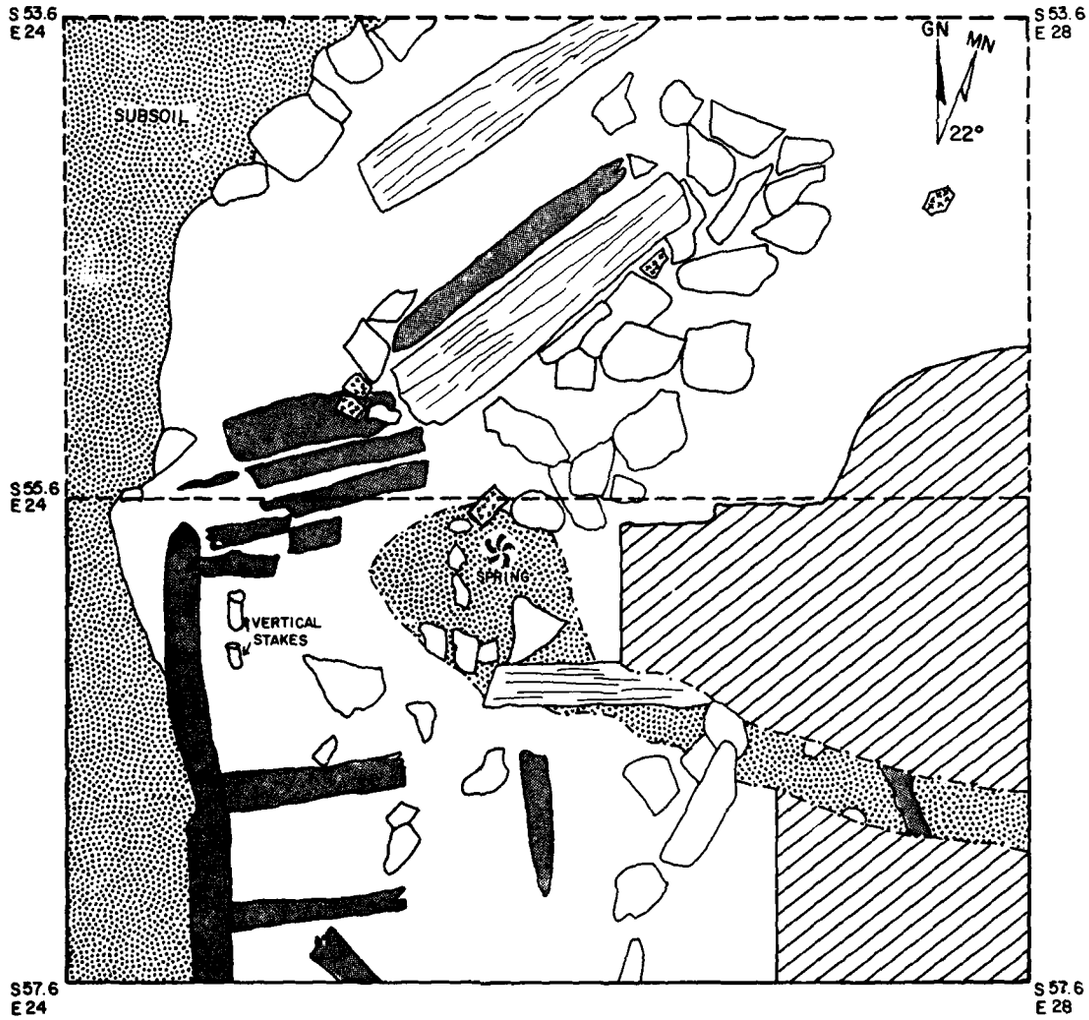
Figure 27. Feature 43, cooking pit. Overview looking southwest.

the deposit, but one or two steps away from the edge a person may sink in, but no more than knee-deep. At the time of Phase I work, there was no indication of either the outflow location or of any efforts made by any one other than cattle to utilize this water source.

Only minimal attention was given to the spring area in Phase I. A metal probe was used to check for anything of substance in the deposit with the result that a rock concentration was located. For Phase II, hand excavation and water screening of the sodden bog deposit were planned. A 2 x 4m test pit was laid out over the area of the bog where the rock concentration had been probed. This test pit was an extension of the grid system used for the rest of the site. The sodden bog deposit was shoveled into wheel barrows and water screened on the bank of the Rocky River, 340m away from the spring. No fort-period artifacts were found in the bog deposit, however.

Artifacts of the twentieth century were found in association with a crude platform, Feature 46, which was what the Phase I probing had discerned. Thirty cm under the bog's upper, wetter deposit was an arrangement of 2in thick planks, small logs, rocks, slab lumber and odd fragments of crudely made bricks (Figure 28) constituting a platform of sorts. It was not continuous horizontally, and because its rocks were not flat (at least at the time of the archaeological exposure of them), it was not very good footing, either. Only the planks were fairly firm and level. The whole construction generally sloped in and down from the edge of the basin toward the outflow, which was located just south of the middle of the 2 x 4m test pit some 20-30cm from the wooden part of the platform. The artifacts found in the deposit over Feature 46, and even between the main plank and the rocks to the south of it, were all things which could well end up in the muck around such a natural spring as this: twelve fragments of a purpled, heavy, clear glass water goblet with a thick stem and foot; a couple of pieces from the neck of a clear glass jug of the kind cider comes in; five sherds from a plain white ironstone cup; two pieces of a leather boot with both eyelets and hooks still attached (it takes little stretch of the imagination to picture how a boot came to be lost in the tenacious spring deposit); two tin can fragments; peach pits; peanut shells; and many short, sawn, hard pine sections of a small diameter. The presence of the latter will remain unexplained here. Considerable organic material was well-preserved in the bog deposit and included seeds, twigs, and leaves.

Thus, Feature 46 was found to be a fairly recent construction designed to facilitate access to the spring outflow. It is not carefully built, but rather, assembled from materials at hand, thrown into the muck and somewhat arranged. No prepared catch-basin for the outflow was found, but it was observed that the water in a hand-scooped basin will clear in less than a minute and can be dipped out. The outflow bubbles up organic debris and clogs such a hand-scooped basin quickly, so a fresh one would have to be prepared for each use.



FORT INDEPENDENCE
38 AB 218

0 .5 1 M

0 1 2 3 FT

SPRING AREA / FEATURE 46

---- HAND EXCAVATED LIMITS

—— BACKHOE EXCAVATED LIMITS (~40 CM DEEPER THAN HAND EXCAVATED AREA)

PLANK OR SLAB LUMBER

LOG

ROCK

BRICKBAT

UNEXCAVATED

SANDY BLUE CLAY

REDDISH MICACEOUS SANDY CLAY

—·— EDGE OF HAND EXCAVATED DRAINAGE CHANNEL ~20 CM DEEPER THAN SURROUNDING AREA

FIGURE 28

The deposit over Feature 46 was fine wet clay of a light brown color and a silty texture. This deposit graded into the 20cm thick topsoil layer at the edges of the basin, where it became more humic in content and consequently darker in color. Toward the middle of the semicircular basin, the upper deposit was thicker, about 45cm, with Feature 46 sandwiched within it near the outflow. A major change in soil type occurred below the upper, light brown, saturated bog deposit: a firmer zone (some 30cm thick) of blue-gray, fine-grained, micaceous clay evenly mixed with coarse sand. This zone was what made the platform, Feature 46, possible, since the zone was firm enough to support rocks, cattle, and people, and to maintain driven vertical posts upright. The components of Feature 46 which were near the outflow were about 15cm above this firm blue clay zone.

The matter of fort-period use of the spring remained open, so deeper excavation around the outflow was planned. In order for this to occur, further drainage of the area had to be arranged. A backhoe was brought in and the hand excavated drainage channel was widened and deepened. When the water level was lowered to 82cm below Feature 46, the main components of that feature were removed and the sandy blue clay material below it was excavated, as well as about 12cm of the next lower zone, a gray-brown, fine, silty clay with sandier lenses within it. The total thickness of this zone cannot be given because the base of it was not reached. No more evidence of arranged materials was found in the hand excavated 2 x 4m test pit. No additional water screening was done on any of the lower deposits.

To ensure that no further remains of man-made origin were present in the spring deposit, an area to the south of and contiguous with the test pit was excavated using the backhoe. The backhoe excavated area was approximately 3 x 4m, and the deposits were stripped horizontally about 30cm at a time, with care being taken to leave in place anything of substance. The backhoe excavated material consisted of about 45cm of the topmost, light brown, wet clay layer; 30cm of the second, sandy, blue clay layer; and about 25cm of the third, gray-brown, silty clay layer, totaling about one meter.

More components of Feature 46 were found in the backhoe work, but no fort-period artifacts or any other, lower, evidence of construction. Some of the additional parts of Feature 46 were at about the same level as the main feature elements, but some parts were half a meter lower. The horizontal log shown in Figure 43 along the west edge of the spring basin was a retaining element associated with the nearly vertical stakes driven to stabilize it and the shorter log sections north of it. The other logs and rocks in the backhoe excavated area were embedded in the lowest layer encountered. They had no apparent arrangement but were probably Feature 46 underpinnings which shifted and/or sunk.

The area right around the spring outflow was hand excavated to some 20cm below the backhoe exposed level in order to see whether there was a deeper prepared catch-basin, but none was found. The area around the outflow was red in color compared to the adjacent gray-brown clay, resembling the outer subsoil basin more than the bog deposits. The source of the outflow was deeper than one could reach

with a full arm's extension down into its 10 to 13cm diameter mouth, with sandy clay walls going all the way down. However much clay was removed from around the outflow, it seemed to reform and maintain its vertical tunnel by the pressure of its current. This makes it likely that potential users of this water source could have exploited it at whatever depth their preference dictated.

Feature 46 may have been constructed at the time that Feature 43, the nearby molasses hearth, was in use, whether as a molasses hearth or as part of a still. Nonetheless, the spring is so close to the fort that it seems very likely it was also the water source for the garrison. The probable substitution of a gate where the southwest bastion should have been is further argument for the fort-period use of the spring, since a gate would probably have been located in such a way as to maximize proximity to the fort's water source.

Feature 48

A small clay mound with a burned central area and what appeared to be large chunks of slag on its surface was designated Feature 48. The mound was located about 20m south and downslope of the soldier's hut, Feature 39 (Figure 6). The slag suggested the possibility of a forge so further exploration of this mound was undertaken. Clearing of the vegetation and humus revealed a roughly square mound some 17cm in maximum height (Figure 29). In plan view the mound was 4.72 x 4.44m (15ft 6in x 4ft 7 3/16in), surrounded by a shallow depression. The burned central area had concentric zones of loam and/or clay mixed with varying amounts of charcoal and daub. The periphery of the mound had irregular areas of hard, reddened, burned clay.

The grid system was extended to include Feature 48 and a 30cm wide stratigraphic trench was excavated through the center of the mound, running north-south, to check for foundations or any statigraphy within the mound. The deposits were dry screened.

No foundations were encountered. The profiles of the stratigraphic trench appeared to be of a normal soil horizon modified by two events: 1) a large bonfire, and 2) the removal of dirt from around the bonfire area and the deposition of it on top of the smoldering fire. The strata, thus, were layers and pockets of topsoil loam and subsoil clay, variously affected by charcoal and heat. No ash or charcoal layers were observed in the profiles, and no artifacts were found in any of the excavated materials.

Having established that this was not a forge, it was desirable to see whether Feature 48 had been a fort-period activity area of some other kind. So the northwest quadrant of the feature was excavated to sterile clay, with dry screening of the deposit, and then the southwest quadrant was similarly treated. No artifacts of any kind were found, but the excavators observed that some of the partially burned twigs present in the deposit still had bark on them, denying any considerable time spent buried.

AD-A133 125 FORT INDEPENDENCE: AN EIGHTEENTH-CENTURY FRONTIER HOMESITE AND MILITIA POST IN SOUTH CAROLINA(U) BUILDING CONSERVATION TECHNOLOGY INC NASHVILLE TN B E BASTIAN 2/3

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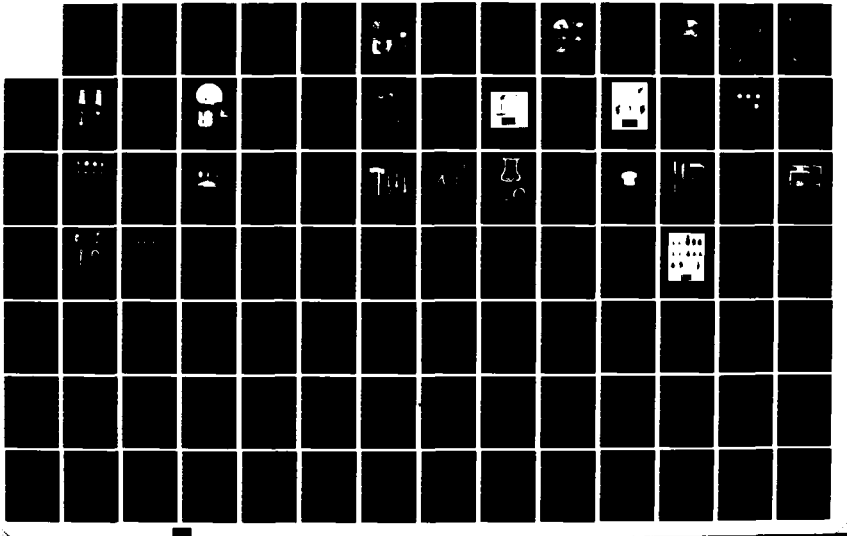
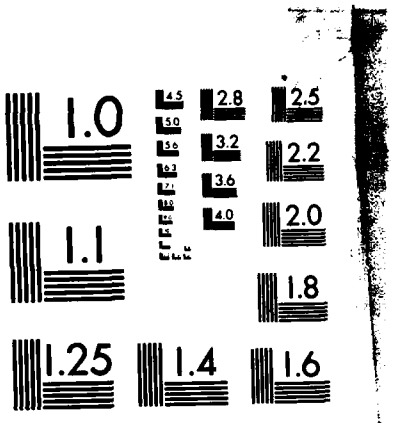
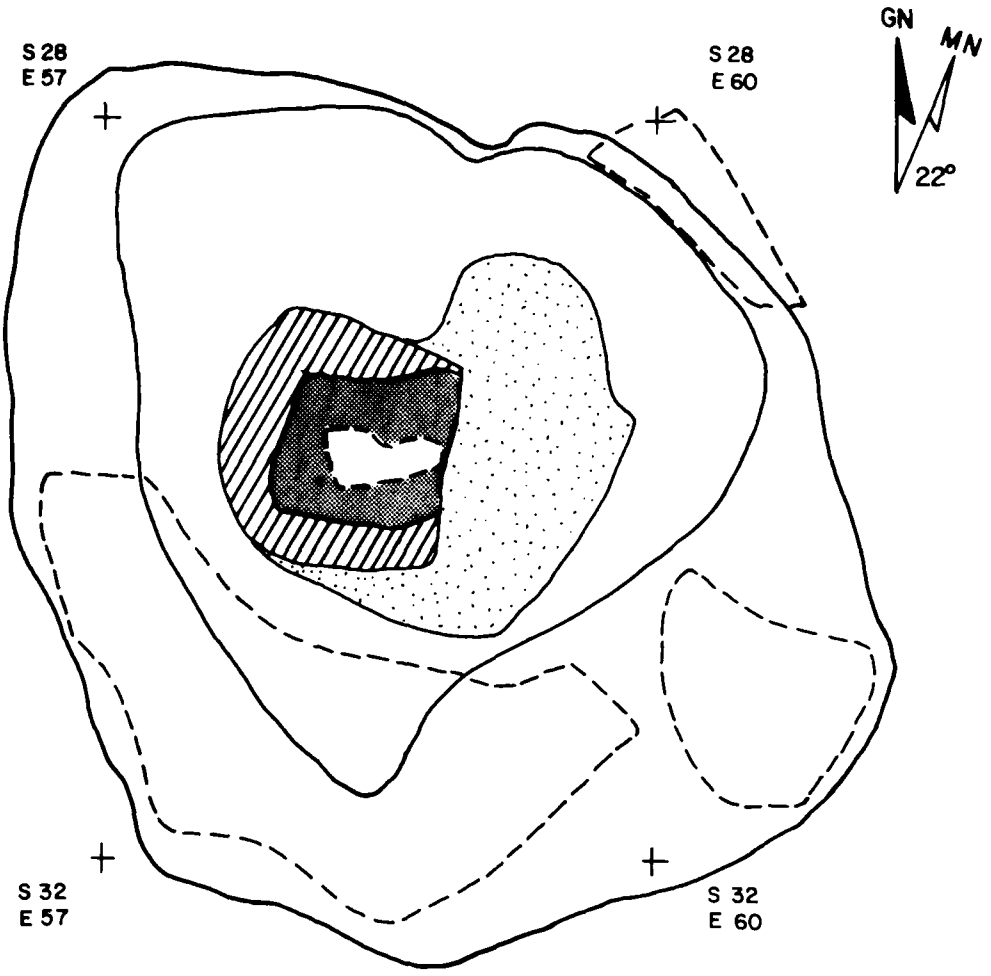






FORT INDEPENDENCE
38 AB 218

0 50 100 CM

0 3 FT

FEATURE 48

—— TOP & BOTTOM OF CLAY MOUND

--- AREAS OF FIRED CLAY

BROWN LOAM, CHARCOAL, FIRED CLAY

DARK, MOIST BROWN LOAM & CHARCOAL

BROWN LOAM & FIRED CLAY

FIGURE 29

With the conclusion that Feature 48 was not contemporaneous with the fort, the feature was interpreted as a fairly recent campfire, although no modern artifacts such as aluminum foil or tin cans were present to support this. When the large slag chunks which had a superficial association with Feature 48 were closely examined later in the laboratory, they were found to be chunks of burned clay. The clay had been subjected to such high heat that it actually frothed, resulting in a porous, pumice-like texture. Imprints of sticks and branch ends are visible in these chunks. It was only possible to identify the nature of this material because some of the fired mud daubers' nests from Structure 2 exhibited the same pumice-like texture, and these had to be made of clay. The large chunks of fired clay found in the area of Feature 48 probably ended up there as a result of erosion washing out fort-period deposits upslope from the modern feature.

Closer examination of all the materials earlier thought to be slag showed that no true slag was found anywhere on the site during either Phase I or Phase II work, so it is probable that no smithing took place there. If this was the case, the Fort Independence garrison was dependent on their supply lines for nails and hardware and on having to go a distance to have their weapons repaired and their horses shod. Fort Rutledge may have had a smith, but it is possible that Bowie's men had to go as far as Ninety Six for such services.

5.0 ARTIFACTS: DESCRIPTION, INVENTORY, AND ANALYSIS

5.1 FORT PERIOD ARTIFACTS

For convenience of description, artifacts will be discussed under broad headings based on material of manufacture, with identified or suggested functions as the second breakdown. Some cross-referencing will thus be necessary (i.e., "buttons" would be found under both Brass and Pewter headings), but not overly much, due to the modest quantity of artifacts in this assemblage. Names and terms are generally those most frequently used in the literature of historical archaeology. For analytical purposes, the data will be arranged according to South's classification (South 1977:95-96) and discussed in those terms in the comparative section to follow the artifact descriptions.

5.11 Ceramics

Porcelain (Figure 30A, Figure 33B)

Chinese export porcelain was present at the site but rare. Eight sherds of underglaze blue-decorated and three sherds of underglaze blue-decorated with red overglaze enamel were found. In the former ware, saucer and bowl forms were present, but no estimate as to quantity can be made. The red overglaze enamelled sherds were all from a tea bowl (Figure 33B), which measured 3.66cm (1 7/16in) in height, 6.40cm (2 1/2in) in rim diameter, and 2.5cm (1in) in foot ring diameter. Note that the swirl effect was potted as well as painted.

Eight of the 11 porcelain sherds were associated with the central structure. Two others were finds recovered from backhoe backdirt and thus were given the general site provenience, "surface." The remaining sherd was from one of the stockade postmolds.

White Saltglazed Stoneware (Figure 30B)

Plain and two decorated types of fine white saltglazed stoneware were represented in the ceramic subassemblage. Relief-molding in the "barley" pattern on two plate rim sherds (probably from the same plate) was one of the decorative forms of white saltglazed stoneware. A single rim sherd from a bowl was decorated with the scratch-blue technique in a chevron and swag motif. Twenty-two of the 27 plain sherds lacked distinctive features for assigning them to vessel types, but five sherds were from a saucer with a 6.4cm (2 1/2in) foot ring diameter. Generally these sherds were light and thin. They were probably from teaware items. Twenty-seven of the total of 30 white saltglazed stoneware sherds were from the immediate

vicinity of Structure 2: from the burned cellar debris; from the top zone of Feature 45; and from the plowzone of squares to the north of the cellar. The other three sherds were surface or backhoe excavated finds.

Westerwald Stoneware

Only two sherds of this heavy, gray saltglazed ware were found, neither large enough to have the typical cobalt blue decoration. A rim 8.90cm (3 1/2in) in diameter could be from a mug. One sherd was from the plowzone in a square three meters to the south of the cellar of the main house. The other was from one of the stockade postmolds.

British Brown Stoneware

At least one vessel, probably a jug or a pitcher, of this ware was represented by 103 sherds, all but two of which came from the cellar of the main house. One of the other two sherds came from a square just south of the cellar, the other was from one of the stockade postmolds. Most of the sherds were found in the burned debris level of the cellar, and the effects of heat on them were such as to make identification and/or reconstruction extremely difficult. A few sherds, less affected, exhibited a honey-brown saltglaze on the outside of the vessel, but glaze and body colors, glaze and body textures, and even sherd shapes were radically altered in the fire. Only one measurement on this vessel was possible, a rim diameter of 6.40cm (2 1/2in).

Creamware

This fine earthenware was distributed in a pattern very similar to that described for white saltglazed stoneware, and the frequency count was also similar: 31 creamware sherds and 30 white saltglazed stoneware sherds. The darker yellow, earlier variant was represented by 25 sherds and the lighter, later type by six sherds. Vessel types were probably bowls and saucers, but no vessel counts could be made. One darker yellow rim sherd measured 16.50cm (6 1/2in) and a lighter yellow foot ring sherd measured 6.40cm (2 1/2in). The lighter yellow sherds were distributed much the same as the darker ones. This ware is assumed to have been teaware.

Jackfield (Figure 30)

Just one sherd of this fine, hard, dry-bodied, black-glazed, red earthenware was found. It was in the burned debris zone of the cellar. It was a thin body sherd with the terminal of a strap handle still attached. This could have been from a teapot.

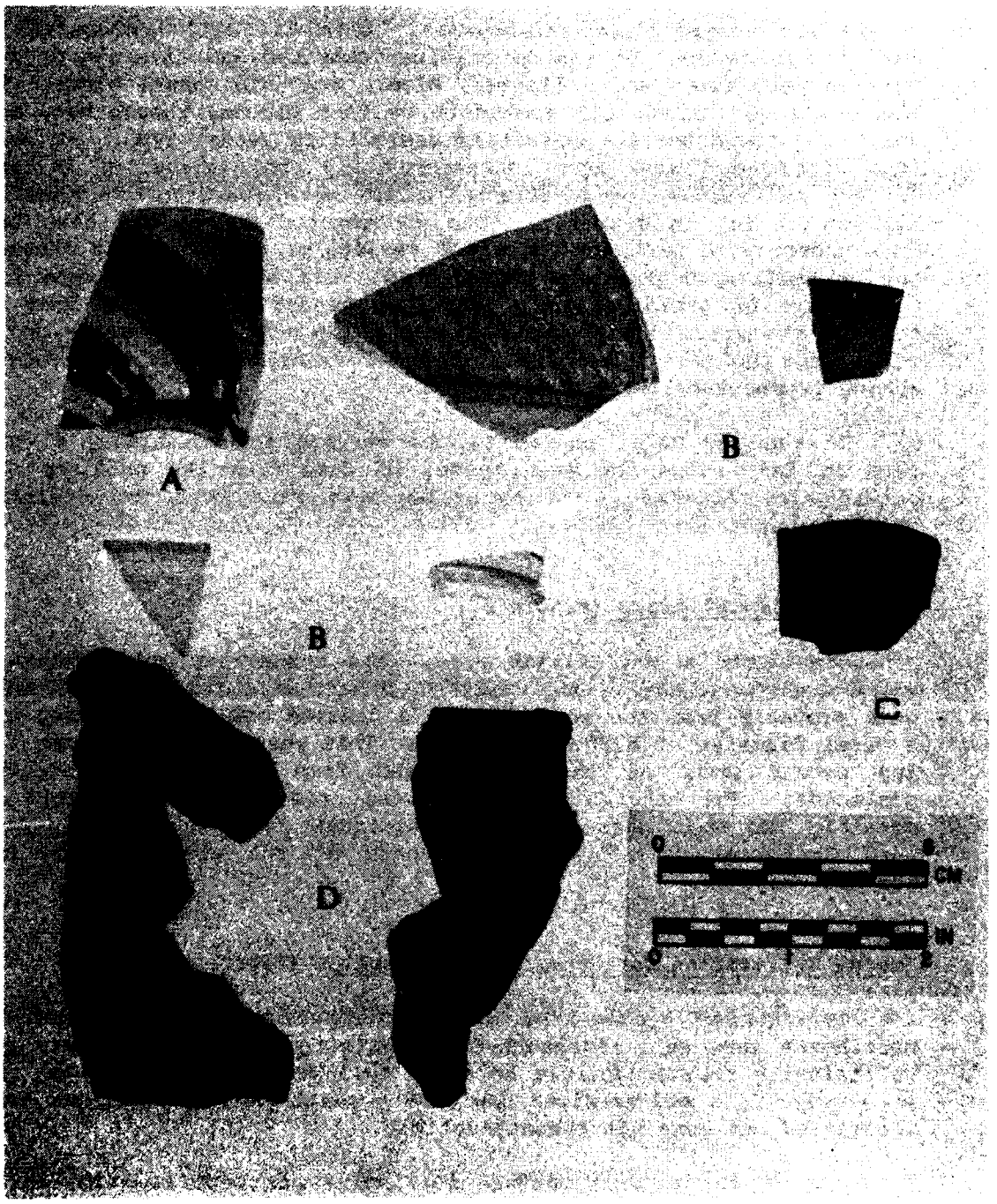


Figure 30. A. Chinese porcelain
B. Saltglaze stoneware
C. Jackfield
D. Earthenware

Delft (Figure 31)

A more commonplace earthenware, Delft was well represented at Fort Independence: 95 sherds of blue-decorated and five sherds with no blue decoration and a lighter, bluer, gray tin enamel glaze. The blue-decorated sherds all seemed to be from plates, though many were small and could not be definitely assigned to vessel type. At least four different plates were represented. A rim diameter of 24.10cm. (9.5in) and another of 21.60cm (8 1/2in) were measured. A base was 12.70cm (5 in) in diameter. The undecorated sherds may have been from undecorated parts of decorated vessels or a plain Delft ointment jar or small bowl could be represented. All Delft sherds were in a poor state of preservation. The glaze tended to separate from the body of the ware in many small pieces. The soft, earthenware bodies of the sherds, bereft of glaze, lost all definition around the edges, making reconstruction very difficult.

Of the 100 Delft sherds in the ceramic subassemblage, 87 came from in and around the main house, 15 came from the soldiers' hut outside the stockade, and the other two came from two different stockade postmolds.

Combed Yellow Slipware (Figure 31)

Considered a utilitarian ware, this hornet-striped earthenware was uncommon on the site. Fifteen sherds were found, 11 of which were probably from the same vessel, a handled bowl or porringer with a basal diameter of 8.30cm (3 1/4in). This vessel's sherds came from the debris zone of the cellar and from one of the stockade postmolds. The other four sherds were from at least one more and possibly two more vessels of indeterminate form whose proveniences were Structure 2 and near the gorge of the southeast bastion, respectively.

Coarse Utilitarian Earthenware: Consumption (Figure 32 and 33)

Soft-bodied, leadglazed and/or slipped earthenware bowls and porringers were well represented at the site. Three porringers were sufficiently reconstructible to allow full profile measurements. Two more vessels, a medium-sized bowl and a small bowl or porringer, were identified but were not reconstructible.

One of the reconstructible porringers was decorated inside and out by greenish clouds on a pale orange background, an effect using underglaze color and a clear lead glaze on an orange body (Figure 50C). This vessel, whose 17 sherds were found in the cellar fill and in the deposits around the west end of the main house, surprisingly showed no signs of fire. Its height was 7.30cm (2 7/8in). Its rim diameter was 10.20cm (4in). Its basal diameter was 7.60cm (3in).

Another more-or-less complete porringer was identical in its body and appearance to the porringer just above (Figure 33A). Most

of the 18 sherds representing this vessel were from the cellar fill. The glaze had completely flowed away on some sherds, but others showed no such effects, even ones from the burned debris level of the cellar. This vessel's height was 6.40cm (2 1/2in), its rim diameter, 12.10cm (4 3/4in), and its basal diameter, 8.90cm (3 1/2in).

