G88 Vassal Module 3.4 Changes [note this is a Vassal 3.2.17 module]

1. Version History documents changes:

*Version 3.4 (Joe Harkins, Vince Meconi, Bill Thomson) 4/10/2021*

- PENDING: All counters regenerated from original Adobe Illustrator files to PNG format for superior screen resolution of text, replacing the previous GIF format.
- PENDING: Add functionality and button to flip all units to full strength in Graveyard. Will not affect VP scoring [any unit in Graveyard is scored as full strength.]All one step units are now indicated by underlined unit names. Added ed list of one-step units as a help file.
- Paul Blankenship's PBU Look At Feature capability assimilated [original java code credited to David Sullivan). Similar to that in the Virtual Advanced Squad Leader [VASL] module from which the code was extracted. CNTL-Right Click generates a temporary large circle around the mouse location. This is used to draw the opponent's attention to the location being acted upon. This circle will appear both in server play and any logfile.
- Updated Hot Keys help file to explain LookAt activation and modify Function ## keys. Note F# function keys do not apply to Macintosh as such keys have general computer functions [i.e. F1 & F2 are display brightness, F10, F11, F12 are sound controls, etc].
- Added optional Meade+1, Hancock+1, 2-7 Gamble, 2-7 Devin, and Union Wing Commanders (Reynolds, Slocum, Sedge) citing divisions in the wing.
- 2-7 Gamble and 2-7 Devin optional counters value updated such as reports as 2 VP when destroyed when VP Summary button is triggered.
- Updated images for optional extra Union generals Newton and Birney with updated turn of entry on counter.
- All optional counters are located in the optional display accessed by green/yellow Optional Units button. Optional units have a yellow field behind the unit name. If to be used, put the standard counter into the optional display and pull the optional unit onto the map or OOB.
- Union Wing Commander display added to charts.
- Added G88 Combat Odds [percentage of outcome] chart. This file is credited to Vince Meconi BPA tournament handouts.
- Flipping of Initiative Chit now reported to log.
- The Delete trait was removed from the Initiative Chit.
- Units on Graveyard and Optional Units are no longer marked moved when exploitations. A 2.0 zoom level has been added on both of these displays.
- All five scenarios updated to include the all optional units into the optional units display.
- Deleted all obsolete Help and Scenario files [reducing module size for 3.2 to 3.9 MB]
- Version History, Optional Units, and PBEM Rules Conventions help files updated.

Items listed as PENDING are slated for version 3.4.1.

2. Added all optional units to optional unit display. If in use, put optional units on map and corresponding standard unit into the optional unit display. Optional units are indicated by yellow Unit Name background field.

3. The optional 2-7 Union Gamble and Devin will report at 2 VPs when residing in the Graveyard.

4. Added LookAt; Control+Right clip generates a temporary red circle on Server and Logfile to bring opponent's attention to point of action.

5. Added listing of 1 step units, indicated by underlined unit name

G88 Module One-Step Units

updated 210407
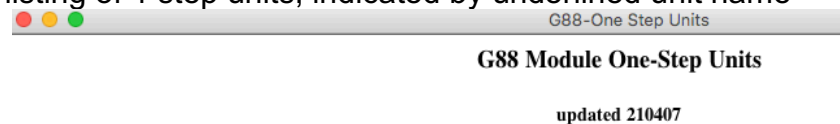
One Step units are identified by an underlined name.

CSA Calvary

- Robertson

Union Artillery

- Huntington
- McGilvery
- Muhlenburg
- Ransom
- Taft
- Tidball

Union Calvary

- Devin
- Huey

6. When the Initiative Chit is flipped, this is reported to the control window [& logfile]

7. Hot Key functions have been optimized.

G88 Module Hot Keys
updated 210410

Control Window

Note F# function keys do not apply to Macintosh as such keys have general computer functions [i.e. F1 & F2 are display brightness, F10, F11, F12 are sound controls, etc].

