

HEAVY METAL™

LOADING INSTRUCTIONS

CBM 64/128 Cassette
Press **SEET** and **RETURN** keys together. Press **PLAY** on the cassette deck then follow on screen prompts.

CBM 64/128 Disk
Type **LOAD/HEAVY METAL™**, **A,1**, and press **RETURN**. For "BEACH HEAD", insert side 2 and type **LOAD/HEAVY METAL™**, **A,1** and press **RETURN** then follow on-screen prompts.

Spectrum 48K Cassette
Type **LOAD/HEAVY METAL™** and press **PLAY** on the cassette deck.

Spectrum +2, +3 Cassette
Press **ENTER** on the **LOADER** option, then press **PLAY** on the cassette deck.

Spectrum +3 Disk
Turn on the computer, insert disk and press **ENTER** on the **LOADER** option, then follow on-screen prompts.

Amstrad CPC Cassette
Press **CTRL** and small **ENTER** keys together. Press **PLAY** on the cassette deck. Follow screen prompts.

Amstrad CPC Disk
Press **ENTER** and press **ENTER**, then follow on-screen prompts.

Atari ST
Insert the game disk and Switch on computer, the game will then load and run automatically.

CBM Amiga
Insert the game disk and Switch on computer, the game will then load and run automatically.

Cassette users please note
Beach Head is located towards the end of side 2 on the cassette. To load, fast forward the tape to a point approximately half way through, stop the tape and perform the loading procedure above.

TITLE AND DEMO SCREENS

The Title Screen (C64, ATST, Amiga versions only)



After you've turned the disk over, (C64 only), the next screen you'll see is called the **TITLE SCREEN**. From this level you can choose one of two options.

1. **PLAY THE GAME** - Proceed to the **PERSONNEL FILE**.
2. **DEMONSTRATION** - Go to the **DEMO SCREEN** where you can preview any of the 4 main action screens.

THE DEMO SCREEN

This screen will allow you to see a demonstration sequence of any of the main action screens.

- MBT** - Main Battle Tank
- ADAT** - Air Defence Anti-Tank System
- FAV** - Fast Attack Vehicle
- TACC** - Tactical Command Centre (C64 version only)

During the demonstration, pressing **SPACE BAR** will start the game by taking you directly to the **PERSONNEL FILE**. If you want to see the entire demo, you will return to the **DEMO SCREEN**.

Selecting "Exit" will take you back to the **TITLE SCREEN**.

PLAYING THE GAME

The Personnel File
The **PERSONNEL FILE** summarizes the names and ranks of all officers. If you are playing the game for the first time, use the "ADD NAME" function to the **YOUR NAME** screen. (Select ADD NAME, type your name and hit the **RETURN** key). Up to 10 names are allowed in the file, and a blank line must exist in order to enter a new name. If a blank line does not exist, use the "DELETE NAME" function to erase one of the existing names from the list. Select the "CANCEL" function to return to the **Title Screen**.

AMSTRAD DISK USERS NOTE: Save personnel file and **TACCOM** data to side 'K' of the game disk. Tape versions can save to any tape, but the program has no facility for using user named files, i.e. it loads the first correct file it comes across.

The Player File

Each player has his or her own file which automatically maintains records of performance ratings, time in service and rank advancements. Every first time you begin as a Cadet in Officer's Training School (OTS). A player will become a commissioned officer (2nd Lieutenant or Rank) after qualifying on each of the three Combat Simulators. Qualifying is not difficult, but Cadets must demonstrate basic combat skills by scoring a minimum of 5,000 points on each simulator. (C64 Users Note: A player cannot play the Tactical Command portion of the game until he has received his commission as a 2nd Lieutenant).

Advancements in Rank
Your rank is determined by your total advancement points which accumulate each time you play the game. Be sure to play each time under the same **PLAYER NAME** so that your points will accumulate properly.

RANK	TOTAL ADVANCEMENT POINTS
GENERAL (5 star)	86400 and up
GENERAL (4 star)	71800-86399
GENERAL (3 star)	62100-71799
GENERAL (2 star)	51300-62099
GENERAL (1 star)	41400-51299
COLONEL	32400-41399
L.T. COLONEL	24300-32399
MAJOR	17100-24299
CAPTAIN	10800-17099
1st LIEUTENANT	5400-10799
2nd LIEUTENANT	0-5399

Officer's Training School
If you have not yet qualified, you will automatically go to the **OTS Screen** and then on to the **COMBAT SIMULATION SCREEN**.

