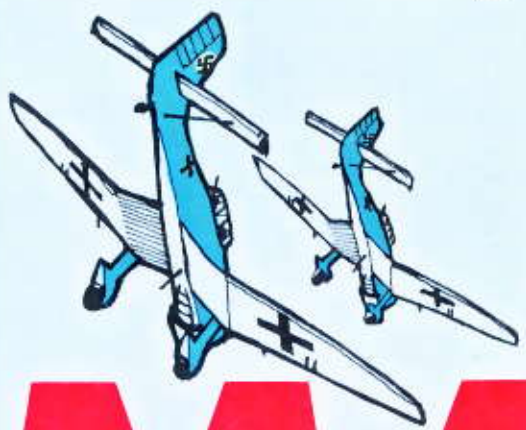


The Battle for the Central
Mediterranean Sea
Dec. 1941 - Aug. 1942

Simulations
Canada



MALTA STORM



MALTA STORM, The Battle For The Central Mediterranean, December 1941 - August 1942.

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1.0 INTRODUCTION: The Italian plan seemed so simple: sweep aside the meager British garrisons dotting the Eastern Mediterranean to establish a great and glorious New Roman Empire. La Regia Marina, the newly refurbished and enlarged navy, need only secure the supply lanes across the narrows to Tripoli. Certainly not a problem, considering the promised assistance of the Luftwaffe. After all, the main British bases were off at opposite ends of the Med: Alexandria in Egypt and Gibraltar in Spain. Only the tiny outpost island of Malta stood in the way...

This is a combined air, sea, and land simulation of the fighting that raged around Malta from December, 1941 into September, 1942. One player, representing the Allied side, must use his forces to preserve Malta while interfering with the Italian resupply of their forces in Africa and Rommel's Panzer Armees Afrika. The other player, representing combined Italian and German forces (the Axis), must suppress or capture the British base and keep large quantities of supply and reinforcements flowing across the central Mediterranean.

Malta itself starts in a bleak supply condition, and the Allied player must get his own transports through before starvation sets in. The Axis army in North Africa, reeling from its recent defeat in Operation Crusader, is even

more desperate and must be urgently resupplied or surrender. Victory points are awarded or lost depending on how well each side performs. The player with the most victory points at the end of the game is the winner.

During the course of the game each player assumes the role of Kesselring or Cunningham, the supreme commanders of the theatre. As such, he must concentrate on the grand strategy and broad choices open to him. Minor tactics do not require his attention. For example, the Allied player must carefully weigh the risks of sending a convoy to Malta and decide whether to risk his expensive battleships on escort duty. Once he has committed them, further control is out of his hands and he must simply await results. The plotting of convoy routes, the maneuvering of individual ships, the firing of guns, torpedoes, anti-aircraft barrages, etc are handled by the computer.

2.0 GENERAL COURSE OF PLAY: Each player takes a turn reviewing Intelligence estimates, shaping strategy by setting National Priorities, and fine tuning operations in the Operational Planning section. Once each side has completed this orders stage, movement and combat are resolved by the computer. Victory Points are awarded or lost: primarily on the losses taken and the supply used & delivered. Finally, various housekeeping chores are performed prior to the start of the next turn.

Map hexes are about 112 km across, turns are three weeks in length, and supply points are measured in thousands of tons. Units are aircraft squadrons, gruppas or stormos (wings) of 15 to 54 aircraft, individual ships for light cruisers and larger, flotillas /squadrons /divisions for smaller ships, and brigades or divisions for ground units. Each unit has one or more "steps" which are composed of individual ships, aircraft, guns, or platoons.

While the historical participants in this campaign had good information as to the other's dispositions and intentions, their knowledge was far from complete or accurate. This is reproduced in various ways. Information on enemy dispositions and combat activity is limited, and sometimes outright inaccurate. Various screen and printed reports are generated during the course of the game. Reports for a player's own units will be complete and accurate. Reports on enemy units will be in summary form only and subject to roughly a 35% deviation. Combat result reports will tend to be general in nature, with the significant possibility of inaccuracy in specific detail reported. Despite these limitations, using these reports to build insight into enemy intentions and capabilities is essential in plotting a victorious strategy.

3.0 GAME EQUIPMENT: Two identical, laminated maps representing the sea area over which the campaign was fought are included in the game. The map is divided into 3 sea basin areas. Ports are indicated by square symbols for major capacity and circles for minor capacity. Ports used in the simulation are named, while those unnamed are included for general background. The approximate routes for convoys between various ports are indicated by the dashed brown lines. The back of the map includes an Order Of Battle for the forces available to the theatre.

Two differently colored markers provided with the game can be used to keep track of

force locations and contact reports. These are quality markers. They can be sharpened to a good point and will, if reasonably used, hold it well. However, since the markers use a harder writing material to allow fine lines, pressing hard into the map surface will eventually cause damage. Please mark lightly. To erase marker notations from the laminated surfaces, simply rub them off promptly with a damp cloth. Using a dry cloth will remove most of the markings, but leave some residue.

4.0 GETTING STARTED:

4.1 BOOTING: Before first booting the game you should format a blank disk for saving games. Consult your DOS manual for how to format a blank disk. IBMPC users should use DOS 2.0 or later and boot the game by inserting the disk in the default drive of an already running system and typing 'MALTA'. Amiga, Atari ST, & Macintosh users should click on the Malta Storm program file.