The third reconstructible porringer was also associated with the central structure, mostly in plowzone levels and the deposition on the west end of the house. It had a buff body with an olive-green lead glaze inside and out (Figure 33D). The glaze on some sherds had run and bubbled from the effects of heat. There were 18 sherds from this vessel. Its height was 6.40cm (2 1/2in). Its rim diameter was 12.10cm (4 3/4in) and its basal diameter was 7.60cm (3in).

A possible bowl was represented by 36 sherds which were thin, buff-bodied (some more gray), and glazed with a clear lead glaze on the inside only. A rim diameter of 20.30cm (8in) and a basal diameter of 11.40cm (4 1/2in) were measured. A simple, medium-sized, straight-rimmed, flaring-sided bowl with a flat base would be the vessel form. No height could be reconstructed. The sherds were all associated with the main house, predominantly with the west end deposits.

Another porringer or small bowl had only four sherds present in the burned debris zone of the cellar. With a rim diameter of 12.70cm (5in), this vessel had a buff body and a clear lead glaze inside and out, yielding a dull, honey-colored finish.

The remaining 35 sherds included: 13 rim sherds, 12 of which were unique; 10 basal sherds, nine of which were unique; one handle, probably from a porringer; and 11 body sherds. Almost all of these were thin, buff-bodied, and clear leadglazed. A few had the dark greenish lead glaze, a few were thick-bodied, and a few had gray bodies. Small vessels were represented. Curiously absent among them were mugs. Most of the sherds were from in and around the central structure, but eight were from the area just outside the gorge of the southeast bastion, six were from one of the stockade postmolds, and four were found in trash pit Feature 38.

Coarse Utilitarian Earthenware: Storage or Preparation
(Figures 30, 31, 34)

Three jars were represented, all from the central structure. They were quite different from each other in most respects and did not conform to any recognized type.

The most complete jar was badly damaged in the fire. It was originally glazed on the inside only with a dark brown or black lead glaze (Figure 30D). No sherds display a pristine glaze, so this color determination is conjectural. The inside glaze was messily slopped up and over the rim and onto the outside of the lip. The base was flat and the jar was essentially ovoid in form. No handle

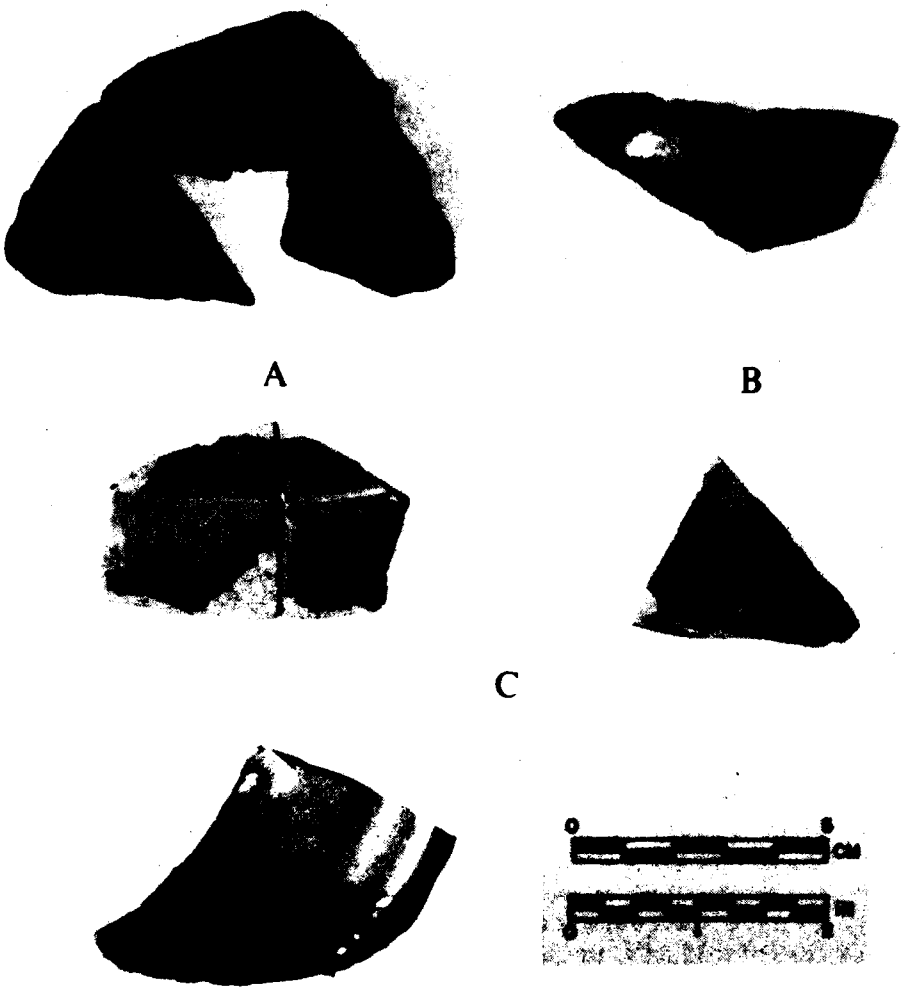


Figure 31. A. Brown glazed earthenware jar
B. Combed yellow slipware
C. Delft

sherds were present among the 314 sherds of this jar which were recovered from the burned debris layer of the cellar. The effects of the fire on this vessel were extreme. The glaze had flowed away entirely or bubbled into a glassy froth. A few sherds retained their original, oxidized, orange-buff body color, but the great majority evidenced gray bodies from the reduction-firing effects of the burning of the main house. Many sherds exhibited spalling on one or both of their surfaces. Many sherds were warped and one had a hole punched through it while it was still plastic from the fire. The rim of the jar was no longer quite round, so the diameter was 24.10-25.40cm (9 1/2-10in). The basal diameter was 16.5cm (6 1/2in). The conjectural height was 34cm (13 3/8in) (Figure 34).

Another jar was much more crudely potted, thick, and clumsy (Figure 30). Fifty sherds from the refuse deposit on the west end of the main house were recognized as being from this vessel, but fire damage, again, made identification and reconstruction very difficult. Original body color was pink with a rust-brown glaze on the inside only, the glaze having a metallic sheen. Measurable rim sherds varied a bit due to warpage, but the diameter was probably about 30.50cm (12in). An ear-type lug in this paste was noted to be hand modeled and crudely so. It is assumed to be part of this vessel. The possibility of colonial manufacture of this vessel can be suggested.

The third jar was represented by just 13 sherds, all from the plowzone in squares around the main house. The vessel was thick-bodied and glazed on both the inside and outside (Figure 31A). The outer glaze was thick and dark brown. The inner glaze was medium brown with amber flecks. The body was soft and pale orange to buff-orange in color, but not marbled. No ribbing was present. No measurements could be made.

Ceramic analysis will be discussed further below in the Artifact Analyses and Intersite Comparisons section.

5.12 Pipes

Only 24 pipe fragments were found on the site. No bowl decoration was noted, but 22 fragments were stems which could be measured for hole diameter. One had a diameter of 6/64in, 18 had diameters of 5/64in, and three had diameters of 4/64in. Using the Binford regression formula, a mean pipestem date of 1743.99 was obtained (Binford 1962:19). Using the Heighton and Deagan regression formula, a mean pipestem date of 1748.48 was obtained (Heighton and Deagan 1972:221). These predate the actual occupation date by 20 or more years. Of course, the sample size is quite small.

The pipe fragments were distributed rather widely at the site. Eight were from the cellar fill zones, four were from the plowzone in squares south of the main house, nine were from the plowzone in squares north of the mainhouse, two were from two different stockade postmolds, and one was from the plowzone of a square west of the main

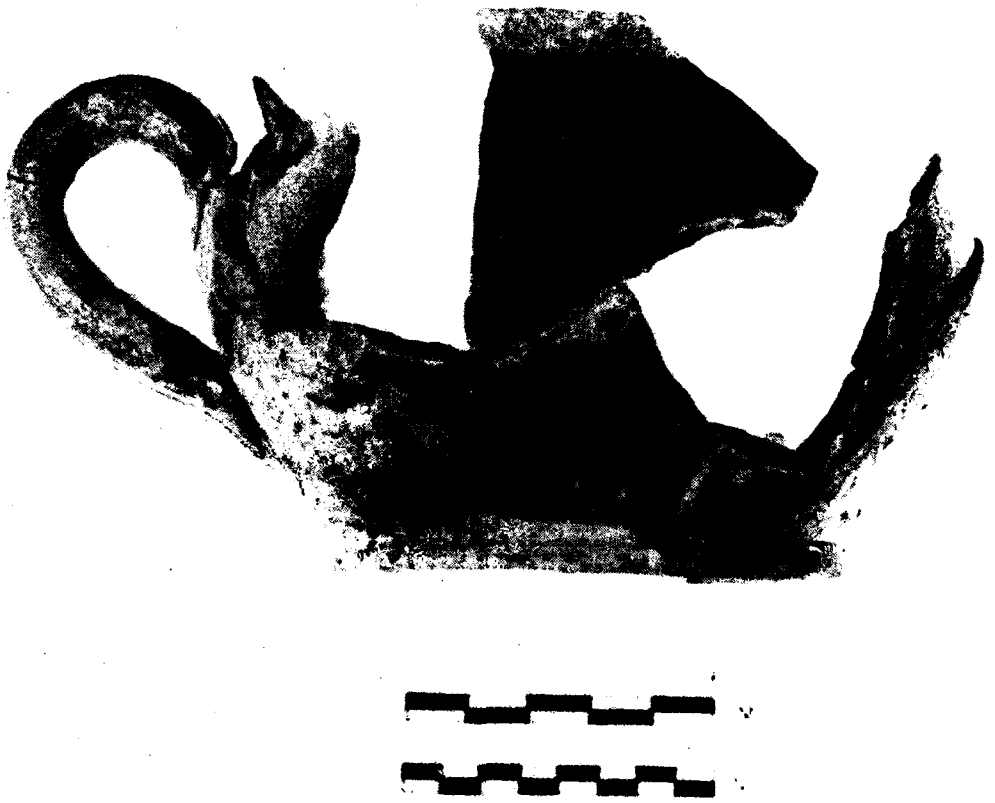
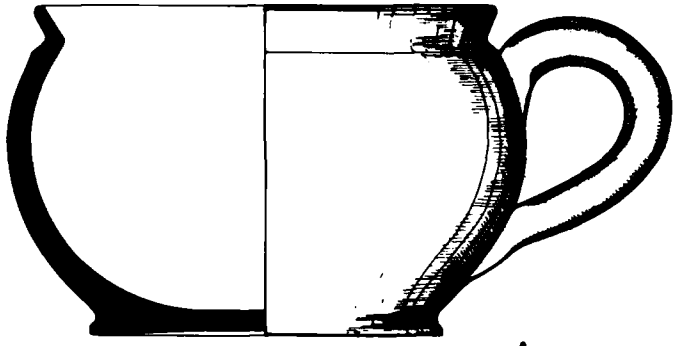


Figure 32. Earthenware Porringer



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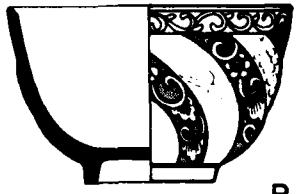

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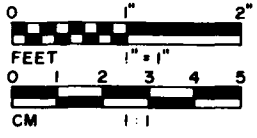

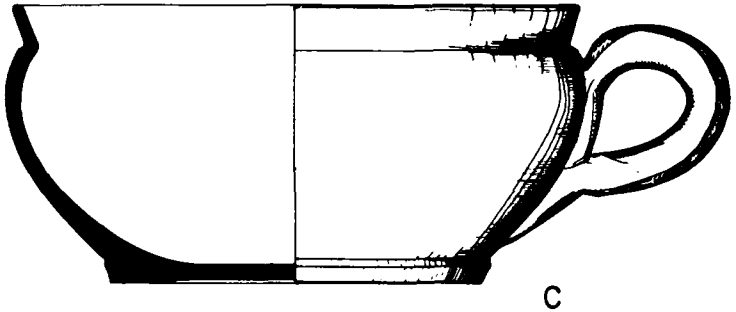

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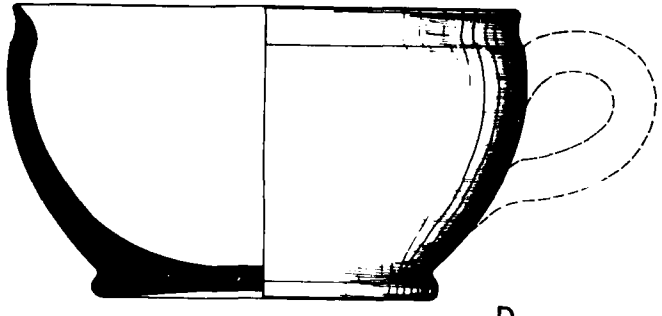
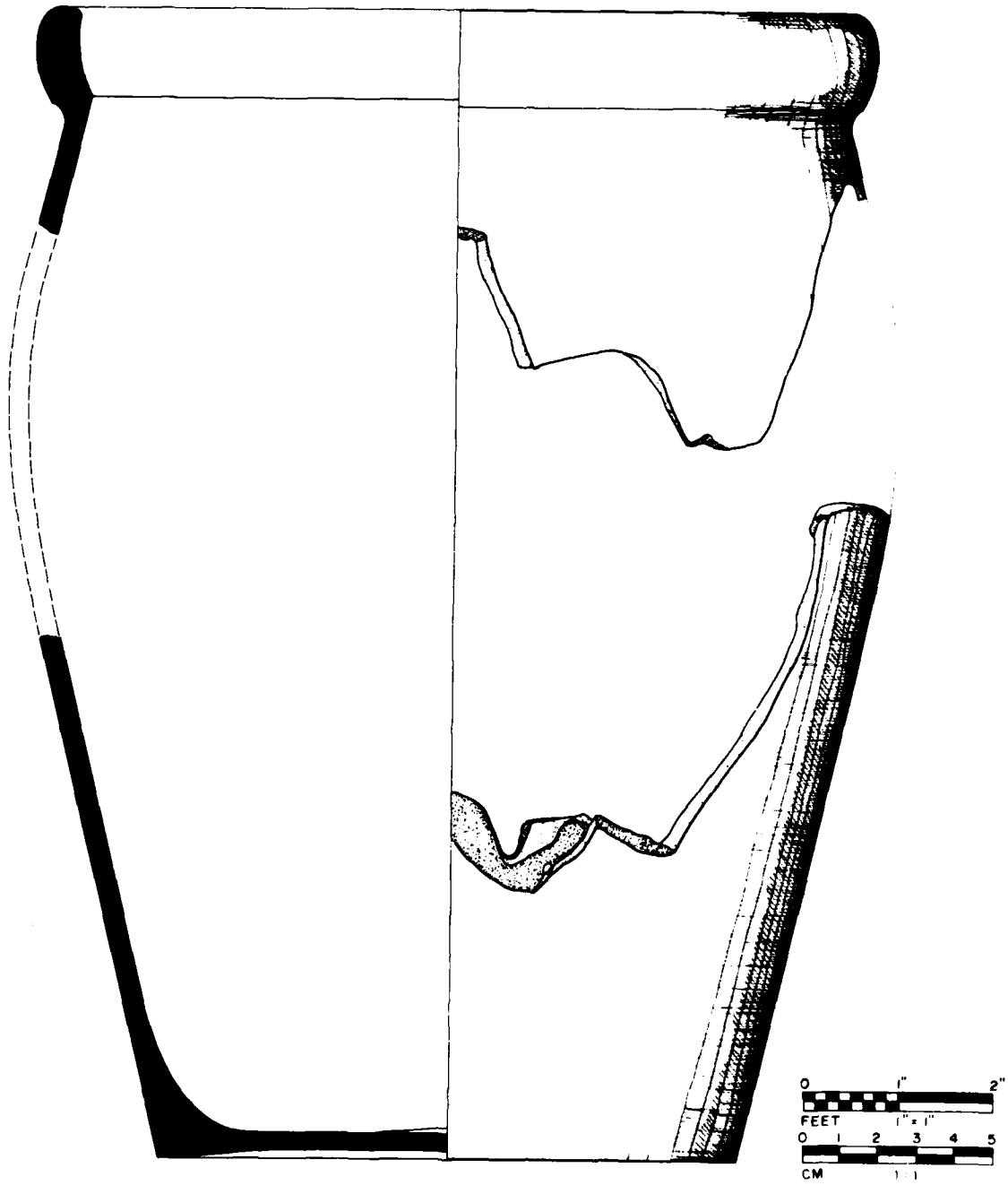


D

A, C, D: EARTHENWARE PORRINGERS B: CHINESE EXPORT PORCELAIN TEACUP

FIGURE 33



GLAZED EARTHENWARE STORAGE JAR

FIGURE 34

house. Absence of pipe fragments from the Feature 45 area was noteworthy, since this feature's lower zone has been equated with the primary refuse deposit for the main house.

5.13 Glass

Wine Bottles (Figures 35 and 36)

These handblown, olive-green, round cross sectioned, long-necked bottles are ubiquitous on later eighteenth century sites, and Fort Independence was no exception. No intact or reconstructible bottles were found, but 351 unburned fragments and 314 burned fragments were recovered. Seven unique rim/neck fragments suggested at least seven wine bottles were represented. These were all from the deposits associated with the main house. Five complete or near-complete bases were found, four from the main house deposits, and one from the soldiers' hut.

The rim treatment on the seven rim fragments varied somewhat. All had string rims, but there was a contrast between one type (represented by only one rim) whose triangular-tooled string rim was applied well below the untooled, straight mouth (see Figure 35B), and another type (exhibited by all the other rims) whose flat-tooled string rim was applied next to or, on one example, directly over the tooled mouth (see Figure 35A). The tooling of the mouth on the second type was triangular in all cases but one, where the mouth tooling was rounded. The first type is probably earlier than the second (Brown 1971:105-6). Four of the five bases had domed kicks. One had a conical kick.

Burned and unburned fragments were distributed about equally in the horizontal dimension, the great majority were from all around the central structure. Many more burned than unburned fragments came from all zones of the southwest corner area of the cellar, including the plowzone in adjacent squares: 277 burned versus 38 unburned, with 189 burned fragments coming from the bottom, burned debris zone of the cellar.

Feature 39 had 11 unburned wine bottle fragments present. Nine stockade postmolds had unburned fragments and one of them, Feature 36, had 24 pieces. One additional stockade postmold had a burned fragment present in the fill. Feature 38 had one burned and one unburned wine bottle fragment in its trash deposit. Feature 45 on its south end had 62 unburned fragments and two burned fragments within its two zones. The more northerly half of Feature 45 had 22 unburned and three burned fragments.

Demijohn (Figure 36)

Three fragments of a very large grass-green glass bottle were recovered from trash pit Feature 38. The single diagnostic fragment was from the shoulder area of the bottle, being shallowly concave

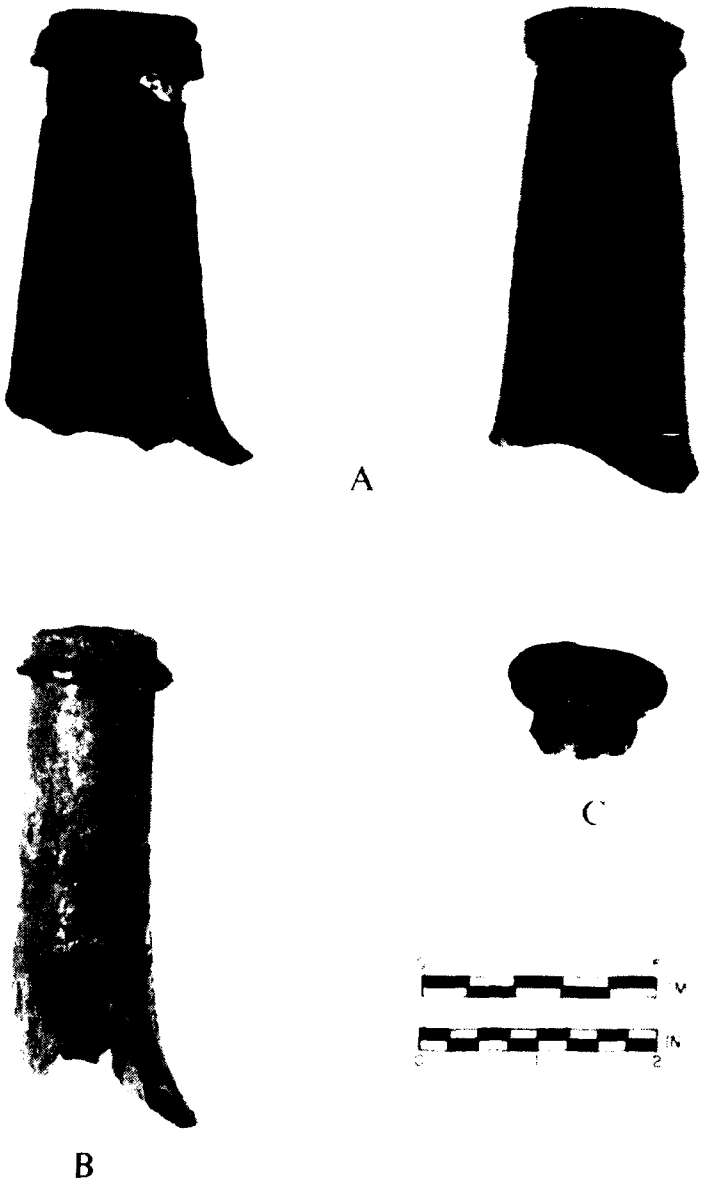


Figure 35. A. & B. Wine bottle necks
C. Case bottle neck

with a large scar on the outside where an applied lug-type handle had broken away. This handle would be unusual, since most demijohns were wicker-covered, with handles woven into the covering. The fragment was about 19cm (7 1/2in) in diameter and 2.48cm (about 1in) in maximum thickness. It weighed 1.18 kg (2.58lb), and it probably constituted only about 10-15% of the whole vessel. The whole vessel would have been very heavy. Eighteenth-century demijohns were globular in shape, resembling the wine bottles of the early eighteenth century (McKearin and Wilson 1978:257; Noel Hume 1969:64). No estimate of volume capacity for this container can be made, but McKearin and Wilson note that in the late nineteenth century, a five-gallon carboy required 12 lb of molten glass, and a 13gal carboy required 26lb of glass (1978:257), which might identify the recovered eighteenth-century fragment with the larger capacity vessel on the basis of the weight of the fragment.

Case Bottles (Figures 35 and 36)

The so-called British case bottle was also olive-green in color, but less yellow-green, generally, than the wine bottles. This bottle type was square in cross section and had a very short neck. Only two case bottles were represented in the glass subassemblage, one by 174 fragments and the other by one small fragment. The 174 fragments were all from the central structure, with 172 of them from the burned layer in the cellar. Only one mouth/neck and one base were present, but they were typical: the mouth was folded out and back on itself to blend with the neck, creating a round lip; the base was square and had only a slightly concave kick. The body sherds from this bottle were flat or right-angled, and exhibited crazing to such an extent that only a thin zone in the center of the profile of the fragments was still translucent. This bottle was only slightly removed from being crumbs of glass. The other case bottle was represented by just one flat, olive-green body fragment found in Feature 39.

Other Bottles

Three other bottles were represented at the site, all some greenish hue of blue. One, represented by 10 fragments, was round in cross section, with a round base, a flat, everted, horizontal lip, and a short neck (Figure 37). This bottle was a medium blue-green color, had a basal diameter of 4.30cm (1 11/16in), a neck diameter of 1.90cm (3/4in), and a maximum lip diameter of 3.50cm (1 3/8in). The height could not be reconstructed, but this bottle most resembles an enlarged medicine vial (approximately doubled), so it was probably relatively tall, the height as much as five times the basal diameter, if medicine vial proportions pertain. The fragments were from deposits associated with the main house, and nine of the 10 were from the southern half of the house.

A second blue bottle was represented by 12 fragments, all from the upper zone of Feature 45. The color of this bottle was pale aqua and the cross section was square or rectangular. No basal fragments

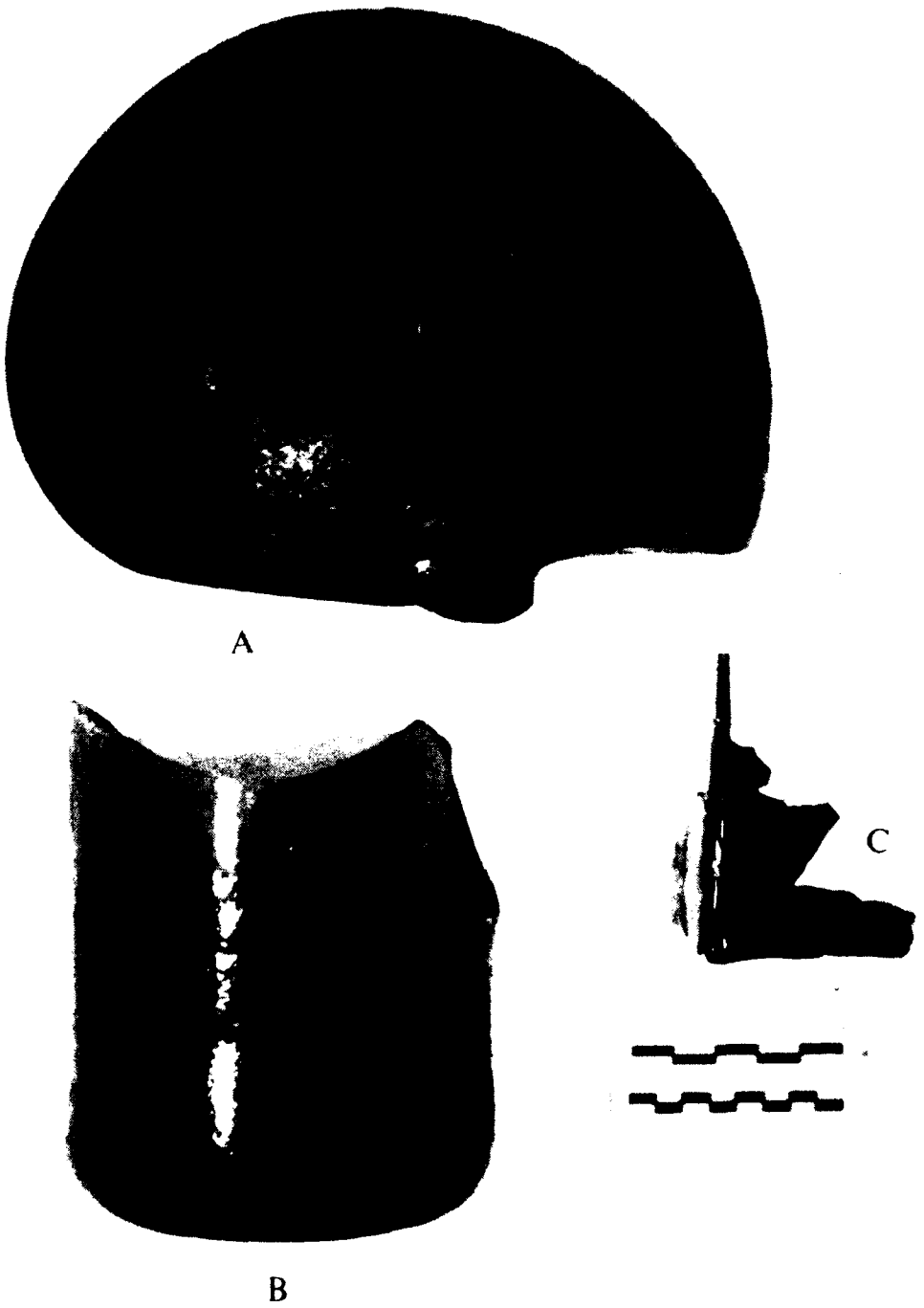


Figure 36. A. Demijohn fragment
B. Wine bottle base
C. Case bottle fragment

were recovered and only one small piece of the collared rim of the mouth was recovered. Body pieces were flat or right-angled. No measurements were possible.

The third blue bottle was a darker aqua. A single fragment from the basal kick was found, the shape suggesting a round cross section. This fragment was from the fill of one of the stockade postmolds.

Possible Mortar (Figure 38)

A heavy grass-green glass vessel was represented at the site by nine fragments, all fairly thick (.92cm or 3/8in), and all suggesting a cylindrical container with an inner diameter of 14cm (5 1/2in). No basal fragments were found, but a rim fragment exhibits a carefully shaped rim (Figure 38B) slanting downward on the outside of the container. The fragments from this container were found quite scattered: four were from the area of the southwest corner of the cellar, no two from the same excavation unit; two were finds associated with backhoe work; one was from the plowzone of a square northwest of the main house; another from the plowzone of a square northeast of Structure 2, and the last was from the fill of a stockade postmold.

