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1. Check your equipment carefully to be sure that all cables and connections are correct.
2. Re-read the section in your computer's manual that tells you how to load software. Try to load software again.
3. If possible, load another program from a tape or disk you know works on your computer. This will prove that your equipment works. Try once more to load your game.
4. The normal reason software will not load is tape recorder or disk drive head misalignment. Your computer may be able to save and load programs on its own disk drive, but be unable to read software made on a different disk drive for this reason. Be sure your heads are correctly aligned. Your local computer store or dealer can help you with this.
5. If the program still cannot be loaded, send the software, with a complete description of the problem (what type of computer you have, what the computer says, if anything, when you try to load the software or play the game, and what you did to try to get it to load) to:

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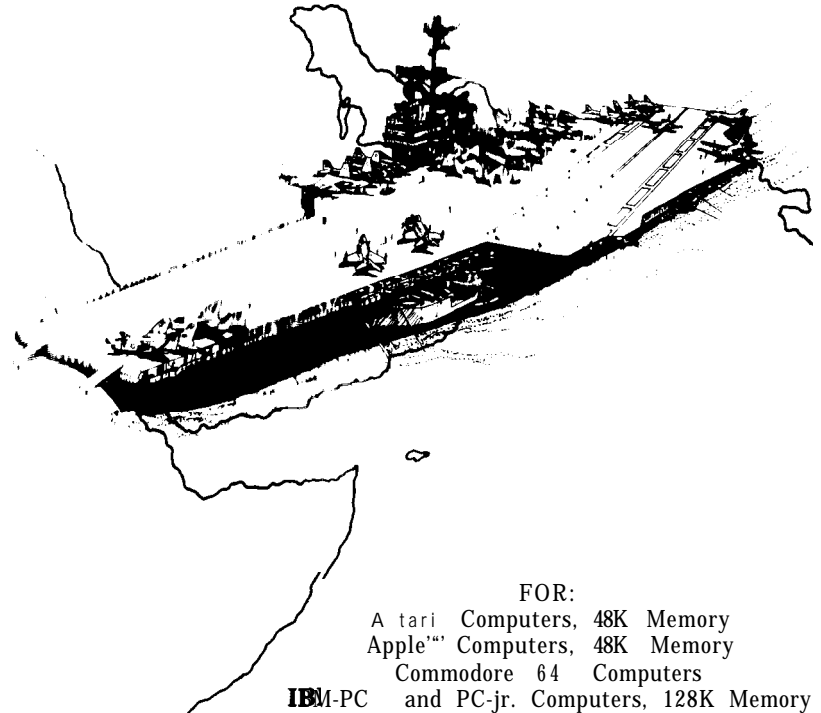
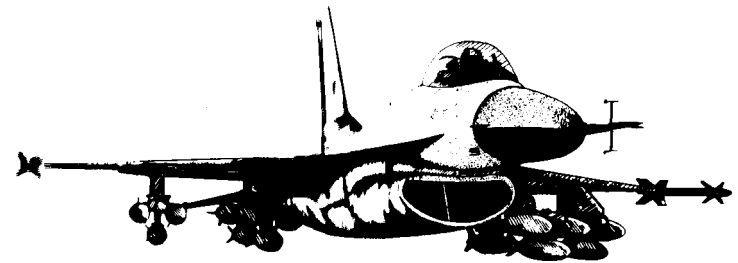
2nd Edition

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GULF STRIKE®

INSTRUCTION MANUAL



FOR:

A t a r i Computers, 48K Memory

A p p l e™ Computers, 48K Memory

Commodore 64 Computers

I B M-PC and PC-jr. Computers, 128K Memory

INSTRUCTION MANUAL

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1.0 LOADING INSTRUCTIONS

1.1 ATARI@ DISK

■ Remove the BASIC cartridge from your computer and plug a joystick into the computer controller port#1. If you have a computer with built-in BASIC (800XL) you must hold the OPTION key down during the entire loading process, which takes place before and after the title screen appears.

■ Turn on your disk drive.

■ When the ready light goes out, put the game disk into the disk drive.

■ Turn on your computer. The game program will load, display the title screen, and ask if you will play a new or saved game. Make your selection as described below (Section 2.0), and the computer will continue to load the game. Finally, it will ask if you're playing the one- or two-player version. The computer will resume the loading procedure (SOOXL users must continue to hold down the OPTION key).

1.2 APPLE@ DISK

■ With the computer turned off, put the game disk in the drive and turn on the computer. As the game is loading, the prompt USE A JOYSTICK will appear. A white box surrounds the NO prompt. Press the U and the 0 key to move the box. Press the SPACE BAR to enter your selection. Do the same when LOAD A SAVED GAME? appears. (During the game, you will be faced with other Y/N questions. Follow the same procedure if you are using the keyboard.)

■ The computer will load more data, then ask if you're playing the one- or two-player version. If you select the one-player version, the computer will ask you to select the difficulty level of the computer opponent. Toggle the joystick (if you selected it above) or press the 0 (not the zero) key to bring one of three options up (Easy, Medium, or Hard), and press the Space Bar or fire button to make your selection.

■ When the keyboard is being used, the eight keys surrounding the K key is used to move the cursor. The SPACE BAR is used in place of the fire button. The joystick and the keyboard cannot be used to play the same game. The rulebook will only refer to the joystick operation, so if playing with the keyboard, remember that the eight keys surrounding the K key represent the joystick, and the space bar the fire button.

1.3 COMMODORE 64 DISK

■ Turn on the computer, disk drive, and monitor. Plug the joystick into port #2. When the READY prompt appears on your screen, put the game disk into the drive, type LOAD "*" ,B,1 and press the RETURN key. About 30 seconds will pass before the title screen will appear.

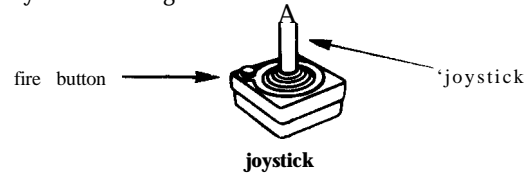
■ The computer will ask if you want to play a saved game. Make your selection by toggling the black box over your answer, and press the fire button. More data will load, then the prompt ONE OR TWO PLAYER GAME? will appear. Toggle the joystick to move the black box over the ONE or TWO, and press the fire button. (Example: pressing the button with the black box over TWO means that the twoplayer game has been selected).

■ If you select the oneplayer version, the computer will ask you to select the difficulty level of the computer opponent. Toggle the joystick to bring one of three options up (Easy, Medium, or Hard), and press the fire button to make your selection. More data will load, then the map will appear. The disk drive may be turned off after the map appears, but must be turned on again in order to save a game.

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2.0 GAME CONTROLS

The game is played by using the joystick or keyboard, depending upon which computer you are using.



The computer will prompt you for input. By toggling the joystick and pressing the fire button, you will be able to respond to all computer prompts.

To end a game phase you must press the START key (Atari), the ESC key (Apple), the F1 key (Commodore), or the Q key (IBM).

3.0 VICTORY CONDITIONS

At the beginning of the game, the player commanding the US/Iranian forces controls all 21 Victory Point Squares (VPS). During the 25 turns of the game, he must prevent the USSR player from capturing 9 of these VPS.

The 21 VPS, followed by their map location, are:

Tabriz (9,9)	Kermanshah (10,23)	Zanjan (16,15)
Hamadan (16,22)	Abadan (14,40)	Ahvaz (15,37)
Arak (19,26)	Rasht (21,13)	Qazyin (22,17)
Qom (25,24)	Kashan (26,26)	Tehran (27,20)
Esfahan (27,32)	Shiraz (30,44)	Bandar Abbas (45,55)
Kerman (48,42)	Mashad (56,17)	Oman Point 143,58)
Dubay (39,61)	Qeys Island (35,57)	Abu Zhabi (36,64)

The game will end when one of the following situations occur:

- when 25 game turns have been completed,
- the turn after the Soviet/Iraqi side captures 9 VPS, or
- when the player(s) choose to end the game.

If the game is ended before one of the above victory conditions is met the computer will only display the number of enemy hit points each side has eliminated. When a side meets one of the above victory conditions he is declared the winner and the computer will calculate the degree of victory. The degree of victory is based upon the number of enemy hits points eliminated and bonus points. The Soviet/Iraqi player will get bonus points for how fast he takes the 9 VPS and the USA/Iranian player will get bonus points for the number of VPS the Soviet/Iraqi player failed to take.

4.0 SCALE

4.1 Turn Scale: each game turn represents two (2) days of real time.

4.2 Map Scale: each map square is 28X28 kilometers or 784 square kilometers.

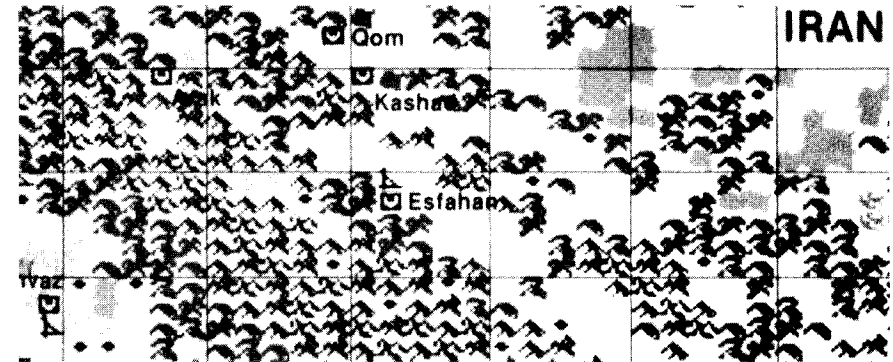
4.3 Unit Scale: there are three types of units: ground units, air units and naval units.

- Ground: each unit represents a body of troops ranging in size from a battalion to division, with their particular equipment.
- Air: each unit represents a squadron of approximately 10 to 24 aircraft.
- Naval: each unit represents a battlegroup of one or more ships.

5.0 THE MAP

The map extends: west to east from the Tigris and Euphrates Rivers to the eastern border of Iran; and, north to south, from the southern half of the Caspian Sea to the north coast of the Persian Gulf. Thus, most of the fighting in the campaign will take place across Iran, with naval combat in the Persian Gulf.

Although not visible on the map, the entire playing area is divided into 28X28 kilometer squares. In the lower right hand corner of the map two black sets of numbers are displayed. These numbers will indicate the location of the cursor and act as a reference point for you.



Portion of Strategic Map

The map is made up of several different terrain types:

Type	Atari	Apple	Commodore	Cost
rough desert	gold	green	yellow	3/6
desert	gold	green	yellow	2/4
rough	red	orange	red	3/8
airbase	*	*	*	2/3
city	*	*	*	2/3
victory point square	*	*	*	2/3
town	*	*	*	2/3
swamp	blue	blue	blue	4/8
oil rig	white	black	brown	2/3
seaport	blue	black	brown	2/3
mountains	red	orange	red	4/8
impassable mountains	black	purple	grey	-
ocean	blue	blue	blue	-
river	blue	blue	blue	-
bridge	blue	blue	blue	4/4
border	+	+	†	☆
clear	brown	black	brown	2/3

terrain Cost: The first number is the number of MP that it costs a non-armored unit to move into the square. The second number represents the MP cost for armored units.

color depends upon ownership: USA/Iranian=gold; USSR/Iraq=black.

color depends upon terrain beneath symbol. The border is gold in rough or desert; red in mountain and black in clear terrain.










+ same as the terrain type it is on.

6.0 STACKS

No individual units are shown on the map. Instead, the player will see flashing black squares with a hammer and sickle on them to represent, USSR & Iraqi units and flashing yellow squares with a star to indicate Iranian and Allied units. A square containing one or more units is called a STACK. There is no limit, to the number of units that a stack can contain. But the display window (see Section 7 below) can display only 19 units at a time, and it is impossible to give orders to units not displayed, so you should avoid having more than 19 units in a stack. **NOTE:** the Apple and C64 versions can display only 18 units.

