

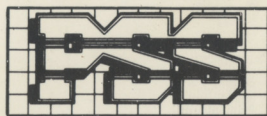
THE AUTHOR: Alan Steel is one of the original British Wargamers and has been playing and designing wargamers for nearly 25 years. Graphic help from Ian Bird, Music by David Dunn.

Also available in the PSS Wargamers series – Battle for Midway.
Available for CBM64, Amstrad, MSX, Atari.

© MCMLXXXIV PSS

All rights of the producer, and of the owner of the work being produced, are reserved. Unauthorised copying, hiring, lending, public performance and broadcasting of this cassette is prohibited. The publisher accepts no responsibility for errors, nor liability for damage arising from its use.

Whilst the producers of Theatre Europe have taken every care in researching this program to ensure the accuracy of details, we must stress that the events depicted in this conflict simulation are entirely fictitious – They must never be allowed to happen, the danger is that they might!



THE ULTIMATE CONFLICT SIMULATION

THEATRE EUROPE

TELETEXT MESSAGE:

MASSIVE US INTERVENTION IN SYRIA.....

BONN DECLARES DESIRE FOR

REUNIFICATION OF TWO GERMANY.....

NATO BUILD UP IN WEST GERMANY.....

RUSSIAN TANKS CROSS WEST GERMAN
BORDER.....THEATRE EUROPE

WARGAMERS SERIES

THEATRE EUROPE

INDEX

Item		Page
1	INTRODUCTION	1
2	LOADING	1
3	GETTING STARTED	1
4	MAP MODE	1
5	To MOVE a UNIT	2
6	To MAKE an ATTACK	3
7	ACTION SCREENS	3
8	To REBUILD UNITS	3
9	AIR PHASE	4
10	SPECIAL MISSIONS	5
11	RADAR SCREEN	6
12	OPPONENTS (Computer) TURN	6
13	BASIC TACTICS (How to Play)	6
14	To SAVE/LOAD or QUIT GAME	7
15	The ADVANCED GAME	7
16	DISK VERSION	9
17	The European Battlefield	9
18	Designers Notes	11
19	UNIT LIST	14
20	BIBLIOGRAPHY	15

**THIS PROGRAM IS DEDICATED TO THE
PEOPLE OF THE WORLD IN THE HOPE
THAT THE GAME IS NEVER PLAYED FOR REAL.**

ALAN and FRIENDS, MARCH 1985

© P.S.S. 1985

1. INTRODUCTION

Many Computer Games of the 'ARCADE' variety can be played by simply loading the program and getting hold of the Joystick. Any rules etc. can be picked up as you go along. This is NOT a game of that type. Do not take this to mean that this is a game of vast complexity, it is not that either. However it is a game you will learn and enjoy far quicker if you follow this Manual. You must at least read Sections 1 to 13 to understand the basic game.

This game covers the first 30 days of the next war in Europe. You can choose to be the supreme commander of N.A.T.O. or the Warsaw Pact. In your control are air and ground units. These are backed up by your ability to make strategic nuclear/chemical attacks.

As the Warsaw Pact commander your task is to break the N.A.T.O. alliance, which you see as a powerful invasion force, poised on your border. You will achieve your aims by taking over West Germany.

As the N.A.T.O. commander your task is to stop any further Russian invasion of Europe. You will achieve this by preventing the occupation of West Germany.

2. TO LOAD

For Disk Version, see Section 16.

Plug your joystick into Port 2. and ensure that the tape is fully rewind.

Press SHIFT and RUN STOP together.

The message on the screen will say: PRESS PLAY on your cassette player.

Press Play on your cassette player.

The screen will go blank for 15 seconds and then display the message:

'Searching/Found'

After a few seconds the screen will go blank again and the tape will restart. Loading takes only a few minutes using the turbo loader that is incorporated in the software.

3. GETTING STARTED.

When the program has loaded the message PRESS 'N' FOR N.A.T.O. PRESS 'W' FOR WARSAW PACT will be seen. PRESS 'N'.

The screen will now show PRESS '1, 2, OR 3' TO SELECT GAME LEVEL. Press '1'.

You will now be asked PRESS 'A' FOR ACTION SCREENS. PRESS 'N' FOR NONE. Press 'A'.

On the next screen Press 'P' to PLAY.

4. MAP MODE.

The screen will clear and a map of Europe will be displayed. At the top of the screen is a line of black text on a yellow background. This line is the TEXT LINE and is used to display game messages, information etc. The line now reads N.A.T.O. MOVEMENT PHASE. This tells us that the Phase (Part) of the game turn we are in, allows N.A.T.O. units to move.

