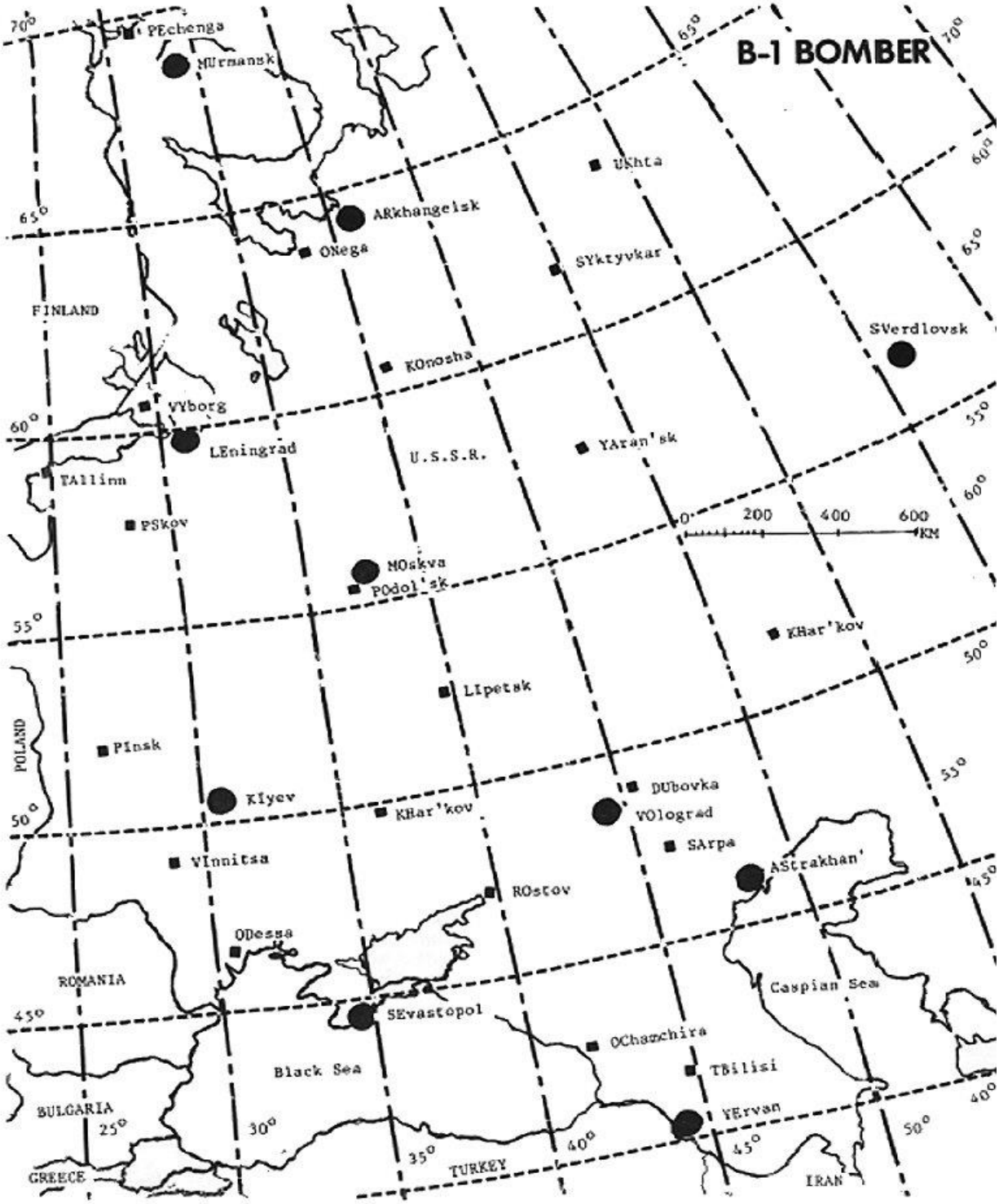
B-1 NUCLEAR BOMBER

TI-99/4A
AND EMULATORS

microcomputer games®

A DIVISION OF THE AVALON HILL GAME COMPANY

ABANDON WARE


B-1 BOMBER
PEchenga
MUrmansk
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ONega
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VInnitsa
ROstov
ODessa
ROMANIA
Caspian Sea
SEvastopol
OChamchira
Black Sea
TBilisi
BULGARIA
YErvan
GREECE
TURKEY
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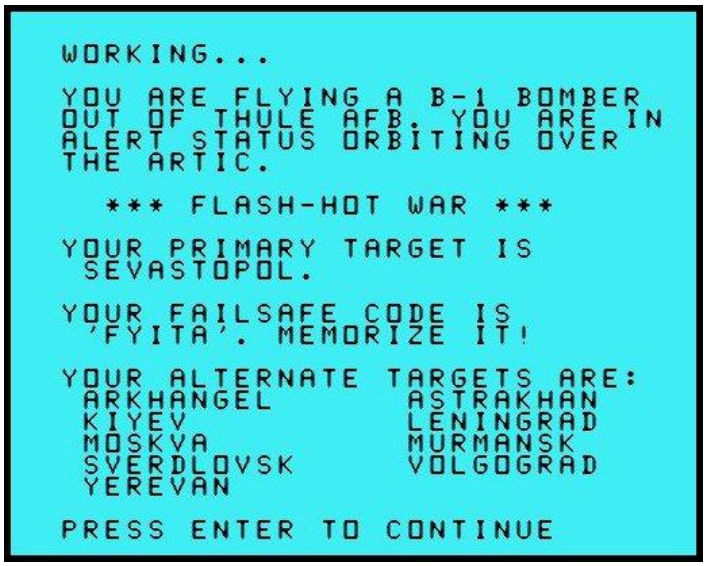
INTRODUCTION

B-1 Nuclear Bomber for the TI-99/4A simulates a manned bombing mission into the old Soviet Union. The player gives commands to the computer which 'flies' the bomber on its mission. The player must fly to within bombing range of the