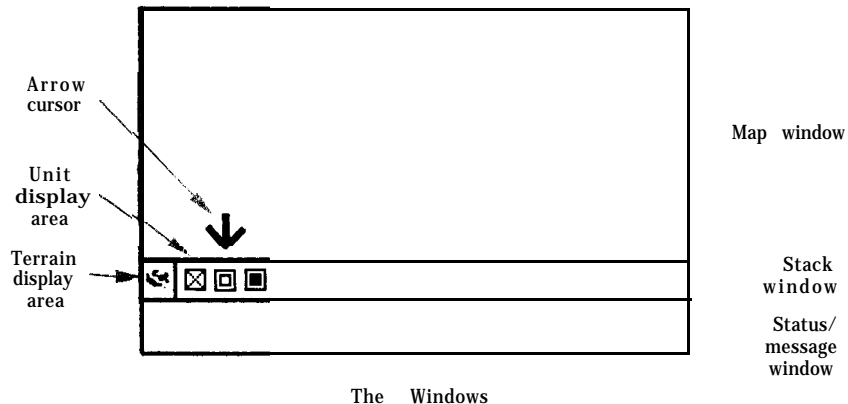
Again USA, Iran and their allied stacks are tinted yellow; Soviet and Iraqi stacks are tinted black.

Each player can examine his own stack by positioning the cursor over the stack and pressing the fire button. An enemy stack cannot be examined unless there is a friendly stack adjacent to it. A stack can contain different types of units. Each type has its own symbol:

	armored, mechanized		artillery
	engineer		air units
	marine		naval units, surface
	air defense		naval units, submarine
	infantry, airborne, airmobile, ranger, special forces		

7.0 WINDOWS

The computer's display screen is divided into three sections, called windows.



Map Window: The upper portion of the display is called the Map Window. See Section 5 for details.

Status/Message Window: The lower section is the Status/Message Window. It will display information on selected units and is also used by the player for entering orders.

Stack Window: Between the Map Window and the Status Window is the Stack Window, showing the terrain type the stack is currently occupying and all of the units comprising the stack.

NOTE: to examine a unit in the Stack Window, position the Arrow cursor over the unit and press the fire button.

8.0 SEQUENCE OF PLAY

A turn in Gulf **Strike** consists of a sequence of phases. To end a phase, press **START** (Atari), **ESC** (Apple), **F1** (Commodore), or **Q** (IBM).

A turn consists of three phases.

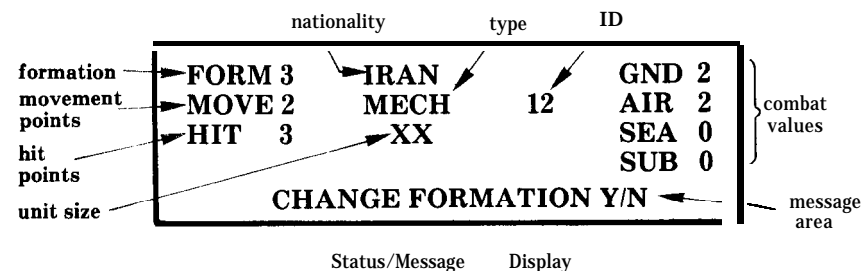
- 1) GROUND NAVAL MOVEMENT PHASE
 - 1.1 USA/Iran ground and naval units change formation and move.
 - 1.2 Soviet/Iraq ground and naval units change formation and move.
- 2) AIR MOVEMENT AND COMBAT PHASE
 - 2.1 -USA/Iran player creates an air mission.
 - The mission is launched.
 - Air strikes, surface strikes and Soviet/Iraq interception attacks are resolved.
 - The mission returns to base.
 - 2.2 USA/Iran player creates and launches another strike.
 - 2.3 When the USA/Iran player is finished launching strikes, the Soviet/Iraq player creates and launches his air missions.

3) GROUND/NAVAL COMBAT

The computer scans the map for adjacent opposing units and resolves combat between them.

9.0 GROUND UNITS

9.1 GROUND STATUS/MESSAGE WINDOW



FORM (formation): a number from 1 to 6 that describes the unit's current formation. See *Formation Effects Table* (page 10) for more information.

MOVE (movement points): displays the number of movement points (MP) remaining for the unit. As a unit moves or changes formation during a turn its movement points are reduced.

HIT (hit points): each unit has a set number of hit points (HP). If it suffers damage in combat, it will lose hit points. When a unit's hit points reach zero it is destroyed and removed from the map.

Nationality: the nationality of the unit.

Unit Type: there are several types of ground units, see Section 9.2 for details.

Unit Size: a unit is one of four sizes:

- II - BATTALION (BN): the smallest unit in **Gulf Strike**.
- III - REGIMENT (REG): usually composed of 3 battalions.
- X - BRIGADE (BDE): usually composed of 3 battalions.
- XX - DIVISION (DIV): usually composed of 3 brigades.

Combat Value: the unit's combat strength against ground (GND), air (AIR), naval (SEA), and submarine (SUB) units. The correct value is used against the appropriate target. When attacking ground units, the GND is used; against submarines, the SUB value is used, etc.

Message Area: displays prompts from the computer requesting input from the player.

9.2 UNIT TYPES

Airborne (ABN): a unit organized, equipped and trained for delivery to the battlefield by airdrop.

Air Defense (ADA): a unit organized, equipped and trained to defend against enemy aircraft.

Airmobile (AMB): a unit organized, equipped and trained to move about the battlefield in aircraft (usually helicopters).

Armor (ARM): a unit composed of armored fighting vehicles (AFVs); tanks.

Artillery (ART): a unit organized, equipped and trained to deliver indirect fire upon enemy targets.

Engineers (ENG): a unit organized, equipped and trained to carry out engineering functions on the battlefield.

Infantry (INF): a unit composed of foot soldiers.

Mechanized (MEC): a unit composed of infantry units equipped with Armored Personnel Carriers (APC) and supported by AFVs.

Marine (MAR): a unit organized, equipped and trained to conduct amphibious operations.

Marine Amphibious Brigade (MAB): a marine unit of brigade strength designed and equipped to conduct amphibious operations.

Marine Amphibious Unit (MAU): as for MAB except the unit is of less than brigade strength.

Ranger (Ranger): an elite airborne infantry force specially trained and organized to conduct decentralized and limited independent combat operations.

Special Forces (SF): a multi-purpose elite force specifically trained and equipped to provide a flexible response to various contingencies.

9.3 COMMAND AND CONTROL

Ground units move in one phase and fight in another, with the computer automatically handling all combat.

To move a unit, place the cursor over a friendly stack. Press the fire button. In the stack window the type of terrain the stack is occupying will first be displayed followed by a separate symbol for each unit in the stack. Using the joystick, move the arrow cursor over the unit symbol you want to examine or give orders to and press the fire button. All the data for that unit will be displayed in the status/message window. The computer will ask you if you want to change the unit's formation.

Use the joystick to highlight either YES or NO (whichever one you want to do) in the message area and press the fire button.

If you elected to change the unit's formation the computer will prompt you for the new formation (see Section 9.4). Toggle the joystick until the desired formation is displayed in the message area and press the fire button.

After the formation prompt, the computer will ask if you want to move the unit. Respond to the prompt in the same manner as for formation. **If you elect** to move the unit, blue flashing boxes will surround the unit, indicating the legal areas that the unit can move into if it has sufficient movement points. If you are moving a unit into a space already occupied by a friendly stack, the cost to enter is determined by the terrain in the space.

You also have the option of moving the entire stack of units. After you have finished examining and giving formation orders to the units in the stack, move the arrow cursor to the terrain display area and then press the fire button. The computer will ask if you want to move the whole stack. Movement is carried out in the same manner as for individual units. The Movement allowance of the stack is that of the *slowest* unit in the stack.

Units must be moved square by square. Using the joystick, move the cursor to a blue square. Press the fire button. A stack symbol will move to the new square. Repeat this procedure until the unit reaches its destination or runs out of movement points.

It is not possible to move onto an enemy stack, unless that stack is composed only of air units. If a stack moves onto an opposing stack composed only of air units, then all of the air units in that stack are considered destroyed. The color of the airbase changes to that of the conquering unit. The unit automatically ends its move there.

If you want to end a unit's movement before it runs out of movement points, position the cursor over the stack symbol and press the fire button. The computer will ask you to confirm the move. Toggle the joystick to indicate either YES or NO and press the fire button.

If you end your move on (not just move through) an enemy VPS or airbase, the square is captured and changes to your color (yellow for USA/Iran; black for USSR/Iraq).

To end the Movement phase, press the **START** key (Atari), the **ESC** key (Apple), the F1 key (Commodore), or the Q key (IBM).

NOTE: Airborne, Ranger and Special Forces units have a movement factor of 60 on the first turn of the game, simulating the delivery by airdrop of these units.

9.4 FORMATIONS

A ground unit can be in six different formations. Each formation has a different effect upon movement points (MP) usage, movement and combat effectiveness (see Formation Effects Table). The six formations are:

- 1. Move to Contact:** the middle ground between attack, defense and movement. The unit is not strong or weak in any area.
- 2. Hasty Assault:** this formation can be formed easily from the Travel (4) or Move to Contact (1) formation, but its combat multiple is less than a Deliberate Assault (3) formation, and it costs more to enter a square than Move to Contact (1).
- 3. Deliberate Assault:** a planned attack formation, which has the highest possible Combat Multiple.
- 4. Travel:** the fastest formation for movement, but it has a low Combat Multiple and leaves the unit vulnerable to attack.
- 5. Hasty Defense:** like Hasty Assault (2), very easy to change into. Most effectively used when the unit is suddenly threatened by an attack. The unit gets one column shift in its favor when attacked.
- 6. Deliberate Defense:** the unit is "dug in" and cannot move. The unit gets three column shifts in its favor when attacked.

FORMATION EFFECTS TABLE

Formation	Terrain Cost Multiple	MPs to Enter Formation	MPs to Leave Formation	Combat Multiple
1. Move to Contact	1	1	0	1
2. Hasty Assault	2	2	0	2
3. Deliberate Assault	4	4	2	3
4. Travel	0.25	1	1	0.25
5. Hasty Defense	2	2	1	1*
6. Deliberate Defense	†	4	1	1★

*: plus one column shift on the CRT
 †: unit cannot move while in this formation
 ★: plus three column shifts on the CRT

Terrain Cost Multiple: this is multiplied by the cost for entering a square, and deducted from the unit's Movement Points (MP) for that turn. Example: a unit in travel formation would only expend 1 MP to enter a clear terrain square, while a unit in Deliberate Assault formation would expend 8 MPs. Note that the cost to **move into** a clear square was 1 MP and not 0.5 MP as expected. It will always cost at least 1 full MP to move into any square.

The computer calculates the movement factors for airborne, ranger, special forces and airmobile units as if they are in Travel formation, moving on clear terrain. It does not, make any **difference what formation these units are really in** or what terrain type they are moving to, they always have a movement factor of 1.

MPs to Enter/Leave: a unit expends this number of MPs to enter or leave that formation. Example: it, costs 5 MPs to get into the Deliberate Defense Formation (6) from the Hasty Defense Formation (5); 1 MP to leave the old formation (5) and 4 MPs to get into the new one (6).

Combat Multiple: a unit's ground combat value is multiplied by the Combat Multiple. A unit in Travel formation has its combat strength cut to one-quarter, while a unit in Deliberate Assault formation has its combat strength trebled.

9.5 COMBAT

Combat takes place whenever two opposing stacks move adjacent to each other.

Because each square is 784 square kilometers, the player will not have the command and control to coordinate attacks on a tactical level. The computer will decide which friendly units will attack which enemy units. Of course the manner in which you assign units to stacks and how you maneuver them will have a great effect on the battle's outcome.

Combat is handled automatically by the computer during the Ground Combat Phase. A friendly stack adjacent to an enemy stack will attack and be attacked during this phase.

NOTE: the term attacker and defender is designated by the computer during the Ground Combat Phase, and does not refer to the current formation that a unit is in. However, units in formation 5 (Hasty Defense) or 6 (Deliberate Defense) will not attack, only defend.

Before the computer displays the result of ground and naval combat it will ask if you want the 'slow' results readout. If you select YES, the computer will pause after each combat result and wait for you to press the fire button before displaying the next readout. If you choose the fast results readout, the computer will automatically "scroll" through the combat results.

