WATERLOO

A game of Napoleon for the
TRS 80 CX 32K Computer
1) LOAD or LOAD (disk) from either side.
2) RUN with cassette "PLAY" on.
3) Select D>isk or C>assette.
4) Select N ew game or F>ile. If NEW is selected, select difficulty 1-5, with (1) the easiest; (5) the historical game.
5) Set monitor tint control to French flag: Blue, White, Red.

MAPSCREEN

WATERLOO depicts the famous battle using text graphic characters to represent terrain features and roads, British, and Prussian (Allied) forces, as well as French units, French morale and movement status. Also included are Victory Objectives appearing as L, E, J, and the town of Waterloo. The game is played on a binary map 32 bytes wide by 36 bytes long, or 1152 bytes held in memory normally reserved for hi res graphics. The ML routine that calls this map, along with a second ML routine, are stored from location 29750 to 32767.

Too large to be completely displayed at one time, the map can be scrolled up when player is ready to "move on". It cannot be scrolled down.

WATERLOO attempts historical accuracy, and is our most commander-oriented game.
MAP FEATURES

All green areas are open terrain. Slopes are off-white, high hills and entrenchments are red, roads and the town of Waterloo are black, and woods are displayed with up-arrow symbols. Woods, slopes and high hills (hereafter called rough terrain) affect both combat and movement.

Additionally, the letter "L" appears to the right of center on the opening screen. This "L" symbolizes the Ligny road junction, which will be discussed in more detail later.

UNITS

Player controls the French forces and their leader, Napoleon. French units are symbolized by a reverse "N" (black) for Napoleon, black "A" for artillery, standard "I" for infantry, "G" guards, "S" skirmishers, and "C" for cavalry. Infantry, Guards, Skirmishers, and Cavalry are symbolized in black characters when in "high morale". All French units appear as an asterisk "#" when their movement has ended, except Napoleon, which appears as a green "N".

British units are portrayed in Light blue check, British reinforcements in dark blue check, and Prussian units in Orange check. Depending on the monitor you have, these colors may appear differently.

The French unit will flash like a cursor as it is described at the top of the screen. Allied units are never described. Only the unit flashing can receive a unit command.
MOVEMENT

French units are moved with the direction arrows. But first, enter "M" to place the flashing unit in the movement mode, hold "M" down until the flashing stops, then direct movement with the arrows.

On play levels above level 2 any French unit having a strength greater than one (1) may lose combat strength when moving north (up) only. The chances of this happening to artillery are greater than for other units.

Moving a unit next to an Allied unit causes combat, ending that unit's movement.

Units cannot be wrapped around, and attempting to do so causes a loss of one (1) movement factor to that unit that turn.

Entering "E" ends a unit's movement UNTIL THE NEXT TURN. You cannot move a unit twice in the same turn. You may skip over a unit and move it later, but once a unit's movement is started it cannot be ended and then started again that turn.

Player may change the unit described (flashing) with the (RIGHT ARROW).

MOVEMENT LIMITS—Units may not be moved higher than the "<<<" at print location 126, or to the bottom-most row of the screen. Units retreated to the latter are lost permanently. Attempting to move too high or too low creates a colon (:) in place of the unit. To correct, simply adjust unit's position with the arrows.
Units may not stack. (Except Napoleon). They may move through friendly units but may not reside there at the end of movement (or combat). Doing so forces the computer to move them. It is therefore advisable to carefully plan moves in advance.

Artillery units having five (5) MF may be fired. Firing artillery requires two commands, "A" for aiming, and "F" for fire, in that order.

Enter <A> and note the location of the white marker. Move the marker to the desired location with any of the four arrows. Notice that there is a loss of a "round" available for firing with each aim adjustment. The total rounds left will be displayed at the top of the screen. This total does not mean that the unit's permanent strength is being depleted. Permanent depletion can only occur as a result of combat or during north (up) movement.

Enter <F> to fire. The number of remaining rounds will fall either at the aiming point or to one side, but never north or south.

Artillery may only be fired in one direction - UP. Only Allied units are affected by artillery fire.

Artillery otherwise acts as any other ground unit and may be used in normal combat.

MOVEMENT ALLOWANCES:
Units are given a movement allowance of from 7 movement factors,
(MF) for Cavalry, to 2 MF for Guards. During play, Napoleon, with an MF of 14, may add one MF to a unit(s) by giving a benefit. See below.

Entering any, rough terrain ends movement immediately (Except Skirmishers, which can move through rough terrain.) (The Ligny road junction and other junctions are considered road terrain.)

OPENING TERRAIN
Player may "open" terrain by placing a unit on it. The next unit moving to that location will not be restricted by the rough terrain unless it draws combat.