target to deliver the weapon. The B-1 is opposed by nuclear armed MIG's and SAM's of the Soviet air defense system. The aircraft is capable of defending itself with ECM (electronic counter measures), evasive action and nuclear tipped multi-purpose Phoenix missiles.

PROGRAM STARTUP

The program starts with an initial display containing the primary target of the mission, the five letter failsafe code, which is required to arm the bomb, and a list of alternate targets and Soviet defense complexes.



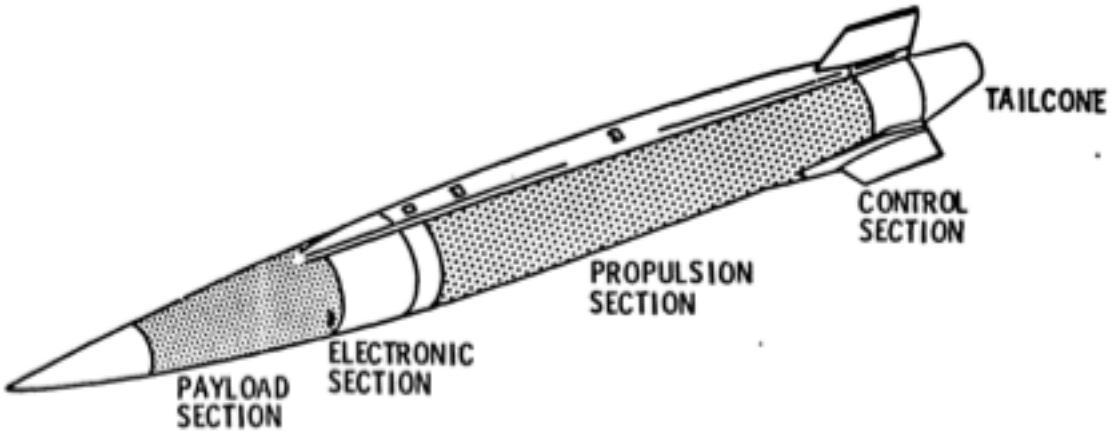
(Example)

BOMBING THE TARGET

In the game, the B-1 carries one short-range attack missile (SRAM) with a one Megaton warhead. This is large enough to destroy your target. The SRAM has a range of 250 kilometers (km).