RANDOM FACTOR	Attacker-Defender Strength Comparison														
	1:4	1:3	1:2	1:1	2:1	3:1	4:1	5:1	6:1	7:1	8:1	9:1	10:1	11:1	12:1
1	3/0	2/0	2/0	2/0	1/0	1/0	1/0	1/1	1/1	1/1	1/1	0/1	0/1	0/1	0/1
2	2/0	2/0	2/0	1/0	1/0	1/0	1/0	1/1	1/1	1/1	1/1	0/1	0/1	0/2	0/3
3	2/0	2/0	1/0	1/0	1/0	1/0	1/1	1/1	1/1	1/1	0/1	0/1	1/2	0/2	0/3
4	2/0	2/0	1/0	1/0	1/0	1/0	1/1	1/1	1/1	0/1	1/2	1/2	0/2	1/3	0/4
5	2/0	1/0	1/0	1/0	1/0	1/1	1/1	1/1	0/1	1/2	1/2	0/2	1/3	0/3	0/4
6	1/0	1/0	1/0	1/0	1/1	1/1	1/1	0/1	0/1	1/2	0/2	0/3	0/3	0/3	0/4
7	1/0	1/0	1/0	1/1	1/1	1/1	1/1	0/1	0/1	1/2	0/2	0/3	0/3	0/4	0/5
8	1/0	1/0	1/1	1/1	1/1	0/1	0/1	1/2	0/2	0/3	1/4	0/4	0/4	0/4	0/5
9	1/0	1/1	1/1	1/1	0/1	0/1	1/2	0/2	0/3	0/3	1/4	0/4	0/5	0/5	0/6
10	1/1	1/1	1/1	0/1	1/2	1/2	0/2	1/3	1/4	1/4	0/4	0/5	0/5	0/6	0/6

GROUND COMBAT RESOLUTION TABLE (CRT)

The first number is the number of hits the attacking stack takes and the second number is the number of hits the defending stack takes. All hits are allocated evenly through all units within the stack.

The player need not refer to the Combat Resolution Table (CRT) during the game, the computer will calculate all combat. It is provided to give the players some guidelines when planning their strategies. Note that some columns on the CRT are odds ratios, while others are combat differentials.

You should be aware of what additional modifiers affect the battle's outcome. The CRT modifiers are:

Formation: see the Formation Effects Table (9.4) for the combat multiple. If the defender is in Hasty Defense formation it receives a one column shift in its favor. If it is in Deliberate Defense formation, it receives a three column shift. Only the most favorable shift is used.

Terrain: a unit attacking from a bridge square has its combat strength halved.

Armor: if an attacking or defending stack has an armor or mechanized unit the CRT is shifted two columns in its favor. If both sides have armor, the shifts will cancel each other out.

Artillery: if the defender has an artillery unit, the CRT is shifted two columns in its favor. The attacker, however, gets an even greater benefit. For each artillery unit the attacker has, he receives a two added to his random factor on the CRT.

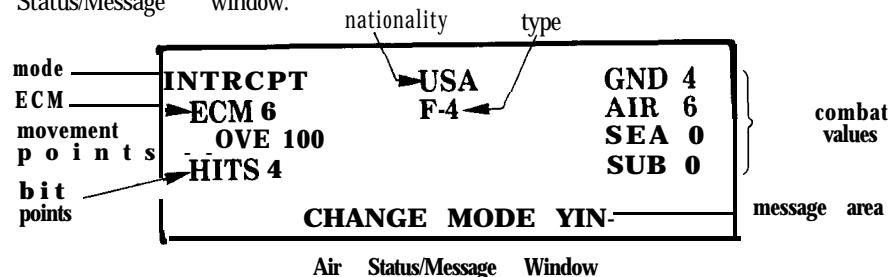
Engineers: if an attacking stack has any engineer units, the CRT is shifted one column in the attacker's favor.

NOTE: on the CRT, the attacker's favor is a shift to the right and the defender's favor is a shift to the left.

10.0 AIR UNITS

10.1 AIR STATUS/MESSAGE WINDOW

The Air Status/Message window is very similar to the Ground Status/Message window.



Mode: the current mode the air unit is in. See section 10.3.

ECM: electronic counter measures. ECM is used to jam enemy electronic targeting devices used by missiles. The higher the number the better. See Section 10.4.

Type: indicates what type of aircraft the air unit is composed of (see Section 10.2).

Nationality: the nation the air unit belongs to.

Movement points: the total number of squares that an air unit can move in a turn. Air units are not affected by terrain features.

Hit points: the number of hit points remaining to the air unit. When a unit's hit points reach zero, the unit is destroyed.

Combat values: see Section 10.4.

Message area: the area of the window where the computer displays status messages and prompts.

10.2 UNIT TYPES

Air units are rated differently for each of the combat missions. Each air unit represents one air squadron.

Multi-Role: AV-8B, F-4, F-15, F-111, Mirage, Yak-36 and MiG-23 aircraft. These air units have a good AIR and GND rating, although examination of individual air units will show one rating is greater than the other. These units can be used in almost any role, and, when at the same air base, create a varied and unpredictable threat for your opponent.

Interceptors: Hunter, Lightning (LTNG), and MiG-21 aircraft. These air units are predominantly air-to-air combat fighters with a very limited bombardment capability.

Surface Strike: A-4, II-28 Su-20, A-10, AH-1, Su-24, Jaguar, and Tu-22 aircraft. The major use of these units is surface strikes. Some units have a poor AIR rating, and the attack helicopters (AH-1) have a limited range requiring them to be based near their targets.

Multi-Strike: A-6 and A-7 aircraft. These are air units characterized by their good GND and SEA ratings. They are usually based on an aircraft carrier.

Subsurface Strike: SH-3, P-3 and S-3 aircraft. These units can attack detected submarines. The P-3 is a long-range, land-based plane. The P-3 and S-3 have a secondary anti-ship missile capability.

Others: E-6 aircraft. The E-6 is an electronic counter measures (ECM) air unit. When stacked with other air units, its high ECM rating can benefit the entire stack.

10.3 MODES

Air modes are used to determine each aircraft's function and mission during a turn. There are three modes: Interception, Air Strike and Surface Strike. During the Air Movement and Combat Phase the player assigns aircraft to one of these modes. At the start of the game all air units with an Air Combat Value will be in the Interceptor mode, the rest are in the Surface Strike mode.

Interception: units in this mode may not be sent out on missions, but are prepared to respond to enemy air movement. In this mode, their range will cover the entire map. When enemy air units on a mission are detected by the player's radar, air units in interception mode automatically take off and attempt to attack the enemy air units. The number of interceptors dispatched varies, but is roughly the same as the number of enemy units in the mission. A given unit may fly only three interceptions per Air Move and Combat Phase. If an enemy flight is detected, but there are no friendly interceptors remaining to launch, the enemy will carry out its mission unmolested. An air unit cannot fly both an attack mission and interception during the same turn. Even if after returning from an attack mission, and its mode is changed to interception, the computer will not use it in this mode until the next turn.

Air Strike: air units in this mode are used as escort cover for air units in the Surface Strike mode. When enemy interceptors attack the mission air units they are first engaged by the air units in Air Strike mode. Only when all of the air units in Air Strike mode are eliminated, are the air units in the Surface Strike mode attacked by the enemy interceptors.

Surface Strike: Air units in this mode are allowed to attack surface units: ground units, naval units and airbases. If the unit has a SUB combat value, it can attack submarine units. Air strikes can damage ground units, but cannot destroy them. No matter how much damage an airstrike inflicts on a ground unit, that unit's hit points will never go below 1. This also holds true for air units attacked while on the ground.

NOTE: only air units in Air Strike and Surface Strike mode can be used to form an air mission. Units with no Air combat value will always be in surface strike mode.

10.4 MOVEMENT AND COMBAT

Movement and combat takes place at the same time. The player forms missions to attack enemy units. A mission consists of at least one air unit from a base. Missions cannot be composed of air units from different bases. An air unit can fly a maximum of three missions per turn. Carrier-based air units only fly a single mission per turn.

To create a mission, place the cursor over a stack that contains air units and press the fire button. If necessary, set the units to the desired mode for the mission. Remember that air units in interception mode cannot be used to form a mission.

Position the arrow cursor over the stack's terrain display area and press the fire button. The computer will ask you if you want to create a mission. Respond with YES and position the arrow cursor over an air unit, if the unit is in the proper mode the computer will ask you if you want to use the air unit for your mission. Toggle the joystick to either YES or NO.

Once you have selected all of the air units for the mission, move the arrow cursor back to the terrain display area and press the fire button. The computer will then prompt you for the mission target. To assign a target for the mission, position the cursor over the enemy stack and press the fire button. Keep in mind that the range of the mission is limited to one-half the range of the slowest air unit.

If after launching an air mission you find that the air units do not have enough movement points to reach an enemy stack, position the cursor over any empty square and the mission will be allowed to return to base.

NOTE: the mission may be intercepted by enemy interceptors either on the way out or back from the base.

The computer will automatically carry out the mission. While flying the mission, there is a chance that the enemy will attempt to intercept. The enemy interceptors will first attack your units in Air Strike mode. Aircraft damaged during an interception dogfight will automatically return to base. There is also a chance that the target stack will detect an incoming air strike and respond with its own anti-aircraft fire. Each unit in the stack with an Air Combat Value (AIR) (see Section 9.1) may fire at the attacking air units.

If the target square contains more than one enemy unit, the computer will ask you to select one of the enemy units as the target for each attacking air unit. Toggle the joystick to move the arrow cursor over the desired target unit and press the fire button. Do the same for each attacking air unit. If the target stack contains units with an Air Combat Value, i.e. Air Defense ground units, they may respond with anti-aircraft fire against your air units before and after the strike is over.

When performing a ground strike on ground or naval units, the air unit uses its GND value. If the target is a submarine unit, its SUB value is used. If the air unit has no SUB value it cannot attack submarine units. The computer takes the appropriate air attack value and subtracts from it a random number from 1 to 10. A zero or negative result is a miss. If the result is 1-3, one hit point is subtracted from the target unit's hit points. If the result is greater than 3, two points are subtracted from the target unit's hit points.

Air to air combat is more complicated. First, the target air mission units are examined to find the best ECM rating. The attacking air unit selects one enemy air unit as its target. The computer takes the attacker's air combat value and subtracts it from a random number from 1 to 10. If the result is negative, the unit failed to inflict damage on the target. If the result is positive, the computer takes the target mission's best ECM value and subtracts it from a random number from 1-10 to obtain the ECM success value. If this value is negative, it is set to zero. The computer then takes the result of the first subtraction and subtracts from it the ECM success value. A negative result indicates no damage was inflicted. A positive number will cause the computer to take this result, divide it by two, round to nearest whole number, and subtract this value from the target unit's hit points. This same calculation is also used in determining hits from ground anti-aircraft fire.

After the attack, the mission's air units will return to base. If they were not intercepted on their flight to the target, there is a chance that they could be intercepted by enemy interceptors and/or fired upon by ground anti-aircraft units.

The player may choose to have the mission's air units return to their original base, or another friendly base within range. Any air units that aborted their mission will automatically return to its original base, movement points will still be deducted from them, but less than the aircraft that completed the mission. Carrier-based air units are automatically returned to their carrier.

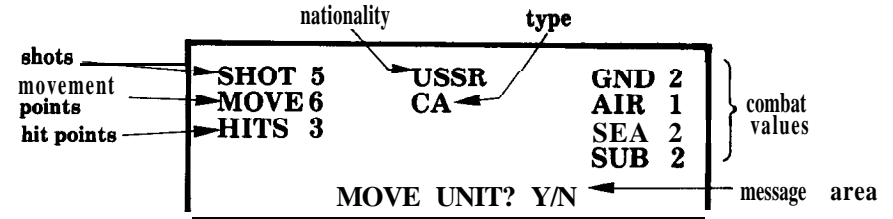
NOTE: land-based aircraft may not be based on aircraft carriers and vice versa.

Air Superiority missions: sometimes it is a good idea to send your fighters out in an attempt to draw out and destroy the enemy's interceptors. This is done in the normal manner as a ground attack mission, except the target square should not contain an enemy stack. The target square should be at least a quarter of your air unit's range distance from its base. The air units must be in the Air Strike mode.

When the mission's air units land, you may create and fly another mission, Movement Points and the three mission limit permitting. To end the Air Phase press the **START** key (Atari), the **ESC** key (Apple), the **F1** key (Commodore), or the **Q** key (IBM).

11.0 NAVAL UNITS

11.1 STATUS/MESSAGE WINDOW



The naval Status/Message window is very similar to the ground Status/Message window (see Section 9.1). The only value not covered in Section 9.1 concerns the SHOT value: the total number of anti-ship missile salvos with the sea unit.

On naval units, the GND combat value represents the unit's guns, SEA its anti-ship missiles and SUB its torpedoes, surface to subsurface missiles and depth charges.

A naval surface unit will attack an adjacent enemy ground unit with its GND combat value. It will attack an adjacent enemy surface unit with either its SEA or GND combat value. Adjacent enemy submarine units will only be attacked with the SUB value.