Below this line is a box with DEFCON 5 printed in it. This shows us how close we are to making a major nuclear attack. DEFCON 1 would mean we are making it! The DAY box indicates which day of the war we are in.

On SWEDEN you will see a WHITE SQUARE, this is called the COM BOX. (If you do not know where Sweden is, see enclosed Map/Poster.) The COM BOX is used to order moves, attacks etc.

By moving the joystick the COM BOX can be moved around the Map. The large white square near the top left of the screen is the REPORT BOX. This tells you what the COM BOX is positioned over and gives a report on any units strength. (Units on the Map are Armies or Corps). As a guide here is a list of symbols used on the screen Map.

SYMBOL	COLOUR	DESCRIPTION
Blank	Black	Land
Blank	Cyan	Sea/Lake
Shaded	Brown	Mountains
Line	Grey	Border
Cross	Various	Capital City
Circle	Blue	N.A.T.O. Corps
Circle	Red	Warsaw Pact Army
Circle	Yellow	Neutral Army/Corps

5. To MOVE a UNIT.

Place the COM BOX over a N.A.T.O. Unit (Blue Circle) and press the joystick fire button. The COM BOX will turn GREEN, showing that the Unit is ready for a move. You will notice that the COM BOX can now only move a certain amount. This shows how far the Unit is capable of moving. When the COM BOX is over where you wish the Unit to go, press the fire button. The COM BOX will turn WHITE and the Unit will move. The Unit will have a black dot in it's centre. This is to remind you that the Unit has moved this turn. A Unit cannot move twice in one turn, neither can it move into the sea or on top of another Unit. There are exceptions to this which are dealt with in the Advanced Game. Movement through Mountain areas is slower than normal. On the turn following a move into Mountains, the Unit will start the Movement Phase already dotted. It will not be able to move until the following turn. The player can move as many or as few Units as he likes each turn within the limits mentioned above. A Move order can be cancelled, if the COM BOX is still green. Put the COM BOX back on the Unit and press the fire button.

To leave the MOVEMENT PHASE Press the SPACE BAR.

6. To MAKE an ATTACK.

The TEXT LINE will now read N.A.T.O. ATTACK PHASE. All the dots on the Units caused by movement will be cleared. To make an Attack place the COM BOX over your Unit and press the fire button. The COM BOX will turn GREEN to show the Unit is ready for an Attack order. The movement of the COM BOX will again be limited to show the Attack range. Position the COM BOX over the Unit you wish to attack and press the fire button. Your Unit and the Unit you are attacking will both be marked with a dot. Each Unit can only make one attack per game turn. You cannot attack your own Units. (much as you may feel like it!). You can attack an enemy with more than one of your own. Once again within the above limits you can make as many or as few attacks as you like.

To leave the Attack Phase press the Space Bar.

7. ACTION SCREENS.

If you selected ACTION SCREENS by pressing 'A' at the start of the start of the game the following will apply. If you did not, read the MAP ATTACKS section. The TEXT LINE will ask you to SELECT BATTLE. To do this place the COM BOX over one of your Attacking Units (dotted) and press the fire button. If you do not wish to see the battle, or are not making any Attacks this turn, press the Space Bar for the MAP ATTACKS.

The screen will clear and show you a view of the Attack. Your forces will be shown moving across the lower half of the screen, mainly on the road. The enemy will be located near the horizon and may or may not be visible. Your task is to assist the attack by destroying enemy forces with your missiles. To launch a missile press the fire button. Guide the missile to its target by keeping the aiming sight (Black Square) on the target. Any aircraft are normally hostile and may be fired at as well. Depending upon how many of the enemy you destroy, you receive a bonus (or penalty), which is applied to ALL your attacks this turn. Try to make each missile count. Throwing them about like confetti will lead to problems as you will note in the Rebuild Phase. The Action Screen will end after a time and you will see the Map Attacks.

MAP ATTACKS.

The screen will display the normal Map Mode, all Units involved in battles will flicker. Any unit that is destroyed will be removed from the Map. Some Units may be forced to retreat at this stage.