4.2 GENERAL: In the upper left hand corner of the screen is a box entitled Main Menu. This box shows the choices available to the player for controlling his forces and operating the game. The large right hand box is the main display area for reports and activities. The screen wide bottom box is the prompt area, in which details about how to use the current display are indicated. In general, the arrow keys are used to move between choices and the return ("enter") key is used to select the current choice. The currently available choice is shown in inverse video while the menu is active, and in yellow (underlined) when that choice has been activated.

The first four choices are all accessible in any order to the player, and upon completion of the turn, the player continues on by selecting the fifth choice, entitled Staff Sortie Workup. In addition there are two final choices ('Combat Resolution' and 'Housekeeping') that are not user-selectable, but rather are highlighted automatically during the appropriate portion of the turn resolution.

There is no rigidly defined order of play. The Main Menu allows the active Player to access Intelligence, Strategic Planning, Operational Planning and game Utilities in any order desired and as often as desired. It is suggested, however, that in a typical turn a player should first look carefully at the Intelligence reports, then consider National Priorities, and finally examine and make any alterations in individual Unit orders. These actions are discussed in much greater detail below.

4.3 ONE OR TWO PLAYERS: After booting, the computer will ask you to set up its player settings for the Axis and the Allies. Selecting 'Human' will put the player in the position of doing all the National Priorities activities of his viewpoint, which will remain unchanging until reassigned by the player. 'Assisted' is the default setting in which the computer will do all staff functions and National Priorities based on the current situation, but can be freely overridden by the player as well as allowing a limited ability to alter staff generated orders within the National Command Span Limitations. 'Computer' will give the computer command of all functions for that side, allowing to react as it thinks appropriate. 'Human Historical' is like 'Human' above but the computer starts by setting all National Priorities and operational orders to those followed historically. Similarly 'Computer Historical' has the computer run the

side, but do so with historical orders, rather than those that might be more appropriate. Note that these parameters may be changed during the course of the game using the Game Utilities / Change Player Parameters menu.

5.0 UNITS & GROUPS:

5.1 UNITS: Units are the basic building blocks of military command. Each Unit contains one or more steps of an identical weapon type or asset class. For example, II / StG 3 is a Stuka gruppe (equivalent to an Allied wing) containing up to 52 Stuka dive bombers. Each unit is rated for size, skill, morale, current rate of serviceability, weapons accuracy, weapons killing power against air, naval and land targets, virtual protection (speed and evasiveness) and actual protection (armour and damage capacity). There is a maximum upper limit of 90 units per side in this game.

5.2 GROUPS: Groups are a collection of Units under a single command. Unit types will not normally be the same, but will usually belong to the same branch of service. For example, the Allied group "Force B" contains battleships, cruisers, destroyers and transports, but not aircraft or ground units.

Groups hold the supply that is consumed by the subordinated Units. Groups have a Morale rating based on the weighted average of the morale of the subordinated units. Losses, if high enough, may cause this morale to snap and the group will abort its mission.

Groups other than the Asset Pools and the Strategic Pool are said to be "front line groups". The number of front line groups is fixed in the game at nine Axis and seven Allied. In addition there are the three separate 'groups' showing the disposition air, land and sea units, and a final group containing the Strategic Pool. As described later, the Strategic Pool is composed of units not currently in play that may be brought in at a cost in victory points.

5.21 AXIS GROUPS:

German Groups:

Fliegerkorps II - the pride of the Luftwaffe, it had led the attack in the Battle of Britain, and then again in Russia where it got to within range of Moscow. Now based in Sicily, it was assigned the job of pounding Malta into submission.

Fliegerkorps X - the veterans of the Mediterranean, based in Greece and Crete, it sealed off Malta from resupply from Egypt. The sea lanes immediately to the south of Crete became known to the Allied naval crews as 'Bomb Alley'.

Fliegerkorps XI - the home of the vaunted German paratroopers - the Fallschirmjaeger - who had so humiliated the Allies in Belgium in 1940 and in Crete in 1941. This unit was earmarked to spearhead the conquest of Malta in 1942. Italy's best parachute and airborne divisions were attached to assist.

Italian Groups:

5th Army - the Italian garrison of Sicily. Although weak in doctrine, numbers and equipment, these troops were prepared to fight to avenge the earlier defeats of their comrades at British hands.

6th Air Force, Regia Aeronautica - based in Sardinia, its mission was to deny resupply to Malta from Gibraltar and the west.

2nd Air Force, Regia Aeronautica - based in Sicily, its mission from the start of the war was to suppress Malta's aircraft, fast cruisers

and submarines.

Regia Marina Main Fleet - based at Taranto, the large and modern Italian battle fleet enjoyed a substantial advantage in size and firepower over the Allies, plus the advantage of a central location. It made major efforts to protect the convoys during the Malta campaign. Inexperience, poor training, and a critical lack of fuel oil were its major shortcomings.

Regia Marina Light Units - the far flung destroyers, torpedo boats, submarines and U-Boats dedicated to interdicting Allied convoys throughout the Mediterranean.

