

A USER'S GUIDE TO FLASH ATTACK

FLASH ATTACK is a fast paced action game for two players, requiring two Commodore PET Computers with at least 8K of memory each. Each player has one base of operations and one mobile tank; the tank is used to seek out and destroy the opposing player's base. Players may place mines and build decoy bases, and ICBMs (Intercontinental Ballistic Missiles) may be deployed. A typical game takes anywhere in the range from 30 seconds to 5 minutes to play, depending on the skill of the players and the layout of the terrain.

To Begin:

1. Connect the PETs to be used with standard MACH 2 PET-interconnect cable (see "Multimachine Games", BYTE, December, 1980 for details on the construction and use of this cable).
2. Load both machines from the Flash Attack game cassette supplied, and RUN the program on both machines.
3. If you answer YES to the first question the program asks, it will print out a brief refresher relating to which keys do what.
4. The second question the program asks relates to whether or not you wish to play the standard two-machine game. The alternative is to play the one-player one-machine "standalone" form of the game, which was designed to allow players to practice on their own between matches (see Appendix A). Both players must answer YES to this second question in order to play the standard two-machine game. Once they have both done so, the play automatically begins.

The Object:

5. The object of the game is to destroy any one of the four white squares constituting the opposing player's base. This can be accomplished by one of two means: firing a shell from your tank at your opponent's base, or shooting off an ICBM from your base at your opponent's base.

The Field of Play:

6. Play takes place in a 60 by 40 area bounded by "mountains", mountains being represented by closely cross-hatched squares. Tanks may not move through mountains, nor can shells of any kind destroy them, but ICBMs may pass over mountains on their way to a target. The field of play also contains forested areas, represented by groups of little Christmas Trees. Tanks may pass through forests, and shells of any kind can destroy them -- forests serve two purposes: first, a tank or base shell will explode upon hitting a tree, thereby sparing whatever is behind the tree, and secondly, a square containing a tree is known by both players not to contain a mine.

Moving Your Tank:

7. The numeric keypad is used to specify all directional information: to move one square up, hit the "8" key, to move down, hit the "2" key, to move to the left, hit the "4" key, and to move to the right, hit the "6" key. Moving on the respective diagonals is accomplished through the use of the "7", "9", "1", and "3" keys. Note that to move out of your base, your first move must be on a diagonal, since tanks cannot move through walls. Also note that each time you move, your gas display decreases by one: once this number goes to zero, you will find yourself unable to move (see "Refueling, Etc., At Your Base").

Firing the Tank Gun:

8. By hitting the space key, your tank gun becomes "armed", which means that the next direction you specify will be taken to be the direction in which to fire rather than the direction in which you wish to move. The little light marked "F" just to the right of your tank window will light up whenever your tank gun is armed. To de-arm your tank gun before firing, so as to conserve a shell, hit any illegal key (for example "O"). Note that each time you fire your tank gun, one of the lights in the display marked "SHELLS" goes out; once all of these lights are out, you will no longer be able to fire from your tank (see "Refueling, Etc., At Your Base").

Planting Mines:

9. To plant a mine, hit the "M" key and then move away from that square. A "+"-sign graphic will appear on the square just vacated (although from your opponent's point of view, the square will continue to look just like a "stretch of virgin grassland"). Note that each time you plant a mine, one of the lights in the display marked "MINES" goes out; once all of these lights are out, you will no longer be able to plant mines (see "Refueling, Etc., At Your Base").

Building Decoy Bases:

10. Decoy bases must be constructed one "wall" at a time: hit the "W" key and then move away from that square, and you will find that you have deposited a wall behind you. By depositing walls in a diamond-shaped pattern, you can create an object that looks just like a real base, except that when your opponent destroys it, the game does not end. Note that each time you create a wall, one of the lights on the display marked "WALLS" goes out; once all of these lights are out, you will no longer be able to place walls (see "Refueling, Etc., At Your Base").

Firing the Base Gun:

11. By hitting the "J" key (just to the left of the space key), your base gun becomes "armed" which means that the next direction you specify will be taken to be the direction in which you wish to fire your base gun rather than the direction in which you wish to move. The little light marked "F" just to the left of your base window will light up whenever your base gun is armed. There is no limit on the number of base gun shells.

Using the ICBMs:

12. To send off an ICBM, you will first need to enter a direction for the ICBM to be fired off in, and a range, or distance from your base for the ICBM to travel. To enter the direction, hit the "A" key -- this will cause your "ANGLE" register to clear and the little light beside it to come on. Enter an angle in degrees, the straight-up direction corresponding to an angle of 0 degrees and proceeding clockwise from there (for example, to aim directly to the right from your base, use an angle of 90 degrees; to aim directly to the left, use an angle of 270 degrees). Angles must fall in the range from 0 to 359 -- negative angles are not allowed.