The identification of this glass vessel as a mortar may be a bit fanciful, but no other small cylindrical, thick-walled glass items came to mind, and the presence of a doctor at the site, as noted in the Bowie Papers, suggested the possibility of some medical paraphernalia having entered the archaeological record.

Medicine Vials (Figure 37)

Four clear and five colored glass medicine vials were represented at the site. All were round in cross section. All of the clear vials were from the Feature 45 area, though body fragments not used to determine the minimum vial count were from Feature 1, also. The colored vials were also from the Structure 2 main deposits, Feature 1 and Feature 45. There were 45 fragments from clear vials and 37 fragments from colored vials. Only one vial, grass-green in color, was mostly reconstructible except for the actual height. A minimum height could be measured, equaling 13.40cm (5 1/4in), as well as a basal diameter of 2.80cm (1 1/8in), a shoulder diameter of 3.10cm (3/16in), and a neck diameter of 1.60cm (5/8in). This vial's 16 fragments came mostly from the southwest corner of the cellar, in all levels, but the entire base came from the burned debris layer in the northeast corner of the same feature.

Three of the four clear vial bases were measurable, with the following diameters: 1.940cm (3/4in); 3.10cm (3/16in); and 3.30cm (1 1/4in). No lip fragments and only one partial neck fragment were present.

The smallest colored glass vial was a dark olive-green, like the wine bottles. Only the basal and lip parts were present along with two body fragments for a total of five pieces. Basal diameter was 2.24cm (7/8in) and the lip (outer) diameter was .99cm (3/8in).

A pale yellow-green vial had a basal diameter of 2.90cm (1 1/8in). There were nine fragments of this vial. The two remaining vials were pale aqua in color, neither complete enough to measure. One of the vials was represented by six fragments and the other by just one.

Goblets and Tumblers (Figure 38 and 39)

Gray-tinged, clear lead glass fragments from goblets were found in Features 1 and 45 of Structure 2. No chemical test of composition was made. These fragments were identified as lead glass on the basis of color. A total of 27 fragments from bowls, stems, and feet represent at least two goblets, based on the number of complete stems. Both stems were drawn and plain, without air twists, tear drops or knops. One stem had a partial foot which had melted and warped from heat. It was still possible to see that the foot was not the folded type. No other fragments from goblet feet were folded, either. Feet were slightly conical in profile. One of the stems had an ogee-shaped bowl and the one with the plain foot had a trumpet-shaped bowl. All 19 bowl fragments were from ogee-shaped bowls. Diameter measurements were very consistent: four bowl rims each measured 5.1cm (2in) and two feet each measured 7.0cm (2 3/4in). There were no cross-mends among these, but it is possible that only one bowl and one foot were represented by these fragments. No surface decoration of any kind was observable on these fragments.

The three tumbler fragments were all from the deposits around the west end of the main house. It was not possible to say whether these were lead glass or soda glass. The lead glass of the goblets was slightly translucent due to patination. The tumbler fragments were crystal clear and bright except for rust stains. It is possible that they were just a better quality of lead glass than the goblets, an idea somewhat supported by the fact that the goblets were completely undecorated and therefore relatively inexpensive, while the tumbler fragments have an acid-etched design near the rim. Probably just one tumbler is represented, although only two of the fragments could be joined. The other rim fragment does have the same design -- a sinuous line over a straight line. These simple lines may have had gilding originally. No measurements were possible.

The footless goblet stem fragment exhibited definite bifacial retouch on two adjoining edges (Figure 39). It is proposed that the stem section made a good handle for a homemade flensing tool.

Twenty-seven pieces of burned clear glass were also found: 26 pieces associated with Structure 2, all levels in all deposits, and one piece from a stockade postmold.

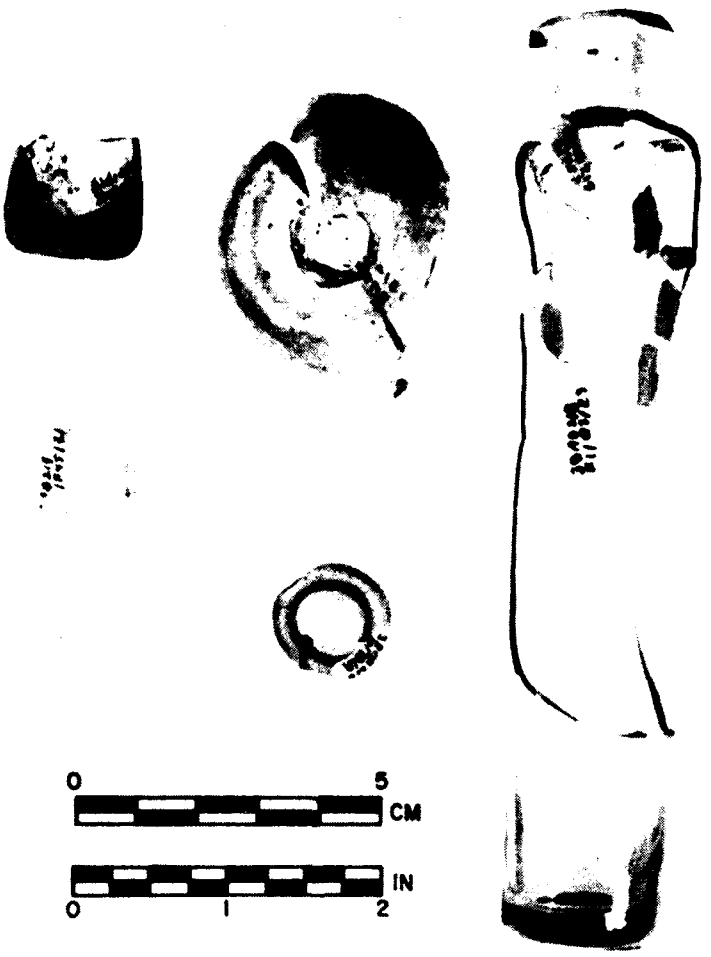
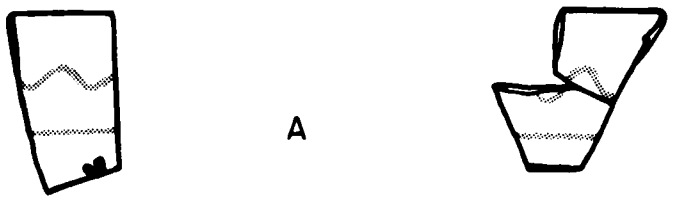


Figure 37. Medicine vials and other bottles



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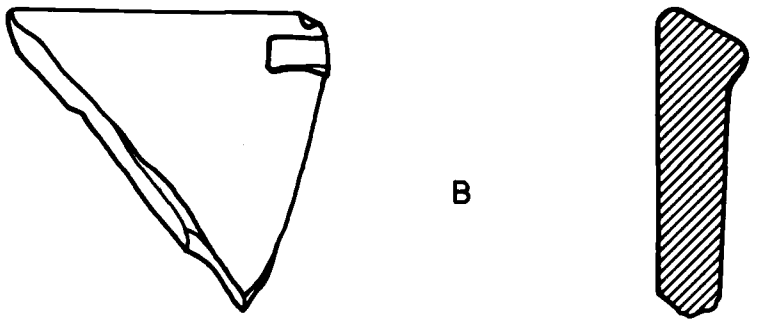


B

FIGURE 38 : A. TUMBLER WITH ETCHED DECORATION
B. GREEN GLASS MORTAR (?) FRAGMENT
(DRAWN ACTUAL SIZE)

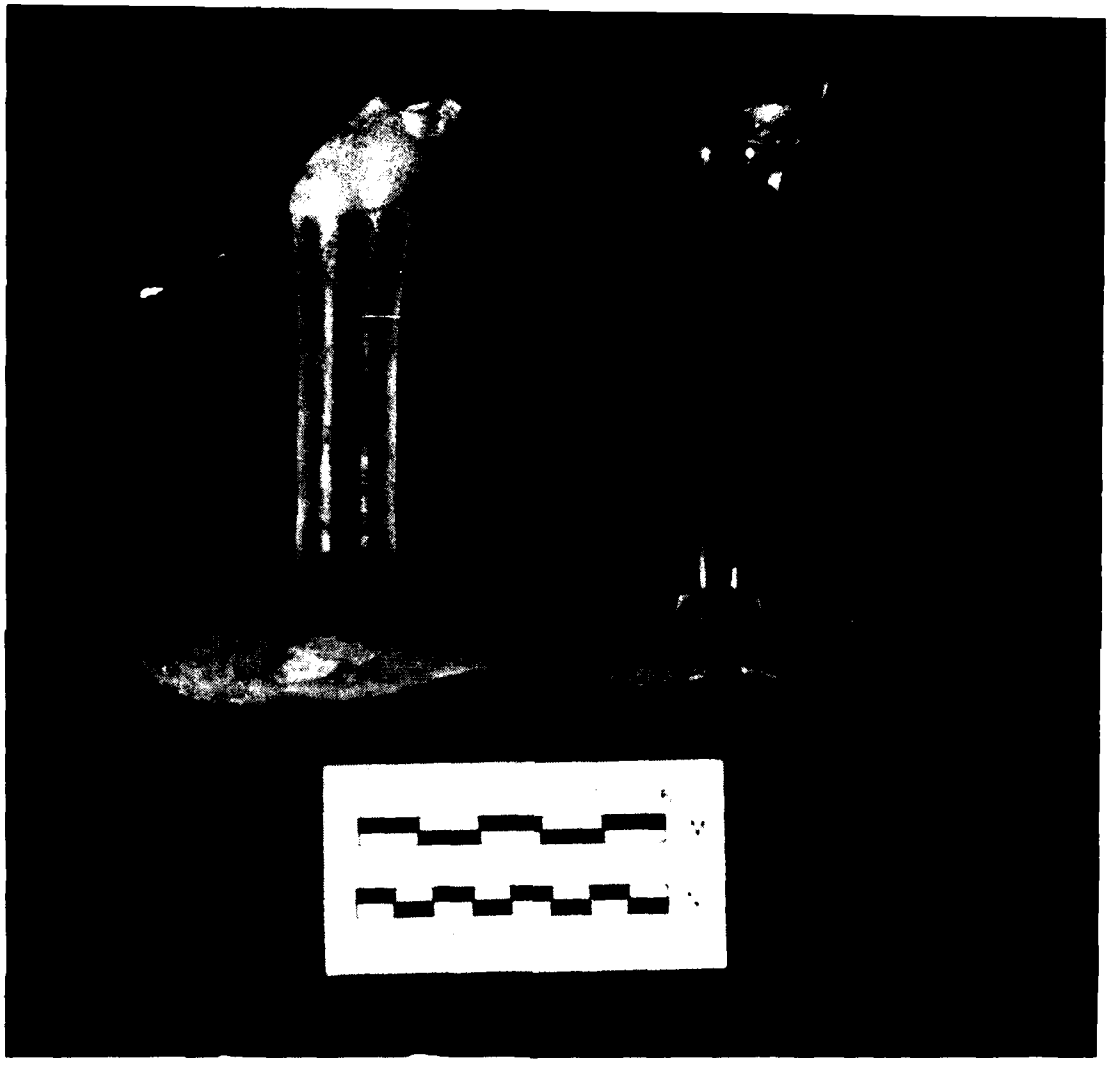


Figure 39. Goblets

Window Glass (Figure 40)

Clear, flat, thin glass fragments with a pale aqua tint were identified as window glass. Eight unburned and seven burned pieces were found. No intact quarrels were found or pieces indicative of the shapes of quarrels, but casement-type windows are assumed for the main house, based on contemporary vernacular architectural practice. Thickness measurements ranged between .14 and .18cm (3/64 and 1/16in). Most fragments were patinated but one fragment from the burned debris zone of the cellar was pristine. Window glass was from two areas of the main house, the western half of the cellar and the western half of the north wall of the structure.

Beads (Figure 41)

Only five beads were recovered, but using 1/4in screens accounts for that, probably. Three translucent cobalt blue beads were found which were cylindrical, wire-wound, and 9, 11, and 12mm (ca. 3/8, 7/16, and 1/2in) in diameter, respectively. One was from the plowzone north of the main house and another was from the bottom zone of the cellar fill. The third was from Feature 39 and differed slightly in being sloppily faceted. The remaining two beads were opaque white, wire-wound, and oblong, with a round cross section. A tiny floral design was inlaid with blue glass around the mid-section of these beads but is now missing. The lengths were 11 and 12mm (about 7/16 and 1/2in) and the diameters were 6.9 and 6.3mm (5/32 and 1/4in). The larger one was found in the plowzone north of the cellar and the smaller one was in the lowest zone of the cellar fill.

5.14 Stone

Gunflints

Two types of gunflints were present at Fort Independence, the Dutch, or spall gunflints and the French, or blade gunflints, both of which were commonly used by Euro-American colonists and Indians between 1740 and 1775, the English blade gunflint not being produced until after 1780 (Witthoft 1966:28-30; 36). There were 13 of the white to gray, opaque, steep-backed spall flints and five of the honey-colored, or "beeswax," translucent blade flints. Many were broken, fire-spalled, or so worn as to render it impossible to discern original dimensions. Some show a sharply concave, battered edge, possibly wear resulting from use with a fire steel (Witthoft 1966:29). One worn but complete French flint had a cortex "heel." Eleven of the Dutch gunflints were closely associated with the main house, mostly from the plowzone level and the top zone of the cellar fill. One more Dutch flint came from a stockade postmold and the other was a surface find from the Phase I stripping of a backhoe transect along the E 54 grid line. Two French flints were also surface finds, one was from the cellar entryway fill, and the other two were from plowzone squares, one north of the main house and one south.

Figure 40. Window glass, burned and unburned.

Possible Stone or Fired Clay Mold (Figure 41)

The broken end of a square-sectioned block of indeterminate length and indeterminate material was recovered from the northern part of Feature 45 in the upper zone. It was clearly deliberately shaped with five plane faces at right angles to each other, the sixth face being the broken one. Two opposite sides have negative impressions, very rough but deep. What the positive was supposed to be cannot be discerned from this fragment, but this artifact was probably part of a homemade mold for casting lead or pewter.

5.15 Silver, Brass, Copper, and Pewter

Silver Knee Buckle (Figure 42)

The only silver item found on the site was a fragment of a bas-relief decorated knee buckle. The buckle was 2.30cm (7/8in) along the one measurable side. A stamped maker's mark was on the reverse side, a representation of the letters "SE" raised against a rectangular inset area. This mark was researched and found to be that of Stephen Emery of Boston. The mark spans the years 1725 to 1801 (Wyler 1937).

Brass Buttons (Figure 42)

Brass buttons were not common items at Fort Independence. Eight brass buttons or button backs and one white metal button were recovered (also one pewter button, see the end of this section). These were mostly simple buttons whose face and back were one piece. The button backs were elements of more complex buttons having separate crowns and back/eye elements.

One large undecorated brass button was flat in cross section and had the eye cast as part of the button. Its diameter was 2.70cm (1 3/32in). This button was found in the plowzone of one of the squares adjacent to the southwest corner of the cellar of the main house.

Two brass and one white metal button were of a medium size, 1.8cm (11/16in), and were convex in cross section. Their eyes were brass wire that had been cast into the body of the button. The white metal button and one of the brass buttons of this size were plain, but the other brass button was decorated with an inscribed, radial, star-like, geometric design, now largely eradicated. Two of these three buttons were from the plowzone in squares around the central structure, the white metal one from north of it and the decorated brass one from south of the cellar. The plain brass button was from Postmold 4, in the area of Structure 1.

Two large brass buttons and a fragment from a third were identical in cross section and in mode of manufacture to the medium-sized buttons just described. They were generally thinner in gauge, however. Their diameter was about 2.50cm (1in). The fragment was

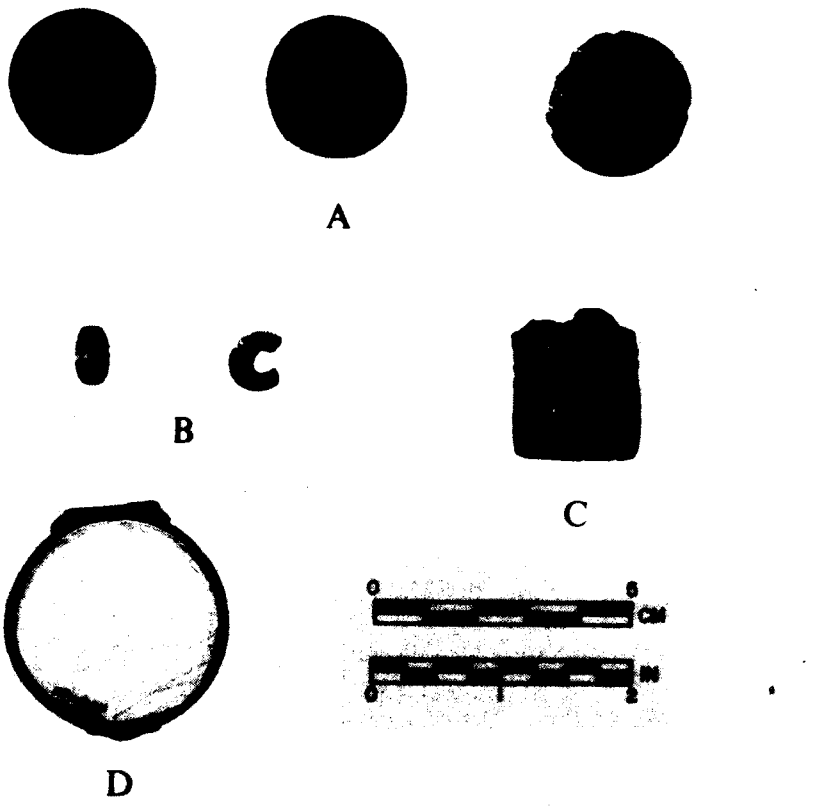


Figure 41. A. Copper half pennies
B. Glass beads
C. Homemade stone or clay mold
D. Lid to compass

found in the plowzone of a square near the southwest corner of the main house. The whole specimen was from trash pit Feature 38. The other one was from the topmost zone of the cellar fill.

One medium-sized brass button back had a separate, cast-in, brass wire eye. The diameter was 1.50cm (9/16in). This back came from the top zone, as did the other, smaller, button back. This small specimen (1.2cm or 7/16in) was probably half of a sleeve-link pair. The eye was a triangular tab cast as part of the back with the hole drilled through in a separate operation.

Brass Shoe Buckles (Figure 42)

Only four fragments from shoe buckles were found, three associated with the main house and the fourth from a stockade postmold's fill. No fastening elements were present, only pieces of the decorative buckle frame. Two of the fragments were from one buckle but did not join. That buckle was rectangular in shape. The other two buckles were probably oval. Decoration on these was difficult to discern, but floral or scroll-like elements were present. One oval frame had pierced places within the design.

Brass Strap Buckle (Figure 42)

This plain buckle had no tongue, but an indentation to receive the tongue was present opposite the crossbar. It measured 2.90 x 2.60cm (1 1/8 x 1in).

Brass Furniture Hardware

Two backplates were found: a round one for a drop-type drawer pull in the plowzone of a square to the northeast of the cellar and a fragment from a "bat's wing" backplate for a bail-type drawer pull. This was found in backdirt from backhoe work. The round plate was 2.70cm (1 1/16in) in diameter.

Copper Coins (Figure 41)

Three copper half cent coins were found. Two were too worn to show details of date or subject depicted. The third was identified prior to cleaning as an "old head" George II (Noel Hume 1969:157, 162). No date could be discerned, but Noel Hume observes that this type of coin was minted every year between 1740 and 1754, except for 1741, and that no new copper coins were minted until after 1770, explaining why coins like those found at Fort Independence were so worn.

Brass Gun Hardware (Figure 43)

A small undecorated trigger guard fragment was found in backhoe backdirt near the west wall of the fort. The burned debris layer of the cellar fill had the other two brass items of gun hardware: an escutcheon plate fragment and a sideplate fragment. The escutcheon fragment was embellished by an inscribed line near the entire perimeter and by caret-like marks near the screw hole and at the broken end. The sideplate fragment is also decorated in bas-relief. Its shape is scroll-like, but the piece is too incomplete to tell whether this was one of the dragon sideplates from a British trade gun. (See 5.17, Iron for other items of gun hardware.)

Brass Trunk Hardware

A square, two-part, self-contained brass hinge was found in the plowzone of a square near the southwest corner of the cellar. Each leaf had three holes which were countersunk on the outer face. The leaves were cut from sheet brass and assembled with an iron pin. The hinge, opened, would be 4.70cm (1 7/8in) square and .27cm (1/8in) thick.

Brass Horse Bridle Boss

One round, plain boss for the decoration of the cheekpiece of a horse's bridle was found. It was 3cm (1 3/16in) in diameter and had two iron pins on the back for fastening it to the bridle. This specimen came from the uppermost zone of the cellar fill.

Brass and Glass Compass Case (or Miniature Case) Lid (Figure 41)

The complete lid of a small, hinged, round case or box was found in the refuse deposit around the southwest corner of the main house. The brass lid frame was 4.30cm (1 11/16in) in diameter. The glass cover was 4.0cm (1 5/8in) in diameter and .18cm (1/16in) thick.

Brass Name Plate

A small, thin, circular disc was found in the Zone 2 fill over the cellar entryway. It was decorated with two inscribed, concentric lines near the edge and the name,

S.
BARKER

This name plate may have been from a trunk or chest. It was 2.70cm (1 3/32in) in diameter and .07cm (5/32in) thick.

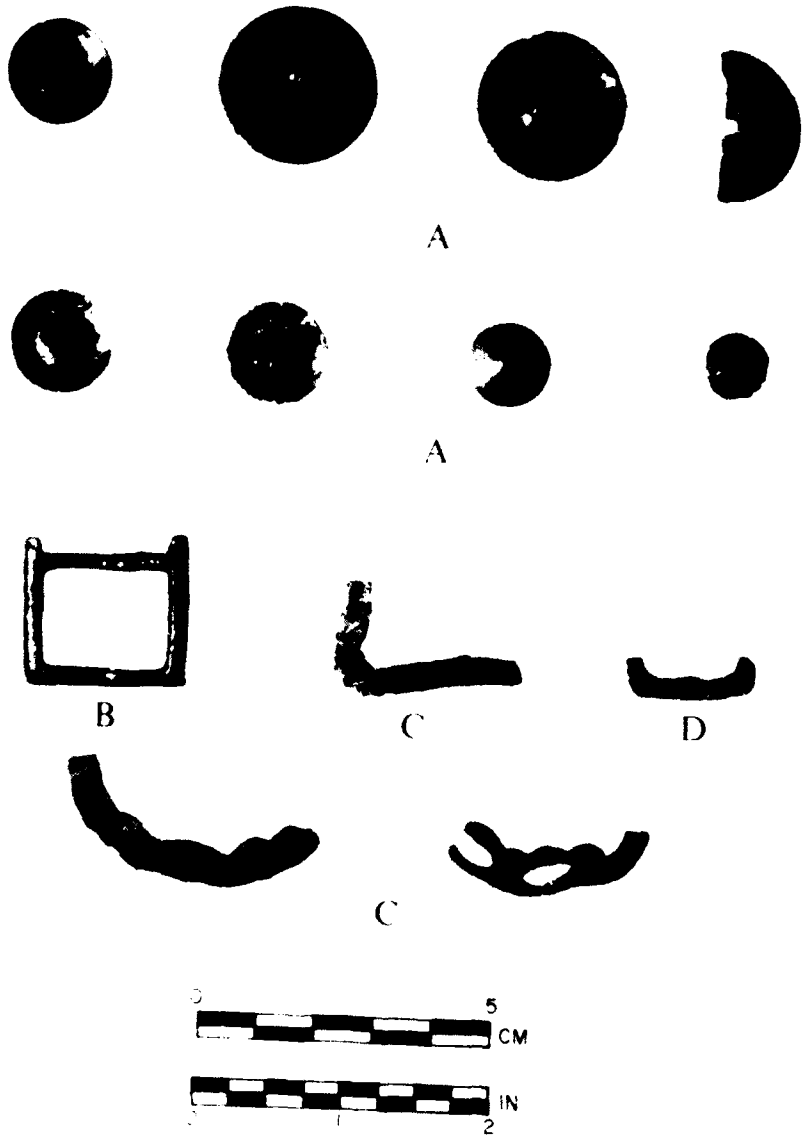


Figure 42. A. Brass buttons
B. Brass strap buckle
C. Brass shoe buckle fragments
D. Silver knee buckle fragment

Pewter Button

This button resembled the large, brass, convex, plain-faced buttons with separate cast-in eyes, only this button was thicker. The eye of this button was missing; its diameter was 2.80cm (1 1/8in). It was found in the plowzone of a square south of the cellar entry's subsoil cut.

Pewter Tube Segment

A short segment of a pewter tube with one cut end and one broken end was found in the backhoe backdirt from the north wall area. Presumably, this was just a fragment from some unknown object. Its diameter was 1.40cm (5/8in).

5.16 Lead

Balls, Shot, Sprues, Trimmings (Figure 43)

Two undeformed musket balls and two undeformed lead shot were found, as well as five deformed musket balls and three deformed shot. The undeformed balls were from the cellar's burned layer and the undeformed shot was from the plowzone in a square just south of the cellar entry. The undeformed balls were of caliber .54 and .60 (1.37 and 1.54cm) and the undeformed shot of caliber .32 and .40 (.82 and 1.00cm). The balls were too small for British or French military muskets but both countries had trade guns which could have taken the .54 caliber ball (Hamilton 1976:33). The .60 caliber ball's intended firearm is not known. The shot would have been buck shot, probably (Hamilton 1976:35).

Deformed balls came from the cellar fill (two balls) and from the plowzone in squares near the southeast bastion, near the northeast bastion, and just north of the cellar (three balls). Deformed shot came from near the cellar entry of the main house, from the plowzone in a square near the northeast bastion and from the plowzone of the pasture to the east of the fort stockade about 20m (three shot, total). No pattern to the distribution of deformed balls or shot was noted.

One lead trimming from a two-part mold and four sprues from balls or shot were found in the plowzone of squares toward the northeast and southeast corners of the stockade.

Lead "Pencils"

These lead strips were square or rectangular in cross section. When found, two of the three were coiled up or folded in a seemingly deliberate way. The third was just a short segment. These we from the cellar or plowzone squares adjacent to the main house.

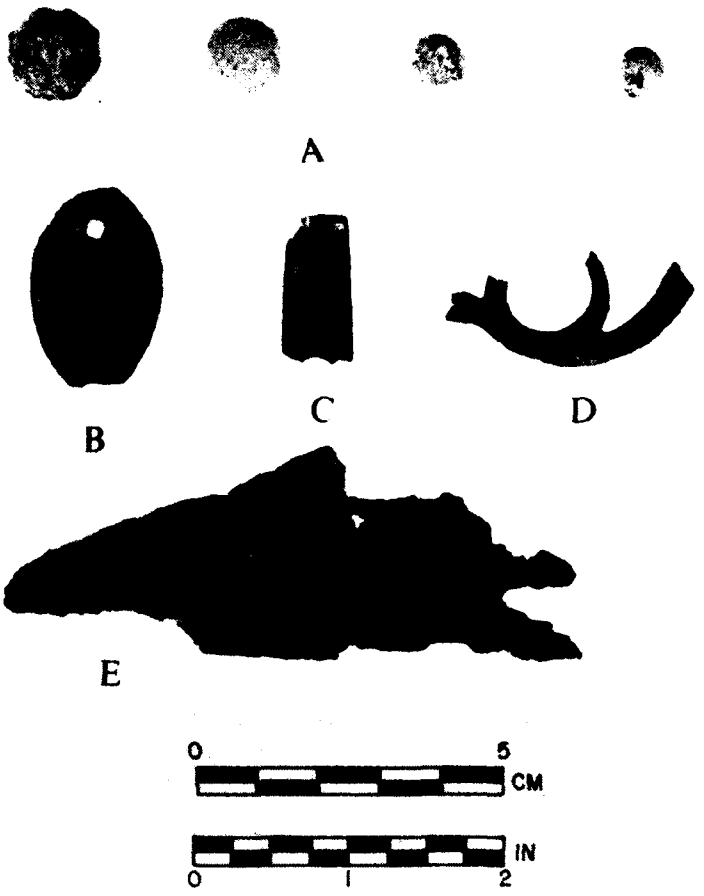


Figure 43. A. Musket balls
B. Escutcheon plate
C. Trigger guard
D. Side plate
E. Gun lock

Lead Gunflint Pads or Grips

Two irregular lead discs were identified as the pads used to secure a gunflint in the jaws of the cock of a flintlock firearm. One came from the fill of a stockade postmold and one from the plowzone in a square to the northeast of the cellar.

5.17 Iron

Kettle Fragments

Eight fragments from cast iron kettles were recovered, five of them thinner gauge (6-7mm, 7/32 -1/4in) than the remaining three (8-9mm, 5/16 - 3/8in). None was large enough to indicate sizes of kettles. One fragment came from the soldiers' hut, another came from near the southeast bastion, and the remaining six came from the cellar fill.