- **F1** 1d10 die roll
- **F2** 2d10 die roll [Format: CSA 1d10, USA 1d10]
- **F3** Open Notes
- **F4** Graveyard Display
- **F5** Open Charts
- **F6** Open Markers Window
- **F7** Open USA OOB
- **F8** Open CSA OOB
- **F9** Open Optional Units Display

Units

- **CNTL-G** Send to Graveyard
- **CNTL-M** Mark Moved
- **CNTL-R** Reorganize
- **CNTL-S** Step
- **CNTL-T** Toggle Movement Trails On/Off

GENERAL

- **CNTL-Right Mouse Click** generates a temporary large circle around the mouse location. This is used to draw the opponent's attention to the location being acted upon. This circle will appear both in server play and any logfile. Circle will disappear in approximately 3 seconds.

8. Added Combat Odds Chart

| Combat | Terrain Effects | Mapboard Turn Track | USA Wing Commands | G88 Combat Odds |

Gettysburg '88 Combat Odds

MODIFIDER DIFFERENTIAL	Defender Loses 2 Steps	Defender Loses 1 Step	Defender Loses 0 Steps	Total Defender Loses	Attacker Loses 0 Steps	Attacker Loses 1 Step	Attacker Loses 2 Steps	Total Attacker Loses
Attacker +9	79	15	5	**99**	1	0	0	**1**
Attacker +8	72	18	7	**97**	3	0	0	**3**
Attacker +7	64	21	9	**94**	6	0	0	**6**
Attacker +6	55	24	11	**90**	9	1	0	**10**
Attacker +5	45	27	13	**85**	12	3	0	**15**
Attacker +4	36	28	15	**79**	15	6	0	**21**
Attacker +3	28	27	17	**72**	18	9	1	**28**
Attacker +2	21	24	19	**64**	21	12	3	**36**
Attacker +1	15	21	19	**55**	24	15	6	**45**
Even	10	18	17	**45**	27	18	10	**55**
Attacker −1	6	15	15	**36**	28	21	15	**64**
Attacker −2	3	12	13	**28**	27	24	21	**72**
Attacker −3	1	9	11	**21**	24	27	28	**79**
Attacker −4	0	6	9	**15**	21	28	36	**85**
Attacker −5	0	3	7	**10**	18	27	45	**90**
Attacker −6	0	1	5	**6**	15	24	55	**94**
Attacker −7	0	0	3	**3**	12	21	64	**97**
Attacker −8	0	0	1	**1**	9	18	72	**99**
Attacker −9	0	0	0	**0**	6	15	79	**100**

9. Added Wing Commander Chart

Wing Commander	Corps	Corps	Corps	Division
Reynolds	1 (Reynolds) Doubleday Robinson Wadsworth Wainwright	3 (Sickles) Birney Humphrey Randolph	11 (Howard) Barlow Schurtz Steinwehr Osborne	1st Cav (Buford) Devin Gamble Merritt
Sedgewick	2 (Hancock) Caldwell Gibbon Hays Hazard	6 (Sedgwick) Howe Newton Wright Tompkins		2nd Cav (Gregg) Gregg Huey McIntosh
Slocum	5 (Sykes) Ayres Barnes Crawford Martin	12 (Slocum) Geary Williams Muhlenberg		3rd Cav (Kilpatrick) Custer Farnsworth
Hancock	Army Commander on July 1st; Any two units			

10. Game Example illustration; Union turn 14

- Control + Right Click generated temporary red circle at mouse location [LookAt feature].
- Union Ransom [J5] is a one-step unit as indicted by underlined name
- Optional Meade [with +1 DRM] is in use, Yellow name field indicates optional unit.
- Optional Hancock is in use but as game is past CSA Turn 9, Hancock has been flipped to side without the +1 DRM.
- Union attack vs Longstreet failed, Unions retreats noted by both Moved indicator and Movement trails showing retreat.
- In previously resolved battle, Union occupied Culps Hill [M9] but was forced to retreat. However for the moment the Union retains control of Culp's Hill.