A submarine unit attacks adjacent enemy units in the same manner as surface units. But if it does not have a GND or SEA combat value it will use its SUB value (i.e. torpedoes and subsurface to surface missiles) instead.

Naval combat uses the same procedure as air to air combat.

11.2 UNIT TYPES

There are several different naval unit types. Each type has its own capabilities. Each unit represents a single ship. All of these units fall into three major categories.

Surface Action Units: these units have varying GND, AIR, SEA and SUB capabilities and are most vulnerable to air and submarine naval units.

- BB -Battleship
- CA -Conventional Cruiser
- CG -Guided Missile Cruiser
- CGN -Nuclear Guided Missile Cruiser
- co -Corvette
- DD -Destroyer
- DDG -Guided Missile Destroyer
- FAC -Fast Attack Craft
- FF -Frigate
- MCM -Mine Countermeasures Ship

Aircraft Carriers: surface units with the ability to sortie with specially designated air units. These units are particularly potent due the increased offensive strike range provided by the aircraft.

c v -Conventional Aircraft Carrier
CVN -Nuclear Aircraft Carrier
CVH -Helicopter Carrier

Submarines: the primary purpose of these units is to inflict as much damage as possible on enemy units, or at least to threaten such damage. They are most vulnerable to air units and other enemy submarines.

ss -Conventional Submarine
SSGN -Guided Missile Submarine
SSN -Nuclear Submarine

11.3 COMMAND AND CONTROL

Movement and combat is handled in the same manner as ground combat (see Section 9.1). However, naval units are allowed to attack ground units adjacent to them along the coast.

Unlike ground units, it is not possible to move a stuck of naval units. You must move them unit by unit.

Air units on aircraft carriers are sent out on missions during the Air Movement and Combat Phase.

12.0 SAVE GAME

At the end of each turn, the computer will ask if you want to save the game. If you choose YES, the computer will prompt you to insert a formatted diskette. The game will overwrite a previously saved **Gulf Strike** game already on that disk. To format a disk, consult the owner's manual for your computer. We strongly suggest having a disk available before the game begins.

When prompted, remove the game disk from the disk drive and replace it with a formatted diskette. Note that the Save Game routine will overwrite the previous saved game already on the formatted disk. Press the fire button; the game will be saved to disk. While saving, the computer monitor screen will display the message "SAVING GAME, PLEASE STAND BY".

After the game has been saved, the computer will prompt you to put the game disk back into the disk drive and the game will be resumed.

13.0 DESIGNER'S NOTES

13.1 HELICOPTERS

We know that helicopters can land almost anywhere, but because of memory problems we have been forced to restrict helicopters to airbases. Besides, have you ever tried to maintain an attack helicopter in the middle of the desert?

While it appears that the helicopters in an Airmobile unit can land anywhere, this is not the case. It is assumed that the transport helicopters that carry the airmobile unit are located on an airbase and fly from the base, to the airmobile unit's location, pick them up, transport them to their destination and then return to the nearest friendly base.

13.2 ABORTED AIR MISSIONS

If an air mission is aborted, (i.e. it took a hit either from enemy interception or ground anti-aircraft fire) it will return to its base. Because it did not complete the entire mission, fewer movement points will be deducted from it than from the other units that completed the mission.

13.3 STACK MOVE

In stack move, the worst movement factor and the worst formation is used to determine the movement points for the stack. Note that these factors are not necessarily taken from the same unit. Hence, a stack's MPs could be **less than** the slowest unit in the stack.

13.4 AIRMOBILE UNITS

Air-mobile units can move and land anywhere. They fly from one point to another and so terrain features do not affect their movement points.

NOTE: even though it is possible for an airmobile unit to end its turn on a sea square, it is assumed that the unit is still in the air and that it will continue its move on the next turn. It is possible that an adjacent enemy naval unit could attack the unit.

13.5 COMBAT

In the Combat Phase the computer scans the map to locate all enemy units in contact with each other. The computer makes a list of the locations of each of these combat situations and then starts the combat resolution phase. The computer resolves each combat in turn for all ground units on the list. If the computer encounters a combat situation that involves a naval unit it will display the location coordinates of the combat, but skip on to the next ground combat situation. When all of the ground combat situations have been resolved it will then go back and resolve the naval actions, ship by ship.

13.6 TRANSFERRING AIR UNITS FROM BASE TO BASE

Sometimes it is a good idea to move your air units from airbase to airbase. The best way to do this is to first create an air mission. When the computer asks you for the target, select the airbase that the mission was launched from. The computer will then come back with "Select Base". Move your air units to any friendly base that is within their MP range.

By using this method you have gained a greater radius that you can move your air units in. As an example, a MiG-23 has 40 MPs. Its normal max. attack range is 20 squares. But if you select its own base as target, you have just expanded its range to 38 squares: the distance to target 1, to return 1, total mission distance=2. Take 2 from the MiG-23's 40 MPs and you have 38 MPs remaining to move the units to a new base.

13.7 GARRISON UNITS

To protect airfields the USSR/Iraqi player has non-moving garrison units. In addition to these garrison units the computer will also leave a garrison unit in every VPS the USSR/Iraqi side takes when playing in the single player mode. This has been done to make the single player game more challenging and to give the feeling of supply lines for the USSR/Iraqi player.

13.8 MOVEMENT ONTO VPS

When playing the game it appears that naval units can move onto land and VPS land units can move onto sea VPS. These units are not really moving onto these squares, but are considered to be controlling them from the nearest appropriate square. But for combat purposes the units are counted as being on the VPS.

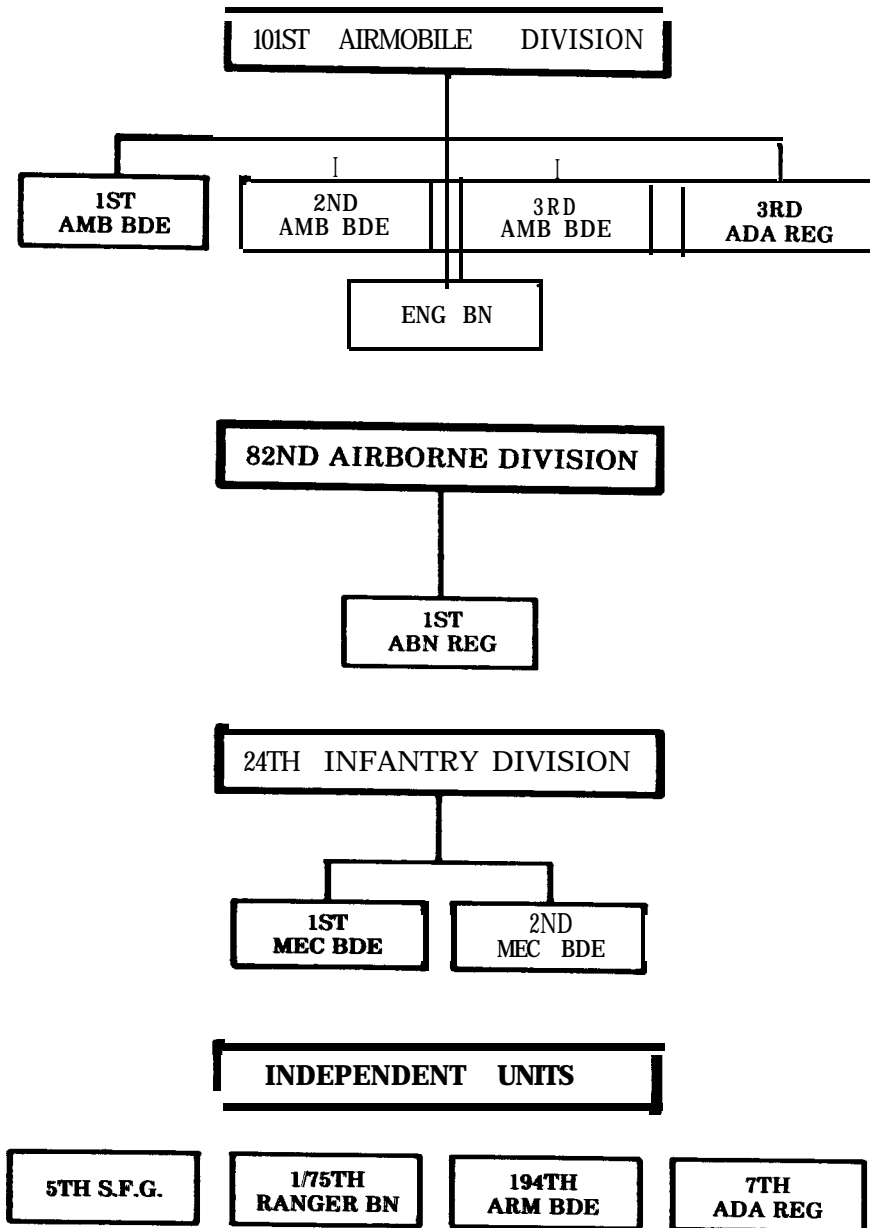
13.9 AIRBORNE,, RANGER AND SPECIAL FORCES UNITS

Because of their elite status and general lack of heavy equipment these units are allowed to ignore terrain effects and move at a steady rate of one MP per square. They can even move across the open sea, but let's assume they are using aircraft, boats or some other such vehicle.

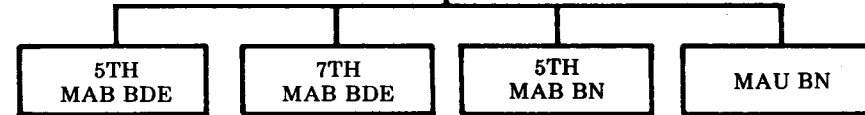
14.0 ORDERS OF BATTLE

U.S.A.

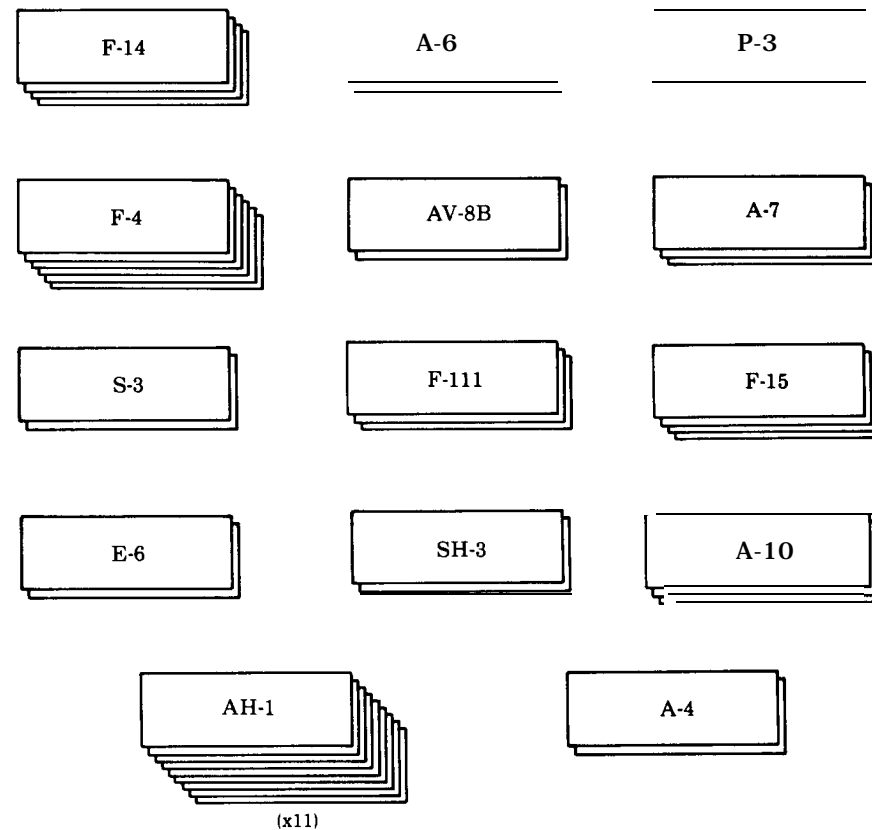
GROUND UNITS



MARINES



AIR UNITS

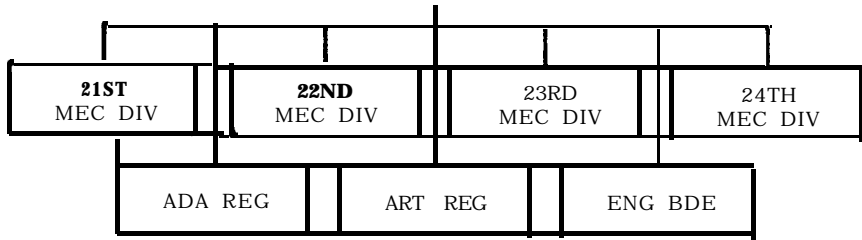


NAVAL GROUPS

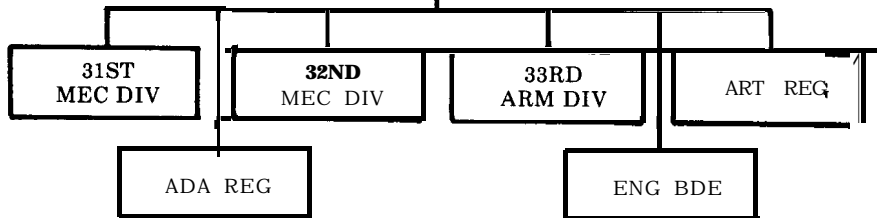
- 1-Battleship
- 1-Nuclear Aircraft Carrier
- 1-Conventional Aircraft Carrier
- 3-Nuclear Submarines
- 1-Destroyer