8. To REBUILD UNITS.

The TEXT LINE will read N.A.T.O. REBUILD PHASE ARM. 1 and all your Units will change to numbers. Place the COM BOX over a Unit (number) and the REPORT BOX ARM. line will show the same value as the map. This is because all your Units are now showing their ARM values (Combat Strengths). In this Phase you may add any ARM reinforcements you receive to any Unit. The number of Arm reinforcements for this turn is shown on the TEXT LINE. In this case 1. Position the COM BOX over the Unit you wish

to rebuild and press the fire button. The ARM. value of that Unit will increase and the TEXT LINE will now read ARM. 0. The COM BOX will turn from YELLOW to WHITE. This is to show that no more ARM points are available this turn. Press the Space Bar and move on to the AIR Rebuild stage.

The above is repeated to assign AIR points to your Units. Press the Space Bar and go on to the SUP. (Supply) Rebuild stage. On the left of the MAP/POSTER is the N.A.T.O. REINFORCEMENT SCHEDULE. This shows the amount of Rebuilds and on what Day they will arrive. Note AIR Rebuilds for Units are listed under TAC AIR. The Units listed under AIR are for the Airforce only. Rebuilds cannot be 'saved up' and are lost if not used on the turn they arrive. No Unit can have an ARM, AIR or SUP. value higher than 9.

Press the Space 'Bar for the next Phase.

9. AIR PHASE.

This phase is used to control your Airforce. Air Units can be assigned to various MISSIONS and moved into or out of RESERVE. All AIR Reinforcements are automatically added to the RESERVE on the day they arrive. AIR Units can be 'saved up' in RESERVE and will not be lost if left in RESERVE. The AIR RESERVE is shown at the top right of the screen. The main display shows the Air Missions you can perform and under AIR POWER the number of AIR Units on this mission.

By moving the joystick the Text Pointer (FROM RESERVE) can be set at various MISSIONS. If the fire button is pressed an AIR Unit will move From Reserve to the Mission. After you have assigned the AIR Units press the Space Bar. The Text Pointer will change and read TO RESERVE. If it is now placed next to an AIR MISSION and the fire button pressed, an AIR Unit will move from the MISSION to the RESERVE. Notice that we cannot move units from one Air Mission to another in the same Air Phase. The Units must always pass through the RESERVE and take two turns to change MISSIONS. Management of your AIR RESERVE is an important factor in playing the game well.

The colours of the numbers of AIR Units assigned to a MISSION give you information about the enemy's Airforce. If your number is coloured green then you have more AIR Units assigned to that MISSION than him. If the colour is yellow the numbers are equal. Red shows that he has more AIR Units on that mission than you. Note this is only true on LEVEL 1. See advanced game for other LEVELS.

There are only four AIR MISSIONS that you need to understand on game LEVEL 1. A brief outline of each follows.

AIR SUPERIORITY.

AIR Units on this Mission seek to gain control of the air over the battlefield (Europe). They achieve this by patrolling and attacking enemy aircraft in the air. Air Superiority is a very important mission as it affects all other missions. If the enemy is winning the battle for Air Superiority you will take greater losses flying other missions. If you are in the lead he will take greater losses.

COUNTER AIR

These AIR Units attack enemy airfields. Seeking to destroy the enemy airforce by knocking out his bases rather than fight him in the air. This mission will help you in the battle for Air Superiority.

INTERDICTION

This Air Mission attacks the enemy supply and movement network i.e. roads, bridges, tunnels, etc. The effect of the mission is to delay the arrival of enemy Reinforcements.

RECONNAISSANCE

You will have noticed that positioning the COM BOX over an enemy Unit on any MAP MODE screen will give a Report on the Unit in the REPORT BOX. This report gave the Units name and ARM. level. The more AIR Units assigned to Reconnaissance the more detailed this Report will be. These AIR Units will take losses (as will all others) so if the Reports on enemy Units start to get less detailed you will know the reason.

10. SPECIAL MISSIONS.

This phase can be skipped by pressing 'N' (MAINTAIN PRESENT STATUS) this calls for no special missions. The Level 1 game can be played without using any Special Missions.

STRATEGIC CHEMICAL LAUNCH

This Mission will launch an attack using missiles equipped with Chemical warheads (GAS). The target will be an enemy supply city. This Mission carries the risk of an enemy Nuclear response.

STRATEGIC NUCLEAR LAUNCH

When this mission is called (by pressing 'f1') you will be asked for the NUCLEAR AUTHORISATION CODE. If the correct CODE is entered you will be given access to the Nuclear Fire Missions. An incorrect CODE will cause you to miss this phase. The CODE only has to be entered once in any game, access is automatic after this has been done. In the Nuclear Fire Mission phase the control arrow is moved by the joystick. To fire a particular mission, position the arrow next to the mission and press the fire button. A brief guide to the missions follow:

STANDBY: This fires no mission and is the normal setting.