Regia Marina Convoy Control - the merchant ships and their immediate escorts responsible for supplying all of Panzer Arme Afrika through the North African ports. They were also available for transporting 5th Army to Malta to follow up the airborne spearheads.

5.22 ALLIED GROUPS

Royal Navy Force H - all of the surface ships of the Royal Navy stationed at Gibraltar at the extreme western end of the Mediterranean. Force H started with one battleship, one light aircraft carrier, two light cruisers, ten destroyers, and twelve civilian transport ships.

Royal Navy Force K - all of the surface ships of the Royal Navy stationed at Malta. It started with four light cruisers and four destroyers.

Royal Navy Force B - all of the surface ships of the Royal Navy stationed at the base of Alexandria in Egypt. It had two battleships, three light cruisers and one anti-aircraft cruiser, eighteen destroyers, and eight civilian transport ships.

Royal Air Force Malta - ten squadrons of various aircraft grouped together to interdict Italian convoys, bomb Italian ports, and protect the military and civilian targets on Malta.

Western Desert Air Force - many squadrons of fighters and bombers were attached to this force to support the 8th Army in Africa. For the purposes of this game, only the 89th (Beaufighter) Squadron is shown. The chief function of the WDF was to raid Italian transports using Benghazi and to provide a home for Allied bomber units fleeing Malta.

231st Brigade Group - four undertrained infantry brigades and two anti-aircraft regiments totaling (with support troops) some 30,000 underfed men. This was the garrison of Malta.

Royal Navy Submarines - Three submarine flotillas, the 1st, 8th and 10th SubFlots, controlled all Allied submarines in the Mediterranean.

6.0 INTELLIGENCE

6.1 VIEW ESTIMATE OF STRATEGIC BALANCE: This screen shows the ratio of Axis to Allied air power within range of Malta, the total ratio of surface naval power, the amount of Allied supply in Malta in tons, Allied supply as an approximate number of turns until surrender, and the amount of Axis supply in Tripoli in tons and as approximate turns until Axis surrender. Also included is a detailed breakdown of the accrual of Victory Points to date. Note that enemy totals and ratios will be subject to an error of plus or minus 15% as a default (or whatever other number is set in the Game Utilities / Set 'Fog of War' menu).

6.2 VIEW ENEMY GROUP REPORT: This report will show the anticipated Missions and Intensities of all enemy front line Groups. Allied reports of Axis intentions will be fairly

accurate because of the added advantage of ULTRA information. Axis reports of Allied intentions will reflect Allied staff thinking, but will not reflect subsequent changes made personally by the Allied player. This represents the significantly less effective intelligence apparatus historically maintained by the Axis forces.

6.3 VIEW ESTIMATED ENEMY ASSETS:

This can be set for each of the three basin areas. Each of these screens presents information on the suspected allocation of enemy assets. If there are two or fewer of a particular asset type then the report will be reasonably accurate. If there are more than three then the report can deviate up or down in accordance with the Fog of War setting for Basin Estimates in the Game Utilities / 'Fog of War' menu. For example, if the operational estimate setting is set to 20, then estimates will be accurate to plus or minus 20%.

6.4 PRINT SUMMARY OF DESTROYED

ASSETS: This option will print a listing sorted by weapon type to either the screen or printer with the following aggregate values: step losses for the most recent turn and game to date, sorties for the most recent turn and game to date, the game loss rate as a percentage of game sorties, steps damaged for the most recent turn and game to date, the game damaged rate as a percentage of game sorties, the number of replacement steps available, the number of steps currently short of full strength, and the number of enemy aircraft that have been destroyed by that type of weapon. The numbers for enemy assets will be plus or minus 15% or any other amount set in the Game Utilities / 'Fog of War' game report accuracy menu.

6.5 PRINT CURRENT STATUS OF COMBAT

UNITS: This option will print out a listing of all units not in the Strategic Pool that have generated sorties or have been attacked, showing the current and maximum number of steps that the Unit may contain, the rate of serviceability, the skill rating, the morale rating, total sorties performed to date, and total step losses to date.

6.6 TOGGLE PRINTED COMBAT

RESOLUTION REPORT: This option will print out combat results as they are generated to a standard parallel printer. When the report is toggled on, a message to that effect will appear on the screen just below the Statistics Box.

7.0 NATIONAL PRIORITIES:

7.1 GENERAL: Each player will establish his overall strategy for the turn by ranking in descending order of importance a list of five key priorities. Some of these priorities are complementary, others are mutually exclusive. Once this ranking has been made, the computer, in its capacity as 'staff' administrator, will generate all necessary operational Group and Unit orders to implement the strategy. In many ways, this is the heart of the game from the player viewpoint, so careful use of this function is advised. Note that Group and Unit orders can later be individually overridden in the Operational Planning Phase, subject to National Command Span limitations. If National Priorities are reset after individual orders have been given, those orders will be lost and the National Command Span limitation will be restored to its initial value.

7.2 SETTING NATIONAL PRIORITIES: To alter the list, move the selection indicator to the priority to be moved with the arrow keys

and select it by pressing "enter" or "return". Then use the arrow keys to move the selection to the desired location on the list and insert it at that location by again pressing "enter" or "return". The effect of the ranking of the various priorities is as follows:

Both Players:

- *Minimizing Prestige Losses* tends to keep battleships and heavy cruisers safely in port when ranked highly, and releases them otherwise.