**U.S.S.R.
GROUND UNITS**

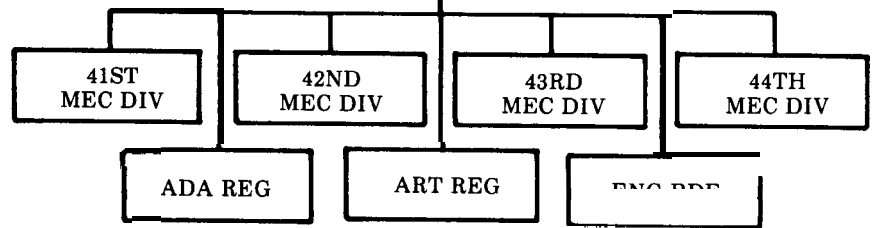
1ST TURKESTAN ARMY



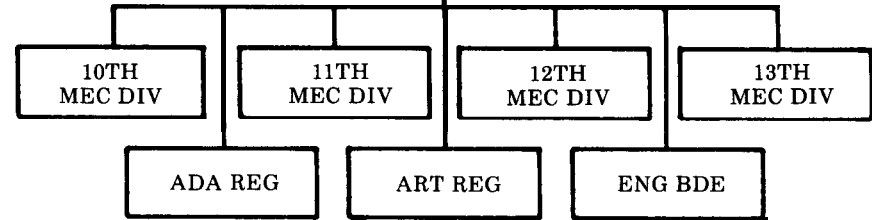
2ND TURKESTAN ARMY



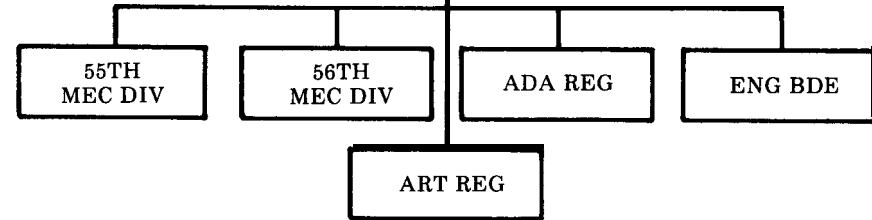
4TH ARMY



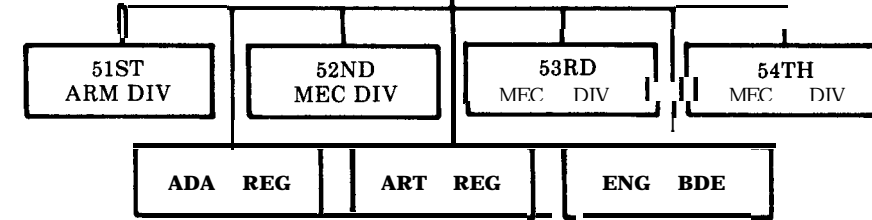
7TH ARMY



AFGHANISTAN ARMY I

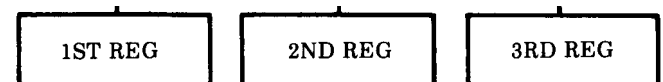


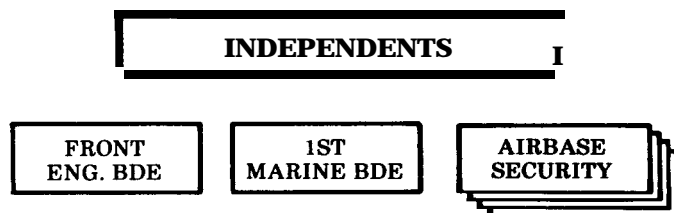
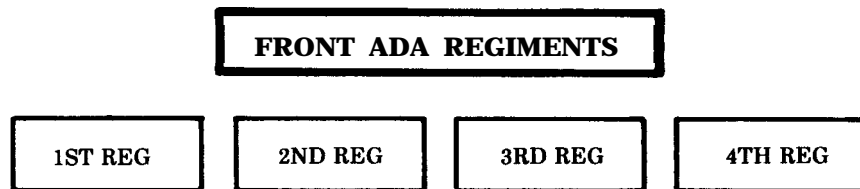
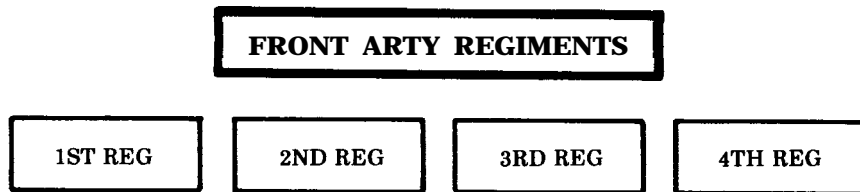
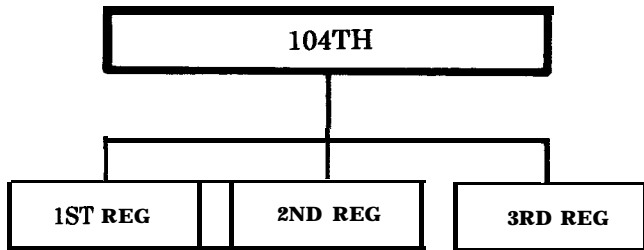
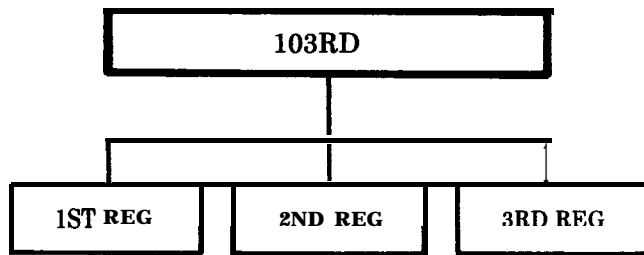
NORTH CAUCASUS ARMY



AIRBORNE DIVISIONS

102ND





GULF STRIKE[®]

IBM RULES ADDENDUM

The IBM version of Gulf Strike has been expanded and modified. Instead of a joystick, a variety of commands are used to command your forces.

This addendum supplements and changes the rules. It is organized just like the rulebook; that is, the section on Ground Units is number 9.0 in the regular and addendum rules. Where the rules contradict each other, the IBM version takes precedent.

1.4 IBM@ DISK LOADING INSTRUCTIONS

■ The IBM version of **Gulf Strike** is a total rewrite of the original. The orders of battle and the map have been preserved, but **all** programs have been completely redesigned by expanding some sections, such as the air combat **phase**, to include aspects of the boardgame, or to add new rules such as the difficulty ratings. These rules are on this four-page insert.

■ Turn on your IBM and put your DOS disk in drive A. At the **A:** prompt, replace it with the game disk and type **gs**. Press the **RETURN** key. After the title page appears, there will be a series of questions:

1. Specify monitor type.
2. Two player, solitaire (default) or saved game? (Default means that pressing the **RETURN** key automatically selects the solitaire game.)
3. If playing a new game, you'll be asked to pick a difficulty level. The difficulty level affects how much you know of enemy units. At Difficulty **1**, **you can** identify the units in an enemy stack anywhere on the map. At Difficulty 2 or 3, you must have friendly units adjacent in order to make an identification. Higher difficulty levels will increase the chance of being intercepted during air missions.

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5.0 THE MAP

The symbol for each unit is different, but can be recognized by using the I/dentify command as explained below. Use the H/elp command to show all terrain types.

6.0 STACKS

The **symbol** for each unit is different, but can be recognized **by** using the I/dentify command as explained below. Use the H/elp command to show all terrain types.

9.0 GROUND UNITS

A completely different set of keyboard commands are used to play **Gulf Strike** on the IBM. The cursor (the flashing box on the map) is moved by using the keypad instead of the joystick. (The numbers at the top of the keyboard can also be used.) A list of commands are given below. Press the letter before the slash symbol (I) to use that command (Example: press the **M** key to enter a M/ovement order). If more information is needed, the game will display **prompts** and ask for a response.

Ground units may move onto a stack composed solely of enemy naval units. The naval units are displaced to the nearest open ocean square at no cost.

(Ins) or Zero key

This command selects a stack for movement or formation change orders. When a stack has been selected, the following sub-commands-M/ove, F/ormation and I/dentify-can be used:

M/ove the stack

You have the choice of moving a single unit, the entire stack, or portion of that stack. Follow the prompts as they appear, and when the unit(s) are ready to move, the map will appear, and the stack will be surrounded by the number key to press so as to enter that square. Only legal moves will be shown. Press the 5 key to end a move. A unit may be moved any number of times during its turn, so long as it has enough movement points remaining.

Unlike the other versions, the IBM will not show the number of movement points a unit has. You must stop the move and use the I/dentify command to do that. You will also not be able to cancel a move; once a unit has entered a square, it cannot be changed.

F/ormation change

The formation screen will appear and you can make changes to any units in the stack. Formation changes are limited only by a unit's remaining movement points. The cost to change formations corresponds to the chart on page 10, with the cost to leave its current formation added.

I/dentify the stack

This shows a variety of information on the stack the cursor is on. This corresponds to the Ground Status/Message Window on page 7 of the rulebook.

Other commands to use when no stack has been selected are:

G/o to a city

Used for moving quickly across the map. A window will appear displaying ten cities. See the rulebook or tactical map handout to find out where they are located.

H/elp screens

Three screens show terrain features, and commands for the current phase (i.e. ground or air phases).

I/dentify the stack

Same as the I/dentify command above.

M/aster Map

Pressing the **M** key cycles through the two view magnifications. The 2x doubles the size of the map you can see at one time (20 squares north/south by 40 squares east/west); the 4x expands the view to show 56 squares east/west by 40 squares north/south.

The Master maps are for viewing only. It cannot be scrolled, nor can units move when it appears.

N/ext unit

The cursor will automatically go to the next unit that has not received orders.

S/ound

This is a toggle switch that turns the sound on and off. No prompt will appear when you use this command, but the status of sound can be checked. When attempting an illegal move, the computer will make a sound if the switch is turned on.

Vulnerable

This displays a list of friendly airfields that are not occupied by friendly ground units. This information is useful for defending these bases from airborne assault.

9.4 FORMATIONS

Armor cannot use the Deliberate Defense (DD) formation. Other units can use DD only if an engineer unit is present, or if the unit is in a city. All units in a square must be in DD for the DD command to be effective. Otherwise, any units in DD will be considered to be in Hasty Defense (HD) formation.

Movement costs: diagonal movement costs 1.4 times (rounded up) that for orthogonal movement (i.e. north, south, east or west).

9.5 COMBAT

At the end of the game turn, a list of all units which took hits or were destroyed will be shown. A graph will be drawn, displaying the number of Victory Point Cities held each turn. The US line is colored green, the Soviets red. A marker on the right side indicates the 9 VPs necessary for a Soviet win. Two lines also trace the cumulative number of hits sustained by each side.

10.0 AIR UNITS

The Air Movement and Combat Phase is handled differently than the Ground and Naval Movement Phase. The 2x Master Map is displayed, and all missions are flown from it.

When the phase begins, move the cursor to an airport or use the **N/next** command to find the next airbase with readied aircraft. Press **[INS]** to select a base from which to create a mission. The screen will show all the aircraft at the chosen base. Your first option is to change each plane's mode. The current mode for each air unit will flash. To change the mode, press **I/ntercept**, **A/ir** or **Surface**. Press **[ENTER]** to keep the current mode. Air mode changes never cost movement points.