The primary target is chosen at random from the list of targets. All targets have a population of more than one million.

The Failsafe Code is a group of five random letters, its purpose is to prevent inadvertent/accidental arming of the SRAM. A note of the failsafe code should be made prior to giving the first command. This code will be required later to arm the SRAM.



THE SOVIET AIR DEFENSE COMMAND

The air defenses of the Soviet Union for the purposes of this game, consist of approximately twenty Defense Complexes (DC's). Each DC evaluates the range of the B-1 and decides whether to launch. Launching depends on range (750 km max), altitude (lower less likely) and the state of the SRAM. A B-1 without an SRAM is less likely to be attacked; one with an armed SRAM will draw a great deal of attention. A launch will cause a message to be displayed on the screen giving type of unit launched (either MIG or SAM) and intercept time, as well as the name of the launching DC. Unless prevented in some way each unit will intercept, resulting in a nuclear airburst which can cause destruction of the bomber. It can also cause changes in course, speed and loss of fuel.

SAM's and MIG's may be defended against by the use of Electronic Counter Measures (ECM), evasive action or Phoenix missiles. Phoenix missiles may also be used to eliminate DC's from a range of up to 200 km.

ECM causes MIG's and SAM's to lose their target. Repeated use of the ECM system lowers the effectiveness. ECM is better when used against SAM's and is not range dependent.

Evasive action is a violent altercation in the course and altitude, which works better against SAM's than MIG's. Evasive action works only on close units. It also poses the risk of flying into the ground when starting at a low altitude.

Phoenix missiles are nuclear tipped and will home in on the target. They may be fired at units within 10 seconds of intercept. The Phoenix missile functions better against MIGS, but may also be used against Soviet defense complexes within range.

Each type of defense is selected by giving the computer the appropriate command.

COMMANDS

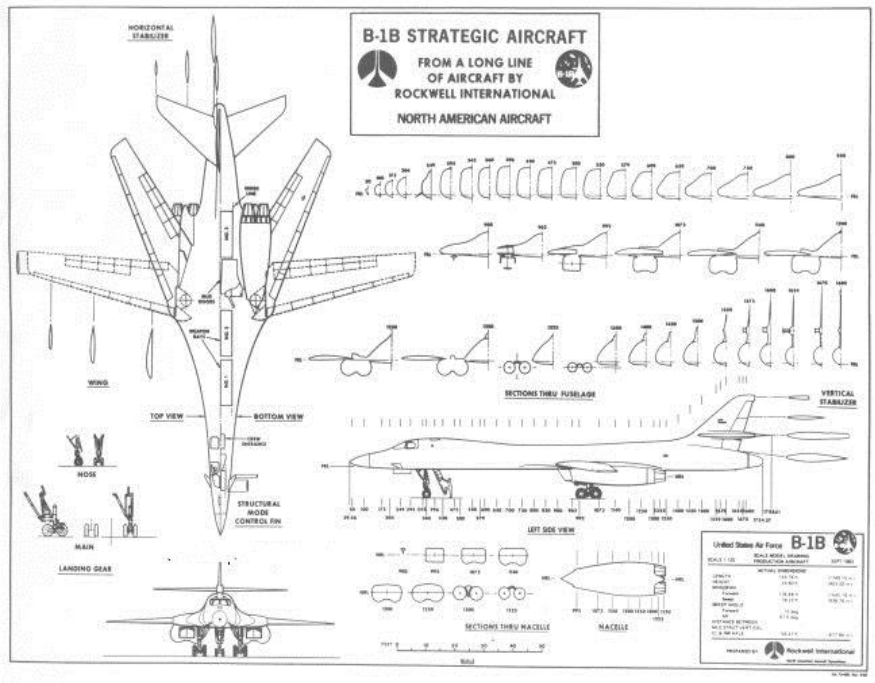
Commands may be divided into four types: flight control, navigational, combat and bombing. Each command and each target or Air Defense Complex is recognized by the computer from its first two letters (e.g. EC for ECM, PH for Phoenix Missiles, MO for Moskva, KO for the Konosha Defense Complex, etc.).