If you have qualified, you will automatically move to the **OPTION SCREEN** (see **Flow Chart**) where you may choose to play the **TACTICAL COMMAND** portion of the game.

The OTS Screen
If the **OTS (Officer's Training School)** screen appears, it means that you are still a Cadet and have not yet received your commission. Only commissioned officers

(2nd Lieutenant rank or higher) have **TACTICAL COMMAND** status. Upon leaving this screen, you will go directly to the **COMBAT SIMULATION** screen, where you will have your chance to qualify. Once you have qualified on each of the three simulators, you will return to the **OTS screen**.

COMBAT SIMULATION

The Combat Simulators are designed to test and improve your skills under simulated battlefield conditions.

Qualifying
Qualifying is accomplished by scoring a minimum of 5,000 points on each of the three **COMBAT SIMULATORS**. You may then advance in rank as your performance and time in service warrant.

You can return to the **COMBAT SIMULATORS** at any time to sharpen your combat skills or to compete against other officers for top scores. Your best and last scores on the simulators will be saved with your personnel file. The best scores are considered when evaluations for promotion are done.

Operating the Combat Simulators

The combat simulators operate identically to their counterparts except that they have unlimited fuel and shells and a fixed number of units with which to fight. Once all your units are destroyed, the simulation is over. Your performance is based entirely on the number of points scored during the simulation. Refer to the section on Operating Your Equipment for specific information on how to operate each piece of hardware.

PLAYING OPTIONS

The Option Screen
You will automatically come to the option screen if you have a rank of 2nd Lieutenant or higher.

This screen allows you to select either Tactical Command or Combat Simulation. **Combat Simulation** is the same portion of the game you were required to play while you were a Cadet. Now it is optional. You can use the Simulators to sharpen your skills on a specific piece of equipment. You can also compete against your friends on a more "Arcade" level, where strategy and planning are not required. The Combat Simulators are also better suited to younger children.

Tactical Command is much more challenging than simulation alone. It combines all the features of the three simulators with the elements of strategy, tactical manoeuvring, combat engagement and re-supply. You must demonstrate your skills as a **field commander** if you hope to receive any significant promotions.

The TACC Screen



TACC stands for **Tactical Command Centre**. This screen is where all decisions will be made regarding deployment of forces, enemy engagement, re-supply etc. The enemy forces will attempt to capture your Headquarters, and you will try to stop them. After moving your forces to engage the enemy, you can choose to sit and watch or you can join one of the battles and help your men to fight. If you choose to watch, you will surely lose, and the General will be very hard on you. If you choose to fight, your performance will greatly affect the outcome. Refer to the **Tactical Command Section** for specific instructions on manoeuvring your forces and interpreting information from the **TACC screen**.

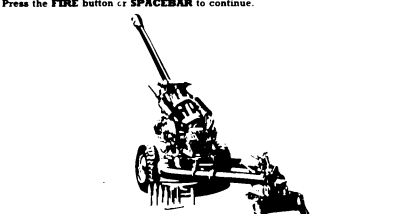
The Debriefing Screen

Upon completion of a game during Tactical Command play, you will come to the **Debriefing Screen** for an evaluation. **Advancement Points** are awarded based on your overall game performance. You do not have to win to get a good rating. Since the enemy will always be numerically superior, it is more important to reduce that superiority as much as possible than it is to win.

Your Performance Rating is related to your **Advancement Points** as shown below.

Performance Rating	Advancement Points
Outstanding	2200 or more
Superior	2000 to 2199
Exemplary	1800 to 1999
Commendable	1500 to 1799
Adequate	1200 to 1499
Inferior	900 to 1199
Below Average	600 to 899
Pathetic	300 to 599
Disgusting	Less than 300

After a few seconds in **TACC Debriefing** you will meet with the General. **The General's Evaluation**
Four Star General E. E. "Bud" Dick, is not an understanding person. He is quite unsympathetic and intolerant of new officers. You may find his remarks harsh at times, but underneath, he probably means every word of it. There is one hope, however. With enough perseverance you may someday become a Five Star General and out rank old General Dick. I wonder what he'd have to say then?
Press the **FIRE** button or **SPACEBAR** to continue.