After mode changes are finished, choose the planes for a mission. You can either send **A/all** the planes from the base, or create a subset of those planes. To create a subset, each plane will flash. Press the **X** key to select it (its line will turn green) or any other key to exclude it (the line will turn grey).

When mission selection is done, move the cursor to the target and press the **5** key. As the mission flies to and from the target, enemy planes will attempt to intercept it and, if they succeed, the interception screen will appear. The top third of the screen shows attacking surface strike planes. The middle third of the screen shows friendly escorts (if present). The bottom third shows enemy interceptors.

As each interceptor or escort attacks, it will flash, as will the plane under attack. Results will appear at the bottom of the screen. If a plane sustains a hit, it turns grey, indicating an aborted mission. If a plane is shot down, it will turn yellow/brown. A Flak screen will appear if there are ground defenses firing. This shows the planes fired on and whether they are eliminated. Finally, the surviving surface strike force is shown flying over its targets. For each plane, select a target by pressing the letter under an enemy unit.

Distances are calculated as actual point-to-point distances, rounded up.

After combat, a prompt will ask if you want the mission to return to its original airbase. Answering **(Y)es** does it automatically; you don't have to move the cursor. To return the mission another airbase, move the cursor there and press the **5** key. You may then fly another mission from that base.

At the end of your air phase, you may reassign any planes that have not flown three missions to intercept status.

Air bases have a modest repair capacity. If an air unit does not fly a mission, it will have 1 hit point restored. If it flies one mission, there will be a percentage chance that the plane unit will be repaired. Up to 10 planes on each side may be repaired each turn.

11.0 NAVAL UNITS

Naval movement and combat is handled in the same manner as described in the rulebook with the following exceptions:

If a carrier is reduced to two hit points, its planes will only be able to fly two missions. If reduced to one hit point, its planes will only fly one mission.

Some ships also carry ship-to-ship missiles (SSM). Each turn that a ship is not involved in other bombardment, it will seek a target for its missiles. Missiles have a range of 5.

Naval stack movement is allowed.

13.0 DESIGNER'S NOTES

13.6 TRANSFERRING AIR UNITS FROM BASE TO BASE

There are two ways of moving units from one base to another. If the new base is within range, you can simply fly from one base to the other. If the base is not within range, then fly an air superiority mission towards the new base. After the mission, you'll get the prompt which asks whether you want to return to the base of origin.

13.8 MOVEMENT ONTO VPS

Ground units may move into a square occupied solely by enemy naval units. Those naval units move to a nearby ocean square. Thus, naval units cannot hold Victory Point Squares against ground forces. (Soviet airborne forces in particular can be important in securing early gains.)

EFFECTS OF DIFFICULTY LEVEL

At the beginning of the game, each side chooses its difficulty level, affecting the initial setup and determining how the rules are interpreted.

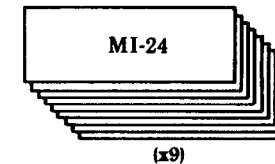
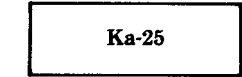
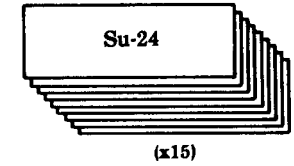
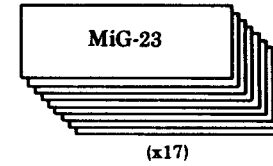
Feature	Friendly	Difficulty	Level
Identify stacks	1	2	3
VP distance used by computer for calculations	A	B	C
Distance searched for moves	5	8	10
Initial mode of enemy troops	3	4	5
Targeting of air strikes	MC	HA	DA
Will airborne seek out undefended airfields?	c	D	D
Will airborne seek out uncontested VP's	no	yes	yes
Will airborne seek out uncontested VP's	no	yes	yes

- Key:
- (A) Any stack may be identified
 - (B) Friendly unit must be adjacent to enemy stack before it can be identified
 - (C) Air attacks will be made on random targets
 - (D) Attacker can select specific targets
 - (DA) Deliberate Assault
 - (HA) Hasty Assault
 - (MC) Move to Combat

Air Combat Calculations Based Upon Attacker's Difficulty Level

The Percentage Chance..	Friendly	Difficulty	Level
of interception	1	2	3
if intercepted, chance of pre-attack flak	40	50	66
if not intercepted, chance of post-attack flak	80	90	95
if not intercepted, chance of post-attack intercept	60	70	80
	10	20	30

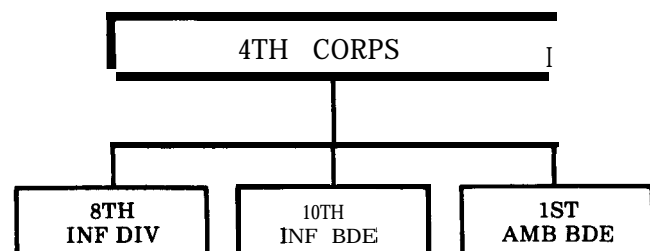
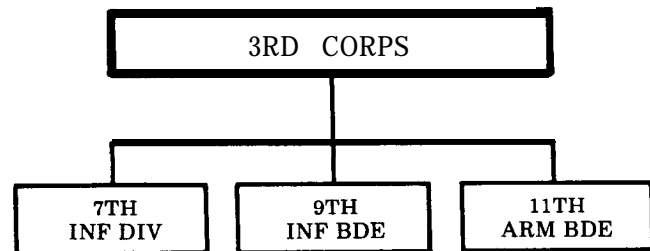
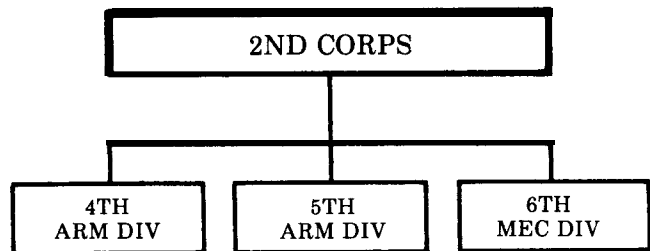
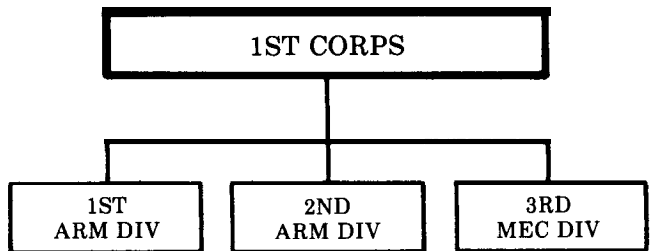
AIR



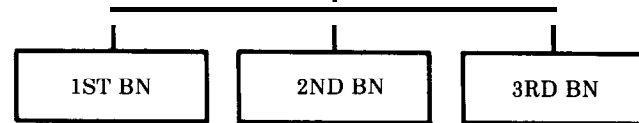
NAVAL GROUPS

- 1-Helicopter Carrier
- P-Conventional Cruisers
- 1-Guided Missile Cruiser
- 1-Nuclear Guided Missile Cruiser
- 1-Guided Missile Destroyer
- 2-Conventional Submarines
- 2-Nuclear Submarines
- 3-Guided Missile Submarines
- 1-Mine Countermeasures Ship

**IRAN
GROUND UNITS**



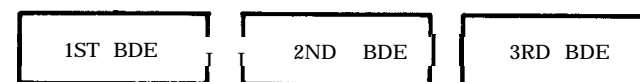
MARINES



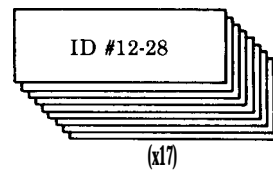
ADA BRIGADES



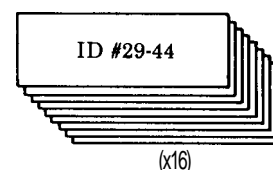
ARTILLERY BRIGADES



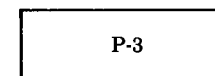
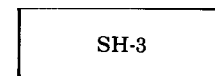
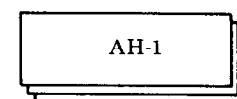
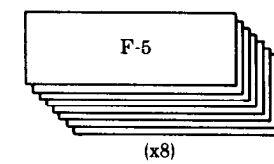
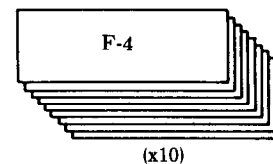
MILITIA DIVISIONS



MILITIA BRIGADES



AIR UNITS

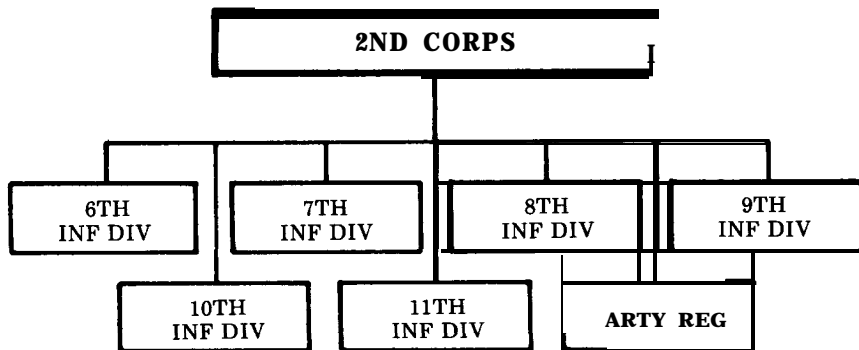
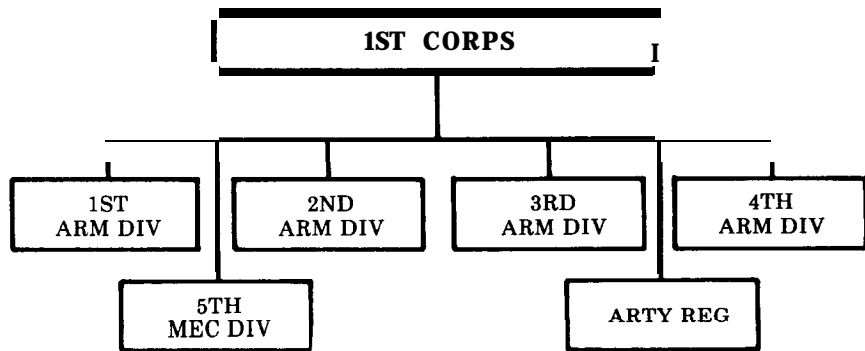


NAVAL GROUPS

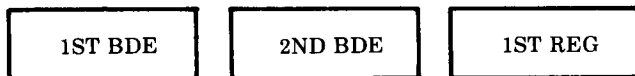
- 1 -Corvette
- 1 -Frigate
- 1 -Destroyer
- 1-Fast Attack Craft

IRAQ

GROUND UNITS



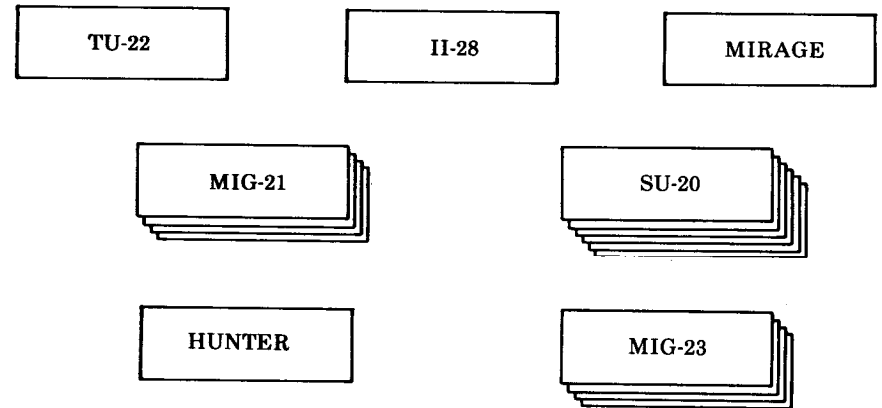
ADA UNITS



INDEPENDENT



AIR UNITS



NAVAL GROUPS 3-Fast Attack Crafts



Soviet T-62
Main Battle Tank

OTHER NATIONS

GROUND

UNITED KINGDOM

1RW
ABN BN

FRANCE

R.P.I.M.
ABN BN

UAE

GUARDS
BDE

1ST
INF BDE

2ND
INF BDE

ARTILLERY
BDE

SAUDI ARABIA

GUARDS
BDE

2ND
ARM BDE

4TH
MECH BDE

ARTILLERY
BDE

KUWAIT

3RD
MECH BDE

OMAN

GUARDS
BN

1ST
INF BDE

2ND
INF BDE

QATAR

GUARD BN

INF BDE

AIR

SAUDI ARABIA

F-5

LIGHTNING

KUWAIT

A-4

MIRAGE

OMAN

HUNTER

JAGUAR

QATAR

MIRAGE

NAVAL GROUPS

BRITISH

1-Nuclear Submarine

SAUDI ARABIA

1-Corvette
1-Frigate

FRANCE

1-Destroyer
1-Mine Countermeasures Ship

15.0 SELECTED WEAPONS SYSTEMS

15.1 AIRCRAFT



A-4 Skyhawk

Single-seat carrier-based light attack bomber
Made by: McDonnell Douglas, USA
User: USA, Kuwait
Max Speed: 645mph
Armament: Bombs, rockets, missiles, guns
GND:3 A I R : 2 SEA:0 ECM:4 H P : 3 MP:50