After each command entered there will be a short delay while the computer processes Soviet air defenses. For long auto-pilot times this delay will be longer.

FLIGHT CONTROL COMMANDS

Flight control commands are:

Altitude…… **AL**
Course…….. **CO**
Autopilot……..**AU**



The **AL**titude command instructs the flight computer to a specific altitude. The aircraft will then climb or descend until the specified altitude is reached. The flight control system will ignore any request out of its operational flight envelope (less that 100m or greater than 25,000m). A high altitude increases the probability of a DC launching, while a lower altitude makes it less likely for an intercept launch to occur, but enough room should be maintained for evasive action if necessary, or to lessen the impact of a nuclear airburst. Note: Flying below 300m runs the risk of '*terrain avoidance radar failure*' (i.e. the B-1 crashing into the ground). Should evasive action be necessary, or an airburst changes the aircrafts altitude, it will remain at that altitude until the flight control computer is given new orders for an altitude change.

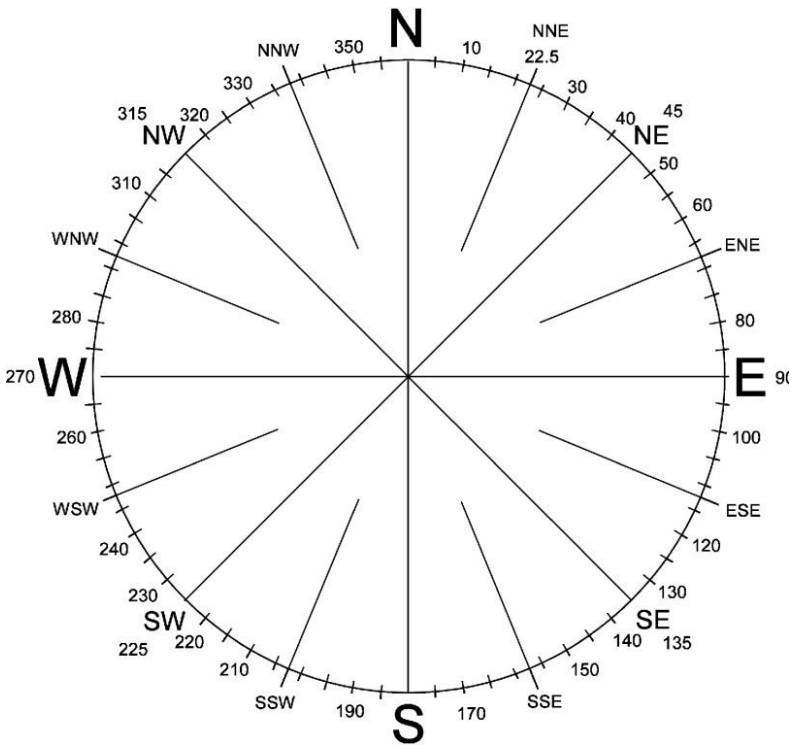
COurse requests an ordered course to which the B-1 will adjust at its maximum rate. If altered by evasive action or airburst, the aircraft will maintain the heading unless given new instructions.

Autopilot will instruct the computer with a time interval to be engaged. While the autopilot is in control, the player may not interrupt. Some events trigger a disengagement of the autopilot, such events are, MIG or SAM launches, or a target coming into range. Targets leaving range will not disengage the autopilot.

