



SOUTH CAROLINA
CONFEDERATE RELIC ROOM &
MILITARY MUSEUM

Fire Support Base RIPCORD Diorama



A Diorama Project

AMPS Central SC
“Wildcats” Chapter



Agenda

- Introduction
- Project Background, Basic Research, Basic Construction
- Example of Organizational Research Influence on the Diorama and the Models
- Example of Technical Research Influence on the Diorama and the Models
- Audience Q&A
- Conclusion



Fire Support Base RIPCORD Diorama



Introduction

Members of the Panel:

Mike Roof

Ralph Nardone

Jeff Nelson

In the audience we have a number of other club members who contributed and worked on the diorama. They will be able to assist in answering particular questions.

Our objective today is to provide you with an overview of the FSB RIPCORD diorama project with an emphasis on how we researched it and how that research guided the design and construction.



Project Background

- Initial Approach by Museum: July, 2017
- Commission Specs: FSB RIPCORN in 1/72 scale
- Scale is the ratio between the real world measurement and the same measurement made on the model. Here 1" on the model equals 72" inches in the real world.
- The feasibility of the project was assessed, and we determined if we could actually build a diorama to accurately represent FSB RIPCORN.



Project Timeline

- Initial contact by the museum: June-July, 2017
- Project put on indefinite hold: September, 2017
- Museum re-contacted us: August, 2018
- Club voted to reaccept the commission: September, 2018
- Construction started: October, 2018
- Diorama delivered to the museum: March, 2020.



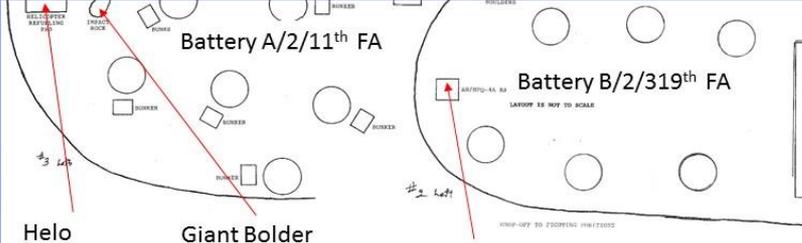
Fire Support Base RIPCORD Diorama



Signature Items and Features on RIPCORDER



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE AND IS SUBJECT TO THE CONTINUING REVIEW AND RECLASSIFICATION AUTHORITY OF THE NATIONAL ARCHIVES AND RECORDS ADMINISTRATION.



Location of 105mm
In video firing d
lay / direct align

Helo
Refueling
Pad

Giant Bolder



Fire Support Base (FSB) RIPCORD
Ca. Late June, 1970
Credit: Robin Graham. FSB Ripcord Association
Not to Scale





Fire Support Base RIPCORDER Diorama



Basic Research

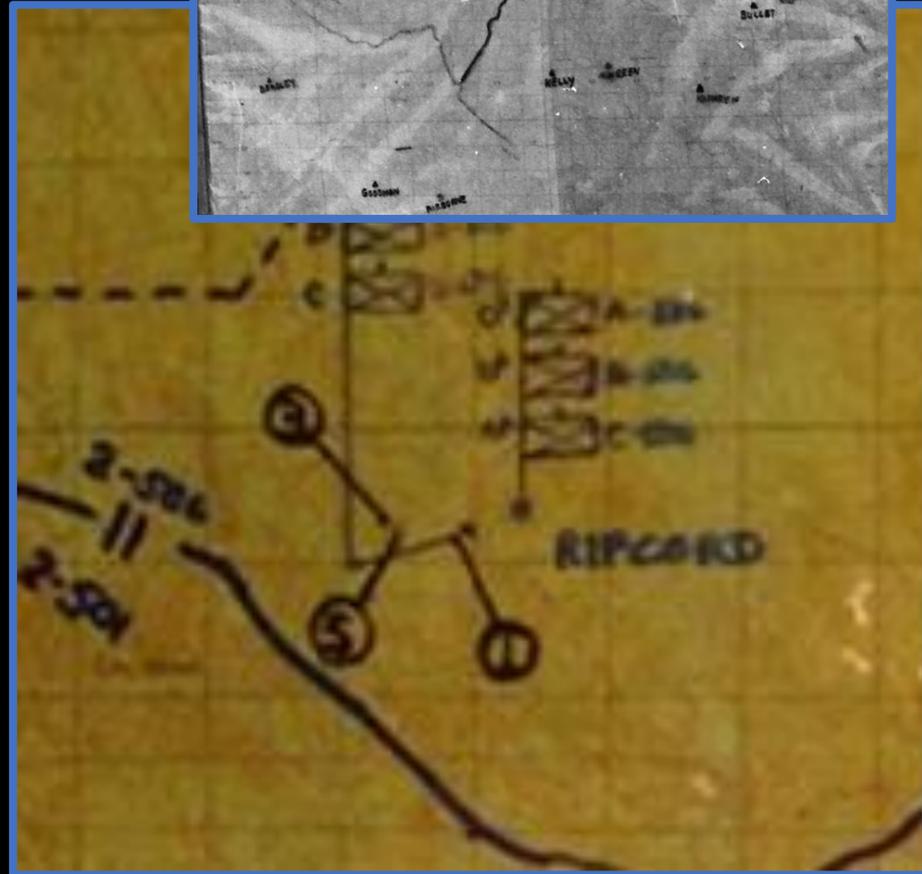
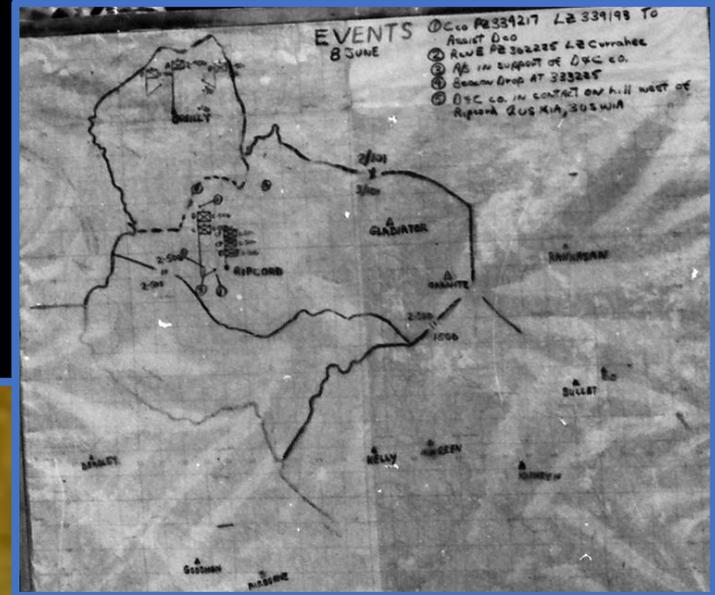
- Precisely locate FSB RIPCORDER and understand the surrounding terrain.
- Estimate the scaled size of the base.
- Identify the key signature terrain and man-made features that were unique to FSB RIPCORDER
- Determine what commercial scale models were available and what features we would have to make from scratch.
- Devise the method of construction.
- Commission was accepted on an “exact cost basis” with all labor donated.