A-6 Intruder

Two-seat carrier-based strike and reconnaissance aircraft
Made by: Grumman, USA
User: USA
Max Speed: 643mph
Armament: Bombs, missiles
GND:5 A I R : 1 SEA:7 SUB:0 ECM:4 HP:3 MP:60



A-7 Corsair

Single-seat light attack aircraft
Made by: Vaught, USA
User: USA
Max Speed: 698mph
Armament: Bombs, rockets, missiles, guns
GND:5 A I R : 1 SEA:6 SUB:0 ECM:4 HP:3 MP:40



A-10 Thunderbolt

Single-seat close support aircraft
Made by: Fairchild, USA
User: USA
Max Speed: 449mph
Armament: One 30mm multi-barrel gun and up to 16,000lb of bombs, rockets, missiles
GND:7 A I R : 0 SEA:0 SUB:0 ECM:4 HP:3 MP:40



AH-1 HueyCobra

Two-seat ground attack helicopter
Made by: Bell, USA
User: USA, Iran
Max Speed: 141mph
Armament: Multi-barrel cannon, grenade launcher, minigun, missiles, rockets
GND:5 A I R : 0 SEA:0 ECM:4 HP:3 MP:20



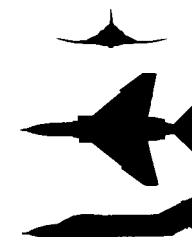
AV-8 Harrier

Single-seat V/STOL strike and reconnaissance aircraft
Made by: British Aerospace, UK and McDonnell Douglas, USA
User: USA
Max Speed: 737mph
Armament: 30mm cannon, bombs, missiles, rockets, gun pods
GND:3 A I R : 5 SEA:0 SUB:0 ECM:4 HP:3 MP:20



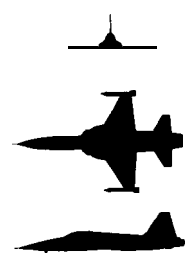
E-6 (EA-6B) Prowler

Four-seat carrier-based ECM aircraft
Made by: Grumman, USA
User: USA
Max Speed: 656mph
Armament: Unarmed
GND:0 A I R : 0 SEA:0 SUB:0 ECM:7 HP:2 MP:60



F-4 Phantom

Two-seat multi-mission land and carrier-based fighter and fighter-bomber
Made by: McDonnell Douglas, USA
User: USA, Iran
Max Speed: Mach 2.15 (1418 mph)
Armament: Cannon, missiles, rockets, bombs
GND:5 A I R : 6 SEA:0 SUB:0 ECM:5 HP:4 MP:100



F-5 Tiger

Lightweight fighter
Made by: Northrop, USA
User: Iran, Saudi Arabia
Max Speed: Mach 1.64 (1,082mph)
Armament: 20mm cannon, rockets, bombs
GND:3 A I R : 5 SEA:0 SUB:0 ECM:3 HP:3 MP:40



F-14 Tomcat

Two-seat carrier-based air superiority and general purpose fighter
Made by: Grumman, USA
User: USA
Max Speed: Mach 2.34 (1,564mph)
Armament: Multi-barrel 20mm gun, missiles
GND:4 A I R : 9 SEA:0 SUB:0 ECM:6 HP:3 MP:120



F-15 Eagle

Single-seat and two-seat air superiority fighter
Made by: McDonnell Douglas, USA
User: USA, Saudi Arabia
Max Speed: + Mach 2.5
Armament: 20mm multi-barrel gun, missiles, bombs
GND:5 AIR:8 SEA:0 SUB:0 ECM:6 HP:4 MP:100



F-111

Two-seat tactical fighter
Made by: General Dynamics,8
User: USA
Max Speed: Mach 2.2 (1,160mph)
Armament: Multi-barrel 20mm gun, missiles, bombs
GND:6 AIR:4 SEA:0 SUB:0 ECM:6 HP:4 MP:180



Hunter

Single-seat fighter
Made by: Hawker, UK
User: Oman, Iraq
Max Speed: Mach 0.92 (710mph)
Armament: 30mm cannon, bombs, rockets
GND:1 AIR:2 SEA:0 SUB:0 ECM:2 HP:3 MP:20



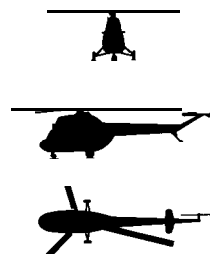
Il-28 Beagle

Light tactical bomber, ECM and reconnaissance aircraft
Made by: Ilyushin, USSR
User: Iraq
Max Speed: 560mph
Armament: 23mm cannon, bombs
GND:3 AIR:1 SEA:0 SUB:0 ECM:2 HP:3 MP:40



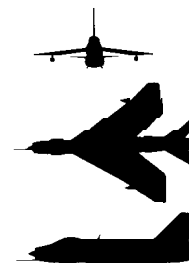
Jaguar

Single-seat light tactical support aircraft
Made by: Sepecat, UK
User: Oman
Max Speed: Mach 1.6 (1,055 mph)
Armament: 30mm guns, bombs, rockets
GND:1 AIR:0 SEA:0 SUB:0 ECM:3 HP:2 MP:30



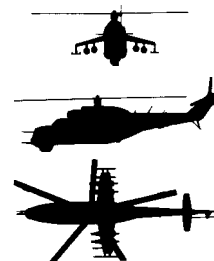
Ka-25

Anti-submarine carrier-based helicopter
Made by: Kamov, USSR
User: USSR
Max Speed: 137mph
Armament: Torpedoes, depth charges, bombs
GND:0 AIR:0 SEA:0 SUB:5 ECM:2 HP:3 MP:20



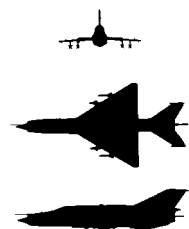
Lightning

Single-seat fighter
Made by: BAC, UK
User: Saudi Arabia
Max Speed: Mach 2.1 (1,320mph)
Armament: Cannon, missiles, bombs, rockets
GND:1 AIR:3 SEA:0 SUB:0 ECM:2 HP:3 MP:50



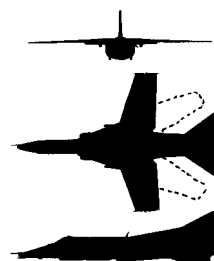
Mi-24 Hind

Attack helicopter
Made by: USSR
User: USSR
Max Speed: 185mph
Armament: Cannon, rockets, antitank missiles
GND:5 AIR:0 SEA:0 SUB:0 ECM:2 HP:3 MP:20



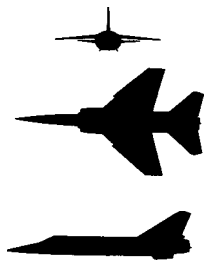
MiG-21 Fishbed

Single-seat lightweight fighter
Made by: Mikoyan, USSR
User: Iraq
Max Speed: Mach 2.1 (1,385mph)
Armament: 23mm cannon, missiles, rockets
GND:0 AIR:4 SEA:0 SUB:0 ECM:3 HP:3 MP:40



MiG-23 Flogger

Single-seat tactical fighter
Made by: Mikoyan, USSR
User: Max Speed: USSR, Mach 2.3 Iraq (1,520mph)
Armament: 23mm cannon, missiles, rockets
GND:4 AIR:6 SEA:0 SUB:0 ECM:5 HP:4 MP:40



Mirage

Single-seat fighter-bomber
 Made by: Dassault-Breguet, France
 User: UAE, Qatar, Kuwait, Iraq
 Max Speed: Mach 2.2 (1,460mph)
 Armament: 30mm cannon, missiles, rockets, bombs
 GND:4 AIR:6 SEA:0 SUB:0 ECM:4 HP:3 MP:80



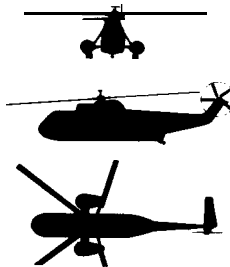
P-3 Orion

Shore-based anti-submarine reconnaissance aircraft
 Made by: Lockheed, USA
 User: USA, Iran
 Max Speed: 473mph
 Armament: Up to 20,000lb of torpedoes, mines, depth charges and bombs
 GND:0 AIR:0 SEA:4 SUB:6 ECM:3 HP:3 MP:255



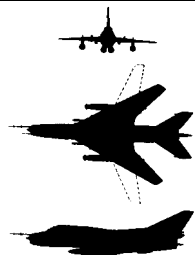
S-3A Viking

Four-seat carrier-based anti-submarine aircraft
 Made by: Lockheed, USA
 User: USA
 Max Speed: 518mph
 Armament: Torpedoes, depth charges, mines, missiles, rockets, special weapons
 GND:2 AIR:1 SEA:4 SUB:5 ECM:4 HP:2 MP:14



SH-3 Seaking

Anti-submarine helicopter
 Made by: Sikorsky, U S A
 User: USA
 Max Speed: 166mph
 Armament: Homing torpedoes, rockets, depth charges, missiles
 GND:0 AIR:0 SEA:0 SUB:6 ECM:3 HP:2 MP:30



Su-20 Fitter

Single-seat ground-attack fighter
 Made by: Sukhoi, USSR
 User: Iraq
 Max Speed: Mach 2.17 (2,430mph)
 Armament: 30mm cannon, rockets, missiles
 GND:3 AIR:2 SEA:0 SUB:0 ECM:3 HP:3 MP:20



Su-24 Fencer

Two-seat attack aircraft
 Made by: Sukhoi, USSR
 User: USSR
 Max Speed: Mach 2.5 (1,650mph)
 Armament: 23mm multi-barrel cannon, missiles, rockets, bombs
 GND:5 AIR:2 SEA:0 SUB:0 ECM:4 HP:4 MP:40



Tu-22 Blinder

Reconnaissance bomber
 Made by: Tupolev, USSR
 User: USSR, Iraq
 Max Speed: Mach 2.0 (1,320 mph)
 Armament: Cannon, bombs, missiles
 GND:5 AIR:0 SEA:0 SUB:0 ECM:2 HP:3 MP:80



Yak-36 Freehand

Single-seat carrier-based V/STOL strike and reconnaissance aircraft
 Made by: Yakovlev, USSR
 User: USSR
 Max Speed: 850mph
 Armament: Cannon, bombs, rockets
 GND:3 AIR:4 SEA:0 SUB:0 ECM:3 HP:3 MP:20

Gulf Strike makes extensive use of abbreviations. The following is a comprehensive alphabetical listing of the acronyms found in this manual:

ABN	Airborne unit	ENG	Engineer
ADA	Air Defense unit	FAC	Fast Attack Craft
AFV	Armored Fighting Vehicle	FF	Frigate
AH	Attack Helicopter	FORM	Formation
AMB	Airmobile unit	GND	Ground
APC	Armored Personnel Carrier	INF	Infantry
ARM	Armor	MAB	Marine Amphibious Brigade
ART	Artillery	MAR	Marine unit
BB	Battleship	MAU	Marine Amphibious Unit
BDE	Brigade	MCM	Mine Countermeasures Ship
BN	Battalion	MEC	Mechanized unit
CA	Conventional Cruiser	MP	Movement Point
CG	Guided Missile Cruiser	NATO	North Atlantic Treaty Organization
CGN	Nuclear Guided Missile Cruiser	REG	Regiment
co	Corvette	SF	Special Forces
CRT	Combat Resolution Table	ss	Submarine unit
c v	Conventional Aircraft Carrier	SSGN	Nuclear Guided missile submarine
CVH	Helicopter Carrier	SSN	Nuclear submarine
CVN	Nuclear Aircraft Carrier	SUB	Submarine
DD	Destroyer	US/USA	United States of America
DDG	Guided Missile Destroyer	USSR	Union Of Soviet Socialist Republics
DIV	Division	VPS	Victory Point Square
ECM	Electronic Counter Measures		