NAPOLEON BENEFIT (High morale)
To reflect Napoleon's great command capability in WATERLOO, units receive high morale when "influenced" by Napoleon. At start, Napoleon may give up to three (3) benefits to any unit(s) OTHER THAN ARTILLERY within a 3 x 3 square surrounding the Napoleon character "N". These benefits add combat strength points (CSPs) and 1 MF to the unit's total, but may only be given during Napoleon's INITIAL move option. I.E., skipping over Napoleon precludes him giving any benefits that turn, though he still may be moved later on.

The number of Strength points awarded is dependent on the number of road junctions captured, though at least one CSP will always be given.
Once a unit has received CSPs from a benefit, it cannot receive another one until it has had combat. It may still gain the (1) MF, however. This 1 MF benefit is not cumulative from turn to turn.

To supply the benefit, first enter "M" to place Napoleon in the movement mode, and then enter "B" to give the benefit. It costs Napoleon two (2) MFs to give a benefit. Thus, Napoleon may give three benefits and still have eight (8) MFs left for movement that turn.

Otherwise, Napoleon is like any other French unit regarding combat and terrain. Napoleon may also be killed. Don't let this happen! Doing so ends the game immediately.

Benefit locations: (Including Napoleon's location)

B B B
B N B
B B B

COMBAT (Normal)
Occurs when a French unit enters a location next to an Allied unit from any direction.

French units attacking from the north receive a high modifier added to their combat strength, from the east or west a moderate modifier and from the south, no modifier.
Allied units DEFENDING in any rough terrain always receive a VERY HIGH modifier.

Allied units are usually unable to move during the Allied movement phase following combat.

COMBAT (Allied Counterattack)
Occurs at the beginning of the turn. All combat rules apply except that: A) French units still may be moved after being counterattacked and B) no combat modifiers are applied.

A black "X" marks the location where the combat occurs.

Allied unit strength is shown briefly in the top right hand corner of the screen during all combat.

The unit losing the most CSPs, either French or Allied, will retreat to a location free of units.

Eliminated units will disappear from the screen along with a high low sound for Allied losses; a low pitch sound for French losses.

PATROLS—Cavalry only. Enter "P" for Patrol at any time during a cavalry unit’s move. The screen will briefly scroll up five (5) locations in order for the player to glimpse at what is ahead of him. It will automatically scroll back. Yes, there is a catch. 50% of the time the cavalry unit will not return, and sending a cavalry unit on patrol ends its movement that turn.
(E) ENDS MOVE.

NON-UNIT COMMANDS
Up til now all commands mentioned have been Unit Commands, those
effecting action on a specific unit.
NON UNIT Commands are general commands affecting play and
control.

Enter "C" to call the NON UNIT COMMAND module to the screen.

(S) SCROLL- Moves the screen permanently with your advance.
Enter the number of rows you wish to SCROLL UP. WARNING! Do
not scroll to a point where your northernmost unit is off the
screen. (To the south.)

(C) CADRE- Lists units at your disposal. Any key advances page.
Displays unit number, type, strength status:
Status- ELIM refers to elimination, NAPOLEON, NEY and RESERVE to
the corps commander.

(T) TURN - Ends turn.

(I) GAME SAVE- Computer will automatically save to disk or
cassette, depending on which was selected at start. Select File
number.

(I) INTELLIGENCE UPDATE. Any key returns.

(E) CANCELS COMMAND MODULE.
The COMMAND MODULE is automatically displayed at the end of all French Movement.

CORPS

French forces are cadred in one of three (3) corps: I under Napoleon, II under NEY, and IV the Reserve Corps. (Napoleon is the only commander represented in the game.) I Corps is present at the opening. II and IV Corps will eventually come into play by either waiting (often a long time) or by calling them to the battlefield.

To call a Corps, enter <R> as a unit command BEFORE Napoleon has moved. If Ligny has not been captured, the chance of success is only 25%. For each city captured the odds increase to 33, 50 and 100%.

Calling a Corps always results in the loss of Napoleon’s moving or giving any BENEFITS that turn, and the permanent loss of one (1) Napoleon benefit, and, depending on the game level, from 0-2 of Napoleon’s MF for the duration of the game. (Level 1, 0 MF, Levels 2-3, 1 MF, Levels 4-5, 2 MF.) WARNING!! Do not call for a scroll, or scroll before call

Napoleon benefits can never fall to less than one (1) nor can MFs fall to less than 7.
VICTORY OBJECTIVES-

LIGNY—Represented by an (L) at start. Ligny controls the arrival of Prussian units. During turns which end with a French unit at Ligny, Prussian unit arrivals are cut in half. Day one (1) only. After day one the Prussians arrive in force until Ligny is captured.