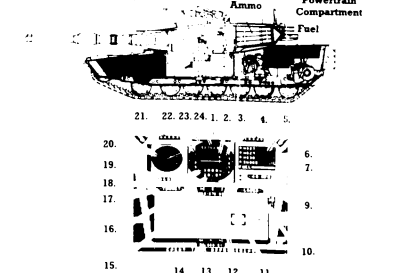
OPERATING YOUR EQUIPMENT

Operating the M1A1 Abrams Main Battle Tank (MBT)



Description
Get ready to take the controls of an M1A1 Abrams, the U.S. Army's newest, most sophisticated main battle tank. The M1 features an unparalleled combination of mobility, armour protection and firepower. Its sloped armour, made of tough composite metals, provides excellent protection against most anti-tank weapons. The M1 is powered by a 1500 HP gas turbine engine. It also has a Laser rangefinder and a Gyro Stabiliser which allows this tank to engage targets while on the move. The M1 has a 120mm cannon, smoke dischargers for defence manoeuvring and a top speed of 73 KPH (44 MPH). Learn to operate your M1 at maximum efficiency and get to know all of its capabilities.

Objective
Your objective is to destroy as many enemy targets as you can while sustaining as few losses as possible. You will encounter enemy tanks, artillery, mortar fire and multi launch rocket systems.



Main Battle Tank - Instrument

1. SCORE
2. ALIGNMENT ARROW (When this ARROW is centred directly on your target, you are pointing directly at it.) (Always turn TO THE ARROW)
3. PROJECTILE RANGE (Based on gun angle) (This range must match the target range to score a hit)
4. PLAYER STRENGTH
5. AMOUNT OF AMMUNITION REMAINING
6. AMOUNT OF SMOKE REMAINING
7. FUEL GAUGE
8. SPEED INDICATOR (Minus means reverse)
9. FORWARD/REVERSE INDICATOR (Blue means forward)
10. ENEMY LASER SCAN WARNING (Accompanied by an audible alarm)
11. TARGET CURSOR (Shows the position of the target)
12. MAIN VIEWING SCREEN
13. INFORMATION & MESSAGE DISPLAY
14. DRIVER'S HEADING (Direction the tank is pointing)
15. TURRET BEADING (The direction the 120 MM gun is pointing)
16. GUN ANGLE
17. TARGET ALERT (Accompanied by an Audible tone)
18. TARGET RANGE (Digital)
19. TARGET VECTOR (Heading to intercept)
20. THERMAL IMAGING SYSTEM
21. ENEMY STRENGTH
22. TARGET RANGE (Analog) (in 100 METERS)
23. PERISCOPE VIEW WITH LASER RANGEFINDER
24. TARGET VECTOR (Heading to intercept)

DESCRIPTION OF MBT INSTRUMENTS

Thermal Imaging Systems
The infra-red thermal imaging system produces an image by sensing the heat radiated by objects. The detected energy is converted to electrical signals and the images displayed are directed into the eye piece of the gunner's sight. The information is then sent to the laser rangefinder for target ranging.

Laser Rangefinder
Information from the thermal imaging system is passed to the Laser Rangefinder, which automatically calculates the Target Vector (direction) and Target Range. The system is virtually instantaneous in operation and extremely accurate, making it possible to hit targets at long range and while on the move. The Laser Rangefinder eliminates any guesswork. The gunner simply turns the turret until he is pointing at the target. (The target is indicated on the main viewing screen by the TARGET CURSOR). Once the target is in approximate alignment, the gunner will then use the ALIGNMENT ARROW for fine adjustment. When the ARROW is centred on the target image, the gun is pointing directly at the target. The gunner then raises or lowers the gun angle until the PROJECTILE RANGE indicator matches (approximately) the TARGET RANGE indicator and fire.

Periscope View
An image of the target is automatically magnified and displayed in the periscope view, making it easily identifiable.

Score
Used in combat simulation to keep track of your combat points.

Player Strength
The number of tanks remaining in your unit.

Enemy Strength
Indicates the relative strength of the enemy division. This number does not always decrease when an enemy target is destroyed. It may take two or more kills to reduce the enemy's relative strength by one unit.

AMMUNITION

MB27 - (APFSDS*-T)
This round is constructed of depleted uranium and is your most effective weapon against any type of armour. It is the ONLY round that will penetrate the armour of the enemy TR-80 tank.

MB29 - (APFSDS*-T)
Standard armour piercing combat round.

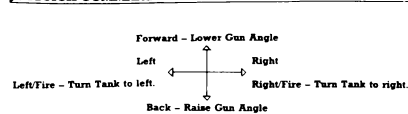
MB30 - (HEATMP*-T)
Standard armour piercing combat round.