15.2 GROUND

15.21 Unit Comparison chart

UNIT TYPE	COMBAT VALUES			MOVEMENT POINTS
	GND	AIR	HITS	
USA				
Engineer Battalion	1	4	1	8
Air Defense Battalion	1	0	3	8
Infantry Battalion			1	4
Special Forces Battalion	1	1	1	4
Ranger Battalion	1	1	2	6
Marine Battalion	1	1	1	6
Air Defense Brigade	1	4	3	8
Airborne Regiment	3		3	6
Marine Brigade	3	4	3	4
Air-mobile Brigade	3	2	3	7
Mechanized Brigade	4	2	3	8
Armored Brigade	5	2	3	8
USSR				
Airborne Regiment	3	2	3	6
Air Defense Regiment	1	4	3	8
Artillery Regiment	1	2	3	8
Engineer Brigade	2	2	3	8
Marine Brigade	3	2	3	4
Armored Division	8/9	4	9	8
Mechanized Division	8/9	4	9	8
Iran				
Marine Battalion	1	1	1	4
Air Defense Brigade	1	5	3	8
Air-mobile Brigade	2	1	3	4
				8
Artillery Brigade	2	2	3	8
Infantry Brigade	2	1/0	3	4
Armored Division	5/7	3	9	8
Infantry Division	4/5/6	211	9	4
Mechanized Division	5	2	9	8
Iraq				
Air Defense Regiment	1	2	4	8
Artillery Regiment	1	2	3	8
Air Defense Brigade	1	4	3	8
	3		9	4
Armored Division	4	2	9	8
Mechanized Division	5	2/1	9	8
Infantry Division	4			4
U K				
Airborne Battalion	1	1	1	6
France				
Airborne Battalion	1	1	1	6

15.22 Combat Vehicles

BMP Combat Vehicle (APC)



Made by: USSR
 User: USSR, Iraq
 Crew: 3
 Passengers: 8 infantry
 Main armament: 73mm gun
 Max armor: 20mm
 Max speed: 34mph

Chieftain Main Battle Tank



Made by: UK
 User: Iran
 Crew: 4
 Main armament: 120mm gun
 Max armor: 150mm hull, 250mm turret
 Max speed: 30mph

M60 Main Battle Tank



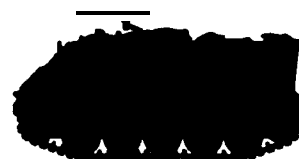
Made by: USA
 User: USA, Iran, Saudi-Arabia
 Crew: 4
 Main armament: 105mm gun
 Max armor: 120mm
 Max speed: 30mph

M109 Self-propelled Howitzer



Made by: USA
 User: USA, Iran
 Crew: 6
 Main armament: 155mm howitzer
 Max armor: 20mm
 Max speed: 34mph

M113 Armored Personnel Carrier (APC)



Made by: USA
 User: USA, Iran
 Crew: 2
 Passengers: 11 infantry
 Main armament: 50cal Machine Gun
 Max armor: 38mm
 Max speed: 42mph

M551 Sheridan Light Tank



Made by: USA
 User: USA
 Crew: 4
 Main armament: 152mm gun/missile launcher
 Max armor: 45mm
 Max speed: 45mph

SAU-152 Self-propelled Howitzer



Made by: USSR
 User: USSR
 Crew: 5
 Main armament: 152mm howitzer
 Max armor: 110mm
 Max speed: 30mph

T-55 Medium Tank



Made by: USSR
 User: Iraq
 Crew: 4
 Main armament: 100mm gun
 Max armor: 100mm hull, 170mm turret
 Max speed: 30mph

T-62 Medium Tank



Made by: USSR
 User: USSR, Iraq
 Crew: 4
 Main armament: 115mm smooth-bore gun
 Max armor: 100mm hull, 170mm turret
 Max speed: 34mph

T-72 Medium Tank



Made by: USSR
 User: USSR
 Crew: 3
 Main armament: 125mm gun
 Max armor: Up to 120mm on hull, more on turret. Possibly of composite type resistant to shaped charges.
 Max speed: 50mph

15.3 NAVAL

15.31 Unit comparison chart

TYPE OF UNIT	COMBAT VALUES						MOVEMENT POINTS
	GND	AIR	SEA	SUB	ECM	HIT	
USA							
BB	9	3	9	5	6	6	8
CVN	5	8	5	5	6	5	10
DD	4	6	5	5	5	4	8
SSN	0	0	0	6	4	4	12
c v	5	8	7	5	6	5	8
USSR							
CVH	4	9	6	3	5	3	8
CA							8
CG	11	11	48	11	11	11	8
CGN	3	8	9	2	6	4	10
DDG	3	0	6	3	2	2	8
MCM	1	0	0	2	3	2	8
SS N	11	0	08	44	11	4	126
SSG							
SSN	0	0	0	6	4	4	12
IRAN							
c o	2	3	6	2	2	2	8
DD							8
FAC	4	11	11	05	11	11	8
FF	2	3	6	3	4	2	8
BRITISH							
SSN	0	0	0	6	4	4	12
FRANCE							
DD	4	6	5	5	5	4	8
MCM	1	0	0	2	3	2	8
IRAQ							
FAC	1	2	4	0	2	1	8
SAUDI ARABIA							
c o	2	3	6	2	2	2	8
FF	2	3	6	3	4	2	8

Kiev class VSTOL carrier/cruiser (USSR)

Displacement: 40,000 tons
 Armament: Missiles, 57mm dual-purpose guns
 anti-sub rockets
 Aircraft: 35 mixed V/STOL & helicopter
 Speed: 30kts

**Echo II class missile submarines (USSR)**

Displacement: 5,600 tons
 Armament: Cruise missiles, torpedoes
 Speed: 20kts

**Kresta I class cruiser (USSR)**

Displacement: 6,500 tons
 Armament: Bombardment missiles, surface to
 air missiles, anti-sub missiles, torpe-
 does, 57mm guns.
 Speed: 34kts

**Nimitz class aircraft carriers (USA)**

Displacement: 81,600 tons
 Armament: missiles
 Aircraft: Over 90 aircraft and helicopters
 Speed: 33kts

**George Washington class missile submarine (USA)**

Displacement: 6,019 tons
 Armament: Missiles, torpedoes
 Speed: 30kts

**STRENGTH COMPARISON TABLES**

For those of you that care about such things, we have listed below comparison tables for the total Ground, Air and Sea Combat Values of the nations involved in the game.

GROUND UNITS

NATION	GND	AIR	HIT
USA	38	31	39
USSR	263	199	321
Iran	163	71	275
Iraq	51	36	123
UAE	8	6	16
Saudi Arabia	9	8	26
Qatar	3	1	4
Oman	6	3	9
Kuwait	2	2	5
	1		1
France	1	1	1
Iran+Allies	231	124	376
USSR & Iraq	3x4	235	444

AIR

NATION	GND	AIR	SEA	SUB	HIT
USA	201	137	44	28	151
USSR	194	140	0	5	164
Iran	89	100	4	10	78
Iraq	47	61	0	0	58
Saudi Arabia	4	8	0		6
Qatar	4			0	
Oman	2	62	0	0	11
Kuwait	10				9
Iran+Allies	310	263	48	40	256
USSR & Iraq	241	201	0	5	222

NAVAL

NATION	GND	AIR	SEA	SUB	HIT
USA	23	25	26	38	32
USSR	26	37	61	47	46
Iran	9	14	21	10	9
Iraq	3	6	12	0	3
Saudi Arabia	4	6	12	5	4
		0		6	4
France	5	6	5	7	6
Iran+Allies	41	51	64	66	55
USSR&Iraq	29	33	73	47	49

CREDITS

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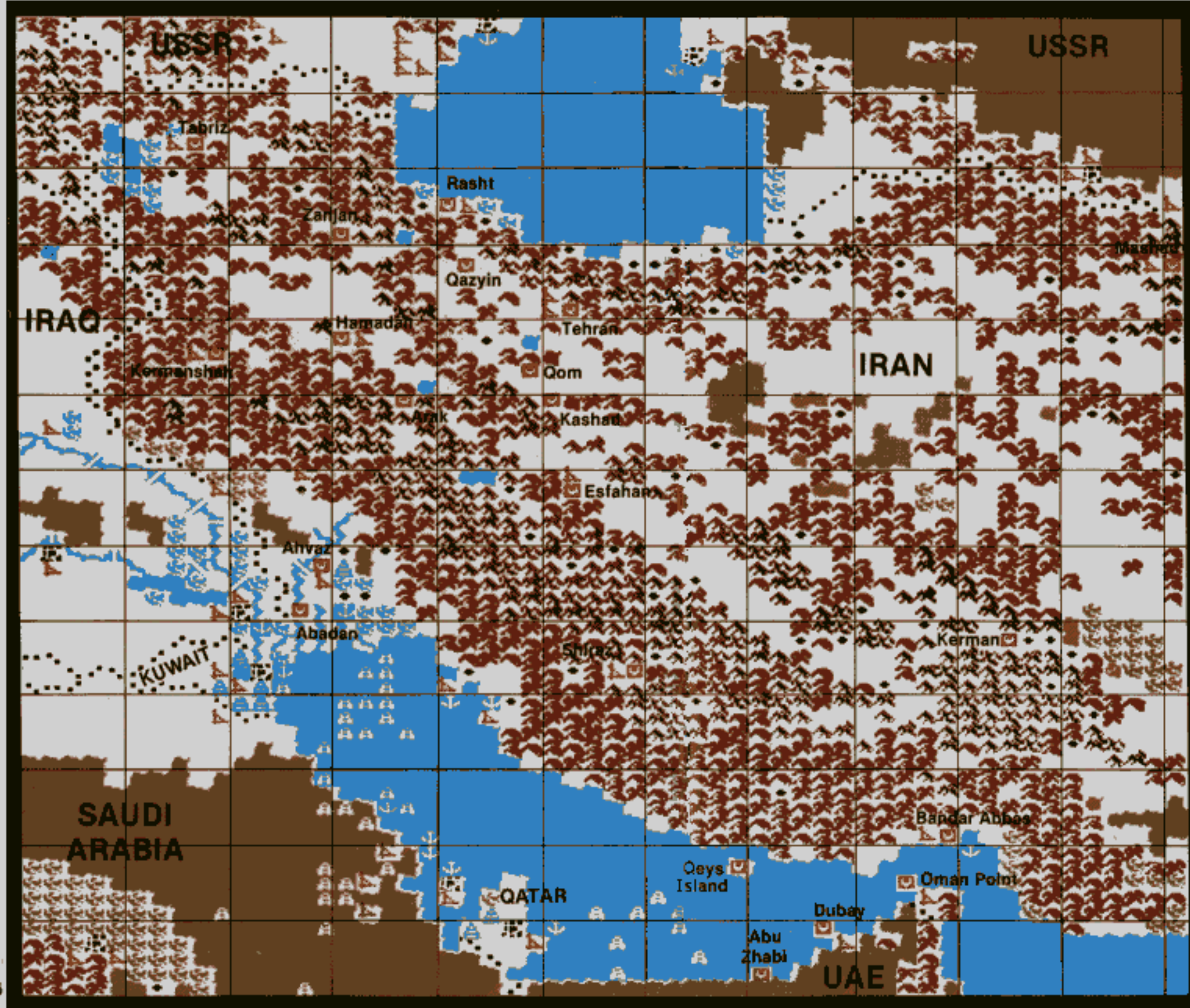
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QUESTIONS ON PLAY

The clarity of these rules has been verified by Software Testers of Universal Microcomputer Programmers (STUMP) and deemed "complete" in all facets of instruction. Please re-read them in areas that seem unclear at first reading. Questions on play can be answered by the factory only upon receipt of a self-addressed envelope first-class postage.



KEY

TERRAIN	COST
Rough Desert	3/6
Desert	2/4
Rough	3/8
Airbase	2/3
City	2/3
Victory Point Square	2/3
Town	2/3
Swamp	4/8
Oil Rig	2/3
Seaport	2/3
Mountains	4/8
Impassable Mountains	NA
Sea/Lake	NA
River	NA
Bridge	4/4
Border	*
Clear	2/3

*Same as the terrain type it is on.