SINGLE STRATEGIC LAUNCH: This allows you, by means of the RADAR SCREEN to make a Nuclear Strike on any one target.

FIRE-PLAN WARM PUPPY: This will fire the majority of your missiles at various targets. The enemy reaction to this will be extreme (you have been warned!).

On Level 1 ignore all references to the REFLEX SYSTEM and do NOT switch it on. Only ONE Mission can be called each turn. To leave this phase press the Space Bar.

11. RADAR SCREEN.

This screen is used to show missile attacks made by either side. If you have selected a SINGLE STRATEGIC LAUNCH the Nuclear Targeting Cursor will be on screen. Position the Cursor over a target and press the fire button. You cannot make Strategic Attacks against a friendly or Neutral City/Unit.

If the enemy launches an attack against you the following will apply: The enemy missiles will be 'boxed' by a Tracking Cursor and the I.P. Cursor will appear on screen. This is the Impact Predictor and will move to the Predicted Impact Point of the enemy missiles. (Their Target) The REPORT BOX will name the target.

If the enemy launches a FIRE PLAN attack the I.P. and Tracking Cursors will not appear.

12. OPPONENTS (Computer) TURN.

The computer will now perform all the Phases you have just completed. You will see his Movement and Attack Phases. In the ATTACK PHASE if you have selected ACTION SCREENS you must do the following. Place the COM BOX over one of your Units that is being attacked and press the fire button.

The Action Screen display is similar to Section 7 and all points covered there apply. If the computer fires any Special Missions it will make them out of sequence. They will be made at the start of its turn, so it is possible that you may fire a Special Mission and see it on the RADAR SCREEN, and then the computer will fire a Special Mission. This means that the computers turn will start with the RADAR SCREEN showing the computers Special Mission.

13. BASIC TACTICS (How to play).

On Level 1 it is better to fire no Special Missions. Any advantages you receive will be offset by the triggering of nuclear responses by the computer. As the N.A.T.O. player your Task is to DEFEND West Germany, this does not mean you should set out to capture Moscow!

Making Attacks with Units is a costly way of stopping the WARSAW PACT. A careful Defence will gradually grind down his attacking Units. (Maybe!).

Do not allow a Units ARM. value to become 0 as the Unit will be destroyed if it is attacked. This will mean the loss of any AIR./SUP. the Unit had.

On the ACTION SCREENS firing a constant stream of missiles may get you a good Attack/Defence Bonus, but the SUP. values of your Units will fall at an alarming rate. Be warned.

In the Air try to win the battle for Air Superiority, but do not let your Reconnaissance Level drop to 0.

14. To SAVE/LOAD or QUIT GAME.

At the start of your MOVEMENT PHASE you may QUIT the game by pressing the 'f1' key, when the QUIT = F1 prompt is showing. You can now RESTART the game by pressing 'R' or press 'S' to SAVE the game.

For Disk Version Load/Save see Section 16.

Put a blank cassette tape in your cassette player, then press 'C'. If you wish to save more than one game on the cassette tape make a note of the tape counter reading. Now press Record and Play. The screen will go blank until the saving is complete.

To load a previously Saved game you must first load the game as normal. Press 'N, 1 & A' to reach 'Load Old Game' selection. Now press 'B' to Load the Saved game. Put the saved game tape in your cassette player. Make sure it is rewound to the start of the saved game. Now press 'C' and then press Play on the cassette player. The saved game will load and then start.

15. THE ADVANCED GAME.

The following are differences or extra features that apply when playing the game on Levels 2 and 3. Also covered is playing the game as the commander of the WARSAW PACT.

MOVEMENT

It is possible to make an EXCHANGE Move providing neither Unit has Moved in this Turn. Place the COM BOX over one of the Units and press the fire button. Position the COM BOX over the other Unit and press the fire button again. The two Units will Exchange Places.

CHEMICAL RELEASE

After the MOVEMENT Phase the TEXT LINE will read ENTER CHEMICAL RELEASE CODE OR PRESS 'N'. To authorise CHEMICAL RELEASE press 'Y'. Your Units will now use Tactical Chemical Weapons (Gas) in their Attacks. This will give your Units an Attack Bonus and cause greater losses to enemy Units. Once Chemical Release is authorised, it will be in use from then on.