- *Minimizing Supply Use* tends to shut down naval movement of the heavier types (particularly battleships) when highly ranked, and allows larger convoys with heavier escorts when ranked low. Maximum effort air operations are forbidden when this priority is ranked first.

Axis Only:

- *Suppressing Malta as #1-5:*

1. All swing air units transfer to Sicily, naval units react intensely; 2. Some swing units transfer to Sicily, naval units react moderately; 3. Naval units react moderately; 4. Air units swing away from Sicily, harassing naval reaction only; 5. All swing air units transfer away from Sicily, no naval reaction.

- *Capturing Malta as #1-5:*

1. All remaining Strategic Pool ground units are bought, air Units are put on Max Intensity, Fliegerkorps XI drops on Malta airfields, 5th Army lands to seize major cities and end resistance; 2. All Strategic Pool ground units are bought and prepare for invasion; 3. Existing activated ground units prepare for invasion; 4. Units in FK XI are sold back to the Strategic Pool; 5. All ground units are sold back to Strategic Pool.

- *Preparing Offensive in Africa as #1-5:*

1. Large convoys move to Tripoli with battleship escorts; 2. Large convoys move to Tripoli with heavy cruiser escorts; 3. Small convoys move to Tripoli with light cruiser escorts; 4. & 5. No convoys.

Allied Only:

- *Supplying Malta as #1-5:*

1. A large convoy is sent from Gibraltar and from Alexandria; 2. A convoy is sent from Alexandria; 3. A convoy is sent from Gibraltar; 4. & 5. No convoy is sent.

- *Reinforcing Malta (Note that this has no effect prior to turn 5) as #1-5:*

1. USS Wasp is activated and makes one fly off of Spitfires to Malta, CVL Eagle makes two fly offs; 2. CVL Eagle makes one fly off of Spitfires to Malta; 3, 4, & 5. No effect.

- *Preparing Offensive In Africa as #1-5:*

1. Creates 2000 VPs; 2. Creates 1000 VPs; 3. Creates 200 VPs; 4. Loses 900 VPs; 5. Loses 1500 VPs.

8.0 OPERATIONAL PLANNING:

8.1 GENERAL: Selecting this phase will bring up a listing of all groups in the Results Box. To the right of the group name is the location of the HQ, the most common type of mission ordered & average intensity, the rate of supply use, and stock of supply held in thousands of tons. The arrow keys move up, down, left and right to valid fields. The Dialog Box contains prompts for options available at a given cursor position. The player has the option to show subordinated units, or to show all units at the highlighted location.

8.2 SHOWING SUBORDINATED UNITS:

This option will allow the player to see all of the Units that are attached to and supplied by the Group that he has selected. The Unit name, effective strength out of total steps in inventory, location, mission & intensity levels, and designated target or destination (if appropriate) are shown. Units with collapsed morale are shown in dimmed print. For asset pools, the target or destination is replaced by the owning parent Group. For the Strategic Reserve, the target or destination is replaced by the cost to buy or cost to use. Just above the Dialog Box at the bottom is supplementary information on the particular unit highlighted: total sorties, weapon type, skill, morale, and % serviceable ratings.

This display allows the player to browse and see just where his strength lies, and to what purpose it has been committed. He can also give some Unit specific orders if he so chooses as per the National Command Span Limitations below.

8.3 NATIONAL COMMAND SPAN LIMITATIONS: Due to the orientation of the viewpoint of the game, it is unrealistic for players to be able to freely alter individual Unit orders. However, the theatre commanders did, on occasion, make direct requirements of their staffs for particular units. Accordingly, a number of Unit orders can be changed by the player directly, within the following staffwork limits:

Allied - Air: 4 units; Naval: 6 units;
Land: 1 unit.
German - Air: 5 units; Naval: 2 units;
Land: 2 units.
Italian - Air: 3 units; Naval: 3 units;
Land: 2 units.

These values are known as the Command Span Limitation, and the remaining allowance of changes is shown during the Unit Menu in the Dialog Box as "(CSL=)".

With the cursor in the second field the player may assign the Unit new orders. The player is prompted for a new mission (the existing mission is the default), a new intensity (the existing intensity is the default), and a new target (for strikes), destination (for relocations) or convoy route (for naval escorts and transports), if required. Valid targets or destinations must be within combat range for targets, and within transport range (2.5 times combat range) for escorts or transports. Typing the letter "Q" will return the player to the Group-level display.

The CSL allowances are reset to their original values when the National Priorities are retabulated. If a player wishes to reset his forces to the way they were before he made any individual changes, he need merely reprocess the National Priorities in their original order. All unit transfers and order changes will be unwound and the CSL allowances restored.

8.4 MISSIONS: Combat units may perform any one of the missions described as follows:

8.41 STRIKE: Attack all enemy units in a specified target hex exclusively, and ignore all other possible targets. All enemy units which start, end, or remain in the target hex will be attacked.

8.42 REACTION: Attack only those enemy units which move within reaction range. Stationary enemy units within reaction range will not be attacked. This mission will be used mainly by bombers and naval forces to intercept enemy strike, superiority, escort, and transport missions. If no such interception occurs, the reacting unit will make no sorties and use no supply.