NAVIGATIONAL COMMANDS

The navigational commands are:

Navigator……..**NA**
Search……..**SE**
Status……..**ST**
Radar……..**RA**



The **NA**vigator command is used to request a city or Defense Complex to fly to. All targets and destinations are recognized by the first two letters of their respective name. The computer also recognizes TH for Thule AFB, as the B-1 MUST return to base upon completion of the mission.

Use of the navigator takes a large amount of game time, so it is not recommended to implement this command with a MIG hot on you tail.

SEarch returns the range and bearing of the nearest active Defense Complex within +/- 45 degrees of the B-1's present course. This is intended as an aid to flak suppression. The search command also uses a large amount of game time.

STatus returns a display of important aircraft parameters, including fuel and a contact summary.

RAdar only returns the contact summary. A contact summary is also displayed before each request for a command if any contacts are held.

COMBAT COMMANDS

The combat commands are:

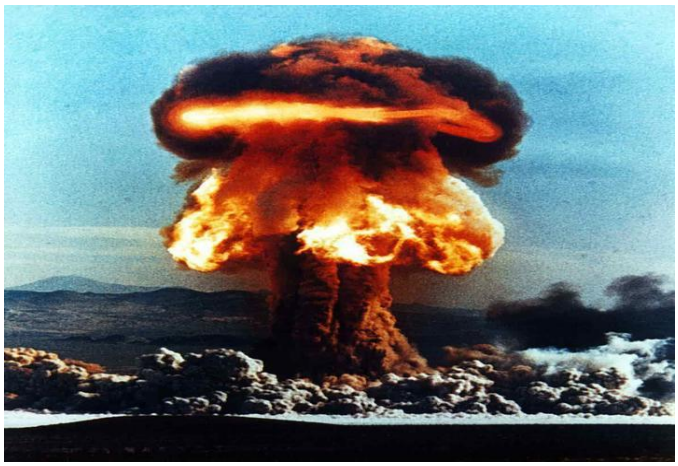
Electronic Counter Measures...**EC**
Evasive Action.....**EV**
Phoenix Missile.....**PH**

ECM or Electronic Counter Measures may cause airborne MIG's and SAM's to lose their target lock or even self-destruct. The effect is not range dependent and works better on SAM's. With each use the effectiveness of ECM is reduced because the Soviets figure out what is happening.

EVasive action is a violent change in course and altitude to throw off pursuing aircraft or missiles. The size and direction of the change is random. The effect is very range dependent and works better on SAM's than on MIG's. If evasive action results in a negative altitude, the B-1 will crash and it's game over.

PHoenix Missiles are used against SAM's, MIG's or DC's within range (200km). When selected, a target will be requested by the computer, if only ENTER is pressed, the Phoenix will be fired at the nearest target provided it's within range. You'll be informed when a target is in range with a display warning like, "MIG-25 in Phoenix range" or when time to intercept is under 10 seconds. The Phoenix missile is more effective against MIG's. If a DC's name is input and that DC is within range, the Phoenix missile will destroy it for the balance of the game.

BOMBING COMMANDS



The bombing commands are:

Arm Bomb……**AR**
Bomb Target……. **BO**

ARming the SRAM is required prior to dropping it. To accomplish arming of the weapon, you must first successfully enter the Fail Safe Code when requested. Arming the SRAM will result in '*excessive attention*' from the Soviet Defense Command, so it's wise not to arm the weapon too early. *Once armed, the the SRAM cannot be disarmed.*

The **BO** command launches the SRAM, a final verification in the format of a simple YES/NO is requested. A 'No' answer aborts the drop.

ENDING THE GAME

The game is ended when the B-1 is either destroyed or it returns to base. To end the game after dropping the SRAM, set **CO**urse for **TH**ule AFB. At a certain distance from Russia over the Arctic the game is ended.

Note: Although the B-1 may not have enough fuel to reach Thule on its own, but it's presumed to refuel in-flight from a tanker over the Arctic.

No matter how the game is concluded, a short mission summary is displayed as well as a chance to play again.

Manual Created 6/6/2014 By: Kevan / Ω