*Armour Piercing Fin Stabilizing Discarding Sabot.
Enemy Laser Scan Warning
Your M1A1 is equipped with smoke generation capabilities to confuse enemy targeting systems. When the LASER SCAN WARNING alarm sounds, it means that your sensors have detected an enemy laser scan of your tank. You must dispense smoke immediately or the enemy targeting system will lock on to you and fire. If the enemy tank is able to score a direct hit, your tank will be destroyed.

MAIN BATTLE TANK CONTROLS - C64, ATST, AMIGA

FORWARD	TAB
REVERSE	CONTROL
EXIT THIS SCENE	ESCAPE
STOP	SPACE BAR
ROTATE TURRET ONLY	
18 KPH	1
36 KPH	2
54 KPH	3
72 KPH	4
CHANGE TARGETS	A (C64 ONLY)
SOLID FILL ON/OFF	DNST DELT (C64 ONLY)
SOLID FILL ON/OFF	DELETE (AMTST ONLY)
SOLID FILL ON/OFF	HELP (AMTST ONLY)
SHELLS USE MB27'S	F1
USE MB29'S	F2 (FS on C64)
USE MB30'S	F3 (FS on C64)
GENERATE SMOKE	F4 (FS on C64)
CHANGE BETWEEN GUNNER'S AND DRIVER VIEW	SHIFT

JOYSTICK COMMANDS



SPECTRUM
Keys
O Up
A Down
O Left
O Right
M,SPACE Fire/Select
X Pause Sub-Game
O Quit when paused
Joysticks: Kempston and Cursor. Joystick compatible.
Sinclair 1/2 replace directions

AMSTRAD
Keys
O Up
A Down
O Left
O Right
SPACE Fire/Select
ESC Pause Sub-Game
O Quit when paused
Joystick - Joystick 1 replaces directions.
Additional keys for Spectrum.

In addition:
TACCOM
Z,X,C,V O Select player unit
E Enter Sub-Game
MBT
O Gun barrel down
A Gun Barrel up
W Accelerate
S Decelerate
E Select weapon
D Smoke
ADAT
SPACE Fire missile

USING THE LASER RANGEFINDER

Learn to rely on your Laser Rangefinder. It is the most powerful offensive feature of your M1. Follow these steps while referring to the **INSTRUMENT DIAGRAM**.

1. Turn your tank (if necessary) to bring a target into view on the **PERISCOPE**.
2. While looking at the **MAIN VIEWING SCREEN**, turn your tank left or right (by using the joystick) until a gun barrel is pointing almost directly at the **TARGET CURSOR**.
3. Now look at the periscope and notice the location of the **ALIGNMENT ARROW**.
4. Turn towards the **ARROW** until it is centred on the target image. You ARE NOW IN **HORIZONTAL ALIGNMENT**.
5. Next, look at the **TARGET RANGE** (the left set of vertical numbers).
6. Now, raise or lower your gun angle until your **PROJECTILE RANGE** matches (nearly) the **TARGET RANGE**. (The projectile range is the right set of vertical numbers). You ARE NOW IN **RANGE ALIGNMENT**.
7. If you are still in horizontal alignment, you should fire your cannon by pressing the **FIRE** button.

KEEP MOVING!

Your tank is covered with reactive armour, which bolts on the outside of your tank's body and turret. It explodes outward to blunt the impact of incoming shells. This allows you to take a number of hits without being disabled. If you're stationary, however, your chance of being hit in a spot that has been previously hit increases and makes you much more vulnerable.

OPERATING THE AIR DEFENCE ANTI-TANK (ADAT) SYSTEM

Description



This unit is a highly sophisticated, modular missile launcher designed specifically to be an anti-aircraft/anti-tank weapon. The main component of the system is the turret based launch platform consisting of two banks of four laser beam riding missiles. The unit also features a 30mm cannon for additional firepower. The ADAT system was designed by Martin Marietta Corporation to provide effective anti-aircraft and anti-armour capabilities in a fast reaction vehicle for front line NATO forces. It is mounted on an M-41 Bradley Chassis with a top speed of 41 mph.

Objective
Your objective is to destroy enemy "MIG" fighters and TR-80 tanks. Aircraft can be destroyed by your missiles or your cannon. Tanks can only be destroyed by the 30mm cannon.

ADAT Instruments and Controls