Fire Support Base RIPCORD Diorama



Locating FSB RIPCORD





Fire Support Base RIPCORD Diorama



Estimating the Size of the Base



**OH-58 Kiowa
Fuselage and Tail Length=
33'-4" / ~ 10m**

Hill 1010

LZ CAROL
Occupied in 1968
later becomes
FSB RIPCORD
In 1970.
Photo shows LZ
CAROL and the
basic shape of the
FSB taking shape.

**Small Hill
With
"Impact Rock"**

**Saddle where
155mm How.
Battery will be
Located**



Fire Support Base RIPCORD Diorama



Basic Construction

- Construction was planned from the beginning so that the diorama could be transported to the museum and then moved through the doors.
- 1” thick foam board was cut following the contours from the topo map and stacked, “layer cake” fashion to make the basic land form.
- Man-made features, like the bunkers and other positions, were made from scratch out of stock styrene plastic and epoxy putty.
- Many of these man-made features were duplicated using urethane casting resin poured into rubber molds.



Fire Support Base RIPCORD Diorama



Basic Construction

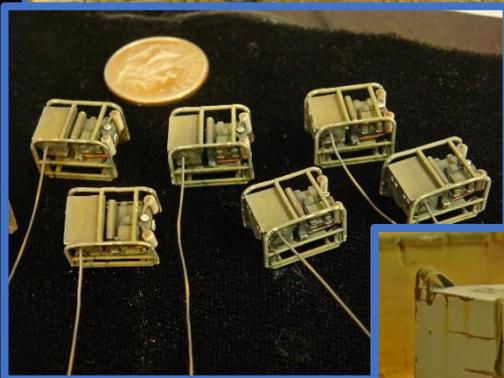
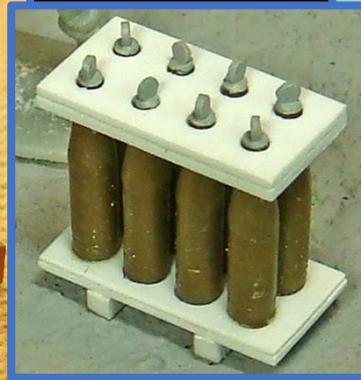




Fire Support Base RIPCORD Diorama



Modeling the Signature Items and Features

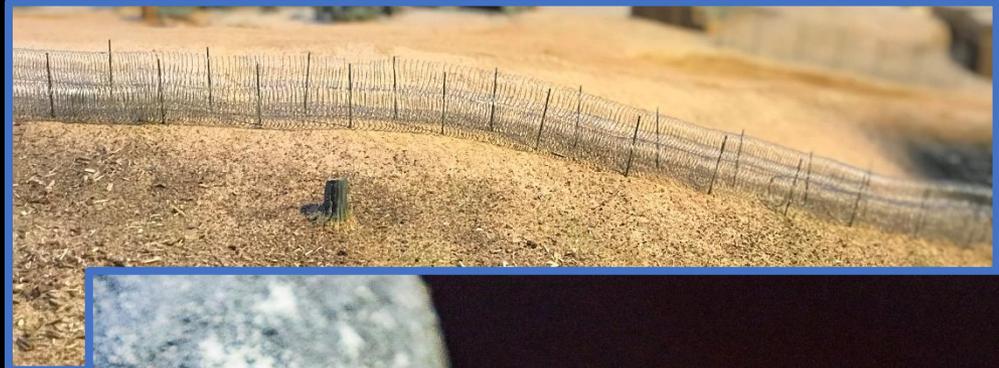




Fire Support Base RIPCORD Diorama



Modeling the Signature Items and Features





Fire Support Base RIPCORD Diorama



Moving and Installing the Diorama





Fire Support Base RIPCORD Diorama



Final Installation





Fire Support Base RIPCORN Diorama



Examples of Unit and Technical Research on the Diorama and Models

Ralph Nardone: Research on the 101st Aviation Units that made FSB RIPCORN possible.

Jeff Nelson: Detailed research and construction of a signature item, the AN/MPQ-4A Counter-Mortar Radar.