8.43 SUPERIORITY: Attack all enemy

units, moving or stationary, within combat range. Sorties are generated and supply consumed whether there are targets or not.

8.44 ESCORT: Sortie, but attack only those units that attack it. Bombers and naval transports can be given 'close escorts' by assigning fighter or surface naval units (respectively) with an Escort mission to the group. Note that friendly fighters or surface naval units in other groups with Superiority or Reaction missions can be considered 'distant escorts'. Also note that naval units escorting transports in the same group should be assigned the same convoy route as the transports.

8.45 TRANSPORT: Move self and cargo to a new location and return. All merchant ships and some naval combat units may be assigned this mission. The transporting unit will attack enemy units that attack it, but with reduced efficiency and increased vulnerability, depending on how much cargo is being carried. Transport missions must be assigned to a particular 'convoy route' instead of a particular target or destination. The greatest intensity of effort that may be assigned a transport mission is three (3) - an intensity of four is used to relocate the unit to a new base (see 8.56 below). Cargo is unloaded at the destination automatically, subject to port capacity constraints.

Aircraft do not have a cargo capacity. Axis airborne units have an intrinsic airborne lift capability which is used when they are given the Transport mission. The 5th Army utilizes available naval transports then in Naples to perform the Transport mission. British ground units cannot be given the Transport mission.

The Allied aircraft carriers may only be used to ferry aircraft to a location just south of the Balearic Islands in the Western Mediterranean known as the Balearic Island Flyoff point. Spitfire squadrons transported to that point aboard carriers will automatically fly on to Malta. This restriction exists because your superiors feel the aircraft carriers themselves are much too valuable to risk any nearer the single greatest concentration of German airpower in existence.

8.5 INTENSITY OF EFFORT:

8.51 GENERAL: Intensity of effort determines the number of sorties that are generated for the turn. Intensity has five degrees: 5. Maximum; 4. Determined; 3. Sustainable; 2. Harassing; and 1. Inactive. Units that are inactive generate no sorties at all. The intensity for each unit is indicated on displays by the number of ">" symbols for that unit.

8.52 NAVAL UNITS: The rate of sorties are defined to be the number of 'round trips' generated during the turn. For example, an intensity of three means three missions from the starting location to the target (or destination, or along the convoy route) and back again for the current turn.

8.53 GROUND UNITS: The rate of sorties represents the intensity of supply use rather than any actual number of patrols made.

8.54 AIR UNITS: The rate of sorties determines the maximum daily rate of aircraft sorties: 1.9 per aircraft per day at maximum, 1.3 at determined, .85 at sustainable, and .4 at harassing. The actual number of sorties flown will depend on unit serviceability rates and the state of the weather.

8.55 UNIT FATIGUE: Note that higher levels of Intensity of effort adversely effect unit morale and serviceability. Units that are inactive recover morale and serviceability more

rapidly than otherwise.

8.56 RELOCATION: Units that are given transport missions with an intensity of four are treated as a special case. This instructs the computer to move the unit to another base. The word "Relocate" will replace the usual mission and intensity identifier in the third field, and the player should move to the fourth field to enter a new destination if the desired one is not already shown. Air units given relocate orders will move immediately and may be given another order forthwith. All other units make their relocation move during combat resolution.

8.6 OTHER OPERATIONS: If the cursor is in the first field (unit name) the player has the option of:

8.61 TRANSFERRING OWNERSHIP: The Unit may be transfer to another Group. This does not physically relocate the unit (which is done using the Transfer mission at intensity four), it just changes its superior group. If a unit has been transferred once, and the player wishes to transfer it again in the same turn, it must be transferred back to the original group before it can be transferred elsewhere.

8.62 SPLITTING: A unit may be broken down into two units. Each new unit must have a minimum of one step. The owning player will name the new unit with a name up to eleven characters long. There is an absolute maximum of 90 units total for each player at any one time, which may restrict this ability.

8.63 MERGING: This allows merging two Units to become one unit. The units must be of identical weapon type and location.

8.7 LOCATION REPORT: Hitting the Return key when a location is highlighted will generate a report to the screen showing the names of all of the Units that are at the same location.

9.0 GAME UTILITIES:

9.1 SAVE/LOAD GAME: The current game may be saved to any available drive and/or subdirectory that has sufficient free space available. The game may be saved under any valid operating system file name. A previously saved game may be loaded from any available drive and/or subdirectory.

9.2 ADJUST SCREEN COLOURS: On computer systems allowing this, the player may use this routine to set the screen colours to personal choices for normal foreground and background, inverse foreground and background, highlighted foreground, and lowlight foreground. Changes are saved to disk and automatically used the next time the game is run.

9.3 ADJUST SCREEN DISPLAY SPEED: Most messages appearing in the Results Box are delayed a variable multiple of a fraction of a second for readability. This option sets the multiplier. A multiplier of zero permits the fastest game play but may make many messages unreadable, particularly on fast processor computers such as turbo 286 and 386 systems. Just adjust the value to find a speed that suits you for your machine. The maximum multiplier allowed is 99.