ASSAULT-BREAKER

This is a special AIR MISSION that can be used to attack enemy ground Units. If the number of AIR Units assigned to this Mission in your AIR PHASE is 10 or more the following will apply.

Before the ATTACK PHASE the TEXT LINE will show SELECT ASSAULT BREAKER TARGET. The Assault Breaker targeting Cursor will be on screen (A B). Place this Cursor over the Unit you wish to attack and press the fire button. The Attack will cause losses in the Units ARM level. (Maybe!) Only one ASSAULT-BREAKER Attack can be made per turn. The AIR Units flying this Mission are liable to take losses.

WARSAW PACT SPECIAL UNITS

The 1st AIRBORNE ARMY and the 1st AMPHIBIOUS ARMY are special Units and are capable of specialist MOVEMENT.

The 1st AMPHIBIOUS ARMY is capable of SEA MOVEMENT. The Unit starts on the sea and can continue to move on the sea. However once the Unit moves onto the Land it cannot return to SEA MOVEMENT. It will then become the same as all other Units.

The 1st AIRBORNE ARMY is capable of AIR MOVEMENT. The COM BOX will show the limits it can AIR MOVE within. If you wish to use AIR MOVEMENT for this Unit, you must do it the FIRST time the Unit moves. After this first move it will move like any other Unit.

The AMPHIBIOUS ARMY cannot be REBUILT until it is on LAND. The AIRBORNE ARMY cannot be REBUILT until it has moved. Then only the SUP. level can be raised.

Various movement restrictions apply to the above Units as you will discover.

AIR PHASE (Advanced)

The ASSAULT BREAKER Mission was covered earlier, the others are as follows:

DEEP STRIKE-This Mission attacks the command and control of the enemy. Like

INTERDICTION it may lead to the late arrival of enemy Units. It could also stop enemy Assault Breaker missions. It carries a slight risk of triggering a nuclear response.

IRON-SNAKE-This Mission attacks the enemy railway network. It could cause the delay or loss of enemy REINFORCEMENTS.

On Levels 2 and 3 the RED, GREEN and YELLOW colours of your AIR Unit numbers still give information about the enemy's Airforce. But now some of the information could be wrong.

SPECIAL MISSIONS

You may have realised that the enemy could launch a nuclear attack in his turn and that you cannot reply until your turn. To overcome this you have the REFLEX SYSTEM. Once you have entered the NUCLEAR AUTHORISATION CODE the Reflex System can be switched on. When switched on the Reflex System will automatically reply to an enemy missile attack. It will reply by launching a nuclear attack to match the enemy's. Single Launch for Single Launch, Fire Plan for Fire Plan. It will fire while the enemy missiles are still in the air. The danger is that it cannot distinguish between an enemy nuclear or chemical missile attack. If the enemy fires a chemical attack your Reflex System will make a nuclear reply. I will leave you to contemplate the dangers involved in this.

Use the 'f 5' in the SPECIAL MISSIONS Phase to turn the REFLEX SYSTEM on or off.

ADVANCED TACTICS

WARSAW PACT: Remember your aim is to take over West Germany. Do not waste too many resources invading Neutrals in the south. In the AIR you must make the most of your initial advantage, N.A.T.O. will receive more AIR Units than you as the days go by.

N.A.T.O.: Get control of the Air as soon as possible, then allocate spare Air Units to Assault Breaker Missions. Only make counter attacks at very favourable odds.

16. DISK VERSION.

TO LOAD

Plug in your joystick into Port 2.

Insert Program disk in disk drive. Type LOAD "*"8 (then press RETURN). When the READY prompt appears on the screen Type RUN (then press RETURN). The Program will now Load and Run.

To SAVE a GAME

After pressing F1 to QUIT the game, press S for Save. Insert a blank formatted disk into the disk drive. Now press C to Save the game.

To LOAD a SAVED GAME.

Load the game as normal and then press N, 1 & A to reach the Load Old Game selection. Press B and insert the disk with your Saved game into the disk drive. Now press C and the game will load and run.

17. The European Battlefield.

In the area covered by the game map, approximately 6.5 million people are in the armed forces of N.A.T.O. or the Warsaw Pact. The countries that make up N.A.T.O. and the Warsaw Pact are shown on the Map/Poster. Spain is incorrectly colour coded, it joined N.A.T.O. in 1982. Greece and Turkey are N.A.T.O. members outside the area of the map.

The ground units total some 84 divisions for N.A.T.O. and 173 for the Warsaw Pact. Both sides have 13+ Divisions not on the map which are allocated to the theatre.