Forks (Figure 44)

These three two-tined specimens were fragmentary. None had the tang for the bone handle plates present, and one had lost both tines as well. The forks came from the plowzone of squares both north and south of the main house.

S-Blade Food Chopper (Figure 44)

This eighteenth-century kitchen tool featured a blade which was triangular in cross section and shaped like the letter "S" in plan. At the middle of the "S", the square shank was attached perpendicularly and probably finished with a relatively long wooden handle (Morton 1976:150; Nutting 1965:652). The blade measured 7cm (2 3/4in) in length and the shank was 10.80cm (4 1/4in) long. This tool was recovered from the top zone of the cellar's fill near the middle of the west wall.

Dividers (Figure 45)

This hinged instrument was for measuring distances on maps, for calculating trajectories for artillery firings, and for carpentry. The specimen recovered was broken at the ends of the two legs. It came from the rubble fill of the cellar.

Buckles (Figure 45)

Three sizes of buckles were found. Two small, approximately square buckles were probably used on straps. They measured about 2.50cm (1in) on a side. The one from the cellar had no tongue. The one from Feature 4 still had the tongue attached.

A medium-sized, squarish, fragmentary buckle measured about 3.60cm (1 3/8in) on a side and came from the cellar fill. The tongue was missing.

One large strap or sword belt buckle was intact, with a pin for the tongue cast as part of the buckle frame with the tongue still attached. The buckle was found south of the main house in the plowzone of a square. It measured 4.90 x 5.50cm (1 7/8 x 2 3/16in) and was slightly concave/convex in cross section.

Horse and Wagon Hardware (Figure 46)

The framework from what was probably a leather-covered stirrup and two fragmentary horseshoes were found, all from the lower zones of the cellar fill. The stirrup was 14cm (5 1/2in) tall and the platform for the foot was 11.50cm (4 1/2in) wide. The horseshoes were typically eighteenth-century, i.e., round with wide branches curving inward and no calkins (Chappell 1973:104).

A singletree end and a large, toothed clevis were also found in the lowest zone of the cellar fill. The singletree piece was 15cm (5 15/16in) long, and the clevis was 21cm (8 1/4in) long by 11.90cm (4 11/16) wide where the pin was inserted through the eyes. The pin was split on one end to receive a securing key and was 1.90cm (3/4in) in diameter.

Two unattached links from a chain were also found in the cellar fill. These were 6.10cm (2 3/8in) in length.

Gun and Cannon Parts (Figures 43 and 47)

A badly warped and melted gun lock, probably from a musket, was found in the cellar fill of the main house. All the working parts are present except for the frizzen. The cock is broken below the juncture of the neck. Identification of this lock as far as model or country of origin was not possible due to its badly damaged condition.

A very fragmentary additional gun lock was also found in the cellar fill. Only a part of the pan and a narrow remnant of the lock plate were present, so no further identification could be made.

A hefty, mushroom-like, cast-iron object was identified as the broken-off knob or pommel from the rear of a cast-iron cannon. The knob was 7.30cm (2 7/8in) in diameter with a neck of 5.40cm (2 1/8in) in diameter. This item came from the cellar fill, also.

Miscellaneous Tools (Figure 48)

The cellar yielded a chisel, a broken section of a triangular file, and a tool identified at Fort Michilimackinac as an ice

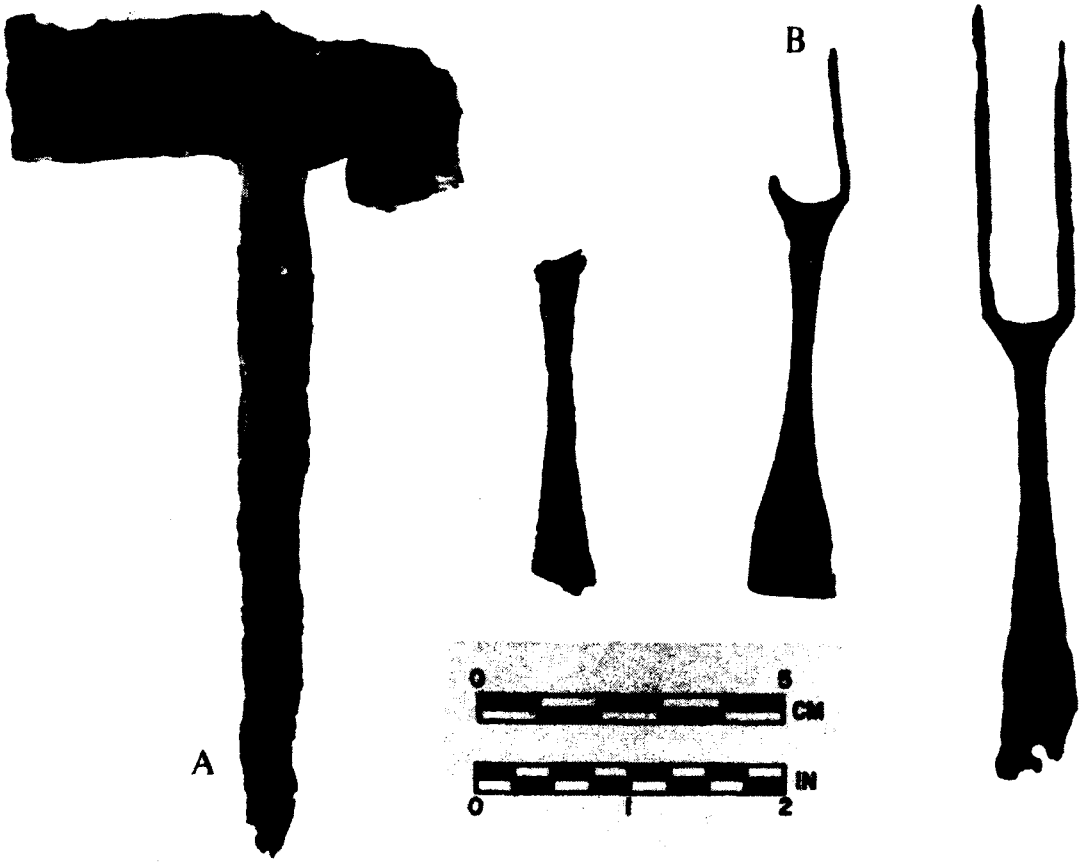


Figure 44. A. Food Chopper
B. Forks

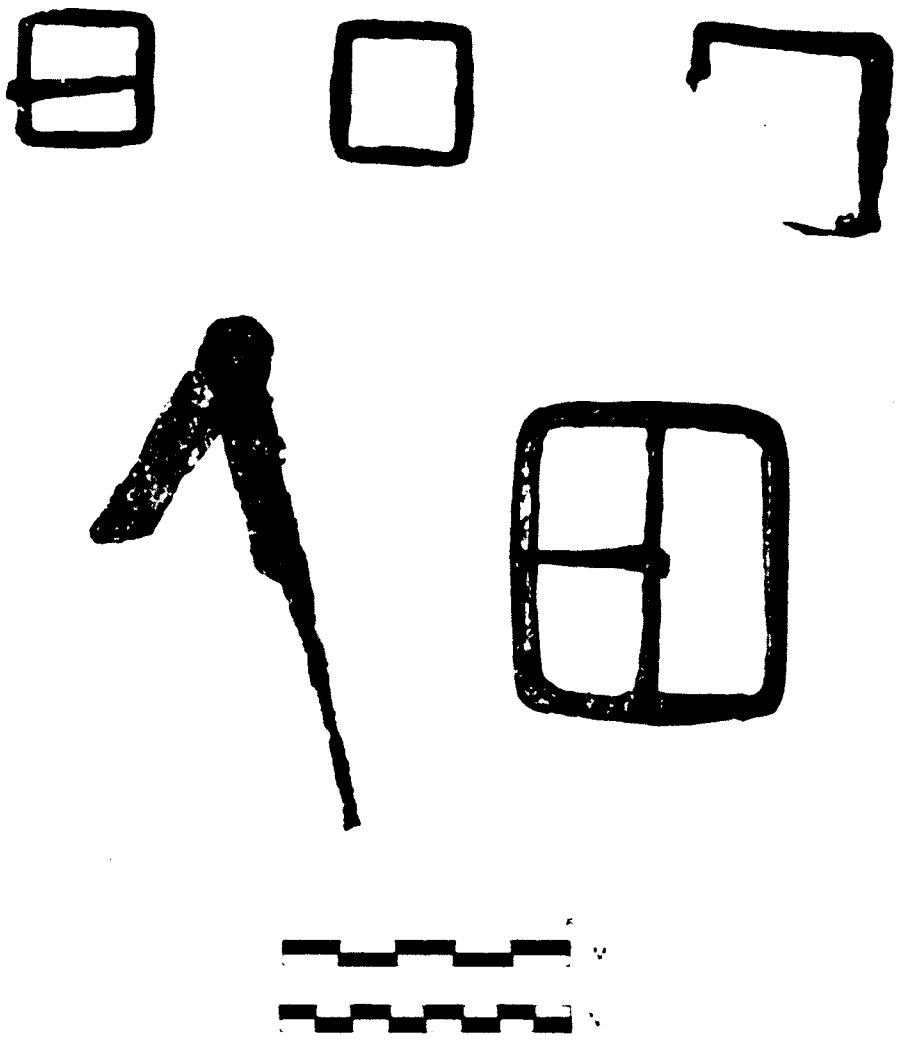


Figure 45. Dividers and buckles

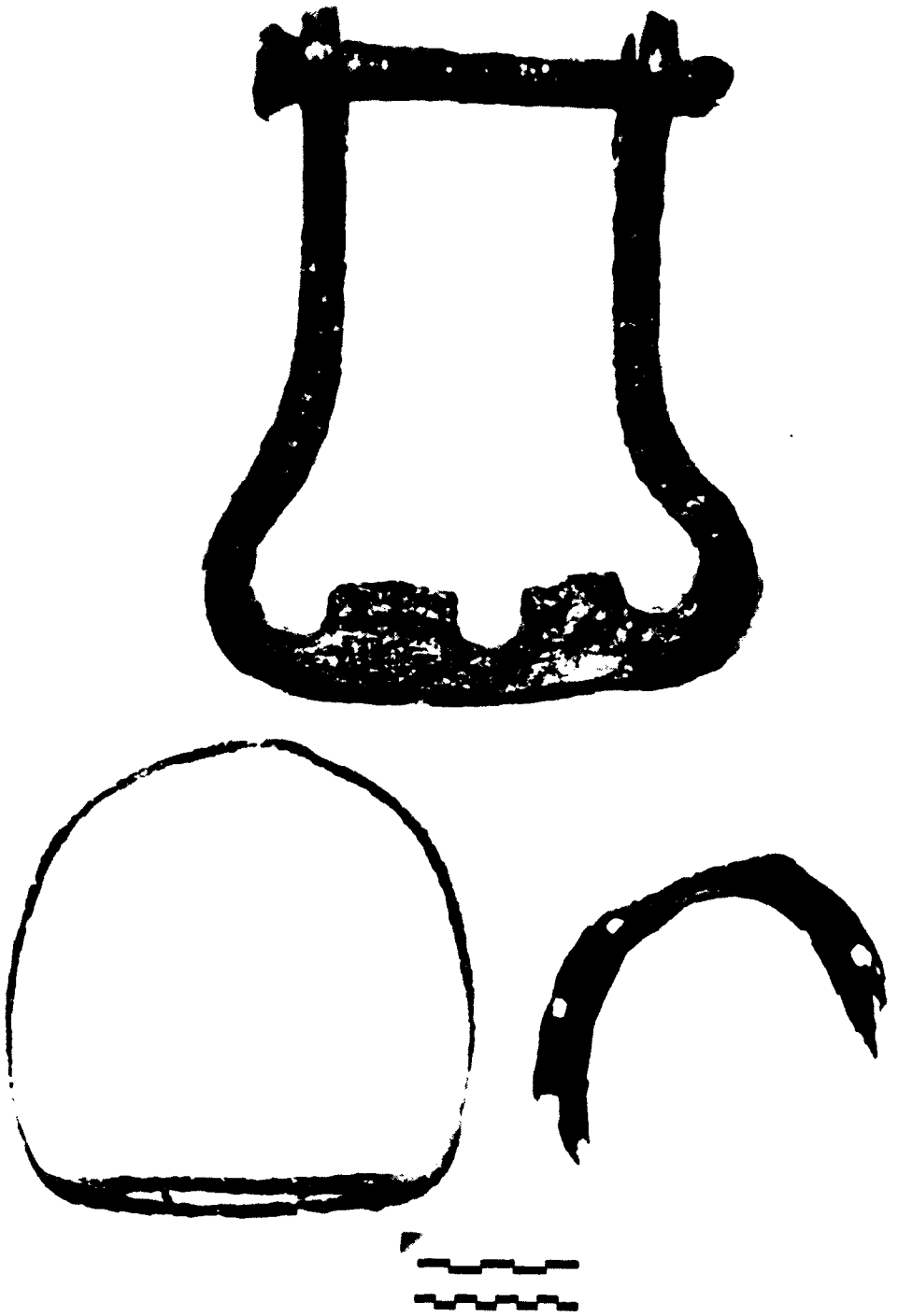


Figure 46. Horse and wagon hardware

chopper. The plowzone from a square just south of the middle of the main house yielded a gouge and the ferrule from some small tool. Feature 45 yielded a claw hammer head. Measurements for these tools were as follows:

hammer head: length, 10.20cm (4in); working surface, about 2.54cm (1in) square
chisel blade: length, 15.20cm (6in); maximum width, 2.54cm (1in)
file (incomplete): length, 6.80cm; width of side, .80cm (5/16in)
gouge blade (incomplete): length, 7.90cm; blade width, 1.80cm (11/16in)
ice chopper: length, 34.50cm (13 9/16in); maximum width, 4.90cm (1 7/8in).

Stone (1974:298,306) described the latter tool as a means of making holes through lake ice. The Michilimackinac specimen was smaller than the one in the Fort Independence assemblage, but the proportions and shape were the same.

The small ferrule accommodated a shank which was square in cross section and a tool which was round in cross section where it met its handle.

Hinges (Figure 49)

Hinges were of two kinds: self-contained and pintle/hinges. Five self-contained hinges were found, four of them HL or H types and one a butterfly type. One nearly complete HL hinge and the butterfly hinge were found in the lower zone of the northern half of Feature 45. The HL hinge's maximum vertical length was 15.60cm (6 1/8in) and its maximum horizontal length was 12.40cm (4 7/8in). The butterfly hinge was incomplete. It's maximum width was 7.20cm (2 13/16in). Two H or fragmentary HL hinges came from the rubble fill over the cellar entry and a third came from the southwest corner of the cellar's burned layer. The cellar entry hinges were both the same size and the other cellar fragment was larger, but no complete dimensions could be measured.

Pintle hinges or single elements of pintle/hinges came from the cellar and the deposits around the west end of the main house. One complete pintle/hinge and two pintle elements were from the cellar entry and were considered an indication of a pair of doors in the cellar entryway. The complete pintle/hinge had a strap element which was 43.40cm (17 1/16in) long and 5.40cm (2 1/8in) at its widest. One of the odd pintle elements was about the same size as the pintle part of the complete pintle/hinge: pin = 5.50cm (2 3/16in) in length; shaft = 11.10cm (4 3/8in). The other odd pintle was 5.80cm (2 9/32in) in pin length and 14cm (5 1/2in) in shaft length. One other odd pintle was from the burned layer in the southwest quad. It was about the same size as the first pintle whose measurements were given above.

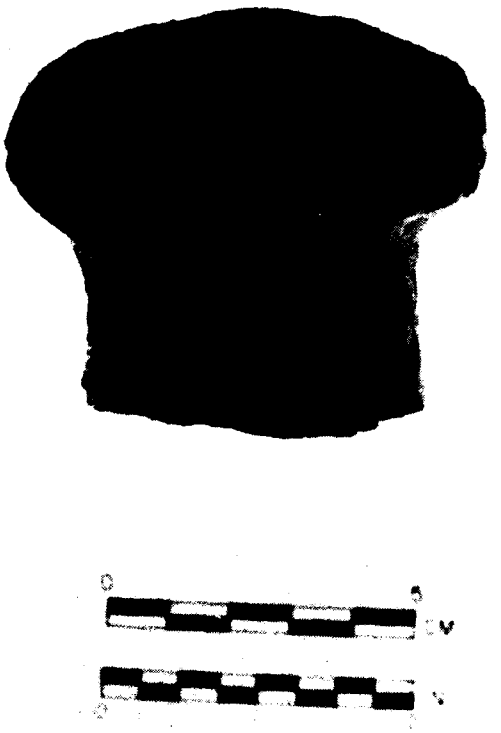


Figure 47. Cannon pommel

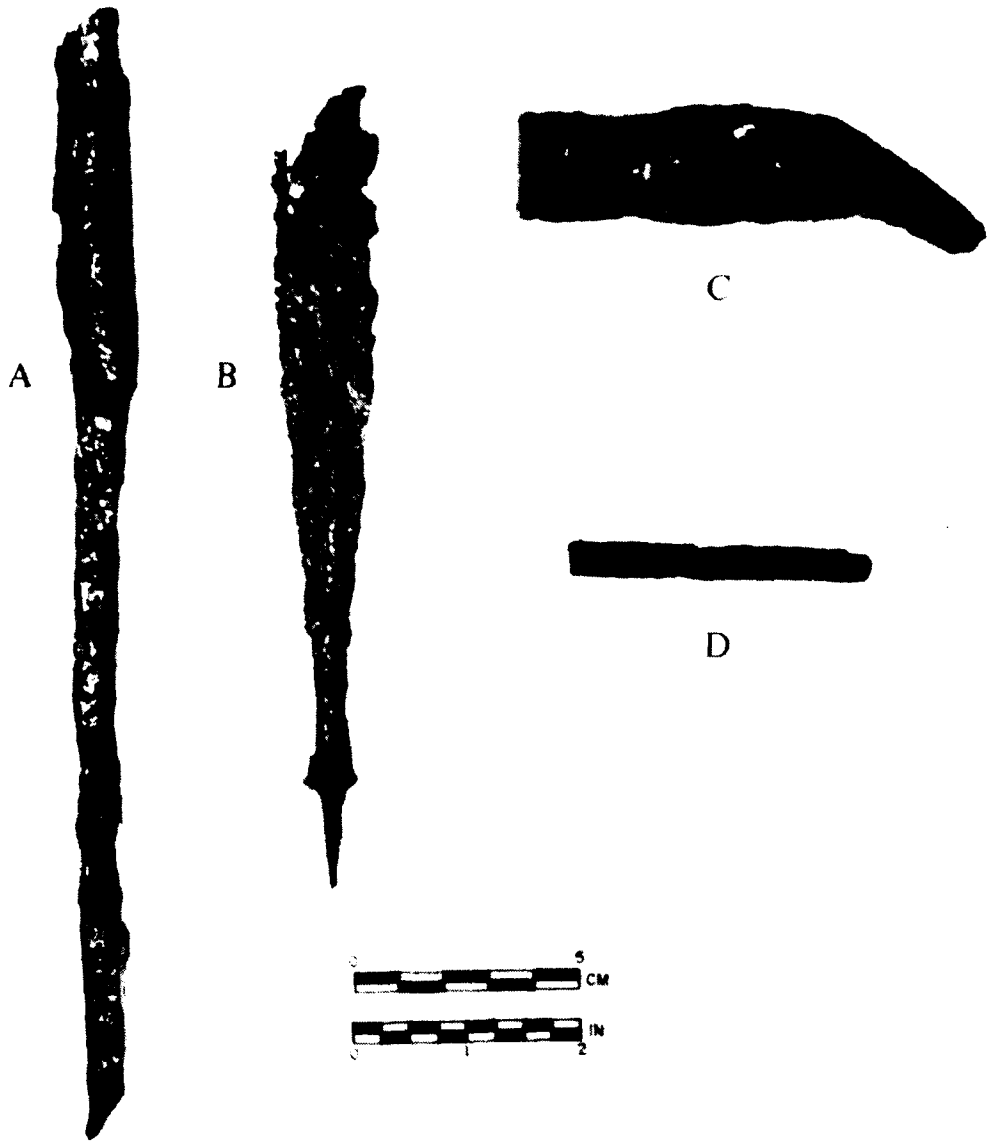


Figure 48. A. Gouge
B. Chisel
C. Hammer
D. File

Door Locks and Parts (Figure 50)

Door locks and latches were represented by three pieces from incomplete specimens. A cover plate from a rim lock and two fragments from a stocklock came from the northern half of the topmost zone of Feature 45.

Shutter, Gate, or Latch Hook (Figure 50)

The cellar's burned layer produced this broken example of a simple hook used to secure a hinged, swinging closure of some kind. It is broken at the eye or pivot. The hook end is wider than the other end.

Door Bolt Guide

Two specimens were recovered. One from Feature 45 was little more than a stub attached to a fragment of the plate. The other was a square-shanked, staple-like projection attached perpendicularly to a plate which was attached to a door to guide a square cross sectioned bolt horizontally into its keeper. The latter, more complete, specimen was from the southwest corner of the cellar.

Staple (Figure 50)

One very large staple was found. Square in cross section, this staple was probably intended to be driven into something to serve as an eye for attaching rope or chain. It was 10.40cm (4 1/8in) long. It came from north of the main house.

Screw

This single specimen was broken, with only the beginning of the threads remaining on the head and shank section. The head had a single slot. The shank diameter was the only possible measurement: .60cm (1/4in). The screw came from the cellar's southwest corner.

Nails (Figure 51)

The 4289 nails recovered from the Fort Independence site included only one nineteenth-century "cut" nail (actually a spike) and two possible wire nails from plowzone squares. Thus, 4286 hand wrought nails were found. These could be categorized as nails with roseheads (2052), nails with T-heads (318), and nails whose heads (1916) could not be typed. Thus the rosehead nails were 87% of the typed nails and the T-head nails were 13%. The size ranges for these two types were as follows:

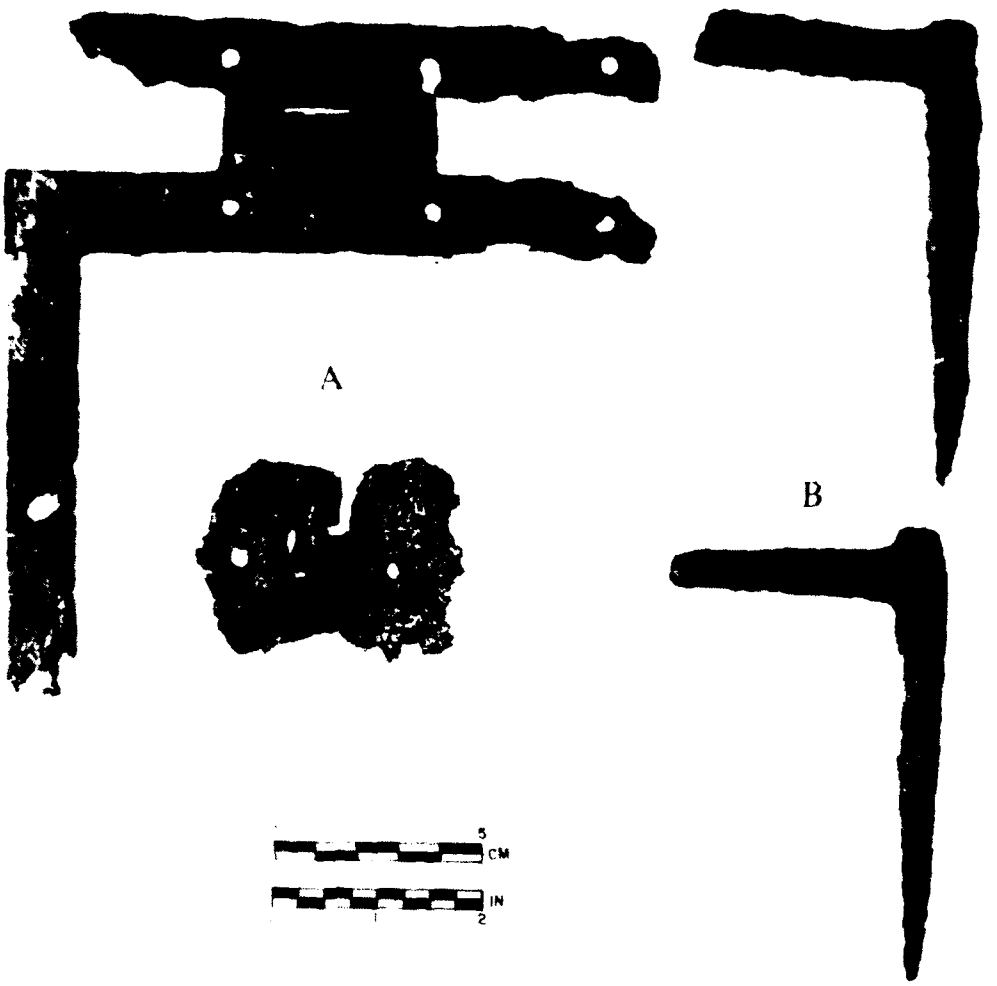


Figure 49. A. Hinges
B. Pintles

	Rosehead	T-Head
less than 2.9 cm	3	0
3 - 3.9 cm	49	3
4 - 4.9 cm	228	6
5 - 5.9 cm	227	33
6 - 6.9 cm	165	32
7 - 7.9 cm	31	12
8 cm or larger	5	1
	708	87
not measurable	1344	231
	2052	318

The mean length for rosehead nails was 5.40cm (2 1/8in) and for T-heads, 6.0cm (2 3/8in). A very few spatulate or flat-pointed nails were observed: six roseheads, one T-head, and two indeterminate.

Most of the nails (3676 or 86%) were associated with the main house. Forty percent were from the cellar's burned layer alone. The metal detector survey indicated that a linear zone of greater nail frequency paralleled the east stockade curtain, but not the south curtain. Neither the west nor the north curtain had intact plowzone adjacent to them due to backhoe stripping as a means of discovery there, so relative nail frequencies for those curtains could not be evaluated. All but five stockade postmolds had nails in their fills, and one, Feature 37, had 27. The metal detector survey showed that nails thinned out quickly away from the central structure. This may reflect avoidance of plowing in the area where the structure's stone foundations were. That idea is supported by the presence of some 15 good-sized trees growing over the entire Structure 2 area when archaeological work began on the site (Figure 3).

Unidentified Artifacts

Ninety-six blobs of rusted iron of various shapes, generally small, were found. The corroded condition of 94 out of these 96 unidentified iron artifacts prevents their even being adequately described. Of the remaining, one from Feature 38 may be part of a stocklock bolt. Another associated with Feature 47 may be a knife blade fragment.

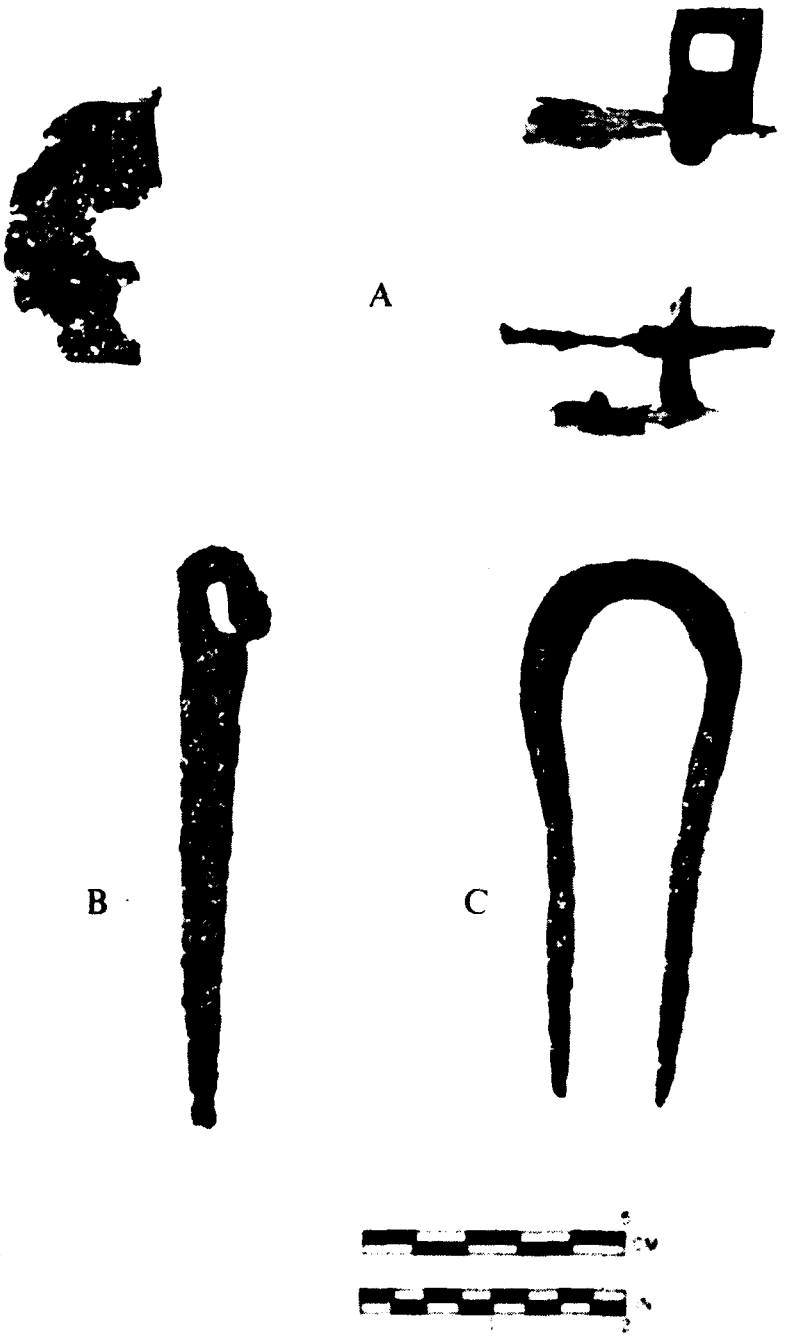


Figure 50. A. Door lock parts
B. Hook
C. Staple

Figure 51. Representative Nails

5.18 Faunal Remains

The following summary of faunal materials is based on the report by zooarcheologist Emanuel Breitburg, included as Appendix D. The sample of 1554 bone fragments represented four mammalian species (cow, pig, deer, rabbit), two avian species (chicken, turkey), and one species (box turtle) and one family (non-poisonous snake) of reptiles. Ninety-two percent of the remains could not be identified due to poor preservation. Identifiable pieces were as follows: 33 from cow (two with knife and ax cut marks); 49 from pig (two with knife cut marks); 5 from deer; 24 from rabbit; 7 from chicken; 1 from turkey; 3 from box turtle; and 2 from snake. A minimum of two cattle, three pigs, two deer, three rabbits, one chicken, one turkey, one box turtle, and one snake were represented as individuals.