9.4 TOGGLE SOUND ON/OFF: This toggles on the simple sound effects generated during combat resolution, and when an important message is displayed.

9.5 CHANGE PLAYER PARAMETERS: Either side can be set to use exclusively human, computer assisted, exclusively computer, human historical, or computer historical National Priorities on a turn by turn basis. The historical options parallel actual strategies but not necessarily actual results. The human

option allows the player to set the priorities as he sees fit, and they will be carried forward unchanged from turn to turn. The computer option allows the computer to make a selection of what priorities may appear best at the time.

9.6 ALTER WEAPONS ACCURACY LEVELS:

The accuracy of each class of weapon may be individually modified. The historical rating for each is 1.00. A setting of 2.00 doubles accuracy and a setting of 0.50 halves it. Note that a change of setting does not affect the killing power of the weapon, just the chance it has of hitting a target. These ratings may be changed to handicap one side if desired.

9.7 SET 'FOG OF WAR' LEVELS:

There are four types of fog: 1. Inaccuracies relating to the estimate of the overall strategic balance; 2. Inaccuracies relating to the estimated enemy assets in each of the Western, Central, and Eastern Mediterranean basins; 3. Air to Sea spotting % accuracy; 4. Inaccuracies in the reporting of combat results. The higher the level of uncertainty, the less accurate the intelligence reports will be, and the more difficult the play of the game. Minimum values are 1% and maximum values are 99%.

9.8 PLAY GAME FOR X TURNS WITHOUT INTERVENTION:

The game can be set to play a specified number of turns into the future on 'automatic pilot'. This setting takes effect at the conclusion of the current player turn. The automatic pilot can be interrupted prematurely by any key press, with control returning to the player at the beginning of the next game turn.

9.9 EXIT GAME NOW:

This returns the computer to its operating system without saving the game. Depending on the balance of Victory Points, one or the other player will be declared the victor. A decisive victory is better than a substantive victory, which in turn is better than a marginal victory. Victory levels are calculated on the difference in the aggregate Victory Point totals: A difference of 10,000 or less is a marginal victory; 10,001 to 25,000 is a substantive victory; 25,000 or more is a decisive victory.

10.0 HOUSEKEEPING:

10.1 GENERAL:

In this phase Victory Points are gained or lost by the Allied player depending on what National Priority was assigned to Reinforcing Africa. One thousand tons of supply are distributed to each non-Malta Group, and the Malta based Allied Groups are resupplied out of central Malta stocks. Any Spitfire replacement squadrons at the Balearic Island Flyoff point go to Malta and on arrival are used intact or broken up to re-equip first Spitfire, and then Hurricane, squadrons. The Axis player receives an historical supply of replacement aircraft which are distributed to the Units most in need. Each Unit takes its losses for the turn, and has its skill, morale, and serviceability levels recalculated. Successful transport missions are docked and supply unloaded. Reinforcements are added to Force B and Force H if warranted. Malta and the Panzer Armees Afrika are checked for starvation, and will surrender if supply falls below zero.

10.2 SUDDEN DEATH:

If the Allied Player is under Historical or Computer control and loses Malta from starvation or invasion, the game ends immediately and the final Victory Point totals are calculated. If the Panzer Armees Afrika surrenders due to lack of supply, the game ends immediately and the final Victory Point totals are calculated. However,

if Sudden Death is triggered, the player has the option of continuing the game. With the selection of this option, if either player was set to historical play, then they are reset to computer play.

11.0 INVADING MALTA:

11.1 GENERAL: The invasion sequence is performed if (and only if) "Capturing Malta" is made the number one National Priority by the Axis player. It takes place after ordinary Combat Resolution and before Housekeeping, at which time the Axis player will have a last chance to back out. Cancellation may be made at a cost of 2,000 prestige VPs to the Axis player.

11.2 THE AIR DROP: Fliegerkorps XI must run the gauntlet of surviving Allied fighter and anti-aircraft fire over Malta before it can drop paratroops. There is a 25% probability that each Allied fighter aircraft will shoot down one step of paratroops. There is a 4% probability that each anti-aircraft step will shoot down one step of paratroops. Surviving steps are dropped at the two primary air bases on Malta: Luqa and Hal Far, and will scatter to a degree determined by the weather and the number of Allied fighters and anti-aircraft steps that intercepted. Surviving unscattered paratroop steps will battle the airfield garrisons (drawn from the 1st Malta Brigade) to secure possession of the airfields.

11.3 THE SEABORNE PRELIMINARIES:

The Italian 5th Army will be loaded aboard all available Convoy Command transports located at that time in Naples (space permitting), and will sail towards Malta. All Axis naval units will sail in support. Any Allied naval units in Malta will automatically try to interdict the landings, and the Allied player will be given the option of having Force B and Force H attempt to interdict as well. All available air units on each side will automatically join the fray. Air and naval combat, if required, will then be resolved. 5th Army losses will be proportional to the fraction of transports sunk en route.

11.4 THE SEABORNE LANDINGS: 5th Army, if it has not been turned back by excessive losses, will land on the thinly defended southern tip of Malta closest to the airfields held by Fliegerkorps XI. These two groups will link up and then attempt to clear the island of resistance in a violent storming operation. If 5th Army does not land, Fliegerkorps XI will attempt to clear the island alone. Losses to clearing forces will be approximately three times the effective strength of the Allied army garrisons modified heavily by relative air superiority. The outcome of the storming operation will be determined and losses calculated.