A rough count of aircraft gives N.A.T.O. 3,000 and the Warsaw Pact 7,000. In the U.S. and Canada are a further 1,900 aircraft that would be deployed to Europe in the event of war. The Warsaw Pact has 750 aircraft deployed in Russia which are likely to be used as reinforcements.

The naval aspect of the theatre is treated in an abstract way. Details of the navies on either side will not be discussed, except to mention that N.A.T.O. has superiority in carrier numbers, whilst the Warsaw Pact has the edge in submarines.

The strategic nuclear balance is as follows: N.A.T.O. 2,000 delivery systems (missiles & aircraft) with 9,000 nuclear warheads. The Warsaw Pact has 2,700 delivery systems with 8,000 warheads.

All the above figures are approximate. The numbers are constantly changing, as new weapon systems are deployed or old ones phased out.

We have tried to use the most accurate information we could legally acquire to produce the game. No doubt we have been tricked by both sides dis-information services at times, but this is the best we could do.

During the Second World War Britain, America and Russia were allies, however after the defeat of Germany, the alliance was soon in disarray. The western members of the alliance became worried when Russia maintained it's armed forces at their wartime level seeing the might of Russia as a possible threat to the now DISARMED rest of Europe. They also disagreed with Russia imposing communist governments on the countries it had liberated from the Germans. Finally in 1949 they formed the North Atlantic Treaty Organisation (N.A.T.O.) to deter any further Russian expansion.

To Russia it appeared that it had fought and suffered a devastating war, only to see it's former allies band themselves together into a hostile alliance. In 1955 (the year Germany joined N.A.T.O.) Russia formed an alliance with the communist countries of Europe. This alliance is known as the Warsaw Pact.

If the war does start, current opinion seems to accept that after 30 days it will grind to a halt. Both sides will then have used up their stockpiles of conventional munitions. New production will not start to reach the front-line until some time after this. If this occurs the West's superior production capabilities would probably ensure a N.A.T.O. victory, provided strategic nuclear weapons have not been used (if they have there will be no production).

The Warsaw Pact forces are committed to fight an offensive war, however it starts. They do not wish to have the battle fought on their soil (they remember WWII).

We will now give a brief outline of the weapons deployed on the Central Front. (West German/ Warsaw Pact border).

Infantry: Still the unsung hero of the battlefield, only now he has to dig a hole for the A.P.C. as well as himself. Seriously, the major change since World War II is that most infantry are now equipped with A.P.C.'s (Armoured Personnel Carriers). Weapons used are assault rifles, grenades, machine guns, mortars and various anti-tank/anti-aircraft missiles. Also carried are N.B.C. (Nuclear, Biological, Chemical) suits, sensors, radios etc. Now you can see why they need the A.P.C.'s, which also make useful hiding places for illicit drink, food and magazines.

Tanks: One of the most impressive weapons to the uninitiated. Thundering by like invulnerable metal giants in peace-time exercises they appear unstoppable. The truth is far different. Without infantry and aircover they are soon reduced to smouldering scrap. The tanks main problems are they are big, noisy, deaf and nearly blind in combat. They need supporting infantry to be their eyes and ears. The aircover is required to keep away enemy ground attack aircraft and helicopters, who are attracted to tanks like wasps to jam. This does not mean that tanks are now useless. They are still the armoured punch in any attack and still the best anti-tank weapon.

Artillery: The forgotten arm; forgotten that is by civilians. Anyone with army combat

experience knows all about artillery. In World War II artillery accounted for more casualties than all other weapons put together. Modern artillery is much more lethal than the 1945 variety. Improved ammunition, targeting, communications and mobility have achieved this. N.A.T.O. has the lead in artillery techniques.

Electronic Warfare: One of the fastest growing aspects of 'modern' warfare. An ever expanding range of electronic equipment is designed to blind, find, deafen or destroy the enemy. Of course it is then necessary to produce equipment which will stop the enemy doing this to you. It has proved to be of great value in the limited combat situations where it has been used. If war occurs on the Central Front and all the equipment is switched on together, then the results will prove interesting to say the least.

Chemical Warfare: Commonly referred to as Gas. Various chemical liquids, solids or gasses are sprayed into an area. This gives rise to various unpleasant effects which we will not discuss. Chemical weapons are delivered by various methods, including aircraft spray tanks, artillery shells, missiles etc.

Airpower: For the purpose of comparison we will simplify the various air missions into three types and give numbers of aircraft allocated to each mission in 1984.