The cellar fill contained 262 pieces, including cow, pig, deer, rabbit, box turtle and snake remains. These remains (excluding those of snake) could represent meat in the diet of either the usual residents of the central structure or of the Tory raiders. The refuse deposit around the west end of the central structure (Feature 45) contained 465 bone fragments, including cow, pig, chicken, and turkey. The lower zone of this deposit was the only primary refuse excavated near the main house and thus the faunal remains from Feature 45 are indicative of what meat the usual occupants of the main house were eating. The only other domicile, Feature 39, contained 30 pieces of bone, including cow, pig, chicken, and possibly deer. The faunal remains from Feature 39 could represent the remains of the last meal consumed in the soldier's hut prior to either the abandonment or the burning of Fort Independence. Comparing Features 45 and 39 in order to contrast the diet of the rank and file soldiers with the diet of the commandant did not demonstrate much difference between them in terms of variety of faunal remains. The only difference was in quantity of faunal remains. Since Feature 45 was in longer use than Feature 39 and was by nature a cumulative deposit of discarded food (and other) remains rather than a hut floor, the difference in quantity of faunal remains is not remarkable. On the basis of comparing Features 45 and 39, however, it would seem that the soldiers and the commandant were eating the same meats, with the soldiers augmenting their supplied fare with deer meat.

Feature 25, one of the posthole/molds of the stockade's west curtain, also had a quantity of bone fragments in its mold fill: 230 pieces, including cow and deer. This was a large mold (diameter = 50cm or 19 - 11/16in and depth = 60cm or 23 - 5/8in) and the volume of bone fragments was noted in the field. It is unlikely that the bone was deposited in Feature 25 during the time of the occupation of the fort because the space was taken by the stockade post at that time. So the bone was probably deposited after the destruction of the fort, either by Boyd's men or by Bowie's clean up crew. The faunal remains from Feature 25 could represent the garbage from a

single meal based on a stew of beef (possibly salt beef since it was wintertime, and Bowie had received a shipment of salt beef just a month before the destruction of the original Fort Independence) with some venison thrown in.

Regarding the use of salt meat at Fort Ligonier, Pennsylvania, Guilday (1977:123) states that staple rations for the British in the French and Indian War period were salt pork and flour, with the pork boned and barreled in brine. Thus, he asserts that the use of salt pork in the mid-eighteenth century would probably leave no archaeological traces, i.e., no faunal remains. This conclusion was supported by the results of the faunal analysis of over 100,000 bone fragments from French and Indian War period Fort Loudoun in east Tennessee (1756-1761). An isolated British outpost supported by South Carolina, Fort Loudoun was subjected to siege by the Cherokees in its latter months, and the letters from the fort document what may have been a common military expediency. When the siege began, the garrison killed their cattle and barreled the beef in brine, although whether they removed the bone is not clear from the record. This strategy calculated that the beef could be made to go farther by being preserved and gradually rationed out, and that greater loss of live cattle to disease, starvation, predators, and Indians would occur than loss of salt beef through spoilage. Although a large amount of food bone was deposited within the walls of Fort Loudoun and some of it was probably the by-product of the practice of salting beef during time of siege, nonetheless, nothing distinguished this faunal subassemblage from that of any other colonial fort. Although butchering techniques were evident, no preference for certain portions was noted. No great uniformity in size of portions was noted, either, although small pieces were produced, generally, which would have been convenient for stewing fresh or storing salted. Since the butchering and salting of the beef was done at the site, the fragments generally assumed to represent live cattle (hoof, horn, and cranial parts) were present (Emanuel Breitburg, 1982, personal communication).

The two alternative salt meat use strategies observed for Fort Ligonier and Fort Loudoun reflect the circumstances surrounding the occupation of these sites. The circumstances at Fort Independence resembled those at Fort Ligonier most of the time. The Bowie Papers indicate that regular supply lines filled the garrison's needs, including both live cattle and salt beef as well as flour, clothing, arms, etc. The Bowie Papers mention cattle twice and salt beef, four times. One of the references to cattle was in connection with preparations for a Creek Indian attack and Bowie was advised to stock up on flour, salt, and cattle "in case of the worst" (Document 38). Salt may have been included in this instance as a condiment, but it could also indicate that the Fort Independence garrison was familiar with the strategy employed by the Fort Loudoun garrison (as mentioned above) and was prepared to carry it out if necessary.

Two references to salt beef in the Bowie Papers were in connection with the daily rations for the Fort Independence garrison. In both instances, one pound of salt beef and one-and-one-half pounds of flour per man per day were cited (Documents 13 and 51). On both occasions, Williamson's tone is such as to suggest that the salt beef is a less desirable substitute for fresh beef but will have to suffice under the circumstances--wintertime and cattle shortages. In the second instance, Williamson even emphasized which barrel in the shipment was "last salted", presumably because that meat would be more palatable, i.e., less salty. From these bits of documentary evidence, from the presence of wild game in the faunal subassemblage, and from the contemporary comments of an officer at Fort Ligonier regarding salt pork (Guilday 1977:123), is is probable that fresh meat was preferred to salt meat, invariably, but circumstances occasionally dictated that salt meat was the only choice.

For economy and efficiency of transportation, it seems likely that the salt beef supplied to Fort Independence was already boned. Thus the faunal remains do not adequately reflect the diet of the fort's inhabitants. Emanuel Breitburg, in his analysis of the faunal subassemblage, suggested that another factor, off-site discarding of food refuse, could also limit the conclusions to be reasonably drawn from these data.

5.19 Botanical Remains

This brief summary draws on the report of archaeobotanist, Andrea B. Shea (included as Appendix E), for identification of the plant material samples recovered from Fort Independence. Wood samples are discussed under the Structures and Fortifications sections, above. Trash deposits, represented by Features 45 and 38, had some plant remains suggestive of diet, i.e., peach pits, persimmon seeds and black walnut shells. The cellar fill also had these (except for walnut shells), plus acorns, a grape seed, and the grain concentration (discussed above) composed of wheat, barley, oats, and corn. Whole corn cobs, also found in the cellar fill, were both 12-rowed and 14-rowed flint corn (Zea mays).

The variety of grains present in the cellar's grain concentration (interpreted as a residue of whole grains originally in a sack) contrasts greatly with the lack of variety of other cultigens at the site. Only peach pits represent all the other domesticates of the Euro-American agricultural repertoire and they are more implicative of trade or supply lines than of on-site orchard husbandry. Thus this important contrast serves to belie that whole grains or any other crops were grown at Fort Independence. The garrison could never have afforded time and manpower for the

simultaneous production of four cereal crops while ignoring other suitable cultigens. The lack of even broken agricultural tools in the artifact assemblage amplifies the probability that cultivated foods were supplied rather than grown by the garrison. The documentary record mentions salt beef and flour and also arrangements for grinding grain at local mills, so much food probably reached Fort Independence in a fairly processed state. There were exceptions--the grain concentration found in the cellar fill was of whole grains, and live cattle are mentioned in the Bowie Papers, as well as salt beef.

In summary, the botanical remains and the faunal remains reflect what the documentary and artifactual evidence indicate, that the greater part of the food used by the garrison was supplied rather than being produced by them. Some utilitization of wild resources (deer, rabbit, persimmon, walnuts) occurred, adding some relief to the monotony of the predominant provided fare--flour and beef.

5.2 PREHISTORIC COMPONENTS

ANALYSIS OF ABORIGINAL ARTIFACTS RECOVERED FROM PHASE I AND II ARCHAEOLOGICAL INVESTIGATIONS AT FORT INDEPENDENCE

By

Robert L. Jolley

A total of 313 aboriginal lithic artifacts was recovered from Phase I and Phase II archaeological investigations at Fort Independence, South Carolina. This small assemblage includes projectile points/knives, thin bifaces/knives, retouched/utilized flakes, cores, flakes, pièce esquillées, gorgets/pendant fragments, one bifacial celt/adze, one drill fragment, one ax/adze, one steatite pipestem fragment, and one unifacial perforator (Table 4).

This report incorporates the Phase I analysis; however, a slightly different typological scheme was employed in the combined Phase I and Phase II analysis (see Bastian 1981:42, for comparison). Those projectile points/knives (i.e., Otarre and Swannanoa) defined in the Appalachian Summit area (Keel 1976) and not listed as recognizable types by Taylor and Smith (1978), were not employed in the combined Phase I and Phase II analysis. Other modifications were made with the Phase I unifacial tool categories and the flake categories.

The projectile point/knife typology used herein incorporates those types previously recognized in the study area (Taylor and Smith 1978), Coe's (1964) types and the Archaic period variants recognized by Chapman (1977). The diagnostic projectile points/knives are representative of the Early Archaic, Middle Archaic, Late Archaic and Early-Middle Woodland Periods (Figure 52). The Middle Archaic occupation, evidenced by 75% of the projectile points/knives, is the largest component.

The steatite pipestem fragment is most likely a historic aboriginal trade item, however it is also similar to types categorized by Wauchope (1966: Figure 138; i and j) as Late Woodland or Mississippian. The pendant and/or gorget fragments probably date to the Archaic or Woodland period (Wauchope 1966:190).

There is a high incidence of bifacial and unifacial tools represented in the assemblage. Bifacial tools comprise 35% of the total assemblage and bifacial and unifacial tools comprise 42% of the total assemblage. However, the prehistoric lithic assemblage was biased towards the recovery of potentially diagnostic items. The recovery methods designed for historic materials were not applied to the prehistoric remains. Consequently, the lithic assemblage cannot

be used to infer site function. The upland settlement location and the number of projectile points/knives and thin bifaces/knives suggest that hunting and butchering were site activities, though.

Taylor and Smith (1978:230-235) have identified six categories of raw material from the Russell Reservoir: quartz, slate, Coastal Plain chert, Ridge and Valley chert, steatite and other. The Fort Independence lithic assemblage is composed of 86.6% quartz, 12.5% chert, .6% slate, and .3% steatite (Table 5). No differential utilization of raw material by tool category, with the exception of slate, is reflected in the subassemblage. The dominant use of quartz in the assemblage is commensurate with Taylor and Smith's (1978:231) observation that quartz was the most commonly used lithic resource in the reservoir.

A wide range in variation of quartz, grading from milky, yellowish brown to clear in color and from smooth to grainy in texture, was noted in the assemblage. Some of the specimens appear to be quartzite; however, quartzite was not recognized by Taylor and Smith (1978:230). An attempt was made to distinguish Ridge and Valley chert from Coastal Plain chert. The presence of cherts that did not conform to either chert type description and Taylor and Smith's (1978:233) questionable assumption of assigning all light gray to black colored chert to the Ridge and Valley chert type category precluded this possibility. Recognizable specimens of Coastal Plain chert and Ridge and Valley chert were present in the assemblage, though. The occurrence of the former type was more prevalent than the latter. The two slate pendant/gorget fragments conform to the description of Carolina Slate defined by House and Ballenger (1976:126).

No prehistoric features or postmolds were identified. On first impression this suggests ephemeral site occupation. However, upland areas of the reservoir are known to be heavily eroded (Taylor and Smith 1978:17). Consequently, an assessment of length of site occupation cannot be made.

In summary, the prehistoric remains recovered from Fort Independence indicate that the site was occupied from Early Archaic through Middle Woodland times. The primary occupation was during the Middle Archaic period. The number of hunting and butchering tools and the upland settlement location suggests that hunting and meat processing were site activities.

TABLE 4: LITHIC INVENTORY

Early Archaic	
3 Kirk Corner Notched projectile points/knives	3 quartz
Middle Archaic	
7 Guilford Lanceolate projectile points/knives	7 quartz
1 Guilford axe/adze	1 quartz
2 Stanly Stemmed projectile points/knives	2 quartz
11 Morrow Mountain I projectile points/knives	10 quartz
	1 chert
7 Morrow Mountain II projectile points/knives	7 quartz
Late Archaic	
4 Savannah River projectile points/knives	4 quartz
Early-Middle Woodland	
2 Yadkin Large Triangular projectile points/knives	2 quartz
Indeterminate	
Bifacial Tools	
2 untyped corner notched, fragmented projectile points/knives	1 quartz
	1 chert
2 narrow, thick, lanceolate stemmed projectile points/knives	2 quartz
1 drill bit	1 chert
1 bifacial celt/adze	1 quartz
1 triangular based thin biface/knife	1 chert
1 square based thin biface/knife	1 quartz
59 thin biface/knive/projectile point fragments	53 quartz
	6 chert
6 amorphous bifaces	5 quartz
	1 chert
Unifacial Tools	
21 retouched/utilized flakes	17 quartz
	4 chert
1 unifacial perforator	1 quartz
Lithic Debitage	
165 flakes	141 quartz
	24 chert
11 cores	11 quartz
2 *pièces esquillées*	2 quartz
Other	
2 pendant/gorget fragments	2 slate
1 pipestem fragment	1 steatite
Total 313	

TABLE 5: RAW MATERIAL UTILIZATION

Raw Material Utilization by Lithic Category

110 bifacial tools	99 quartz (90%)	11 chert (10%)
22 unifacial tools	18 quartz (82%)	4 chert (18%)
178 lithic debitage	154 quartz (87%)	24 chert (13%)
2 pendant/gorget fragments	2 slate (100%)	
1 pipestem fragment	1 steatite (100%)	

313 Total

Total Raw Material Utilization

271 quartz	(86.6%)
39 chert	(12.5%)
2 slate	(.6%)
1 steatite	(.3%)

313 Total

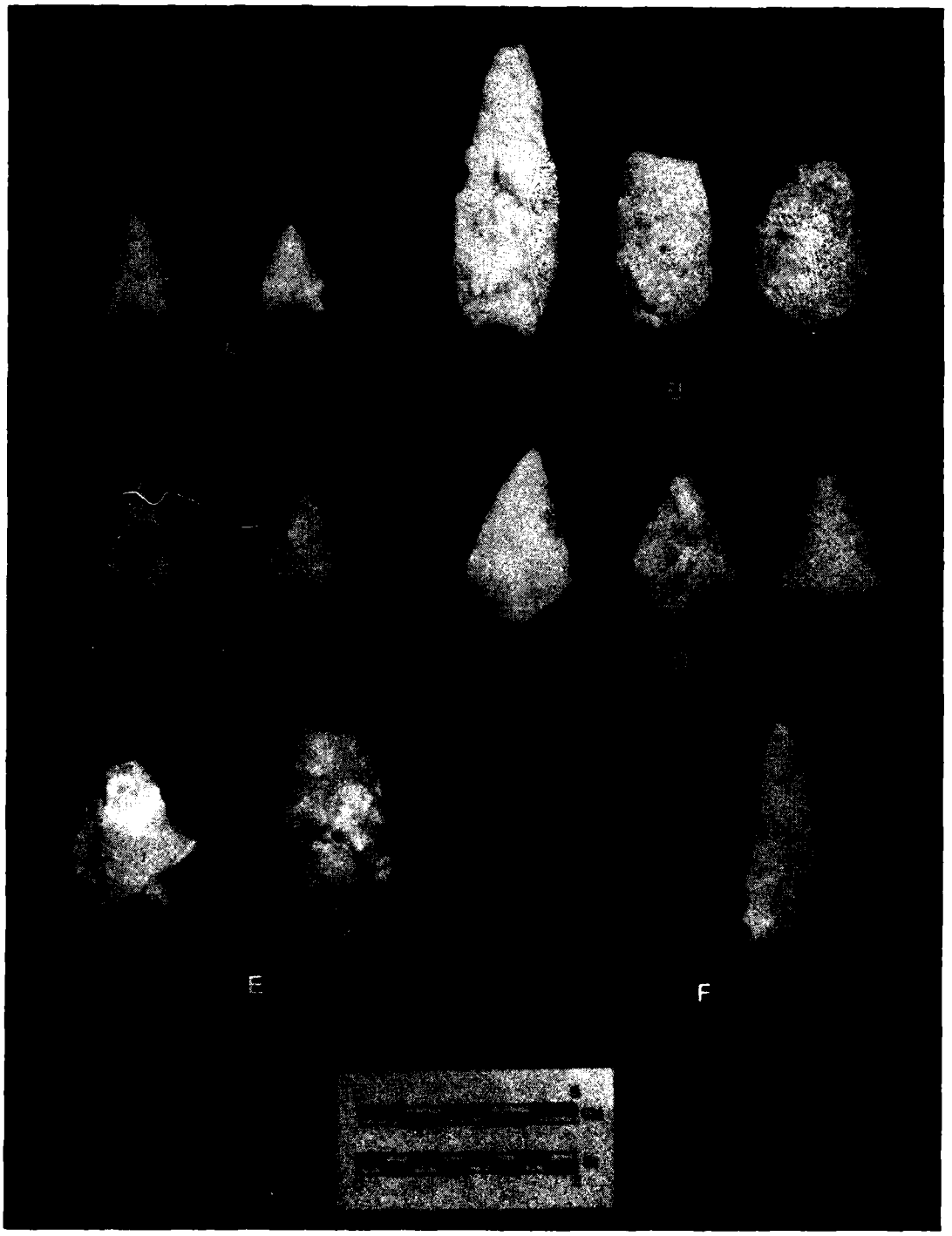


Figure 52. A. Kirk corner notched
B. Guilford lanceolate
C. Stanly stemmed
D. Morrow Mountain
E. Savannah River
F. Yadkin

5.3 Nineteenth- and Twentieth-Century Artifacts

A variety of post-fort-period artifacts was recovered in the course of the archaeological work at Fort Independence. These were all from the plowzone and many were from outside the stockade or from the spring area whose twentieth century use was discussed above.

One nineteenth-century, transfer-printed, ironstone sherd was a surface find. It is a rim sherd from a platter or other large, shallow, flat vessel. Five sherds of undecorated ironstone from a cup were found in association with spring Feature 46.

Also in the spring were nine fragments of a heavy, machine-made, glass water goblet; three fragments of a clear glass cider jug; and two more clear glass fragments from an unknown container. From the main house area, around the northeast corner, came 22 fragments from a Vicks Vaporub jar.

Iron artifacts of more recent manufacture came from the pasture around the fort, mainly to the west. Eight items identified as parts of agricultural equipment and three horseshoe fragments were found by the metal detector. From the main site, a short piece of wire (from north of the main house) and a large "cut" spike were presumed to be the result of post-fort agricultural activities.

The spring area had the remaining modern material: two tin can fragments, three pieces of wire, a cast iron open-end wrench for 3/4in, four-sided nuts or bolts, and five fragments of leather with eyelets and hooks still present.

TABLE 6: FORT INDEPENDENCE ARTIFACTS CLASSIFIED AND QUANTIFIED ACCORDING TO SOUTH'S GROUPINGS (1977:95-96)

		WHOLE SITE	STRUCTURE 2
	Kitchen Group		
1.	Ceramics	798	749
2.	Wine Bottle	668	595
3.	Case Bottle	175	174
4.	Tumbler	3	3
5.	Pharmaceutical Bottles	82	80
6.	Glassware	27	27
7.	Tableware	3	3
8.	Kitchenware	9	7
	Total	1765	1638
	Bone Group		
9.	Bone Fragments	1554	727
	Total	1554	727
	Architecture Group		
10.	Window Glass	15	15
11.	Nails	4286	3676
12.	Spikes	0	0
13.	Construction Hardware	12	11
14.	Door Lock Parts	5	5
	Total	4318	3707
	Furniture Group		
15.	Furniture Hardware	2	1
	Total	2	1
	Arms Group		
16.	Musket Balls, Shot, Sprue, Grips	19	13
17.	Gunflints, Gunspalls	18	15
18.	Gun Parts, Bullet Molds	5	4
	Total	42	32
	Clothi.. Group		
19.	Buckles	10	9
20.	Thimbles	0	0
21.	Buttons	10	9
22.	Scissors	0	0
23.	Straight Pins	0	0
24.	Hook/Eye	0	0
25.	Bale Seals	0	0
26.	Glass Beads	5	4
	Total	25	22

Table 6 (cont.)

		WHOLE SITE	STRUCTURE 2
	Personal Group		
27.	Coins	3	3
28.	Keys	0	0
29.	Personal Items	7	7
	Total	10	10
	Tobacco Pipe Group		
30.	Ball Clay Pipes	24	20
	Total	24	20
	Activities Group		
31.	Construction Tools	5	5
32.	Farm Tools	0	0
33.	Toys	0	0
34.	Fishing Gear	0	0
35.	Stub-Stemmed Pipes	0	0
36.	Colono-Indian Pottery	0	0
37.	Storage Items	0	0
38.	Ethnobotanical (approximate)	1135	1133
39.	Stable and Barn	7	7
40.	Miscellaneous Hardware	3	3
41.	Other	1	1
42.	Military Objects	1	1
	Total	1152	1150
	Total Identifiable Artifacts (less faunal and botanical)	6203	5447

Classes of artifacts represented in total sample = 29

TABLE 7: FT. INDEPENDENCE EMPIRICAL ARTIFACT PROFILE
COMPARED WITH THE CAROLINA ARTIFACT PATTERN (SOUTH 1977:107) AND
THE FRONTIER ARTIFACT PATTERN (SOUTH 1977:145)

Artifact Group	Carolina Artifact Pattern		Ft. Independence		Frontier Artifact Pattern	
	Mean %	% Range	Whole Site: %	Structure 2: %	Mean %	% Range
Kitchen	63.1	51.8-69.2	28.44	30.06	27.6	22.7-34.5
Architecture	25.5	19.7-31.4	69.62	68.07	52.0	43.0-57.5
Furniture	.2	.1- .6	.03	.02	.2	.1- .3
Arms	.5	.1- 1.2	.67	.59	5.4	1.4- 8.4
Clothing	3.0	.6- 5.4	.4	.4	1.7	.3- 3.8
Personal	.2	.1- .5	.16	.18	.2	.1- .4
Tobacco Pipes	5.8	1.8-13.9	.38	.37	9.1	1.9-14.0
Activities	1.7	.9- 2.7	.27*	.31*	3.7	.7- 6.4
			99.97	100.00		

* The Ethnobotanical class, made up mostly of 1000+ cereal grains, greatly inflated the Activities Group, so Class 38, Ethnobotanical, was deleted from the Activities Group total.

5.4 ARTIFACT ANALYSES AND INTERSITE COMPARISONS

A very fruitful series of comparisons utilizing data from eighteenth-century historic sites has been published by Stanley South in his Method and Theory in Historical Archeology (1977). Most of the sites used in South's quantifications were in North and South Carolina and similar to Fort Independence in one or more interesting ways -- period, region, function, distance from center of population and distribution, and duration of occupation. Judging that the collection procedure for the Fort Independence artifact assemblage was sufficient to assure comparability of samples, the artifact data was arrayed according to South's classification (Table 6) and the Empirical Artifact Profile was developed for both the entire Fort Independence site, and for Structure 2 (Table 7).

The comparison, then, of the Fort Independence percentages with both South's Carolina Artifact Pattern and his Frontier Artifact Pattern is instructive. South developed his Frontier Pattern on the basis of one primary distinction and one secondary distinction observable in the combined profiles of frontier/military sites as compared to domestic sites. He found that the relationship between the percentage of Kitchen Group artifacts and the percentage of Architecture Group artifacts was inverted on sites which were remote from population centers (1977:146-147). He also observed that fewer artifact classes were represented overall at the remote sites (1977:148). Both of these distinctions apply to the data from Fort Independence. The primary distinction is expressed even more dramatically in the Fort Independence profile than in the mean for the Frontier Pattern, but not beyond the predicted range for the next site (95% probability): Kitchen Group = 10.2 to 45.0 and Architecture Group = 29.7 to 74.3 (South 1977:145). The 29 artifact classes represented in the total Fort Independence sample compared not unfavorably with an average of 33 for frontier sites, but fell short of the average of 41 for domestic sites (South 1977:148, Table 17;160-163, Appendix to Chapter 5).

A separate profile for Structure 2 was developed because of the primarily domestic character of the structure, since it housed a military headquarters of a kind for only three of its possible sixteen years of existence. The possibility that Structure 2 would differ from the site as a whole in being more similar to the domestic (Carolina) pattern was interesting, but the Frontier Pattern was still emphatically expressed in the Structure 2 profile.

Other measures also exhibited similarities to sites of South's Frontier Pattern. The Furniture Group ratio of .03 was within the range for frontier sites, 0-.3, and the Arms Group ratio for Fort Independence, .67, was consistent with South's observation that late eighteenth-century and early nineteenth-century military sites will resemble domestic ones in this regard. When the Kitchen Group is broken down into classes, again Fort Independence is most similar to other frontier sites, except that tumblers, glassware, tableware and kitchenware are underrepresented (Table 8; compare with South 1977:171, Table 23).

TABLE 8: FORT INDEPENDENCE
PERCENTAGES OF KITCHEN GROUP ARTIFACTS BY CLASS

Artifact Class	%
1. Ceramics	45.24
2. Wine Bottle	37.87
3. Case Bottle	9.92
4. Tumbler	.17
5. Pharmaceutical	4.65
6. Glassware	1.53
7. Tableware	.17
8. Kitchenware	.45
Total	100.00

In addition, one other measure, the Ceramic Ratio, was calculated for the site and compared to South's data. The Fort Independence Ceramic Ratio was .15, most similar to the range for military-frontier sites, .11-.25 (South 1977:172, Table 24).

There were several other quantitative observations made by South which, when the Fort Independence data were manipulated accordingly, pointed up contrasts between Fort Independence and other military-frontier sites. The ratios calculated to reveal the relative influence of Nails, Ceramics, and Wine Bottles, on the observed inverse ratio between the Kitchen Group and the Architecture Group on frontier sites can be compared to the same ratios calculated using Fort Independence data, with interesting differences resulting (compare South 1977:150, Table 18). The equivalent Fort Independence ratios are: nail ratio = 9.52, ceramic ratio = 1.77, and wine bottle ratio = 1.48. The nail ratio for Fort Independence is much more extreme than for any other site of any kind, and the ceramic ratio corresponds well to those for domestic sites. The wine bottle ratio is nearly as high as for Fort Moultrie, where South has noted an extremity that he tentatively relates to proximity to source of supply of bottled spirits rather than to the hypothesis that soldiers drank more. With Fort Independence similarly inclined, apparently, but not particularly close to a source of supply of bottled spirits, perhaps the latter hypothesis is somewhat better supported than it formerly was.

South observed (1977:151) that the frequency of nails increases on frontier sites at the same time that the frequency of ceramics decreases, resulting in an inverse ratio between the Kitchen Group and the Architecture Group for frontier sites as compared to domestic sites. The nail, ceramic, and wine bottle ratios for Fort Independence indicate that nails alone account for its conformity to the Frontier Pattern, since ceramics were no less frequent in relation to all other artifacts (except nails and wine bottle fragments) than was the case for South's domestic sites, and wine bottle fragments were dramatically more frequent, which tended to mask the strong impact of the nails. The quantity of nails recovered at Fort Independence was also strongly influential in another artifact quantification procedure; the comparison of Architecture

Group artifacts with calculated living area for Structure 2. This will be discussed below, with some consideration of one causal factor for the Frontier Artifact Pattern.