11.5 THE CONCLUSION:

Losses from combat will be divided between participating units, and the outcome of the storming operation announced. If the Axis forces are successful, then all surviving Allied air, land, and naval forces located in Malta will surrender. The Axis player will receive Victory Points for such units equal to what would be given for their destruction and, in addition, will receive an extra 20,000 Victory Points in recognition of the substantial political and prestige considerations resulting from the capture of Malta. If the Axis forces are not successful, then the survivors (if any) will re-embark on their transports and return to Naples. The Allied player will receive 10,000 Victory Points in recognition of the political and prestige considerations of having withstood

a major ground forces assault on Malta.

12.0 VICTORY CONDITIONS: The object of the game is to win on points. Victory Points are awarded on the following scale:

12.1 THE DESTRUCTION OF UNITS: Each step of each unit has a VP cost if lost. This can range from a high of 5,000 VPs for battleships to a low of 2 for a typical individual aircraft. Steps that are damaged but not destroyed do not result in the loss of any VPs.

12.2 THE STARVATION OR CAPTURE OF MALTA: If Allied supply in Malta is allowed to fall below zero or if a successful invasion is made by Axis forces, all Allied units based on Malta are deemed to be destroyed and VPs are assessed accordingly. Prestige VPs are also awarded: the Axis player receives 10,000 VPs if Malta is starved and 20,000 VPs if it is successfully invaded. The Axis player loses 2,000 VPs if an invasion is called off, and loses 10,000 VPs if the invasion is not successful.

12.3 THE SURRENDER OF PANZER ARMEE AFRIKA: If supply in North Africa is allowed to fall below zero, all Axis air and ground units in Africa are forced to surrender and are deemed to be destroyed. In addition to any units in the game Order of Battle located in Africa, 75,000 VPs are assessed as the cost of the lost non Order of Battle units and considerable blow to Axis prestige. The game also ends immediately.

12.4 BUYING FUEL: The cost of buying fuel is assessed in VPs. Each major group of units gets a nominal 1,000 tons of supply free per turn. Considerably more than that will be needed by large or active groups, and the cost of the additional supply draw down is determined by the following formula:

$$\text{VP cost} = 8 * ((1.2 * \text{requirements} / 3000) \wedge 2).$$

By far the largest consumers of supply are large naval vessels, particularly battleships. Historically, the British spent a fortune supplying theirs (when they were available), and the Italians often had to go without.

12.5 BUYING STRATEGIC POOL UNITS: The cost of buying additional combat units from the strategic pool is assessed in VPs. This reflects the fact that combat units were relatively scarce and that many other theatres of war were demanding their use. Both sides maintained a pool of units which they switched from theatre to theatre in accordance with their overall grand strategy. Sending a unit to the Mediterranean meant depriving someone elsewhere, perhaps somewhere more important to the outcome of the war.

12.6 TRANSPORTING SUPPLY TO AFRICA: The Allied player receives 2,000 VPs for every turn that "Supplying Africa" is his number one National Priority. He gets 1,500 for making it priority number two, 200 for making it third, loses 900 for making it fourth, and loses 1,500 for making it priority five. The Axis player receives ten VPs for every 5,000 tons of supply landed in Tripoli, five VPs for every 5,000 tons of supply landed in Tunis, and twenty VPs for every 5,000 tons landed in Benghazi. The Axis player is limited in the amount of supply that can be landed in these three ports each turn. Tunis has a capacity of 50,000 tons per turn (equivalent to 10 transport trips), Tripoli has a capacity of 90,000 tons (18 transport trips), and Benghazi has a capacity of 40,000 tons (8 transport trips). Note that Tunis is not reliably available as a

port due to the random whims of the Vichy French and Benghazi changes hands in an historical fashion, thus not being available at all times either. Also note that excess supply sent to a port will not be unloaded, though it is often a good idea to send some excess with each convoy to make up for losses en route.

13.0 PLAYER NOTES:

13.1 GENERAL STRATEGY: Malta starts off in a dire supply condition: it must be resupplied immediately. As the Allied player, expect to lose one-third of Malta resupply transports on each round trip, but if you wait until after the rainy season is over in mid-February, you will likely lose two-thirds. Malta starts off with 75,000 tons of general supply and civilian consumption runs to 9,000 tons per turn. To survive to the end of turn thirteen accordingly requires another 51,000 tons or 10 transports worth of supply. If any combat units are to be based in Malta (and the Allied player is advised to do so) then much more will be needed. Aircraft need one ton per sortie, so keeping 100 aircraft or so operational will require roughly 1,500 tons per turn in the rainy season, and twice that afterwards. The 231st Brigade Group can get by on about 300 tons per turn. Force K at starting strength needs 3,000 tons per turn that it is active. This comes to a very approximate grand total of 100,000 tons or 20 transports. (Historically, the Allies got 16 transports through and did very little with Force K.)