Air Superiority:	N.A.T.O. 740	:Warsaw Pact 4370
Ground Attack:	N.A.T.O. 1950	:Warsaw Pact 1920
Reconnaissance:	N.A.T.O. 285	:Warsaw Pact 600

These figures do not include the French Airforce, the 1,900 aircraft in the N.A.T.O. reserve or the 750 Warsaw Pact reserve.

Head counts such as the above are not as overwhelming as they first appear. N.A.T.O. has superior (in general) aircraft and better pilots. Also a much higher percentage of the N.A.T.O. aircraft can actually fly (many of the Warsaw Pact aircraft are grounded awaiting spares, etc.).

That concludes our rather brief survey of the European Battlefield. We did not wish to overwhelm you with endless technical details, but rather to give a different view of Theatre Europe. Anyone wishing the technical details should refer to some of the books listed in the bibliography.

18. Designers Notes.

In the THEATRE EUROPE we have tried to produce a game that is both playable and informative. The game has gone through many revisions and alterations before it reached its present form. For those of you who are experts in this field we apologise for the simplifications we have had to make. Our task is to produce a game which can be understood and played by a wide age group. This group includes both wargamers and non-wargamers, experts and novices. The game in its present form is (we hope) a reasonable balance between conflicting requirements.

18. Designers Notes.

Certain assumptions were made in the game which we hope are valid. These include:

1. N.A.T.O. will win the battle for control of the Atlantic.
2. The Warsaw Pact will gain control of the Baltic.
3. Warsaw Pact Naval movement in the Baltic will be slowed by N.A.T.O. mines.
4. The N.A.T.O. Atlantic air transport operation will succeed.
5. France will enter the war immediately.
6. Switzerland, Sweden and Austria will remain neutral.
7. The Warsaw Pact Armies will remain loyal and 'enthusiastic'.
8. The Warsaw Pact will not start the war with a massive nuclear bombardment.
9. N.A.T.O. will not 'go nuclear' if it cannot stop the invasion in X days.
10. Both sides will refrain from using biological weapons.

We have grouped certain Divisions, brigades etc. into non-existent armies for ease of play. The two most obvious examples are the 1st. Airborne Army and 1st. Amphibious Army. The Warsaw Pact has the units that compose these Armies but they are not organised as Armies (so we are told).

The exchange move is really to allow the Warsaw Pact to rotate 'burnt out' units to the rear as fresh ones enter the battle. Thus simulating their tactical doctrine.

The movement limits on the 1st. Airborne Army are to force the player to make a reasonable Air Move. The player still has various options and we felt this was better than putting a big arrow on the screen, then saying 'Use them here you fool.' Though the Airborne Unit in reality could land further West than this, we do not think the Warsaw Pact would be able to maintain supply by air beyond the movement limit.

The Rebuild Phase attempts to show the problems associated with supply and the allocation of reserves. The clever ones amongst you will soon find ways to abuse this Phase. It is left in its present form for ease of use.

The REFORGER SITES are stores of equipment to outfit U.S. Divisions. The idea being that the men are flown over from America, thus saving time, as the equipment would normally have to be brought over by sea. As the rebuilds representing these Divisions enter the game, the Sites are 'used up'. We leave you to work out what happens if a Warsaw Pact Unit enters a Reforger Site before then.

Tactical Chemical Release reflects the use of Tactical Gas weapons. Once gas has been used the effectiveness of its further use is limited. Once bitten, twice shy!

In a unit the ARM level represents the combat effectiveness of that Unit. It is not just a head or tank count. Many other factors come into play. For instance the Warsaw Pact Units are penalised because of their high breakdown rates.

The TAC Air level of a Unit includes Aircraft we expect to be assigned to ground support as well as helicopters, etc. that are part of the Unit.

The SUP level includes missile reloads, conventional ammunition, fuel, food and water etc.

The nuclear aspect of the game presented many problems. We felt it was unrealistic for the game to have no nuclear attacks, but we did not want the game to degenerate into nuclear 'ping-pong'. The threat of nuclear attacks will limit the players options and we

feel this is how it should be. You will find that nuclear strike capability is a two edged sword. It gives you great power in attack or defence, but each use will make the start of an all-out nuclear war more likely.

The strategic Gas Attacks are mainly a device for introducing uncertainty into the game. However with the advent of the 'Nuclear Winter' theory this may change. If you know that X Megatons will trigger a Nuclear Winter, why not arm your missiles with X - 10% Megatons and arm the rest with Chemical Warheads? No doubt the military on both sides are already looking into this an alternative schemes.