One other interesting measure, the bone ratio, was calculated with the Fort Independence data and compared to bone ratios from other sites (South 1977:180 Table 27). The bone ratio for the whole site, .23, was intermediate between low values for site middens classified as adjacent and secondary, and high values for site middens classified as peripheral and secondary. To assess the probability that a peripheral rather than adjacent midden was excavated around the west end of Fort Independence's Structure 2, the bone ratio for Feature 45 was calculated and found to be .77, high enough to strongly suggest Feature 45 was a peripheral midden. Therefore, the assemblage from Structure 2 can be regarded as representative of all the eating behaviors of the occupants of Structure 2.

Structure 2 having had a stone foundation like several of South's (1977:122-123) Brunswick Town ruins, the ratio of square footage of floor area to Architecture Group artifacts was calculated. The square footage was computed using the outer dimensions of the Structure 2 foundations, each reduced by two feet to allow for the log walls, and the result was 453.25 square feet for each floor. Since Structure 2 is interpreted as a one-and-a-half story building, and since South used cellar area in his determination of square footage at Brunswick Town, the figure 453.25 was doubled and an additional 210.8ft^2 was added for the cellar floor area. Thus, approximately 1117ft^2 of living space was available to the inhabitants of Structure 2, and the ratio of Architecture Group artifacts to floor space was .3, or about double the ratios found by South at Brunswick Town (1977:123, Table 13). Even if the cellar space of Structure 2 is not included, the ratio is still .24, about 25% higher than Brunswick Town. Two independently operating factors may be responsible for this observed difference. First, perhaps the wooden superstructures of the Brunswick Town ruins, built in an earlier period of 1728-1734,(South 1977:57, 66, 253) and in a different construction mode (probably frame with clapboard siding), were assembled with both wooden pegs and nails, leaving no archaeological remains representing some proportion of the joinery involved in the structures. Also, the contemporary practice of salvaging nails and hardware from burned buildings may have reduced the number of nails representing the structures at the Brunswick Town ruins. If this latter factor was also in operation at Fort Independence, the ratio of Architecture Group artifacts to floor space would be even higher for Structure 2.

One perspective on the main difference South has noted between domestic and military-frontier sites, that short occupation spans may help produce the inverse Kitchen Group/Architecture Group ratio observed (South 1977:177), can be sharpened somewhat with the Fort Independence data. A log structure of about 1117ft^2 occupied a maximum of sixteen years had .43 Kitchen Group artifacts for each Architecture Group artifact found. This quantification may be useful

for comparisons with other sites, but certain circumstances at Fort Independence must be considered as affecting its utility in generalizing to other sites: supply limitations may have limited certain kinds of goods at Fort Independence.

In considering the main distinction of the Frontier Artifact Pattern relative to the Carolina Artifact Pattern, it is suggested that, as long as each artifact is equally weighted in these quantitative manipulations, for each house of a certain size and certain construction method, a minimum number of years of occupation would have to occur for an adjacent and/or peripheral midden to reach a size where the frequency of archaeologically recoverable Kitchen Group artifacts would equal, one for one, the frequency of recoverable nails and other structural hardware items or fragments thereof, yielding an empirical profile wherein the two Groups would be equally expressed. Further occupation would bring the Kitchen Group artifact proportion more and more into contrast with the Architecture Group proportion of the assemblage, since the former would increase while the latter would remain static (unless the structure was enlarged). The relationship between the Kitchen and Architecture Groups observed by South on domestic sites would be increased.

The large quantity of nails recovered at Fort Independence was shown, above, to result in what would appear to be relatively extreme values for two measures (nail ratio, and the ratio of floor area to Architcture Group artifacts), compared with South's findings for domestic structures at Brunswick Town, North Carolina, and for several other domestic and military sites of the eighteenth century. By way of explanation, it is suggested that the placement of any site along South's Frontier-Carolina continuum (1977:147) is merely a function of the length of occupation. Construction related artifacts can be reviewed as a static factor since their numbers do not increase appreciably after construction. On the other hand, kitchen related artifacts are in constant use and quantities increase throughout the occupation of a site. Thus the relationship between these two factors is constantly changing and the longer a frontier site is occupied, the more closely its Kitchen Group/Architecture Group ratio resembles that defined for the Carolina Pattern.

Another interesting ratio purportedly reflects differential social status. This differential, observed in eighteenth- century ceramics lies primarily in the contrast between assumedly high status teaware and assumedly low status heavyware, which was inexpensive, readily available, expendable, and served in food preparation, storage, and routine consumption. The number of sherds judged to be from heavyware was 727 compared to 71 from teaware, or about ten to one. This was quite different from other Revolutionary War sites. Fort Watson, South Carolina, had a heavyware to teaware frequency ratio of one to two and Fort Moultrie (near Charleston, South Carolina) had a heavyware to teaware frequency ratio of three to one (South 1977:149-151). Distribution of the two functional ware groupings at Fort Independence contrasts only between Structure 2 and Feature 39, the only identified dwellings. Only Structure 2 had

teaware. Feature 39 had heavyware only, at least one Delft plate. Structure 2 also had Delft plates plus all the coarse utilitarian earthenware found at the site. Clearly it was the higher status dwelling, its inhabitants also more versatile in terms of variety of behaviors associated with food and beverage consumption.

The tea items were of five different wares or decorative types, none of them very exotic or expensive. This mix-and-match approach was not unusual (Roth 1961), but these wares were probably long out of fashion in Charleston, while still being carefully curated by Mrs. Bowie at Fort Independence. Also interesting to note, the heavyware items sorted quite distinctly, with wares being consistent with specific functions, if vessel form identifications are accepted. Delft was almost all in the form of plates. Thin, utilitarian earthenware took the form of porringers and bowls. All thick, utilitarian earthenware was in the form of storage jars. Vessels for beverages other than tea were quite underrepresented, (unless porringers served multiple purposes), with only one possible stoneware jug and one possible Westerwald mug in the entire subassemblage. Perhaps tin-plated sheet iron cups or treen were used and did not survive. All of these observations based on the ceramic subassemblage must be tempered by the recognition that Fort Independence was probably vacated and then looted and thus many items did not enter the archaeological record.

The total count for the ceramic subassemblage was 798, with 277 sherds from types amenable to use in the calculation of South's Mean Ceramic Date Formula (South 1977:210-17). That exercise is presented in Table 9 along with the result of an additional mathematical adjustment designed to predict most accurately the median occupation date of a site from the Mean Ceramic Date Formula (South 1977:236). As is readily apparent, neither calculated date is acceptably close to the possible median occupation date, 1771, if the proposition that the site was first occupied no earlier than 1763 is accepted.

A similarly deviant pipestem date of 1743.99 was noted, above. These dating anomalies require some consideration of possible explanations. First, small sample size doubtless is a factor, certainly with the pipestem date obtained, and perhaps with the dates based on ceramic artifacts as well. A number of the sites for which South (1977:254-260, Appendix B) presents ceramic data, however, also had small samples without producing anomalous mean ceramic dates.

A quantitative study of ceramic time lag was undertaken using data from Silcott, Washington, a late nineteenth-century townsite (Adams and Gaw 1977). For ceramic artifacts, a lag of 21 to 23.5 years was found to have occurred between the date of manufacture and the date of disposal, when compared to glass artifacts from the same contexts (1977:228). The authors discuss the two primary components which would constitute the observed time lag: manufacture, transit, storage, and sale time versus purchase, use, and disposal time (1977:218). They assume the first interval would be relatively short due to the vested interests of manufacturers and various middlemen, but they do not attempt to quantify it. Thus, they do not quantify

the second interval, either, merely assuming that it would account for the major part of the observed time lag. Nor do they attempt to explain the overall time lag beyond observing the components of it and essentially equating it with a generation's duration (1977:229). They do not necessarily equate that with, say, sentimental curation behavior ("mother's good china"), although that might be one factor involved.

Clearly the time that elapses between the purchase of ceramics and their disposal into the archaeological record would be dependent on many factors--period and place, type of ceramic object (function, fragility), context of use, user, etc.--and it remains to be demonstrated that ceramic time lag quantified on the basis of the artifact assemblage from Silcott, Washington, is a consistent, reliable index for other historic sites. The ceramic time lag noted for Fort Independence was some 16 to 24 years, the differences between the probable median occupation date of 1771 and 1) the raw mean ceramic date of 1747, and, 2) the interpreted median occupation date of 1755.4 (Table 4, above). This certainly mirrors the findings of Adams and Gaw, but two cases do not constitute adequate justification for making a generalization. Also, the concept of a rapidly diffusing eighteenth-century historic ceramic horizon was developed because of the consistent close relationship found by archaeologists working with many cases to pertain between a ceramic ware and its known manufacture dates. That this same phenomenon would be observed for ceramics from archaeological contexts of other periods was not guaranteed when the validity of the Mean Ceramic Date Formula for the eighteenth century was proposed. Rather than disproving the reliability of mean ceramic dates for eighteenth-century sites, the ceramic time lag observed at Fort Independence requires explanation as a deviation from what could be reasonably expected.

It is suggested that ceramic time lag at Fort Independence was the result of artificial wartime scarcity. South emphasizes that the horizon phenomenon partially assessed by the Mean Ceramic Date Formula assumes rapid diffusion of new ceramic types over a wide area (1977:234), but that would be in an ideal economic market unhindered by tariffs, embargos, or blockades. Perhaps the latter obstacles to rapid diffusion would affect the eighteenth- century ceramic horizon phenomenon during specific time periods when they were in effect. Thus, during the Revolutionary War, the newest British ceramics weren't being imported and the newest French or other European ceramics were being restricted in their importation by blockades. Consequently, the inhabitants of Fort Independence made do with their old ceramics, resulting in an earlier mean ceramic date than would have been the case had the site been occupied just a decade later. The implications of this for sites of unknown occupation period in the eighteenth century are disturbing. One would have to know the actual dates of occupation to consider the possibility that wartime scarcity and blockades or peacetime tariffs and embargos were affecting the rate or extent of the ceramic horizon phenomenon. Conversely, not knowing the actual dates of occupation but using a ceramic sample deposited at a time when certain wares were restricted by embargo or whatever, would result in a deceptively early mean ceramic date.

TABLE 9: CALCULATION OF SOUTH'S MEAN CERAMIC DATE FORMULA

Ceramic Type Description	Median Date	Sherd Count	Product
White Saltglazed			
Plain	1763	27	47601
Relief Molded Plates	1758	2	3516
Scratch Blue	1760	1	1760
Westerwald	1738	2	3476
British Brown Stoneware	1733	103	178499
Creamware			
Dark Yellow	1771	25	44275
Light Yellow	1798	6	10788
Jackfield	1760	1	1760
Delft			
Blue decorated	1750	95	166250
Combed Yellow Slipware	1733	15	25995
		277	483920

MEAN DATE = 1747

INTERPRETED MEDIAN OCCUPATION DATE (South 1977:236) = 1755

5.5 ARCHITECTURAL COMPARISONS

In regard to architecture, Fort Independence yielded fairly detailed archaeological data for one permanent, domestic dwelling (Structure 2), one temporary, military dwelling (Feature 39), and for the stockade-like fortification. The permanent, domestic dwelling was typical of its time and place in some ways, but in others it was exceptional. The probable one-room floor plan, the gable end chimney, the storage loft, and the cellar are all typical of modest English colonial dwellings of the eighteenth century throughout the southern colonies. The hewn logs used in the building of Structure 2 signify its location on the frontier as compared to the frame and clapboard houses of the towns and more settled coastal areas. Atypical aspects of Structure 2 include its size and its remarkably sturdy foundation and unusually large fireplace/chimney. The plan dimensions of the central structure (20ft 6in x 26ft 6in) are larger than those of eighteenth-century log cabins, generally specified in historical architectural sources as 16 x 16ft (Swaim 1978:30). The central structure was smaller than urban dwellings which usually had two rooms on the ground floor:

> Brunswick Town, North Carolina, the Hepburn-Reonalds House: ca. 23 x 30ft (after South 1977:51).
>
> Brunswick Town, North Carolina, Nath Moore's Front: ca. 24ft 7in x 38ft 7in (after South 1977:57).
>
> Richmond, Virginia, townhouse: 20 x 40ft (from an advertisement of property for sale in a 1775 Virginia newspaper, Noel Hume 1966:254).

The main house at Fort Independence was also smaller than a contemporary rural farmhouse in the more settled Caroline County, Virginia, area, which was described as 28 x 32ft, and which also had a separate kitchen outbuilding (1775 Virginia newspaper advertisement of property for sale, Noel Hume 1966:254).

The scale and mass of the dry laid, stone masonry involved in Structure 2 indicate that this dwelling was not considered a temporary shelter to be replaced by a better one as soon as circumstances would allow. Had the building survived the Revolutionary War and been reoccupied by a farming family who prospered, it probably would not have been torn down or relegated to sheltering animals and fodder when the family increased in size, but rather the building would have had additional log pens or shed rooms appended to extend and expand its useful life.

The fireplace and chimney of Structure 2 are relatively large for a single-pen log house. The fireplace would have dominated the room into which it projected. Its exceptional size may have been necessary to assure adequate heating for all of the interior space of the structure. This is supported by the suggestion of architectural historians that the more-or-less conventional 16 x 16ft size of log cabin pens was a result of both the inability of a fireplace to heat a

large area, and the length of non-hardwood log which a man could lift by himself. The projection of the fireplace into the interior of the house is also unusual. While the gable end fireplace/chimney is typically English and frequent in all colonial architecture, in the Southern colonies it was common for the chimney to be exposed on the outside of the building (Foley 1980:14). This contrasts with the New England colonies where (until the eighteenth century) the lack of adequate local lime for mortar and the severe winters resulted in the rapid dissolution of exposed masonry. As a result, masonry was not often utilized in New England until later, and chimneys came to be located in the centers of houses rather than on the ends. A quotation from Governor Winthrop of Massachusetts presents a clue to the positioning of the fireplace/chimney at Fort Independence: In 1631 the Governor had "erected a building of stone" but "there came so violent a storm of rain...(it not being finished, and laid with clay for want of lime) two sides of it were washed down to the ground" (Kimball 1966:35). All of the dry-laid stonework of the main house at Fort Independence was probably "laid with clay" and was probably subject to the same problems encountered by Governor Winthrop. But rather than entirely enclose his fireplace and chimney within his log house, thereby creating more complex problems in the articulation of the masonry with the wooden superstructure, Robert Anderson compromised and projected all but the back side of his traditional gable-end chimney into the interior of the house, thereby protecting three of the four sides of the vulnerable stonework. This use of clay as mortar was *known and common* in England (Kimball 1966:35) and it is easy to see the adaptability of the technique for frontier conditions, especially in the Piedmont where clay is common and limestone for mortar is not.

Structure 2 thus represents a composite of eighteenth-century building practices, preferences, and techniques. Most of these derived from European traditions (English plan and form and Swedish/German material usage) tempered by a new environment and fine tuned by the trials and errors of immigrants of various nationalities and needs over 150 years or so prior to being incorporated into Structure 2 at Fort Independence. The log house which can be evoked from the archaeological data would not have introduced anything new to even the vernacular architectural repertoire of the American late eighteenth century, but it represents a constellation of general traits found to be adaptive in a house on the colonial American frontier, plus some specific traits chosen for their adaptability at this particular time and in this place.

The other dwelling for which there is archaeological data is the soldiers' hut, the temporary, crudely constructed, cramped and uncomfortable hovel where rank and file soldiers are assumed to have lived. Interestingly, there are both archaeological and documentary observations of structures of this kind, in both domestic and military settings, *from* the seventeenth, eighteenth, and nineteenth centuries. The central concept behind these huts is temporary, expedient shelter. They are known from the English repertoire of structures and were utilized in early seventeenth-century Massachusetts Bay. A contemporary description states that the settlers,

> burrow themselves in the Earth for their first shelter under some Hill side, casting the Earth aloft upon Timber; they make a smoaky fire against the Earth at its highest side (Kimball 1966:50).

The same architectural historian gives another example from 1682 in newly founded Philadelphia where semi-subterranean shelters,

> were formed by digging into the ground, near the verge of the river-front bank, about three feet in depth; thus making half their chamber underground, and the remaining half above ground was formed of sods of earth, or earth and brush combined. The roofs were formed of layers of limbs, or split pieces of trees overlaid with sod or bar, river rushes, etc.

These shelters also were used at French and Indian War period Fort Loudoun in east Tennessee, where the men involved in the construction of that fort in 1756-7 lived in a number of these huts for several months until the more permanent buildings could be erected (Kuttruff 1982: personal communication). The Revolutionary War use of this kind of structure by the British in Manhattan was discussed along with Feature 39 in the Archaeological Findings section, and the adaptability and expediency of this kind of structure was not lost on military scientists of the American Civil War era. Colonel Henry Lee Scott's military dictionary of 1861 credits the timely adoption of these "underground huts" at Sebastopol with the salvation of the British Army there (Scott 1861:140-1).

The ephemeral nature of these structures, both in terms of temporary use and in terms of impermanent materials, probably makes them under-represented in the archaeological record. Their most likely location on hillsides away from primary activity areas (which were most likely to be on level surfaces, if possible) makes them less likely to be found by archaeological discovery procedures focused on primary site components with more identifiable remains, such as structures. The unceremonious abandonment of one of these crude structures when its inhabitants moved on or up to better housing makes it probable that the excavated basin would be used as a trash disposal area, if occupation on the site continued. This was what happened at Fort Loudoun. Such re-use would serve to obscure the original identity of these structures, when encountered archaeologically. The expedient option these crude shelters represented to all persons of English or derivative colonial tradition on the American frontier makes it possible that such shelters could be found on any frontier site, military or domestic, although the occurrence of them in the literature identifies them more with military usage after the seventeenth century.

The fortifications at Fort Independence were an afterthought in all likelihood, and despite the fact that the man responsible for erecting them was the closest thing to a military engineer that the upcountry had at that time, they do not correspond to formal concepts of defensive lines. The plan of the stockade at Fort Independence conforms to fortification theory, being a regular polygon with bastions at the

projecting angles (except for one), but beyond that, the stockade was a purely idiosyncratic and adaptive construction, more related to the seventeenth-century holeset-post method of building houses and outbuildings (Carson, Barka, Kelso, Stone, and Upton 1981) than to any accepted contemporary method of fortification construction. Fort Moore, South Carolina, built in 1715, is the only other eighteenth-century example of holeset-post-anchored fortifications which could be located (Ivers 1970:28-30, 62-63). Technically, the stockade at Fort Independence had only the appearance of a stockade, being nothing more than a good, tall, sturdy fence. Despite whatever formal knowledge of the science of fortification he may have had, frontier experience apparently had taught Robert Anderson that a simple pseudo-stockade would suffice against Indians who were more inclined to guerilla tactics than to laying siege. He modified the stockade concept to make it quick and less labor-intensive to erect and maintain. The result represents a modest but sufficient effort at protecting a homesite for an indefinite but temporary period of threat.

For that reason, Fort Independence contrasts greatly with most other eighteenth-century forts with respect to number and kind of defensive works, dimensions, plan, number and arrangements of internal structures, etc. Most planned forts represent a constellation of formal military engineering concepts which constitute one set of valid comparisons to be made among them. Fort Independence lacks these. The internal structures at most forts contrast greatly with the solitary one at Fort Independence. Usually forts have multiple internal structures, which are generally large in order to accommodate group activities and frequently specialized in function: barracks, magazine, guardhouse, storehouse, commander's quarters, etc. Also, the various components of most forts are built at the same time, more or less, from some comprehensive, functionally integrated plan. This is not the case at Fort Independence. Additionally, the various components of most forts are built with the same degree of durability in mind, but not at Fort Independence, where a strong contrast exists between the clearly evident permanence built into Structure 2 and the insouciant transience of the pseudo-stockade. For all these reasons, the most fruitful comparisons regarding architecture which can be made with the particular constructions found at Fort Independence would be with findings from other fortified homesites, because these most closely parallel Fort Independence in origin, concept, nature, and function. The historical research on Fort Independence indicated that Robert Anderson was not the only pioneer in the South Carolina and Georgia backcountry to fortify his home in the decade preceding the Revolution. Although a number of these "plantation forts" (Ivers 1970:28) were mentioned in passing in the various documents and secondary sources, unfortunately only the names have survived. Ivers lists several of these plantation forts--Fort Boone, Murray's Fort, Patton's Fort--which were built at the time of the Creek attacks in 1764 for the protection of Long Canes settlers, but no details of size, plan, or materials for these forts are available (1970:39, 63, 66).

Nonetheless, the fortified homesite is part of the English tradition and examples can be cited from the seventeenth, eighteenth, and nineteenth centuries from various settings. Two primary characteristics pertain to this type of site: 1) the circumstance of threat of attack by hostile

natives on outnumbered, isolated, intrusive pioneers; and 2) the resultant response with some kind of defensive measure that provides protection and a place from which to muster a defense or counterattack. In the course of human history, many confrontations where these characteristics could be expressed in various ways have arisen, so it is not surprising that considerable variability exists among the examples gathered with respect to size, material, method, concept and durability of defensive measures.

From Ulster in northern Ireland, in the year 1615, a village plan for English colonists focused on a "bawn", the fortified house of the leader of the group (Noel Hume 1979:765, 767). A contemporary plan for such a bawn (Garvan 1951:127) appears to have earthwork fortification walls some 90 ft on a side, in a four-sided, four-bastioned configuration, with an outer ditch and drawbridge. The back of the house is integrated into one curtain opposite the gate and drawbridge, leaving a large, protected courtyard. No temporary measures are seen in this example, apparently conceived with the need for enduring protection in mind, indicating a continuing occupation by the intrusive group and an expectation of continuing hostility from the indigenous population.

A 1619-1622 Virginia example at the Martin's Hundred site features a central house with a four-sided, trapezoidal "palisade" surrounding it, with dimensions of roughly 70 x 110ft. The palisade has a watchtower and a gun platform extending out from two adjacent corners, with the other two corners not treated defensively (Noel Hume 1979:739). The palisade, as Noel Hume has interpreted its construction, resembles what was found at Fort Independence: "a Pallizado of Planckes and strong Posts, foure foote deepe in the ground" (Noel Hume 1979:752). The posts of this fort were found to be nine feet apart (Noel Hume 1979:750) in a configuration Noel Hume described as "laid out by someone trained in the 'why don't we stop about here' school of military engineering" (Noel Hume 1979:762). This informality of design could also be characteristic of many fortified homesites, but not all. The central structure protected by the palisade at Martin's Hundred is some 14 x 38ft in size and is depicted by Noel Hume's artist as being of plastered, half-timber construction (Noel Hume 1979:740). This site also featured other structures in another enclosed area nearby, interpreted as the company compound. The structures and the compound enclosure are shown as being of the same construction methods and materials as the fort, and all were probably built at more or less the same time. Probably, these structures and their enclosures can be considered to be as permanent as the settlers could manage with the nondurable materials available to them, so Martin's Hundred pioneers evidently expected Indian hostility to pose a threat indefinitely.

Another kind of fortified domicile is known from mid-seventeenth-century New England. For this type of defensive site, rather than erecting a barrier between the hostiles and the house, the house itself was exceptionally strongly built of large, hewn logs closely fitted and variously jointed at the corners. This "garrison house" (Foley 1980:54) was the only form of log construction in the building tradition brought by English settlers to the New World, and it was derived from the log "castles" the Normans first used to protect themselves when they were the hated conquerors of England in the eleventh century. The garrison house in New England would be built by a prominent person in the settlement and

it would serve as a refuge for all the neighbors when Indian raids occurred. The logs were impenetrable by most means and difficult to ignite. Windows were small and barred, and the doors thick and solid. The second story overhung the first with slots cut into the floor of the overhang so that the defenders could fire down on attackers. No dimensions for such structures could be obtained and no archaeological observation of them is known.

At Stratford Hall, Virginia, a fortified planter's house called "The Clifts" was built around 1670, representing the first occupation of the site which would become the ancestral home of the Lees. The fortifications consist of a true palisade--closely spaced but not contiguous posts set in a continuous trench--in a roughly rectangular plan measuring 55 x 60ft (Neiman 1980:19). The layout is not geometric, but two opposing corners of the palisade have circular bastions while the other two corners are not treated defensively. The frame and clapboard house within the palisade is a three-room, holeset-post-founded structure with shed appendages. Its three-room core measures 18ft 6in x 41ft (Neiman 1980:12). The fortifications at this site were only in place for a brief time while a wave of paranoia about the Indians swept the colony, precipitating Bacon's Rebellion in 1676 (Neiman 1980:20). At The Clifts, then, the fortifications were an afterthought, necessitated by a change in circumstances and probably not considered a permanent fixture. Neiman even states that the flimsy palisade had more psychological than defensive value (1980:20).

From the Wormslow plantation site near Savannah, Georgia, a tabby variant of the fortified homesite was excavated by William M. Kelso. He dates the construction to circa 1739-44 (1979:21). The tabby enclosure is four-sided, with four bastions on the corners, measuring, overall, 70 x 80ft (Kelso 1979:54). These fortifications are eccentric in design, not conforming to the geometry of formal fortification theory, and Kelso states "the fort probably was merely one man's uneducated conception of what an eighteenth-century square bastioned fort should look like" (1979:86). The front wall of the tabby house, with the main door in it, is common with the enclosure wall on the side opposite to the back gate, leaving a large yard or court, an arrangement nearly identical to that of the Irish bawn (Kelso 1979:90). The other house walls are independent. The outside dimensions of the five-room house are 24 x 32ft (Kelso 1979:73). There is a cellared outbuilding in one of the bastions adjacent to the gate. The house and fortifications were probably built at the same time and both were typical of Georgia coastal tabby construction of the first half of the eighteenth century. The threatening circumstances which prompted the builder of Wormslow to fortify his home are not as evident or immediate as in the other cases set forth here. Kelso mentions that the Spanish were a threat to coastal Georgia in the 1740's, and the French assumed that role in the 1750's (1979:1), but he suggests later that the buffer role of the colony of Georgia resulted in many early Georgian settlements and plantations being fortified (1979:90). There is no disputing that Captain Jones built to last. Slow-setting tabby required that his commitment to such a durable construction material would probably be tested over a period of many months' duration, but evidently Jones had patience and determination. Some parts of his tabby fortifications still stand to a height of eight feet today, but just why Captain Jones felt he

needed long-term protection is not clear.

A fortified domicile complex called Fort Martin in Monongalia County, West Virginia, was contemporary with Fort Independence but continued to be occupied well into the nineteenth century, with a span from 1770 to 1840 (Payne and Thomas 1981). Fort Martin was one of a series of planned fortified homesites which were commissioned by the colony of Virginia for the protection of her frontier settlers. A builder could apply for assistance from Virginia in the building of his frontier homestead and in exchange his fortified homesite became a refuge for his less protected neighbors when Indian hostilities arose. Archaeological investigation at Fort Martin was limited to intensive testing, so data on the physical aspects of the fort were limited. The size and shape of the stockade or palisade were not determined, but evidence for it having been anchored by hole-set posts, like the stockade at Fort Independence, was found (Payne and Thomas 1981:25-26). The circumstance of relatively thin soil cover over bedrock at the site of this fort was the interpreted reason for setting only a few posts at intervals in separate holes rather than attempting the difficult excavation of the continuous trench necessary for a true palisade or stockade. Two stockade postholes were found which were roughly rectangular and measured 60 x 90cm and 110 x 150cm. Many stones in the hole fill indicated their use for tamping and stabilization. Some evidence for a dwelling at Fort Martin was found also. A 3 x 5m stone-lined cellar was found adjacent to an area of arranged stones which may be associated with the cellar as part of a structure of some kind (Payne and Thomas 1981:17). Other stone concentrations and at least one midden area were also noted at this site but no further archaeological work was planned there.