The primary value of Malta to the Allies was the opportunity to interdict Axis supply to Africa. By stationing only moderate forces in Malta they were able to force the Axis to assign disproportionately large forces to escort duty, to the direct detriment of the fighting in Africa, and indeed to the war in Russia. At the same time, the Allies always had to remember that the war in Africa would be won in Africa, and so reinforcing and preparing 8th Army for the decisive campaign was uppermost in their minds. This duality is expressed in the allocation of VPs. "Prepare Offensive In Africa" should always be the number one Allied national priority unless events in Malta absolutely demand otherwise. This priority generates 1,000 VPs per turn, for a potential maximum of 14,000 VPs. This is too significant a total for the Allies to fritter away trying to play a "strong" strategy based on Malta. (Historically, Africa was priority one for the Allies for nine of the fourteen turns.)

The Allies should use the bombers in Malta to attrite the Italian convoys during the first third of the game. Given the overwhelming strength of the German fighter cover, Allied bombers will not last long anyway, so use them aggressively from the start. If transferred out of Malta, they will rebuild at the rate of one step per turn, so units reduced to two or three aircraft can be sent out with a view to returning towards the end of the game. Of course, the Axis will want to try to force these bombers out as soon as possible to clear one more detriment to supplying PAA.

The troops of 231st Brigade Group in Malta just have to hunker down and absorb the punishment aimed at them. Since there is no way to move infantry in or out of Malta, they can only try to fight off aircraft. The Axis will want to hit the island hard and constantly

in an attempt to reduce them before any attempt at invasion can be made, since their primary function is to deter such an invasion. Although totally devoid of cover, Malta was crisscrossed with numerous limestone walls creating a sort of 'limestone bocage' that would have provided a very high defensive multiplier in combat. The four weak and incompletely trained brigades might well have fought with effect (if not success) against the eight Axis divisions arrayed against them.

Force K in Malta (four light cruisers, four destroyers) is a powerful naval force for interdicting Italian convoys. The Axis will want to eliminate it or force it to transfer out of Malta as quickly as possible. The Allies had a substantial intangible superiority over the Regia Marina, and the main purpose of Force K is to force the Italians to use their fuel guzzling battleships to protect their convoys. Ordinarily, if not required to escort Allied convoys, Force K will try to intercept anything not protected by battleships. Since the Italians have the battleships and will use them, the indirect consequence of Force K, whether it sorties or not, is to make the Axis player burn huge quantities of very expensive fuel oil. The Axis player must avoid being tricked into this position often. Being based within range of Fliegerkorps II, Force K cannot remain at Malta forever, but it will be able to cause plenty of trouble before it is wiped out or transferred to Gibraltar or Alexandria if the Axis player is not careful.

13.2 FURTHER CONSIDERATIONS: The Italian Navy is not nearly as strong as it looks. Though it is tempting to do otherwise, stick to escort duties with it and do not be tempted to strike at the Royal Navy unless you can hit an isolated element.

The Axis player should always buy lots of air units. They are the main Axis strength and totally beyond the ability of the Allied player to influence directly. But be ready to sell them back later in the game so as to recover some of their costs (though sell backs are not allowed after turn 8 to prevent "end of game" syndrome). And that means make them effective early by diligent use.

The Axis should wait for the weather to clear before trying to wear down Malta, letting the air units build up their strength in the meantime. But when you hit the Allied convoys, do so with maximum violence. And the Allied player should use such lulls to increase interdiction of Axis supply as well as get supply into Malta, if possible.

There is no faster way for the Axis to lose than to fail to keep a healthy amount of supply in North Africa. This may occasionally require the sparing use of battleships, keeping in mind that they are expensive in fuel and cost a lot if lost.

And as a final bit of advice, the Axis player should always appear to be threatening to invade Malta, even if you have no intention of actually doing so. The threat alone will force Allied actions that can be advantageous to the Axis.

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**MALTA STORM, The Battle For The Central Mediterranean, December 1941
- August 1942.**

The original Italian plan had seemed simple: Confiscate the lightly defended territories of North Africa, thus reestablishing the Italian Empire and pushing out the interfering English at the same time. It would only require the refurbished and enlarged La Regia Marina to establish secure supply lanes across the narrow passage from Italy to Tripoli. Certainly not a problem, considering the assistance of the Luftwaffe. After all, the main Allied staging areas were off at the opposite ends of the Med: Alexandria in Egypt and Gibraltar in Spain. Only the tiny outpost on the central island of Malta stood in the way...

MALTA STORM is an operational and strategic examination of the Axis attempt to obtain control of the Central Mediterranean in the face of a fierce Allied determination to contest that control. Using an innovative system, players are placed in the roles of Cunningham or Kesselring. 2 may play, or the computer will play either side. Design by R. Crandall, development by S. Newberg, & art by J. Kula.

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LONG LANCE, Tactical Naval Combat In The Pacific, 1942.
TO THE RHINE, The Allied Advance In The West, 29 Aug - 14 Dec, 1944.
ROMMEL AT GAZALA, The Battles For Tobruk, 26 May - 27 June, 1942.
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BATTLE OF THE ATLANTIC, The Ocean Lifeline, 1940-1944.
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FIFTH ESKADRA, Modern Naval Combat In The Mediterranean Sea.
FALL GELB, The Fall Of France, Spring 1940.
GREY SEAS, GREY SKIES, Tactical Modern Naval Combat.

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