Controlling Ligny with a French unit for (play level functions—see below) consecutive turns causes its fall and a permanent cap is placed on future Prussian arrivals. (If any exist.) Ligny’s capture also causes British reinforcement rate decline and a second Victory Objective to present itself to the northwest: Nivelles. (E).

The French receive no benefit from controlling Nivelles or Mt. St. Jean (below), only from capturing them. Controlling these VO’s for three (3) to five (5) (depending upon play level)! CONSECUTIVE turns forces their capture.

corps before scrolling. Either don’t
ling a corps.
CONTROL POINTS needed to capture:

Levels 1-2, 3 turns, Levels 3-4, 4 turns, Level 5, 5 turns.

Nivelles— Once captured, the possible total of CSPs allotted moving BENEFIT is increased by one, (to a max of 3), and the future formation of British reinforcements is precluded. Mt. St. Jean (J) will then appear to the north.

Capturing Mt. St. Jean eliminates many Allied units south of MSJ, and increases French CSPs to a possible four (4) during BENEFIT.

Note: Units may be moved off a controlled city and replaced with no effect, but units retreated off during Allied counterattack forces the city control-point counter to fall back to zero (0).

Control Points are kept in the Intelligence Report and are incremented at the end of the turn.

WATERLOO— Not captured like the other cities, but rather is "over run" by units.

Move more than ten plus 4 times the play level in French combat strength points north of the (V) location (just to the southeast of Waterloo) IN ONE TURN and Waterloo is captured.
Example: Level 1 requires at least 14 French CSPs; Level 5, 30 CSPs.

Waterloo cannot be captured until first the other objectives are captured.

TACTICS
The Battle of Waterloo is a misnomer all the way around. More a series of battles than one, it wasn't even fought at Waterloo! But rather, at Ligny, where Napoleon was able to defeat the Prussians, and at Quatre Bras (Four arms); a road junction, where Wellington stopped the French Army which had been thrown piecemeal into battle.

Like the battle of the same name, WATERLOO is difficult to win. A key to victory, however, is the prevention of a linkup between Brucker's Prussian units (Ligny Road) with Wellington's main British force at Quatre Bras. (Main red area at start).

Though Allied troop size greatly outnumber French forces, Napoleon has better soldiers and consequently stronger units. Prussian unit strength improves Wellington's overall strength, but the main allied forte is their ability to muster troops.

Allied units are at their best when defending in rough terrain, and at their worst in counterattack. (Like in the actual battle.)
Prussian units are limited, British units are not. Wellington will continue to reinforce his position with fresh troops arriving from Waterloo until Mt. St Jean is captured. Though these units will not have overwhelming CSPs, there are a lot of them. Napoleon's hope for victory lies in capturing Ligny early and making a swift move to Nivelles. French reinforcements will normally arrive late in the afternoon of the first day or early Day 2. Though at start, French Guards units tend to overwhelm their adversaries, attrition may weaken them beyond use later on. Keeping Napoleon benefits at three may not be as important as capturing Nivelles (the point in the game when reinforcements are suspended).

On the other hand, the march north is difficult enough to protect with a new army, let alone one that has fought 2-3 large battles. The smaller the French unit's strength, the greater the percentage of increase a benefit will be, and perhaps the more important multiple benefits are at that point.

Once Nivelles is captured, player must prevent certain counterattack from the remaining British and Prussian forces to the west, and at the same time be able to move on Mt. St. Jean.

IF the player can capture Mt. St. Jean; IF the player can reinforce his position; IF the player is able to advance quickly enough to trap enough Allied units and suspend their reinforcements early; IF player is able to muster his depleted army into a single body, then he may be able to break through the last line of defense before capturing Waterloo.
Player’s success will depend largely on his knowledge of the rules and his common sense use of tactics. Use of the Intelligence command is a must.

VICTORY
Player wins DECISIVELY if he captures Waterloo by the end of the game. (Day 3, 6 PM turn, <42 turns>, or when and if Napoleon is killed); wins MODERATELY if he is able to capture MSJ by then, win a LIMITED Victory if he captures as much as Nivelles; and DRAWS if he can only Capture Ligny. He loses if he fails to capture anything.

ERRORS- We’ve tried to present this as completed product, error free, but do to the vastness of this undertaking and the complexity of the program, we can only hope that all errors have been trapped or omitted. In the event that one or more slipped through playtest, note these line numbers. GOTO 200 returns game to map and redraws. GOTO 880 ends turn and resets for next game hour.

CASSETTE owners. Due to the fluctuations involved in a mechanical cassette, there may be a time when game save bombs. Simply rewind the game file and RUN 50 to load again. Also, please check your volume control and keep the tape heads clean.

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