A mid-nineteenth-century example of the fortified homesite is provided by Fort Buenaventura in Utah, near the junction of the Ogden and Weber Rivers. The fort was begun in late 1845 by a mountain man from Connecticut named Miles Goodyear. Seasonal flooding proved to render the site uninhabitable and it was abandoned, with the houses being moved elsewhere, in 1850. This site was the location of the first permanent log structure in the Great Basin (DeBloois 1979:1) and presumably the threat of Indian attacks caused Goodyear to erect a stockade around his homesite. Contemporary documentary sources described a square, picket-type stockade of pointed cottonwood logs roughly 80 ft on a side, with four cabins located in the four corners. The stockade walls were supposedly 14 to 16ft high, with opposing gates in the east and west sides. Based on the measurements of a surviving, relocated log cabin which was said to be from Fort Buenaventura originally, the four cabins were thought to be of log construction and of 15 x 18ft plan dimensions (DeBloois 1979:3). Archaeological investigations in two seasons found that Fort Buenaventura was both smaller and less sophisticated than the documents and tradition had implied. The stockade was found to measure about 55 x 60ft and it was anchored the same way that the stockade at Fort Independence was anchored, by hole-set posts at 8 to 10ft intervals. The postholes were of 13 to 18 inches diameter with postmolds within them of 5 to 8in in diameter. The posts were set about 3ft deep into the silt and sand deposits of the fort's river terrace location (DeBloois 1979:8;15). Although three corners of the fort were excavated, the only evidence for a structure was found in the southwest corner. That evidence indicated a

building founded, again, with hole-set posts. The dimensions were 13 x 20ft and the construction method was interpreted as possibly "jacal", a southwestern variant of wattle and daub utilizing hole-set corner posts for its principal frame (DeBloois 1980:7-8). Alternatively, a builder from the east could have been familiar with the hole-set mode of framing finished with applied clapboard siding or split logs, also. No clear formality or permanence was designed into Fort Buenaventura, as evidenced by the archaeological remains, so perhaps the threatening conditions were not expected to endure. However, materials such as those used in the fort and cabin probably have greater longevity in Utah than they would in the southeastern United States, so judging the intended durability of Fort Buenaventura by the standards applied to southern colonial forts may not be valid.

More examples of the fortified homesite can be found, but it would be germane to consider what the usefulness of recognizing this type of site might be. Anthropologists and historians would be interested in what these sites suggest about adaptive behavior. At fortified homesites, readily available materials are utilized according to some concept of defense to provide adequate protection in each circumstance. That concept would be a composite one, with idiosyncratic, traditional, cultural, and environmentally sensitive components. Thus, as expressed by means of the local materials, each concept would probably result in a unique manifestation.

On a fortified homesite, it might be possible to interpret how serious a threat was extant, and how long it was expected to endure, given minimal disturbance and good preservation. For more ambitious anthropological problems, the input of documentary data could increase the number and kind of questions which could be asked and the specificity of them.

6.0 FORT INDEPENDENCE ON THE FRONTIER

Since a fortified homesite will nearly always (at least at the time of its fortification) be located on some kind of frontier, it is of interest to consider the theoretical concept and archaeological manifestation of frontier as these notions may be useful to understanding the occupation of Fort Independence. Waselkov and Paul (1981) have addressed these matters, summarizing several models which historical archaeologists have created for the study of the American frontier. Of relevance to the present study were Gregory Waselkov's postulations for Zumwalts' Fort, Missouri, and Kenneth Lewis' for Jamestown, Virginia (Waselkov and Paul 1981:312-314). These two models differ with respect to the degree of involvement of an indigenous population on the frontier. Waselkov would deal with both invading and invaded cultural systems equally, while Lewis would focus primarily on the intrusive system. However, the two models are similar in positing two important characteristics of cultural systems on the frontier which can be operationalized for archaeological research purposes. First, a cultural system will undergo sudden simplification on the frontier, and second, a cultural system will become more immediately self-sufficient on the frontier. These changes would manifest themselves archaeologically as, first, a lack of variety in the artifact assemblage along with an emphasis on the utilitarian; and, second, a strong reliance on local resources evidenced by wild game and plant food remains.

When Fort Independence artifact data are viewed from the perspective of Waselkov's model, they do not conform. The Fort Independence artifact assemblage had virtually no trade goods (five glass beads were recovered) and absolutely no ceramics of the kind called Colono ware, which would signal either trade with or the actual presence of Indians and/or slaves or free blacks at Fort Independence. Rather than being a free agent in the intermixing social and economic frontier zone envisioned by Waselkov, Fort Independence had only a very limited and special kind of interaction with the nearby indigenous populations: warfare. Although the documents indicated that on at least one occasion, Captain Bowie provided a drummer for a military escort on an official visit by South Carolina's upcountry Indian agent to some friendly Creeks in Georgia (Bowie Papers, Document 45), no archaeological evidence resulting from this minor kind of Indian contact was found.

Both Waselkov and Lewis predict both greater self-sufficiency and cultural simplification will occur on frontier sites. Self-sufficiency at Fort Independence is denied by the conclusion drawn from the documents that an external supply line provided nearly everything that was needed except for raw building materials and a limited amount of wild foods. The recovered faunal and botanical remains indicate that Fort Independence personnel made only very minor use of locally procured wild foods, probably only occasionally managing to add a little variety to their usual rations. Finally, some simplification is evident in the artifact assemblage from Fort Independence. Some artifact categories exhibiting variation elsewhere are limited to a single specimen, or to just one material or form at Fort Independence. However, judging how "simplified" an assemblage is, is a subjective process. Also, some items of a non-utilitarian nature are present, if utilitarian as Waselkov uses it means essential to survival. Such things as teaware items, a compass case lid,

possible medical paraphernalia, a surveyor's or carpenter's instrument (dividers), and the brass hardware from furniture with drawers all deny a Spartan, marginal, frontier existence. In summary, using Waselkov's and Lewis' (Jamestown) archaeologically operationalized models for the frontier, Fort Independence would not necessarily qualify as a frontier site except for its archaeologically identified stockade and its documentarily verified frontier location.

Lewis developed his frontier model further and used it to inform his archaeological approach to the town of Camden, South Carolina. It is possible to relate Fort Independence in a very limited way to Lewis' Camden version of the frontier model, but the two sites are not really comparable. For Camden, Lewis postulates an economic and communicational network focused on a frontier town (Camden) having certain characteristics, nearly none of which apply to Fort Independence. This is because it was Ninety Six and not Fort Independence which was the analog of Camden for that part of South Carolina's frontier where Fort Independence played a role. In contrast, Fort Independence was a highly specialized end node of the commercial and informational network centered on Ninety Six. In the great majority of instances, Fort Independence received goods and services but did not return raw materials or provide a growing, diversifying market, as a less specialized, domestic end node in the same network would have done. Thus, Fort Independence was not interdependent with Ninety Six or even semi-dependent. It was wholly dependent, even for the barest essentials. Nonetheless, its singular, protective function was important enough to warrant total support by the larger system of which it was a part. The Bowie Papers indicate that Fort Independence occasionally served a minor redistributive function in passing along various items from its stores to other wholly dependent end nodes, i.e., other military units. Overall, however, Camden and Fort Independence are not comparable and the hypotheses about a frontier town that Lewis sets up for testing with data from Camden are not testable with data from Fort Independence. This is because the occupation at Fort Independence was too brief, included no Indian contact, and was not amenable to a breakdown between civilian and military phases.

7.0 SUMMARY AND CONCLUSIONS

The objectives of the research conducted on Fort Independence were largely exploratory because so little was known about the fort when research began. As the initial historical research suggested interesting or conflicting particulars about the fort, new questions were asked and hypotheses were set up to be examined in the light of new data, historical and archaeological. The documents by themselves initially contributed just a rough idea of when the site was first occupied, disclosed its dual functions as, first, a plantation and, then, a military post, and detailed its demise. Archaeology then conclusively proved that Fort Independence was located on the Rocky River, that it consisted of a well-built log house with a sturdy but temporary, fence-like stockade around it, and that temporary, auxiliary shelters had been built nearby during the military occupation to house the surplus population. Only archaeology disclosed the plan and size of the fort and provided evidence of its materials and mode of construction. Later historical research made use of original documents (Bowie Papers) to detail the military occupation, such as who garrisoned the fort, the actions in which they were involved, their role in the Revolutionary War in the upcountry, and to a limited extent, their lifestyle. The Bowie Papers also helped to reconcile the confusion in the public records regarding the location of Fort Independence on both the Rocky and Savannah Rivers by indicating that the fort and garrison were moved from one to the other, despite the short period of existence. While many of the questions about Fort Independence have been answered by documentary research, by archaeological research, and by the combination of the two, some questions will probably never be answered. Exactly when were the log house and stockade built? Why did someone take the trouble to clean up the site of the burned fort? What happened to the second Fort Independence? Overall, the historical data provided an absolute chronology and context for the archaeological data, and were generally complementary to them. Conflicts did not arise because the historical data were too few and insufficiently detailed to contrast with each other or with the archaeological observations.

No clear picture of the exclusively domestic occupation of the site could be sketched due to the impossibility of archaeologically discriminating it from the subsequent military occupation and to the absence of documentary records relating to it. General historical treatments of the process of back country settlement in South Carolina lend themselves to the suggestion that Robert Anderson's plantation, so close to the new Indian boundary, could have been one of the earliest to penetrate that far. The archaeologically-derived ceramic dates for the site (1747 and 1755) were found to be earlier than expected, and this could support the suggestion that the domestic occupation of the site was relatively early for that area, barring that the early ceramic dates are an artifact of unusual and circumstantial factors.

The military occupation of the site was much better documented. The historical records revealed that the fortifications at Fort Independence were conceived as a temporary and expedient adaptation to a threat that was neither overwhelming nor expected to endure. The archaeological record revealed that the site was quite harmonious with this concept and these circumstances: The stockade concept was altered to economize on time and

effort; local materials were used, without elaborate preparation or refinement. And when the course of the Revolutionary War in the backcountry dictated that a better location for the Fort Independence garrison was warranted, the site was abandoned without ceremony or sentiment.

The importance of the Fort Independence garrison in the contemporary and subsequent settlement of the area lay primarily in holding the new territory at a time when South Carolina was assailed from within and without and was very vulnerable to the loss of her hard-won frontier. Fort Independence was only one of several frontier military posts which formed the backcountry defense system conceived by Governor Rutledge as a barrier to the re-occupation of the frontier by the Indians and as a counternote to the Tory influence there. Fort Independence and her sister forts on the frontier made it possible for the postwar wave of settlers to confidently and expeditiously exploit the new territory, and to continue to push back the boundaries of the new state.

8.0 BIBLIOGRAPHIES

8.1 BIBLIOGRAPHY FOR THE HISTORICAL RESEARCH

Maps

Mills, Robert
1825 Atlas of the state of South Carolina, made under the authority of the Legislature; prefaced with a geographical, statistical and historical map of the state. F. Lucas, Jr., Baltimore, Maryland.

Newspapers

South Carolina and American Gazette
1779 February 25th issue. Charleston, South Carolina

South-Carolina Gazette
1774 February 21st issue. Charleston, South Carolina

Public Records

Bowie Account
1784-1821 Audited account of John Bowie, #652. South Carolina Department of Archives and History, Columbia, South Carolina.

Colonial Land Grants
(Various Dates) Colonial land grants of South Carolina. Microfilm, South Carolina Department of Archives and History, Columbia, South Carolina.

Colonial Plats
(Various Dates) Colonial plats of South Carolina. Microfilm, South Carolina Department of Archives and History, Columbia, South Carolina.

General Assembly, Legislative Reports
1786 General Assembly, legislative reports, #12. South Carolina Department of Archives and History, Columbia, South Carolina.

Memorials
(Various Dates) Memorials of South Carolina. Microfilm, South Carolina Department of Archives and History, Columbia, South Carolina

Salley, A. S., ed.
1917 Stub entries to indents issued in payment of claims against South Carolina growing out of the Revolution; Book T. The State Company, for the Historical Commission of South Carolina, Columbia, South Carolina.

Salley, A. S., ed.
1934 Stub entries to indents issued in payment of claims against South Carolina growing out of the Revolution; Book B. The State Company, for the Historical Commission of South Carolina, Columbia, South Carolina.

Trask Documents
1783-5 Lease of release and surveyor's plat for the Fort Independence tract and for the 529-acre tract adjoining, both in the name of John Vanderhorst. Xerox copies supplied to the author by the present owner of the land.

Treasury Journal
1778-1780 South Carolina Treasury Journal, Receipts and Payments. Microfilm, South Carolina Department of Archives and History, Columbia, South Carolina

Tutt Account
1783-1786
1823-1826 Audited Account of Benjamin Tutt, #7970. South Carolina Department of Archives and History, Columbia, South Carolina.

Wates, Wylma
1956 Stub entries to indents issued in payment of claims growing out of the Revolution; Book K. State Commercial Printing Company, for the South Carolina Archives Department, Columbia, South Carolina.

Primary Sources

Bowie Papers
1776-1780 Microfilm; original manuscripts in the collection of the Rare Books and Manuscripts Division of the New York Public Library, Astor, Lenox, and Tilden Foundations.

Laurens Papers
1749-1792 Papers of Henry Laurens. South Carolina Historical Society. Microfilm copy in Sumter Papers, South Caroliniana Library, University of South Carolina, Columbia, South Carolina.

Secondary Sources

Bass, Robert D.
1978 Ninety Six, the struggle for the South Carolina back country. Sand-lapper Store, Lexington, South Carolina.

Caldwell, Joseph R.
1974 Preliminary report: archeological investigation of Fort Charlotte, McCormick County, South Carolina. Notebook, Institute of Archeology and Anthropology, University of South Carolina, 6(2):45-56.

Davis, Nora Marshall
1949 Fort Charlotte on the Savannah River and its significance in the American Revolution. Star Fort Chapter of the Daughters of the American Revolution, Greenwood, South Carolina.

DeVorsey, Louis, Jr.
1966 The Indian boundary in the southern colonies, 1763-1775. University of North Carolina Press, Chapel Hill, North Carolina.

Gobbel, Luther L.
1919 Militia in North Carolina in colonial and Revolutionary times. Historical Papers of the Trinity College Historical Society, 13:35-61.

Heitman, Francis Bernard
1893 Historical register of officers of the Continental Army during the War of the Revolution, April, 1775, to December, 1783. W. H. Lowdermilk and Company, Washington, D.C.

Hillborn, Nat and Sam Hillborn
1970 Battleground of freedom; South Carolina in the Revolution. Sandlapper Press, Inc., Columbia, South Carolina.

Ivers, Larry E.
1970 Colonial forts of South Carolina, 1670-1775. The University of South Carolina Press, Columbia, South Carolina.

Landrum, John B. O'Neall
1897 Colonial and Revolutionary history of upper South Carolina, embracing for the most part the primitive and colonial history of the territory comprising the original county of Spartanburg with a general review of the entire military operations in the upper portions of South Carolina and portions of North Carolina. Shannon and Company, Printers, Greenville, South Carolina.

Logan, John Henry
1859 A history of the upper country of South Carolina from the earliest periods to the close of the War of Independence; Volume I. S. G. Courtenay and Company, Charleston, South Carolina.

1980 A history of the upper country of South Carolina, from the earliest periods to the close of the war of independence; Volume II: a journal of personalities, reminiscences, traditions, and history of the Revolution in South Carolina. Southern Historical Press, Easley, South Carolina.

M'Call, Captain Hugh
1969 History of Georgia. Cherokee Publishing Company, Atlanta, Georgia (reprint of 1909 edition).

Ramsay, David
1785 The history of the Revolution of South Carolina from a British province to an independent state. Isaac Collins, Trenton, New Jersey.

Scott, Colonel H. L.
1861 Military dictionary: comprising technical definitions; information on raising and keeping troops; actual service, including makeshifts and improved material; and law, government, regulation, and administration relating to land forces. D. Van Nostrand, New York.

Sharpe, Eron M.
1963 Pickens families of the South. Published by the author, Memphis, Tennessee.

Taylor, Richard L. and Marion F. Smith, compilers.
1978 The report of the intensive survey of the Richard B. Russell Dam and Lake, Savannah River, Georgia and South Carolina. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series, No. 142. Columbia, South Carolina.

The History Group, Inc.
1981 Historical investigations of the Richard B. Russell multiple resource area. Interagency Archeological Services Division, National Park Service, Atlanta, Georgia.

Waring, Alice Noble
1962 The fighting elder: Andrew Pickens, 1739-1817. University of South Carolina Press, Columbia, South Carolina.

8.2 BIBLIOGRAPHY FOR THE ARCHAEOLOGICAL RESEARCH

Adams, William H. and Linda P. Gaw
1977 A model for determining time lag of ceramic artifacts. Northwest Anthropological Research Notes, 11:218-231.

Alterman, Michael
1982 Telephone communication, June 10, 1982.

Bastian, Beverly E.
1981 Interim report and a proposal for Phase II archaeological investigations at Fort Independence, Richard B. Russell Dam and Lake, Abbeville County, South Carolina. Report on file with the Interagency Archeological Services Division of the National Park Service, Southeast Region, Atlanta.

Binford, Lewis R.
1962 A new method of calculating dates from kaolin pipestem samples. Southeastern Archaeological Conference Newsletter 9(1):19-21.

Breitburg, Emanuel
1982 Telephone conversations, May 25 and May 27, 1982.

Brown, Margaret K.
1971 Glass from Fort Michilimackinac: a classification for eighteenth century glass. The Michigan Archaeologist, 17(3-4):97-215.

Calver, William L. and Reginald Pelham Bolton
1950 History written with pick and shovel; military buttons, belt-plates, badges, and other relics excavated from colonial, Revolutionary, and War of 1812 camp sites by the Field Exploration Committee of the New York Historical Society. The New York Historical Society, New York.

Carson, Cary, Norman F. Barka, William M. Kelso, Garry Wheeler Stone, and Dell Upton
1981 Impermanent architecture in the southern American colonies. Winterthur Portfolio: A Journal of American Material Culture, 16 (2/3):135-196.

Chapman, Jefferson
1977 Archaic period research in the Lower Little Tennessee River Valley. Reports of Investigations, No. 18. The University of Tennessee, Department of Anthropology, Knoxville, Tennessee.

Chappell, Edward
1973 A study of horseshoes in the Department of Archaeology, Colonial Williamsburg. In Five artifact studies, edited by Ivor Noel Hume, pp. 100-116. The Colonial Williamsburg Foundation, Williamsburg, Virginia.

Coe, Joffre L.
1964 The formative cultures of the Carolina Piedmont. Transactions of the American Philosophical Society, n.s., 54.

DeBloois, Evan I.
1979 Archaeological testing at Fort Buenaventura State Park. Report on file at the School of Social Sciences, Weber State College, Odgen, Utah.

1980 Excavations at Fort Buenaventura, 1980. Report on file at the School of Social Sciences, Weber State College, Ogden, Utah.

Foley, Mary Mix
1980 The American house. Harper & Row, Publishers, Inc., New York.

Garvan, Anthony N. B.
1951 Architecture and town planning in colonial Connecticut. Yale University Press, New Haven, Connecticut.

Guilday, John E.
1977 Animal remains from archaeological excavations at Fort Ligonier. In Experimental archaeology, edited by Daniel Ingersoll, John E. Yellen, and William Macdonald, pp. 121-132. Columbia University Press, New York.

Hamilton, T. M.
1976 Firearms on the frontier: guns at Fort Michilimackinac 1715-1781. Reports in Mackinac History and Archaeology, Number 5. Mackinac Island State Park Commission, Mackinac Island, Michigan.

Heighton, Robert F. and Kathleen A. Deagan
1972 A new formula for dating kaolin pipestems. Conference on Historic Site Archaeology Papers 6:220-229.

House, John H. and David L. Ballenger
1976 An archaeological survey of the Interstate 77 route in the South Carolina Piedmont. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series, 104, Columbia, South Carolina.

Keel, Bennie C.
1976 Cherokee archaeology: A study of the Appalachian summit. University of Tennessee Press, Knoxville, Tennessee.

Kelso, William M.
1979 Captain Jones's Wormslow; a historical, archaeological, and architectural study on an eighteenth-century plantation site near Savannah, Georgia. Wormslow Foundation Publications, Number 13, University of Georgia Press, Athens, Georgia.

Kimball, Fiske
1966 Domestic architecture of the American colonies and of the early Republic. Dover Publications, Inc., New York.

Kuttruff, L. Carl
1982 Personal conversation, June 1, 1982.

Lewis, Kenneth E.
1976 Camden: a frontier town. University of South Carolina, Institute of Archeology and Anthropology, Anthropological Studies, No. 2, Columbia, South Carolina.

McKearin, Helen and Kenneth M. Wilson
1978 American bottles and flasks and their ancestry. Crown Publishers, Inc., New York.

Morton, Robert
1976 Southern antiques and folk art. Oxmoor House, Inc., Birmingham, Alabama.

Neiman, Frazer D.
1980 The "Manner House" before Stratford (discovering The Clifts plantation). Robert E. Lee Memorial Association, Incorporated, Stratford, Virginia.

Noel Hume, Ivor
1966 1775. Alfred A. Knopf, New York.

1969 A guide to artifacts of colonial America. Alfred A. Knopf, New York.

1979 First look at a lost Virginia settlement. National Geographic, 55(6):734-767.

Nutting, Wallace
1965 Furniture of the Pilgrim century (of American origin), 1620-1720; with maple and pine to 1800, including colonial utensils and wrought-iron house hardware into the 19th century, Volume 2. Dover Publications, Inc., New York.

Payne, Ted M. and Ronald A. Thomas
1981 Archaeological investigations at Fort Martin, West Virginia. Report on file at Mid-Atlantic Archaeological Research, Inc., Newark, Delaware.

Roth, Rodris
1961 Tea drinking in eighteenth century America: its etiquette and equipage. Contributions from the Museum of History and Technology, Paper 14, Smithsonian Institution, Washington, D.C.

Scott, Colonel Henry Lee
1861 Military dictionary: comprising technical definitions; information on raising and keeping troops; actual service, including makeshifts and improved material; and law, government, regulation, and administration relating to land forces. D. Van Nostrand, New York.

Shurtleff, Harold R. (edited by Samuel Eliot Morison)
1967 The log cabin myth; a study of the early dwellings of the English colonists in North America. Peter Smith, Gloucester, Massachusetts.

South, Stanley
1977 Method and theory in historical archeology. Academic Press, New York.

Stone, Lyle M.
1974 Fort Michilimackinac 1715-1781; an archaeological perspective on the Revolutionary frontier. Publications of the Museum, Michigan State University, East Lansing, Michigan.

Swaim, Doug
1978 North Carolina folk housing. In Carolina dwelling; towards preservation of place: in celebration of the North Carolina vernacular landscape, edited by Doug Swaim, pp. 28-45. The Student Publication of the School of Design: Volume 26, North Carolina State University, Raleigh, North Carolina.

Taylor, Richard L. and Marion F. Smith, compilers.
1978 The report of the intensive survey of the Richard B. Russell Dam and Lake, Savannah River, Georgia and South Carolina. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series, 142, Columbia, South Carolina.

Waselkov, Gregory A. and R. Eli Paul
1981 Frontiers and archaeology. North American Archaeologist 2(4):309-329.

Wauchope, Robert
1966 Archaeological survey of northern Georgia with a test of some cultural hypotheses. Memoirs of the Society for American Archaeology, 21.

Witthoft, John
1966 A history of gunflints. Pennsylvania Archaeologist, 36(1-2):12-49.

Wyler, Seymour B.
1937 Old silver. Crown Publishers, New York.

Provenience	Ceramics	Bottle Glass	Window Glass	Other Glass	Pipes	Gun Flints	Personal Items	Gun, Cannon Parts	Lead Ordnance	Brass, Iron Hardware	Nails	Iron Tools	Horse, Wagon Equip't	Kitchen, Iron	Unidentified Iron	Faunal	Botanical	Prehistoric Lithic	Modern
F.1Z1,2	111	112	1	15	4	4	10	2		2	676	3	4	2	20	203	50	47	
F.1Z.3	398	409	1	24	3		1	4	3	3	1717		3	3	29		20	21	
F2		1									2					3			
F.3	1	1									13					1			
F.4		1			1						1					9	1	1	
F.5																			
F.6											1							1	
F.7		1									4								
F.8																9			
F.9				1							9								
F.10																			
F.11																			
F.12																			
F.13																			
F.14																			
F.15																			
F.16	1										21					7			
F.17																30			
F.18	1										2					5			
F.19																	1		
F.20		1									7					3			
F.21											6					13	1		
F.22											8				1	28	1	3	
F.23	1	1									1					3			
F.24																31			
F.25	7	2									6					230	1		
F.26											1					4			
F.27																6	1		
F.28									1		7				3	19			
F.29	2																		
F.30																3	1	2	
F.31					1											1			
F.32		2									7						1	3	
F.33		1									2					2			
F.34											6					5			
F.35						1					5								
F.36		24									4					1		1	
F.37		1					1				27								
F.38	4	5					1			1	57				5	22	2	6	
F.39	15	11		1							2			1		9	1		
F.43																			5
F.45Z1	32	8	1	19			1				222	1			1	465	53		
F.45Z2	11	8		4			2			3	35						35	1	
F.46																	8	2	34
F.47	6	7		2	1	1	2		1	5	327	1	1	1	12		3	7	
PMA											2								
PMB																		1	
PMC											1								
PMD																			
PME											4							1	
PM1											1								
PM4							1												
PM6											2							6	
Total	590	596	3	66	10	6	19	6	5	14	3186	5	8	7	71	1112	180	103	39

APPENDIX B: Excavated Artifacts From Grid Squares

Provenience	Ceramics	Bottle Glass	Window Glass	Other Glass	Pipes	Gun Flints	Personal Items	Gun, Cannon Parts	Lead Ordnance	Brass, Iron Hardware	Nails	Iron Tools	Horse, Wagon Equip't	Kitchen, Iron	Unidentified Iron	Faunal	Botanical	Prehistoric Lithic	Modern
S6E88	10	4		1					1		2					2		5	
N0E70	1	4					1				4							1	
2/70											5							2	
4/70	3	10					1				21			1		5	1	1	
6/70		3		4	1						16					2	1	2	
8/70		12		3							17			1		7		4	
10/70		9									13					2		2	
0/72	2	3		1							4					8		2	
2/72	9	4				1					44					19		1	
4/72		1	1								8							1	
6/72		3	1								28							5	
8/72	1	10		3						1	82				1			1	
10/72	6	20			1						28					2		7	
0/74		2									10								
2/74	36	54		8	1		2				113					62	7	10	
4/74	7	1		1		1					16								
6/74		1		1							8							4	
8/74	15	16	3	11	1					1	95				5		19	3	2
10/74						1					27				1				1
0/76	8	7		5							18					2		2	
2/76	15	25	5		22		1			2	65	2			1		33	1	30
4/76	2	1									22							13	1
6/76	4	5		2		4	2				148							13	
8/76	6	8		4			2			1	55				1				2
10/76	1	8		1							14					14		7	
0/78	5	6		4	1		1				31				8		4		3
2/78	4	4			1						12				1		9	3	1
4/78																			
6/78																			
8/78	6	9		1	1	1					38					3		13	5
10/78	12	11	1	2		1			1		26					14		16	8
0/80	6	1	1	2	1	1	1		4		9				1				5
2/80																			
4/80																			
6/80											1						1	1	
8/80	9	2			1				1		21							7	1
10/80	5	8		1	1						15					6		4	7
6/82	3	3									10					1		7	
8/82	2	4					1		2		13					1		8	
10/82	7	4			2				1	1	16					5		3	1
Surface	15	18		1		3	1	1		2	3					12		39	1
Total	200	281	12	78	12	13	13	1	10	8	1058	?	0	2	19	232	18	217	24

Provenience	Ceramics	Bottle Glass	Window Glass	Other Glass	Pipes	Gun Flints	Personal Items	Gun, Cannon Parts	Lead Ordnance	Brass, Iron Hardware	Nails	Iron Tools	Horse, Wagon Equip't	Kitchen, Iron	Unidentified Iron	Faunal	Botanical	Prehistoric Lithic	Modern
S02E66											1								
N02E66											3								
S02E68		1									1								
N00E68											1				1				
N16E68											3								
S02E70		1									1								
S02E74											1								
S02E76											2								
S02E78											2								
N12E78											1								
S02E80											1								
N02E80	1																		
S08E82											1								
S06E82											1								
S04E82											2				1				
N02E82														1					
S06E84											1								
N02E84																			
N14E84											1								
N16E84											2								
N04E86											1								
N08E86											1								
N10E86					1						1								
N12E86	1										2								
N14E86																		1	
S02E88											1								
N00E88	1										1								
N02E88											2								
N04E88											1								
N08E88											1								
N10E88					1						2								
N12E88											2								
S06E90														1					
S04E90											1								
**W. of Ft															1				7
**N. of Ft											1				1				2
**E. of Ft									1		1								1
Total	3	2			2				1		43			2	4			1	10

* Including non-metallic items recovered at same locus as metallic items

** Beyond grid; no measured location

APPENDIX D

AN ANALYSIS OF FAUNAL REMAINS RECOVERED FROM FORT INDEPENDENCE (38AB218) ABBEVILLE COUNTY, SOUTH CAROLINA

by
Emanuel Breitburg

Phase I and Phase II archaeological investigations conducted at Revolutionary War period Fort Independence, Abbeville County, South Carolina (38AB218) recovered a small quantity of 1554 fragments of bone and shell. The analytical procedures employed in assessing the remains included tallying the frequency of identified skeletal portions of each represented species by feature and excavation unit, determining the number of species and number of individuals represented by these remains (Table I), and describing and tabulating the skeletal portions represented in the site subassemblage (Table II). Of the 1554 examined skeletal fragments, 127 pieces are identifiable to four species of the mammalian class, two species of the avian class, one species and one family of reptiles, and one introduced freshwater bivalve. At least 66% of the material was subjected to fire, and only four skeletal portions bear knife cuts or ax cuts demonstrative of the butchering procedures employed. Sixty-five percent of all the remains originate from Feature 1 (Structure 2), Feature 25, and Feature 45. The remaining 600 fragments were distributed among 24 features and 33 excavation units.