13. Having entered the desired angle, hit the "R" key -- this will cause your "RANGE" register to clear and the little light beside it to come on. Enter the range desired, in units of playing field "squares" (the x:y aspect ratio is to be taken as 1:1 for the purposes of this computation).

14. To actually fire an ICBM off at any time, hit the "I" key. If you have CB2 sound hooked up, a high, falling whistle will be heard. If the combination of angle and range you have chosen causes the ICBM to go off the north or south end of the field of play, no explosion will occur; otherwise, a 3 x 3 area centered upon the point of impact will be totally destroyed. Note that each time you fire an ICBM, one of the little lights in the display marked "ICBMS" will go out; once all of the lights are out, you will no longer be able to fire an ICBM.

Tank Condition:

15. You have five tanks available to you over the course of each game. Each time your current tank is hit by a shell from your opponent's tank, its condition will change: if in condition GREEN it will change to condition AMBER, if in AMBER, it will go to RED, if in RED it will be destroyed. Each time your tank runs across a mine, its condition will change as though it had just been hit by two tank shells in succession. Each time your tank is hit by either an ICBM or by your opponent's base gun, it will be unconditionally destroyed.

16. When your tank is in condition RED, you will find that it does not move properly. What is happening is that a random effect is coming into play in such a way that approximately 50% of the movements you propose are ignored, although your gas supply decreases each time you attempt to move.

Refueling, Etc., At Your Base:

17. Your tank will run low on its various consumables (mines, shells, walls, and gas) over the course of a foray; in addition, it may sustain damage in battle with the opponent's tank or as a result of running over a mine. By driving your tank back to the center of your base and hitting the "HOME" key, all of these deficiencies can be rectified: the tank is refueled, given a full complement of walls and weaponry, and is brought back to condition GREEN if not already there.

Game Termination:

18. Under most circumstances, one player will destroy the other's base, and the game will automatically terminate with one player's condition being SUPREME while the other's is DEFUNCT. Occasionally, however, the terrain will be set up in such a way that the two players' bases are separated from one another by an impenetrable line of mountains, in which case the game may need to be terminated by some other means than by one player having won. Hit the back-arrow key (" ") at any time to terminate the game under way.

19. Each time a game ends, the fact that it has ended is indicated by the blinking cursor at the lower left of both players' screens. Simply hit the return key at this point to get a display of the entire field of play. The field of play is considerably more than one screen's worth, so it will scroll its way over the display... to stop the scrolling so as to be able to examine an area of the field more closely, hit any key, then hit any key again to set the scrolling to resume. Note that in this final, post-mortem display of the field, your opponent's mines become visible to you, showing up as asterisks.

Appendix A: Standalone Flash Attack

The program as supplied on cassette can be set up to run in either a one- or a two-machine form. In the one-machine, or "standalone" form of the game, the same basic command forms and so forth apply as in the two-machine form, the main difference being that the player's opponent is now the PET itself. The standalone form of the game is intended strictly for use in practice and as a demonstration setup when two machines are not available; your opponent in this form of the game is strictly a random keystroke generator, and cannot be expected to present any real challenge to beat. To invoke the standalone form of Flash Attack, answer NO to the second question it asks after you fire it up... once you have done this, each time you play you will be playing the standalone version, until you reload the program from the cassette.

Appendix B: A Few Other Things

Flash Attack is written in a FORTH-like language devised specifically for the purpose by MACH 2. Since users will not be able to read the code to see how it works, a few notes are included here:

The five-second delay after requesting play during which the program has the "JUST A MOMENT..." message on the screen is used to create a new, random version of the field of play, and to transmit it over the interconnect cable from one machine to the other. The randomization of the field of play takes place within some fairly strict constraints: forested areas will always be made up of roughly globular aggregations of trees, while mountains will tend to be elongated in the diagonal directions. Bases are set down pretty much randomly, but are chosen such that they will never be within direct sight of each other at the start of a game.

The windowing software that creates the view from the screen of what the vicinity of the tank and base look like is really setting up a true window into the computer's memory. This is why there are such strange looking things off the north and south ends of the field of play: north of the field is where the program has its variables allocated (you will be able to see these items change as you move around, shoot at things, etc., if you look carefully); south of the field is where the program itself is.

Just for kicks, try hitting the SHIFT/OFF key sometime during a game, and see what happens... MACH 2 makes no guarantee of program integrity if you do this, but the results can be amusing nevertheless.