The Reflex system is an attempt to simulate the 'Automatic Computer-Controlled Reaction System' that is currently gaining favour in the Pentagon (see 'Science Digest' -March 1985). The less said about this the better. The concept of allowing a computer to launch nuclear strikes, with no human intervention, shows there are apparently no limits to human insanity.

The targeting of the computers nuclear strikes in the game caused us some sleepless nights. As did the thought that somewhere someone is doing the same for real. The Air phase is our attempt to show the importance of air power in modern warfare. We have tried to do this in as simple a way as possible. Playing the game you will realise that we do not think it will be as easy for N.A.T.O. to achieve Air Superiority as is widely believed.

The 'at start' positions of the N.A.T.O. and Warsaw Pact assume a build up of forces on both sides, caused by by a period of international tension before the outbreak of hostilities (see enclosed newspaper article).

We do not believe a computer game should be used as a platform to make political statements and have bent over backwards (in some cases with sunglasses on) to be impartial in our treatment of the subject. We will leave you with one final problem: Identify the planet described below;

Two thirds of the planet's population are starving to death. Some of the remaining third destroy foodstocks to maintain prices. The planet's population is also split into two armed camps, who between them have the nuclear equivalent of 3.5 TONS of TNT for EVERY man, woman and child on the planet.

19. UNIT LIST.

NATO UNITS IN GAME	ARM	AIR	SUP
DANISH I CORPS.....	2	1	1
DUTCH I CORPS.....	3	1	2
BELGIUM I CORPS.....	3	2	2
BRITISH I CORPS.....	4	2	3
WEST GERMAN I CORPS....	7	3	3
WEST GERMAN II CORPS....	7	3	3
WEST GERMAN III CORPS....	5	2	3
UNITED STATES V CORPS....	9	4	5
UNITED STATES VII CORPS....	8	4	5
FRENCH I CORPS.....	3	2	3
FRENCH II CORPS.....	2	1	2
ITALIAN II CORPS.....	2	1	1
ITALIAN IV CORPS.....	1	1	1
ITALIAN V CORPS.....	3	1	2

NEUTRAL UNITS	ARM	AIR	SUP
SWISS ARMY.....	2	2	1
AUSTRIAN ARMY.....	2	1	1
YUGOSLAVIAN I CORPS....	2	1	1
YUGOSLAVIAN II CORPS....	2	0	1

WARSAW PACT UNITS	ARM	AIR	SUP
3rd SHOCK ARMY.....	9	4	4
1st GUARDS TANK ARMY....	8	4	4
3rd GUARDS TANK ARMY....	6	3	3
4th GUARDS TANK ARMY....	6	3	3
8th GUARDS TANK ARMY....	4	3	3
2nd GUARDS ARMY.....	8	4	4
8th GUARDS ARMY.....	8	4	4
20th GUARDS ARMY.....	7	3	4
10th ARMY.....	4	2	2
16th ARMY.....	4	2	2
21st ARMY.....	3	1	2
28th ARMY.....	7	3	4
41st ARMY.....	6	3	2
1st AIRBORNE ARMY.....	3	1	1
1st AMPHIBIOUS ARMY....	3	1	2
1st POLISH ARMY.....	5	2	2
2nd POLISH ARMY.....	4	2	2
2nd RUMANIAN ARMY.....	5	1	2
3rd RUMANIAN ARMY.....	4	1	2

20. BIBLIOGRAPHY.

Much of the information used in this program was taken from the following sources.

THE THIRD WORLD WAR by General Sir John Hackett & others.

THE UNTOLD STORY OF THE THIRD WORLD WAR by General Sir John Hackett
& others.

HOW TO MAKE WAR by J.F. Dunnigan.

THE BALANCE OF MILITARY POWER published by SALAMANDER BOOKS LTD.

AMERICAN WAR POWER edited by R. Bonds.

SOVIET WAR POWER edited by R. Bonds.

SOVIET MILITARY POWER issued by U.S.A. Department of Defense.

WORLD ARMAMENTS AND DISARMAMENT YEARBOOK issued by S.I.P.R.I.
(Various issues).

JANES ANNUALS various issues.

Booklets on CHEMICAL and NUCLEAR EFFECTS issued by H.M.S.O.

Leaflets issued by N.A.T.O.

Leaflets issued by the SOVIET Embassy.

Leaflets issued by the AMERICAN Embassy.

SANITY issued by the C.N.D.