Mammalian remains were identifiable in 113 cases, representing a total of 10 individuals of cow, pig, deer, and rabbit. Cattle remains consist of: one head fragment (a horn core fragment); 16 dental fragments; a thoracic spinous process; four rib portions; scapula, humerus, and ulna portions of the forequarter; femur and tibia of the hindquarter; and miscellaneous fragments of metapodial and phalangeal elements. Two rib shaft portions from Feature 25 exhibit knife cuts, while one of these also exhibits both knife cuts and ax cuts along the shaft. A minimum of two individuals were represented by cattle remains identified as mandibular third molars.

While cattle remains were numerically the second most abundant identifiable remains recovered from the site, pig remains were the most numerous with 49 identifications. The skeletal fragments representing domestic pig consist of: a burned and fragmented mandibular alveolar portion; 29 dental elements and fragments; radius, ulna, and carpal of the forequarter; tibia and fibula fragments of the hindquarter; and miscellaneous fragments of metapodial and phalangeal elements. Seven of the fragments were subjected to fire. Two skeletal fragments associated with Feature 39 display knife cuts. A right proximal radius displays a knife cut on the medial aspect, directly below the articular rim, while a left proximal ulna exhibits a transverse knife cut on the medial aspect of the head. Both knife cuts exemplify procedures used to disarticulate the medial aspect of the elbow. The knife cut on the radius implies the elbow was disarticulated in part by severing the flexor carpi radialis and long medial ligament. The knife cut appearing along the medial aspect of the

ulna suggests that disarticulation within the region of the elbow also involved severing the deep flexor at its origin. A minimum of three individuals was identified from three left proximal ulnae.

The third species of mammalia recovered from the fort was the white-tailed deer. Five possible skeletal portions identified to the species include: a distal humerus portion; two left proximal ulnae; a proximal left radius, and a burned distal metapodial epiphysis. Based on the recovery of two left proximal ulnae, a minimum of two individuals represent the species. Two skeletal portions, a burned right humerus shaft and a burned lumbar vertebra, represent either the elements of white-tailed deer or domestic pig.

Finally, the fourth mammalian species identified from the faunal subassemblage was the eastern cottontail rabbit. A total of 24 fragments represent: mandibular remains in three cases; lumbar vertebrae and sacrum in nine cases; humerus in two cases; pelvic portions in two cases; femur portions in four cases; and tibia portions in two cases. A minimum of three individuals is present. These individuals are recognized from two right mature and one right immature rami portions.

Avifauna are limited to the domestic chicken and wild or domestic turkey. A minimum of one individual of domestic chicken is represented by coracoid, humerus, femur, and tibiotarsus portions. Turkey is represented by a single burned right proximal radius fragment recovered from Feature 45.

A total of five skeletal fragments represents reptilian species, and a single shell represents molluscan species. Reptilian remains represent eastern box turtle in three cases. The specimens, originating from Feature 1, consist of an anterior plastron portion, and burned hypoplastron and xiphiplastron plates. Two other reptilian specimens, also from Feature 1, represent the nonpoisonous snake family. The freshwater mussel (Corbicula spp. or Asiatic clam), from Feature 48, the spring, is an introduced species and is definitely not associated with fort period activity.

The small quantity of faunal remains recovered from Phase I and Phase II investigations at Fort Independence provides a very limited picture of the animal species employed in diets of site inhabitants. Since the fort lacks any abundant deposits of discarded food remains, it is suggested that fort occupants maintained relatively clean activity areas and conducted discard activities away from the fort. Based on the analysis of the recovered faunal remains, it is suggested that beef was the primary source of meat followed by domestic pig and white-tailed deer. Chicken and turkey provided a very limited amount of meat to fort occupants.

IDENTIFICATION OF FORT INDEPENDENCE REMAINS BY PROVENIENCE

Structure 2

Feature 1 (Total = 261)

Bos taurus

1 left maxillary M1M2; 1 right maxillary M3; 1 left mandibular M1; 1 left mandibular M3; 2 dental frags.; 1 distal metapodial epiphysis. Total = 7

Sus scrofa

1 burned and fragmented mandibular alveolar portion; 1 right maxillary I1; 1 left maxillary I1; 1 left maxillary P2; 1 left and 2 right maxillary P4; 2 left maxillary M1; 1 left mandibular M3; 13 dental frags.; 1 burned right distal tibia, epiphysis absent; 1 burned fibula shaft frag. Total = 25

Odocoileus virginianus (?)

1 right distal medial humerus portion; 1 distal metapodial condyle epiphysis. Total = 2

Sylvilagus cf. floridanus

1 right and 1 left ramus portions; 1 right innominate; 1 pelvic frag.; 1 sacrum; 8 lumbar vertebrae; 1 right immature proximal femur shaft portion; 1 right femoral diaphysis. Total = 15

Terrapene carolina

1 anterior plastron; 1 right hypoplastron and 1 right xiphiplastron (both burned). Total = 3

Colubridae, 2 vertebrae.

Terrestrial snail, 3 individuals.

Indeterminate

200 (159 burned) large mammal frags.; 2 small mammal frags.; 2 bird frags. Total = 204

Feature 45 (Total = 465)

Bos taurus

1 burned horn core frag.; maxillary left P4 and M3. Total = 3

Sus scrofa

1 burned right proximal radius; 1 burned proximal metapodial 3/4; 1 burned distal metapodial, epiphysis absent. Total = 3

Gallus gallus

1 burned left coracoid portion.

Meleagris gallopavo

1 burned right proximal radius.

Indeterminate

452 (433 burned) large mammal frags.; 1 small mammal frag.; 4 burned bird frags. Total = 457

Stockade Postmolds

Feature 2 (Total = 3)

Indeterminate

3 burned large mammal frags.

Feature 3 (Total = 1)
Indeterminate
1 large mammal frag.

Feature 4 (Total = 9)
Indeterminate
9 large mammal frags.

Feature 16 (Total = 7)
Bos taurus
3rd phalanx digit 3/4
Indeterminate
6 large mammal frags.

Feature 17 (Total = 30)
Indeterminate
30(10 burned) large mammal frags.

Feature 18 (Total = 5)
Indeterminate
5 large mammal frags.

Feature 20 (Total = 3)
Indeterminate
3 burned large mammal frags.

Feature 21 (Total = 13)
Indeterminate
13 (10 burned) large mammal frags.

Feature 22 (Total = 28)
Indeterminate
28 burned large mammal frags.

Feature 23 (Total = 3)
Sus scrofa
1 right tibia shaft frag.
Indeterminate
1 burned large mammal frag.; 1 burned bird frag.

Feature 24 (Total = 31)
Indeterminate
31 (27 burned) large mammal frags.

Feature 25 (Total = 231)
Bos taurus
1 left and 1 right mandibular M3; 3 dental frags.; 4 rib portions (1 with knife cut shaft and 1 with knife cut shaft and ax cuts); 1 femur head epiphysis; 1 femur shaft portion; 1 right proximal tibia, epiphysis absent; 1 left tibia shaft; 2nd phalanx digit 3/4; 1 proximal ulna fragment. Total = 15
Odocoileus virginianus
1 left proximal radius; 1 left proximal ulna. Total = 2

Indeterminate
212 (52 burned) large mammal frags.; 1 bird frag.
Total = 213

Feature 26 (Total = 4)
Sus scrofa
1 right maxillary I1.
Indeterminate
3 large mammal frags.

Feature 27 (Total = 6)
Sus scrofa
1 dental frag.
Indeterminate
5(2 burned) large mammal frags.

Feature 28 (Total = 19)
Indeterminate
19 large mammal frags.

Feature 29 (Total = 97)
Sus scrofa
1 dental frag.; 1 proximal metapodial 3/4; 1 distal 1st phalanx digit 2/5. Total = 3
Indeterminate
94(4 burned) large mammal frags.

Feature 30 (Total = 3)
Indeterminate
3 large mammal frags.

Feature 31 (Total = 1)
Indeterminate
1 burned mammal frag.

Feature 33 (Total = 2)
Indeterminate
2 burned mammal frags.

Feature 34 (Total = 5)
Indeterminate
5 large mammal frags.

Feature 36 (Total = 1)
Bos taurus
1 dental frag.

Trash Pits

Feature 8 (Total = 9)
Indeterminate
9 large mammal frags.

Feature 38 (Total = 22)
Indeterminate
22 (16 burned) large mammal frags.

Soldiers' Hut

Feature 39 (Total = 30)
Bos taurus
1 right humerus shaft; 1 left humerus portion. Total = 2
Sus scrofa
1 fragmented right proximal radius portion (with knife cuts on the medial aspect, below the articular rim); 2 (1 burned) left proximal ulnae and 1 burned left proximal ulnar shaft (1 with transverse knife cut on the medial aspect of the head); 1 distal metapodial condyle 3/4; 1st phalanx 3/4; 2nd phalanx 3/4. Total = 7
Pig/Deer
1 right burned humerus shaft fragment; 1 burned lumbar vertebra portion. Total = 2
Gallus gallus
1 left humerus shaft; 1 right distal femur portion. Total = 2
Indeterminate
17 (11 burned) large mammal frags.

Other Features

Feature 48 (Total = 1)
Corbicula spp.
1 valve.

Grid Squares

S6/E88 (Total = 2)
Indeterminate
1 burned large mammal frag.; 1 burned bird frag.

N0/E72 (Total = 8)
Sylvilagus floridanus
1 immature left femur shaft; 1 right tibia diaphysis. Total = 2
Indeterminate
4 burned large mammal; 2 small mammal frags. Total = 6

N0/E76 (Total = 2)
Sylvilagus floridanus
1 right ramus portion; 1 right tibia shaft.

N0/E78 (Total = 4)
Sus scrofa
2 dental frags. Total = 2

Sylvilagus floridanus
1 right humerus, proximal epiphysis absent.
Indeterminate
1 burned bone frag.

N2/E72 (Total = 19)
Sylvilagus floridanus
1 immature right ramus.
Indeterminate
18 burned large mammal frags.

N2/E74 (Total = 62)
Odocoileus virginianus (?)
1 burned left proximal ulna.
Indeterminate
59 (29 burned) large mammal frags.; 2 burned bird frags.
Total = 61

N2/E76 (Total = 35)
Indeterminate
24 (21 burned) large mammal frags.; 11 terrestrial snail frags.

N2/E78 (Total = 9)
Sus scrofa
1 right distal radial epiphysis; 1 right ulnar carpal.
Total = 2
Sylvilagus floridanus
1 right distal humerus; 1 left femur; 1 right proximal tibia portion. Total = 3
Gallus gallus
1 left distal femur portion; 1 left proximal tibiotarsus; 1 left and 1 right distal tibiotarsi. Total = 4

N4/E70 (Total = 5)
Indeterminate
5 (2 burned) large mammal frags.

N4/E72 (Total = 4)
Indeterminate
4 burned large mammal frags.

N4/E74 (Total = 4)
Sus scrofa
1 burned fibula shaft frag.
Indeterminate
3 burned large mammal frags.

N6/E70 (Total = 2)
Indeterminate
1 burned large mammal frag.; 1 terrestrial snail.

N6/E72 (Total = 7)
Indeterminate
7 (3 burned) large mammal frags.

N6/E76 (Total = 2)
Indeterminate
1 burned large mammal frag.; 1 terrestrial snail frag.

N6/E82 (Total = 1)
Indeterminate
1 burned large mammal frag.

N8/E70 (Total = 7)
Sus scrofa
1 burned dental frag.
Indeterminate
5 burned large mammal frags.; 1 terrestrial snail frag.
Total = 6

N8/E74 (Total = 19)
Indeterminate
19 burned large mammal frags.

N8/E76 (Total = 14)
Indeterminate
14 burned large mammal frags.

N8/E78 (Total = 3)
Indeterminate
3 burned large mammal frags.

N8/E82 (Total = 1)
Indeterminate
1 burned large mammal frag.

N10/E70 (Total = 2)
Indeterminate
2 burned large mammal frags.

N10/E72 (Total = 2)
Sus scrofa
1 dental frag.
Indeterminate
1 burned large mammal frag.

N10/E76 (Total = 14)
Indeterminate
14 (13 burned) large mammal frags.

N10/E78 (Total = 14)
Indeterminate
13 burned large mammal frags.; 1 terrestrial snail frag.

N10/E80 (Total = 86)
Indeterminate
6 burned large mammal frags. Total = 6

N10/E82 (Total = 5)
Indeterminate
4 burned large mammal frags.; 1 terrestrial snail.

N14/E68 (Total = 1)
Indeterminate
1 large mammal frag.

N14/E74 (Total = 1)
Indeterminate
1 burned large mammal frag.

N16/E62 (Total = 1)
Sus scrofa
1 dental frag.

N16/E66 (Total = 1)
Indeterminate
1 burned large mammal frag.

N16/E82 (Total = 1)
Indeterminate
1 burned large mammal frag.

N16/E84 (Total = 2)
Indeterminate
2 burned large mammal frags.

Surface (Total = 4)
Bos taurus
1 left mandibular dp3; 1 thoracic spinous portion; 1 right distal femur. Total = 3
Indeterminate
1 burned large mammal frag.

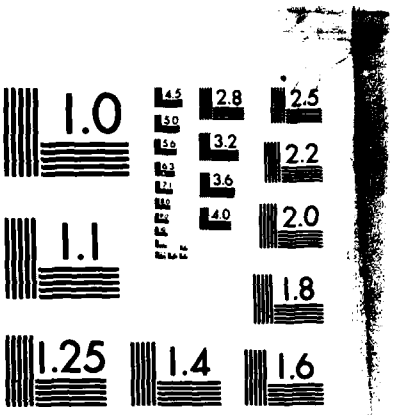
TABLE I
Tabulation of Examined Identifiable and
Unidentifiable Faunal Remains
Ft. Independence (38AB218)

	No. of Pieces	No. of Individuals
MAMMALIA-MAMMALS	113	10
Bos taurus, Domestic cow	33	2
Sus scrofa, Domestic pig	49	3
Odocoileus virginianus, Deer	5	2
Deer/Pig	2	--
Sylvilagus floridanus, Rabbit	24	3
AVES-BIRDS	8	2
Gallus gallus, Domestic chicken	7	1
Meleagris gallopavo, Turkey	1	1
REPTILIA-REPTILES	5	2
Terrapene carolina, Box turtle	3	1
Colubridae, Nonpoisonous snake	2	1
MOLLUSCA-BIVALVES	1	1
Corbicula spp., Asiatic clam	1	1
Indeterminate	1427	--
large mammal fragments	1391	--
small mammal fragments	5	--
bird fragments	11	--
misc. bone fragments	1	--
terrestrial snail	19	--
TOTAL	1554	15

AD-A133 125 FORT INDEPENDENCE: AN EIGHTEENTH-CENTURY FRONTIER HOMESITE AND MILITIA POST IN SOUTH CAROLINA(U) BUILDING CONSERVATION TECHNOLOGY INC NASHVILLE TN B E BASTIAN

3/3

UNCLASSIFIED DEC 82 F/G 5/6 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE II

Frequency of Examined Skeletal Portions
Fort Independence (38AB218)

Taxa	No.	left	right	burned
Bos taurus, Domestic cow				
horn core fragment	1	1		1
maxillary P4	1	1		
maxillary M1	1	1		
maxillary M2	1	1		
maxillary M3	2	1	1	
mandibular M1	1	1		
mandibular M3	3	2	1	
mandibular dp3	1	1		
dental fragments	6			
thoracic spinous process	1			
scapula portion	1	1		
humerus portion	1		1	
rib portions	4	(1 knife cut, 1 knife cut and ax cut)		
proximal ulna fragment	1			
femur head epiphysis	1			
femur shaft	1			
proximal tibia (epiphysis absent)	1		1	
tibia shaft	1	1		
distal metapodial epiphysis 3/4	1			
2nd phalanx digit 3/4	1			
3rd phalanx digit 3/4	1			
distal femur	1		1	
Total	33	(2 cut, 1 burned)		

Table II continued

Taxa	No.	left	right	burned
Sus scrofa, Domestic pig				
fragmented mandibular alveolus	1			1
maxillary I1	3	1	2	
maxillary P2	1	1		
maxillary P4	3	1	2	
maxillary M1	2	1		
mandibular M3	1	1		
dental fragments	19			
proximal radius	2		2 (1 knife cut)	
proximal ulnae	3	3 (1 knife cut)		1
distal radial epiphysis	1		1	
ulnar carpal	1		1	
tibia shaft	1		1	
distal tibia (epiphysis absent)	1		1	1
fibula shaft portions	2			2
proximal metapodial 3/4	2			1
distal metapodial 3/4 (epiphysis absent)	1			1
distal metapodial condyle 3/4	1			
metapodial condyle 3/4	1			
distal 1st phalanx digit 2/5	1			
1st phalanx 3/4	1			
2nd phalanx 3/4	1			
Total	49	(2 cut, 7 burned)		
Odocoileus virginianus, White-tailed deer				
distal medial humerus condyle	1(?)		1	
proximal ulnae	2(?)	2		
proximal radius	1(?)	1		
distal metapodial condyle epiphysis 3/4	1			1
Total	5	(1 burned)		
Deer/Pig				
humerus shaft	1		1	1
lumbar vertebra	1			1
Total	2	(burned)		

Table II continued

Taxa	No.	left	right	burned
Sylvilagus cf. *floridanus*, Rabbit				
mandibular ramus portions	4		3 (1 immature)	
lumbar vertebrae	8			
sacrum	1			
humerus portion (proximal epiphysis absent)	1		1	
distal humerus	1		1	
innominate bone	1		1	
pelvic fragment	1			
proximal femur	1		1	
fragmented femur	1	1		
femur shaft	1	1 (immature)		
femoral diaphysis	1		1	
proximal tibia	1		1	
tibia shaft	2		2 (1 diaphysis)	
Total	24			
Gallus gallus, Domestic chicken				
coracoid 1	1	1		1
humerus shaft	1	1		
distal femur	2	1	1	
proximal tibiotarsus	1	1		
distal tibiotarsus	2	1	1	
Total	7 (1 burned)			
Melegris gallopavo, Turkey				
proximal radius	1			
Total	1 (burned)			
Terrapene carolina, Eastern box turtle				
anterior plastron portion	1			
hypoplastron	1		1	1
xiphiplastron	1		1	1
Total	3 (2 burned)			
Colubridae, nonpoisonous snake family				
vertebrae	2			
Total	2 (burned)			

Table II continued

	No.	left	right	burned
Corbicula spp., Asiatic clam				
valve	1		1	
Total	1			
Indeterminate				
large mammal fragments	1391	--	--	936
small mammal fragments	5	--	--	--
bird fragments	11	--	--	6
misc. bone fragments	1	--	--	1
terrestrial snail	19	--	--	--
Total	1427	(943 burned)		
Total examined	1554	(958 burned)		

APPENDIX E

ARCHAEOBOTANICAL REMAINS FROM FORT INDEPENDENCE (38AB218)

by
Andrea B. Shea

Identifications listed by provenience

Carb. = carbonized specimen
Uncarb. = uncarbonized specimen

Pine species in study area:
- Pinus strobus (White pine; mountains only)
- P. palustris (Longleaf pine)
- P. taeda (Loblolly pine)
- P. serotina (Pond pine)
- P. rigida (Pitch pine; mountains only)
- P. echinata (Short leaf pine)
- P. virginiana (Virginia pine)

Structure 2
- Feature 1
  - Q1/Z1
    - 4 whole Persimmon seeds, uncarb.: Diospyrós virginiana
    - 1 Peach pit fragment, uncarb.: Prunus persica
    - 4 Peach pit fragments, carb.
    - 1 Pine resin frament, carb.
  - Q1/Z3
    - 1 Hard Pine fragment, uncarb.: Pinus sp.
    - 1 Acorn shell, uncarb.: Quercus sp.
  - Q2/Z1
    - 3 whole Persimmon seeds, uncarb.
    - 20 Peach pit fragments, uncarb.
    - 2 Hard Pine fragments, carb.
    - 5 Hard Pine fragments, uncarb.
    - 1 Cedar fragment, carb.: Juniperus virginiana
    - 3 Sourwood fragments, carb.: Oxydendrum arboreum
  - Q2/Z2
    - 3 Peach pit fragments, uncarb.
    - 1 Acorn shell fragment, uncarb.
    - 1 Grape seed, uncarb.: Vitis sp.
  - Q2/Z3/grain concentration, all carb.
    - Composition of sample by weight:
      - 72.39 gr cereal grains and seeds (see below)
      - 19.35 gr maize kernels and cob and kernel fragments: Zea mays (Table I)
      - 28.30 gr wood fragments (see below)
      - 69.55 gr residual material (smaller than 1.0 mm)
      - 189.59 gr TOTAL
    - Identification and frequency of cereal grains:
      - 1000+ whole wheat grains: Triticum aestivum

4 whole barley grains: Hordeum vulgare
8 whole oat grains: Avena sativa
4 whole corn cockle seeds; (+ 1 gr corn cockle capsule: Agrostemma githago; weed common to grainfields; introduced)

Identification and frequency of wood fragments
40 Hard Pine fragments
1 Soft Pine fragments
5 Cedar fragments
8 Red Oak fragments: Quercus sp.
1 White Oak fragment: Quercus sp.
1 Chestnut fragment: Castanea dentata
56 Total fragments

Q2/Z3
2 whole Persimmon seeds, uncarb.
1 Hard Pine fragment, carb.
1 Cedar fragment, uncarb.
2 Cedar fragments, carb.

Q3/Z3
1 Pine fragment, uncarb.
1 Pine knot, uncarb.
1 Hard Pine fragment, carb.
1 Black Willow fragment, carb.: Salix nigra

Q4/Z1
2 whole Persimmon seeds, uncarb.

Q4/Z3
1 Hard Pine fragment, uncarb.
1 Hard Pine fragment, carb.

N Baulk/Z3
4 Hard Pine fragments, carb.

S Baulk/Z3
1 Hard Pine fragment, partially carb.

W Baulk/Z3
1 Pine fragment, uncarb.

Feature 45

2/74/A(=Z1)
1 whole Persimmon seed, uncarb.
2 Persimmon seed fragments, partially carb.
4 Peach pit fragments, partially carb.

2/74/Z1
2 Peach pit fragments, carb.
5 Poplar fragments, carb.: Liriodendron tulipifera

4/74/Z1
1 White Oak fragment, carb.
3 Pine fragments, carb.

8/74/A(=Z1)
2 Black Walnut shell fragments, carb. (Juglans nigra)
34 Black Walnut shell fragments, uncarb.
1 Whole Peach pits, uncarb.
2 Peach pit, uncarb.
1 Cedar fragment, uncarb.
1 Pine wood fragment, carb.
1 Pine bark fragment, carb.

8/74/Z1
5 Black Walnut shell fragments, carb.
2/72/Z2
3 Peach pit fragments, uncarb.
2 Hickory fragments, carb.: Carya sp.
4/72/Z2
8 Peach pit fragments, carb.
1 Red Oak fragment, carb.
8/74/Z2
18 Peach pit fragments, carb.
3 Black Walnut shell fragments, carb.
1 Acorn cap, carb.
Feature 47/Z3
1 Hard Pine, uncarb.
2 Hard Pine, partially carb.

Stockade post samples
Feature 4: White Oak Group, carb.
19: White Oak Group, uncarb.
21: Hard Pine, uncarb.
22: White Oak Group, carb.
25: White Oak Group, carb.
27: White Oak Group, uncarb.
30: White Oak Group, carb.
32: White Oak Group, uncarb.

Other Features
Feature 38
1 Peach pit fragment, carb. (north half of feature, Z2)
1 Whole Peach pit, uncarb. (south half of feature, no zone)
Feature 39
post sample: Cedar, uncarb.
Feature 46
S55.6/E24/A,B
1 Grape vine fragment, uncarb.; diameter=55mm
1 Whole Peach pit, uncarb.; large type
3 Pine fragments, uncarb.
S55.6/E24/C
1 Whole Peach pit, uncarb.; large type
S55.6/E26/A,B
1 Whole Peach pit, uncarb.
2 Hard Pine fragments, uncarb.; sawn
2 Hard Pine post samples, uncarb.
Feature 48
S30/E54
17 Hard Pine, large fragments, carb.
3 Cedar, small fragments, carb.
1 Willow, large fragment, carb.

Grid Squares
2/76/A
1 bark fragment, possibly grapevine, uncarb.
2/78/A
3 whole Persimmon seeds, uncarb.

4/70/A
1 whole Persimmon seed, uncarb.
6/70/A
1 whole Persimmon seed, uncarb.
6/80/A
1 whole Persimmon seed, uncarb.
8/72/A
1 Peach pit fragment, uncarb.

Miscellaneous
Postmold 8: Pine bark fragment, carb.
Postmold 11: Cedar fragment, uncarb.

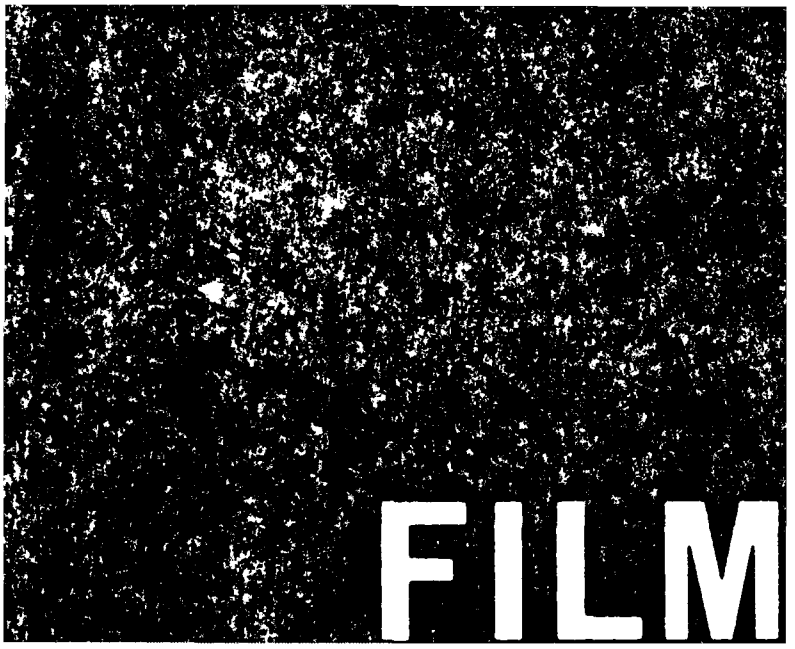
TABLE I: Maize Description
(All measurements in mm)

	SPECIMENS									
	1	2	3	4	5	6	7	8	9	10
Cupule Width	6.0-9.0	5.0-6.0	5.0-6.0	5.0-6.0						
Cupule Length	2.0	2.0	1.5	2.0						
Glume Width	4.0	3.0	3.0	3.5						
Cob: No.Rows	14	14	14**	12**						
Cob Diameter Max	15.0	15.0	-	-						
Min	13.0	15.0	-	-						
Cob Segment Length	60	35	-	-						
Rachis Segment Length*	4.0-6.0	4.0-4.5	2.5	-						
Kernel Shape	oblong	-	-	-	rounded	rounded	rounded	oblong, narrow	oblong, narrow	oblong, narrow
Kernel Width	3.0-9.0	-	-	-	5.5	6.0	6.0	6.0	5.0	6.0
Kernel Thickness	6.0	-	-	-	4.0	7.5	3.5	2.0	4.0	4.5
Kernel Height	10.0	-	-	-	8.0	7.0	8.0	12.0	12.0	10.5

*from lower glume to lower glume
**determination based on cupule angle

Specimen descriptions:

1. Provenience: F1/Q2/Z3; Complete cob segment with some kernels attached, 12 rows at basal end, 14 rowed after 2 rows of cupules, irregularly paired.
2. Provenience: F1/Q2/Z3; Complete cob segment, no kernels attached.
3. Provenience: F1/Q2/Z3; Cob fragment, no kernels attached.
4. Provenience: F1/Q2/Z3; Cob fragment; no kernels attached.
5. Provenience: F1/Q2/Z3; Loose kernel, probably from 12 rowed cob.
6. Provenience: F1/Q2/Z3; Loose kernel, probably from 12 rowed cob.
7. Provenience: F1/Q2/Z3; Loose kernel, probably from 12 rowed cob.
8. Provenience: F1/Q2/Z3; Loose kernel, probably from 14 rowed cob.
9. Provenience: F1/Q2/Z3; Loose kernel, probably from 14 rowed cob.
10. Provenience: F1/Q2/Z3; Loose kernel, probably from 14 rowed cob.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